



BY APPOINTMENT TO
HER MAJESTY QUEEN ELIZABETH II
MANUFACTURERS OF DAIMLER AND JAGUAR CARS
JAGUAR CARS LIMITED COVENTRY



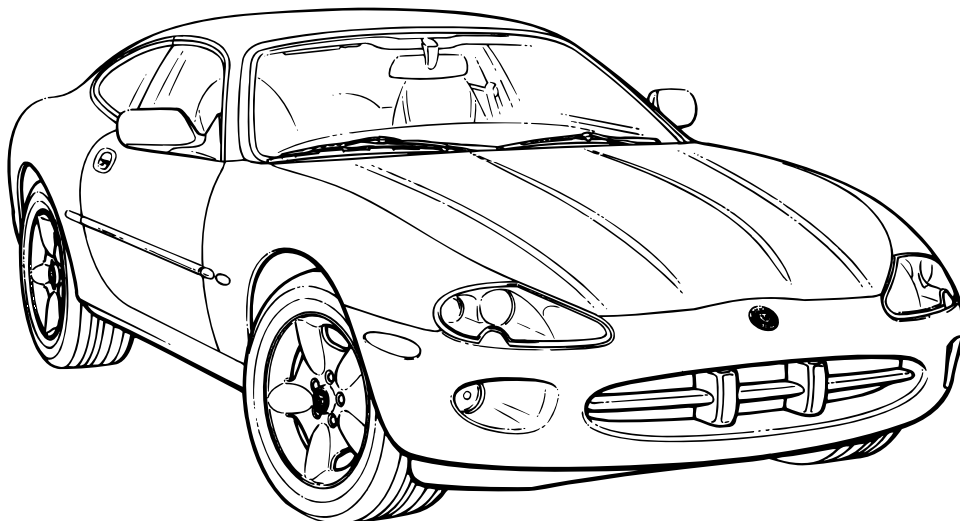
BY APPOINTMENT TO
HER MAJESTY QUEEN ELIZABETH
THE QUEEN MOTHER
MANUFACTURERS OF DAIMLER AND JAGUAR CARS
JAGUAR CARS LIMITED COVENTRY



BY APPOINTMENT TO
HIS ROYAL HIGHNESS THE PRINCE OF WALES
MANUFACTURERS OF DAIMLER AND JAGUAR CARS
JAGUAR CARS LIMITED COVENTRY

XK Range

2003 Model Year Electrical Guide



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The following abbreviations and acronyms are used throughout this Electrical Guide:

A/C	Air Conditioning
A/CCM	Air Conditioning Control Module
ACP	Audio Control Protocol Network
APP SENSOR	Accelerator Pedal Position Sensor
APP1	Accelerator Pedal Position Sensor Element 1
APP2	Accelerator Pedal Position Sensor Element 2
B+	Battery Voltage
BANK 1	RH Cylinder Bank (Cylinders 1, 3, 5, 7)
BANK 2	LH Cylinder Bank (Cylinders 2, 4, 6, 8)
BPM	Body Processor Module
CAN	Controller Area Network
CKP SENSOR	Crankshaft Position Sensor
CM	Control Module
CMP SENSOR / 1	Camshaft Position Sensor / RH Bank
CMP SENSOR / 2	Camshaft Position Sensor / LH Bank
COUPE	Coupe Vehicles
CONV.	Convertible Vehicles
DSC	Dynamic Stability Control
ECM	Engine Control Module
ECT SENSOR	Engine Coolant Temperature Sensor
EFT SENSOR	Engine Fuel Temperature Sensor
EGR	Exhaust Gas Recirculation
EOT SENSOR	Engine Oil Temperature Sensor
EVAP CANISTER CLOSE VALVE	Evaporative Emission Canister Close Valve
EVAP CANISTER PURGE VALVE	Evaporative Emission Canister Purge Valve
FTP SENSOR	Fuel Tank Pressure Sensor
GPS	Global Positioning System
HID	High Intensity Discharge
HO2 SENSOR 1 / 1	Heated Oxygen Sensor – RH Bank / Upstream
HO2 SENSOR 1 / 2	Heated Oxygen Sensor – RH Bank / Downstream
HO2 SENSOR 2 / 1	Heated Oxygen Sensor – LH Bank / Upstream
HO2 SENSOR 2 / 2	Heated Oxygen Sensor – LH Bank / Downstream
IAT SENSOR	Intake Air Temperature Sensor
IC	Instrument Cluster
ICE	In-Car Entertainment System
IMT VALVE / 1	Intake Manifold Tuning Valve / Top
IMT VALVE / 2	Intake Manifold Tuning Valve / Bottom
IP SENSOR	Injection Pressure Sensor
KS / 1	Knock Sensor / RH Bank
KS / 2	Knock Sensor / LH Bank
LH	Left Hand
LHD	Left Hand Drive
MAF SENSOR	Mass Air Flow Sensor
MAP SENSOR	Manifold Absolute Pressure Sensor
N/A	Normally Aspirated
NAS	North American Specification
PATS	Passive Anti-Theft System
PWM	Pulse Width Modulated
RH	Right Hand
RHD	Right Hand Drive
ROW	Rest of World
SCP	Standard Corporate Protocol Network
TCM	Transmission Control Module
TP SENSOR	Throttle Position Sensor
TP1	Throttle Position Sensor Element 1
TP2	Throttle Position Sensor Element 2
TURN	Turn Signal
TV	Television
V8	V8 Engine
VICS	Vehicle Information Control System
VVT VALVE / 1	Variable Valve Timing Valve / Bank 1
VVT VALVE / 2	Variable Valve Timing Valve / Bank 2
+ve	Positive
-ve	Negative



Electrical Guide Format

This Electrical Guide is made up of two major sections. The first section, at the front of the book, provides general information for and about the use of the book, and information and illustrations to aid in the understanding of the Jaguar XK-TYPE electrical / electronic systems, as well as the location and identification of components.

The second section includes the Figures, which are the basis of the book. Each Figure is identified by a Figure Number (i.e. Fig. 01.1) and Title, and is accompanied by a page of data containing information specific to that Figure.

It is recommended that the user read through the front section of the book to develop a familiarity with the layout of the book and with the system of symbols and abbreviations used. The Table of Contents should help to guide the user.

Vehicle Identification Numbers (VIN)

VIN ranges are presented throughout the book in the following manner:

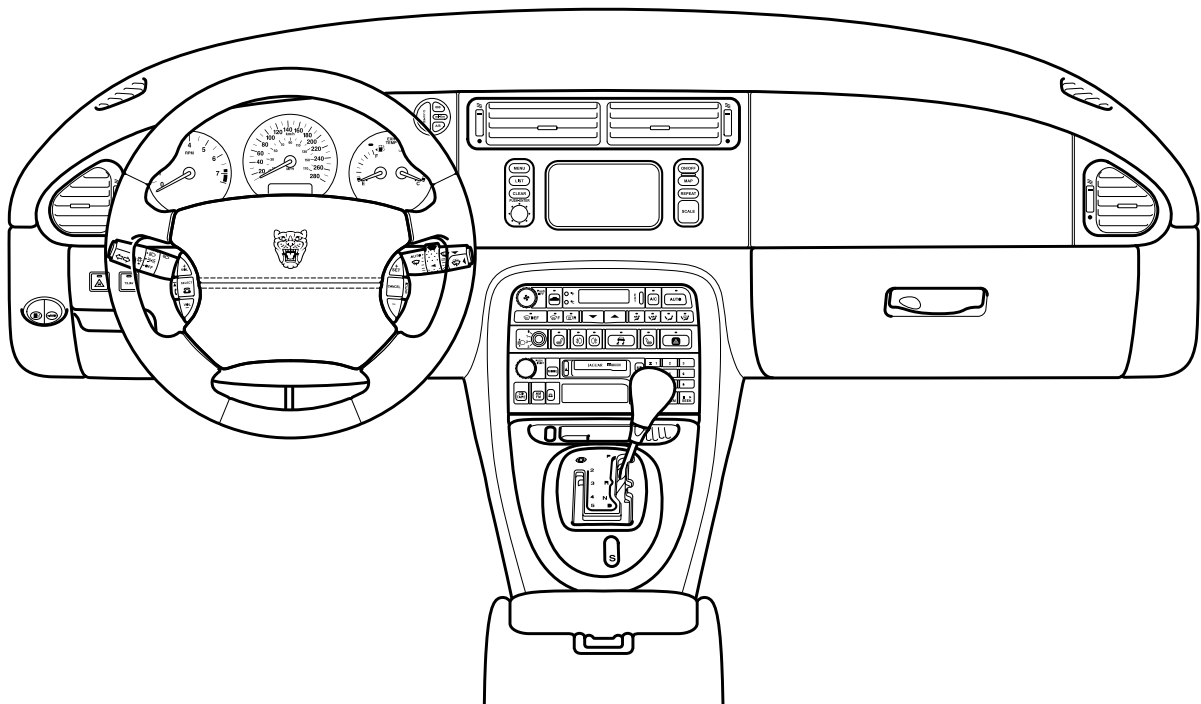
→ VIN 123456 indicates “up to VIN 123456”; VIN 123456 → indicates “from VIN 123456 on”.

Jaguar XK Range Electrical System Architecture

The vehicle electrical system is a ground side switched system. The ignition switch switches ground circuits on / off to complete system circuits and apply power. Circuits that require ignition switch position control are supplied with “ignition switched grounds”. Both power grounds (high current consumers) and logic grounds (electronic switching circuits) are used throughout the system.

Three data networks are employed in the vehicle: a high speed Controller Area Network (CAN) for the engine, drive train and related systems, a Standard Corporate Protocol network (SCP) for the body systems, and an Audio Control Protocol network (ACP) for certain In-Car Entertainment and Telephone functions. Any vehicle subsystem depicted on the figures with the CAN or SCP included uses data derived from the network, or transmits data via the network to achieve control. Messages for both networks are cataloged in the Appendix of this book. In addition to the two networks, the vehicle uses a serial data bus (ISO) for diagnostics, security sounder operation and for the programming of certain control modules.

XK RANGE INSTRUMENT PANEL





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Switch Pack – Driver Seat	Fig. 12.1		
.....	Fig. 12.2		
Switch Pack – Passenger Seat	Fig. 12.3		
.....	Fig. 12.4		
Switch Pack – Driver Door	Fig. 10.2		
Switch Pack – Passenger Door	Fig. 10.2		
Tail Lamp Relay	Fig. 09.3		
Tail Lamp Units	Fig. 09.3		
Telephone Antenna	Fig. 17.1		
.....	Fig. 17.2		
.....	Fig. 17.3		
Television Antennas	Fig. 17.5		
Television Antenna Amplifier	Fig. 17.5		
Television Module	Fig. 17.5		
Throttle Motor	Fig. 04.1		



NOTE: In the examples shown on this page, an 'X' is used where a number would appear on an actual Figure.

Reference Symbols

Reference symbols are used for three purposes:

- to allow the user to complete the individual system circuit to power supply or ground
- to refer the user to a related circuit
- to identify control module inputs, outputs and signal grounds

Battery Power Supply

This symbol represents a direct battery power supply and refers the user to Figure 01.1, 01.2 or 01.3.

Ignition Switched Power Supply

This symbol represents ignition switched power supply and refers the user to Figure 01.1, 01.4, 01.5 or 01.6.

The suffix I indicates auxiliary power. Power is supplied in ignition switch key positions I (AUXILIARY) and II (IGNITION).

The suffix II indicates ignition power. Power is supplied in ignition switch key positions II (IGNITION) and III (ENGINE CRANK).

The suffix E indicates engine management switched power. Power is supplied in ignition switch key positions II (IGNITION) and III (ENGINE CRANK) under ECM control.

Ignition Switched Ground

This symbol represents an ignition switched ground and refers the user to Figure 02.1.

This symbol without a suffix indicates CRANK. Ground is completed in ignition switch key position III (ENGINE CRANK).

The suffix I indicates auxiliary ground. Ground is completed in ignition switch key positions I (AUXILIARY) and II (IGNITION).

The suffix II indicates ignition ground. Ground is completed in ignition switch key positions II (IGNITION) and III (ENGINE CRANK).

Figure Number Reference Flag











This symbol refers the reader to a figure number only. It does not refer to a flag with the same number on a different figure.

As used in Figures 01.1 through 02.1, the reference flag refers the user to a continuation of the circuit. In this instance, the user matches the number to a Power Supply or Ground symbol to trace the circuit.

In most other cases, it is not necessary to refer to another figure for completion of a circuit, as the reference flags are used to indicate parallel circuits and circuits that share components. Most of the circuits where this situation occurs are overlapped to avoid the necessity for cross-referencing to another figure. Exceptions to this rule are instances where signals are transmitted to or received from other system circuits. When circuits are not overlapped, they are noted by (CIRCUIT CONTINUED).

BPM Because the Body Processor Module appears numerous times, the abbreviation BPM is used in the reference flags on Figures 01.2 and 02.1 in order to conserve space.

Control Module Input, Output, Data Link, Signal Ground and Network(s)

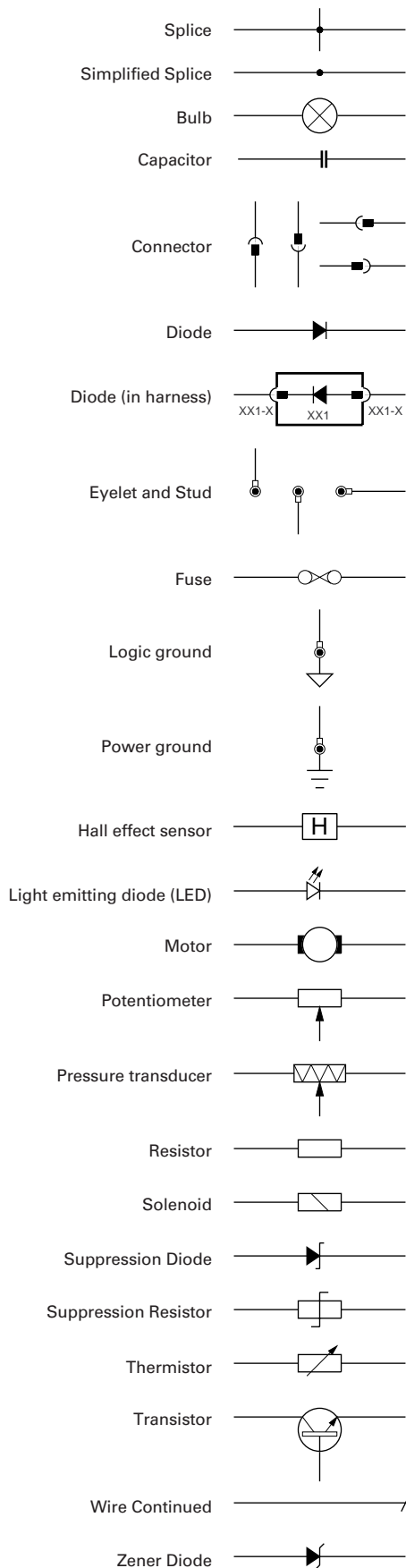
 Input	 Power ground	 Sensor/signal supply V *	 ACP	 SCP
 Output	 Battery voltage	 Sensor/signal ground **	 CAN	 Serial and encoded data

These nine symbols are employed to assist the user in visualizing the 'logic' of circuits containing control modules. The symbols identify control module input, output, data link, signal ground and network pins. These symbols are also employed on the corresponding data page.

- * May also indicate Reference Voltage
- ** May also indicate Reference Ground or Logic Ground.
Refer to Control Module Pin-Out Information.



Wiring Symbols



Wiring Harness Codes

- AC Air Conditioning (Climate Control)
- AN Generator Suppression Module
- AS Generator to Starter
- BB Trunk Bridging Link
- BC Main Power Distribution
- BL Trunk Lid
- BT Trunk
- DD Door, Driver
- DP Door, Passenger
- EL Engine Management Side Marker Link
- EM Engine Management
- FC Fascia
- FL LH Front Wheel
- FR RH Front Wheel
- IC In-Car Entertainment
- IS Inclination Sensor Link
- LF Left Forward
- LL Power Steering Link
- PI Engine
- QL Convertible LH Quarter Light Link
- QR Convertible RH Quarter Light Link
- RF Roof
- RH Rearward
- RL LH Rear Wheel
- RR RH Rear Wheel
- RT Radio Telephone
- SA Starter to Generator Link
- SC Column Switchgear
- SD Seat, Driver
- SP Seat, Passenger
- SW Steering Wheel
- TL Telephone

Wiring Color Codes

- | | | | |
|---|--------|-----|--------|
| N | Brown | O | Orange |
| B | Black | S | Slate |
| W | White | L | Light |
| K | Pink | U | Blue |
| G | Green | P | Purple |
| R | Red | BRD | Braid |
| Y | Yellow | | |

When a wire has two color code letters, the first letter indicates the main color and the subsequent letter indicates the tracer color.

Code Numbering

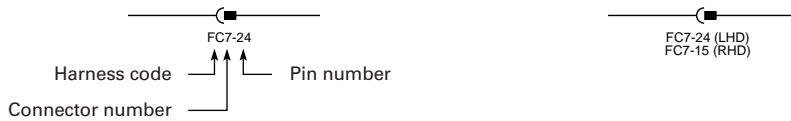
When numbering connectors, grounds and splices, Jaguar Engineering uses a three-position format: AC001, AC002, etc. Because space is limited in this Electrical Guide, the codes have been shortened. Thus AC001-001 becomes AC1-1, AC002-001 becomes AC2-1, etc.



Connectors

HARNESS CODE + CONNECTOR NUMBER + PIN NUMBER; for example: FC7-24 (pin number is separated by a dash)
 Where the pin number differs from LHD to RHD, the connector number will be further identified by (LHD) or (RHD).

EXAMPLES:

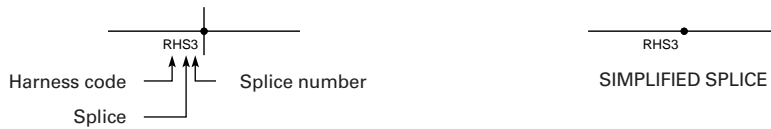


Splices

HARNESS CODE + S (SPLICE) + SPLICE NUMBER; for example: RHS3 (no dash is used)

NOTE: In order to avoid unnecessary circuit complication, multiple splices (more than two wires) within components, in wires leading from input components to multiple circuits and in harness 'ground' sides, are simplified so as not to show wires from other circuits.

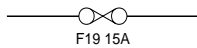
EXAMPLES:



Fuses

All fuses are located in the fuse boxes. Each fuse is identified by an "F" number unique only to the fuse box in which it is located.

EXAMPLE:



Grounds

HARNESS CODE + GROUND STUD NUMBER + EYELET STUD POSITION (A,B,C) + EYELET DESIGNATION (S,L,R)

Eyelet stud position

There may be up to three eyelets on one stud. A, B and C are used to indicate the position of the eyelet on the stud: A – first (bottom), B – second (middle), C – third (top).

Eyelet designation

Two eyelet variations are used: a single eyelet and an eyelet pair. The single eyelet has a single 'leg', which is identified by an S; the eyelet pair has two 'legs', identified as L (left) or R (right).

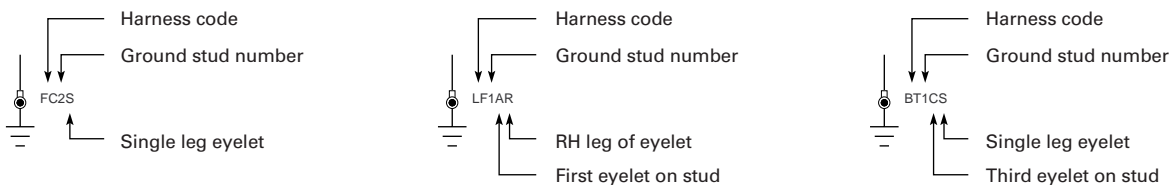


SINGLE EYELET



EYELET PAIR

EXAMPLES:



On figures where LHD and RHD circuits are combined and the ground designation differs from LHD to RHD, the RHD ground code is shown in parentheses. If the ground designation is the same for LHD and RHD, only one ground designation is used.

EXAMPLES:





Diodes

Harness diodes occur at connectors and are depicted as components and identified by a connector number.

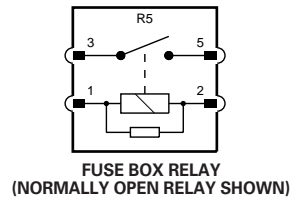
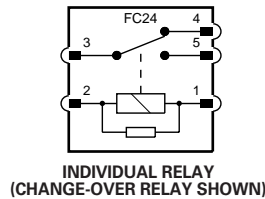
EXAMPLE:



Relays

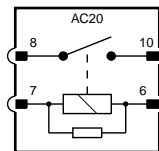
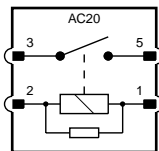
Individual relays located outside of fuse boxes have a separate relay connector (base) and a unique connector number, which is shown within the relay. The connector number is shown in the upper portion of the relay; the pin (terminal) number is shown adjacent to the pin. Relays located within fuse boxes do not have a separate relay connector and are identified by an "R" number unique only to the fuse box in which they are located. All relays use the ISO pin numbering system (1, 2, 3, 4, 5).

EXAMPLE:



Certain relays are paired and share a modular connector. In this instance, the two relays share a common connector number, while the pin numbers of the second relay are identified by the numbers 6 – 10.

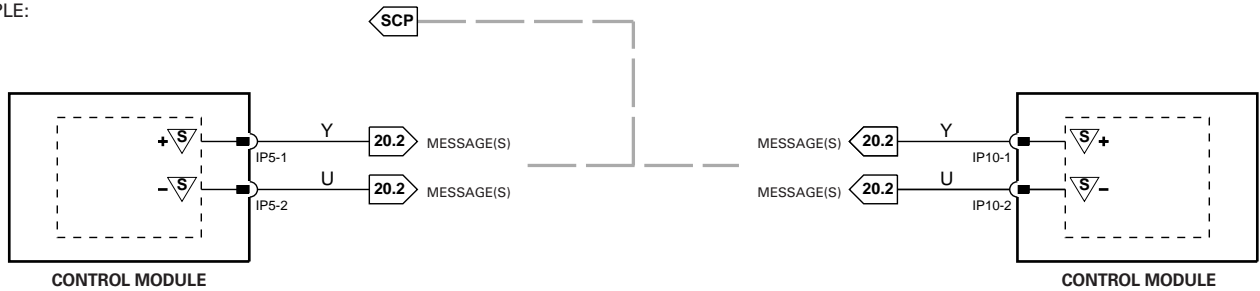
EXAMPLE:



Networks

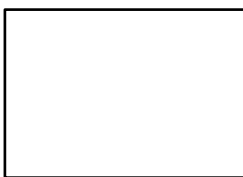
In most instances, networks are shown as a broken grey line to indicate that there is network communication between the depicted control modules. Refer to Figures 21.1 and 21.2 for circuit details.

EXAMPLE:



Component Depictions

EXAMPLE:



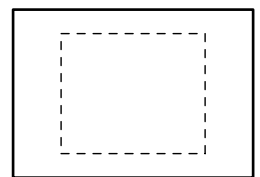
COMPLETE COMPONENTS AND CONTROL MODULES



INCOMPLETE COMPONENTS (EXCEPT CONTROL MODULES)



ASSEMBLIES AND POWER DISTRIBUTION FUSE BOXES



COMPONENTS WITH INTERNAL ELECTRONIC CIRCUIT



Figure and Data Page Layout

Figure Pages

Each Figure represents a specific electrical system of the vehicle. The Figures are arranged numerically by system (**01 - Power Distribution**, **02 - Ground Distribution**, etc.) with variations in the system identified by a numeral following a decimal point (**01.1**, **01.2**, etc.). Refer to the **Table of Contents: Figures** for a complete list of the Figures.

The Figures **01 - Power Distribution** detail the distribution of power to each of the systems. Numbered reference symbols refer the user to a specific Figure and from a specific Figure back to the Power Distribution Figures. This method eliminates the need to include detailed Power Distribution information on each of the Figures. The reference symbols are defined on page 10.

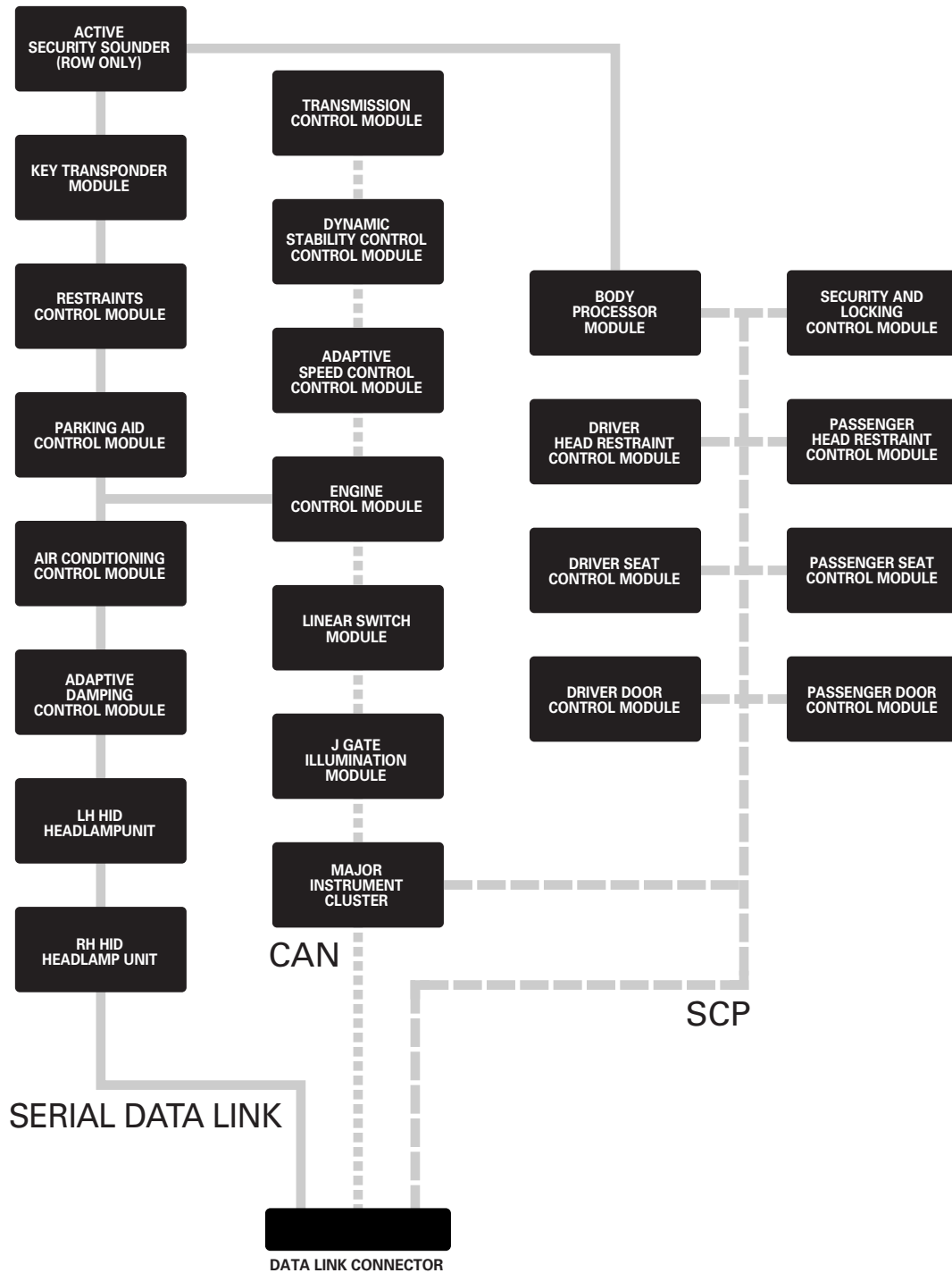
Each Figure appears on a right-hand page with a corresponding Data page to the left. The Figure and Data pages are folding pages. The user must fold out both pages in order to access all the information provided.

Data Pages

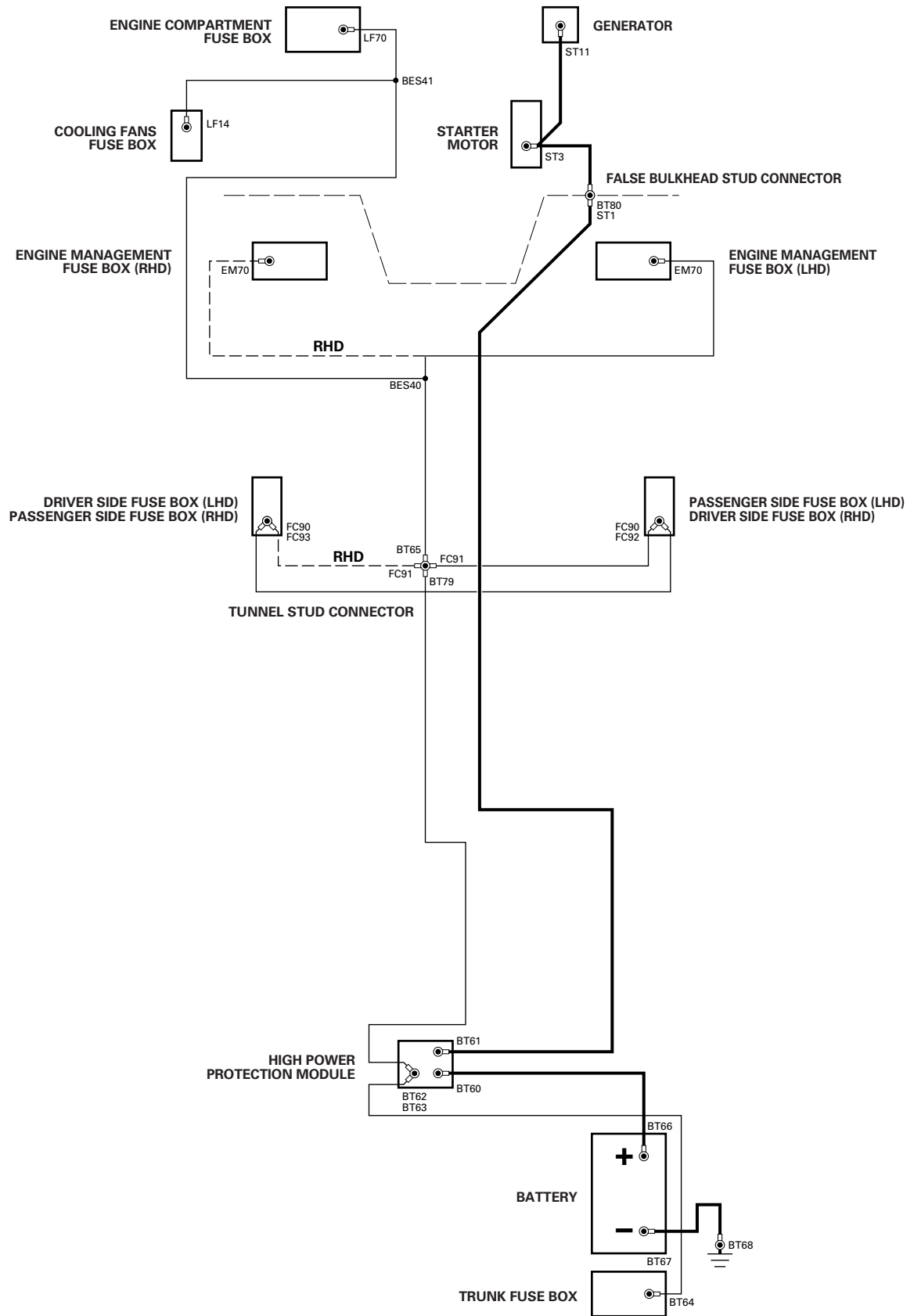
The Data page includes information to assist the user in identifying and locating components, connectors and grounds. This information is supplemented by the illustrations in this front section of the book.

When network data is required for the understanding of a particular circuit, the user is directed to the Appendix.

Most circuits that incorporate a control module include pinout information. The characteristics listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted. This information is provided to assist the user in understanding circuit operation and should be used FOR REFERENCE ONLY.



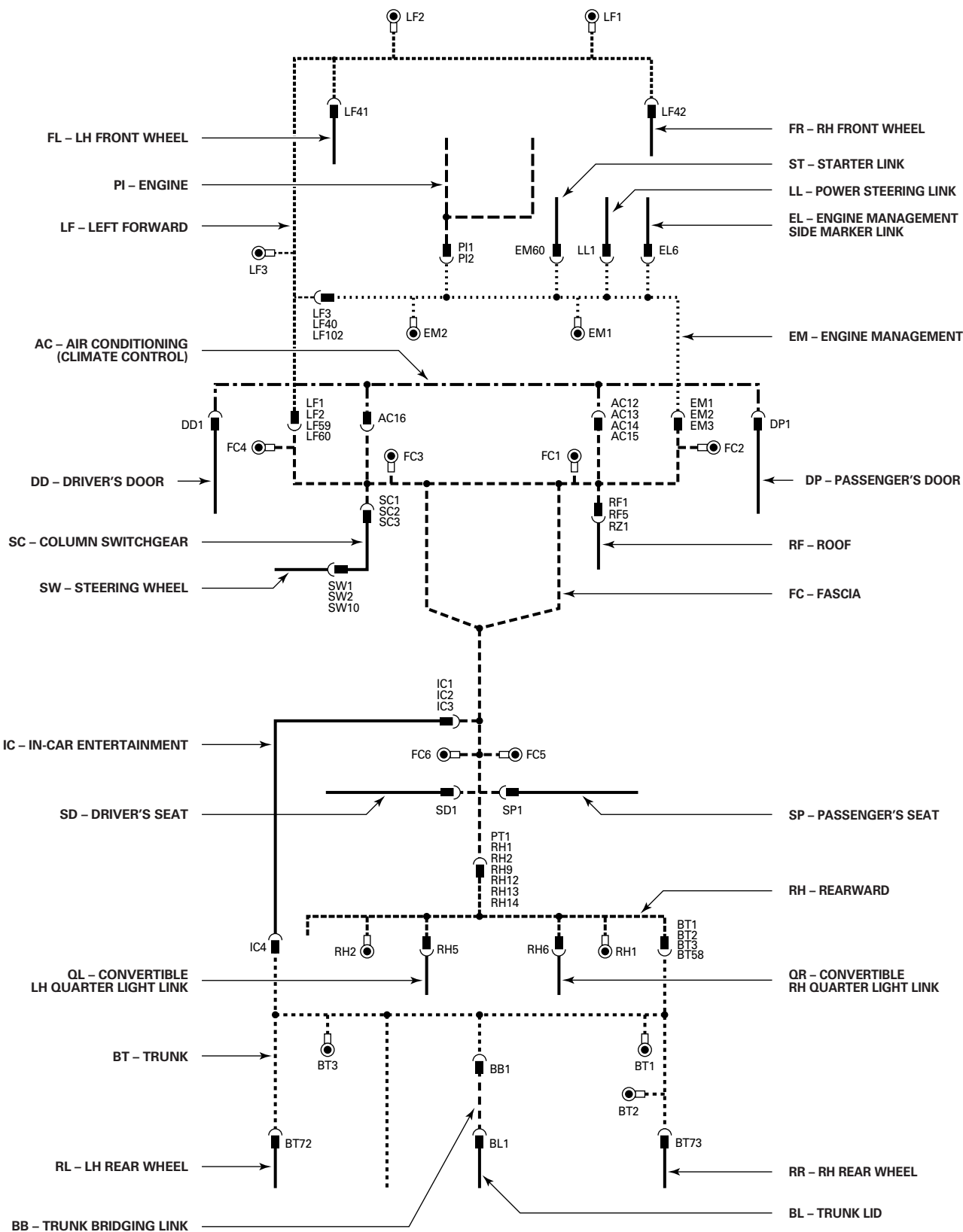
NOTE: TYPICAL XK RANGE NETWORK CONFIGURATION (FULL OPTION SET). REFER TO FIGURES 21.1 AND 21.2 FOR CIRCUIT DETAILS.





LHD

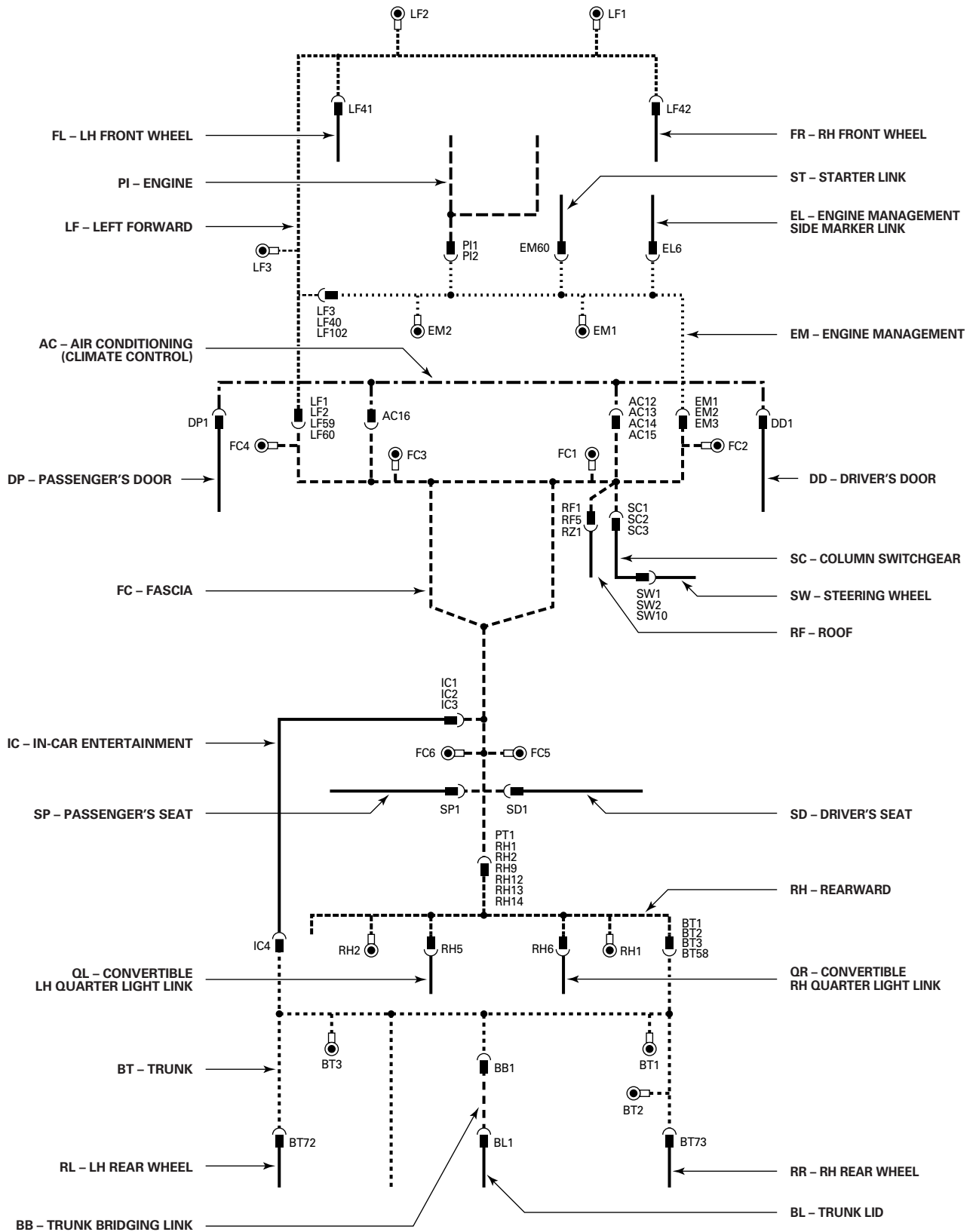
FRONT OF VEHICLE

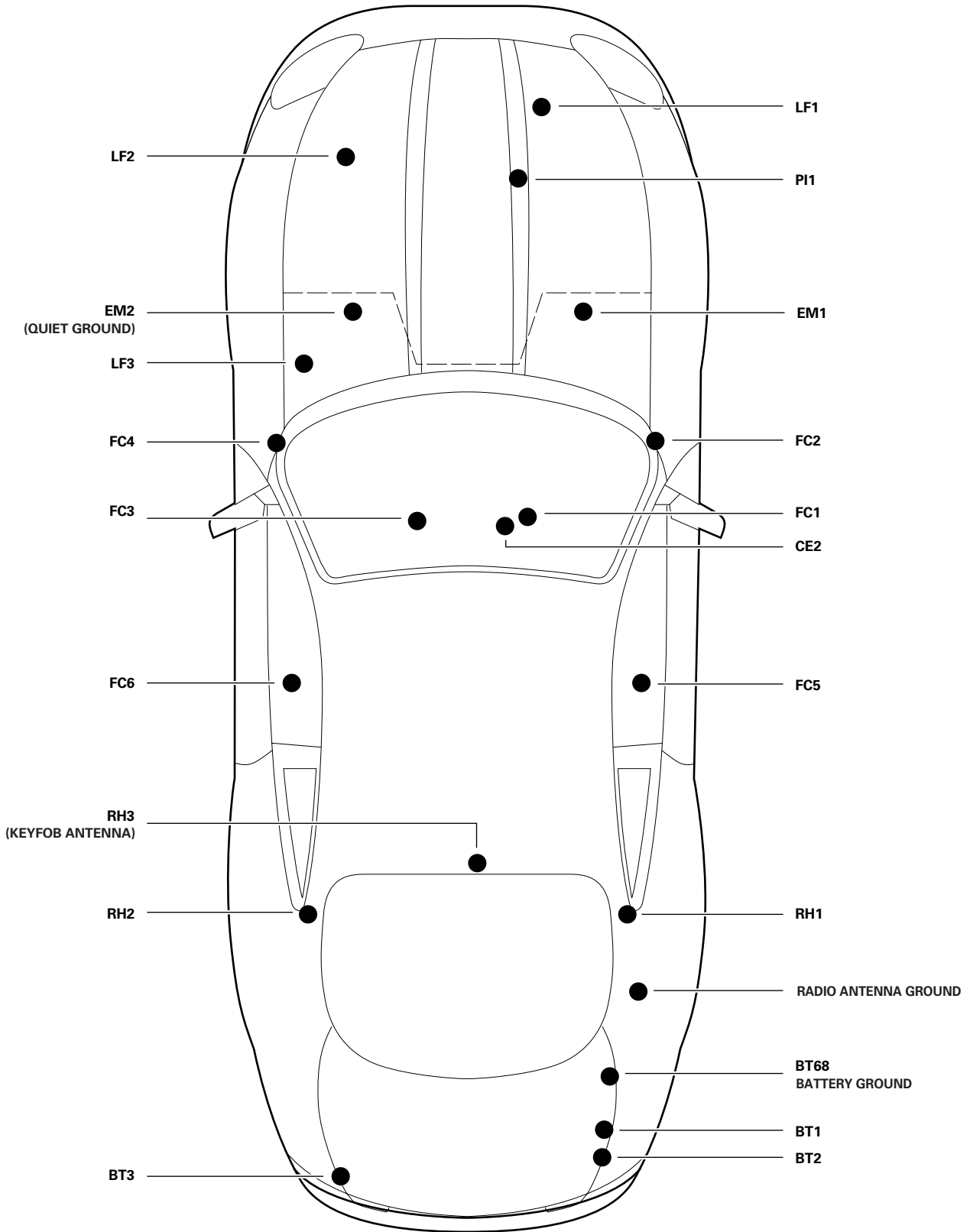


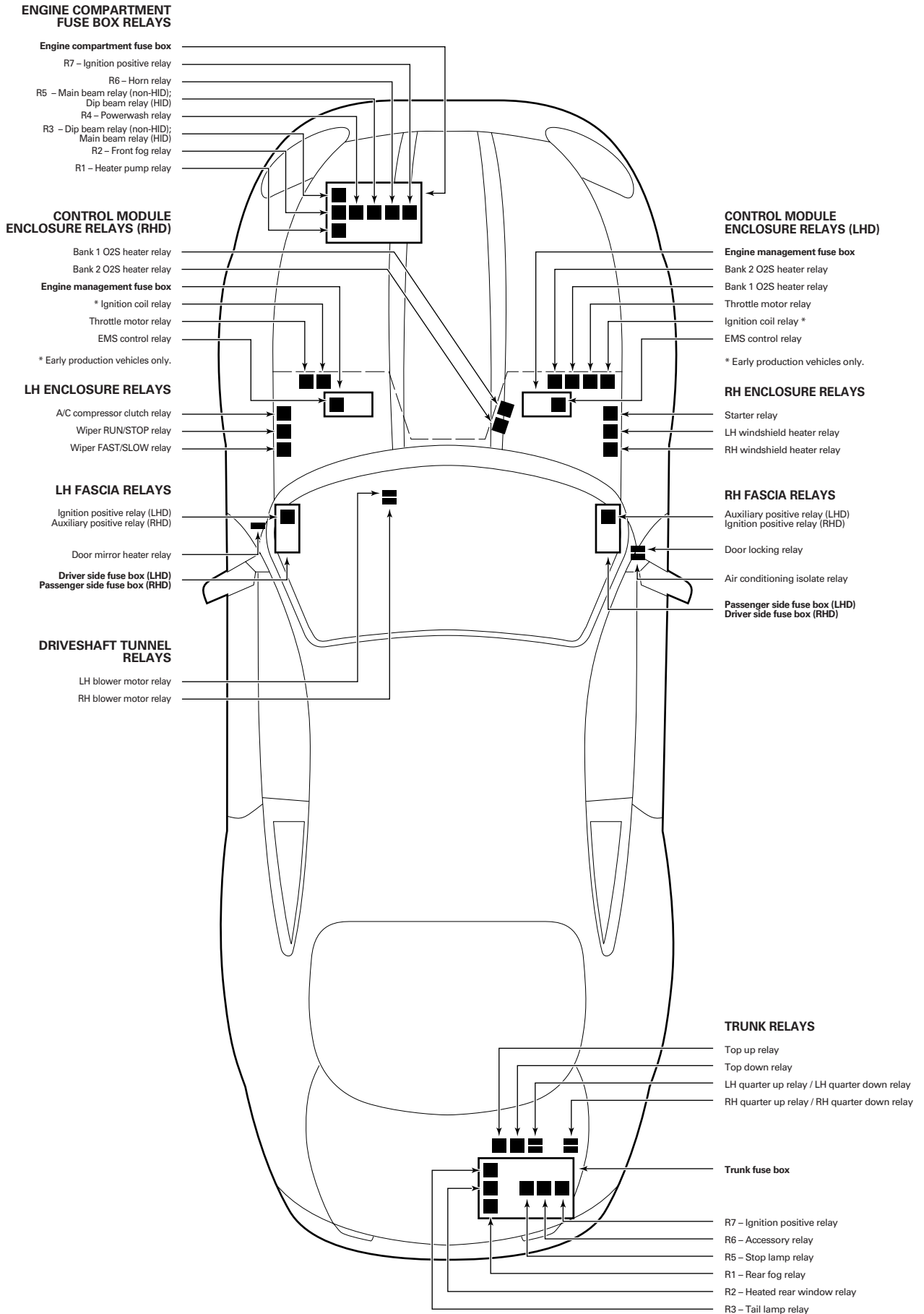


RHD

FRONT OF VEHICLE

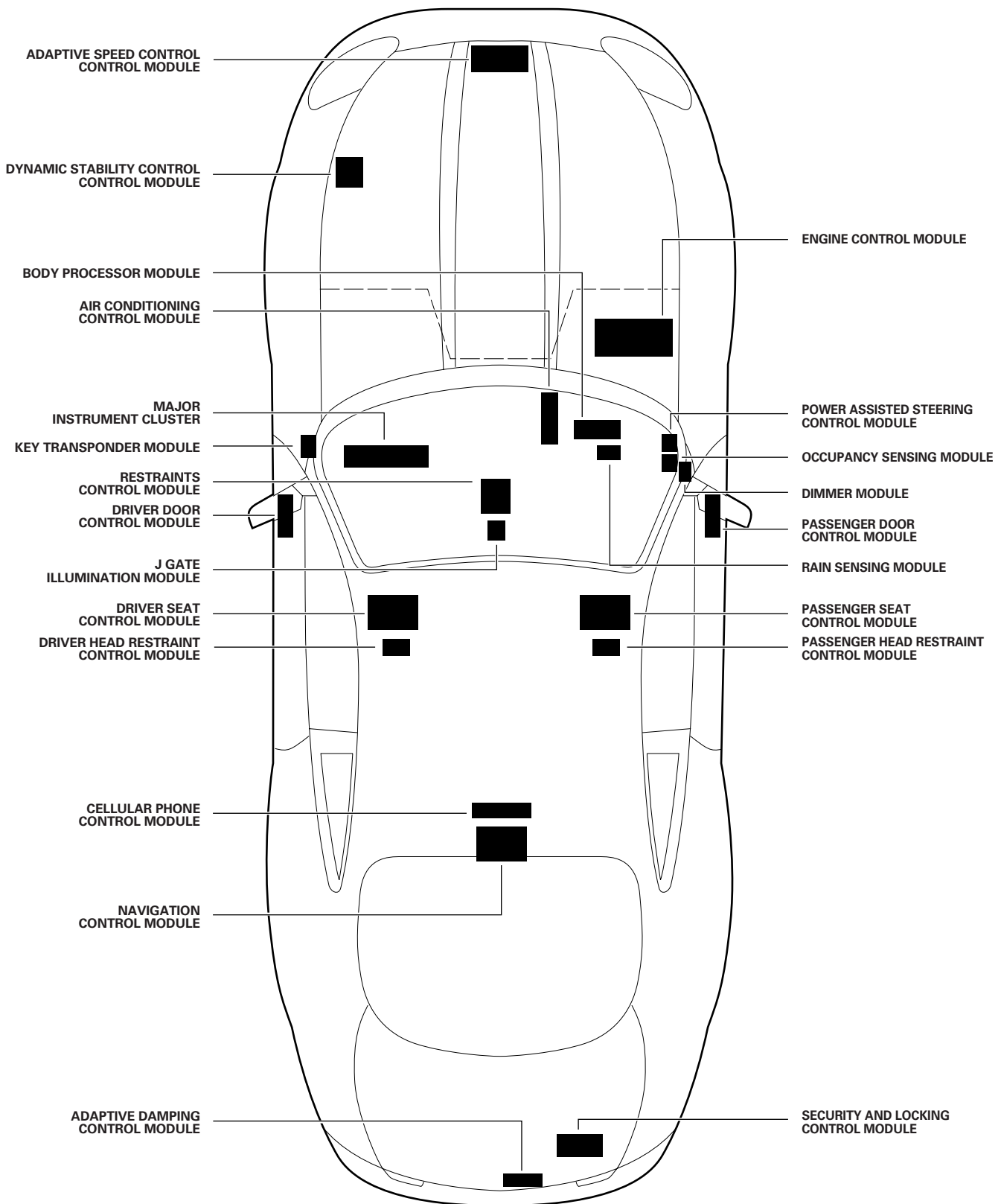








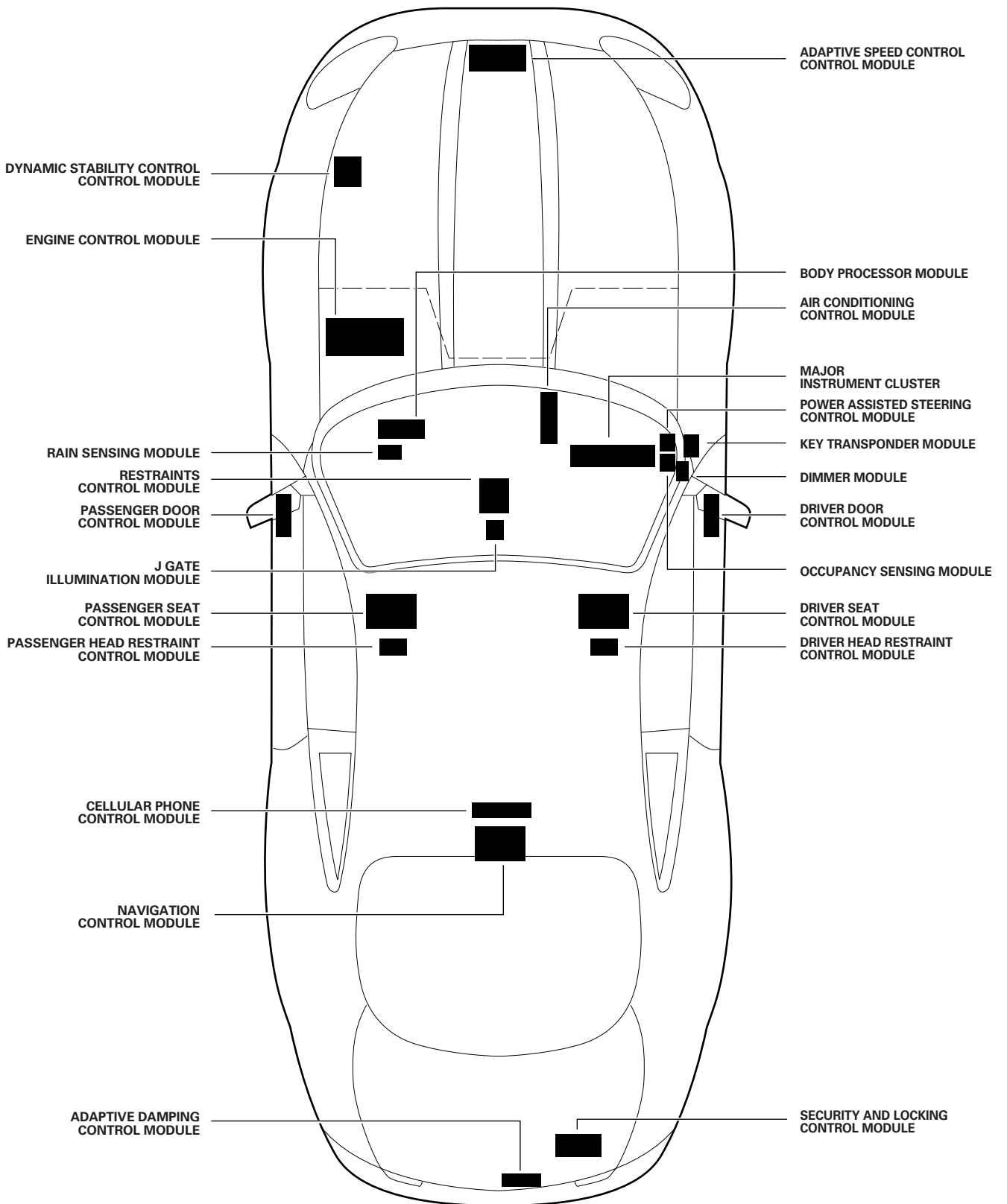
LHD



NOTE: THE TRANSMISSION CONTROL MODULE IS CONTAINED WITHIN THE TRANSMISSION.



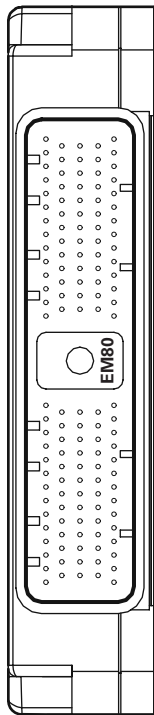
RHD



NOTE: THE TRANSMISSION CONTROL MODULE IS CONTAINED WITHIN THE TRANSMISSION.



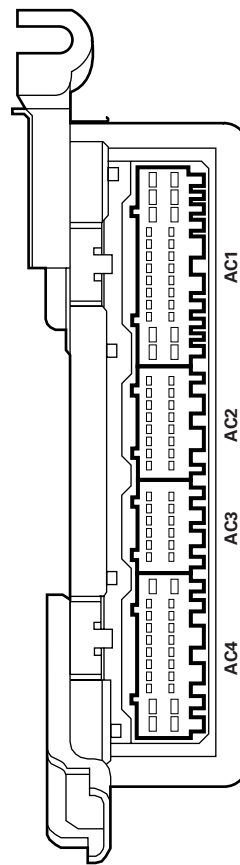
ENGINE CONTROL MODULE



EM80 / BLACK

107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134
G	N	OY	OG	B	BW	BG	BO	BG	B	BW	BG	BO	BG	WU	—	G	Y	—	—	Y	N	N	BR	YG	YG	—	GW
81	82	83	84	85	86	87	88	89	90	91	92	93	94	94	95	96	97	98	99	100	101	102	103	104	105	106	106
B	B	R	Y	YU	—	GU	GR	GO	GW	B	U	Y	G	N	N	—	N	N	BG	—	R	Y	—	RG	O	R	R
55	56	57	58	59	60	61	62	63	64	65	66	67	68	68	69	70	71	72	73	74	75	76	77	78	79	80	80
UY	UY	UY	UY	YG	Y	YR	GB	GW	GO	GU	WVR	UY	O	O	O	UY	O	YG	U	—	N	G	—	YG	Y	G	G
29	30	31	32	33	34	35	36	37	38	39	40	41	42	42	43	44	45	46	47	48	49	50	51	52	53	54	54
B	B	GR	—	WG	RW	—	Y	P	B	—	U	O	—	BG	GW	BW	BW	YR	YG	WU	YG	W	GR	—	—	B	B
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
RU	RU	—	B	B	GO	W	U	U	GU	—	OY	OY	OG	—	BK	BK	BG	BG	—	NR	WG	WG	W	—	W	—	—

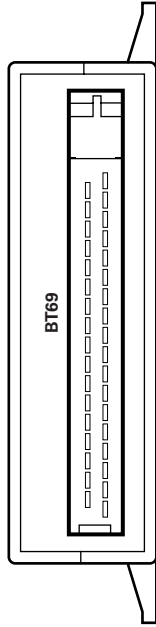
AIR CONDITIONING CONTROL MODULE



12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	1	2	3	4	5	6	7	8	9	10	11	12	13											
WR	B	B	B	GW	OY	U	U	GW	BW	BK	O	22	—	—	WR	B	WR	WU	NW	RW	U	U	UY	W	—	—	—											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	1	2	3	4	5	6	7	8	9	10	11	12	13
WU	GW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—												
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—												
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—												



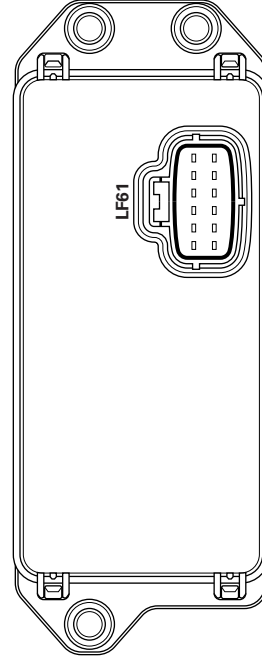
ADAPTIVE DAMPING CONTROL MODULE



BT69 / BLACK

19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
—	BG	U	R	—	OG	U	OG	NW	W	—	O	OY	O	GU	OY	—	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
YR	—	OY	—	—	—	—	—	—	O	WR	—	R	OG	OG	—	—	B

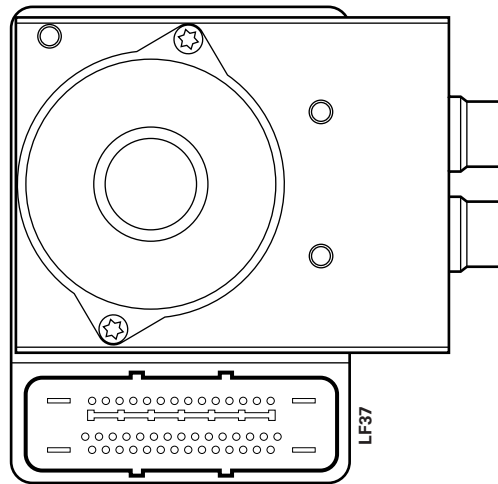
ADAPTIVE SPEED CONTROL MODULE



LF61 / BLACK

1	2	3	4	5	6
NW	B	—	G	—	—
7	8	9	10	11	12
WR	—	—	Y	—	YU

DYNAMIC STABILITY CONTROL MODULE



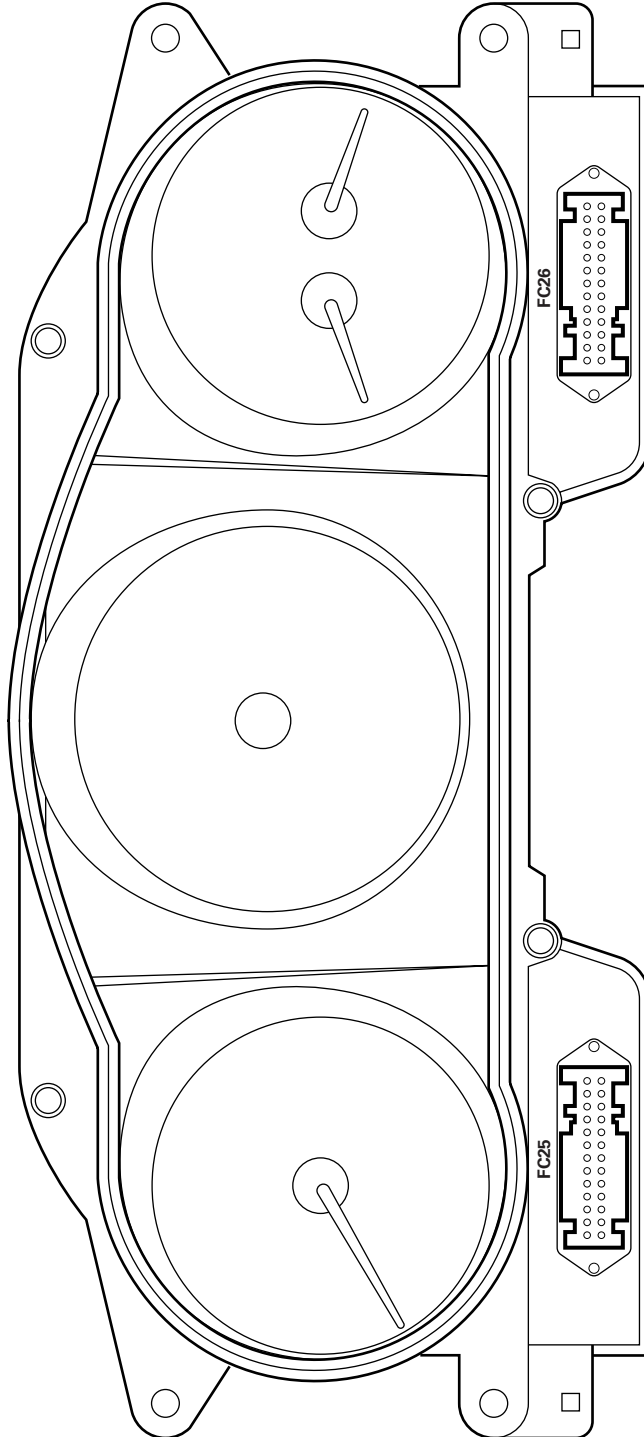
LF37 / BLACK

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NR	—	Y	WU	BK	U	R	U	UY	—	Y	—	—	—	—	B
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
WR	YB	NW	NW	—	—	—	WU	W	NW	NW	NG	W	YR	NR	
32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
NW	Y	G	—	U	W	R	—	YU	—	O	Y	—	R	W	B

TOP



MAJOR INSTRUMENT CLUSTER



FC25 / BLACK

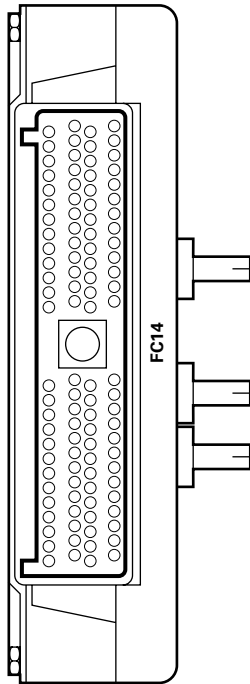
1	WG	2	RG	3	YR	4	BK	5	—	6	RU	7	YB	8	UY	9	Y	10	Y	11	Y	12	—	13	Y
14	U	15	R	16	B	17	RW	18	Y	19	O	20	UY	21	RU	22	U	23	G	24	G	25	BR	26	—

FC26 / YELLOW

13	BW	12	RU	11	G	10	O	9	Y	8	Y	7	RG	6	OG	5	OY	4	YG	3	RW	2	RW	1	R
26	OY	25	—	24	—	23	OG	22	RW	21	RG	20	OY	19	G	18	OG	17	OY	16	Y	15	UY	14	RW



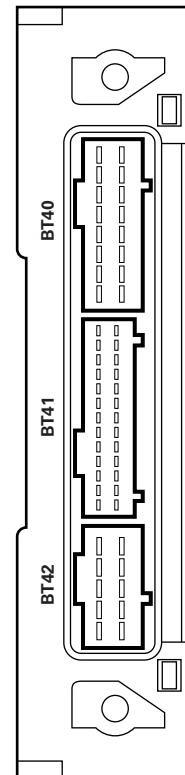
BODY PROCESSOR MODULE



FC14 / GREY

79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
NG	N	GR	GR	GB	U	Y	OG	Y	YG	GR	BG	BW	YB	Y	G	RU	N	WG	GB	UY	BR	RW	N	—	NW
53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78
R	G	YU	OY	—	YB	Y	RW	WG	GU	Y	—	RU	O	OG	O	GW	YR	GO	WR	RW	—	GO	GU	U	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
GO	RW	Y	U	Y	WR	FG	GO	G	GW	GR	RU	YU	WU	GO	Y	BG	U	U	—	OG	—	GW	RW	BW	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
BG	GW	W	GU	YR	UY	—	BW	GU	YR	YB	W	GO	O	WU	RW	OY	YB	WG	OG	YU	WB	WU	NW	B	YG

SECURITY AND LOCKING CONTROL MODULE



BT42 / BLACK

5	4	3	2	1
RU	RU	RG	U	OY
10	9	8	7	6
R	RW	R	UY	O

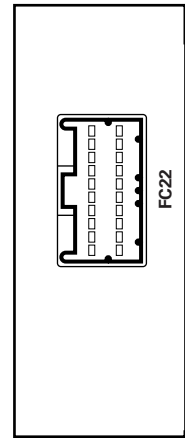
BT41 / BLACK

13	12	11	10	9	8	7	6	5	4	3	2	1
RW	RW	—	BK	—	GW	YU	RU	RW	—	GW*	—	—
26	25	24	23	22	21	20	19	18	17	16	15	14
YR	—	—	—	—	—	—	YR	—	—	—	—	—

BT40 / BLACK

8	7	6	5	4	3	2	1
Y	OG	NR	Y	GW*	U*	O	O
16	15	14	13	12	11	10	9
U	NW	BK	BK	—	—	UY*	GR*

KEY TRANSPONDER MODULE



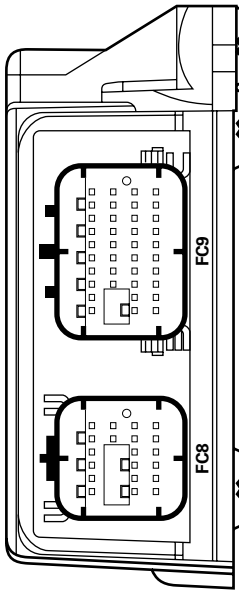
FC22 / GREEN

10	9	8	7	6	5	4	3	2	1
—	YB	OG	O	O	—	NR	—	—	YB
20	19	18	17	16	15	14	13	12	11
—	—	—	WR	O	—	WU	WR	BK	—

* Convertible vehicles only.



RESTRAINTS CONTROL MODULE



FC8 / BLACK

1	WR	2	RU	3	RW	4	BW	5	NW	6	NG
13	RW	14	BW	15	Y	16	BK	17	YR	18	—
19	YB	20	—	21	—	22	BW	23	—	24	—

FC9 / BLACK

1	U	2	O	3	—	4	—	5	—	6	—	7	—	8	—	9	10
21	UY	22	OY	23	BW	24	RW	25	YU	26	YG	27	W	28	G	29	WU
31	RW	32	BW	33	RW	34	BW	35	—	36	37	38	39	40	—	—	—

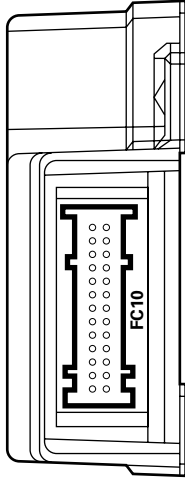
(RHD)

27	WU	28	GU	29	W	30	G
----	----	----	----	----	---	----	---

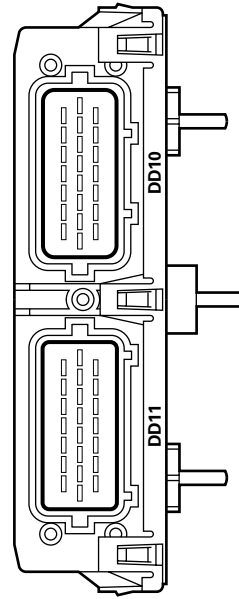
FC10 / YELLOW

14	—	15	—	16	—	17	—	18	W	19	O	20	N	21	Y	22	W	23	BK	24	U	25	O	26	—
1	WU	2	G	3	W	4	Y	5	WG	6	U	7	R	8	G	9	—	10	—	11	—	12	—	13	—

OCCUPANCY SENSING MODULE



DRIVER DOOR CONTROL MODULE



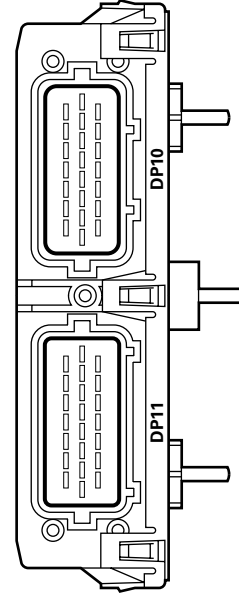
DD11 / BLACK

7	BR	6	WU	5	GU	4	NG	3	YR	2	U	1	NR
15	WG	—	—	13	OY	—	—	12	—	11	WB	—	—
22	UY	21	O	20	GU	19	—	18	—	17	—	16	—

DD10 / BLUE

7	O	6	YB	5	Y	4	UY	3	U	2	BW	1	N
15	OY	14	GW	13	—	12	—	11	—	10	—	9	—
22	OG	21	RU	20	WU	19	GB	18	BO	17	B	16	Y

PASSENGER DOOR CONTROL MODULE



DP11 / BLACK

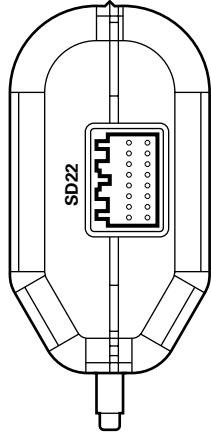
—	—	6	—	5	—	4	—	3	—	2	—	1	—
15	—	14	—	13	—	12	—	11	—	10	—	9	—
22	—	21	—	20	—	19	—	18	—	17	—	16	—

DP10 / BLUE

7	O	6	YB	5	Y	4	UY	3	U	2	BW	1	N
15	OY	14	GW	13	—	12	—	11	—	10	—	9	—
22	OG	21	RU	20	WU	19	—	18	—	17	—	16	—



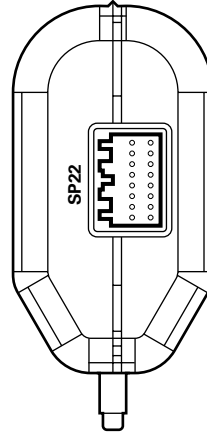
DRIVER HEAD RESTRAINT CONTROL MODULE



SD22 / BLACK

8	7	6	5	4	3	2	1
B	B	G	UY	RU	OG	—	N
—	15	14	13	12	11	10	9
BW	BG	Y	U	YU	W	WG	NG

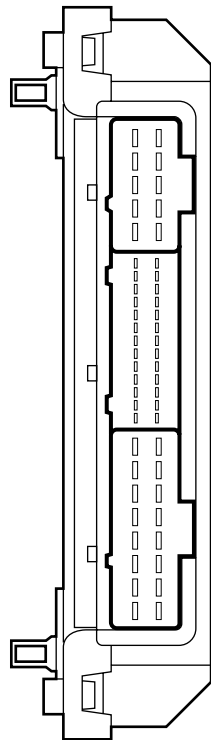
PASSENGER HEAD RESTRAINT CONTROL MODULE



SP22 / BLACK

8	7	6	5	4	3	2	1
—	B	G	UY	RU	OG	—	N
16	15	14	13	12	11	10	9
BW	BG	Y	U	YU	W	WG	NG

DRIVER SEAT CONTROL MODULE



SD3 / BLACK

9	10	11	12	13	14	15	16
UY	OY	W	WG	GU	GR	GW	NR
1	2	3	4	5	6	7	8
GO	NB	O	R	G	GR	WU	WR

SD3

SD4

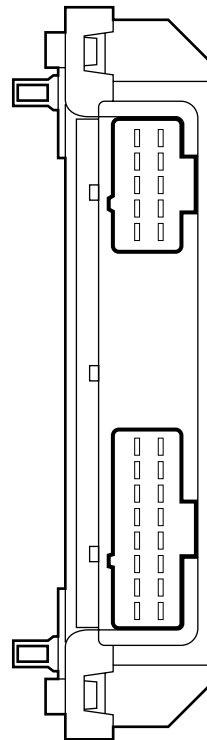
SD4 / BLACK

14	15	16	17	18	19	20	21	22	23	24	25	26
WU	YG	—	—	WR	YB	—	—	—	—	—	—	—
1	2	3	4	5	6	7	8	9	10	11	12	13
WG	BG	—	—	W	WB	—	Y	—	WR	W	BO	—

SD5 / BLACK

6	7	8	9	10
—	—	G	Y	U
1	2	3	4	5
BO	B	OG	UY	NR

PASSENGER SEAT CONTROL MODULE



SP3 / BLACK

9	10	11	12	13	14	15	16
UY	OY	W	WG	W	WG	GW	NR
1	2	3	4	5	6	7	8
GO	NG	O	R	G	GR	WU	WR

SP3

SP5 / BLACK

6	7	8	9	10
—	—	—	Y	U
1	2	3	4	5
—	B	OG	UY	NR

Fig. 01.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BATTERY	BT66 BT67	EYELET EYELET	TRUNK / RH SIDE
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
COOLING FANS FUSE BOX	LF14 LF15	1-WAY / BLACK 1-WAY / BLACK	ENGINE COMPARTMENT / TOP OF LH SHOCK ABSORBER TOWER
FUSE BOX – DRIVER SIDE	FC5 FC6 FC90 FC92 FC94	10-WAY / NATURAL 10-WAY / BLACK EYELET EYELET EYELET	FASCIA / DRIVER SIDE
FUSE BOX – ENGINE COMPARTMENT	LF5 LF6 LF7 LF8 LF70	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	ENGINE COMPARTMENT / LEFT FRONT
FUSE BOX – ENGINE MANAGEMENT	EM19 EM20 EM70	10-WAY / NATURAL 10-WAY / BLACK EYELET	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
FUSE BOX – PASSENGER SIDE	FC20 FC21 FC90 FC93	10-WAY / NATURAL 10-WAY / BLACK EYELET EYELET	FASCIA / PASSENGER SIDE
FUSE BOX – TRUNK	BT10 BT11 BT12 BT13 BT64	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	TRUNK / ELECTRICAL CARRIER
HIGH POWER PROTECTION MODULE	BT60 BT61 BT62 BT63	EYELET EYELET EYELET EYELET	TRUNK / ADJACENT TO BATTERY
TRANSIT ISOLATION DEVICE	BT44 BT49	2-WAY / BLACK 1-WAY / BLACK	TRUNK / ADJACENT TO BATTERY

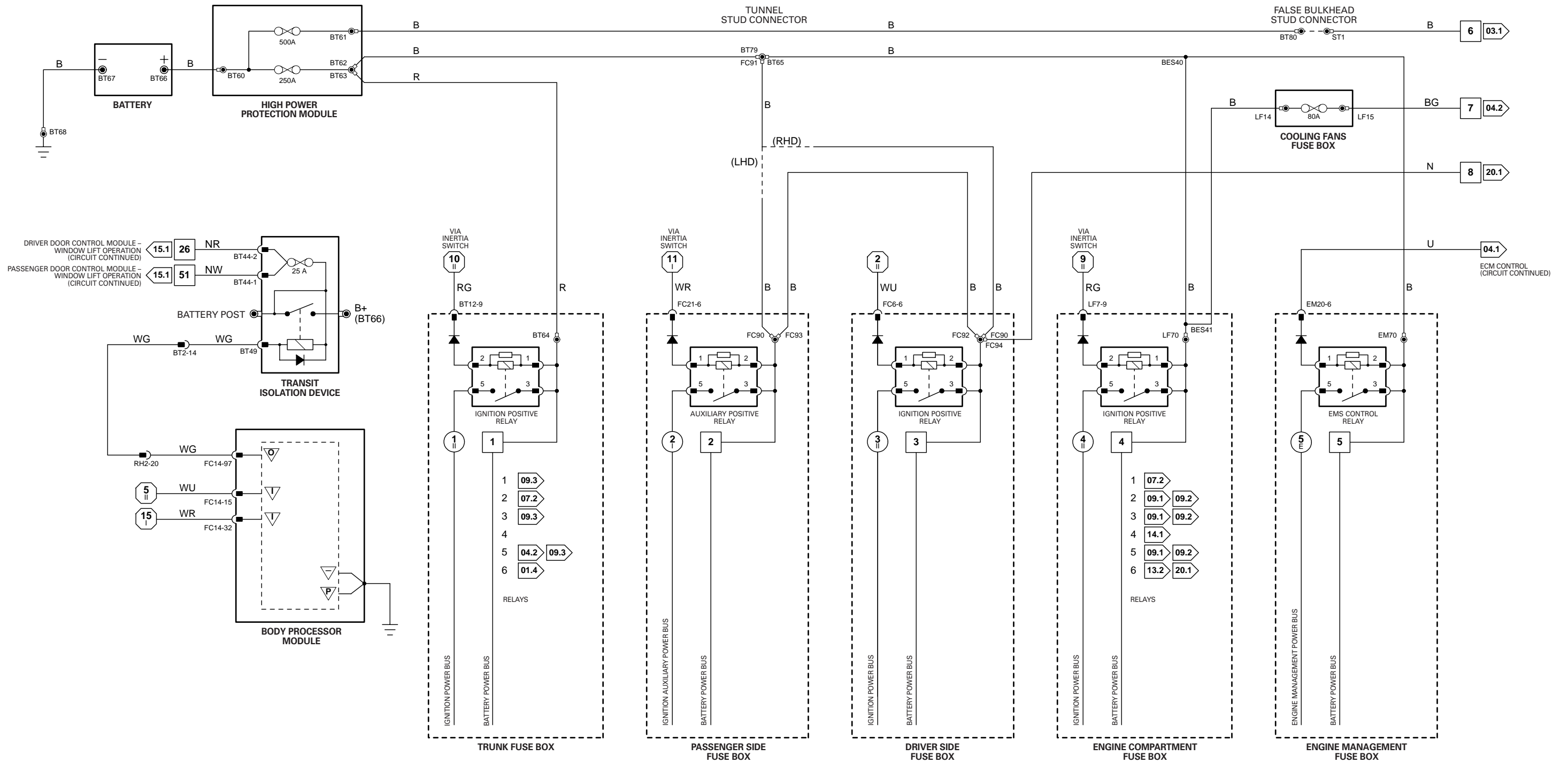
HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDS

Ground	Location
BT68	BATTERY GROUND STUD

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



▽ Input ▽ Battery Voltage ▽ Sensor/Signal Supply V
 ▽ Output ▽ Power Ground ▽ Sensor/Signal Ground
 ▽ ACP ▽ SCP
 ▽ CAN ▽ Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

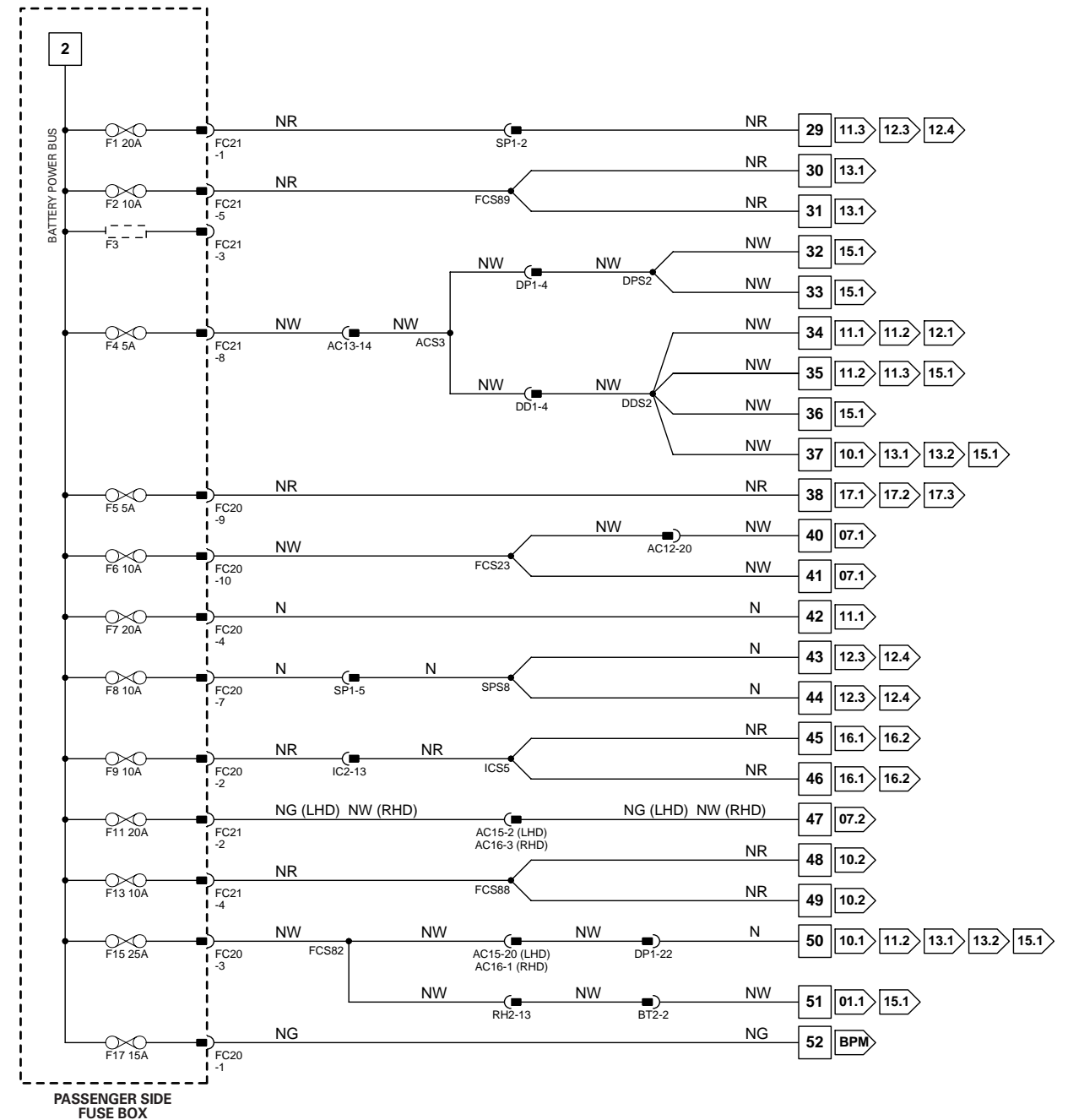
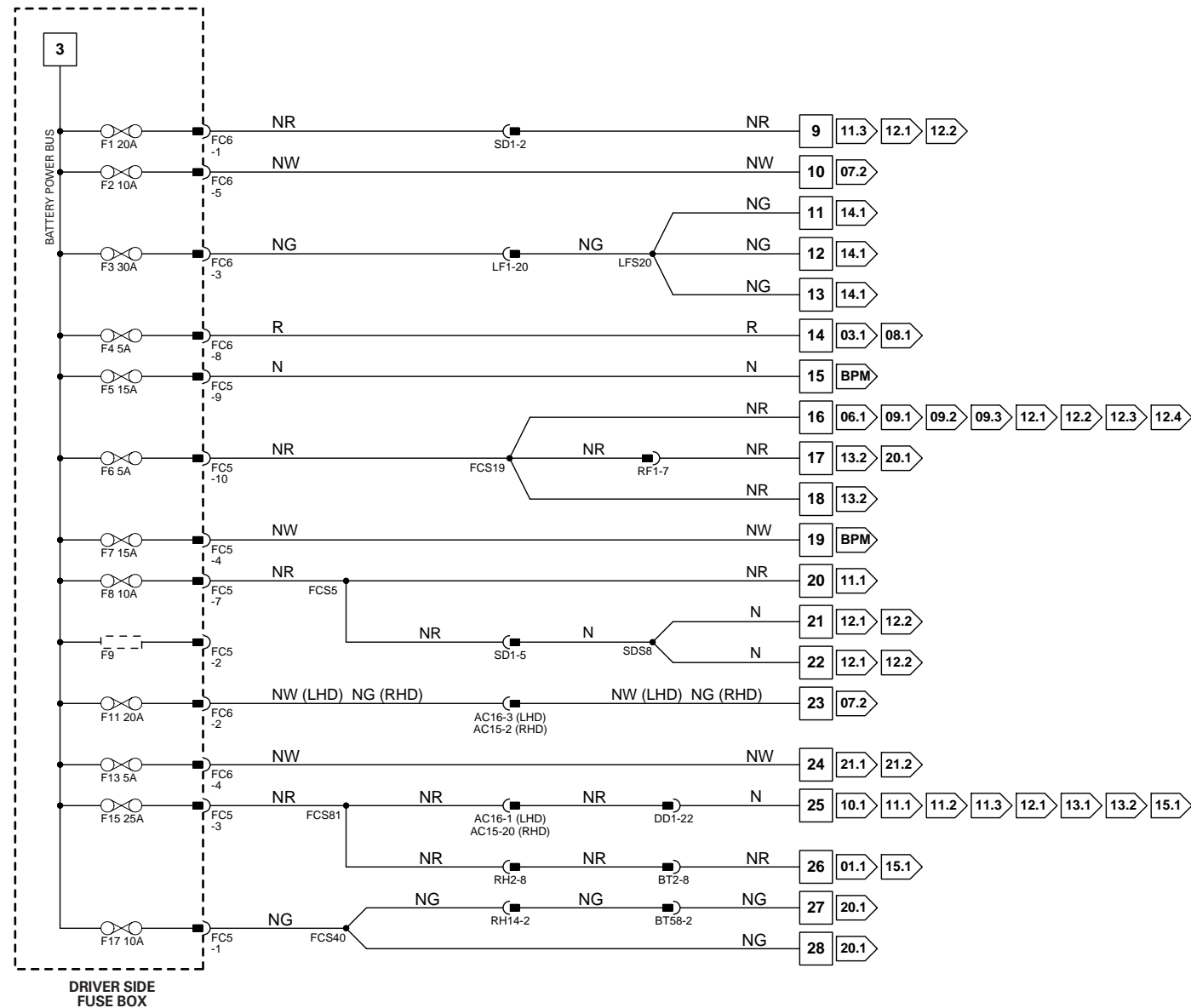
COMPONENTS

Component	Connector(s)	Connector Description	Location
FUSE BOX – DRIVER SIDE	FC5	10-WAY / NATURAL	FASCIA / DRIVER SIDE
	FC6	10-WAY / BLACK	
	FC90	EYELET	
	FC92	EYELET	
	FC94	EYELET	
FUSE BOX – PASSENGER SIDE	FC20	10-WAY / NATURAL	FASCIA / PASSENGER SIDE
	FC21	10-WAY / BLACK	
	FC90	EYELET	
	FC93	EYELET	

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC12	20-WAY / WHITE / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA TOP CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC15	20-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC16	8-WAY / WHITE / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BT58	4-WAY / BLACK / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
IC2	14-WAY / WHITE / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
LF1	20-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RH14	2-WAY / BLACK / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RT1	18-WAY / YELLOW / FASCIA HARNESS TO TELEPHONE HARNESS	BELOW CENTER CONSOLE
SD1	14-WAY / YELLOW / FASCIA HARNESS TO DRIVER SEAT HARNESS	BELOW DRIVER SEAT
SP1	14-WAY / YELLOW / FASCIA HARNESS TO PASSENGER SEAT HARNESS	BELOW PASSENGER SEAT

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



BPM NOTE: Body Processor Module appears in numerous Figures.

Fig. 01.3**COMPONENTS**

Component	Connector(s)	Connector Description	Location
FUSE BOX – ENGINE COMPARTMENT	LF5 LF6 LF7 LF8 LF70	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	ENGINE COMPARTMENT / LEFT FRONT
FUSE BOX – ENGINE MANAGEMENT	EM19 EM20 EM70	10-WAY / NATURAL 10-WAY / BLACK EYELET	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
FUSE BOX – TRUNK	BT10 BT11 BT12 BT13 BT64	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	TRUNK / ELECTRICAL CARRIER

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
IC4	14-WAY / WHITE / IN-CAR ENTERTAINMENT HARNESS TO TRUNK HARNESS	TRUNK / LEFT OF ANTENNA ASSEMBLY
PI1	57-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RH12	18-WAY / YELLOW / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.

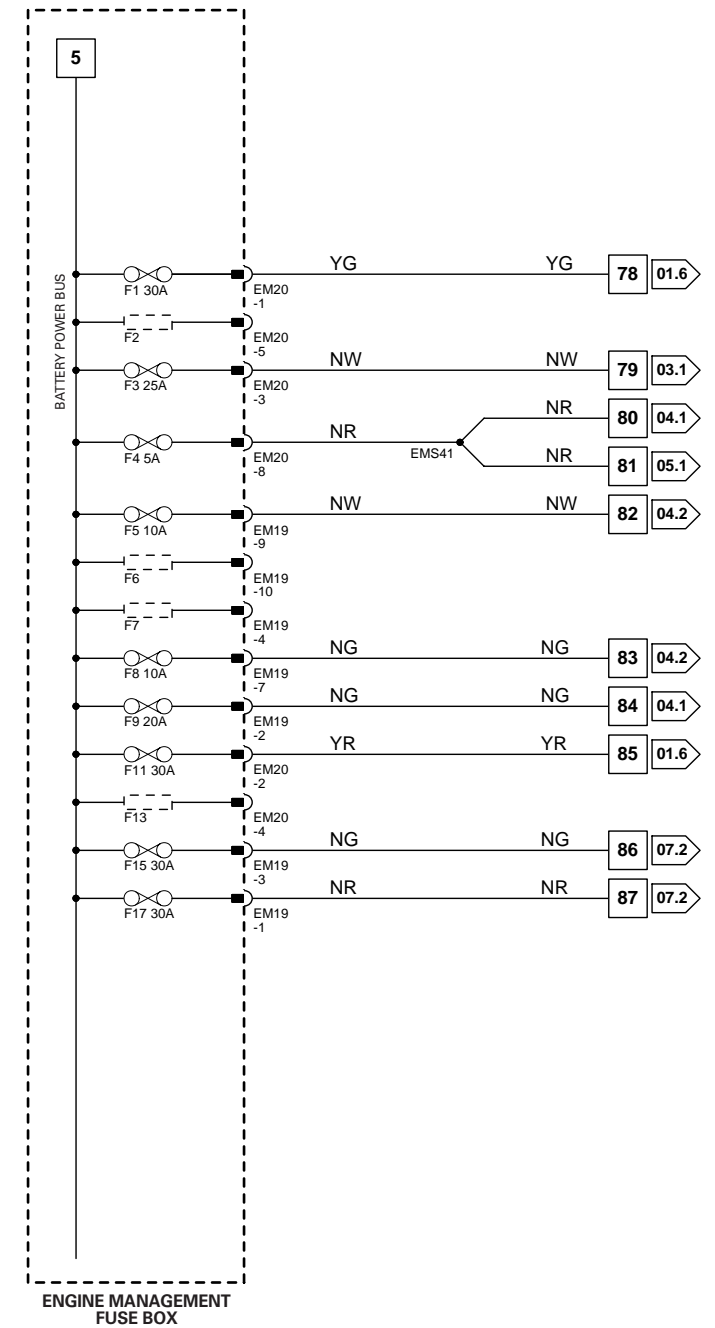
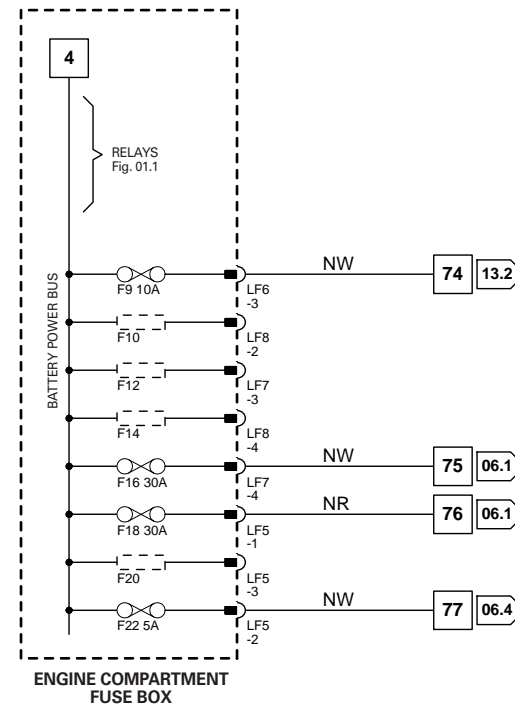
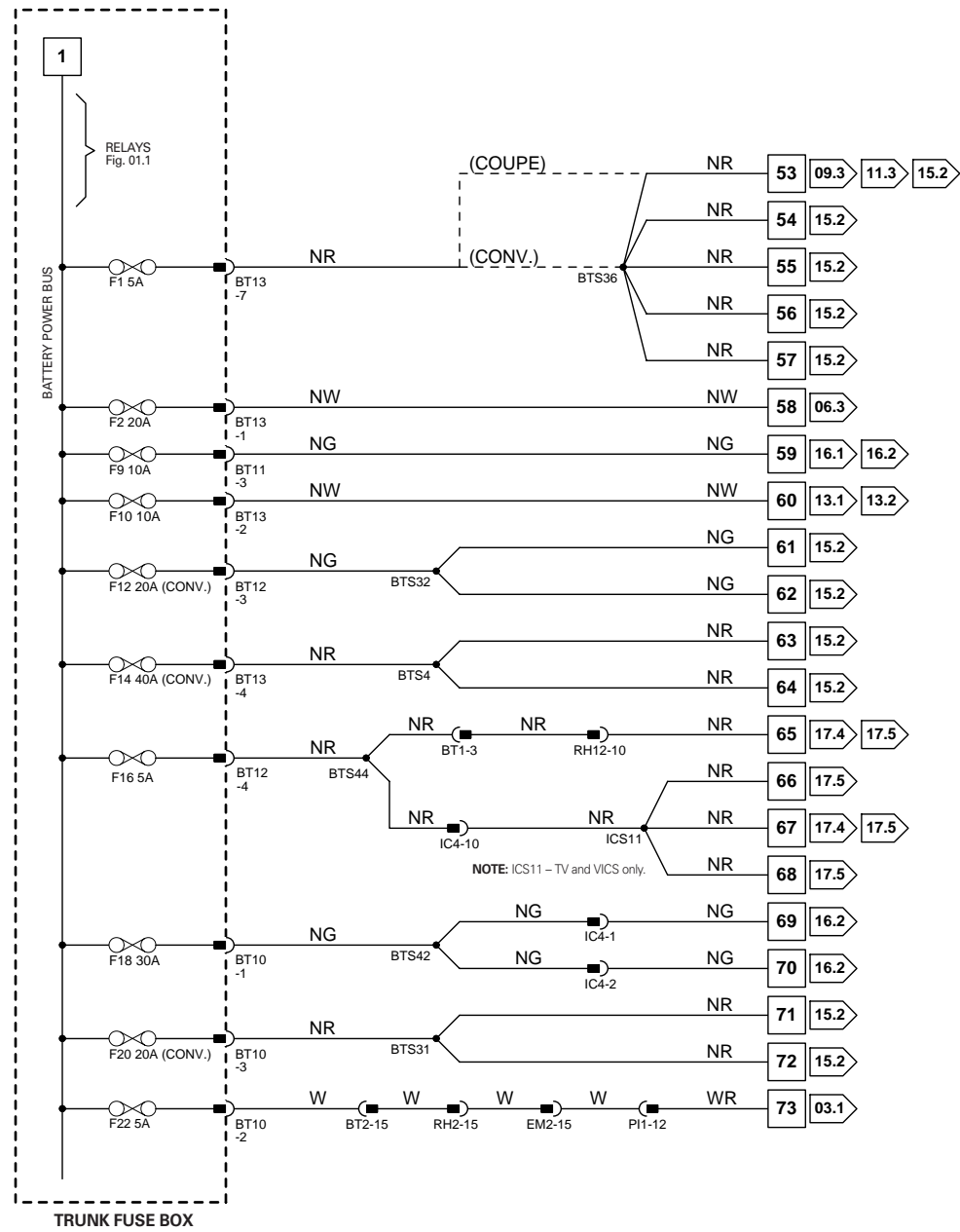


Fig. 01.4**COMPONENTS**

Component	Connector(s)	Connector Description	Location
FUSE BOX – PASSENGER SIDE	FC20 FC21 FC90 FC93	10-WAY / NATURAL 10-WAY / BLACK EYELET EYELET	FASCIA / PASSENGER SIDE
FUSE BOX – TRUNK	BT10 BT11 BT12 BT13 BT64	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	TRUNK / ELECTRICAL CARRIER

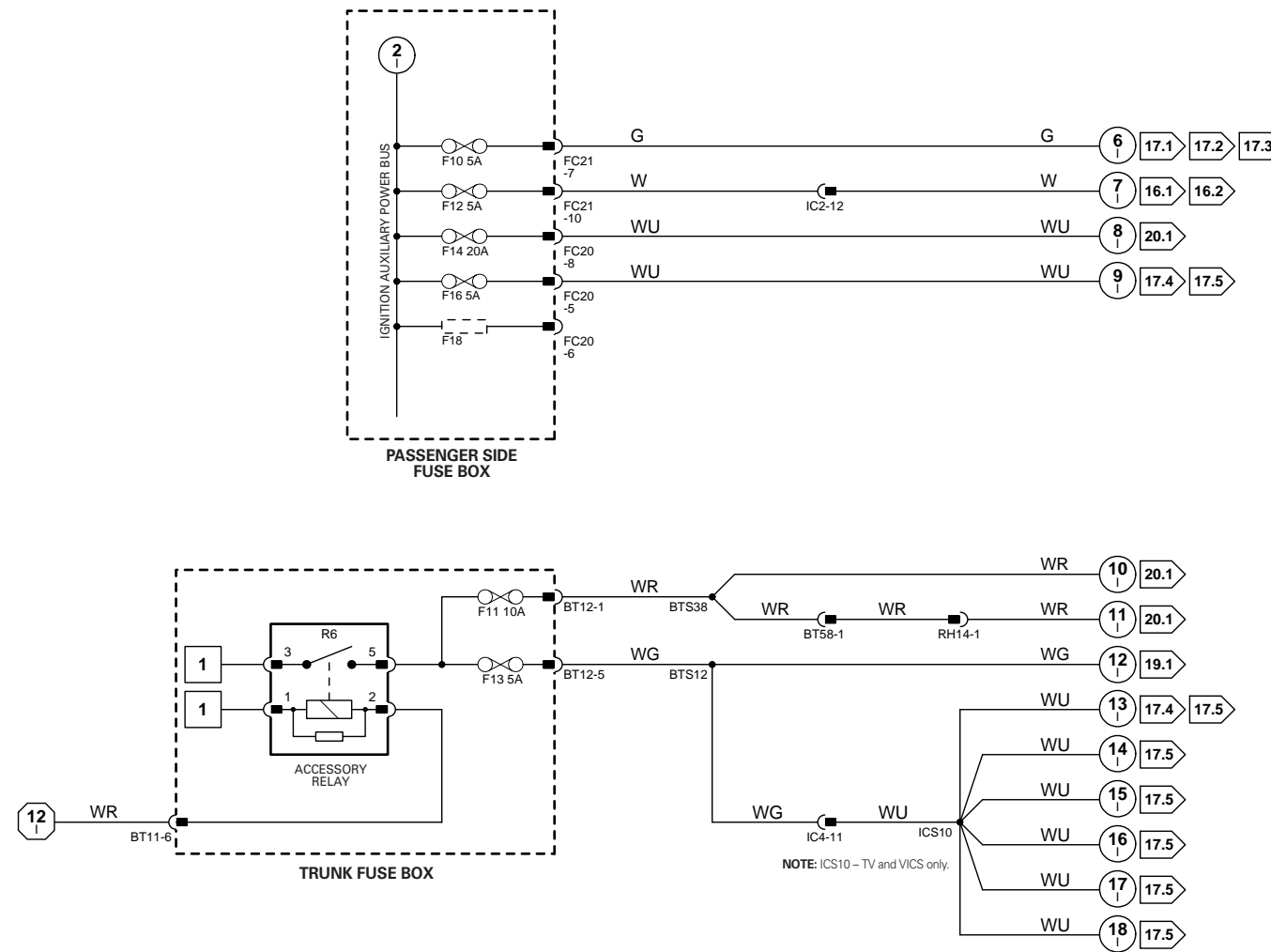
RELAYS

Relay	Connector / Color	Location
ACCESSORY RELAY	BUS / BROWN	TRUNK FUSE BOX – R6

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
BT58	4-WAY / BLACK / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
IC2	14-WAY / WHITE / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC4	14-WAY / WHITE / IN-CAR ENTERTAINMENT HARNESS TO TRUNK HARNESS	TRUNK / LEFT OF ANTENNA ASSEMBLY
RH14	2-WAY / BLACK / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



COMPONENTS

Component	Connector(s)	Connector Description	Location
FUSE BOX – DRIVER SIDE	FC5	10-WAY / NATURAL	FASCIA / DRIVER SIDE
	FC6	10-WAY / BLACK	
	FC90	EYELET	
	FC92	EYELET	
	FC94	EYELET	
FUSE BOX – ENGINE COMPARTMENT	LF5	10-WAY / NATURAL	ENGINE COMPARTMENT / LEFT FRONT
	LF6	10-WAY / BLACK	
	LF7	10-WAY / GREEN	
	LF8	10-WAY / BLUE	
	LF70	EYELET	
FUSE BOX – TRUNK	BT10	10-WAY / NATURAL	TRUNK / ELECTRICAL CARRIER
	BT11	10-WAY / BLACK	
	BT12	10-WAY / GREEN	
	BT13	10-WAY / BLUE	
	BT64	EYELET	

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC15	20-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BT3	20-WAY / YELLOW / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
EM1	20-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
FC49	12-WAY /BLACK / FASCIA HARNESS TO RAIN SENSOR LINK HARNESS	BELOW RH BLOWER
LF3	13-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / ADJACENT TO BRAKE SERVO
LF40	13-WAY / BLACK / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / FORWARD OF BRAKE FLUID RESERVOIR
LF59	12-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
PI1	57-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF2	8-WAY / YELLOW / ROOF HARNESS TO INTERIOR REAR VIEW MIRROR LINK HARNESS	ROOF CONSOLE
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RH9	20-WAY / BLUE / FASCIA HARNESS TO REARWARD HARNESS	BELOW CENTER CONSOLE
RH13	12-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RT1	18-WAY / YELLOW / FASCIA HARNESS TO TELEPHONE HARNESS	BELOW CENTER CONSOLE
SD1	14-WAY / YELLOW / FASCIA HARNESS TO DRIVER SEAT HARNESS	BELOW DRIVER SEAT
SP1	14-WAY / YELLOW / FASCIA HARNESS TO PASSENGER SEAT HARNESS	BELOW PASSENGER SEAT

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.

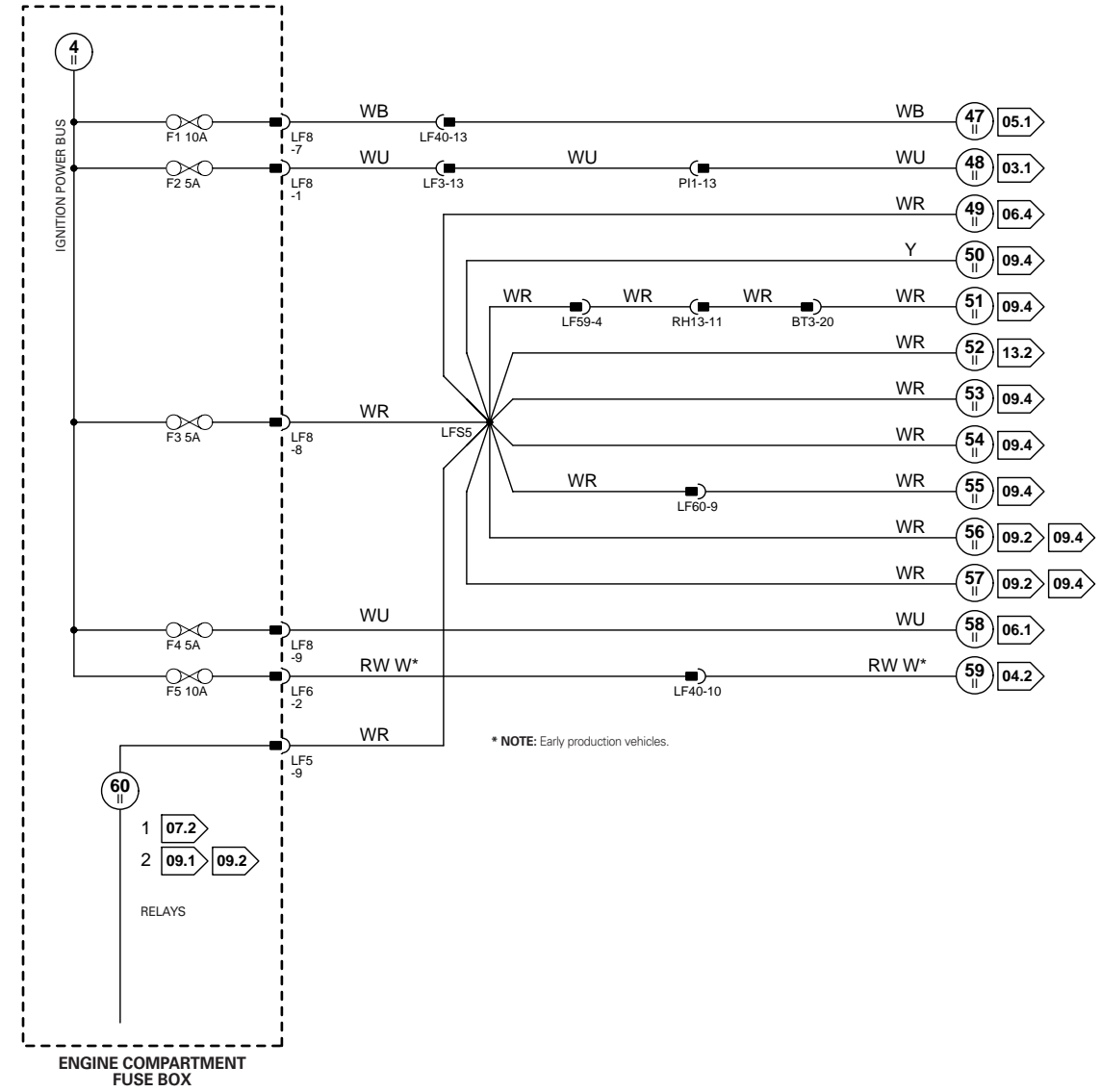
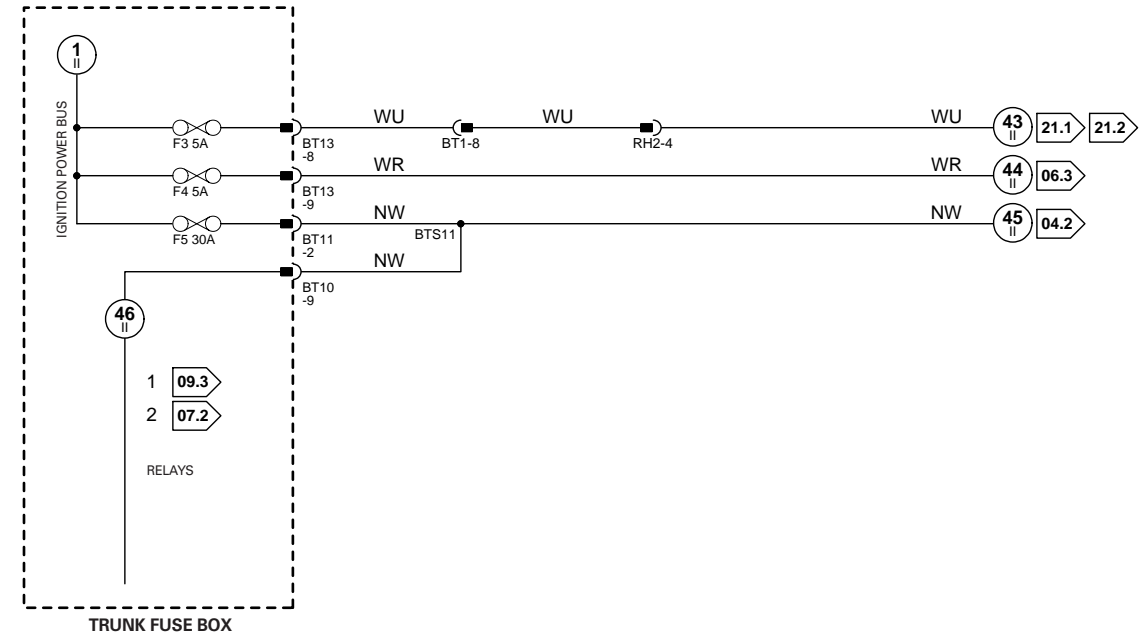
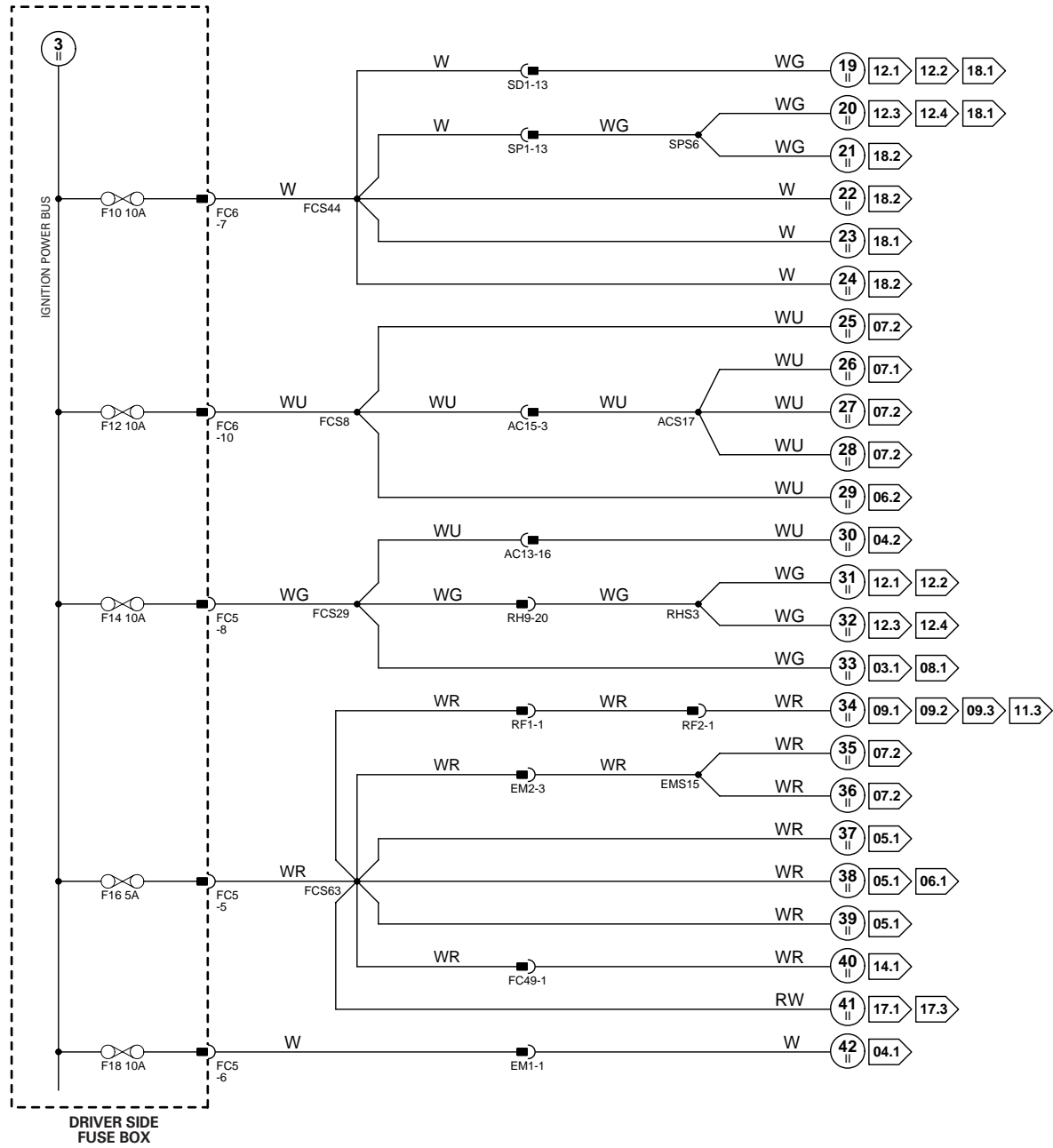


Fig. 01.6**COMPONENTS**

Component	Connector(s)	Connector Description	Location
FUSE BOX – ENGINE MANAGEMENT	EM19 EM20 EM70	10-WAY / NATURAL 10-WAY / BLACK EYELET	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE

RELAYS

Relay	Connector / Color	Location
HO2S HEATER RELAY – BANK 1	EM62 / BROWN	CONTROL MODULE ENCLOSURE RELAYS
HO2S HEATER RELAY – BANK 2	EM61 / BROWN	CONTROL MODULE ENCLOSURE RELAYS

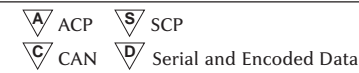
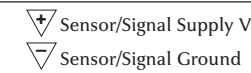
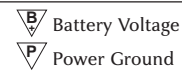
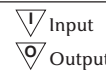
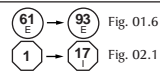
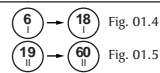
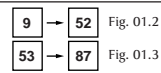
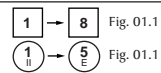
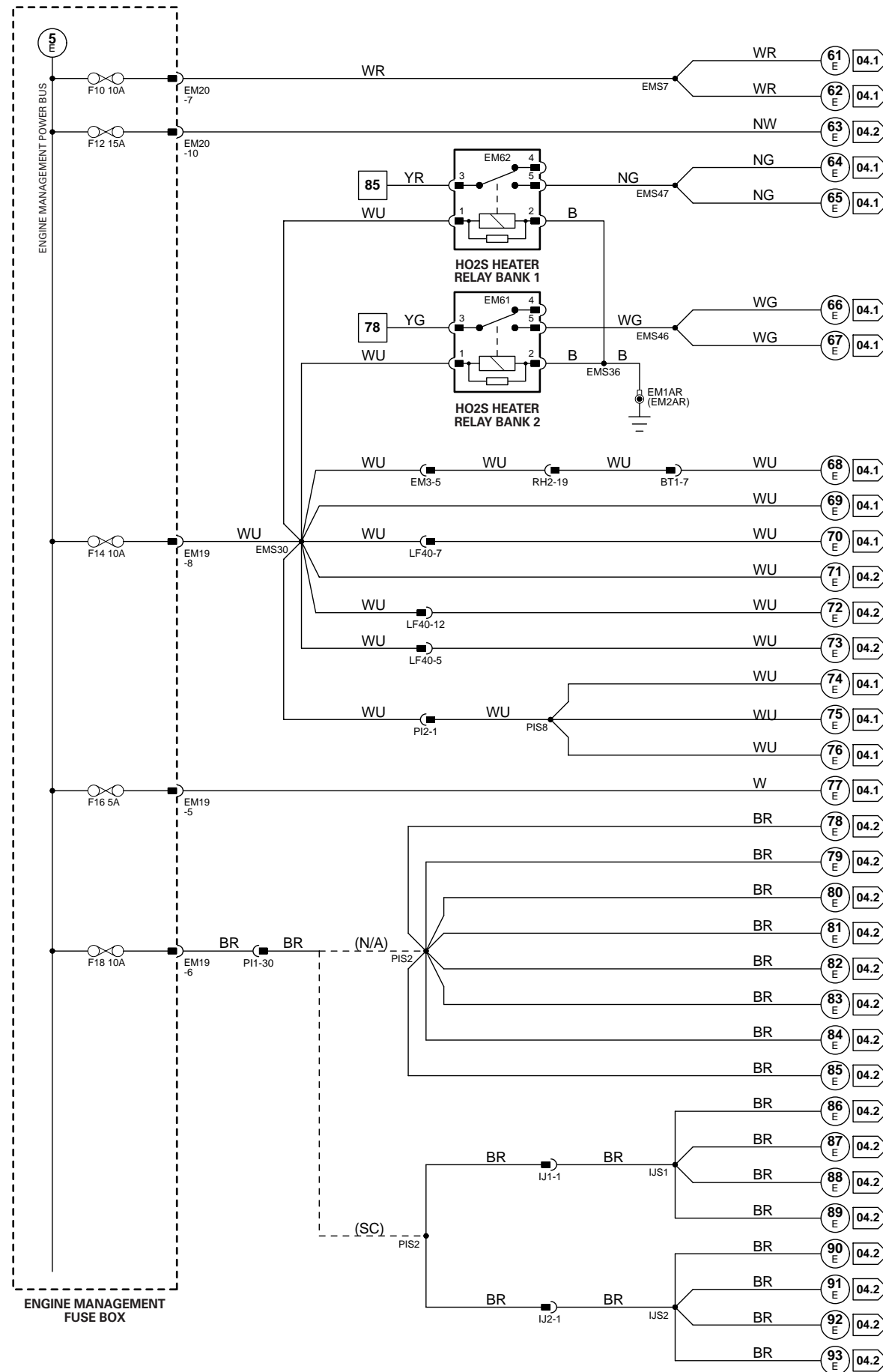
HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
EM3	14-WAY / GREY / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
IJ1	6-WAY / BLACK / ENGINE HARNESS TO FUEL INJECTION HARNESS	ADJACENT TO AIR INTAKE MANIFOLD
IJ2	6-WAY / BLACK / ENGINE HARNESS TO FUEL INJECTION HARNESS	ADJACENT TO AIR INTAKE MANIFOLD
LF40	13-WAY / BLACK / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / FORWARD OF BRAKE FLUID RESERVOIR
PI1	57-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
PI2	13-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDS

Ground	Location
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

Fig. 02.1**COMPONENTS**

Component	Connector(s)	Connector Description	Location
IGNITION SWITCH	FC4	8-WAY / WHITE	STEERING COLUMN
INERTIA SWITCH	AC10	3-WAY / BLACK	ADJACENT TO LH FASCIA FUSE BOX

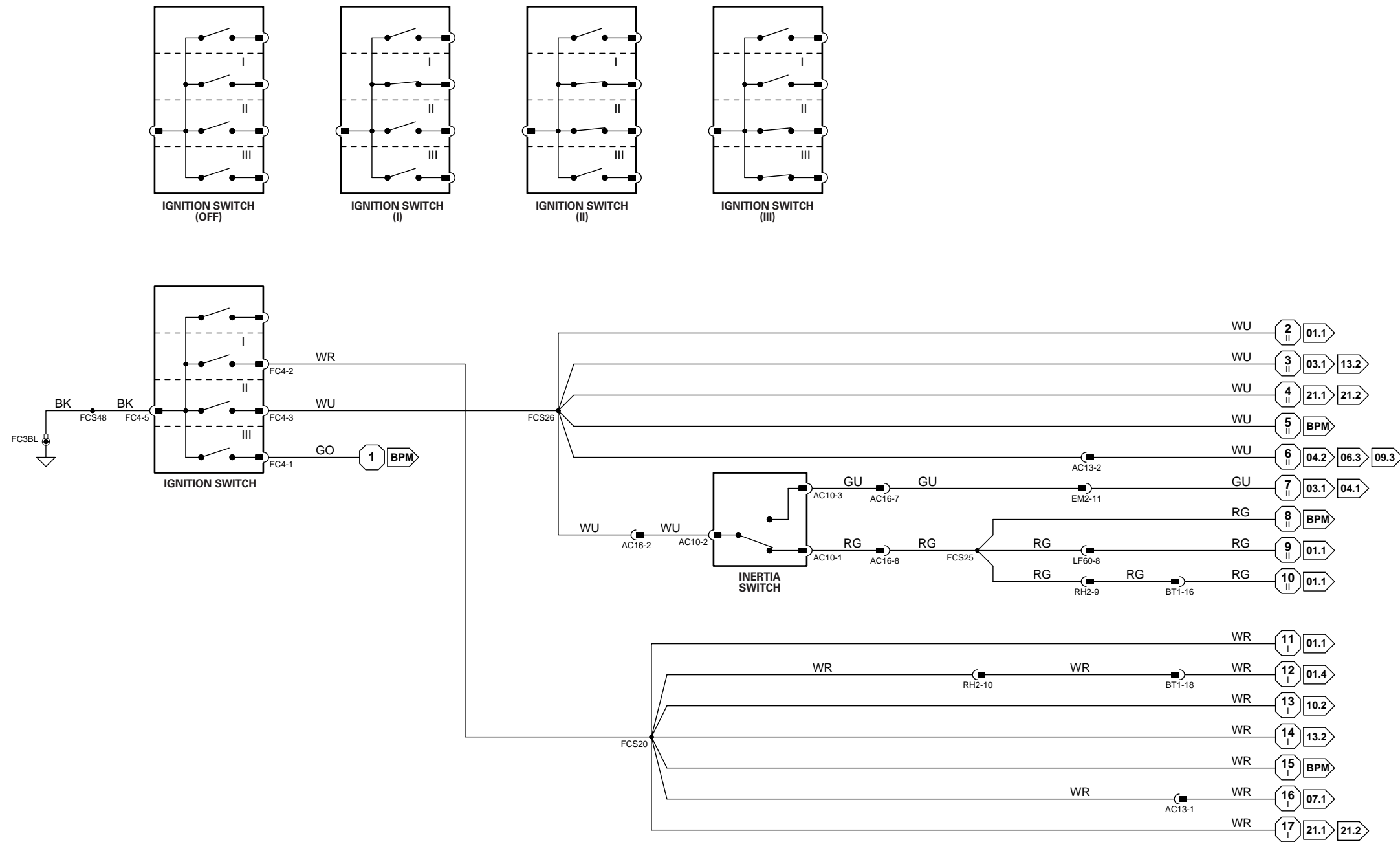
HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC16	8-WAY / WHITE / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDS

Ground	Location
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



BPM NOTE: Body Processor Module appears in numerous Figures.

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-32	IGNITION SWITCHED GROUND (I): GROUND
I FC14-33	IGNITION SWITCHED GROUND (II): GROUND
I FC14-41	ENGINE START REQUEST: GROUND WHEN ACTIVATED
I FC14-58	NOT-IN-PARK SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-67	KEY-IN-IGNITION: GROUND WHEN ACTIVATED
O FC14-72	ENGINE START REQUEST: B+ WHEN ACTIVATED
D FC14-73	SECURITY ACKNOWLEDGE: ENCODED COMMUNICATIONS
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +
D FC14-92	OK TO FUEL SIGNAL: ENCODED COMMUNICATIONS

Engine Control Module

Pin	Description and Characteristic
I EM80-06	ENGINE CRANK: B+
I EM80-10	INERTIA SWITCH: NORMALLY CLOSED / OPEN CIRCUIT WHEN ACTIVATED
I EM80-31	PARK / NEUTRAL SIGNAL: B+ WHEN ACTIVATED
O EM80-41	STARTER RELAY DRIVE: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
I EM80-79	GENERATOR FAULT; CHARGE WARNING:
C EM80-123	CAN -
C EM80-124	CAN +

Key Transponder Module

Pin	Description and Characteristic
D FC22-07	READER / EXCITER COIL: ENCODED COMMUNICATION
D FC22-08	READER / EXCITER COIL: ENCODED COMMUNICATION
D FC22-09	OK TO FUEL: ENCODED COMMUNICATION
SG FC22-12	LOGIC GROUND: GROUND
I FC22-14	IGNITION SWITCHED GROUND (III): GROUND
D FC22-17	SECURITY ACKNOWLEDGE: ENCODED COMMUNICATION

Major Instrument Cluster

Pin	Description and Characteristic
B+ FC25-01	IGNITION SWITCHED POWER SUPPLY: B+
SG FC25-04	LOGIC GROUND: GROUND
C FC25-11	CAN +
S FC25-13	SCP +
S FC25-14	SCP -
I FC25-15	BATTERY POWER SUPPLY: B+
PG FC25-16	POWER GROUND: GROUND
C FC25-23	CAN -

Transmission Control Module

Pin	Description and Characteristic
O GB2-10	PARK / NEUTRAL SIGNAL: GROUND WHEN ACTIVATED

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 03.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BATTERY	BT66 BT67	EYELET EYELET	TRUNK / RH SIDE
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
ENGINE CONTROL MODULE	EM80	134-WAY / BLACK	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
GENERATOR	PI50 ST11	3-WAY / BLACK EYELET	ENGINE COMPARTMENT / RIGHT FRONT
HIGH POWER PROTECTION MODULE	BT60 BT61 BT62 BT63	EYELET EYELET EYELET EYELET	TRUNK / ADJACENT TO BATTERY
IGNITION SWITCH	FC4	8-WAY / WHITE	STEERING COLUMN
KEY TRANSPONDER MODULE	FC22	20-WAY / GREEN	ADJACENT TO DRIVER SIDE FUSE BOX
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
NOT-IN-PARK SWITCH	FC87	3-WAY / WHITE	GEAR SELECTOR ASSEMBLY
READER / EXCITER COIL (COLUMN SWITCHGEAR)	SC12	3-WAY / WHITE	STEERING COLUMN / RH SIDE
STARTER MOTOR	ST3 ST10	EYELET EYELET	ENGINE BLOCK
TRANSMISSION CONTROL MODULE	GB2	16-WAY / BLACK	TRANSMISSION CONTROL VALVE ASSEMBLY

RELAYS

Relay	Connector / Color	Location
STARTER RELAY	EM50 / BROWN	RH ENCLOSURE RELAYS

HARNESS IN-LINE CONNECTORS

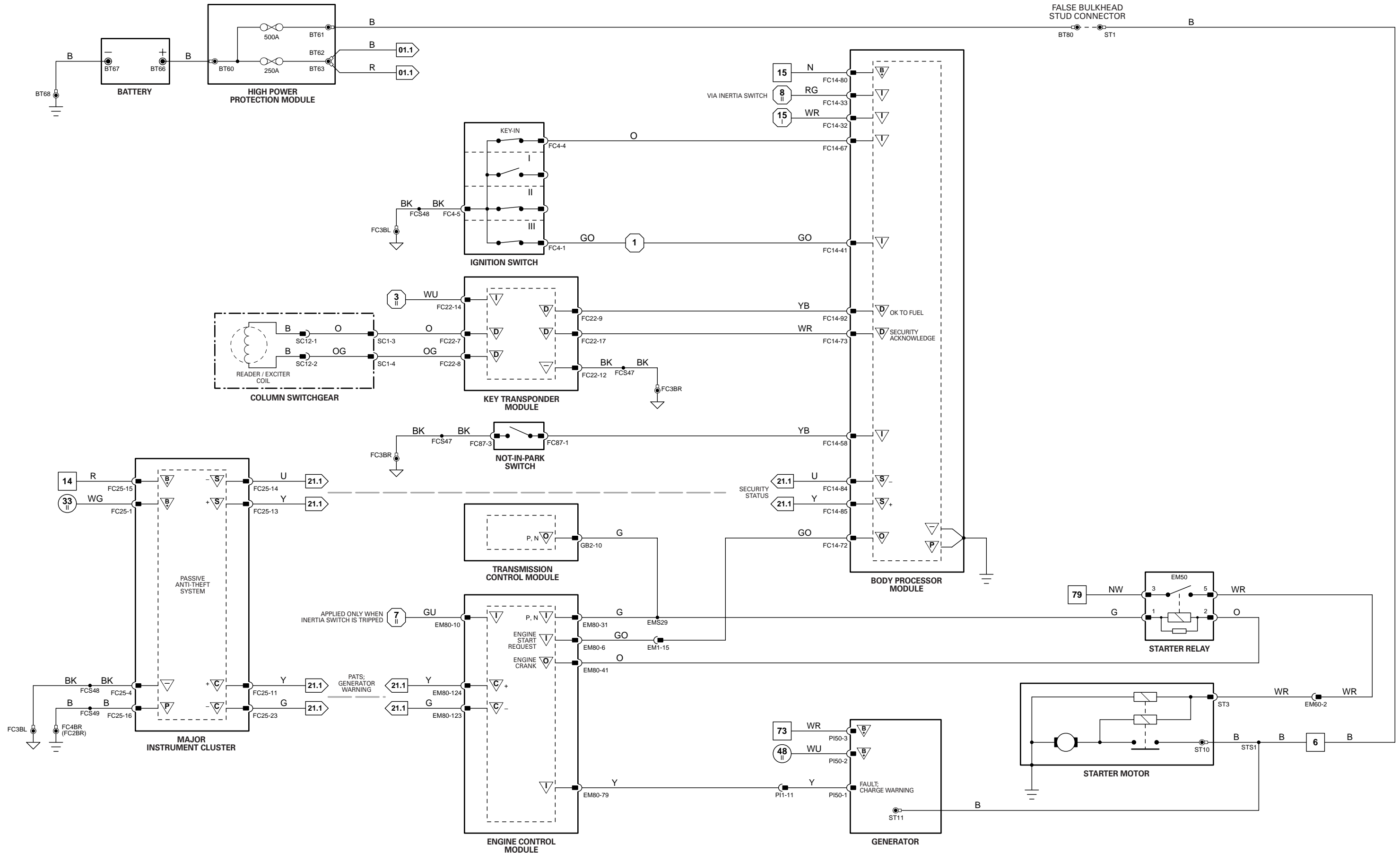
Connector	Connector Description	Location
EM1	20-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
EM60	2-WAY / BLACK / STARTER LINK HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BEHIND LEFT INNER FENDER HEAT SHIELD
PI1	57-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
SC1	12-WAY / WHITE / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN

GROUNDS

Ground	Location
BT68	BATTERY GROUND STUD
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	▽ Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	▽ Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Engine Control Module

Pin	Description and Characteristic
O	EM80-01 HO2 SENSOR HEATER CONTROL – 1/1: PWM, 1 CYCLE PER 128 mS, VARIABLE DUTY CYCLE
O	EM80-02 HO2 SENSOR HEATER CONTROL – 1/1: PWM, 1 CYCLE PER 128 mS, VARIABLE DUTY CYCLE
PG	EM80-04 POWER GROUND 1: GROUND
PG	EM80-05 POWER GROUND 2: GROUND
I	EM80-06 ENGINE CRANK: B+
I	EM80-07 IGNITION ON: B+
I	EM80-10 INERTIA SWITCH: NORMALLY CLOSED / OPEN CIRCUIT WHEN ACTIVATED
SS	EM80-12 SENSOR POWER SUPPLY 1: NOMINAL 5 V
SS	EM80-13 SENSOR POWER SUPPLY 2: NOMINAL 5 V
SG	EM80-17 SMALL SIGNAL GROUND 1: GROUND
SG	EM80-18 SMALL SIGNAL GROUND 2: GROUND
SG	EM80-19 SENSOR GROUND 1: GROUND
SG	EM80-20 SENSOR GROUND 2: GROUND
B+	EM80-22 BATTERY POWER SUPPLY: B+
B+	EM80-23 EMS SWITCHED POWER SUPPLY 1: B+
B+	EM80-24 EMS SWITCHED POWER SUPPLY 2: B+
SG	EM80-29 HO2 SENSOR HEATER GROUND – 1/1: GROUND
SG	EM80-30 HO2 SENSOR HEATER GROUND – 1/1: GROUND
I	EM80-31 PARK / NEUTRAL SIGNAL: B+ WHEN ACTIVATED
I	EM80-36 CRANKSHAFT SENSOR SIGNAL: PULSED SIGNAL, 70 PULSES PER ENGINE CYCLE
SG	EM80-37 CRANKSHAFT SENSOR SIGNAL GROUND: GROUND
O	EM80-40 EMS CONTROL RELAY DRIVE: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-41 STARTER RELAY DRIVE: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
SG	EM80-43 TP AND APP SIGNALS SHIELD: GROUND
I	EM80-44 MASS AIR FLOW SENSOR SIGNAL: NOMINAL 0 – 5 V BY ENGINE OPERATING CONDITION
SG	EM80-45 MASS AIR FLOW SENSOR GROUND: GROUND
SG	EM80-46 MASS AIR FLOW SENSOR GROUND: GROUND
I	EM80-50 ENGINE FUEL TEMPERATURE SENSOR SIGNAL, NOMINAL 0 – 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
O	EM80-52 THROTTLE MOTOR RELAY DRIVE: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
SG	EM80-54 THROTTLE MOTOR GROUND: GROUND
O	EM80-55 HO2 SENSOR HEATER CONTROL – 2/1: PWM, 1 CYCLE PER 128 mS, VARIABLE DUTY CYCLE
O	EM80-56 HO2 SENSOR HEATER CONTROL – 2/1: PWM, 1 CYCLE PER 128 mS, VARIABLE DUTY CYCLE
O	EM80-57 EGR DRIVE 1: B+; EGR DRIVE 1, 2, 3 AND 4 ARE OPERATED IN TURN
O	EM80-58 EGR DRIVE 2: B+; EGR DRIVE 1, 2, 3 AND 4 ARE OPERATED IN TURN
O	EM80-59 EGR DRIVE 3: B+; EGR DRIVE 1, 2, 3 AND 4 ARE OPERATED IN TURN
O	EM80-60 EGR DRIVE 4: B+; EGR DRIVE 1, 2, 3 AND 4 ARE OPERATED IN TURN
O	EM80-66 EVAP CANISTER PURGE VALVE DRIVE: PWM, 10 Hz, POSITIVE DUTY CYCLE RANGE 7% – 100%
O	EM80-67 EVAP CANISTER CLOSE VALVE DRIVE: TO CLOSE, ECM SWITCHES CIRCUIT TO GROUND
I	EM80-68 BANK 2 CAMSHAFT SENSOR SIGNAL: PULSED SIGNAL, 4 PULSES PER ENGINE CYCLE
SG	EM80-69 BANK 2 CAMSHAFT SENSOR GROUND: GROUND
I	EM80-70 ENGINE COOLANT TEMPERATURE SENSOR SIGNAL, NOMINAL 0 – 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
I	EM80-71 INTAKE AIR TEMPERATURE SENSOR SIGNAL, NOMINAL 0 – 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
I	EM80-72 INTAKE AIR TEMPERATURE SENSOR 2 SIGNAL, NOMINAL 0 – 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
I	EM80-73 INJECTION PRESSURE SENSOR SIGNAL, NOMINAL 0 – 5 V: POTENTIOMETER – VOLTAGE INCREASES AS PRESSURE INCREASES
I	EM80-75 THROTTLE POSITION SENSOR 1 SIGNAL: IDLE = 0.60 V; FULL THROTTLE = 4.30 V
I	EM80-76 THROTTLE POSITION SENSOR 2 SIGNAL: IDLE = 1.48 V; FULL THROTTLE = 4.40 V
I	EM80-78 ENGINE OIL TEMPERATURE SENSOR SIGNAL, NOMINAL 0 – 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
I	EM80-79 GENERATOR FAULT; CHARGE WARNING:
O	EM80-80 THROTTLE MOTOR DRIVE: B+ TO ACTIVATE MOTOR
SG	EM80-81 HO2 SENSOR HEATER GROUND – 2/1: GROUND
SG	EM80-82 HO2 SENSOR HEATER GROUND – 2/1: GROUND
I	EM80-83 HO2 SENSOR 1/1 SIGNAL: VARIABLE CURRENT
I	EM80-84 HO2 SENSOR 1/1 SIGNAL: CONSTANT CURRENT
SG	EM80-91 HO2 SENSOR HEATERS 1/2, 2/2 GROUND: GROUND
O	EM80-92 HO2 SENSOR HEATER CONTROL – 1/2: PWM, 1 CYCLE PER 256 mS, POSITIVE DUTY CYCLE RANGE 0 mS = 0%, 77 mS = 30%, 256 mS = 100%
O	EM80-93 HO2 SENSOR HEATER CONTROL – 2/2: PWM, 1 CYCLE PER 256 mS, POSITIVE DUTY CYCLE RANGE 0 mS = 0%, 77 mS = 30%, 256 mS = 100%
I	EM80-94 BANK 1 CAMSHAFT SENSOR SIGNAL: PULSED SIGNAL, 4 PULSES PER ENGINE CYCLE
SG	EM80-95 BANK 1 CAMSHAFT SENSOR GROUND: GROUND
I	EM80-98 BANK 1 KNOCK SENSOR SIGNAL: VARIABLE VOLTAGE DEPENDENT ON ENGINE VIBRATION
I	EM80-99 BANK 2 KNOCK SENSOR SIGNAL: VARIABLE VOLTAGE DEPENDENT ON ENGINE VIBRATION
SG	EM80-100 SENSOR SHIELD: GROUND
I	EM80-102 ACCELERATOR PEDAL POSITION SENSOR 1 SIGNAL: FOOT OFF = 0.75 V; FULLY DEPRESSED = 3.40 V (AUTO) 3.20 (MAN)
I	EM80-103 ACCELERATOR PEDAL POSITION SENSOR 2 SIGNAL: FOOT OFF = 3.38 V; FULLY DEPRESSED = 2.05 V (AUTO) 2.14 V (MAN)
I	EM80-104 FUEL TANK PRESSURE SENSOR SIGNAL, NOMINAL 0 – 5 V: VOLTAGE INCREASES AS PRESSURE INCREASES
D	EM80-105 SERIAL DATA LINK: SERIAL COMMUNICATION
O	EM80-106 THROTTLE MOTOR DRIVE: B+ TO ACTIVATE MOTOR
I	EM80-107 HO2 SENSOR 2/1 SIGNAL: VARIABLE CURRENT
I	EM80-108 HO2 SENSOR 2/1 SIGNAL: CONSTANT CURRENT
O	EM80-109 BANK 1 VVT SOLENOID VALVE: PWM, 300Hz, POSITIVE DUTY CYCLE RANGE 0% – 100%
O	EM80-110 BANK 2 VVT SOLENOID VALVE: PWM, 300Hz, POSITIVE DUTY CYCLE RANGE 0% – 100%
SG	EM80-111 FUEL INJECTORS 2, 3, 5, 8 GROUND: GROUND
SG	EM80-116 FUEL INJECTORS 1, 4, 6, 7 GROUND: GROUND
C	EM80-123 CAN –
C	EM80-124 CAN +
I	EM80-127 MAP SENSOR SIGNAL, NOMINAL 0 – 5 V: VOLTAGE INCREASES AS MANIFOLD ABSOLUTE PRESSURE INCREASES
I	EM80-128 HO2 SENSOR 1/2 SIGNAL, NOMINAL 1 V SWING: 0.1 – 0.9 V SWING
I	EM80-129 HO2 SENSOR 2/2 SIGNAL, NOMINAL 1 V SWING: 0.1 – 0.9 V SWING
SG	EM80-130 HO2 SENSORS SHIELD: GROUND
B+	EM80-134 THROTTLE MOTOR POWER SUPPLY: B+ WHEN RELAY ACTIVATED

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 04.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
APP SENSOR	EM6	6-WAY / BLACK	ENGINE COMPARTMENT / ADJACENT TO BRAKE BOOSTER
CKP SENSOR	PI17	3-WAY / BLACK	ENGINE UNDERSIDE / FORWARD OF BELL HOUSING
CMP SENSOR 1	PI16	2-WAY / BLACK	BANK 1 CAMSHAFT COVER, FRONT
CMP SENSOR 2	PI15	2-WAY / BLACK	BANK 2 CAMSHAFT COVER, FRONT
ECM COOLING FAN	EM64	2-WAY / WHITE	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
ECT SENSOR	PI4	2-WAY / GREY	ENGINE VEE / COOLANT OUTLET CASTING
EFT SENSOR	PI24	2-WAY / BLACK	FUEL RAIL / RH REAR
EGR VALVE	PI34	6-WAY / GREY	N/A: INTAKE MANIFOLD / RH FRONT SC: INTAKE MANIFOLD / REAR
ENGINE CONTROL MODULE	EM80	134-WAY / BLACK	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
EOT SENSOR	PI38	2-WAY / GREY	ENGINE COMPARTMENT / ADJACENT TO OIL FILTER
EVAP CANISTER CLOSE VALVE	BT14	2-WAY / BLACK	ABOVE RH REAR AXLE / FUEL TANK COMPONENTS
EVAP CANISTER PURGE VALVE	LF99	2-WAY / BLACK	BEHIND LH FRONT WHEEL ARCH LINER
FTP SENSOR	FT2	3-WAY / BLACK	FUEL TANK PIPING / LH SIDE (UNDER ACCESS PLATE)
HO2 SENSOR DOWNSTREAM 1/2	EM22	4-WAY / BLACK	RH EXHAUST, CATALYST CENTER
HO2 SENSOR DOWNSTREAM 2/2	EM24	4-WAY / BLACK	LH EXHAUST, CATALYST CENTER
HO2 SENSOR UPSTREAM 1/1	EM21	4-WAY / GREY	RH EXHAUST / TOP OF CATALYST
HO2 SENSOR UPSTREAM 2/1	EM23	4-WAY / GREY	LH EXHAUST / TOP OF CATALYST
IAT SENSOR 2	PI3	2-WAY / GREY	INTAKE MANIFOLD / RH REAR
IP SENSOR	PI43	3-WAY / BLACK	N/A: FUEL RAIL / RH FRONT SC: FUEL RAIL / LH REAR
KNOCK SENSOR 1	PI26	2-WAY / BLACK	ENGINE VEE / BANK 1
KNOCK SENSOR 2	PI27	2-WAY / BLACK	ENGINE VEE / BANK 2
MAF SENSOR	PI35	5-WAY / BLACK	ENGINE AIR INTAKE / ADJACENT TO AIR CLEANER
MAP SENSOR	PI25	4-WAY / BLACK	N/A: INTAKE MANIFOLD / LOWER REAR SC: INTAKE MANIFOLD, REAR / BELOW THROTTLE ASSEMBLY
THROTTLE MOTOR	PI33	2-WAY / BLACK	N/A: ENGINE AIR INTAKE / FRONT SC: ENGINE AIR INTAKE / REAR
TP SENSOR	PI6	4-WAY / BLACK	THROTTLE BODY / THROTTLE SHAFT
VVT SOLENOID VALVE 1	PI31	2-WAY / BLACK	BANK 1 CYLINDER HEAD / FRONT
VVT SOLENOID VALVE 2	PI32	2-WAY / BLACK	BANK 2 CYLINDER HEAD / FRONT

RELAYS

Relay	Connector / Color	Location
THROTTLE MOTOR RELAY	EM16 / BROWN	CONTROL MODULE ENCLOSURE RELAYS

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
EM1	20-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
EM3	14-WAY / GREY / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
FT1	10-WAY / WHITE / TRUNK HARNESS TO FUEL PUMP LINK HARNESS	FUEL TANK / REAR
LF40	13-WAY / BLACK / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / FORWARD OF BRAKE FLUID RESERVOIR
PI1	57-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
PI2	13-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
RH1	20-WAY / GREY / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUND S

Ground	Location
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.

CONTROL MODULE PIN-OUT INFORMATION

Engine Control Module

Pin	Description and Characteristic
I	EM80-08 BRAKE ON / OFF SWITCH: NORMALLY OPEN / B+ WHEN ACTIVATED
I	EM80-09 BRAKE CANCEL SWITCH: NORMALLY CLOSED / GROUND WHEN ACTIVATED
SS	EM80-12 SENSOR POWER SUPPLY 1: NOMINAL 5 V
O	EM80-14 AIR CLEANER SOLENOID VALVE DRIVE: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
SG	EM80-19 SENSOR GROUND 1: GROUND
I	EM80-25 FUEL PUMP MODULE MONITOR: PWM, 1 Hz, 50% POSITIVE DUTY CYCLE = NORMAL, 25% POSITIVE DUTY CYCLE = NO CONTROL SIGNAL, 75% POSITIVE DUTY CYCLE = FUEL PUMP INOPERATIVE
O	EM80-27 FUEL PUMP DRIVE SIGNAL (TO FUEL PUMP MODULE): PWM, 150 Hz, NORMAL POSITIVE DUTY CYCLE RANGE = 4% - 51%
O	EM80-34 AIR CONDITIONING COMPRESSOR CLUTCH RELAY DRIVE: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
I	EM80-47 ADAPTIVE SPEED LIMIT SWITCH REQUEST: STEPPED RESISTANCE
I	EM80-48 ADAPTIVE SPEED LIMIT SWITCH REQUEST: STEPPED RESISTANCE
I	EM80-49 ADAPTIVE SPEED LIMIT SWITCH: GROUND WHEN ACTIVATED
O	EM80-51 COOLING FAN MODULE CONTROL: PWM, 140Hz, POSITIVE DUTY CYCLE RANGE 7% - 95%
O	EM80-61 IGNITION COIL ACTIVATE - CYLINDER 2: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-62 IGNITION COIL ACTIVATE - CYLINDER 4: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-63 IGNITION COIL ACTIVATE - CYLINDER 6: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-64 IGNITION COIL ACTIVATE - CYLINDER 8: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-85 ADAPTIVE SPEED LIMIT ON: TO ACTIVATE, ECM SWITCHES CIRCUIT TO B+
O	EM80-87 IGNITION COIL ACTIVATE - CYLINDER 1: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-88 IGNITION COIL ACTIVATE - CYLINDER 3: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-89 IGNITION COIL ACTIVATE - CYLINDER 5: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-90 IGNITION COIL ACTIVATE - CYLINDER 7: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-112 FUEL INJECTOR DRIVE - CYLINDER 8: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-113 FUEL INJECTOR DRIVE - CYLINDER 5: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-114 FUEL INJECTOR DRIVE - CYLINDER 3: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-115 FUEL INJECTOR DRIVE - CYLINDER 2: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-117 FUEL INJECTOR DRIVE - CYLINDER 7: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-118 FUEL INJECTOR DRIVE - CYLINDER 6: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-119 FUEL INJECTOR DRIVE - CYLINDER 4: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
O	EM80-120 FUEL INJECTOR DRIVE - CYLINDER 1: TO ACTIVATE, ECM SWITCHES CIRCUIT TO GROUND
I	EM80-121 AIR CONDITIONING PRESSURE SENSOR SIGNAL, NOMINAL 0 - 5 V: TRANSDUCER - VOLTAGE INCREASES AS PRESSURE INCREASES
I	EM80-131 IGNITION MONITOR BANK 1: PULSED SIGNAL, 3 PULSES PER ENGINE CYCLE
I	EM80-132 IGNITION MONITOR BANK 2: PULSED SIGNAL, 3 PULSES PER ENGINE CYCLE

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 04.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
ADAPTIVE SPEED LIMIT SWITCH	FC63	10-WAY / NATURAL	REARWARD OF GEAR SELECTOR
AIR CLEANER SOLENOID VALVE	LF13	2-WAY / BLACK	AIR CLEANER HOUSING
AIR CONDITIONING COMPRESSOR CLUTCH	PI36	1-WAY / BLACK	LOWER LH SIDE OF ENGINE
AIR CONDITIONING PRESSURE SENSOR	LF20	6-WAY / BLACK	ENGINE COMPARTMENT, LH SIDE / HIGH PRESSURE REFRIGERANT LINE, BETWEEN COMPRESSOR AND CONDENSER
BRAKE CANCEL SWITCH	AC24	4-WAY / WHITE	TOP OF BRAKE PEDAL
BRAKE ON / OFF SWITCH	AC24	4-WAY / WHITE	TOP OF BRAKE PEDAL
COOLING FAN - LH	GC2	2-WAY / BLACK	ENGINE COMPARTMENT / FRONT
COOLING FAN - RH	GC1	2-WAY / BLACK	ENGINE COMPARTMENT / FRONT
COOLING FAN MODULE	LF35 LF36	2-WAY / BLACK 2-WAY / BLACK	ENGINE COMPARTMENT / COOLING PACK, LOWER RH SIDE
ENGINE CONTROL MODULE	EM80	134-WAY / BLACK	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
FUEL INJECTOR 1	PI7	2-WAY / BLACK	INTAKE MANIFOLD / FUEL RAIL
FUEL INJECTOR 2	PI11	2-WAY / BLACK	INTAKE MANIFOLD / FUEL RAIL
FUEL INJECTOR 3	PI8	2-WAY / BLACK	INTAKE MANIFOLD / FUEL RAIL
FUEL INJECTOR 4	PI12	2-WAY / BLACK	INTAKE MANIFOLD / FUEL RAIL
FUEL INJECTOR 5	PI9	2-WAY / BLACK	INTAKE MANIFOLD / FUEL RAIL
FUEL INJECTOR 6	PI13	2-WAY / BLACK	INTAKE MANIFOLD / FUEL RAIL
FUEL INJECTOR 7	PI10	2-WAY / BLACK	INTAKE MANIFOLD / FUEL RAIL
FUEL INJECTOR 8	PI14	2-WAY / BLACK	INTAKE MANIFOLD / FUEL RAIL
FUEL PUMP	FT3	6-WAY / NATURAL	FUEL TANK EVAPORATIVE FLANGE
FUEL PUMP MODULE	BT18	6-WAY / BLACK	TRUNK / RH REAR
FUSE BOX - TRUNK	BT10 BT11 BT12 BT13 BT64	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	TRUNK / ELECTRICAL CARRIER
IGNITION MODULE AND COIL 1	PI51	4-WAY / BLACK	RH CYLINDER HEAD
IGNITION MODULE AND COIL 2	PI55	4-WAY / BLACK	LH CYLINDER HEAD
IGNITION MODULE AND COIL 3	PI52	4-WAY / BLACK	RH CYLINDER HEAD
IGNITION MODULE AND COIL 4	PI56	4-WAY / BLACK	LH CYLINDER HEAD
IGNITION MODULE AND COIL 5	PI53	4-WAY / BLACK	RH CYLINDER HEAD
IGNITION MODULE AND COIL 6	PI57	4-WAY / BLACK	LH CYLINDER HEAD
IGNITION MODULE AND COIL 7	PI54	4-WAY / BLACK	RH CYLINDER HEAD
IGNITION MODULE AND COIL 8	PI58	4-WAY / BLACK	LH CYLINDER HEAD
INTERCOOLER COOLANT PUMP	EM75	2-WAY / BLACK	ENGINE COMPARTMENT, RH SIDE / ADJACENT TO RADIATOR
STEERING WHEEL SPEED CONTROL SWITCHES	SW2	6-WAY / BLACK	STEERING WHEEL

RELAYS

Relay	Connector / Color	Location
AIR CONDITIONING COMPRESSOR CLUTCH RELAY	EM17 / BROWN	LH ENCLOSURE RELAYS
IGNITION COIL RELAY	EM26 / BROWN	CONTROL MODULE ENCLOSURE RELAYS
STOP LAMP RELAY	BUS / BROWN	TRUNK FUSE BOX - R5

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
EM3	14-WAY / GREY / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
FT1	10-WAY / WHITE / TRUNK HARNESS TO FUEL PUMP LINK HARNESS	FUEL TANK / REAR
IJ1	6-WAY / BLACK / ENGINE HARNESS TO FUEL INJECTION HARNESS	ADJACENT TO AIR INTAKE MANIFOLD
IJ2	6-WAY / BLACK / ENGINE HARNESS TO FUEL INJECTION HARNESS	ADJACENT TO AIR INTAKE MANIFOLD
LF3	13-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / ADJACENT TO BRAKE SERVO
LF40	13-WAY / BLACK / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / FORWARD OF BRAKE FLUID RESERVOIR
PI1	57-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
RH1	20-WAY / GREY / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RH9	20-WAY / BLUE / FASCIA HARNESS TO REARWARD HARNESS	BELOW CENTER CONSOLE
RH13	12-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
SC3	12-WAY / GREY / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN
SW1	12-WAY / BLACK / STEERING WHEEL CASSETTE	INSIDE STEERING COLUMN COWL

GROUND

Ground	Location
BT2	TRUNK, RIGHT REAR
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
LF2	ENGINE COMPARTMENT, FORWARD OF LEFT HAND HOOD LATCH
PI1	ENGINE BANK 1, FRONT COVER

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

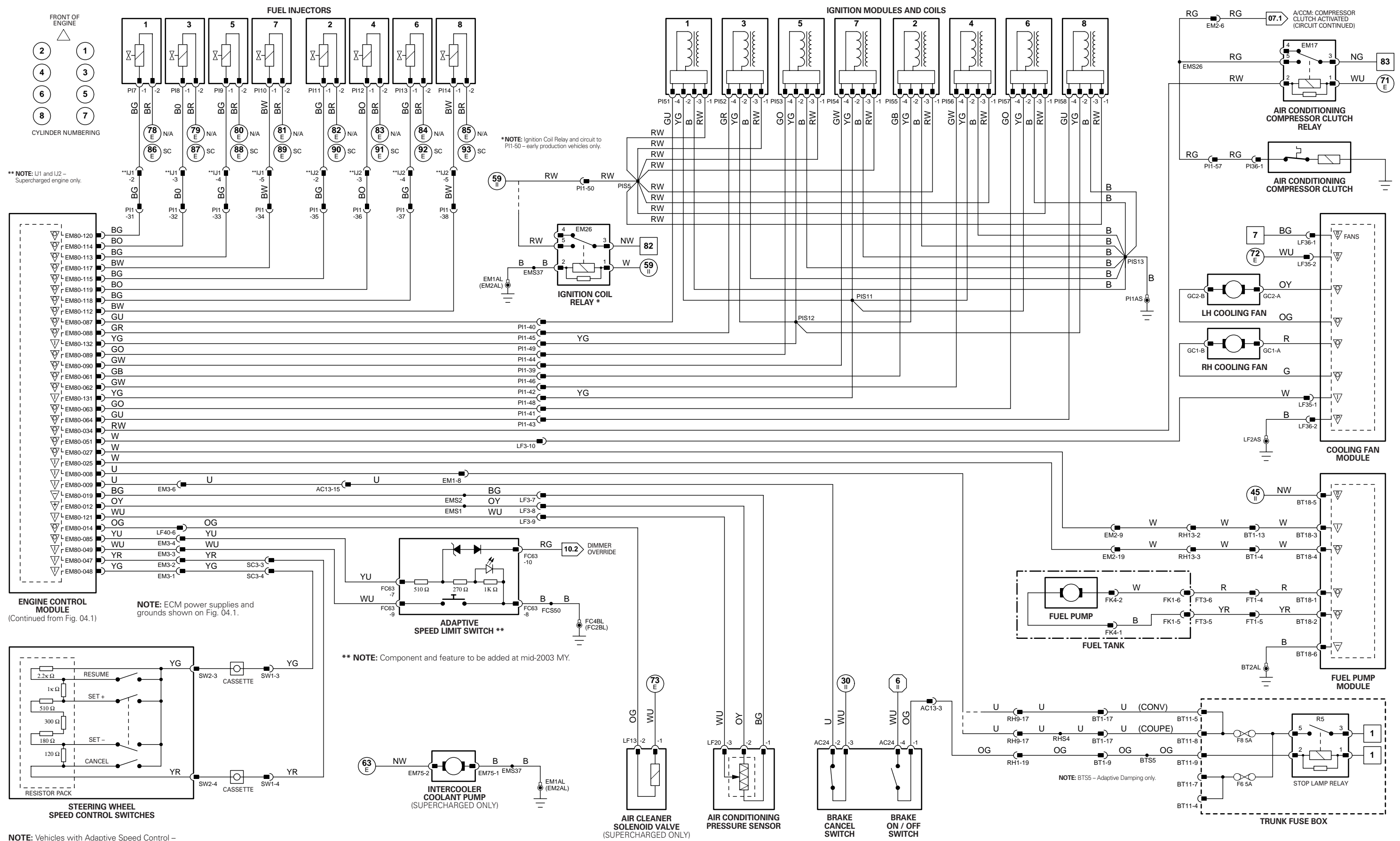
Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.



CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
O	FC14-07 NEUTRAL SWITCH STATUS: GROUND (N)
I	FC14-15 IGNITION SWITCHED GROUND (I): GROUND
I	FC14-32 IGNITION SWITCHED GROUND (I): GROUND
O	FC14-48 GEARSHIFT INTERLOCK SOLENOID DRIVE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
O	FC14-51 KEY LOCK SOLENOID DRIVE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
I	FC14-58 NOT-IN-PARK SWITCH SIGNAL: GROUND WHEN ACTIVATED
B+	FC14-80 BATTERY POWER SUPPLY (LOGIC): B+
S	FC14-84 SCP -
S	FC14-85 SCP +
B+	FC14-104 BATTERY POWER SUPPLY: B+

J Gate Illumination Module

Pin	Description and Characteristic
B+	FC88-01 IGNITION SWITCHED POWER SUPPLY: B+
C	FC88-03 CAN -
C	FC88-04 CAN +
PG	FC88-06 POWER GROUND: GROUND
C	FC88-08 CAN -
C	FC88-09 CAN +

Linear Switch Module

Pin	Description and Characteristic
O	FC100-01 MODE SWITCH STATUS DRIVE: TO ACTIVATE LINEAR LSM SWITCHES CIRCUIT TO GROUND
C	FC100-02 CAN -
C	FC100-03 CAN +
B+	FC100-04 IGNITION SWITCHED POWER SUPPLY: B+
I	FC100-05 NEUTRAL SWITCH STATUS: GROUND (N)
I	FC100-06 POSITION ALIGNMENT SWITCH SIGNAL: GROUND WHEN ACTIVATED
C	FC100-07 CAN -
C	FC100-08 CAN +
I	FC100-09 SPORT MODE ACTIVATE: GROUND WHEN ACTIVATED
PG	FC100-11 POWER GROUND: GROUND

Transmission Control Module

Pin	Description and Characteristic
C	GB2-02 CAN -
C	GB2-06 CAN +
B+	GB2-09 IGNITION SWITCHED POWER SUPPLY: B+
O	GB2-10 PARK / NEUTRAL SIGNAL: GROUND WHEN ACTIVATED
PG	GB2-13 POWER GROUND: GROUND
B+	GB2-14 BATTERY POWER SUPPLY: B+
PG	GB2-16 POWER GROUND: GROUND

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 05.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
GEARSHIFT INTERLOCK SOLENOID	FC86	2-WAY / WHITE	GEAR SELECTOR ASSEMBLY
J GATE ILLUMINATION MODULE	FC88	10-WAY / WHITE	FRONT OF GEAR SELECTOR ASSEMBLY
KEYLOCK SOLENOID (COLUMN SWITCHGEAR)	SC5	2-WAY / BLUE	STEERING COLUMN / RH SIDE
LINEAR SWITCH MODULE	FC100	12-WAY / GREY	LH SIDE OF GEAR SELECTOR / CENTER CONSOLE
MODE SWITCH (TRANSMISSION)	FC35	10-WAY / BLACK	REARWARD OF GEAR SELECTOR
NOT-IN-PARK SWITCH	FC87	3-WAY / WHITE	GEAR SELECTOR ASSEMBLY
POSITION ALIGNMENT SWITCH (TRANSMISSION)	FC105	4-WAY / BLACK	ADJACENT TO LINEAR SWITCH MODULE / J GATE
TRANSMISSION CAPACITOR	EM69	2-WAY / BLACK	ENGINE COMPARTMENT, BULKHEAD
TRANSMISSION CONTROL MODULE	GB2	16-WAY / BLACK	TRANSMISSION CONTROL VALVE ASSEMBLY

HARNESS IN-LINE CONNECTORS

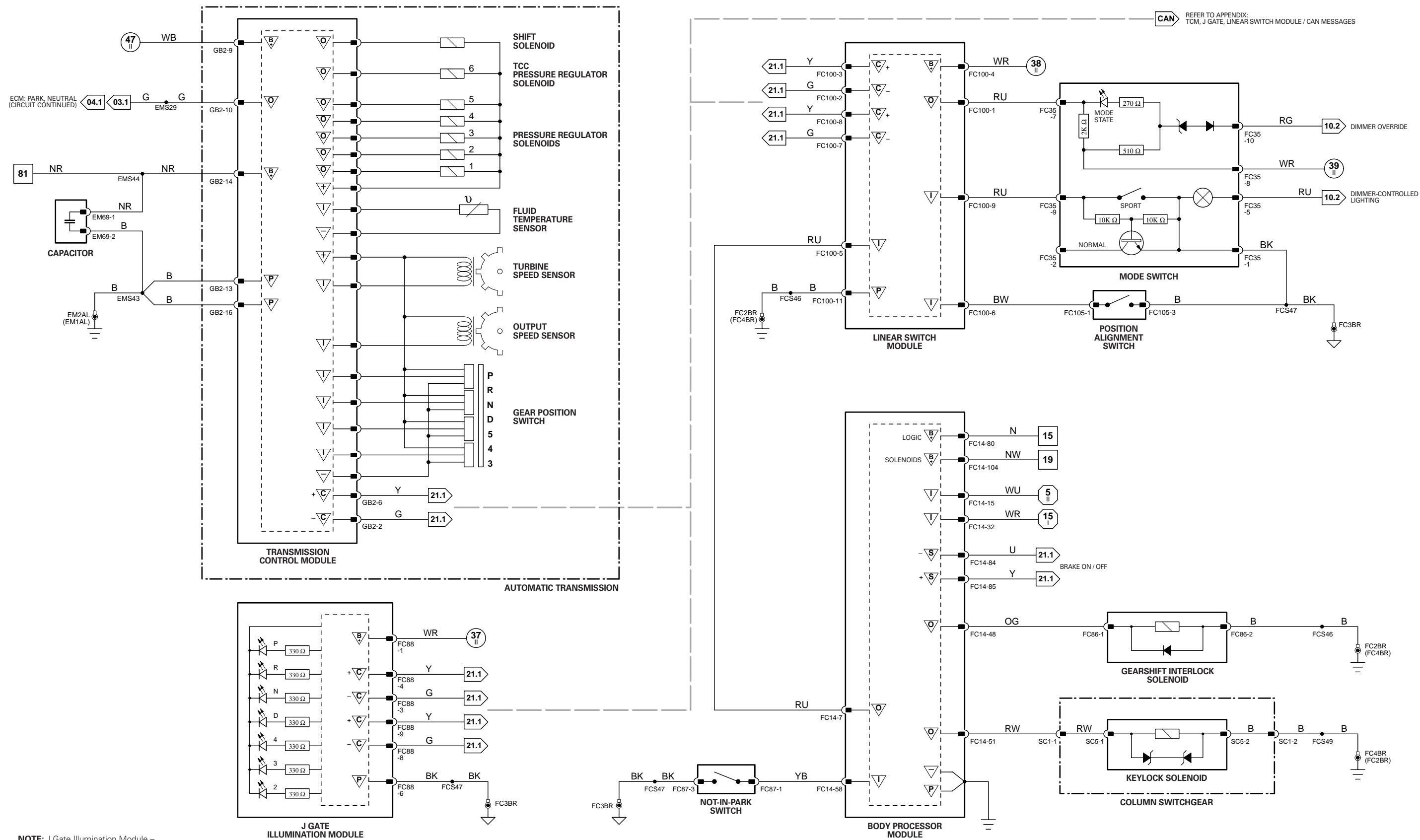
Connector	Connector Description	Location
SC1	12-WAY / WHITE / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN

GROUND

Ground	Location
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTE: J Gate Illumination Module – CAN “listen only” node for gear selector position indicators.

CAN REFER TO APPENDIX: TCM, J GATE, LINEAR SWITCH MODULE / CAN MESSAGES

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	P Power Ground	▽ Sensor/Signal Ground	C CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Dynamic Stability Control Control Module

Pin	Description and Characteristic
B+	LF37-01 BATTERY POWER SUPPLY – PUMP: B+
-	LF37-03 STEERING ANGLE SENSOR SIGNAL (A): PULSED SIGNAL
B+	LF37-04 IGNITION SWITCHED POWER SUPPLY (II): B+
SG	LF37-05 SENSOR GROUND – YAW RATE, STEERING ANGLE SENSORS: GROUND
I	LF37-06 STEERING ANGLE SENSOR SIGNAL (B): PULSED SIGNAL
SS	LF37-07 YAW RATE, STEERING ANGLE SENSORS SUPPLY VOLTAGE: B+
SG	LF37-08 BRAKE FLUID LEVEL SENSOR SIGNAL GROUND: GROUND
I	LF37-09 BRAKE FLUID LEVEL SENSOR SIGNAL: BRAKE FLUID LEVEL LOW = GROUND
C	LF37-11 CAN +
C	LF37-15 CAN –
PG	LF37-16 POWER GROUND – VALVES: GROUND
SS	LF37-17 ACTIVE BRAKE BOOSTER SOLENOID SUPPLY VOLTAGE: NOMINAL 5 V
SS	LF37-18 BRAKE PRESSURE SENSOR SUPPLY VOLTAGE: NOMINAL 5 V
SG	LF37-19 SENSOR GROUND – BRAKE PRESSURE SENSOR: GROUND
I	LF37-20 BRAKE PRESSURE SENSOR SIGNAL, NOMINAL 0.5 – 4.5 V: VOLTAGE INCREASES AS PRESSURE INCREASES
SG	LF37-24 ACTIVE BRAKE BOOSTER TRAVEL SENSOR SIGNAL GROUND: GROUND
C	LF37-25 CAN – (LOCAL)
SS	LF37-26 ACTIVE BRAKE BOOSTER TRAVEL SENSOR SUPPLY VOLTAGE: NOMINAL 5 V
SS	LF37-27 ACTIVE BRAKE BOOSTER FORCE SWITCH NORMALLY OPEN (NOMINAL 5 V): OPEN / CLOSED CIRCUIT
I	LF37-28 ACTIVE BRAKE BOOSTER FORCE SWITCH SIGNAL: GROUND
C	LF37-29 CAN + (LOCAL)
SS	LF37-30 ACTIVE BRAKE BOOSTER FORCE SWITCH NORMALLY CLOSED (NOMINAL 5 V): CLOSED / OPEN CIRCUIT
O	LF37-31 ACTIVE BRAKE BOOSTER SOLENOID DRIVE: GROUND (PWM)
B+	LF37-32 BATTERY POWER SUPPLY – VALVES: B+
SG	LF37-33 RH FRONT WHEEL SPEED SENSOR SIGNAL GROUND: GROUND
I	LF37-34 RH FRONT WHEEL SPEED SENSOR SIGNAL: 46 PULSES PER WHEEL REVOLUTION
I	LF37-36 LH REAR WHEEL SPEED SENSOR SIGNAL: 46 PULSES PER WHEEL REVOLUTION
SG	LF37-37 LH REAR WHEEL SPEED SENSOR SIGNAL GROUND: GROUND
I	LF37-38 DYNAMIC STABILITY CONTROL SWITCH: NORMALLY OPEN / GROUND WHEN ACTIVATED
I	LF37-40 ACTIVE BRAKE BOOSTER TRAVEL SENSOR SIGNAL, NOMINAL 0.5 – 4.5 V: VARIABLE VOLTAGE
SG	LF37-42 RH REAR WHEEL SPEED SENSOR SIGNAL GROUND: GROUND
I	LF37-43 RH REAR WHEEL SPEED SENSOR SIGNAL: 46 PULSES PER WHEEL REVOLUTION
I	LF37-45 LH FRONT WHEEL SPEED SENSOR SIGNAL: 46 PULSES PER WHEEL REVOLUTION
SG	LF37-46 LH FRONT WHEEL SPEED SENSOR SIGNAL GROUND: GROUND
PG	LF37-47 POWER GROUND – PUMP: GROUND

Linear Switch Module

Pin	Description and Characteristic
C	FC100-02 CAN –
C	FC100-03 CAN +
B+	FC100-04 IGNITION SWITCHED POWER SUPPLY: B+
C	FC100-07 CAN –
C	FC100-08 CAN +
I	FC100-10 DSC STATUS INDICATOR: GROUND WHEN ACTIVATED
PG	FC100-11 POWER GROUND: GROUND

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 06.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
ACTIVE BRAKE BOOSTER SOLENOID (ACTIVE BRAKE BOOSTER)	AL1	6-WAY / BLACK	ADJACENT TO BRAKE FLUID RESERVOIR
BRAKE FLUID RESERVOIR	EM37	2-WAY / BLACK	ENGINE COMPARTMENT / BRAKE BOOSTER ENCLOSURE
BRAKE PRESSURE SENSOR	AL2	3-WAY / BLACK	ADJACENT TO BRAKE FLUID RESERVOIR
DSC CONTROL SWITCH (CENTER CONSOLE SWITCH PACK)	FC55	20-WAY / BLACK	CENTER CONSOLE
DYNAMIC STABILITY CONTROL CONTROL MODULE	LF37	25-WAY / BLACK	ENGINE COMPARTMENT / LH FRONT
LINEAR SWITCH MODULE	FC100	12-WAY / GREY	LH SIDE OF GEAR SELECTOR / CENTER CONSOLE
PEDAL FORCE SWITCH (ACTIVE BRAKE BOOSTER)	AL1	6-WAY / BLACK	ADJACENT TO BRAKE FLUID RESERVOIR
PEDAL TRAVEL SENSOR (ACTIVE BRAKE BOOSTER)	AL4	3-WAY / BLACK	ADJACENT TO BRAKE FLUID RESERVOIR
STEERING ANGLE SENSOR	FC3	4-WAY / GREY	STEERING COLUMN
WHEEL SPEED SENSOR – LH FRONT	FL1	2-WAY / BLACK	WHEEL HUB
WHEEL SPEED SENSOR – LH REAR	RL1	2-WAY / BLACK	WHEEL HUB
WHEEL SPEED SENSOR – RH FRONT	FR1	2-WAY / BLACK	WHEEL HUB
WHEEL SPEED SENSOR – RH REAR	RR1	2-WAY / BLACK	WHEEL HUB
YAW RATE AND LATERAL ACCELERATION SENSORS CLUSTER	FC101	6-WAY / BLACK	UNDER CENTER CONSOLE

HARNESS IN-LINE CONNECTORS

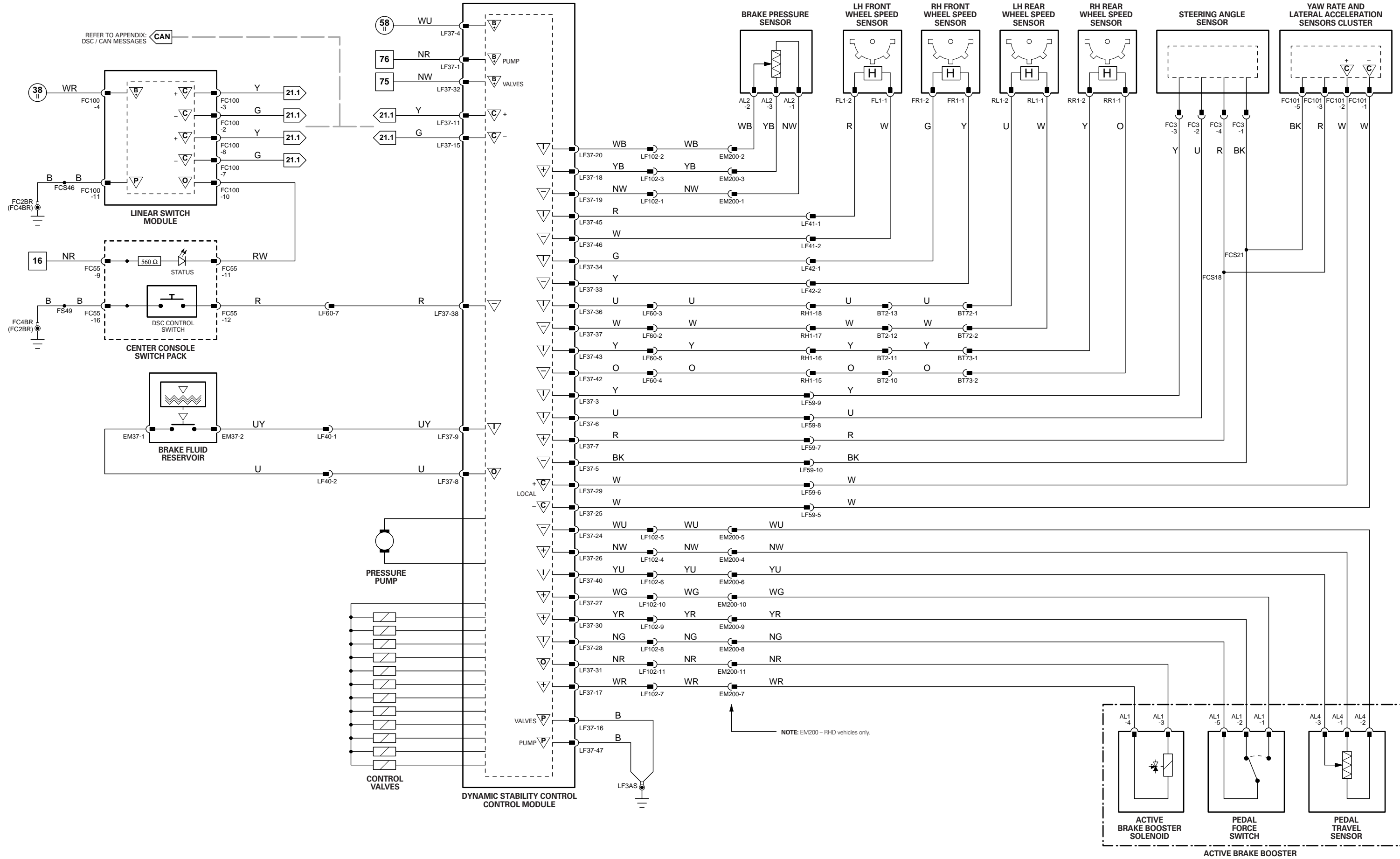
Connector	Connector Description	Location
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BT72	2-WAY / BLACK / LH REAR WHEEL SPEED SENSOR TO TRUNK HARNESS	BELOW FUEL TANK / LEFT HAND SIDE
BT73	2-WAY / BLACK / RH REAR WHEEL SPEED SENSOR TO TRUNK HARNESS	BELOW FUEL TANK / RIGHT HAND SIDE
EM200	12-WAY / BLACK / LEFT FORWARD HARNESS TO DYNAMIC STABILITY CONTROL LINK HARNESS	ADJACENT TO BRAKE SERVO
LF40	13-WAY / BLACK / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / FORWARD OF BRAKE FLUID RESERVOIR
LF41	2-WAY / BLACK / LEFT FORWARD HARNESS TO LH FRONT WHEEL SPEED SENSOR LINK HARNESS	ENGINE COMPARTMENT / ADJACENT TO ENGINE COMPARTMENT FUSE BOX
LF42	2-WAY / BLACK / LEFT FORWARD HARNESS TO RH FRONT WHEEL SPEED SENSOR LINK HARNESS	ENGINE COMPARTMENT / ADJACENT TO AIR CLEANER
LF59	12-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
LF102	12-WAY / BLACK / LEFT FORWARD HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / ADJACENT TO BRAKE SERVO
RH1	20-WAY / GREY / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDINGS

Ground	Location
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST
LF3	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTE: EM200 - RHD vehicles only.

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6	▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1	▽ Output	P Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Power Assisted Steering Control Module

Pin	Description and Characteristic
O FC16-02	TRANSDUCER NEGATIVE: 2 V @ IDLE DECREASING WITH VEHICLE SPEED
I FC16-04	VEHICLE SPEED SIGNAL
O FC16-05	TRANSDUCER POSITIVE: 9 V @ IDLE INCREASING WITH VEHICLE SPEED
B+ FC16-06	IGNITION SWITCHED POWER SUPPLY: B+
PG FC16-08	POWER GROUND: GROUND

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 06.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
POWER ASSISTED STEERING CONTROL MODULE	FC16	9-WAY / BLACK	FASCIA / ADJACENT TO RH SIDE FUSE BOX
POWER ASSISTED STEERING CONVERTER	LL2	2-WAY / BLACK	STEERING RACK / CONTROL VALVE

HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LL1	2-WAY / BLACK / ENGINE MANAGEMENT HARNESS TO POWER STEERING CONVERTER LINK HARNESS	ENGINE COMPARTMENT / ADJACENT TO STARTER MOTOR

GROUNDS

Ground	Location
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

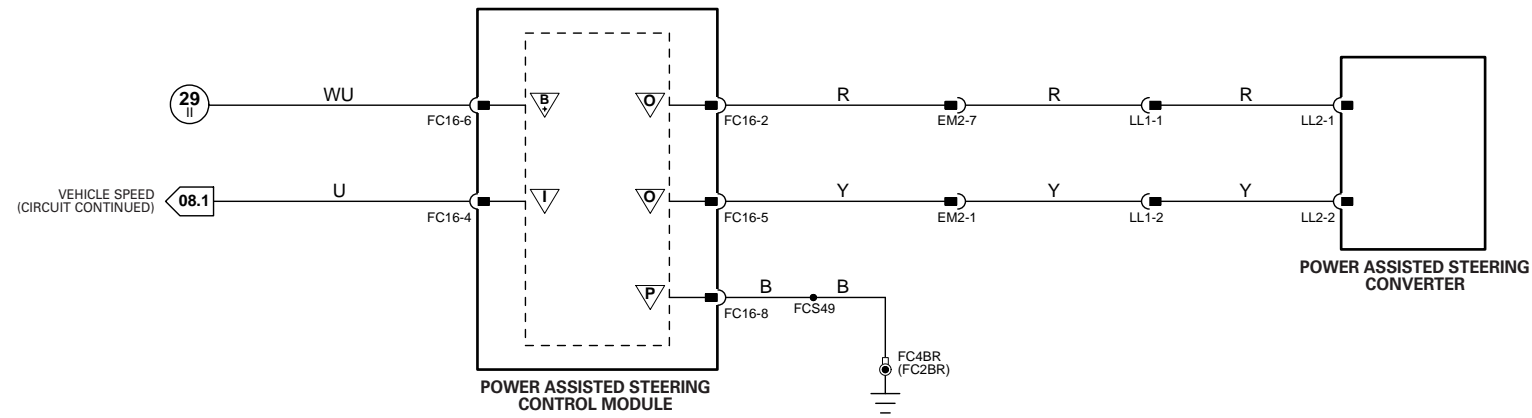
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

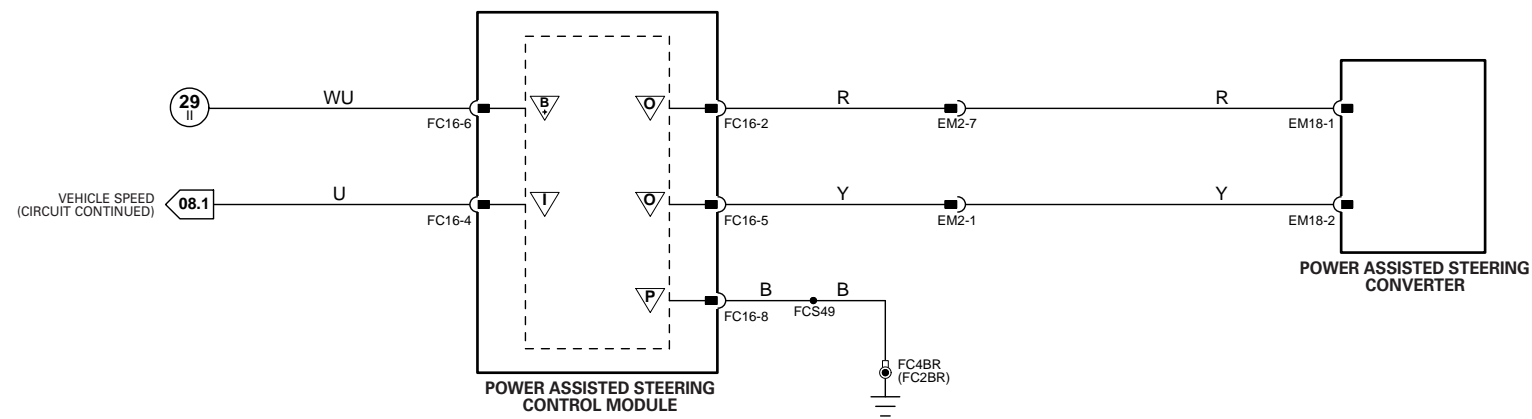
CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



LHD



RHD

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	P Power Ground	▽ Sensor/Signal Ground	▽ C CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Fig. 06.3

Adaptive Damping Control Module

Pin	Description and Characteristic
O	BT69-01 ADAPTIVE DAMPING FAULT WARNING SIGNAL
O	BT69-03 ACCELEROMETER SENSOR GROUND: GROUND
D	BT69-10 SERIAL COMMUNICATIONS
B+	BT69-11 IGNITION SWITCHED POWER SUPPLY: B+
O	BT69-13 LH REAR DAMPER POWER SUPPLY: B+
O	BT69-14 RH FRONT DAMPER POWER SUPPLY: B+
O	BT69-15 RH REAR DAMPER POWER SUPPLY: B+
PG	BT69-18 POWER GROUND: GROUND
I	BT69-20 FRONT LATERAL ACCELEROMETER FEEDBACK: < 0.2 V OR > 4.8 V
I	BT69-21 FRONT VERTICAL ACCELEROMETER FEEDBACK: < 0.2 V OR > 4.8 V
I	BT69-22 REAR VERTICAL ACCELEROMETER FEEDBACK: < 0.2 V OR > 4.8 V
I	BT69-24 VEHICLE SPEED SIGNAL
O	BT69-25 ACCELEROMETER SENSOR SUPPLY: NOMINAL 5 V
I	BT69-26 BRAKE ON / OFF SWITCH: GROUND WHEN ACTIVATED (IGNITION ON II)
B+	BT69-27 BATTERY POWER SUPPLY: B+
D	BT69-28 SERIAL COMMUNICATIONS
O	BT69-30 LH FRONT DAMPER POWER SUPPLY: B+
O	BT69-31 LH FRONT DAMPER ACTIVATE: TO ACTIVATE, ADCM SWITCHED CIRCUIT TO GROUND
O	BT69-32 LH REAR DAMPER ACTIVATE: TO ACTIVATE, ADCM SWITCHED CIRCUIT TO GROUND
O	BT69-33 RH FRONT DAMPER ACTIVATE: TO ACTIVATE, ADCM SWITCHED CIRCUIT TO GROUND
O	BT69-34 RH REAR DAMPER ACTIVATE: TO ACTIVATE, ADCM SWITCHED CIRCUIT TO GROUND

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

COMPONENTS

Component	Connector(s)	Connector Description	Location
ACCELEROMETER – FRONT VERTICAL	FC7	3-WAY / BLACK	CENTER CONSOLE / BEHIND ICE HEAD UNIT
ACCELEROMETER – LATERAL (FRONT)	EM59	3-WAY / BLACK	ENGINE COMPARTMENT / ADJACENT TO ECM
ACCELEROMETER – REAR VERTICAL	BT52	3-WAY / BLACK	TRUNK / BELOW FUEL TANK
ADAPTIVE DAMPING CONTROL MODULE	BT69	35-WAY / BLACK	TRUNK / ADJACENT TO ELECTRICAL CARRIER
BRAKE ON / OFF SWITCH	AC24	4-WAY / WHITE	TOP OF BRAKE PEDAL
DAMPER SOLENOID – LH FRONT	LF43	2-WAY / BLACK	TOP OF LH FRONT DAMPER
DAMPER SOLENOID – LH REAR	DL2	2-WAY / BLACK	TOP OF LH REAR DAMPER
DAMPER SOLENOID – RH FRONT	LF44	2-WAY / BLACK	TOP OF RH FRONT DAMPER
DAMPER SOLENOID – RH REAR	DR2	2-WAY / BLACK	TOP OF RH REAR DAMPER

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BT3	20-WAY / YELLOW / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BT72	2-WAY / BLACK / LH REAR WHEEL SPEED SENSOR TO TRUNK HARNESS	BELOW FUEL TANK / LEFT HAND SIDE
BT73	2-WAY / BLACK / RH REAR WHEEL SPEED SENSOR TO TRUNK HARNESS	BELOW FUEL TANK / RIGHT HAND SIDE
EM3	14-WAY / GREY / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF1	20-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH1	20-WAY / GREY / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RH12	18-WAY / YELLOW / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RL3	2-WAY / BLACK / TRUNK HARNESS TO LH REAR WHEEL LINK HARNESS	REAR OF REAR HUB ASSEMBLY / LEFT HAND SIDE
RR3	2-WAY / BLACK / TRUNK HARNESS TO RH REAR WHEEL LINK HARNESS	REAR OF REAR HUB ASSEMBLY / RIGHT HAND SIDE

GROUND

Ground	Location
BT2	TRUNK, RIGHT REAR

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

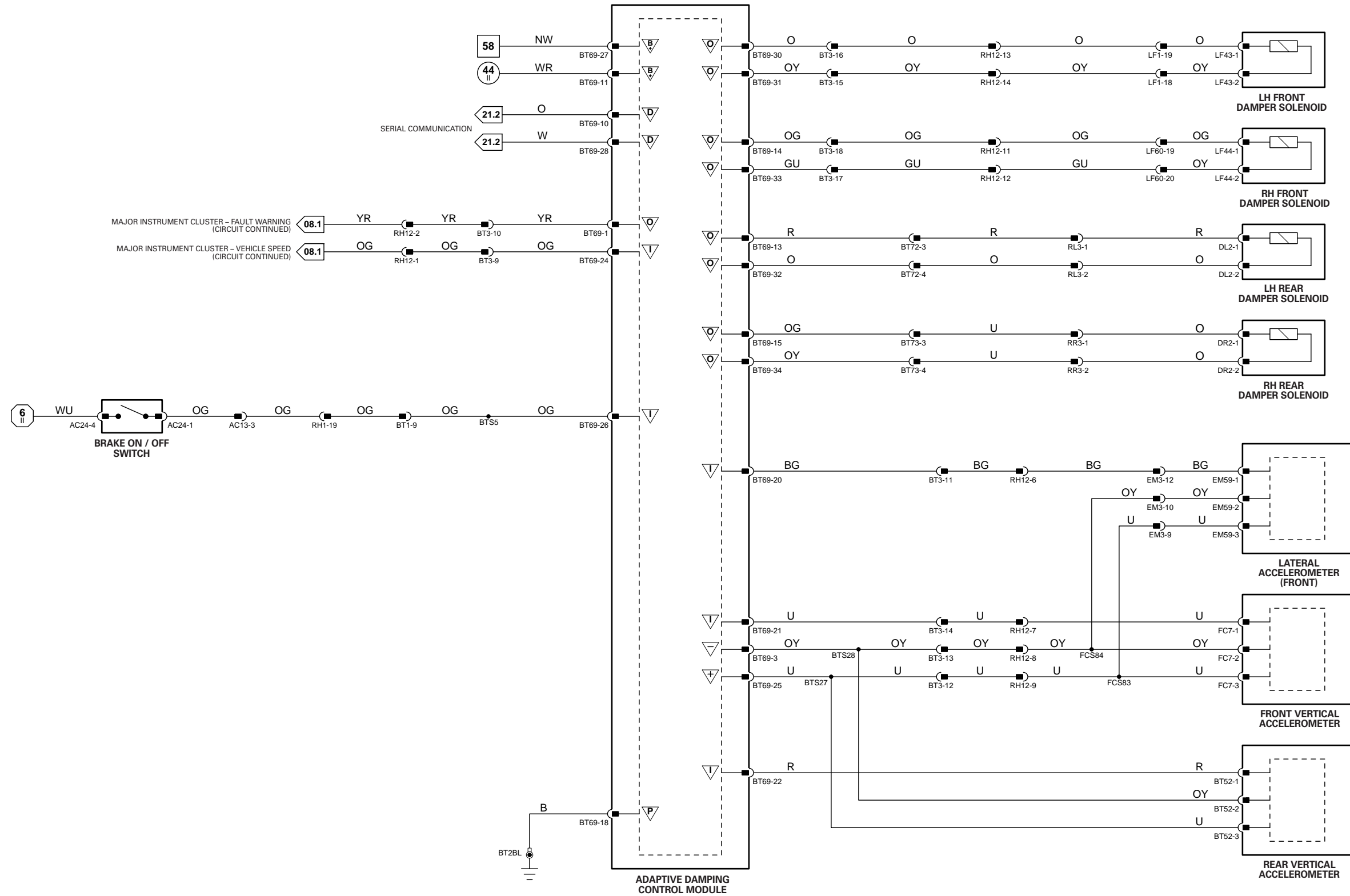
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	Ⓟ Battery Voltage	▽ Sensor/Signal Supply V	Ⓜ ACP	Ⓜ SCP
▽ Output	Ⓟ Power Ground	▽ Sensor/Signal Ground	Ⓜ CAN	Ⓜ Serial and Encoded Data

VARIANT: Adaptive Damping Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Adaptive Speed Control Control Module

Pin	Description and Characteristic
B+	LF61-01 BATTERY POWER SUPPLY: B+
PG	LF61-02 POWER GROUND: GROUND
C	LF61-04 CAN -
B+	LF61-07 IGNITION SWITCHED POWER SUPPLY: B+
C	LF61-10 CAN +
IO	LF61-12 FORWARD ALERT SWITCH / INDICATOR DRIVE: GROUND WHEN ACTIVATED / FORWARD ALERT INDICATOR DRIVE

Dynamic Stability Control Control Module

Pin	Description and Characteristic
C	LF37-11 CAN +
C	LF37-15 CAN -

Engine Control Module

Pin	Description and Characteristic
I	EM80-47 SPEED CONTROL SWITCH REQUEST: STEPPED RESISTANCE
I	EM80-48 SPEED CONTROL SWITCH REQUEST: STEPPED RESISTANCE
C	EM80-123 CAN -
C	EM80-124 CAN +

Major Instrument Cluster

Pin	Description and Characteristic
C	FC25-10 CAN +
C	FC25-11 CAN +
C	FC25-23 CAN -
C	FC25-24 CAN -

Transmission Control Module

Pin	Description and Characteristic
C	GB2-02 CAN -
C	GB2-06 CAN +

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 06.4

COMPONENTS

Component	Connector(s)	Connector Description	Location
ADAPTIVE SPEED CONTROL CONTROL MODULE	LF61	12-WAY / BLACK	ENGINE COMPARTMENT / FORWARD OF RADIATOR
DYNAMIC STABILITY CONTROL CONTROL MODULE	LF37	25-WAY / BLACK	ENGINE COMPARTMENT / LH FRONT
ENGINE CONTROL MODULE	EM80	134-WAY / BLACK	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
FORWARD ALERT SWITCH	FC102	10-WAY / BLACK	DRIVER KNEE BOLSTER
MAJOR INSTRUMENT CLUSTER	FC25	26-WAY / BLACK	FASCIA
	FC26	26-WAY / YELLOW	
STEERING WHEEL SPEED CONTROL SWITCHES	SW2	6-WAY / BLACK	CENTER OF STEERING WHEEL
TRANSMISSION CONTROL MODULE	GB2	16-WAY / BLACK	TRANSMISSION CONTROL VALVE ASSEMBLY

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
EM3	14-WAY / GREY / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF1	20-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
SC3	12-WAY / GREY / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN
SW1	12-WAY / BLACK / STEERING WHEEL CASSETTE	INSIDE STEERING COLUMN COWL
SW2	6-WAY / BLACK / STEERING WHEEL CASSETTE	CENTER OF STEERING WHEEL

GROUNDS

Ground	Location
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
LF1	RIGHT HAND HEADLAMP

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

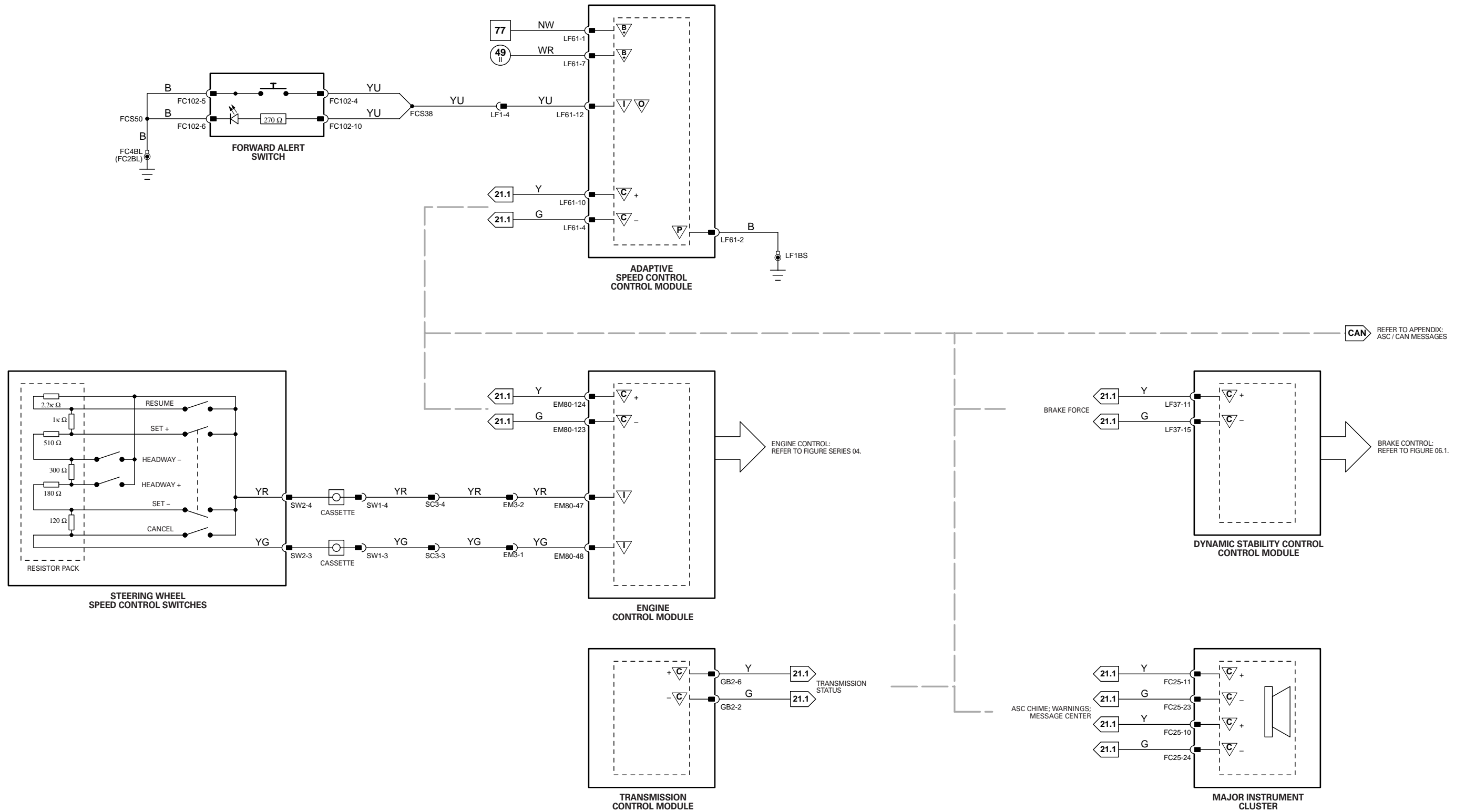
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	P Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: Adaptive Speed Control Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Air Conditioning Control Module

Pin	Description and Characteristic
I	AC1-01 COMPRESSOR CLUTCH STATUS: B+ WHEN COMPRESSOR ENGAGED
O	AC1-06 DEFROST VENT SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-07 CENTER VENT SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-08 LH FRESH / RECIRCULATION VENT MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-09 RH FRESH / RECIRCULATION VENT MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-12 FOOTWELL VENT SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-13 COOL AIR BYPASS VENT SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-19 DEFROST VENT SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-20 CENTER VENT SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-21 LH FRESH / RECIRCULATION VENT SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-22 RH FRESH / RECIRCULATION VENT SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-25 FOOTWELL SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
O	AC1-26 COOL AIR BYPASS SERVO MOTOR: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
I	AC2-01 SOLAR SENSOR SIGNAL: VARIABLE VOLTAGE (NOMINAL 0 – 5 V); INCREASING WITH SOLAR LOAD
I	AC2-02 CENTER VENT POSITION SENSOR SIGNAL: VARIABLE VOLTAGE (NOMINAL 0 – 5 V)
I	AC2-03 RH FRESH / RECIRCULATION VENT POSITION SENSOR SIGNAL: VARIABLE VOLTAGE (NOMINAL 0 – 5 V)
I	AC2-05 COOL AIR BYPASS VENT POSITION SENSOR SIGNAL: VARIABLE VOLTAGE (NOMINAL 0 – 5 V)
I	AC2-06 ENGINE COOLANT TEMPERATURE: VARIABLE VOLTAGE (NOMINAL 0 – 5 V); DECREASING VOLTAGE WITH TEMPERATURE INCREASE
I	AC2-10 DEFROST VENT POSITION SENSOR SIGNAL: VARIABLE VOLTAGE (NOMINAL 0 – 5 V)
I	AC2-11 LH FRESH / RECIRCULATION VENT POSITION SENSOR SIGNAL: VARIABLE VOLTAGE (NOMINAL 0 – 5 V)
I	AC2-13 FOOTWELL VENT POSITION SENSOR SIGNAL: VARIABLE VOLTAGE (NOMINAL 0 – 5 V)
O	AC3-01 HEATED WINDSHIELD STATUS SIGNAL
O	AC3-02 CONTROL PANEL (CLOCK)
D	AC3-03 SERIAL DATA OUTPUT TO CONTROL PANEL
I	AC3-05 AMBIENT TEMPERATURE SENSOR SIGNAL, NOMINAL 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
I	AC3-06 HEATER MATRIX TEMPERATURE SENSOR SIGNAL, NOMINAL 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
D	AC3-07 SERIAL DATA INPUT FROM CONTROL PANEL
O	AC3-08 CONTROL PANEL (START)
I	AC3-11 IN CAR TEMPERATURE SENSOR SIGNAL, NOMINAL 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
I	AC3-12 EVAPORATOR TEMPERATURE SENSOR SIGNAL, NOMINAL 5 V: NTC SENSOR – VOLTAGE DECREASES AS TEMPERATURE INCREASES
B+	AC4-01 IGNITION SWITCHED POWER SUPPLY: B+
B+	AC4-02 ISOLATE RELAY CONTROLLED BATTERY POWER SUPPLY: B+
I	AC4-03 IGNITION SWITCHED GROUND (I): GROUND
O	AC4-04 CONTROL PANEL BATTERY POWER SUPPLY: B+
B+	AC4-05 BATTERY POWER SUPPLY: B+
I	AC4-06 ENGINE SPEED SIGNAL
I	AC4-07 LOAD INHIBIT SIGNAL
SS	AC4-08 SENSOR SUPPLY VOLTAGE: NOMINAL 5 V
O	AC4-09 COMPRESSOR CLUTCH ACTIVATE REQUEST SIGNAL
D	AC4-10 SERIAL COMMUNICATIONS INPUT
O	AC4-12 CONTROL PANEL BATTERY POWER SUPPLY: B+
PG	AC4-13 POWER GROUND: GROUND
O	AC4-14 CONTROL PANEL GROUND: GROUND
O	AC4-15 AIR CONDITIONING ISOLATE RELAY ACTIVATE: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
I	AC4-16 VEHICLE SPEED SIGNAL
I	AC4-17 REFRIGERANT PRESSURE SIGNAL
O	AC4-18 ASPIRATOR MOTOR POWER SUPPLY: B+
SG	AC4-19 SIGNAL GROUND: GROUND
SG	AC4-20 SIGNAL GROUND: GROUND
D	AC4-21 SERIAL COMMUNICATIONS OUTPUT

Major Instrument Cluster

Pin	Description and Characteristic
C	FC25-10 CAN +
C	FC25-11 CAN +
I	FC25-20 HEATED WINDSHIELD STATUS SIGNAL
O	FC25-21 REFRIGERANT PRESSURE SIGNAL
O	FC25-22 ELECTRICAL LOAD INHIBIT SIGNAL
C	FC25-23 CAN –
C	FC25-24 CAN –
O	FC26-03 ENGINE SPEED SIGNAL
O	FC26-04 ENGINE COOLANT TEMPERATURE SIGNAL
O	FC26-05 VEHICLE SPEED SIGNAL – A/CCM
I	FC26-22 COMPRESSOR CLUTCH REQUEST SIGNAL

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 07.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
AIR CONDITIONING CONTROL MODULE	AC1 AC2 AC3 AC4	26-WAY / GREY 16-WAY / GREY 12-WAY / GREY 22-WAY / GREY	A/C UNIT / RH SIDE
AIR CONDITIONING CONTROL PANEL	FC43	12-WAY / BLUE	CENTER CONSOLE
AMBIENT TEMPERATURE SENSOR	LF29	2-WAY / BLACK	ADJACENT TO RH HORN
ASPIRATOR ASSEMBLY	FC12	4-WAY / WHITE	DRIVER KNEE BOLSTER
BLOWER AIR INTAKE – LH	AC5	15-WAY / GREEN	A/C UNIT / LH SIDE
BLOWER AIR INTAKE – RH	AC6	15-WAY / GREEN	A/C UNIT / RH SIDE
EVAPORATOR / HEATER MATRIX ASSEMBLY	AC7	12-WAY / BLACK	A/C UNIT / LH SIDE
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
SOLAR SENSOR	FC52	2-WAY / GREY	DRIVER SIDE FASCIA / ADJACENT TO DEFROST VENT
VENT ASSEMBLY	FC44	12-WAY / BLACK	A/C UNIT / TOP

RELAYS

Relay	Connector / Color	Location
AIR CONDITIONING ISOLATE RELAY	FC24 / BLACK	RH FASCIA RELAYS

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC12	20-WAY / WHITE / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA TOP CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC15	20-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM

GROUND

Ground	Location
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

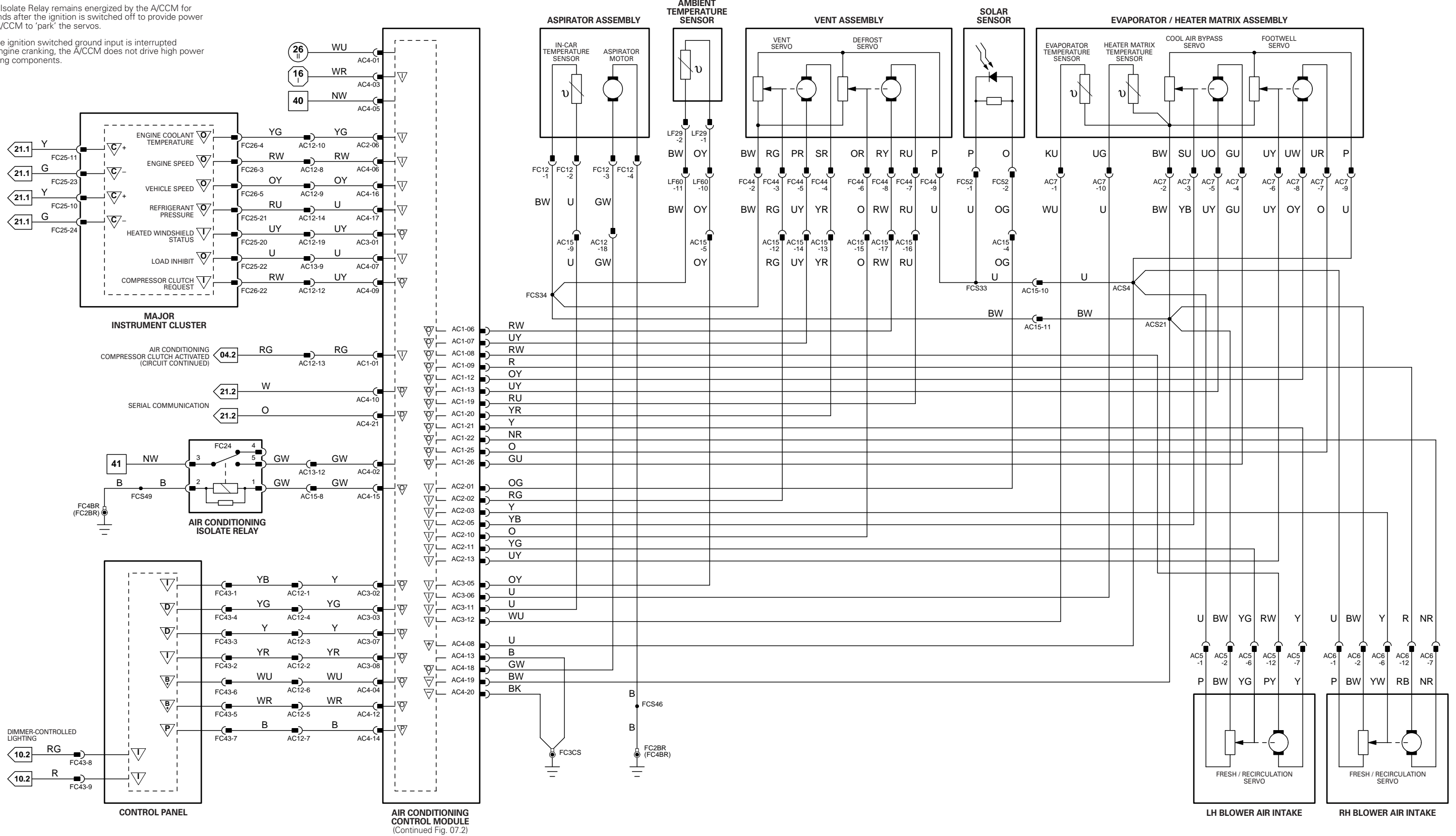
Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTES:

The A/C Isolate Relay remains energized by the A/CCM for 30 seconds after the ignition is switched off to provide power for the A/CCM to 'park' the servos.

When the ignition switched ground input is interrupted during engine cranking, the A/CCM does not drive high power consuming components.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	P Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Air Conditioning Control Module

Pin	Description and Characteristic
0 AC1-02	HEATER VALVE ACTIVATE: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO B+
0 AC1-03	RH BLOWER MOTOR RELAY ACTIVATE: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO GROUND
0 AC1-04	LH / RH WINDSHIELD HEATER RELAYS ACTIVATE: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO GROUND
0 AC1-05	DOOR MIRROR HEATER RELAY ACTIVATE: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO GROUND
0 AC1-16	LH BLOWER MOTOR RELAY ACTIVATE: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO GROUND
0 AC1-17	HEATER PUMP RELAY ACTIVATE: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO GROUND
0 AC1-18	HEATED BACKLIGHT RELAY ACTIVATE: TO ACTIVATE, A/CCM SWITCHES CIRCUIT TO GROUND
1 AC2-07	RH BLOWER SPEED FEEDBACK SIGNAL: VARIABLE VOLTAGE; 7.6 V = LOW SPEED
0 AC2-08	RH BLOWER SPEED CONTROL DRIVE SIGNAL: VARIABLE VOLTAGE; 1.3 V = LOW SPEED
1 AC2-15	LH BLOWER SPEED FEEDBACK SIGNAL: VARIABLE VOLTAGE; 7.6 V = LOW SPEED
0 AC2-16	LH BLOWER SPEED CONTROL DRIVE SIGNAL: VARIABLE VOLTAGE; 1.3 V = LOW SPEED

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 07.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
AIR CONDITIONING CONTROL MODULE	AC1 AC2 AC3 AC4	26-WAY / GREY 16-WAY / GREY 12-WAY / GREY 22-WAY / GREY	A/C UNIT / RH SIDE
BLOWER MOTOR – LH	AC5	15-WAY / GREEN	A/C UNIT / LH SIDE
BLOWER MOTOR – RH	AC6	15-WAY / GREEN	A/C UNIT / RH SIDE
DOOR MIRROR HEATER – DRIVER	DD8	12-WAY / BLUE	DRIVER DOOR / DOOR CASING
DOOR MIRROR HEATER – PASSENGER	DP8	12-WAY / BLUE	DRIVER DOOR / DOOR CASING
FUSE BOX – ENGINE COMPARTMENT	LF5 LF6 LF7 LF8 LF70	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	ENGINE COMPARTMENT / LEFT FRONT
FUSE BOX – TRUNK	BT10 BT11 BT12 BT13 BT64	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	TRUNK / ELECTRICAL CARRIER
HEATED REAR WINDOW	RH17 RH18	1-WAY / BLACK 1-WAY / BLACK	REAR WINDOW / RH SIDE
HEATER PUMP	EM41	2-WAY / BLACK	ENGINE COMPARTMENT / BULKHEAD, LH SIDE
HEATER VALVE	EM43	2-WAY / WHITE	ENGINE COMPARTMENT / BULKHEAD, LH SIDE
WINDSHIELD HEATER – LH	EM49	2-WAY / GREY	ENGINE COMPARTMENT
WINDSHIELD HEATER – RH	EM48	2-WAY / GREY	ENGINE COMPARTMENT

RELAYS

Relay	Connector / Color	Location
BLOWER MOTOR RELAY – LH	AC20 / BLACK	DRIVESHAFT TUNNEL RELAYS
BLOWER MOTOR RELAY – RH	AC20 / BLACK	DRIVESHAFT TUNNEL RELAYS
DOOR MIRROR HEATERS RELAY	FC28 / BLACK	LH FASCIA RELAYS
HEATED REAR WINDOW RELAY	BUS / BROWN	TRUNK FUSE BOX – R2
HEATER PUMP RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX – R1
WINDSHIELD HEATER RELAY – LH	EM44 / BROWN	RH ENCLOSURE RELAYS
WINDSHIELD HEATER RELAY – RH	EM45 / BROWN	RH ENCLOSURE RELAYS

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC12	20-WAY / WHITE / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA TOP CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC15	20-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BT58	4-WAY / BLACK / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF3	13-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / ADJACENT TO BRAKE SERVO
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUND

Ground	Location
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST
RH2	LEFT HAND REAR QUARTER

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

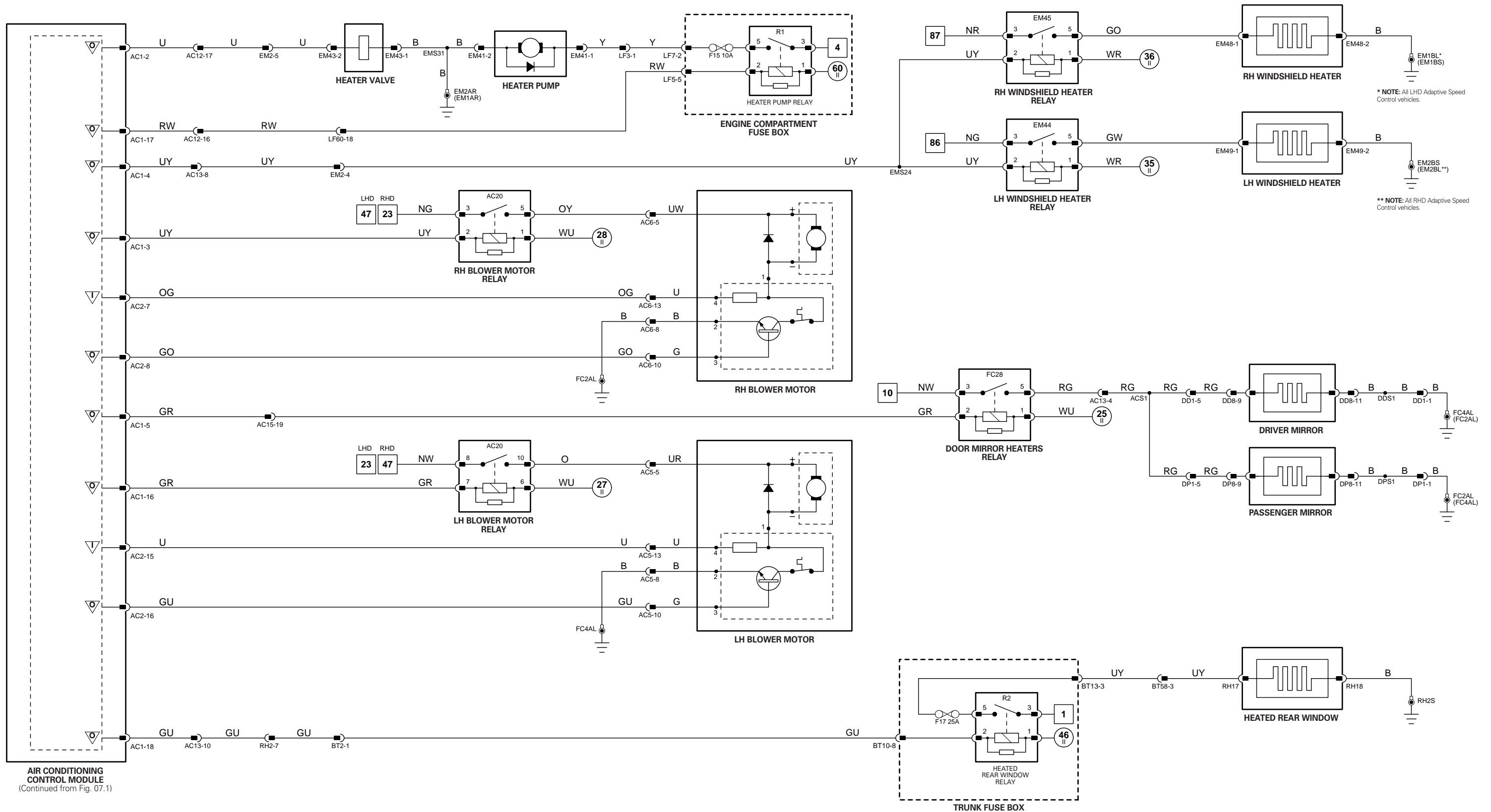
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I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTE: A/CCM power supplies and grounds shown on Fig. 07.1.

NOTE: Refer to EMS Figure 04.2 for Air Conditioning Pressure Sensor and Radiator Cooling Fans circuits.

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

Input	B Battery Voltage	S Sensor/Signal Supply V	A ACP	S SCP
Output	P Power Ground	G Sensor/Signal Ground	C CAN	D Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Major Instrument Cluster

Pin	Description and Characteristic
B+	FC25-01 IGNITION SWITCHED POWER SUPPLY: B+
O	FC25-02 MINOR INSTRUMENT PACK BATTERY POWER SUPPLY: B+
I	FC25-03 ADAPTIVE DAMPING WARNING: GROUND WHEN ACTIVATED
SG	FC25-04 LOGIC GROUND: GROUND
I	FC25-06 ILLUMINATION SUPPLY: B+
I	FC25-07 TRIP CYCLE: GROUND (MOMENTARY)
I	FC25-08 'A/B' TRIP SELECT: GROUND (MOMENTARY)
I	FC25-09 'ML/KM' SELECT: GROUND (MOMENTARY)
C	FC25-10 CAN +
C	FC25-11 CAN +
S	FC25-13 SCP +
S	FC25-14 SCP -
I	FC25-15 BATTERY POWER SUPPLY: B+
PG	FC25-16 POWER GROUND: GROUND
O	FC25-17 MINOR INSTRUMENT PACK ILLUMINATION SUPPLY: B+
I	FC25-18 'CLEAR' SELECT: GROUND (MOMENTARY)
I	FC25-19 '000' RESET: GROUND (MOMENTARY)
C	FC25-23 CAN -
C	FC25-24 CAN -
O	FC25-25 SIGNAL GROUND: GROUND
O	FC26-01 BATTERY CHARGE WARNING
O	FC26-02 OIL PRESSURE WARNING
O	FC26-06 VEHICLE SPEED SIGNAL - PAS
O	FC26-07 VEHICLE SPEED SIGNAL - ADAPTIVE DAMPING CONTROL MODULE
I	FC26-08 BATTERY VOLTAGE GAUGE POSITION FEEDBACK: 5 V (MIDPOINT)
I	FC26-09 BATTERY VOLTAGE GAUGE POSITION FEEDBACK: 5 V (MIDPOINT)
I	FC26-10 OIL PRESSURE GAUGE POSITION FEEDBACK: 5 V = 0 PSI; 3.3 V = NORMAL (MIDPOINT)
O	FC26-11 BATTERY VOLTAGE GAUGE MOVEMENT: 3.7 - 5 V (PULSE)
O	FC26-12 BATTERY VOLTAGE GAUGE MOVEMENT: 3.7 - 5 V (PULSE)
I	FC26-13 FUEL LEVEL GAUGE SIGNAL: VARIABLE RESISTANCE
O	FC26-14 FUEL LEVEL GAUGE SIGNAL GROUND: GROUND
I	FC26-15 OIL PRESSURE GAUGE POSITION FEEDBACK: 5 V = 0 PSI; 3.3 V = NORMAL (MIDPOINT)
I	FC26-16 AIR BAG MIL: GROUND WHEN ACTIVATED
O	FC26-17 OIL PRESSURE GAUGE MOVEMENT: 3.7 - 5 V (PULSE)
O	FC26-18 OIL PRESSURE GAUGE MOVEMENT: 3.7 - 5 V (PULSE)
I	FC26-19 LOW OIL PRESSURE SWITCH SIGNAL: GROUND WHEN ACTIVATED
O	FC26-20 VEHICLE SPEED SIGNAL - AUDIO
I	FC26-21 DIMMER OVERRIDE: GROUND WHEN ACTIVATED
I	FC26-23 LOW COOLANT SWITCH SIGNAL: GROUND WHEN ACTIVATED
I	FC26-26 PARKING BRAKE SWITCH SIGNAL: GROUND WHEN ACTIVATED

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 08.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
ENGINE COOLANT LEVEL SWITCH	EM55	2-WAY / BROWN	ENGINE COMPARTMENT / COOLANT RESERVOIR
FUEL LEVEL SENSOR	FT3	6-WAY / NATURAL	FUEL TANK EVAPORATIVE FLANGE
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
MINOR INSTRUMENT CLUSTER	FC79	20-WAY / BLACK	FASCIA
OIL PRESSURE SWITCH	PI40	1-WAY / BLACK	ENGINE BLOCK / RH SIDE
PARKING BRAKE SWITCH	FC19	1-WAY / BLACK	BELOW PARKING BRAKE LEVER
TRIP COMPUTER SWITCH PACK	FC27	10-WAY / BLACK	FASCIA / DRIVER SIDE
TRIP CYCLE SWITCH (COLUMN SWITCHGEAR)	SC2	10-WAY / YELLOW	ADJACENT TO STEERING COLUMN MOTOR

HARNESS IN-LINE CONNECTORS

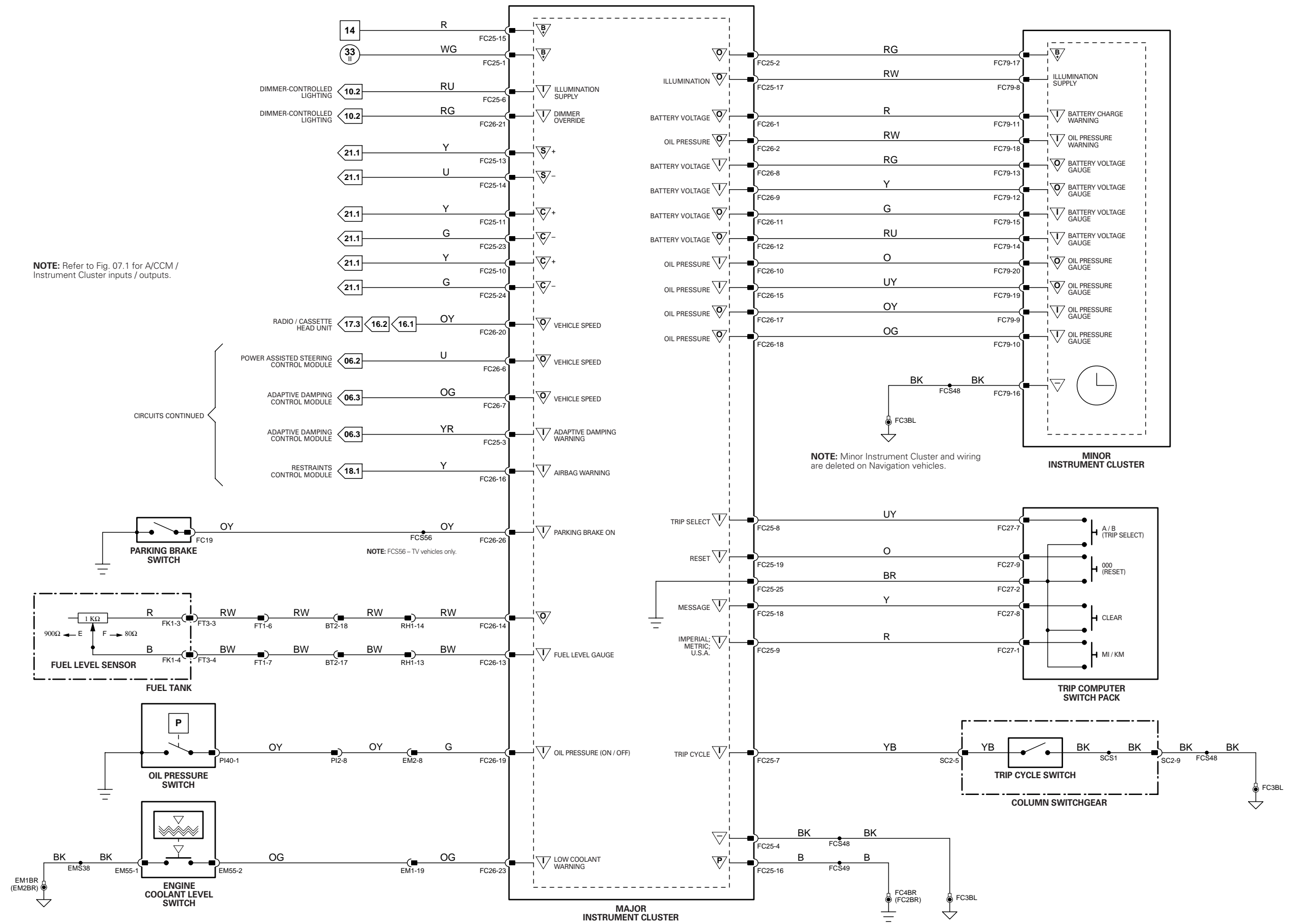
Connector	Connector Description	Location
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
EM1	20-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
FT1	10-WAY / WHITE / TRUNK HARNESS TO FUEL PUMP LINK HARNESS	FUEL TANK / REAR
PI1	57-WAY / BLACK / ENGINE HARNESS TO ENGINE MANAGEMENT HARNESS	ENGINE COMPARTMENT / BRACKET ON TOP OF TRANSMISSION
RH1	20-WAY / GREY / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR

GROUND S

Ground	Location
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.

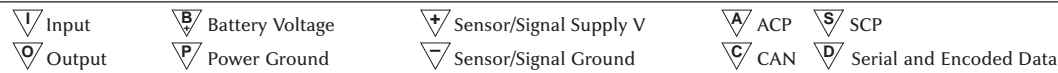
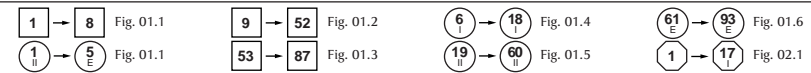


NOTE: Refer to Fig. 07.1 for A/CCM / Instrument Cluster inputs / outputs.

CIRCUITS CONTINUED

NOTE: FCS56 - TV vehicles only.

NOTE: Minor Instrument Cluster and wiring are deleted on Navigation vehicles.



VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-08	AIRBAG AUDIBLE WARNING: GROUND WHEN ACTIVATED
I FC14-15	IGNITION SWITCHED GROUND (I): GROUND
I FC14-32	IGNITION SWITCHED GROUND (I): GROUND
I FC14-41	ENGINE START REQUEST: GROUND WHEN ACTIVATED
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
O FC14-82	AUDIBLE WARNING SPEAKER DRIVE: AUDIO OUTPUT
O FC14-83	AUDIBLE WARNING SPEAKER DRIVE: AUDIO OUTPUT
S FC14-84	SCP -
S FC14-85	SCP +
B+ FC14-104	BATTERY POWER SUPPLY: B+

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 08.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
AUDIBLE WARNING SPEAKER (COLUMN SWITCHGEAR)	SC7	6-WAY / BLACK	STEERING COLUMN / RH SIDE
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET

HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
SC1	12-WAY / WHITE / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

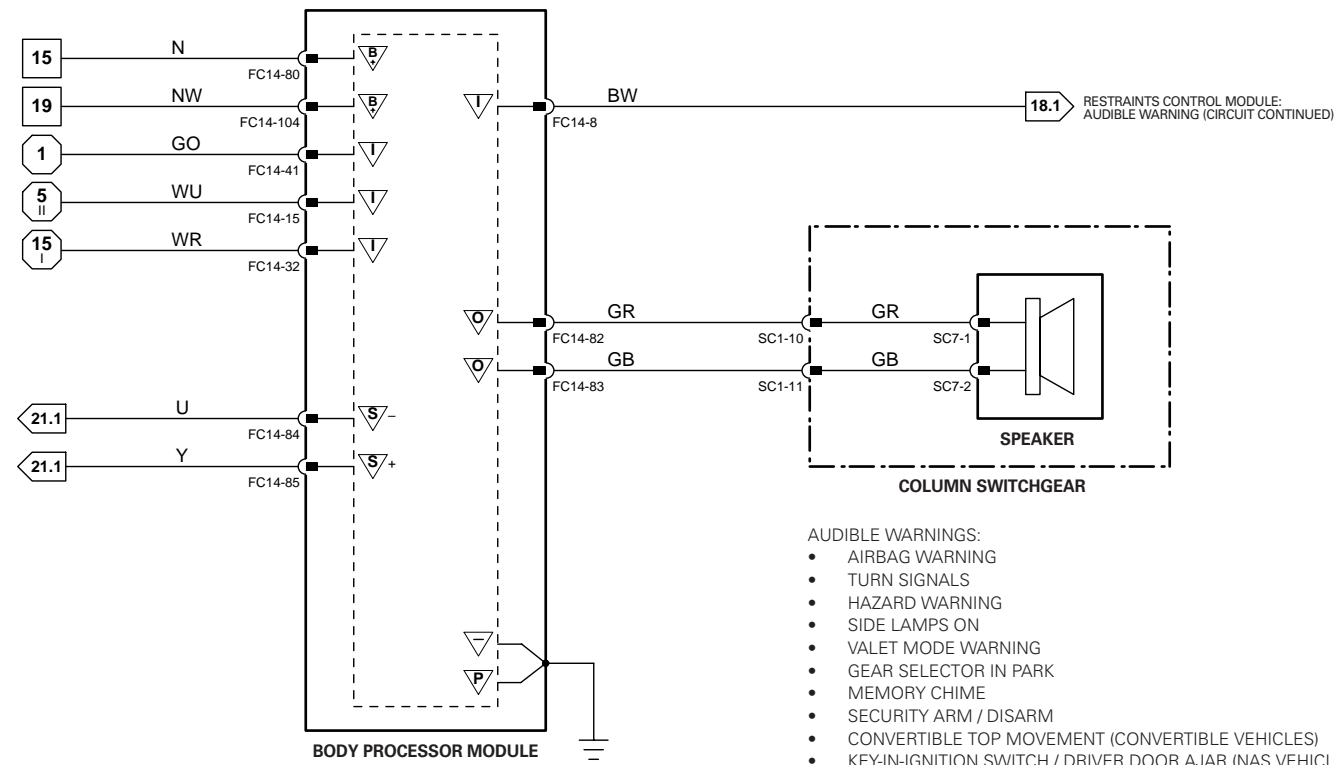
NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.

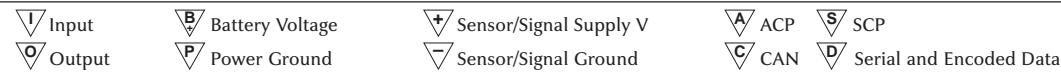
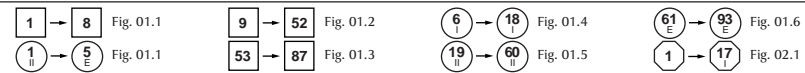


SCP SOURCES:

- TURN SIGNALS; HAZARD WARNING; SIDE LAMPS – Fig. 09.1, Fig. 09.2, Fig. 09.3
- VALET SWITCH; TRUNK RELEASE – Fig. 13.1
- MEMORY – Fig. 11.1, Fig. 11.2, Fig. 12.1
- CONVERTIBLE TOP MOVEMENT – Fig. 15.2
- KEY-IN-IGNITION SWITCH / DRIVER DOOR SWITCH – Fig. 13.1
- NOT-IN-PARK SWITCH – Fig. 05.3
- SEAT BELT SWITCH – Fig. 12.1, Fig. 12.2



- AUDIBLE WARNINGS:
- AIRBAG WARNING
 - TURN SIGNALS
 - HAZARD WARNING
 - SIDE LAMPS ON
 - VALET MODE WARNING
 - GEAR SELECTOR IN PARK
 - MEMORY CHIME
 - SECURITY ARM / DISARM
 - CONVERTIBLE TOP MOVEMENT (CONVERTIBLE VEHICLES)
 - KEY-IN-IGNITION SWITCH / DRIVER DOOR AJAR (NAS VEHICLES ONLY)
 - DRIVER SEAT BELT DISCONNECTED
 - ADAPTIVE SPEED CONTROL FORWARD ALERT



VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
0	FC14-01 RH FRONT SIDE LAMP LAMP ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
0	FC14-02 LH FRONT TURN SIGNAL ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
0	FC14-03 RH FRONT TURN SIGNAL ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
I	FC14-06 HEADLAMP DIPPED BEAM SWITCH SIGNAL: GROUND WHEN ACTIVATED
I	FC14-14 HEADLAMP MAIN BEAM SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I	FC14-15 IGNITION SWITCHED GROUND (I): GROUND
I	FC14-16 SIDE LAMP SWITCH SIGNAL: GROUND WHEN ACTIVATED
0	FC14-20 FRONT FOG LAMP RELAY ACTIVATE / FRONT FOG LAMP STATUS: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
0	FC14-27 LH FRONT TURN SIGNAL REPEATER ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
0	FC14-28 RH SIDE MARKER LAMP ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
I	FC14-30 HEADLAMP FLASH SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I	FC14-38 FRONT FOG LAMP SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I	FC14-39 AUTO LAMPS SIGNAL †
I	FC14-41 ENGINE START REQUEST: GROUND WHEN ACTIVATED
0	FC14-45 MAIN BEAM RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
0	FC14-53 LH FRONT SIDE LAMP ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
0	FC14-54 LH SIDE MARKER LAMP ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
I	FC14-56 ENGINE COMPARTMENT SECURITY SWITCH SIGNAL: GROUND WHEN ACTIVATED (HOOD OPEN)
I	FC14-59 HAZARD SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I	FC14-61 RH TURN SIGNAL SWITCH SIGNAL: GROUND WHEN ACTIVATED
0	FC14-68 DIP BEAM RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+	FC14-79 BATTERY POWER SUPPLY (LIGHTING): B+
B+	FC14-80 BATTERY POWER SUPPLY (LOGIC): B+
0	FC14-81 RH FRONT TURN SIGNAL REPEATER ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
S	FC14-84 SCP -
S	FC14-85 SCP +
I	FC14-88 LH TURN SIGNAL SWITCH SIGNAL: GROUND WHEN ACTIVATED
0	FC14-96 HAZARD STATUS INDICATOR: B+ (PULSED)

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 09.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
FUSE BOX - ENGINE COMPARTMENT	LF5 LF6 LF7 LF8 LF70	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	ENGINE COMPARTMENT / LEFT FRONT
FRONT FOG LAMP - LH	LF32	2-WAY / BLACK	FRONT BUMPER / WHEEL ARCH LINER PANEL
FRONT FOG LAMP - RH	LF22	2-WAY / BLACK	FRONT BUMPER / WHEEL ARCH LINER PANEL
FRONT LAMP UNIT - LH (NON-HID)	LF31	6-WAY / BLACK	LH HEADLAMP ASSEMBLY
FRONT LAMP UNIT - RH (NON-HID)	LF21	6-WAY / BLACK	RH HEADLAMP ASSEMBLY
INTERIOR REAR VIEW MIRROR	RF2	8-WAY / YELLOW	WINDSHIELD / FORWARD OF ROOF CONSOLE
LIGHTING STALK (COLUMN SWITCHGEAR)	SC2	10-WAY / YELLOW	ADJACENT TO STEERING COLUMN MOTOR
SIDE MARKER - LH FRONT	LF11	2-WAY / BLACK	BEHIND WHEEL ARCH LINER
SIDE MARKER - RH FRONT	LF10	2-WAY / BLACK	BEHIND WHEEL ARCH LINER
SIDE TURN SIGNAL REPEATER - LH	LF4	2-WAY / BLACK	BEHIND WHEEL ARCH LINER
SIDE TURN SIGNAL REPEATER - RH	EL5	2-WAY / BLACK	BEHIND WHEEL ARCH LINER
SWITCH PACK - CENTER CONSOLE	FC55	20-WAY / BLACK	CENTER CONSOLE

RELAYS

Relay	Connector / Color	Location
DIP BEAM RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX - R3
FRONT FOG RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX - R2
MAIN BEAM RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX - R5

HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
EL6	2-WAY / BLACK / FASCIA HARNESS TO RH TURN SIGNAL REPEATER	ENGINE COMPARTMENT / ADJACENT TO RIGHT HAND ENCLOSURE
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF1	20-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR

GROUND S

Ground	Location
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
LF1	RIGHT HAND HEADLAMP
LF2	ENGINE COMPARTMENT, FORWARD OF LEFT HAND HOOD LATCH

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

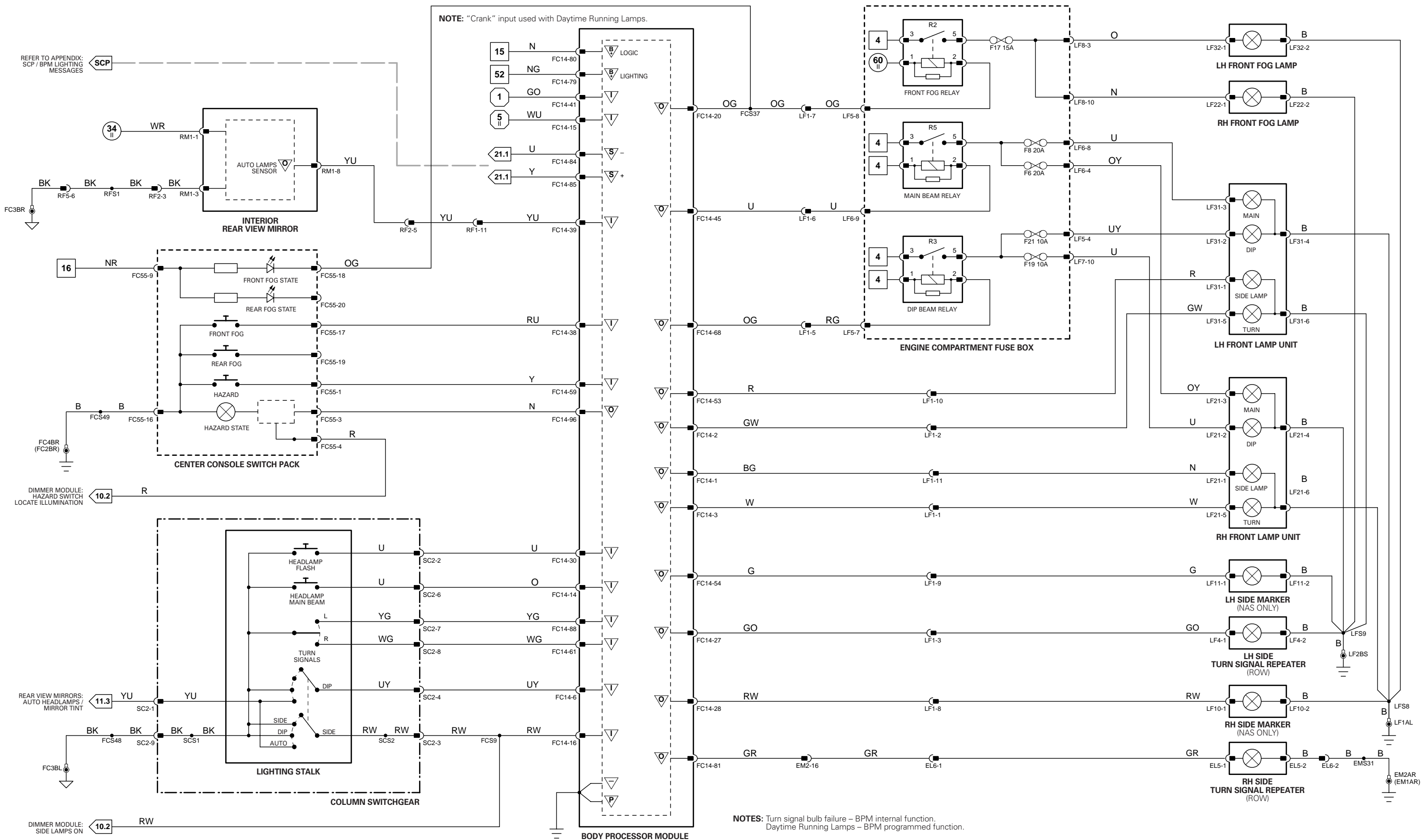
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
0	FC14-01 RH FRONT SIDE LAMP ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
0	FC14-02 LH FRONT TURN SIGNAL ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
I	FC14-06 HEADLAMP DIPPED BEAM SWITCH SIGNAL: GROUND WHEN ACTIVATED
I	FC14-08 AIRBAG AUDIBLE WARNING: GROUND WHEN ACTIVATED
I	FC14-14 HEADLAMP MAIN BEAM SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I	FC14-15 IGNITION SWITCHED GROUND (I): GROUND
I	FC14-16 SIDE LAMP SWITCH SIGNAL: GROUND WHEN ACTIVATED
0	FC14-20 FRONT FOG LAMP RELAY ACTIVATE / FRONT FOG LAMP STATUS: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
0	FC14-27 LH FRONT TURN SIGNAL REPEATER ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
0	FC14-28 RH SIDE MARKER LAMP ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
I	FC14-30 HEADLAMP FLASH SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I	FC14-38 FRONT FOG LAMP SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I	FC14-39 AUTO LAMPS SIGNAL †
I	FC14-41 ENGINE START REQUEST: GROUND WHEN ACTIVATED
0	FC14-45 MAIN BEAM RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
0	FC14-53 LH FRONT SIDE LAMP ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
0	FC14-54 LH SIDE MARKER LAMP ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
I	FC14-59 HAZARD SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I	FC14-61 RH TURN SIGNAL SWITCH SIGNAL: GROUND WHEN ACTIVATED
0	FC14-68 DIP BEAM RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+	FC14-79 BATTERY POWER SUPPLY (LIGHTING): B+
B+	FC14-80 BATTERY POWER SUPPLY (LOGIC): B+
0	FC14-81 RH FRONT TURN SIGNAL REPEATER ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
S	FC14-84 SCP -
S	FC14-85 SCP +
I	FC14-88 LH TURN SIGNAL SWITCH SIGNAL: GROUND WHEN ACTIVATED
0	FC14-96 HAZARD STATUS INDICATOR: B+ (PULSED)

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 09.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
FUSE BOX - ENGINE COMPARTMENT	LF5 LF6 LF7 LF8 LF70	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	ENGINE COMPARTMENT / LEFT FRONT
FRONT FOG LAMP - LH	LF32	2-WAY / BLACK	FRONT BUMPER / WHEEL ARCH LINER PANEL
FRONT FOG LAMP - RH	LF22	2-WAY / BLACK	FRONT BUMPER / WHEEL ARCH LINER PANEL
HID HEADLAMP UNIT - LH	LF30	9-WAY / BLACK	LH HEADLAMP ASSEMBLY
HID HEADLAMP UNIT - RH	LF23	9-WAY / BLACK	RH HEADLAMP ASSEMBLY
INTERIOR REAR VIEW MIRROR	RF2	8-WAY / YELLOW	WINDSHIELD / FORWARD OF ROOF CONSOLE
LIGHTING STALK (COLUMN SWITCHGEAR)	SC2	10-WAY / YELLOW	ADJACENT TO STEERING COLUMN MOTOR
SIDE MARKER - LH FRONT	LF11	2-WAY / BLACK	BEHIND WHEEL ARCH LINER
SIDE MARKER - RH FRONT	LF10	2-WAY / BLACK	BEHIND WHEEL ARCH LINER
SIDE TURN SIGNAL REPEATER - LH	LF4	2-WAY / BLACK	BEHIND WHEEL ARCH LINER
SIDE TURN SIGNAL REPEATER - RH	EL5	2-WAY / BLACK	BEHIND WHEEL ARCH LINER
SWITCH PACK - CENTER CONSOLE	FC55	20-WAY / BLACK	CENTER CONSOLE

RELAYS

Relay	Connector / Color	Location
MAIN BEAM RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX - R3
FRONT FOG RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX - R2
DIP BEAM RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX - R5

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
EL6	2-WAY / BLACK / FASCIA HARNESS TO RH TURN SIGNAL REPEATER	ENGINE COMPARTMENT / ADJACENT TO RIGHT HAND ENCLOSURE
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF1	20-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR

GROUND

Ground	Location
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
LF1	RIGHT HAND HEADLAMP
LF2	ENGINE COMPARTMENT, FORWARD OF LEFT HAND HOOD LATCH

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

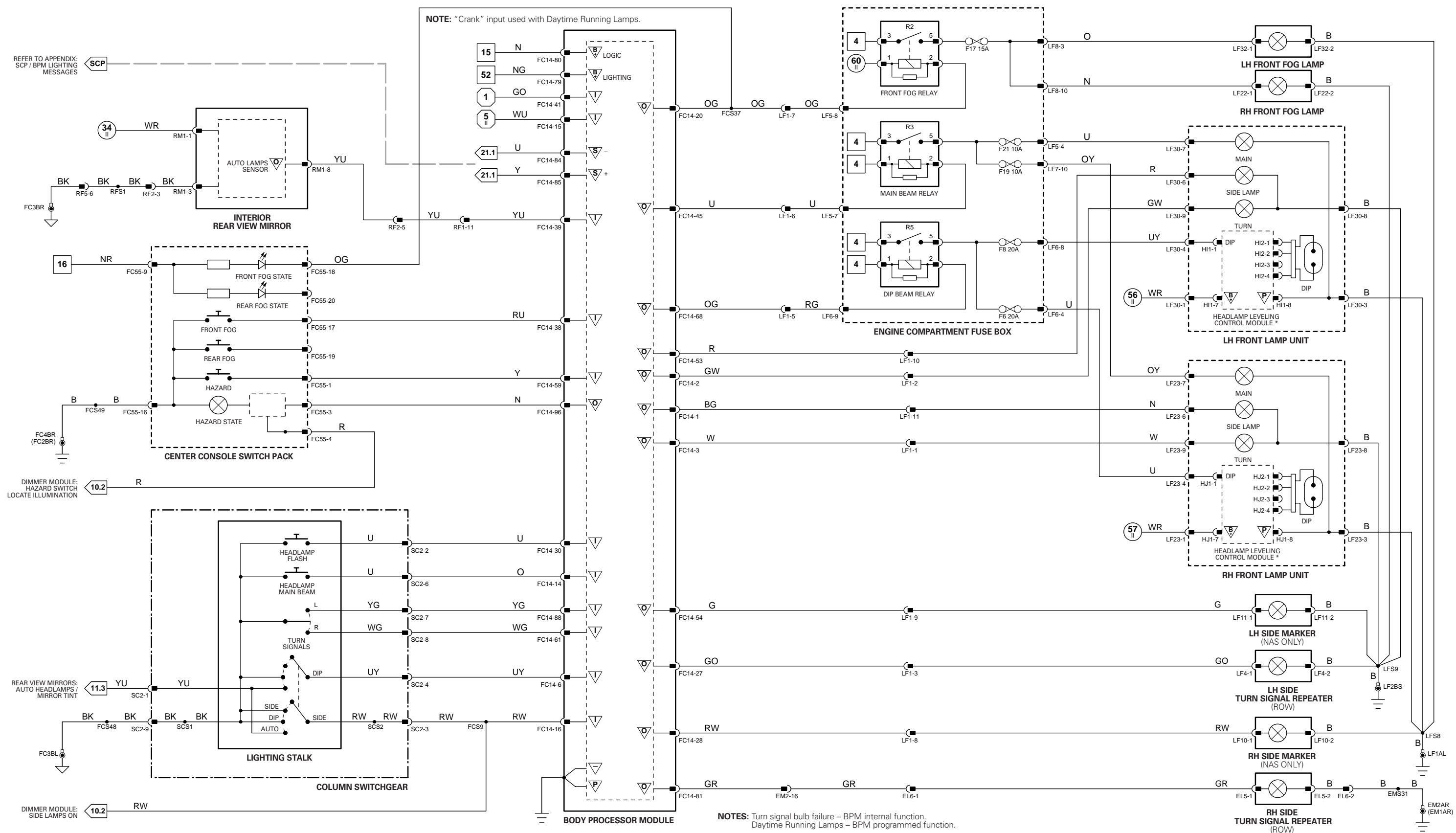
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6	▽ Input	⌋ Battery Voltage	▽ Sensor/Signal Supply V	⌋ ACP	⌋ SCP
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1	▽ Output	⌋ Power Ground	▽ Sensor/Signal Ground	⌋ CAN	⌋ Serial and Encoded Data

VARIANT: HID Headlamp Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-06	HEADLAMP DIPPED BEAM SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-12	REAR FOG LAMP SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-15	IGNITION SWITCHED GROUND (I): GROUND
I FC14-16	SIDE LAMP SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-39	AUTO LAMPS SIGNAL †
I FC14-41	ENGINE START REQUEST: GROUND WHEN ACTIVATED
O FC14-44	REAR FOG LAMP STATUS: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
O FC14-50	LH REAR TURN SIGNAL ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
I FC14-61	RH TURN SIGNAL SWITCH SIGNAL: GROUND WHEN ACTIVATED
O FC14-76	RH REAR TURN SIGNAL ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
B+ FC14-79	BATTERY POWER SUPPLY (LIGHTING): B+
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +
I FC14-88	LH TURN SIGNAL SWITCH SIGNAL: GROUND WHEN ACTIVATED
O FC14-95	TAIL LAMP RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+ FC14-104	BATTERY POWER SUPPLY: B+

Major Instrument Cluster

Pin	Description and Characteristic
C FC25-11	CAN +
S FC25-13	SCP +
S FC25-14	SCP -
C FC25-23	CAN -

Security and Locking Control Module

Pin	Description and Characteristic
O BT40-05	REVERSE LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
B+ BT40-06	BATTERY POWER SUPPLY: B+
O BT40-07	REAR FOG LAMP RELAY ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO GROUND
S BT40-08	SCP +
SG BT40-13	LOGIC GROUND: GROUND
SG BT40-14	LOGIC GROUND: GROUND
S BT40-16	SCP -
O BT41-12	SIDE MARKER LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
I BT41-13	SIDE MARKER LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
O BT42-01	RH STOP LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
O BT42-02	LH STOP LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
O BT42-03	RH TAIL LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
O BT42-04	LH TAIL LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
O BT42-05	NUMBER PLATE LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
I BT42-06	RH STOP LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
I BT42-07	LH STOP LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
I BT42-08	RH TAIL LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
I BT42-09	LH TAIL LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
I BT42-10	NUMBER PLATE LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 09.3

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
BRAKE ON / OFF SWITCH	AC24	4-WAY / WHITE	TOP OF BRAKE PEDAL
FUSE BOX - TRUNK	BT10 BT11 BT12 BT13 BT64	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	TRUNK / ELECTRICAL CARRIER
HIGH-MOUNTED STOP LAMP - CONVERTIBLE	BL8	2-WAY / WHITE	TRUNK / UNDERSIDE OF LID
HIGH-MOUNTED STOP LAMP - COUPE	RH8	2-WAY / WHITE	TRUNK / REARWARD OF SUB WOOFER SPEAKER
INTERIOR REAR VIEW MIRROR	RF2	8-WAY / YELLOW	WINDSHIELD / FORWARD OF ROOF CONSOLE
LIGHTING STALK (COLUMN SWITCHGEAR)	SC2	10-WAY / YELLOW	ADJACENT TO STEERING COLUMN MOTOR
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
NUMBER PLATE LAMP - LH	BL4	2-WAY / BLACK	TRUNK LID / LINER
NUMBER PLATE LAMP - RH	BL5	2-WAY / BLACK	TRUNK LID / LINER
SECURITY AND LOCKING CONTROL MODULE	BT40 BT41 BT42 RH20	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK COAXIAL CONNECTOR	TRUNK / ELECTRICAL CARRIER
SIDE MARKER - LH REAR	BT27	2-WAY / BLACK	TRUNK / LH SIDE
SIDE MARKER - RH REAR	BT26	2-WAY / BLACK	TRUNK / RH SIDE
SWITCH PACK - CENTER CONSOLE	FC55	20-WAY / BLACK	CENTER CONSOLE
TAIL LAMP UNIT - LH	BT31	7-WAY / BLACK	TRUNK / LH SIDE
TAIL LAMP UNIT - RH	BT30	7-WAY / BLACK	TRUNK / RH SIDE

RELAYS

Relay	Connector / Color	Location
REAR FOG RELAY	BUS / BROWN	TRUNK FUSE BOX - R1
STOP LAMP RELAY	BUS / BROWN	TRUNK FUSE BOX - R5
TAIL LAMP RELAY	BUS / BROWN	TRUNK FUSE BOX - R3

HARNESS IN-LINE CONNECTORS

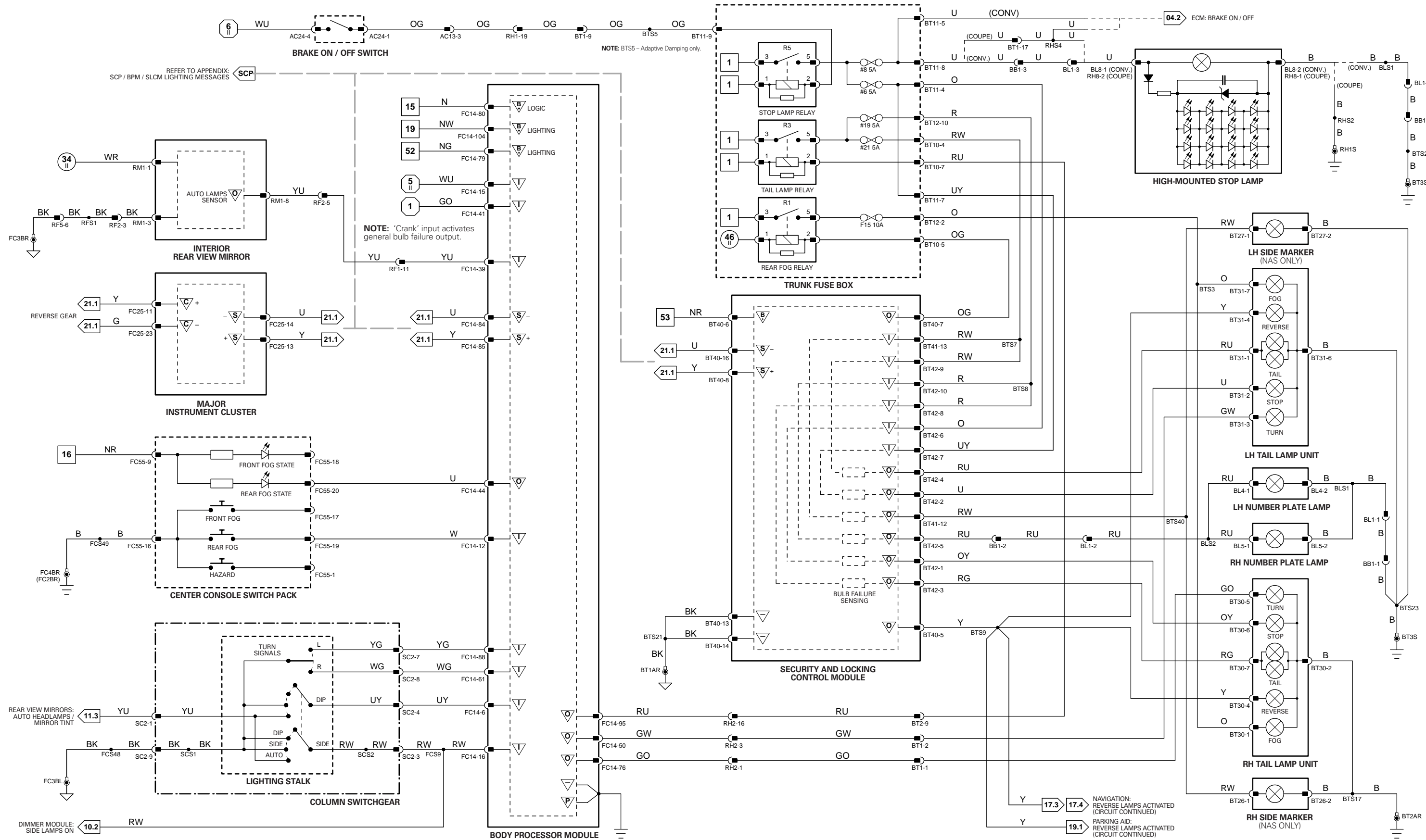
Connector	Connector Description	Location
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BB1	4-WAY / WHITE / TRUNK HARNESS TO TRUNK LID HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BL1	4-WAY / WHITE / TRUNK HARNESS TO TRUNK LID HARNESS	TRUNK / BEHIND TRUNK LID LINER / RH SIDE
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
RH1	20-WAY / GREY / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR

GROUND S

Ground	Location
BT1	ADJACENT TO BATTERY
BT2	TRUNK, RIGHT REAR
BT3	TRUNK, LEFT REAR
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
RH1	RIGHT HAND REAR QUARTER

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	▽ Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	▽ Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

Fig. 09.4**COMPONENTS**

Component	Connector(s)	Connector Description	Location
HEADLAMP LEVELING ACTUATOR – LH	LF34	3-WAY / BLACK	HEADLAMP ASSEMBLY / REAR
HEADLAMP LEVELING ACTUATOR – RH	LF24	3-WAY / BLACK	HEADLAMP ASSEMBLY / REAR
HEADLAMP LEVELING SWITCH (CENTER CONSOLE SWITCH PACK)	FC55	20-WAY / BLACK	CENTER CONSOLE
HID HEADLAMP UNIT – LH	LF30	9-WAY / BLACK	LH HEADLAMP ASSEMBLY
HID HEADLAMP UNIT – RH	LF23	9-WAY / BLACK	RH HEADLAMP ASSEMBLY
RIDE HEIGHT SENSOR – FRONT AXLE	LF33	6-WAY / BLACK	FRONT SUSPENSION
RIDE HEIGHT SENSOR – REAR AXLE	XL1	6-WAY / BLACK	REAR SUSPENSION

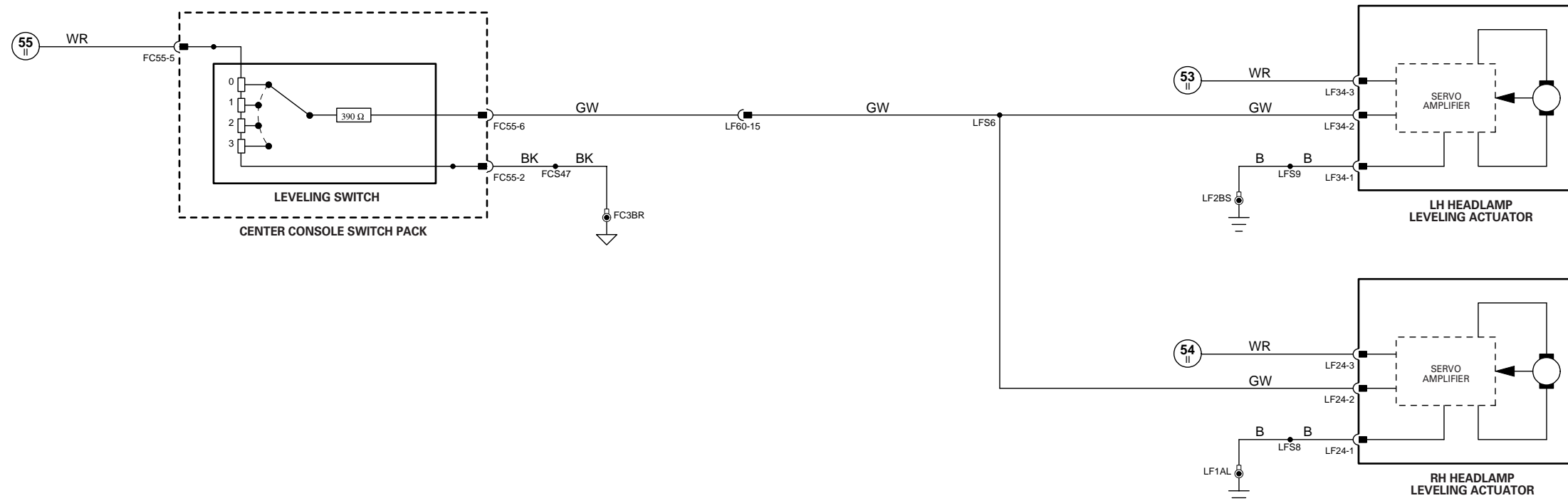
HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
BT3	20-WAY / YELLOW / REARWARD HARNES TO TRUNK HARNES	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
LF59	12-WAY / GREY / FASCIA HARNES TO LEFT FORWARD HARNES	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
LF60	20-WAY / WHITE / FASCIA HARNES TO LEFT FORWARD HARNES	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH13	12-WAY / WHITE / FASCIA HARNES TO REARWARD HARNES	REAR OF CENTER CONSOLE ASSEMBLY
RL2	4-WAY / WHITE / TRUNK HARNES TO LH REAR WHEEL LINK HARNES	ABOVE REAR AXLE / LEFT HAND SIDE
XL2	4-WAY / BLACK / LH REAR WHEEL LINK HARNES TO RIDE HEIGHT SENSOR LINK HARNES	ABOVE REAR AXLE / LEFT HAND SIDE

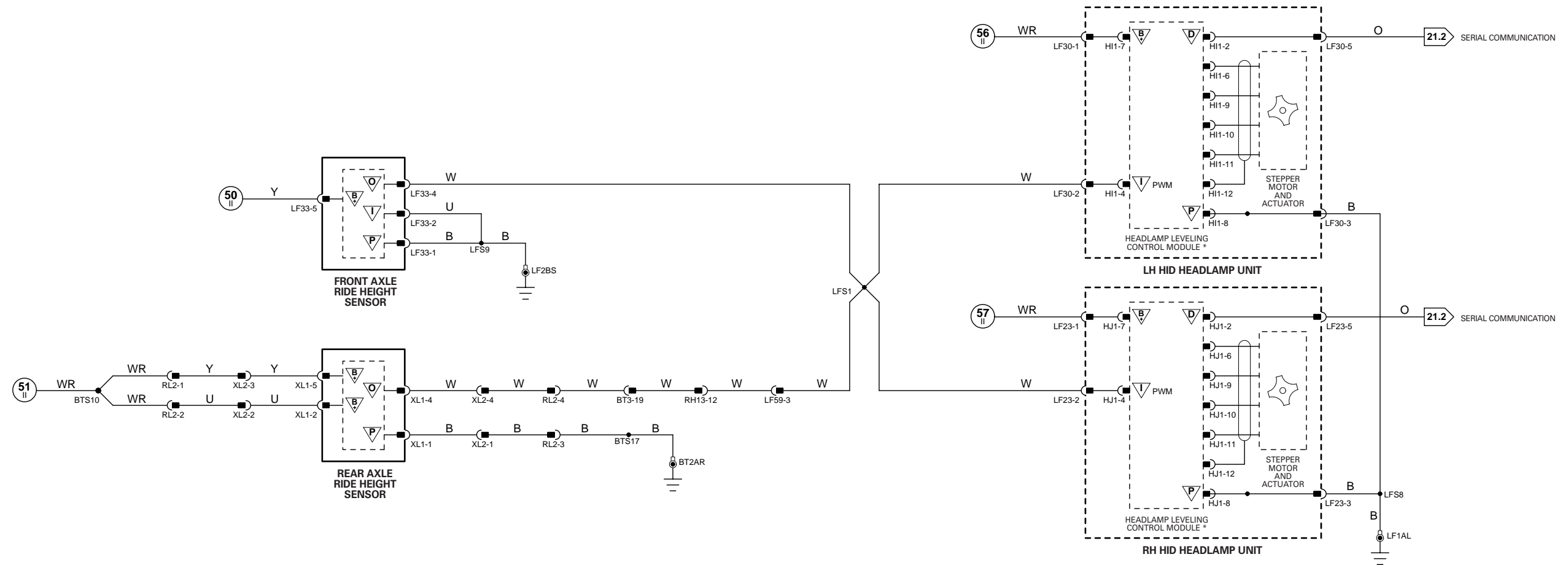
GROUNDS

Ground	Location
BT2	TRUNK, RIGHT REAR
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
LF1	RIGHT HAND HEADLAMP
LF2	ENGINE COMPARTMENT, FORWARD OF LEFT HAND HOOD LATCH

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



DRIVER-CONTROLLED HEADLAMP LEVELING



AUTOMATIC HEADLAMP LEVELING (HID HEADLAMPS)

* NOTE: Refer to Fig. 09.2 for Headlamp Leveling Control Module exterior lighting details.

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I	FC14-15 IGNITION SWITCHED GROUND (I): GROUND
O	FC14-24 INTERIOR LIGHTING ACTIVATE (FADE 1): TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
I	FC14-32 IGNITION SWITCHED GROUND (I): GROUND
I	FC14-41 ENGINE START REQUEST: GROUND WHEN ACTIVATED
I	FC14-67 KEY-IN-IGNITION: GROUND WHEN ACTIVATED
O	FC14-74 INTERIOR LIGHTING ACTIVATE (FADE 21): TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
B+	FC14-80 BATTERY POWER SUPPLY (LOGIC): B+
S	FC14-84 SCP -
S	FC14-85 SCP +
O	FC14-101 INTERIOR LIGHTING ENABLE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
B+	FC14-104 BATTERY POWER SUPPLY: B+

Driver Door Control Module

Pin	Description and Characteristic
B+	DD10-01 BATTERY POWER SUPPLY: B+
SG	DD10-08 LOGIC GROUND: GROUND
S	DD10-09 SCP -
O	DD10-14 DRIVER DOOR PUDDLE LAMP ACTIVATE: TO ACTIVATE, DDCM SWITCHES CIRCUIT TO B+
S	DD10-16 SCP +
PG	DD10-17 POWER GROUND: GROUND
I	DD11-04 DRIVER DOOR LOCK BARREL UNLOCK REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DD11-12 DRIVER DOOR LOCK BARREL LOCK REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DD11-20 DRIVER DOOR AJAR SWITCH SIGNAL: GROUND WHEN ACTIVATED (DOOR OPEN)

Passenger Door Control Module

Pin	Description and Characteristic
B+	DP10-01 BATTERY POWER SUPPLY: B+
SG	DP10-08 LOGIC GROUND: GROUND
S	DP10-09 SCP -
O	DP10-14 PASSENGER DOOR PUDDLE LAMP ACTIVATE: TO ACTIVATE, PDCM SWITCHES CIRCUIT TO B+
S	DP10-16 SCP +
PD	DP10-17 POWER GROUND: GROUND
I	DP11-20 PASSENGER DOOR AJAR SWITCH SIGNAL: GROUND WHEN ACTIVATED (DOOR OPEN)

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 10.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DIODE (BT29) - TRUNK SWITCH	BT29	DIODE	TRUNK / ADJACENT TO BATTERY
DOOR AJAR SWITCH - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR AJAR SWITCH - PASSENGER	DP3	13-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR CONTROL MODULE - DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE - PASSENGER	DP10 DP11	22-WAY / BLUE 22-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR LOCK SWITCHES - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
FOOTWELL LAMP - DRIVER	FC31	2-WAY / BLACK	LH FOOTWELL
FOOTWELL LAMP - PASSENGER	FC32	2-WAY / BLACK	RH FOOTWELL
GLOVE BOX LAMP	FC33 FC34	1-WAY / CLEAR 1-WAY / CLEAR	GLOVE BOX
IGNITION SWITCH (KEY-IN SWITCH)	FC4	8-WAY / WHITE	STEERING COLUMN
PUDDLE LAMP - DRIVER DOOR	DD14	2-WAY / BLACK	DRIVER DOOR
PUDDLE LAMP - PASSENGER DOOR	DP14	2-WAY / BLACK	PASSENGER DOOR
REAR INTERIOR LAMP	RH3	2-WAY / WHITE	REAR CENTER OF HEAD LINING
ROOF CONSOLE	RF10	6-WAY / GREY	ROOF CONSOLE
TRUNK LAMP - LH	BT56	2-WAY / WHITE	TRUNK / LH SIDE
TRUNK LAMP - RH	BT59	2-WAY / WHITE	TRUNK / RH SIDE
TRUNK SWITCH	BT46	2-WAY / BLACK	TRUNK
VANITY LAMP - LH	RF8	3-WAY / YELLOW	SUN VISOR
VANITY LAMP - RH	RF7	3-WAY / YELLOW	SUN VISOR

HARNESS IN-LINE CONNECTORS

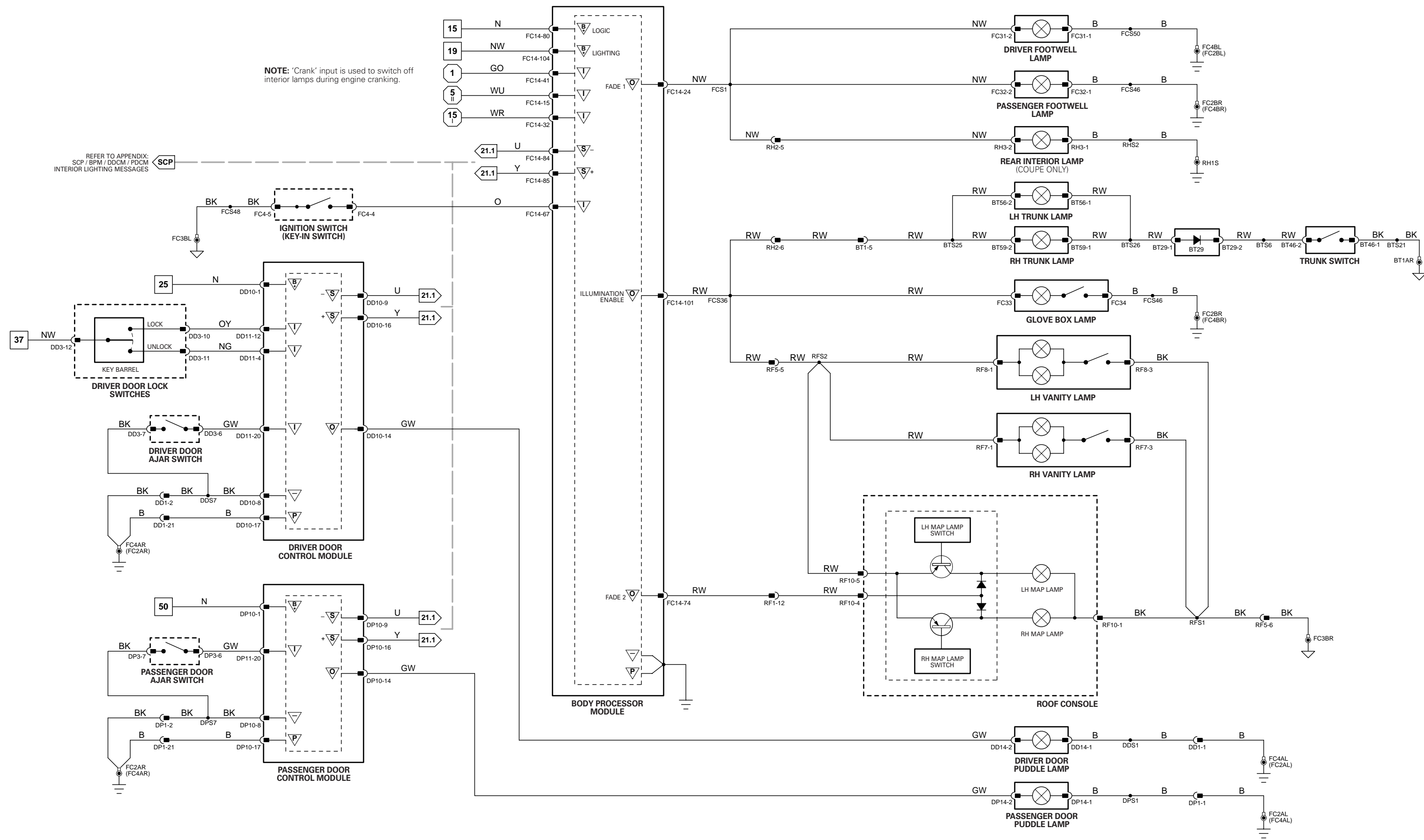
Connector	Connector Description	Location
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF5	8-WAY / WHITE / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDINGS

Ground	Location
BT1	ADJACENT TO BATTERY
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
RH1	RIGHT HAND REAR QUARTER

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



CONTROL MODULE PIN-OUT INFORMATION

Fig. 10.2

Dimmer Module

Pin	Description and Characteristic
O	FC23-01 ILLUMINATION ACTIVATE: TO ACTIVATE, DIMMER MODULE SWITCHES CIRCUIT TO B+
O	FC23-02 ILLUMINATION ACTIVATE: TO ACTIVATE, DIMMER MODULE SWITCHES CIRCUIT TO B+
I	FC23-03 IGNITION SWITCHED GROUND SUPPLY: GROUND (IGNITION I)
I	FC23-04 SIDE LAMPS ON SWITCH SIGNAL: GROUND WHEN ACTIVATED
I	FC23-05 DIMMER SENSOR SIGNAL: 1.3 V = DIM; 4 V = BRIGHT
SG	FC23-06 DIMMER SENSOR SIGNAL GROUND: GROUND
O	FC23-07 ILLUMINATION ACTIVATE: TO ACTIVATE, DIMMER MODULE SWITCHES CIRCUIT TO B+
O	FC23-08 ILLUMINATION ACTIVATE: TO ACTIVATE, DIMMER MODULE SWITCHES CIRCUIT TO B+
PG	FC23-09 POWER GROUND: GROUND
B+	FC23-10 BATTERY POWER SUPPLY: B+
B+	FC23-11 BATTERY POWER SUPPLY: B+
SS	FC23-12 DIMMER SENSOR SUPPLY VOLTAGE: NOMINAL 5 V

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

COMPONENTS

Component	Connector(s)	Connector Description	Location
ADAPTIVE SPEED LIMIT SWITCH	FC63	10-WAY / NATURAL	REARWARD OF GEAR SELECTOR
AIR CONDITIONING CONTROL PANEL	FC43	12-WAY / BLUE	CENTER CONSOLE
CIGAR LIGHTER	FC42 FC59	2-WAY / METALLIC 1-WAY / BLACK	FORWARD OF GEAR SELECTOR
CONVERTIBLE TOP SWITCH	FC62	10-WAY / BLACK	FORWARD OF GEAR SELECTOR
DIMMER CONTROL (COLUMN SWITCHGEAR)	SC11	6-WAY / WHITE	STEERING COLUMN COWL
DIMMER MODULE	FC23	12-WAY / BLACK	FASCIA / ADJACENT TO RH SIDE FUSE BOX
FORWARD ALERT SWITCH	FC102	10-WAY / BLACK	DRIVER KNEE BOLSTER
J GATE ILLUMINATION MODULE	FC88	10-WAY / WHITE	FRONT OF GEAR SELECTOR ASSEMBLY
LIGHTING STALK (COLUMN SWITCHGEAR)	SC2	10-WAY / YELLOW	ADJACENT TO STEERING COLUMN MOTOR
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
MINOR INSTRUMENT CLUSTER	FC79	20-WAY / BLACK	FASCIA
MODE SWITCH (TRANSMISSION)	FC35	10-WAY / BLACK	REARWARD OF GEAR SELECTOR
NAVIGATION CONTROL MODULE	IC22 IC23	16-WAY / BLACK 24-WAY / BLACK	
NAVIGATION DISPLAY MODULE	FC97 FC98	12-WAY / BLACK 16-WAY / BLACK	BEHIND NAVIGATION DISPLAY
RADIO / CASSETTE HEAD UNIT	IC8 IC19 IC20	8-WAY / BLACK 12-WAY / WHITE 26-WAY / YELLOW	CENTER CONSOLE
ROOF CONSOLE	RF10	6-WAY / GREY	ROOF CONSOLE
SWITCH PACK – CENTER CONSOLE	FC55	20-WAY / BLACK	CENTER CONSOLE
SWITCH PACK – DRIVER DOOR	DD17	20-WAY / BLACK	DRIVER DOOR
SWITCH PACK – DRIVER DOOR MEMORY	DD5	10-WAY / BLACK	DRIVER DOOR
SWITCH PACK – PASSENGER DOOR	DP17	8-WAY / BLACK	PASSENGER DOOR
TRIP COMPUTER SWITCH PACK	FC27	10-WAY / BLACK	FASCIA / DRIVER SIDE
TRUNK AND FUEL FILL RELEASE SWITCH	FC41	10-WAY / NATURAL	FASCIA / DRIVER SIDE
VALET SWITCH	FC67	10-WAY / BLACK	DRIVER KNEE BOLSTER

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC15	20-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
IC1	20-WAY / YELLOW / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF5	8-WAY / WHITE / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR
SC3	12-WAY / GREY / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN

GROUNDS

Ground	Location
CE2	ABOVE RIGHT HAND SIDE OF TRANSMISSION TUNNEL
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

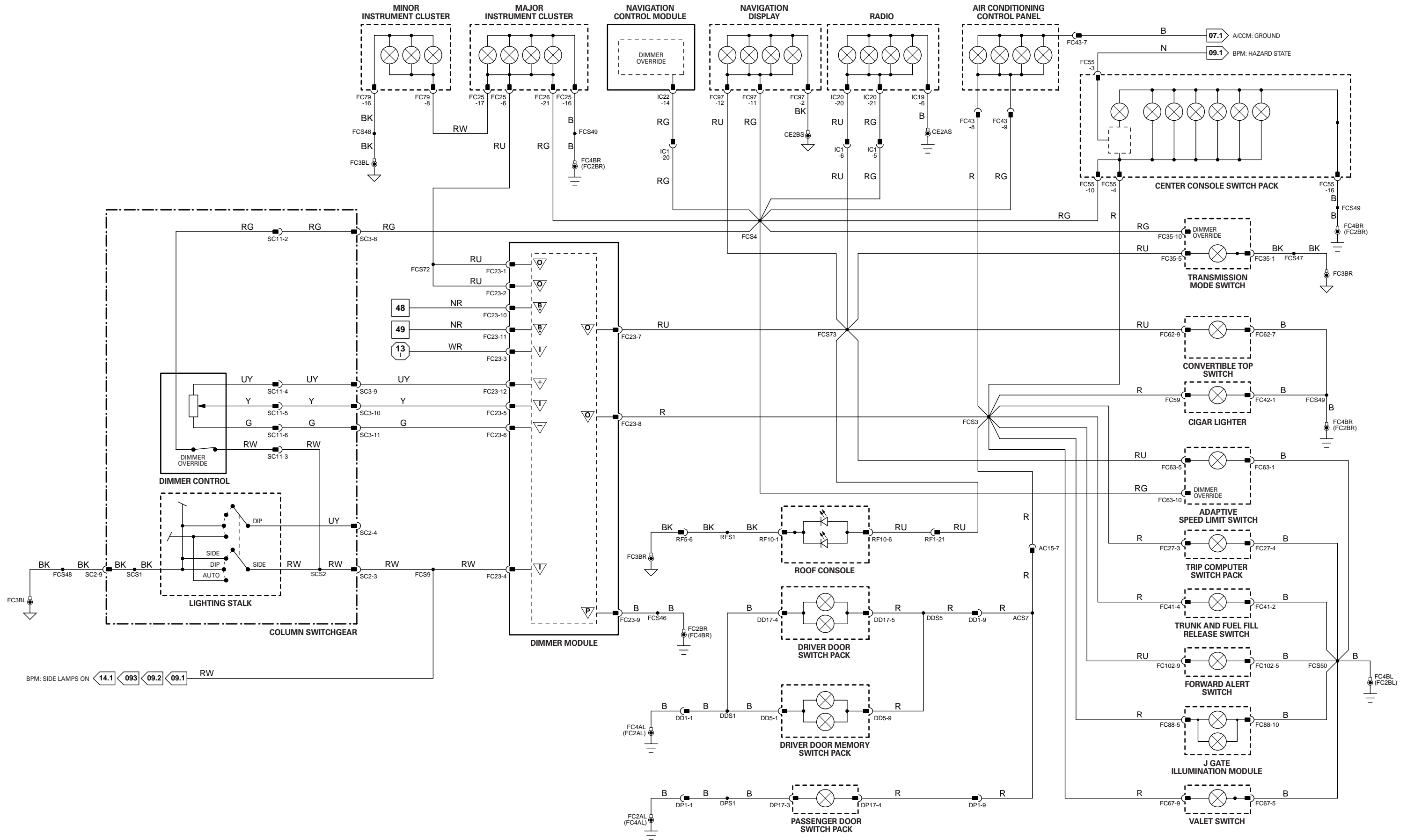
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



BPM: SIDE LAMPS ON 14.1 09.3 09.2 09.1 RW

1 → 8	9 → 52	6 → 18	61 → 93
1 → 5	53 → 87	19 → 60	1 → 17

▽ Input	⌋ Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	⌋ Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-11	AUTO TILT SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-15	IGNITION SWITCHED GROUND (I): GROUND
PG FC14-25	COLUMN MOTORS GROUND: GROUND
I FC14-32	IGNITION SWITCHED GROUND (I): GROUND
SS FC14-40	COLUMN MOTORS POSITION SENSORS SIGNAL SUPPLY: 5 V (NOMINAL)
I FC14-41	ENGINE START REQUEST: GROUND WHEN ACTIVATED
O FC14-52	COLUMN REACH MOTOR DRIVE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
I FC14-58	NOT-IN-PARK SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-66	COLUMN REACH MOTOR POSITION SENSOR SIGNAL: VARIABLE VOLTAGE / IN = HIGHER VOLTAGE; OUT = LOWER VOLTAGE
I FC14-67	KEY-IN-IGNITION: GROUND WHEN ACTIVATED
O FC14-78	COLUMN REACH MOTOR DRIVE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +
I FC14-87	COLUMN JOY STICK SWITCH SIGNAL: VARYING VOLTAGE WHEN ACTIVATED
SG FC14-90	COLUMN TILT MOTOR POSITION SENSOR SIGNAL GROUND: GROUND
SG FC14-91	COLUMN REACH MOTOR POSITION SENSOR SIGNAL GROUND: GROUND
I FC14-93	COLUMN TILT MOTOR POSITION SENSOR SIGNAL: VARIABLE VOLTAGE / UP = HIGHER VOLTAGE; DOWN = LOWER VOLTAGE
O FC14-99	COLUMN TILT MOTOR DRIVE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
O FC14-100	COLUMN TILT MOTOR DRIVE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
B+ FC14-102	BATTERY POWER SUPPLY (MOTORS): B+

Driver Door Control Module

Pin	Description and Characteristic
B+ DD10-01	BATTERY POWER SUPPLY: B+
SG DD10-08	LOGIC GROUND: GROUND
S DD10-09	SCP -
S DD10-16	SCP +
PG DD10-17	POWER GROUND: GROUND
O DD11-02	SEAT MEMORY STATUS LED: GROUND (LED ON)
I DD11-06	MEMORY SET REQUEST: B+ WHEN ACTIVATED
I DD11-20	DRIVER DOOR AJAR SWITCH SIGNAL: GROUND WHEN ACTIVATED (DOOR OPEN)
I DD11-21	MEMORY 1 RECALL REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I DD11-22	MEMORY 2 RECALL REQUEST: B+ (MOMENTARY) WHEN ACTIVATED

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 11.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
AUTO TILT SWITCH (COLUMN SWITCHGEAR)	SC9	6-WAY / BLACK	ADJACENT TO STEERING COLUMN MOTOR
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
COLUMN JOY STICK (COLUMN SWITCHGEAR)	SC9	6-WAY / BLACK	ADJACENT TO STEERING COLUMN MOTOR
DOOR AJAR SWITCH - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE - DRIVER	DD10	22-WAY / BLUE	DRIVER DOOR / DOOR CASING
	DD11	22-WAY / BLACK	
IGNITION SWITCH (KEY-IN SWITCH)	FC4	8-WAY / WHITE	STEERING COLUMN
NOT-IN-PARK SWITCH	FC87	3-WAY / WHITE	GEAR SELECTOR ASSEMBLY
STEERING COLUMN MOTORS	FC60	6-WAY / WHITE	STEERING COLUMN
	FC61	8-WAY / YELLOW	
SWITCH PACK - DRIVER DOOR MEMORY	DD5	10-WAY / BLACK	DRIVER DOOR

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET/ 'A' POST TRIM
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR
SC3	12-WAY / GREY / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN

GROUND

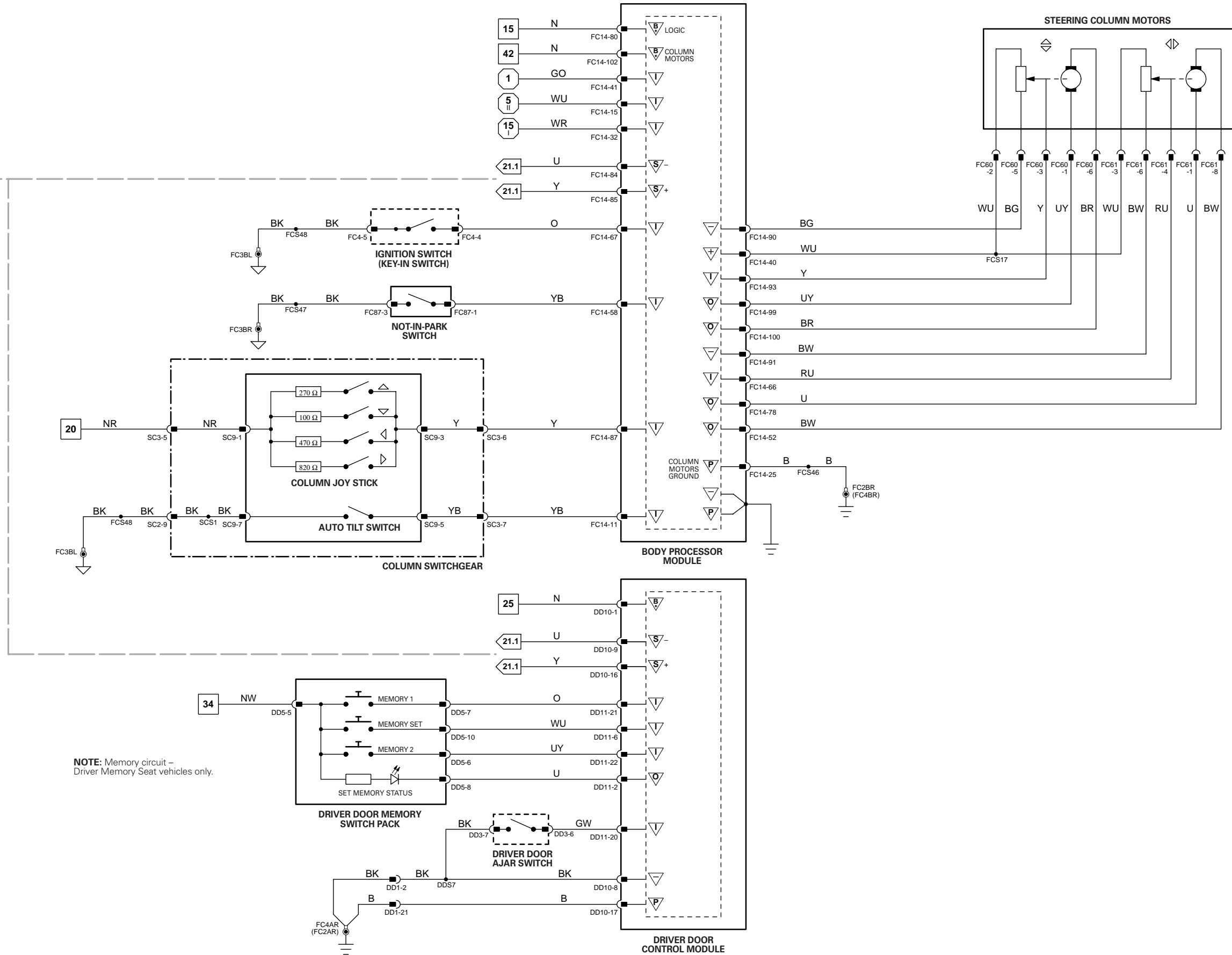
Ground	Location
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

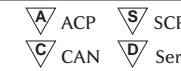
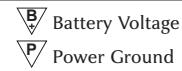
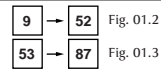
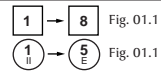
Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



REFER TO APPENDIX: SCP / BPM / DDCM MESSAGES



NOTE: Memory circuit – Driver Memory Seat vehicles only.



VARIANT: All Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-15	IGNITION SWITCHED GROUND (I): GROUND
I FC14-32	IGNITION SWITCHED GROUND (I): GROUND
I FC14-41	ENGINE START REQUEST: GROUND WHEN ACTIVATED
I FC14-58	NOT-IN-PARK SWITCH SIGNAL: GROUND WHEN ACTIVATED
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +

Driver Door Control Module

Pin	Description and Characteristic
B+ DD10-01	BATTERY POWER SUPPLY: B+
SS DD10-02	DRIVER DOOR MIRROR POSITION SENSOR SUPPLY: B+
O DD10-03	DRIVER DOOR MIRROR HORIZONTAL MOVEMENT MOTOR ACTIVATE: B+ = RIGHT, GROUND = LEFT
O DD10-04	DRIVER DOOR MIRROR VERTICAL MOVEMENT MOTOR ACTIVATE: B+ = UP, GROUND = DOWN
SG DD10-08	LOGIC GROUND: GROUND
S DD10-09	SCP -
SS DD10-13	DRIVER WINDOW LIFT SENSOR SUPPLY VOLTAGE: B+
PG DD10-17	POWER GROUND: GROUND
O DD10-20	DRIVER DOOR MIRROR SENSOR COMMON SUPPLY VOLTAGE: B+
I DD10-21	DRIVER DOOR MIRROR HORIZONTAL POSITION SENSOR SIGNAL: 1 V = LEFT; 8 V = RIGHT
I DD10-22	DRIVER DOOR MIRROR VERTICAL POSITION SENSOR SIGNAL: 1 V = DOWN; 8 V = UP
I DD11-01	MIRROR SELECT: B+ = UP / RIGHT; GROUND = DOWN / LEFT
O DD11-02	SEAT MEMORY STATUS LED: GROUND (LED ON)
I DD11-03	RH VERTICAL MOVEMENT REQUEST: B+ = DOWN; GROUND = UP
I DD11-06	MEMORY SET REQUEST: B+ WHEN ACTIVATED
I DD11-09	RH HORIZONTAL MOVEMENT REQUEST: B+ = LEFT; GROUND = RIGHT
I DD11-10	LH HORIZONTAL MOVEMENT REQUEST: B+ = LEFT; GROUND = RIGHT
I DD11-17	LH VERTICAL MOVEMENT REQUEST: B+ = DOWN; GROUND = UP
I DD11-20	DRIVER DOOR AJAR SWITCH SIGNAL: GROUND WHEN ACTIVATED (DOOR OPEN)
I DD11-21	MEMORY 1 RECALL REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I DD11-22	MEMORY 2 RECALL REQUEST: B+ (MOMENTARY) WHEN ACTIVATED

Major Instrument Cluster

Pin	Description and Characteristic
C FC25-11	CAN +
S FC25-13	SCP +
S FC25-14	SCP -
C FC25-23	CAN -

Passenger Door Control Module

Pin	Description and Characteristic
B+ DP10-01	BATTERY POWER SUPPLY: B+
SS DP10-02	PASSENGER DOOR MIRROR POSITION SENSOR SUPPLY: B+
O DP10-03	PASSENGER DOOR MIRROR HORIZONTAL MOVEMENT MOTOR ACTIVATE: B+ = RIGHT, GROUND = LEFT
O DP10-04	PASSENGER DOOR MIRROR VERTICAL MOVEMENT MOTOR ACTIVATE: B+ = UP, GROUND = DOWN
SG DP10-08	LOGIC GROUND: GROUND
S DP10-09	SCP -
S DP10-16	SCP +
PG DP10-17	POWER GROUND: GROUND
O DP10-20	PASSENGER DOOR MIRROR SENSOR COMMON SUPPLY VOLTAGE: B+
I DP10-21	PASSENGER DOOR MIRROR HORIZONTAL POSITION SENSOR SIGNAL: 1 V = LEFT; 8 V = RIGHT
I DP10-22	PASSENGER DOOR MIRROR VERTICAL POSITION SENSOR SIGNAL: 1 V = DOWN; 8 V = UP

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 11.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DOOR AJAR SWITCH - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE - DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE - PASSENGER	DP10 DP11	22-WAY / BLUE 22-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR MIRROR MOTOR - DRIVER	MD1	8-WAY / BLUE	BEHIND MIRROR
DOOR MIRROR MOTOR - PASSENGER	MP1	8-WAY / BLUE	BEHIND MIRROR
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
MIRROR JOY STICK (DRIVER DOOR SWITCH PACK)	DD17	20-WAY / BLACK	DRIVER DOOR
NOT-IN-PARK SWITCH	FC87	3-WAY / WHITE	GEAR SELECTOR ASSEMBLY
SWITCH PACK - DRIVER DOOR MEMORY	DD5	10-WAY / BLACK	DRIVER DOOR

HARNESS IN-LINE CONNECTORS

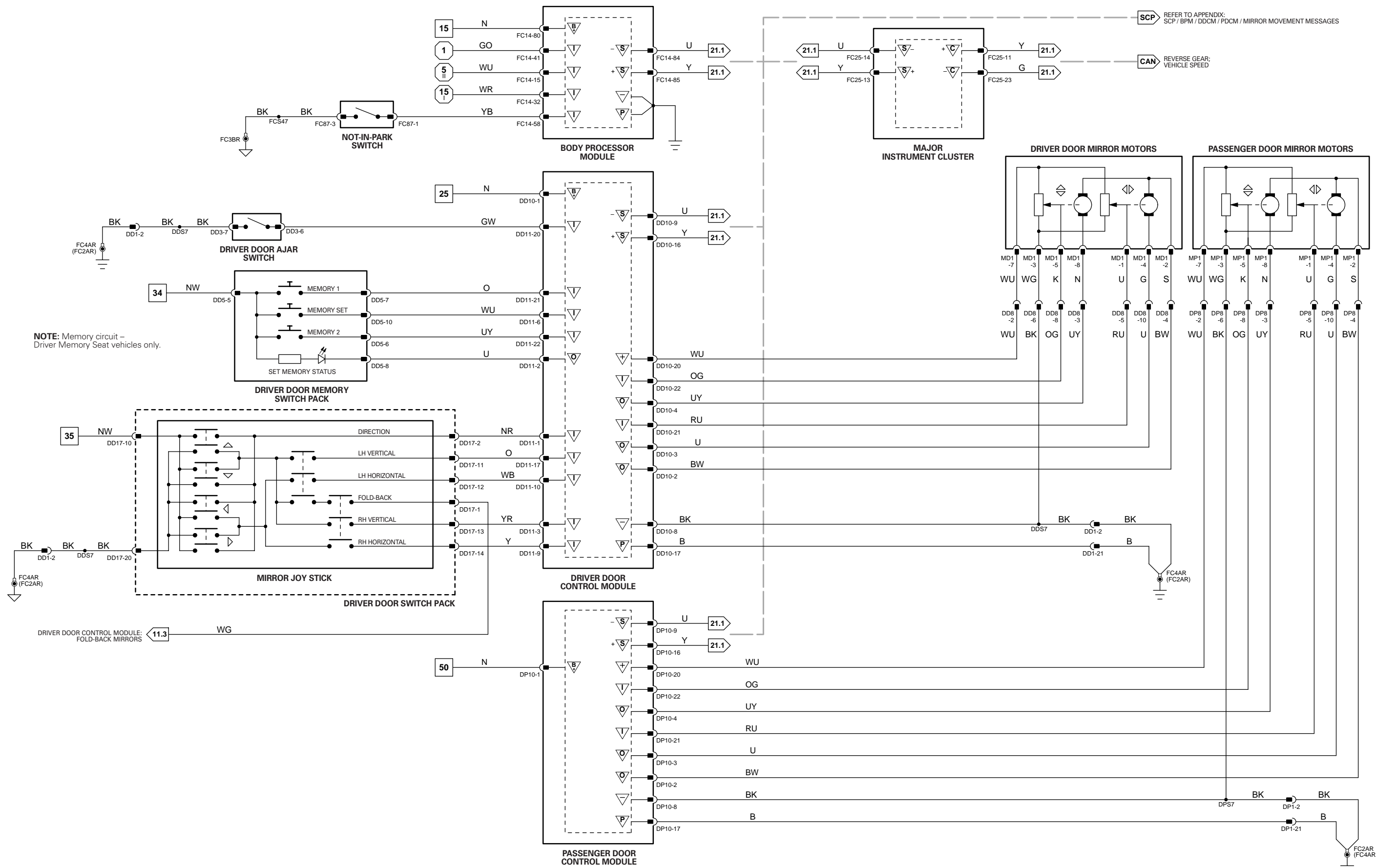
Connector	Connector Description	Location
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DD8	12-WAY / BLACK / DRIVER DOOR MIRROR TO DRIVER DOOR HARNESS	DRIVER DOOR / DOOR CASING
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
DP8	12-WAY / BLUE / PASSENGER DOOR MIRROR TO PASSENGER DOOR HARNESS	PASSENGER DOOR / DOOR CASING

GROUNDS

Ground	Location
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



REFER TO APPENDIX: SCP / BPM / DDCM / PDCM / MIRROR MOVEMENT MESSAGES

REVERSE GEAR; VEHICLE SPEED

NOTE: Memory circuit - Driver Memory Seat vehicles only.

DRIVER DOOR CONTROL MODULE: FOLD-BACK MIRRORS

1 → 8	9 → 52	6 → 18	61 → 93
1 → 5	53 → 87	19 → 60	1 → 17

Input	B Battery Voltage	V Sensor/Signal Supply V	A ACP	S SCP
Output	P Power Ground	G Sensor/Signal Ground	C CAN	D Serial and Encoded Data

VARIANT: All Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-06	HEADLAMP DIPPED BEAM SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-15	IGNITION SWITCHED GROUND (I): GROUND
I FC14-16	SIDE LAMP SWITCH SIGNAL: GROUND WHEN ACTIVATED
SS FC14-21	AUTO LAMPS SWITCH SIGNAL SUPPLY
I FC14-39	AUTO LAMPS SIGNAL †
B+ FC14-79	BATTERY POWER SUPPLY (LIGHTING): B+
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP –
S FC14-85	SCP +

Driver Door Control Module

Pin	Description and Characteristic
B+ DD10-01	BATTERY POWER SUPPLY: B+
SG DD10-08	LOGIC GROUND: GROUND
S DD10-09	SCP –
S DD10-16	SCP +
I DD11-15	DOOR MIRROR POWER FOLD BACK REQUEST: B+ WHEN ACTIVATED

Driver Seat Control Module

Pin	Description and Characteristic
O SD3-04	DOOR MIRROR FOLD BACK ACTIVATE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO GROUND
PG SD5-02	POWER GROUND: GROUND
B+ SD5-05	BATTERY POWER SUPPLY: B+
S SD5-09	SCP +
S SD5-10	SCP –

Major Instrument Cluster

Pin	Description and Characteristic
C FC25-11	CAN +
S FC25-13	SCP +
S FC25-14	SCP –
C FC25-23	CAN –

Passenger Seat Control Module

Pin	Description and Characteristic
O SP3-04	DOOR MIRROR FOLD OUT ACTIVATE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO GROUND
PG SP5-02	POWER GROUND: GROUND
B+ SP5-05	BATTERY POWER SUPPLY: B+
S SP5-09	SCP +
S SP5-10	SCP –

Security and Locking Control Module

Pin	Description and Characteristic
O BT40-05	REVERSE LAMP ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
B+ BT40-06	BATTERY POWER SUPPLY: B+
S BT40-08	SCP +
SG BT40-13	LOGIC GROUND: GROUND
SG BT40-14	LOGIC GROUND: GROUND
S BT40-16	SCP –

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 11.3

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DOOR CONTROL MODULE – DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR MIRROR FOLD-BACK MOTOR – DRIVER	MD3	6-WAY / BLUE	BEHIND MIRROR
DOOR MIRROR FOLD-BACK MOTOR – PASSENGER	MP3	6-WAY / BLUE	BEHIND MIRROR
INTERIOR REAR VIEW MIRROR	RF2	8-WAY / YELLOW	WINDSHIELD / FORWARD OF ROOF CONSOLE
LIGHTING STALK (COLUMN SWITCHGEAR)	SC2	10-WAY / YELLOW	ADJACENT TO STEERING COLUMN MOTOR
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
MIRROR JOY STICK (DRIVER DOOR SWITCH PACK)	DD17	20-WAY / BLACK	DRIVER DOOR
SEAT CONTROL MODULE – DRIVER	SD3 SD4 SD5	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK	BELOW SEAT CUSHION
SEAT CONTROL MODULE – PASSENGER	SP3 SP5	16-WAY / BLACK 10-WAY / BLACK	BELOW SEAT CUSHION
SECURITY AND LOCKING CONTROL MODULE	BT40 BT41 BT42 RH20	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK COAXIAL CONNECTOR	TRUNK / ELECTRICAL CARRIER

HARNESS IN-LINE CONNECTORS

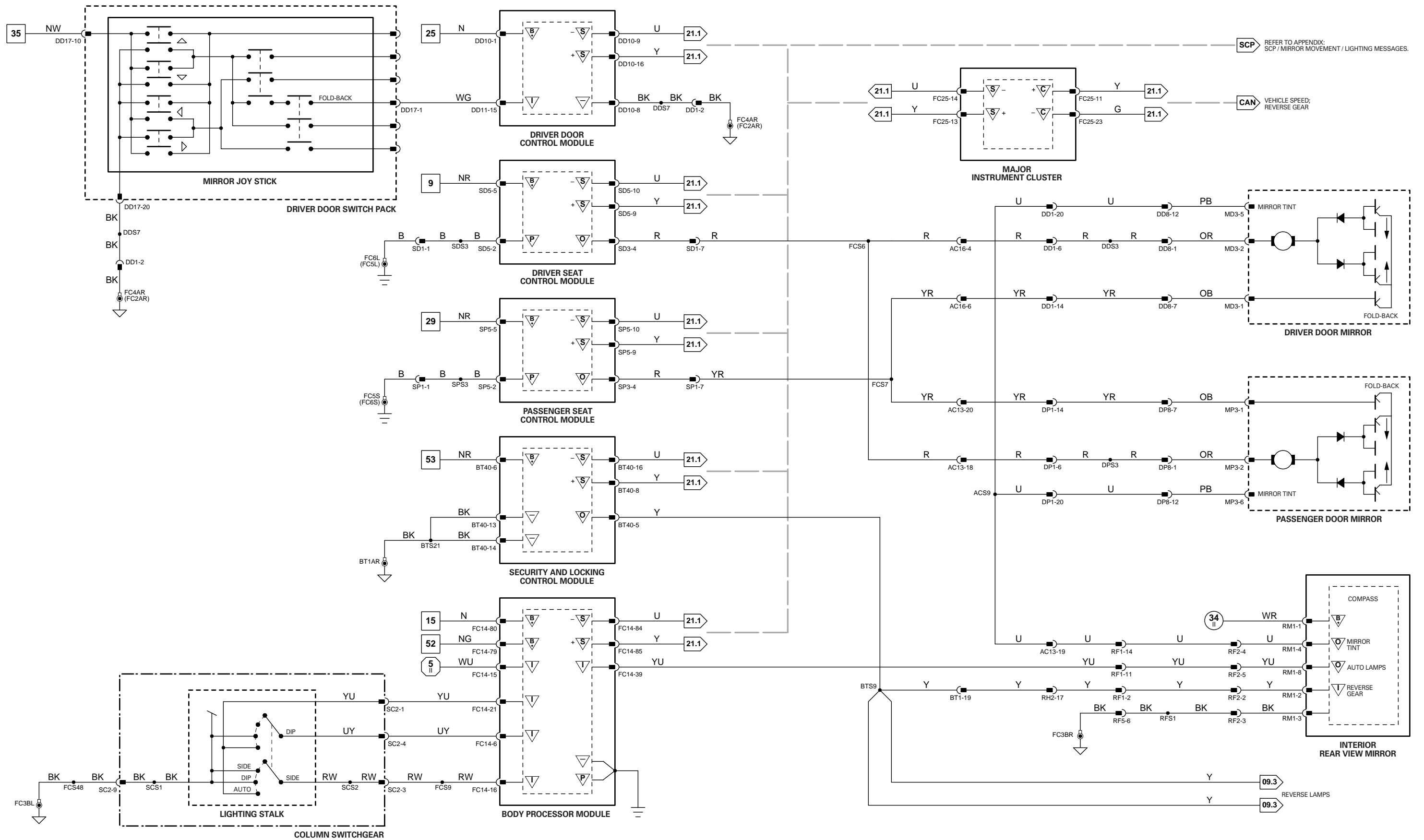
Connector	Connector Description	Location
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC16	8-WAY / WHITE / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DD8	12-WAY / BLACK / DRIVER DOOR MIRROR TO DRIVER DOOR HARNESS	DRIVER DOOR / DOOR CASING
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
DP8	12-WAY / BLUE / PASSENGER DOOR MIRROR TO PASSENGER DOOR HARNESS	PASSENGER DOOR / DOOR CASING
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF2	8-WAY / YELLOW / ROOF HARNESS TO INTERIOR REAR VIEW MIRROR LINK HARNESS	ROOF CONSOLE
RF5	8-WAY / WHITE / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR
SD1	14-WAY / YELLOW / FASCIA HARNESS TO DRIVER SEAT HARNESS	BELOW DRIVER SEAT
SP1	14-WAY / YELLOW / FASCIA HARNESS TO PASSENGER SEAT HARNESS	BELOW PASSENGER SEAT

GROUND S

Ground	Location
BT1	ADJACENT TO BATTERY
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
FC5	RIGHT HAND SEAT
FC6	LEFT HAND SEAT

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



SCP REFER TO APPENDIX: SCP / MIRROR MOVEMENT / LIGHTING MESSAGES.

CAN VEHICLE SPEED; REVERSE GEAR

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
O FC14-17	LHD RH / RHD LH SEAT HEATER STATUS LED: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
I FC14-35	LHD RH / RHD LH SEAT HEATER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
O FC14-69	LHD LH / RHD RH SEAT HEATER STATUS LED: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +
I FC14-86	LHD LH / RHD RH SEAT HEATER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)

Driver Door Control Module

Pin	Description and Characteristic
B+ DD10-01	BATTERY POWER SUPPLY: B+
SG DD10-08	LOGIC GROUND: GROUND
S DD10-09	SCP -
S DD10-16	SCP +
PG DD10-17	POWER GROUND: GROUND
O DD11-02	SEAT MEMORY STATUS LED: GROUND (LED ON)
I DD11-06	MEMORY SET REQUEST: B+ WHEN ACTIVATED
I DD11-21	MEMORY 1 RECALL REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I DD11-22	MEMORY 2 RECALL REQUEST: B+ (MOMENTARY) WHEN ACTIVATED

Driver Head Restraint Control Module

Pin	Description and Characteristic
B+ SD22-01	BATTERY POWER SUPPLY: B+
I SD22-03	HEAD RESTRAINT UP REQUEST: B+ WHEN ACTIVATED
O SD22-04	HEAD RESTRAINT MOTOR DRIVE: TO ACTIVATE DHRM SWITCHES CIRCUIT TO B+
O SD22-05	HEAD RESTRAINT MOTOR DRIVE: TO ACTIVATE DHRM SWITCHES CIRCUIT TO B+
SG SD22-06	LOGIC GROUND: GROUND
PG SD22-07	POWER GROUND: GROUND
I SD22-08	DRIVER OR PASSENGER SEAT IDENTIFICATION: GROUND (DRIVER)
I SD22-09	HEAD RESTRAINT DOWN REQUEST: B+ WHEN ACTIVATED
SG SD22-10	HEAD RESTRAINT POSITION SENSOR SIGNAL GROUND: GROUND
I SD22-11	HEAD RESTRAINT POSITION SENSOR SIGNAL: 10 V = UP; 2 V = DOWN
SS SD22-12	HEAD RESTRAINT POSITION SENSOR SUPPLY VOLTAGE: B+
S SD22-13	SCP -
S SD22-14	SCP +
I SD22-15	SEAT BACK LATCHED SWITCH SIGNAL: GROUND WHEN ACTIVATED
I SD22-16	SEAT BACK TILT SWITCH SIGNAL: GROUND WHEN ACTIVATED

Driver Seat Control Module

Pin	Description and Characteristic
O SD3-01	DRIVER SEAT SQUAB MOTOR DRIVE - FORWARD: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O SD3-02	DRIVER SEAT SQUAB MOTOR DRIVE - REAR: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O SD3-03	DRIVER SEAT HEATER ELEMENTS ACTIVATE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O SD3-05	DRIVER SEAT REAR SEAT HEIGHT MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O SD3-06	DRIVER SEAT REAR SEAT HEIGHT MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O SD3-07	DRIVER SEAT FORE / AFT MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O SD3-08	DRIVER SEAT FORE / AFT MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
I SD3-09	DRIVER SEAT FORE MOVEMENT REQUEST: B+ WHEN ACTIVATED
I SD3-10	DRIVER SEAT AFT MOVEMENT REQUEST: B+ WHEN ACTIVATED
I SD3-11	DRIVER SEAT LOWER REQUEST: B+ WHEN ACTIVATED
I SD3-12	DRIVER SEAT RAISE REQUEST: B+ WHEN ACTIVATED
I SD3-13	DRIVER SEAT REAR HEIGHT LOWER REQUEST: B+ WHEN ACTIVATED
I SD3-14	DRIVER SEAT REAR HEIGHT RAISE REQUEST: B+ WHEN ACTIVATED
I SD3-15	DRIVER SEAT SQUAB AFT RECLINE REQUEST: B+ WHEN ACTIVATED
I SD3-16	DRIVER SEAT SQUAB FORE RECLINE REQUEST: B+ WHEN ACTIVATED
SG SD4-01	DRIVER SEAT SQUAB SENSOR SIGNAL GROUND: GROUND
SS SD4-02	DRIVER SEAT FORE / AFT POSITION SENSOR SUPPLY VOLTAGE: B+
SS SD4-05	DRIVER SEAT SQUAB POSITION SENSOR SUPPLY VOLTAGE: B+
SG SD4-06	DRIVER SEAT FORE / AFT POSITION SENSOR SIGNAL GROUND: GROUND
I SD4-08	DRIVER SEAT REAR SEAT HEIGHT POSITION SENSOR SIGNAL: 10 V = UP; 2 V = DOWN
I SD4-10	DRIVER SEAT RAISE / LOWER POSITION SENSOR SIGNAL: 10 V = UP; 2 V = DOWN
I SD4-11	DRIVER SEAT SQUAB POSITION SENSOR SIGNAL: 9 V = UP; 4 V = DOWN
I SD4-12	DRIVER SEAT FORE / AFT POSITION SENSOR SIGNAL: 10 V = FORWARD; 2 V = REAR
SS SD4-14	DRIVER SEAT RAISE / LOWER POSITION SENSOR SUPPLY VOLTAGE: B+
SS SD4-15	DRIVER SEAT REAR SEAT HEIGHT POSITION SENSOR VOLTAGE: B+
SG SD4-18	DRIVER SEAT RAISE / LOWER POSITION SENSOR SIGNAL GROUND: GROUND
SG SD4-19	DRIVER SEAT REAR SEAT HEIGHT POSITION SENSOR SIGNAL GROUND: GROUND
I SD5-01	DRIVER OR PASSENGER SEAT IDENTIFICATION: GROUND (DRIVER)
PG SD5-02	POWER GROUND: GROUND
O SD5-03	DRIVER SEAT RAISE / LOWER MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O SD5-04	DRIVER SEAT RAISE / LOWER MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
B+ SD5-05	BATTERY POWER SUPPLY: B+
I SD5-08	DRIVER SEAT BELT FASTENED: B+ (FASTENED)
S SD5-09	SCP +
S SD5-10	SCP -

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 12.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DOOR CONTROL MODULE - DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
HEAD RESTRAINT CONTROL MODULE - DRIVER	SD22	16-WAY / BLACK	BEHIND SEAT BACK FINISHER
HEAD RESTRAINT MOTOR - DRIVER	SD23	6-WAY / YELLOW	BEHIND SEAT BACK FINISHER
SEAT BACK LATCH SWITCH - DRIVER	SD25	2-WAY / BLACK	BEHIND SEAT BACK FINISHER
SEAT BACK TILT SWITCH - DRIVER	SD24	2-WAY / BLACK	BEHIND SEAT BACK FINISHER
SEAT BELT COMFORT SOLENOID - DRIVER (LHD)	RH35	3-WAY / BLACK	BEHIND REAR QUARTER TRIM PANEL
SEAT BELT COMFORT SOLENOID - DRIVER (RHD)	RH36	3-WAY / BLACK	BEHIND REAR QUARTER TRIM PANEL
SEAT BELT SWITCH - DRIVER	SD20	6-WAY / WHITE	BELOW SEAT CUSHION
SEAT CONTROL MODULE - DRIVER	SD3 SD4 SD5	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK	BELOW SEAT CUSHION
SEAT CUSHION HEATER - DRIVER	SD19	3-WAY / YELLOW	SEAT CUSHION
SEAT HEATER SWITCH (CENTER CONSOLE SWITCH PACK)	FC55	20-WAY / BLACK	CENTER CONSOLE
SEAT LUMBAR PUMP - DRIVER	SD14	3-WAY / YELLOW	SEAT BACK
SEAT MOTORS - DRIVER	SD7 SD8 SD9 SD10	6-WAY / WHITE 6-WAY / WHITE 6-WAY / GREY 6-WAY / YELLOW	BELOW SEAT CUSHION
SQUAB HEATER - DRIVER	SD17	3-WAY / GREY	SEAT SQUAB
SWITCH PACK - DRIVER DOOR MEMORY	DD5	10-WAY / BLACK	DRIVER DOOR
SWITCH PACK - DRIVER SEAT	SD11	16-WAY / BLACK	DRIVER SEAT

HARNES IN-LINE CONNECTORS

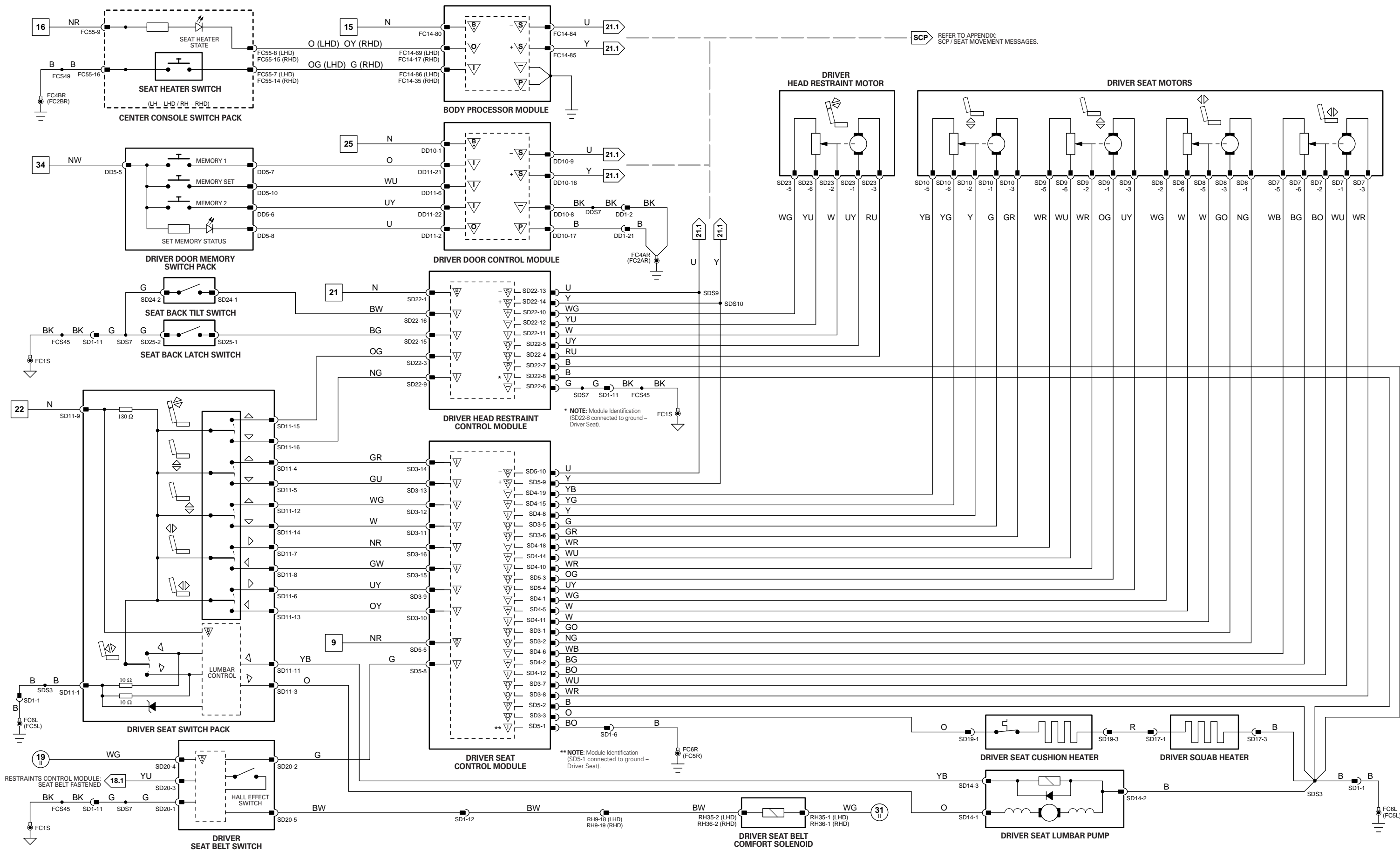
Connector	Connector Description	Location
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNES TO DRIVER DOOR HARNES	DRIVER SIDE 'A' POST MOUNTING BRACKET/ 'A' POST TRIM
RH9	20-WAY / BLUE / FASCIA HARNES TO REARWARD HARNES	BELOW CENTER CONSOLE
SD1	14-WAY / YELLOW / FASCIA HARNES TO DRIVER SEAT HARNES	BELOW DRIVER SEAT

GROUND S

Ground	Location
FC1	TRANSMISSION TUNNEL, RIGHT HAND SIDE
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST
FC5	RIGHT HAND SEAT
FC6	LEFT HAND SEAT

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
O	FC14-17 LHD RH / RHD LH SEAT HEATER STATUS LED: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
I	FC14-35 LHD RH / RHD LH SEAT HEATER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
O	FC14-69 LHD LH / RHD RH SEAT HEATER STATUS LED: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+	FC14-80 BATTERY POWER SUPPLY (LOGIC): B+
S	FC14-84 SCP -
S	FC14-85 SCP +
I	FC14-86 LHD LH / RHD RH SEAT HEATER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)

Driver Head Restraint Control Module

Pin	Description and Characteristic
B+	SD22-01 BATTERY POWER SUPPLY: B+
I	SD22-03 HEAD RESTRAINT UP REQUEST: B+ WHEN ACTIVATED
O	SD22-04 HEAD RESTRAINT MOTOR DRIVE: TO ACTIVATE DHRM SWITCHES CIRCUIT TO B+
O	SD22-05 HEAD RESTRAINT MOTOR DRIVE: TO ACTIVATE DHRM SWITCHES CIRCUIT TO B+
SG	SD22-06 LOGIC GROUND: GROUND
PG	SD22-07 POWER GROUND: GROUND
I	SD22-08 DRIVER OR PASSENGER SEAT IDENTIFICATION: GROUND (DRIVER)
I	SD22-09 HEAD RESTRAINT DOWN REQUEST: B+ WHEN ACTIVATED
SG	SD22-10 HEAD RESTRAINT POSITION SENSOR SIGNAL GROUND: GROUND
I	SD22-11 HEAD RESTRAINT POSITION SENSOR SIGNAL: 10 V = UP; 2 V = DOWN
SS	SD22-12 HEAD RESTRAINT POSITION SENSOR SUPPLY VOLTAGE: B+
S	SD22-13 SCP -
S	SD22-14 SCP +
I	SD22-15 SEAT BACK LATCHED SWITCH SIGNAL: GROUND WHEN ACTIVATED
I	SD22-16 SEAT BACK TILT SWITCH SIGNAL: GROUND WHEN ACTIVATED

Driver Seat Control Module

Pin	Description and Characteristic
O	SD3-01 DRIVER SEAT SQUAB MOTOR DRIVE - FORWARD: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O	SD3-02 DRIVER SEAT SQUAB MOTOR DRIVE - REAR: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O	SD3-03 DRIVER SEAT HEATER ELEMENTS ACTIVATE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O	SD3-05 DRIVER SEAT REAR SEAT HEIGHT MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O	SD3-06 DRIVER SEAT REAR SEAT HEIGHT MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O	SD3-07 DRIVER SEAT FORE / AFT MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O	SD3-08 DRIVER SEAT FORE / AFT MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
I	SD3-09 DRIVER SEAT FORE MOVEMENT REQUEST: B+ WHEN ACTIVATED
I	SD3-10 DRIVER SEAT AFT MOVEMENT REQUEST: B+ WHEN ACTIVATED
I	SD3-11 DRIVER SEAT LOWER REQUEST: B+ WHEN ACTIVATED
I	SD3-12 DRIVER SEAT RAISE REQUEST: B+ WHEN ACTIVATED
I	SD3-13 DRIVER SEAT REAR HEIGHT LOWER REQUEST: B+ WHEN ACTIVATED
I	SD3-14 DRIVER SEAT REAR HEIGHT RAISE REQUEST: B+ WHEN ACTIVATED
I	SD3-15 DRIVER SEAT SQUAB AFT RECLINE REQUEST: B+ WHEN ACTIVATED
I	SD3-16 DRIVER SEAT SQUAB FORE RECLINE REQUEST: B+ WHEN ACTIVATED
I	SD5-01 DRIVER OR PASSENGER SEAT IDENTIFICATION: GROUND (DRIVER)
PG	SD5-02 POWER GROUND: GROUND
O	SD5-03 DRIVER SEAT RAISE / LOWER MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
O	SD5-04 DRIVER SEAT RAISE / LOWER MOTOR DRIVE: TO ACTIVATE DSCM SWITCHES CIRCUIT TO B+
B+	SD5-05 BATTERY POWER SUPPLY: B+
I	SD5-08 DRIVER SEAT BELT FASTENED: B+ (FASTENED)
S	SD5-09 SCP +
S	SD5-10 SCP -

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 12.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
HEAD RESTRAINT CONTROL MODULE - DRIVER	SD22	16-WAY / BLACK	BEHIND SEAT BACK FINISHER
HEAD RESTRAINT MOTOR - DRIVER	SD23	6-WAY / YELLOW	BEHIND SEAT BACK FINISHER
SEAT BACK LATCH SWITCH - DRIVER	SD25	2-WAY / BLACK	BEHIND SEAT BACK FINISHER
SEAT BACK TILT SWITCH - DRIVER	SD24	2-WAY / BLACK	BEHIND SEAT BACK FINISHER
SEAT BELT COMFORT SOLENOID - DRIVER (LHD)	RH35	3-WAY / BLACK	BEHIND REAR QUARTER TRIM PANEL
SEAT BELT COMFORT SOLENOID - DRIVER (RHD)	RH36	3-WAY / BLACK	BEHIND REAR QUARTER TRIM PANEL
SEAT BELT SWITCH - DRIVER	SD20	6-WAY / WHITE	BELOW SEAT CUSHION
SEAT CONTROL MODULE - DRIVER	SD3	16-WAY / BLACK	BELOW SEAT CUSHION
	SD4	26-WAY / BLACK	
	SD5	10-WAY / BLACK	
SEAT CUSHION HEATER - DRIVER	SD19	3-WAY / YELLOW	SEAT CUSHION
SEAT HEATER SWITCH (CENTER CONSOLE SWITCH PACK)	FC55	20-WAY / BLACK	CENTER CONSOLE
SEAT LUMBAR PUMP - DRIVER	SD14	3-WAY / YELLOW	SEAT BACK
SEAT MOTORS - DRIVER	SD7	6-WAY / WHITE	BELOW SEAT CUSHION
	SD8	6-WAY / WHITE	
	SD9	6-WAY / GREY	
	SD10	6-WAY / YELLOW	
SQUAB HEATER - DRIVER	SD17	3-WAY / GREY	SEAT SQUAB
SWITCH PACK - DRIVER SEAT	SD11	16-WAY / BLACK	DRIVER SEAT

HARNES IN-LINE CONNECTORS

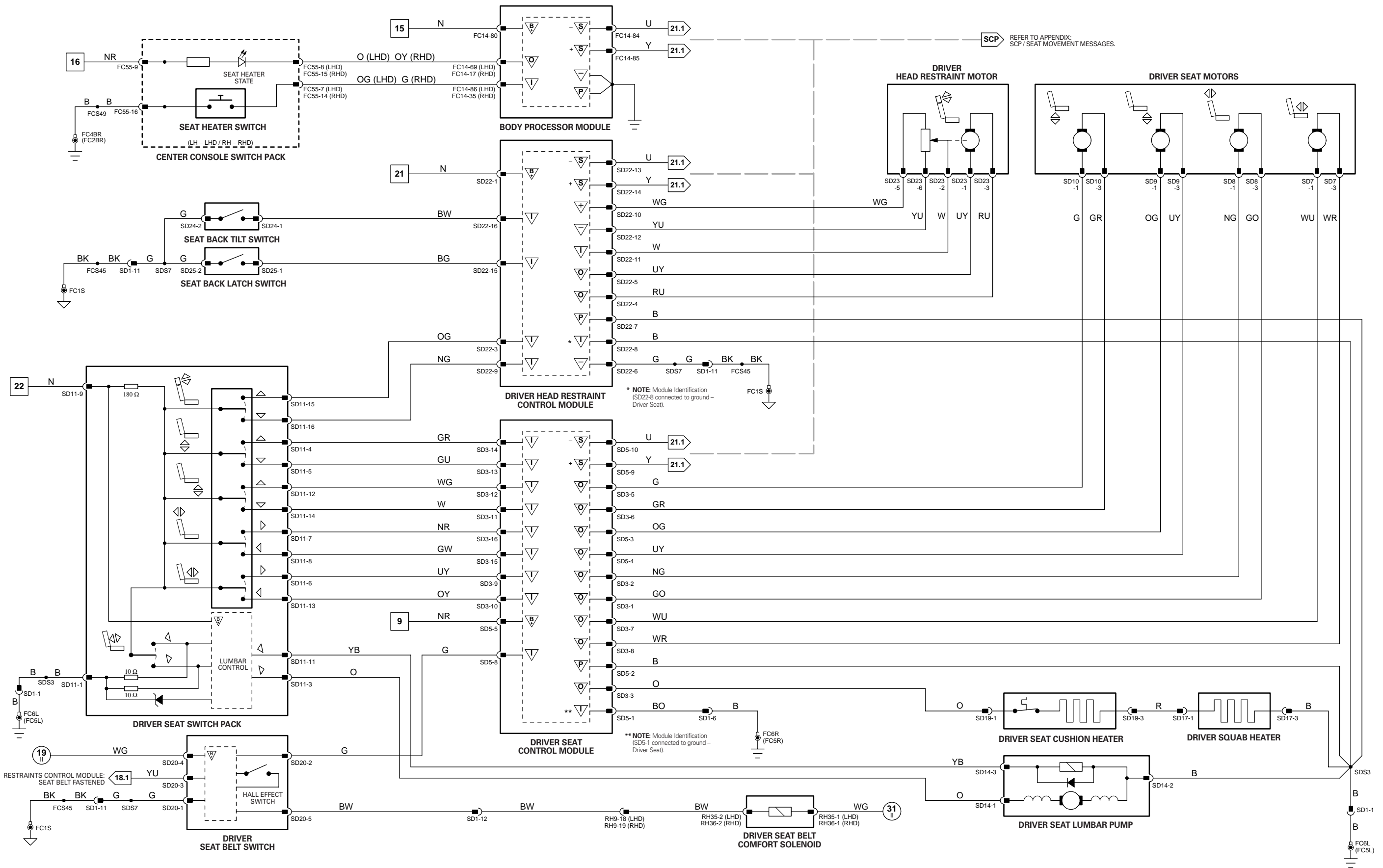
Connector	Connector Description	Location
RH9	20-WAY / BLUE / FASCIA HARNESS TO REARWARD HARNESS	BELOW CENTER CONSOLE
SD1	14-WAY / YELLOW / FASCIA HARNESS TO DRIVER SEAT HARNESS	BELOW DRIVER SEAT

GROUND

Ground	Location
FC1	TRANSMISSION TUNNEL, RIGHT HAND SIDE
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST
FC5	RIGHT HAND SEAT
FC6	LEFT HAND SEAT

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	P Power Ground	▽ Sensor/Signal Ground	C CAN	▽ Serial and Encoded Data

VARIANT: Non Memory Seat Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
O FC14-17	LHD RH / RHD LH SEAT HEATER STATUS LED: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
I FC14-35	LHD RH / RHD LH SEAT HEATER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
O FC14-69	LHD LH / RHD RH SEAT HEATER STATUS LED: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +
I FC14-86	LHD LH / RHD RH SEAT HEATER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)

Passenger Head Restraint Control Module

Pin	Description and Characteristic
B+ SP22-01	BATTERY POWER SUPPLY: B+
I SP22-03	HEAD RESTRAINT UP REQUEST: B+ WHEN ACTIVATED
O SP22-04	HEAD RESTRAINT MOTOR DRIVE: TO ACTIVATE PHRCM SWITCHES CIRCUIT TO B+
O SP22-05	HEAD RESTRAINT MOTOR DRIVE: TO ACTIVATE PHRCM SWITCHES CIRCUIT TO B+
SG SP22-06	LOGIC GROUND: GROUND
PG SP22-07	POWER GROUND: GROUND
I SP22-08	DRIVER OR PASSENGER SEAT IDENTIFICATION: OPEN CIRCUIT (PASSENGER)
I SP22-09	HEAD RESTRAINT DOWN REQUEST: B+ WHEN ACTIVATED
SG SP22-10	HEAD RESTRAINT POSITION SENSOR SIGNAL GROUND: GROUND
I SP22-11	HEAD RESTRAINT POSITION SENSOR SIGNAL: 10 V = UP; 2 V = DOWN
SS SP22-12	HEAD RESTRAINT POSITION SENSOR SUPPLY VOLTAGE: B+
S SP22-13	SCP -
S SP22-14	SCP +
I SP22-15	SEAT BACK LATCHED SWITCH SIGNAL: GROUND WHEN ACTIVATED
I SP22-16	SEAT BACK TILT SWITCH SIGNAL: GROUND WHEN ACTIVATED

Passenger Seat Control Module

Pin	Description and Characteristic
O SP3-01	PASSENGER SEAT SQUAB MOTOR DRIVE - FORWARD: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-02	PASSENGER SEAT SQUAB MOTOR DRIVE - REAR: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-03	PASSENGER SEAT HEATER ELEMENTS ACTIVATE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-05	PASSENGER SEAT REAR SEAT HEIGHT MOTOR DRIVE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-06	PASSENGER SEAT REAR SEAT HEIGHT MOTOR DRIVE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-07	PASSENGER SEAT FORE / AFT MOTOR DRIVE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-08	PASSENGER SEAT FORE / AFT MOTOR DRIVE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
I SP3-09	PASSENGER SEAT FORE MOVEMENT REQUEST: B+ WHEN ACTIVATED
I SP3-10	PASSENGER SEAT AFT MOVEMENT REQUEST: B+ WHEN ACTIVATED
I SP3-11	PASSENGER SEAT LOWER REQUEST: B+ WHEN ACTIVATED
I SP3-12	PASSENGER SEAT RAISE REQUEST: B+ WHEN ACTIVATED
I SP3-13	PASSENGER SEAT REAR HEIGHT LOWER REQUEST: B+ WHEN ACTIVATED
I SP3-14	PASSENGER SEAT REAR HEIGHT RAISE REQUEST: B+ WHEN ACTIVATED
I SP3-15	PASSENGER SEAT SQUAB AFT RECLINE REQUEST: B+ WHEN ACTIVATED
I SP3-16	PASSENGER SEAT SQUAB FORE RECLINE REQUEST: B+ WHEN ACTIVATED
I SP5-01	PASSENGER OR PASSENGER SEAT IDENTIFICATION: OPEN CIRCUIT (PASSENGER)
PG SP5-02	POWER GROUND: GROUND
O SP5-03	PASSENGER SEAT RAISE / LOWER MOTOR DRIVE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP5-04	PASSENGER SEAT RAISE / LOWER MOTOR DRIVE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
B+ SP5-05	BATTERY POWER SUPPLY: B+
S SP5-09	SCP +
S SP5-10	SCP -

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 12.3

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
HEAD RESTRAINT CONTROL MODULE - PASSENGER	SP22	16-WAY / BLACK	BEHIND SEAT BACK FINISHER
HEAD RESTRAINT MOTOR - PASSENGER	SP23	6-WAY / YELLOW	BEHIND SEAT BACK FINISHER
SEAT BACK LATCH SWITCH - PASSENGER	SP25	2-WAY / BLACK	BEHIND SEAT BACK FINISHER
SEAT BACK TILT SWITCH - PASSENGER	SP24	2-WAY / BLACK	BEHIND SEAT BACK FINISHER
SEAT BELT COMFORT SOLENOID - PASSENGER (LHD)	RH36	3-WAY / BLACK	BEHIND REAR QUARTER TRIM PANEL
SEAT BELT COMFORT SOLENOID - PASSENGER (RHD)	RH35	3-WAY / BLACK	BEHIND REAR QUARTER TRIM PANEL
SEAT BELT SWITCH - PASSENGER	SP20	6-WAY / WHITE	BELOW SEAT CUSHION
SEAT CONTROL MODULE - PASSENGER	SP3	16-WAY / BLACK	BELOW SEAT CUSHION
	SP5	10-WAY / BLACK	
SEAT CUSHION HEATER - PASSENGER	SP19	3-WAY / YELLOW	SEAT CUSHION
SEAT HEATER SWITCH (CENTER CONSOLE SWITCH PACK)	FC55	20-WAY / BLACK	CENTER CONSOLE
SEAT LUMBAR PUMP - PASSENGER	SP14	3-WAY / GREY	SEAT BACK
SEAT MOTORS - PASSENGER	SP7	6-WAY / WHITE	BELOW SEAT CUSHION
	SP8	6-WAY / WHITE	
	SP9	6-WAY / GREY	
	SP10	6-WAY / YELLOW	
SQUAB HEATER - PASSENGER	SP17	3-WAY / GREY	SEAT SQUAB
SWITCH PACK - PASSENGER SEAT	SP11	16-WAY / BLACK	PASSENGER SEAT

HARNES IN-LINE CONNECTORS

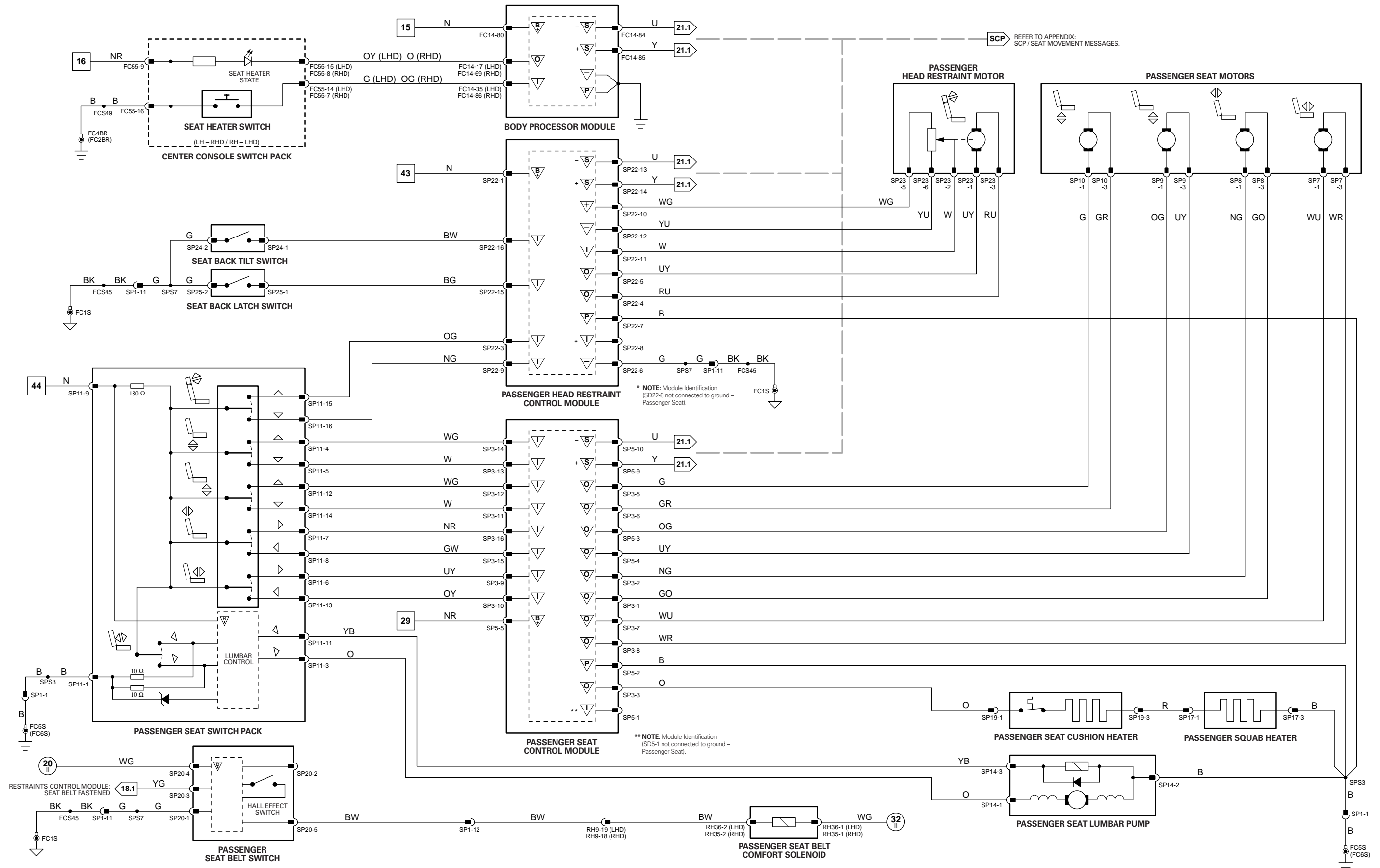
Connector	Connector Description	Location
SP1	14-WAY / YELLOW / FASCIA HARNESS TO PASSENGER SEAT HARNESS	BELOW PASSENGER SEAT

GROUND S

Ground	Location
FC1	TRANSMISSION TUNNEL, RIGHT HAND SIDE
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST
FC5	RIGHT HAND SEAT
FC6	LEFT HAND SEAT

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	P Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: 5-Way Movement Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
O FC14-17	LHD RH / RHD LH SEAT HEATER STATUS LED: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
I FC14-35	LHD RH / RHD LH SEAT HEATER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
O FC14-69	LHD LH / RHD RH SEAT HEATER STATUS LED: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +
I FC14-86	LHD LH / RHD RH SEAT HEATER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)

Passenger Head Restraint Control Module

Pin	Description and Characteristic
B+ SP22-01	BATTERY POWER SUPPLY: B+
I SP22-03	HEAD RESTRAINT UP REQUEST: B+ WHEN ACTIVATED
O SP22-04	HEAD RESTRAINT MOTOR DRIVE: TO ACTIVATE PHRCM SWITCHES CIRCUIT TO B+
O SP22-05	HEAD RESTRAINT MOTOR DRIVE: TO ACTIVATE PHRCM SWITCHES CIRCUIT TO B+
SG SP22-06	LOGIC GROUND: GROUND
PG SP22-07	POWER GROUND: GROUND
I SP22-08	DRIVER OR PASSENGER SEAT IDENTIFICATION: OPEN CIRCUIT (PASSENGER)
I SP22-09	HEAD RESTRAINT DOWN REQUEST: B+ WHEN ACTIVATED
SG SP22-10	HEAD RESTRAINT POSITION SENSOR SIGNAL GROUND: GROUND
I SP22-11	HEAD RESTRAINT POSITION SENSOR SIGNAL: 10 V = UP; 2 V = DOWN
SS SP22-12	HEAD RESTRAINT POSITION SENSOR SUPPLY VOLTAGE: B+
S SP22-13	SCP -
S SP22-14	SCP +
I SP22-15	SEAT BACK LATCHED SWITCH SIGNAL: GROUND WHEN ACTIVATED
I SP22-16	SEAT BACK TILT SWITCH SIGNAL: GROUND WHEN ACTIVATED

Passenger Seat Control Module

Pin	Description and Characteristic
O SP3-01	PASSENGER SEAT SQUAB MOTOR DRIVE - FORWARD: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-02	PASSENGER SEAT SQUAB MOTOR DRIVE - REAR: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-03	PASSENGER SEAT HEATER ELEMENTS ACTIVATE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-07	PASSENGER SEAT FORE / AFT MOTOR DRIVE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
O SP3-08	PASSENGER SEAT FORE / AFT MOTOR DRIVE: TO ACTIVATE PSCM SWITCHES CIRCUIT TO B+
I SP3-09	PASSENGER SEAT FORE MOVEMENT REQUEST: B+ WHEN ACTIVATED
I SP3-10	PASSENGER SEAT AFT MOVEMENT REQUEST: B+ WHEN ACTIVATED
I SP3-15	PASSENGER SEAT SQUAB AFT RECLINE REQUEST: B+ WHEN ACTIVATED
I SP3-16	PASSENGER SEAT SQUAB FORE RECLINE REQUEST: B+ WHEN ACTIVATED
I SP5-01	PASSENGER OR PASSENGER SEAT IDENTIFICATION: OPEN CIRCUIT (PASSENGER)
PG SP5-02	POWER GROUND: GROUND
B+ SP5-05	BATTERY POWER SUPPLY: B+
S SP5-09	SCP +
S SP5-10	SCP -

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 12.4

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
HEAD RESTRAINT CONTROL MODULE - PASSENGER	SP22	16-WAY / BLACK	BEHIND SEAT BACK FINISHER
HEAD RESTRAINT MOTOR - PASSENGER	SP23	6-WAY / YELLOW	BEHIND SEAT BACK FINISHER
SEAT BACK LATCH SWITCH - PASSENGER	SP25	2-WAY / BLACK	BEHIND SEAT BACK FINISHER
SEAT BACK TILT SWITCH - PASSENGER	SP24	2-WAY / BLACK	BEHIND SEAT BACK FINISHER
SEAT BELT COMFORT SOLENOID - PASSENGER (LHD)	RH36	3-WAY / BLACK	BEHIND REAR QUARTER TRIM PANEL
SEAT BELT COMFORT SOLENOID - PASSENGER (RHD)	RH35	3-WAY / BLACK	BEHIND REAR QUARTER TRIM PANEL
SEAT BELT SWITCH - PASSENGER	SP20	6-WAY / WHITE	BELOW SEAT CUSHION
SEAT CONTROL MODULE - PASSENGER	SP3	16-WAY / BLACK	BELOW SEAT CUSHION
	SP5	10-WAY / BLACK	
SEAT CUSHION HEATER - PASSENGER	SP19	3-WAY / YELLOW	SEAT CUSHION
SEAT HEATER SWITCH (CENTER CONSOLE SWITCH PACK)	FC55	20-WAY / BLACK	CENTER CONSOLE
SEAT LUMBAR PUMP - PASSENGER	SP14	3-WAY / GREY	SEAT BACK
SEAT MOTORS - PASSENGER	SP7	6-WAY / WHITE	BELOW SEAT CUSHION
	SP8	6-WAY / WHITE	
	SP9	6-WAY / GREY	
	SP10	6-WAY / YELLOW	
SQUAB HEATER - PASSENGER	SP17	3-WAY / GREY	SEAT SQUAB
SWITCH PACK - PASSENGER SEAT	SP11	16-WAY / BLACK	PASSENGER SEAT

HARNES IN-LINE CONNECTORS

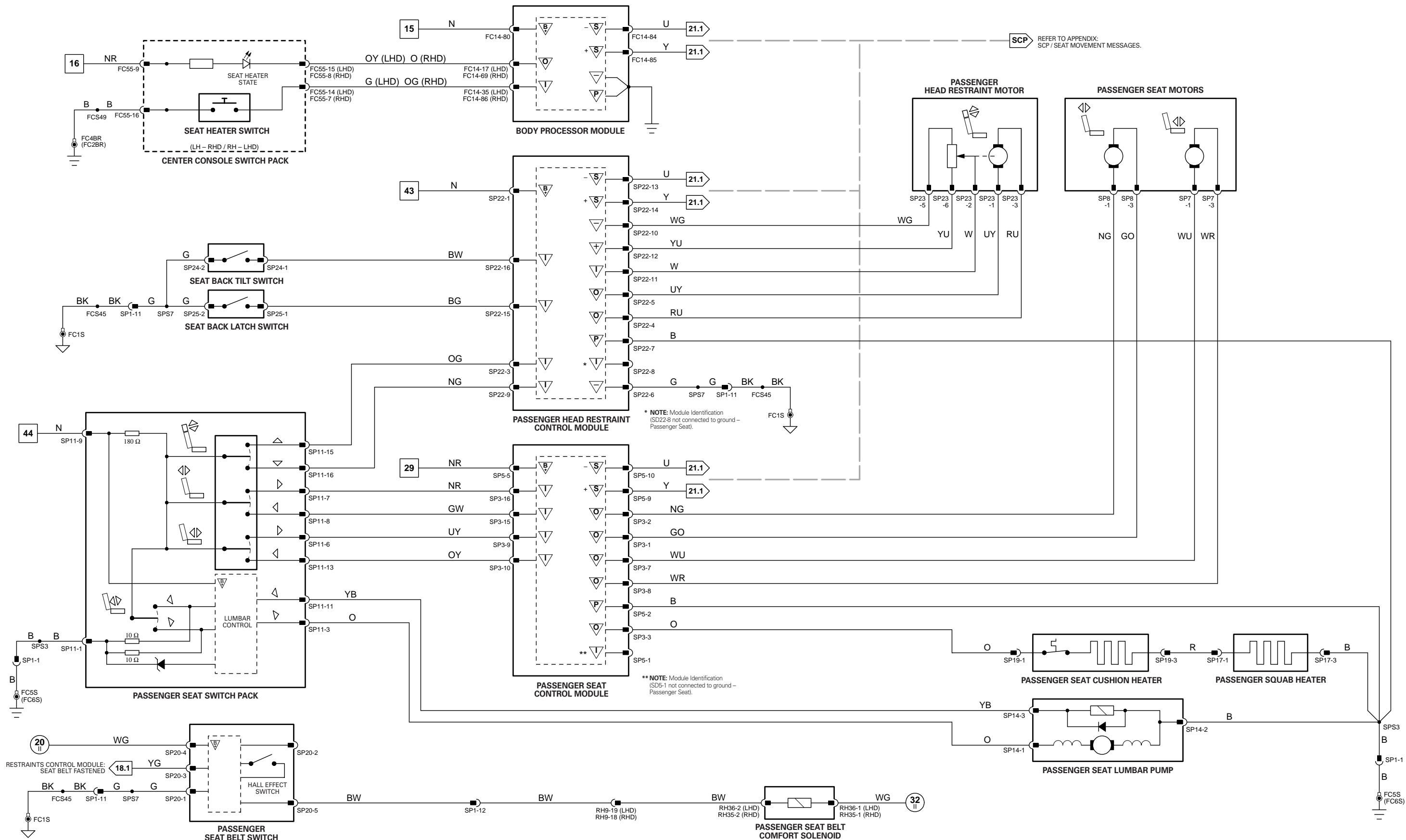
Connector	Connector Description	Location
SP1	14-WAY / YELLOW / FASCIA HARNESS TO PASSENGER SEAT HARNESS	BELOW PASSENGER SEAT

GROUND

Ground	Location
FC1	TRANSMISSION TUNNEL, RIGHT HAND SIDE
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST
FC5	RIGHT HAND SEAT
FC6	LEFT HAND SEAT

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-05	TRUNK RELEASE SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-15	IGNITION SWITCHED GROUND (I): GROUND
I FC14-31	FUEL FILLER FLAP RELEASE SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-33	IGNITION SWITCHED GROUND (II): GROUND
I FC14-41	ENGINE START REQUEST: GROUND WHEN ACTIVATED
I FC14-55	VALET SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-58	NOT-IN-PARK SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-67	KEY-IN-IGNITION: GROUND WHEN ACTIVATED
O FC14-71	DOOR LOCKING RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +

Driver Door Control Module

Pin	Description and Characteristic
B+ DD10-01	BATTERY POWER SUPPLY: B+
O DD10-05	DOOR LOCK ACTUATOR MOTOR UNLOCK: TO ACTIVATE, DDCM SWITCHES CIRCUIT TO B+
O DD10-06	DOOR LOCK ACTUATOR MOTOR LOCK: TO ACTIVATE, DDCM SWITCHES CIRCUIT TO B+
SG DD10-08	LOGIC GROUND: GROUND
S DD10-09	SCP -
S DD10-16	SCP +
PG DD10-17	POWER GROUND: GROUND
I DD11-04	DRIVER DOOR LOCK BARREL UNLOCK REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I DD11-05	EXTERIOR DOOR HANDLE WINDOW DROP REQUEST: B+ WHEN ACTIVATED
I DD11-12	DRIVER DOOR LOCK BARREL LOCK REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I DD11-20	DRIVER DOOR AJAR SWITCH SIGNAL: GROUND WHEN ACTIVATED (DOOR OPEN)

Passenger Door Control Module

Pin	Description and Characteristic
B+ DP10-01	BATTERY POWER SUPPLY: B+
O DP10-05	DOOR LOCK ACTUATOR MOTOR UNLOCK: TO ACTIVATE, PDCM SWITCHES CIRCUIT TO B+
O DP10-06	DOOR LOCK ACTUATOR MOTOR LOCK: TO ACTIVATE, PDCM SWITCHES CIRCUIT TO B+
SG DP10-08	LOGIC GROUND: GROUND
S DP10-09	SCP -
S DP10-16	SCP +
PD DP10-17	POWER GROUND: GROUND
I DP11-20	PASSENGER DOOR AJAR SWITCH SIGNAL: GROUND WHEN ACTIVATED (DOOR OPEN)

Security and Locking Control Module

Pin	Description and Characteristic
O BT40-01	TRUNK RELEASE SOLENOID: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
O BT40-02	FUEL FILLER FLAP SOLENOID: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
S BT40-08	SCP +
SG BT40-13	LOGIC GROUND: GROUND
SG BT40-14	LOGIC GROUND: GROUND
B+ BT40-15	BATTERY POWER SUPPLY: B+
S BT40-16	SCP -
I BT41-05	TRUNK SWITCH: GROUND WHEN ACTIVATED
I BT41-06	EXTERNAL TRUNK RELEASE: GROUND (MOMENTARY) WHEN ACTIVATED
I BT41-07	PASSENGER DOOR LOCK ACTUATOR LOCK STATUS: GROUND WHEN ACTIVATED (LOCKED)
I BT41-19	DRIVER DOOR LOCK ACTUATOR LOCK STATUS: GROUND WHEN ACTIVATED (LOCKED)
I RH20-01	KEY FOB ANTENNA
RH20-02	KEY FOB ANTENNA SHIELD: GROUND

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 13.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DOOR AJAR SWITCH - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR AJAR SWITCH - PASSENGER	DP3	13-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR CONTROL MODULE - DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE - PASSENGER	DP10 DP11	22-WAY / BLUE 22-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR LOCK ACTUATOR - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR LOCK ACTUATOR - PASSENGER	DP3	13-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR LOCK SWITCHES - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
EXTERNAL TRUNK RELEASE SWITCH	BL2	2-WAY / WHITE	TRUNK LID / LINER
FUEL FILL FLAP SOLENOID	IC24	2-WAY / NATURAL	TRUNK / FUEL FILL
IGNITION SWITCH (KEY-IN SWITCH)	FC4	8-WAY / WHITE	STEERING COLUMN
KEY FOB ANTENNA - CONVERTIBLE	HARD WIRED	TOP OF BACKLIGHT	
KEY FOB ANTENNA - COUPE	RH7	COAXIAL CONNECTOR	TOP OF BACKLIGHT
NOT-IN-PARK SWITCH	FC87	3-WAY / WHITE	GEAR SELECTOR ASSEMBLY
SECURITY AND LOCKING CONTROL MODULE	BT40 BT41 BT42 RH20	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK COAXIAL CONNECTOR	TRUNK / ELECTRICAL CARRIER
TRUNK AND FUEL FILL RELEASE SWITCHES	FC41	10-WAY / NATURAL	FASCIA / DRIVER SIDE
TRUNK RELEASE SOLENOID	BT43	2-WAY / BROWN	TRUNK / LH SIDE
TRUNK SWITCH	BT46	2-WAY / BLACK	TRUNK
VALET SWITCH	FC67	10-WAY / BLACK	DRIVER KNEE BOLSTER

RELAYS

Relay	Connector / Color	Location
DOOR LOCKING RELAY	FC24 / BLACK	RH FASCIA RELAYS

HARNESS IN-LINE CONNECTORS

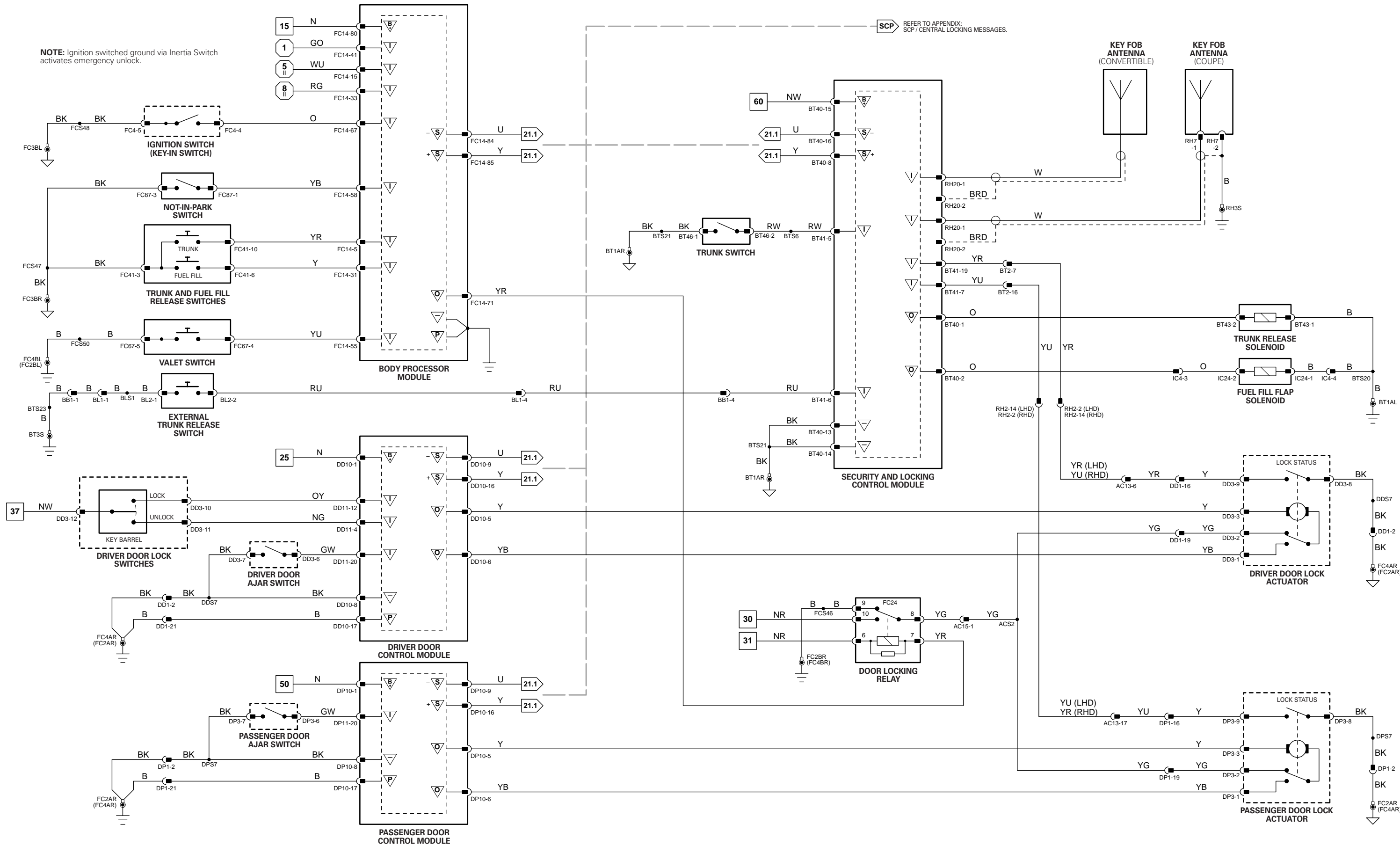
Connector	Connector Description	Location
AC13	20-WAY / YELLOW / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BB1	4-WAY / WHITE / TRUNK HARNESS TO TRUNK LID HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
BL1	4-WAY / WHITE / TRUNK HARNESS TO TRUNK LID HARNESS	TRUNK / BEHIND TRUNK LID LINER / RH SIDE
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
IC4	14-WAY / WHITE / IN-CAR ENTERTAINMENT HARNESS TO TRUNK HARNESS	TRUNK / LEFT OF ANTENNA ASSEMBLY
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDINGS

Ground	Location
BT1	ADJACENT TO BATTERY
BT3	TRUNK, LEFT REAR
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
RH3	ROOF, ADJACENT TO REAR WINDOW

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTE: Ignition switched ground via Inertia Switch activates emergency unlock.

SCP REFER TO APPENDIX: SCP / CENTRAL LOCKING MESSAGES.

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	⌋ Battery Voltage	⌋ Sensor/Signal Supply V	⌋ ACP	⌋ SCP
▽ Output	⌋ Power Ground	⌋ Sensor/Signal Ground	⌋ CAN	⌋ Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
O FC14-13	ACTIVE SECURITY SOUNDER ACTIVATE: ENCODED COMMUNICATIONS
O FC14-22	PASSIVE SECURITY SOUNDER ACTIVATE: AUDIO OUTPUT
O FC14-23	PASSIVE SECURITY SOUNDER ACTIVATE: AUDIO OUTPUT
O FC14-29	SECURITY ACTIVE INDICATOR ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE (PULSED)
I FC14-32	IGNITION SWITCHED GROUND (I): GROUND
I FC14-41	ENGINE START REQUEST: GROUND WHEN ACTIVATED
I FC14-55	VALET SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-56	ENGINE COMPARTMENT SECURITY SWITCH SIGNAL: GROUND WHEN ACTIVATED (HOOD OPEN)
O FC14-70	HORN RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
D FC14-73	SECURITY ACKNOWLEDGE: ENCODED COMMUNICATIONS
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +
D FC14-92	OK TO FUEL SIGNAL: ENCODED COMMUNICATIONS
B+ FC14-104	BATTERY POWER SUPPLY: B+

Driver Door Control Module

Pin	Description and Characteristic
B+ DD10-01	BATTERY POWER SUPPLY: B+
SG DD10-08	LOGIC GROUND: GROUND
S DD10-09	SCP -
S DD10-16	SCP +
PG DD10-17	POWER GROUND: GROUND
I DD11-04	DRIVER DOOR LOCK BARREL UNLOCK REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I DD11-12	DRIVER DOOR LOCK BARREL LOCK REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I DD11-20	DRIVER DOOR AJAR SWITCH SIGNAL: GROUND WHEN ACTIVATED (DOOR OPEN)

Key Transponder Module

Pin	Description and Characteristic
I FC22-01	GLASS BREAKAGE SENSOR: GROUND WHEN ACTIVATED
B+ FC22-04	BATTERY POWER SUPPLY: B+
D FC22-06	SERIAL COMMUNICATION: ENCODED COMMUNICATION
D FC22-07	READER / EXCITER COIL: ENCODED COMMUNICATION
D FC22-08	READER / EXCITER COIL: ENCODED COMMUNICATION
D FC22-09	OK TO FUEL: ENCODED COMMUNICATION
SG FC22-12	LOGIC GROUND: GROUND
I FC22-13	IGNITION SWITCHED GROUND (I): GROUND
I FC22-14	IGNITION SWITCHED GROUND (II): GROUND
D FC22-17	SECURITY ACKNOWLEDGE: ENCODED COMMUNICATION

Passenger Door Control Module

Pin	Description and Characteristic
B+ DP10-01	BATTERY POWER SUPPLY: B+
SG DP10-08	LOGIC GROUND: GROUND
S DP10-09	SCP -
S DP10-16	SCP +
PD DP10-17	POWER GROUND: GROUND
I DP11-20	PASSENGER DOOR AJAR SWITCH SIGNAL: GROUND WHEN ACTIVATED (DOOR OPEN)

Security and Locking Control Module

Pin	Description and Characteristic
S BT40-08	SCP +
SG BT40-13	LOGIC GROUND: GROUND
SG BT40-14	LOGIC GROUND: GROUND
B+ BT40-15	BATTERY POWER SUPPLY: B+
S BT40-16	SCP -
I BT41-05	TRUNK SWITCH: GROUND WHEN ACTIVATED
I BT41-08	INCLINATION SENSOR TRIGGER: GROUND (MOMENTARY) WHEN ACTIVATED
SG BT41-10	LOGIC GROUND: GROUND
O BT41-26	INCLINATION SENSOR SUPPLY: B+
I RH20-01	KEY FOB ANTENNA
RH20-02	KEY FOB ANTENNA SHIELD: GROUND

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 13.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DOOR AJAR SWITCH - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR AJAR SWITCH - PASSENGER	DP3	13-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR CONTROL MODULE - DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE - PASSENGER	DP10 DP11	22-WAY / BLUE 22-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR LOCK SWITCHES - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
ENGINE COMPARTMENT SECURITY SWITCH	EM34	2-WAY / BLACK	ENGINE COMPARTMENT / RH HOOD LATCH
ENGINE CONTROL MODULE	EM80	134-WAY / BLACK	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
FUSE BOX - ENGINE COMPARTMENT	LF5 LF6 LF7 LF8 LF70	10-WAY / NATURAL 10-WAY / BLACK 10-WAY / GREEN 10-WAY / BLUE EYELET	ENGINE COMPARTMENT / LEFT FRONT
GLASS BREAKAGE SENSOR (ROOF CONSOLE)	RF10	6-WAY / GREY	ROOF CONSOLE
HORNS	LF12	2-WAY / BLACK	BEHIND FRONT BUMPER
INCLINATION SENSOR	IS1	5-WAY / ORANGE	TRUNK / ADJACENT TO ANTENNA
KEY FOB ANTENNA - CONVERTIBLE	HARD WIRED	TOP OF BACKLIGHT	
KEY FOB ANTENNA - COUPE	RH7	COAXIAL CONNECTOR	TOP OF BACKLIGHT
KEY TRANSPONDER MODULE	FC22	20-WAY / GREEN	ADJACENT TO DRIVER SIDE FUSE BOX
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
READER / EXCITER COIL (COLUMN SWITCHGEAR)	SC12	3-WAY / WHITE	STEERING COLUMN / RH SIDE
SECURITY ACTIVE INDICATOR (J-GATE ILLUMINATION MODULE)	FC88	10-WAY / WHITE	FRONT OF GEAR SELECTOR MODULE
SECURITY AND LOCKING CONTROL MODULE	BT40 BT41 BT42 RH20	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK COAXIAL CONNECTOR	TRUNK / ELECTRICAL CARRIER
SECURITY SOUNDER - ACTIVE	LF18	6-WAY / BLACK	REARWARD OF RIGHT FRONT HEADLAMP
SECURITY SOUNDER - PASSIVE	LF18	6-WAY / BLACK	REARWARD OF RIGHT FRONT HEADLAMP
TRUNK SWITCH	BT46	2-WAY / BLACK	TRUNK
VALET SWITCH	FC67	10-WAY / BLACK	DRIVER KNEE BOLSTER

RELAYS

Relay	Connector / Color	Location
HORN RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX - R6

HARNESS IN-LINE CONNECTORS

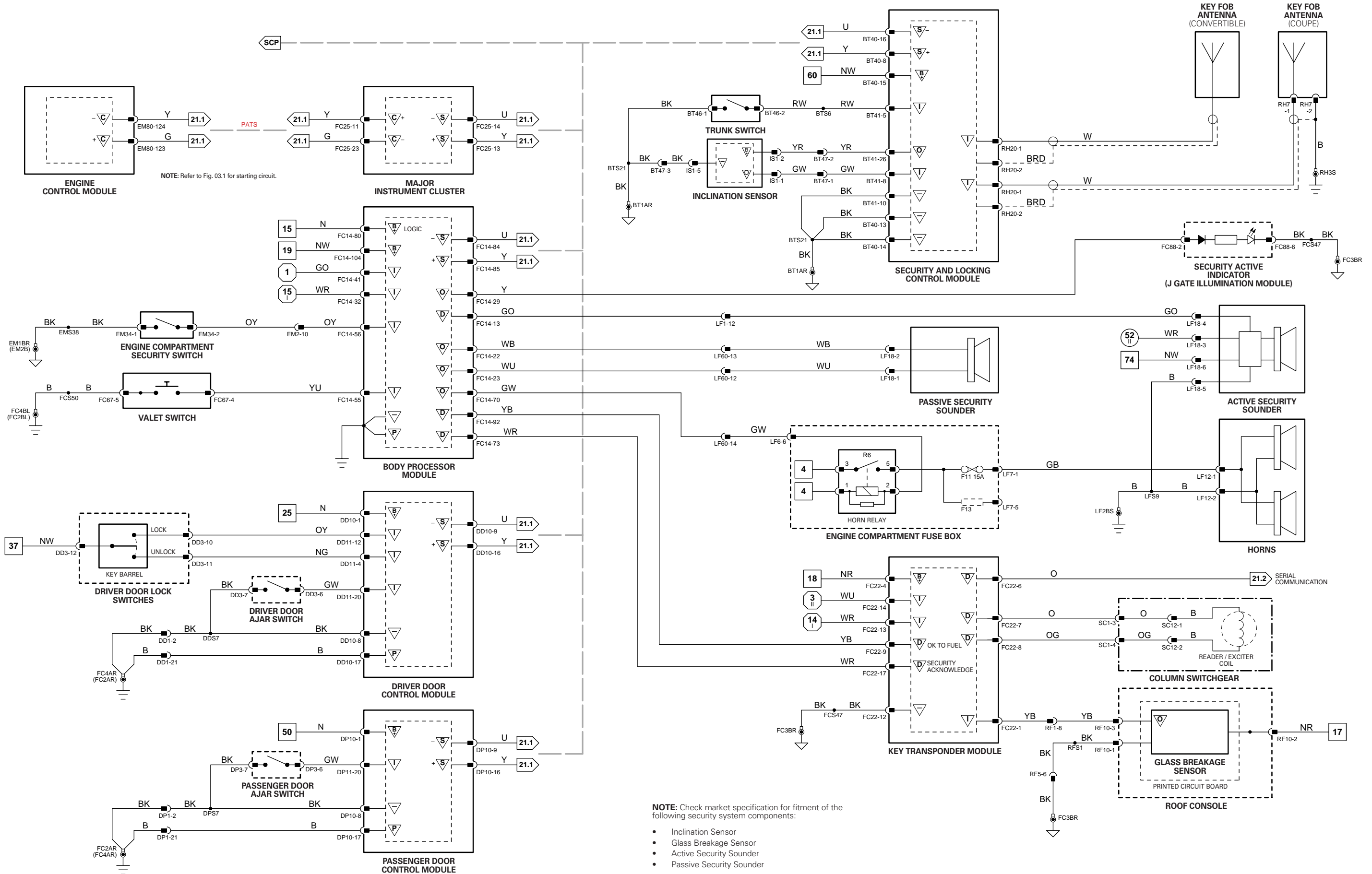
Connector	Connector Description	Location
BT47	3-WAY / WHITE / INCLINATION SENSOR TO TRUNK HARNESS	TRUNK / ADJACENT TO ANTENNA
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF1	20-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF5	8-WAY / WHITE / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
SC1	12-WAY / WHITE / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN

GROUND

Ground	Location
BT1	ADJACENT TO BATTERY
EM1	ENGINE COMPARTMENT, RIGHT HAND ENCLOSURE
EM2	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST
LF2	ENGINE COMPARTMENT, FORWARD OF LEFT HAND HOOD LATCH

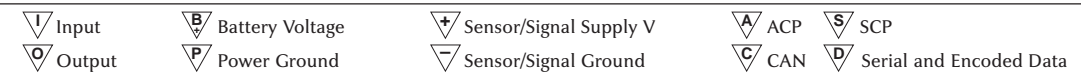
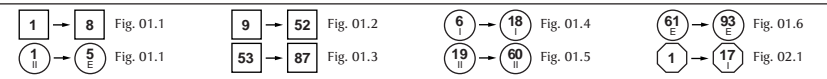
FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTE: Check market specification for fitment of the following security system components:

- Inclinometer
- Glass Breakage Sensor
- Active Security Sounder
- Passive Security Sounder



VARIANT: All Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-09	INTERMITTENT WIPE SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-15	IGNITION SWITCHED GROUND (I): GROUND
I FC14-16	SIDE LAMP SWITCH SIGNAL: GROUND WHEN ACTIVATED
O FC14-18	POWERWASH RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
O FC14-19	WIPER FAST / SLOW RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
O FC14-26	WINDSHIELD WASH PUMP DRIVE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO B+ VOLTAGE
I FC14-34	FAST WIPE SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-37	WASH SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-42	WASHER FLUID LEVEL SWITCH SIGNAL: GROUND WHEN ACTIVATED
O FC14-43	WIPER RUN / STOP RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
I FC14-60	WIPER MOTOR PARK SWITCH SIGNAL: GROUND WHEN ACTIVATED (PARK)
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
I FC14-94	SLOW WIPE SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
B+ FC14-104	BATTERY POWER SUPPLY: B+

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 14.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
FUSE BOX - ENGINE COMPARTMENT	LF5	10-WAY / NATURAL	ENGINE COMPARTMENT / LEFT FRONT
	LF6	10-WAY / BLACK	
	LF7	10-WAY / GREEN	
	LF8	10-WAY / BLUE	
	LF70	EYELET	
LIGHTING STALK (COLUMN SWITCHGEAR)	SC2	10-WAY / YELLOW	ADJACENT TO STEERING COLUMN MOTOR
POWERWASH PUMP	LF25	2-WAY / BLACK	LEFT FRONT FENDER / WHEEL ARCH LINER
RAIN SENSING MODULE	RS1	12-WAY / BLACK	ABOVE PASSENGER FOOTWELL
RAIN SENSOR (INTERIOR REAR VIEW MIRROR)	RF2	8-WAY / YELLOW	BELOW INTERIOR REAR VIEW MIRROR
WASH / WIPE STALK (COLUMN SWITCHGEAR)	SC1	12-WAY / WHITE	STEERING COLUMN / RH SIDE
WINDSHIELD WASH PUMP AND FLUID LEVEL SENSOR	LF27	3-WAY / BLACK	LEFT FRONT FENDER / WHEEL ARCH LINER
WIPER MOTOR	EM51	5-WAY / BLACK	BASE OF WINDSHIELD / AIR INTAKE PLENUM

RELAYS

Relay	Connector / Color	Location
POWERWASH RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX - R4
WIPER FAST / SLOW RELAY	LF49 / BROWN	LH ENCLOSURE RELAYS
WIPER RUN / STOP RELAY	LF48 / BROWN	LH ENCLOSURE RELAYS

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
FC49	12-WAY /BLACK / FASCIA HARNESS TO RAIN SENSOR LINK HARNESS	BELOW RH BLOWER
LF1	20-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
LF3	13-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / ADJACENT TO BRAKE SERVO
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF2	8-WAY / YELLOW / ROOF HARNESS TO INTERIOR REAR VIEW MIRROR LINK HARNESS	ROOF CONSOLE
SC1	12-WAY / WHITE / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR

GROUNDS

Ground	Location
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
LF1	RIGHT HAND HEADLAMP
LF3	ENGINE COMPARTMENT, LEFT HAND ENCLOSURE

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

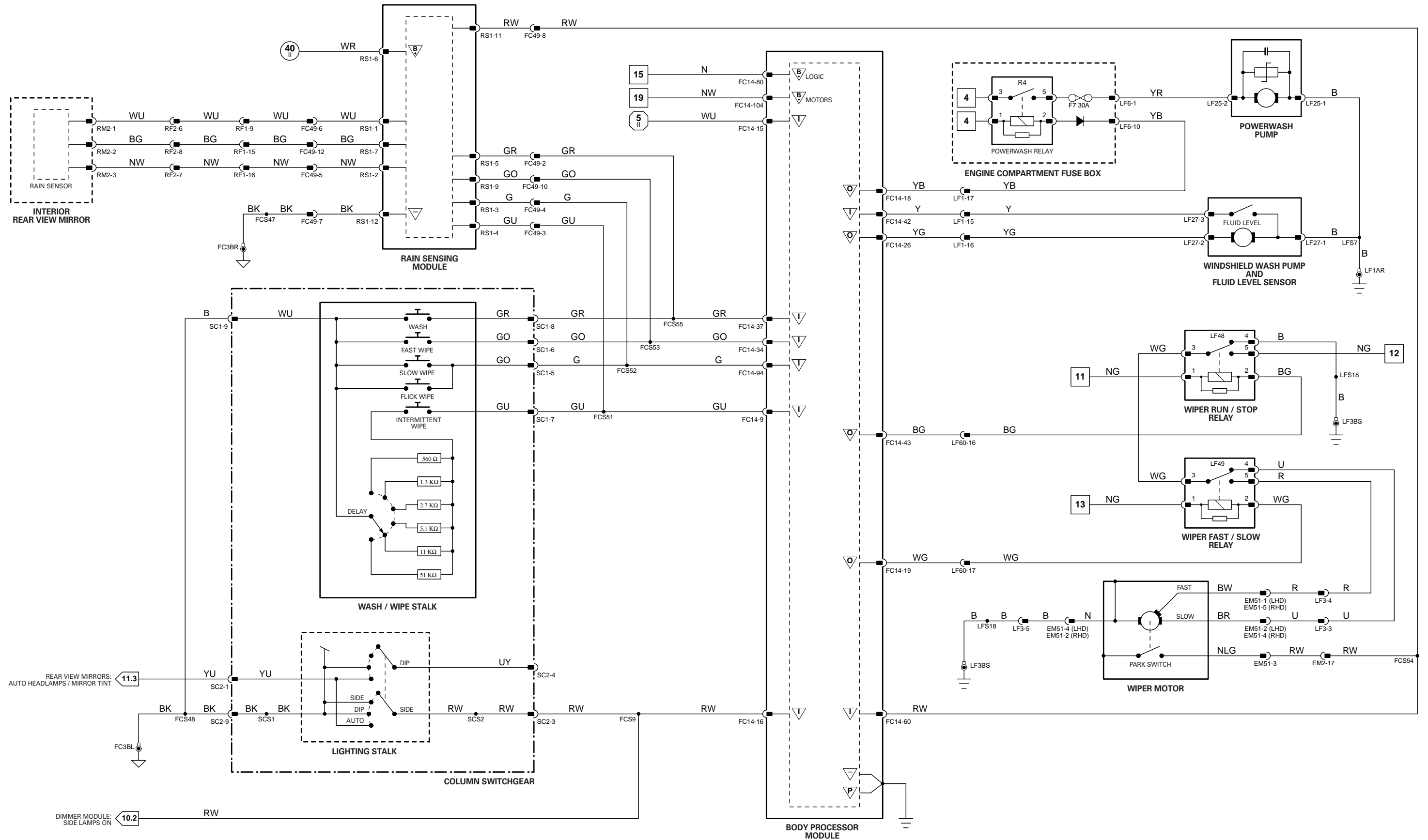
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8	Fig. 01.1	9 → 52	Fig. 01.2	6 → 18	Fig. 01.4	61 → 93	Fig. 01.6
1 → 5	Fig. 01.1	53 → 87	Fig. 01.3	19 → 60	Fig. 01.5	1 → 17	Fig. 02.1

▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	P Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
S FC14-84	SCP -
S FC14-85	SCP +

Driver Door Control Module

Pin	Description and Characteristic
B+	DD10-01 BATTERY POWER SUPPLY: B+
O	DD10-07 WINDOW LIFT MOTOR DOWN ACTIVATE: TO ACTIVATE, DDCM SWITCHES CIRCUIT TO B+
SG	DD10-08 LOGIC GROUND: GROUND
S	DD10-09 SCP -
I	DD10-10 DRIVER SWITCH PACK LH WINDOW DOWN REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DD10-11 DRIVER WINDOW LIFT SENSOR SIGNAL: 2 V = UP; 12 V = DOWN
I	DD10-12 DRIVER WINDOW LIFT SENSOR SIGNAL: 2 V = UP; 12 V = DOWN
SS	DD10-13 DRIVER WINDOW LIFT SENSOR SUPPLY VOLTAGE: B+
O	DD10-15 DRIVER WINDOW LIFT MOTOR UP ACTIVATE: TO ACTIVATE, DDCM SWITCHES CIRCUIT TO B+
S	DD10-16 SCP +
PG	DD10-17 POWER GROUND: GROUND
I	DD10-18 DRIVER SWITCH PACK LH WINDOW UP REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DD10-19 DRIVER SWITCH PACK RH WINDOW UP REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DD11-04 DRIVER DOOR LOCK BARREL UNLOCK REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DD11-05 EXTERIOR DOOR HANDLE WINDOW DROP REQUEST: B+ WHEN ACTIVATED
I	DD11-07 DRIVER SWITCH PACK RH WINDOW DOWN REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DD11-12 DRIVER DOOR LOCK BARREL LOCK REQUEST: B+ (MOMENTARY) WHEN ACTIVATED

Major Instrument Cluster

Pin	Description and Characteristic
S FC25-13	SCP +
S FC25-14	SCP -

Passenger Door Control Module

Pin	Description and Characteristic
B+	DP10-01 BATTERY POWER SUPPLY: B+
O	DP10-07 WINDOW LIFT MOTOR DOWN ACTIVATE: TO ACTIVATE, PDCM SWITCHES CIRCUIT TO B+
SG	DP10-08 LOGIC GROUND: GROUND
S	DP10-09 SCP -
I	DP10-10 PASSENGER SWITCH PACK LH WINDOW DOWN REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DP10-11 PASSENGER WINDOW LIFT SENSOR SIGNAL: 2 V = UP; 12 V = DOWN
I	DP10-12 PASSENGER WINDOW LIFT SENSOR SIGNAL: 2 V = UP; 12 V = DOWN
SS	DP10-13 PASSENGER WINDOW LIFT SENSOR SUPPLY VOLTAGE: B+
O	DP10-15 PASSENGER WINDOW LIFT MOTOR UP ACTIVATE: TO ACTIVATE, PDCM SWITCHES CIRCUIT TO B+
S	DP10-16 SCP +
PD	DP10-17 POWER GROUND: GROUND
I	DP10-18 PASSENGER SWITCH PACK LH WINDOW UP REQUEST: B+ (MOMENTARY) WHEN ACTIVATED
I	DP11-05 EXTERIOR DOOR HANDLE WINDOW DROP REQUEST: B+ WHEN ACTIVATED

Security and Locking Control Module

Pin	Description and Characteristic
S BT40-08	SCP +
S BT40-16	SCP -

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 15.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DOOR CONTROL MODULE - DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE - PASSENGER	DP10 DP11	22-WAY / BLUE 22-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DOOR LOCK SWITCHES - DRIVER	DD3	13-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR LOCK SWITCH - PASSENGER	DP3	13-WAY / BLACK	PASSENGER DOOR / DOOR CASING
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
SECURITY AND LOCKING CONTROL MODULE	BT40 BT41 BT42 RH20	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK COAXIAL CONNECTOR	TRUNK / ELECTRICAL CARRIER
WINDOW LIFT MOTOR - DRIVER	DD16	6-WAY / BLACK	DRIVER DOOR
WINDOW LIFT MOTOR - PASSENGER	DP16	6-WAY / BLACK	DRIVER DOOR
WINDOW LIFT SWITCHES - DRIVER (DRIVER DOOR SWITCH PACK)	DD17	20-WAY / BLACK	DRIVER DOOR
WINDOW LIFT SWITCHES - PASSENGER (PASSENGER DOOR SWITCH PACK)	DP17	8-WAY / BLACK	PASSENGER DOOR

HARNESS IN-LINE CONNECTORS

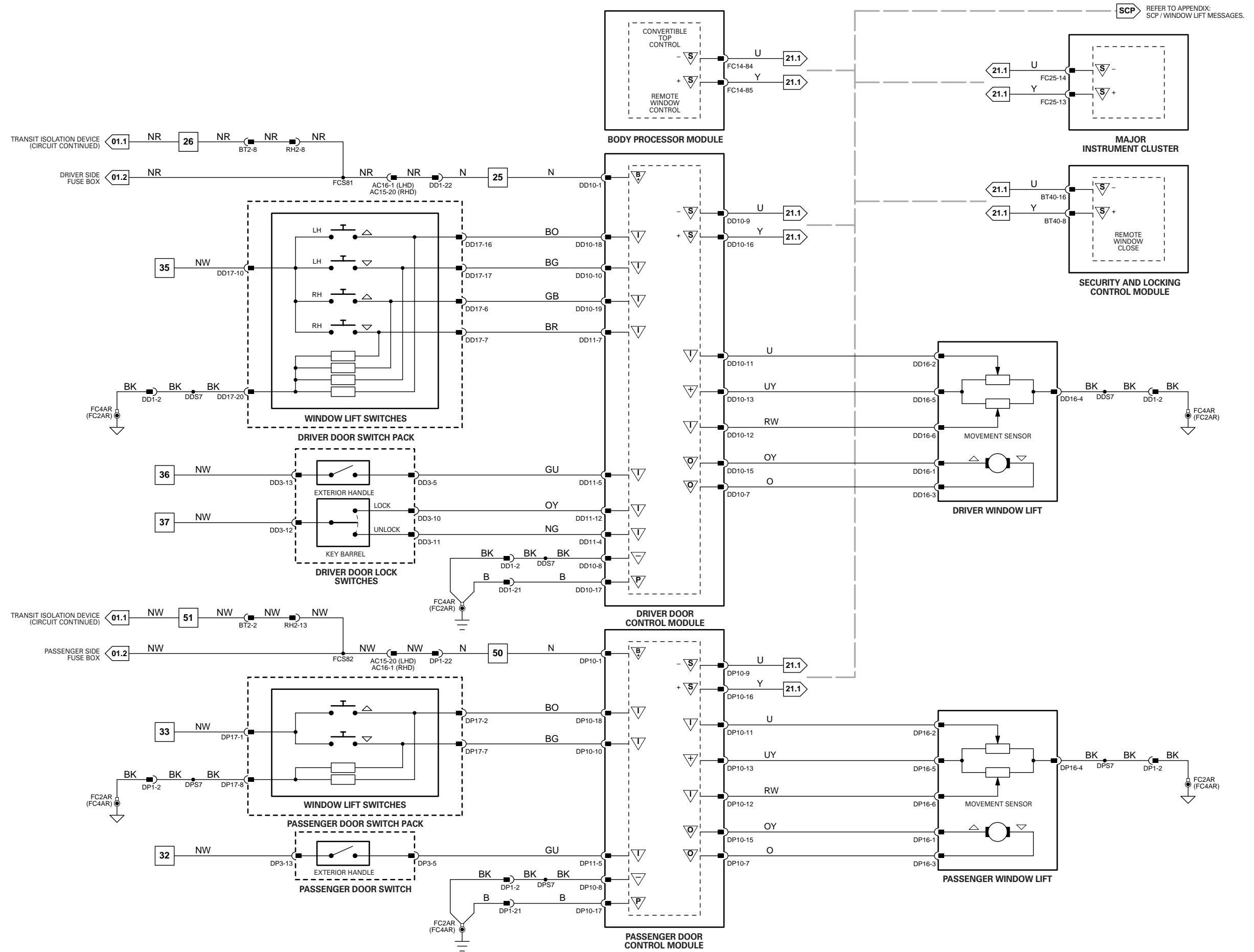
Connector	Connector Description	Location
AC15	20-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
AC16	8-WAY / WHITE / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
RH2	20-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDINGS

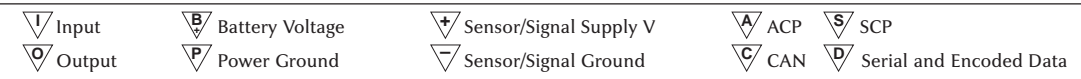
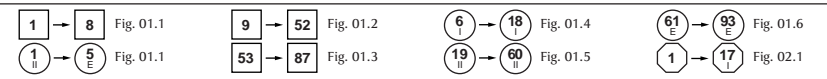
Ground	Location
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



SCP REFER TO APPENDIX: SCP / WINDOW LIFT MESSAGES.



VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Body Processor Module

Pin	Description and Characteristic
I FC14-10	CONVERTIBLE TOP RAISE SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
I FC14-15	IGNITION SWITCHED GROUND (I): GROUND
I FC14-32	IGNITION SWITCHED GROUND (II): GROUND
I FC14-33	IGNITION SWITCHED GROUND (III): GROUND
I FC14-36	CONVERTIBLE TOP READY-TO-LATCH SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-62	CONVERTIBLE TOP LATCH CLOSED SWITCH SIGNAL: GROUND WHEN ACTIVATED
I FC14-63	CONVERTIBLE TOP LOWER SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
O FC14-77	REAR QUARTER GLASS DOWN RELAYS ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+ FC14-80	BATTERY POWER SUPPLY (LOGIC): B+
S FC14-84	SCP -
S FC14-85	SCP +
I FC14-89	CONVERTIBLE TOP CLOSED SWITCH SIGNAL: GROUND WHEN ACTIVATED
O FC14-98	REAR QUARTER GLASS UP RELAYS ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND

Driver Door Control Module

Pin	Description and Characteristic
S DD10-09	SCP -
S DD10-16	SCP +

Major Instrument Cluster

Pin	Description and Characteristic
C FC25-11	CAN +
S FC25-13	SCP +
S FC25-14	SCP -
C FC25-23	CAN -

Passenger Door Control Module

Pin	Description and Characteristic
S DP10-09	SCP -
S DP10-16	SCP +

Security and Locking Control Module

Pin	Description and Characteristic
O BT40-03	TOP UP RELAY ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
O BT40-04	LATCH CONTROL VALVE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
B+ BT40-06	BATTERY POWER SUPPLY: B+
S BT40-08	SCP +
O BT40-09	MAIN CONTROL VALVE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
O BT40-10	TOP DOWN RELAY ACTIVATE: TO ACTIVATE, SLCM SWITCHES CIRCUIT TO B+
SG BT40-13	LOGIC GROUND: GROUND
SG BT40-14	LOGIC GROUND: GROUND
S BT40-16	SCP -
I BT41-03	CONVERTIBLE TOP DOWN SWITCH: GROUND WHEN ACTIVATED

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Fig. 15.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
CONVERTIBLE TOP CLOSED SWITCH	RF4	6-WAY / WHITE	TOP OF WINDSHIELD
CONVERTIBLE TOP DOWN SWITCH	RH29	3-WAY / WHITE	RH OPERATING CYLINDER
CONVERTIBLE TOP LATCH CLOSED SWITCH	RF4	6-WAY / WHITE	TOP OF WINDSHIELD
CONVERTIBLE TOP PUMP	BT15	2-WAY / NATURAL	TRUNK / RH SIDE
CONVERTIBLE TOP RAISED SWITCH	RH29	3-WAY / WHITE	RH OPERATING CYLINDER
CONVERTIBLE TOP READY-TO-LATCH SWITCH	RF4	6-WAY / WHITE	TOP OF WINDSHIELD
CONVERTIBLE TOP SWITCH	FC62	10-WAY / BLACK	FORWARD OF GEAR SELECTOR
DOOR CONTROL MODULE - DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE - PASSENGER	DP10 DP11	22-WAY / BLUE 22-WAY / BLACK	PASSENGER DOOR / DOOR CASING
LATCH CONTROL VALVE	PH2	2-WAY / BLUE	TRUNK / CONVERTIBLE TOP PUMP
MAIN CONTROL VALVE	PH3	2-WAY / ORANGE	TRUNK / CONVERTIBLE TOP PUMP
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
QUARTER LIGHT LIFT - LH	RH33	2-WAY / BLACK	REAR QUARTER PANEL
QUARTER LIGHT LIFT - RH	RH34	2-WAY / BLACK	REAR QUARTER PANEL
SECURITY AND LOCKING CONTROL MODULE	BT40 BT41 BT42 RH20	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK COAXIAL CONNECTOR	TRUNK / ELECTRICAL CARRIER

RELAYS

Relay	Connector / Color	Location
QUARTER DOWN RELAY - LH	BT74 / BLACK	TRUNK RELAYS
QUARTER DOWN RELAY - RH	BT76 / BLACK	TRUNK RELAYS
QUARTER UP RELAY - LH	BT74 / BLACK	TRUNK RELAYS
QUARTER UP RELAY - RH	BT76 / BLACK	TRUNK RELAYS
TOP DOWN RELAY	BT17 / BROWN	TRUNK RELAYS
TOP UP RELAY	BT16 / BROWN	TRUNK RELAYS

HARNES IN-LINE CONNECTORS

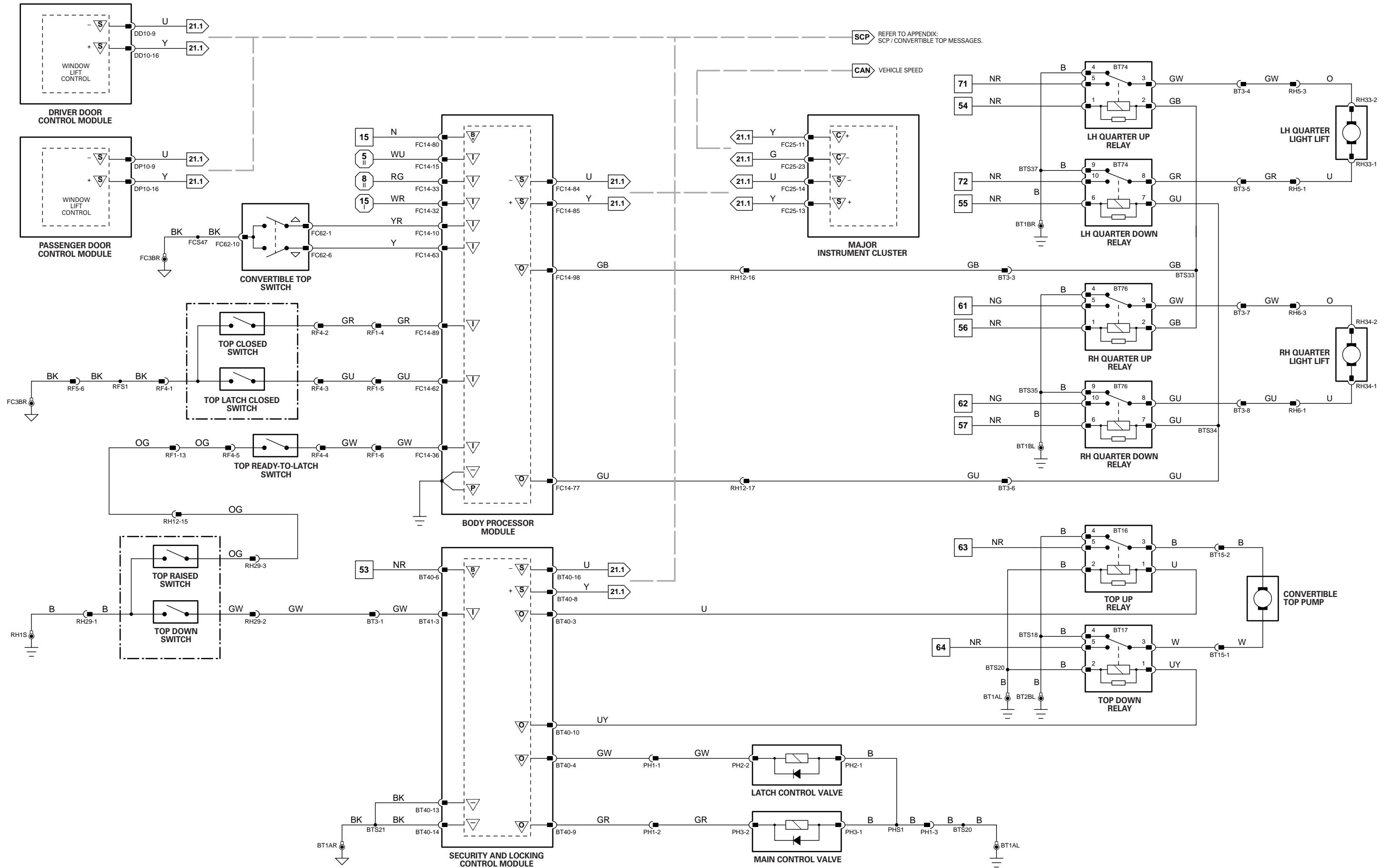
Connector	Connector Description	Location
BT3	20-WAY / YELLOW / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
PH1	3-WAY / YELLOW / TRUNK HARNESS TO CONVERTIBLE TOP CONTROL VALVE LINK HARNESS	TRUNK / ADJACENT TO POWER AMPLIFIER
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF5	8-WAY / WHITE / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH5	3-WAY / WHITE / REARWARD HARNESS TO LH QUARTER LIGHT LINK HARNESS	BEHIND LEFT HAND QUARTER TRIM PANEL
RH6	3-WAY / WHITE / REARWARD HARNESS TO RH QUARTER LIGHT LINK HARNESS	BEHIND RIGHT HAND QUARTER TRIM PANEL
RH12	18-WAY / YELLOW / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDS

Ground	Location
BT1	ADJACENT TO BATTERY
BT2	TRUNK, RIGHT REAR
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
RH1	RIGHT HAND REAR QUARTER

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



SCP REFER TO APPENDIX: SCP / CONVERTIBLE TOP MESSAGES.

CAN VEHICLE SPEED

MAJOR INSTRUMENT CLUSTER

BODY PROCESSOR MODULE

SECURITY AND LOCKING CONTROL MODULE

MAIN CONTROL VALVE

LATCH CONTROL VALVE

LH QUARTER UP RELAY

LH QUARTER DOWN RELAY

RH QUARTER UP RELAY

RH QUARTER DOWN RELAY

TOP UP RELAY

TOP DOWN RELAY

CONVERTIBLE TOP PUMP

LH QUARTER LIGHT LIFT

RH QUARTER LIGHT LIFT

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6	Input	B Battery Voltage	∇ Sensor/Signal Supply V	∇ ACP	∇ SCP
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1	Output	P Power Ground	∇ Sensor/Signal Ground	∇ CAN	∇ Serial and Encoded Data

VARIANT: Convertible Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Fig. 16.1

Major Instrument Cluster

Pin	Description and Characteristic
C	FC25-11 CAN +
C	FC25-23 CAN -
O	FC26-20 VEHICLE SPEED SIGNAL - AUDIO

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

COMPONENTS

Component	Connector(s)	Connector Description	Location
ANTENNA MOTOR	BT19	6-WAY / WHITE	TRUNK / RH SIDE
CD AUTO-CHANGER (STANDARD ICE)	IC7	8-WAY / BLACK	TRUNK / RH SIDE
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
RADIO / CASSETTE HEAD UNIT	IC8 IC19 IC20	8-WAY / BLACK 12-WAY / WHITE 26-WAY / YELLOW	CENTER CONSOLE
RADIO ANTENNA	IC12	6-WAY / BLACK	TRUNK / RH SIDE
RADIO CONTROL SWITCHES (STEERING WHEEL)	SW1 SW4	12-WAY / BLACK 6-WAY / BLACK	INSIDE STEERING COLUMN COWL
SPEAKER - DRIVER DOOR (MID-BASS)	DD19	2-WAY / BLACK	DRIVER DOOR CASING
SPEAKER - DRIVER DOOR (TWEETER)	DD18	2-WAY / BLACK	DRIVER DOOR
SPEAKER - LH SIDE FASCIA	FC38	2-WAY / GREY	FASCIA / LH SIDE
SPEAKER - LH SIDE REAR (CONVERTIBLE)	RH26	2-WAY / BLACK	INTERIOR REAR QUARTER PANEL
SPEAKER - LH SIDE REAR QUARTER (COUPE)	RH30	2-WAY / BLACK	INTERIOR REAR QUARTER PANEL
SPEAKER - PASSENGER DOOR (MID-BASS)	DP19	2-WAY / BLACK	PASSENGER DOOR CASING
SPEAKER - RH SIDE FASCIA	FC39	2-WAY / GREY	FASCIA / RH SIDE
SPEAKER - RH SIDE REAR (CONVERTIBLE)	RH27	2-WAY / BLACK	INTERIOR REAR QUARTER PANEL
SPEAKER - RH SIDE REAR QUARTER (COUPE)	RH31	2-WAY / BLACK	INTERIOR REAR QUARTER PANEL

HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
AC14	14-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET/ 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
IC1	20-WAY / YELLOW / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC2	14-WAY / WHITE / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
RH1	20-WAY / GREY / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
SC3	12-WAY / GREY / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN
SW1	12-WAY / BLACK / STEERING WHEEL CASSETTE	INSIDE STEERING COLUMN COWL

GROUNDS

Ground	Location
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
CE2	ABOVE RIGHT HAND SIDE OF TRANSMISSION TUNNEL
BT1	ADJACENT TO BATTERY

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

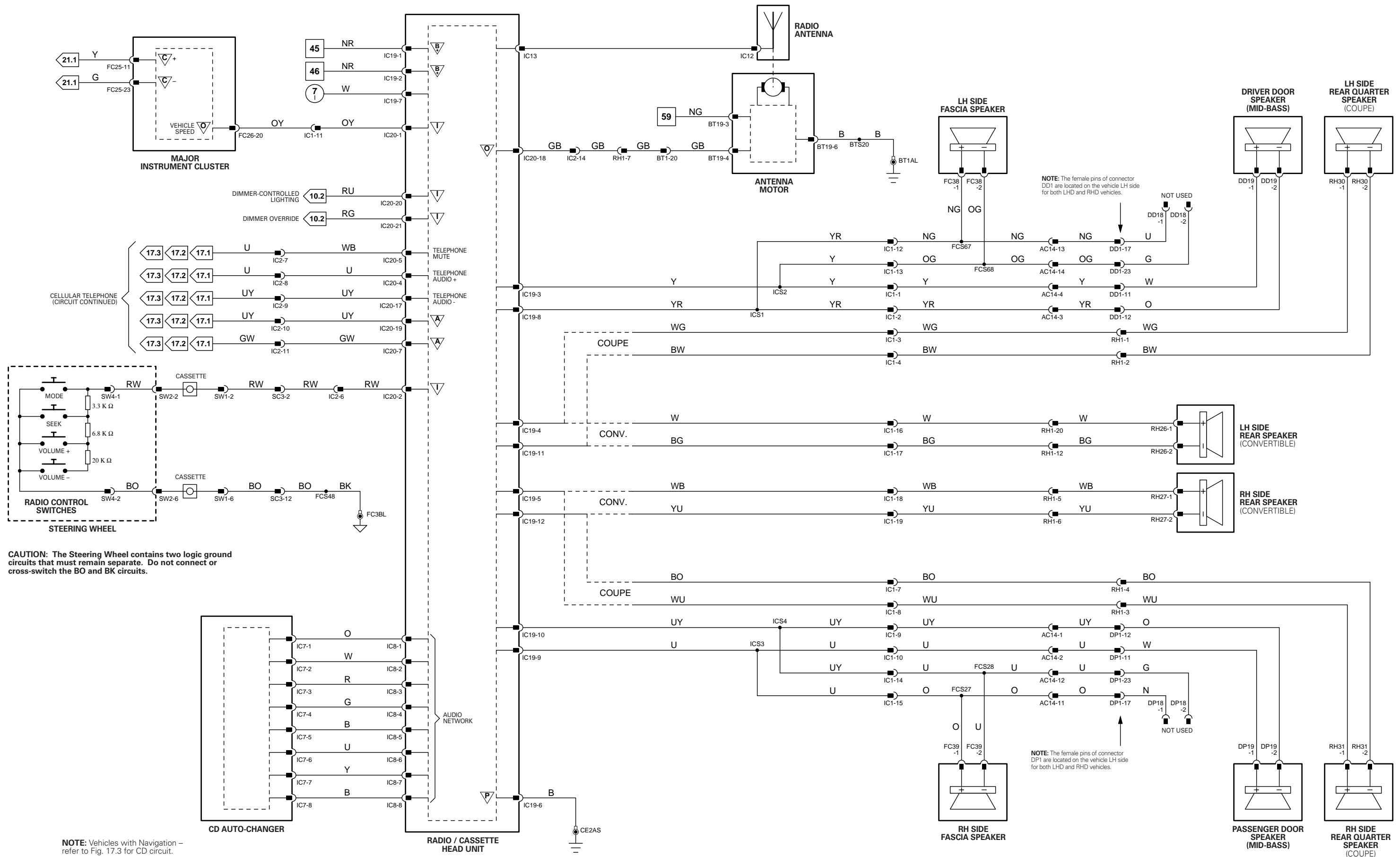
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



CAUTION: The Steering Wheel contains two logic ground circuits that must remain separate. Do not connect or cross-switch the BO and BK circuits.

NOTE: Vehicles with Navigation – refer to Fig. 17.3 for CD circuit.

CONTROL MODULE PIN-OUT INFORMATION

Major Instrument Cluster

Pin	Description and Characteristic
C FC25-11	CAN +
C FC25-23	CAN -
O FC26-20	VEHICLE SPEED SIGNAL - AUDIO

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Fig. 16.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
ANTENNA MOTOR	BT19	6-WAY / WHITE	TRUNK / RH SIDE
CD AUTO-CHANGER (PREMIUM ICE)	PROPRIETARY LINK LEAD		TRUNK / RH SIDE
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
POWER AMPLIFIER	IC7 IC15 IC16	8-WAY / BLACK 18-WAY / WHITE 12-WAY / WHITE	TRUNK / RH SIDE
RADIO / CASSETTE HEAD UNIT	IC8 IC19 IC20	8-WAY / BLACK 12-WAY / WHITE 26-WAY / YELLOW	CENTER CONSOLE
RADIO ANTENNA	IC12	6-WAY / BLACK	TRUNK / RH SIDE
RADIO CONTROL SWITCHES (STEERING WHEEL)	SW1 SW4	12-WAY / BLACK 6-WAY / BLACK	INSIDE STEERING COLUMN COWL
SPEAKER - DRIVER DOOR (MID-BASS)	DD19	2-WAY / BLACK	DRIVER DOOR CASING
SPEAKER - DRIVER DOOR (TWEETER)	DD18	2-WAY / BLACK	DRIVER DOOR
SPEAKER - LH SIDE FASCIA	FC38	2-WAY / GREY	FASCIA / LH SIDE
SPEAKER - LH SIDE REAR (CONVERTIBLE)	RH26	2-WAY / BLACK	INTERIOR REAR QUARTER PANEL
SPEAKER - LH SIDE REAR QUARTER (COUPE)	RH30	2-WAY / BLACK	INTERIOR REAR QUARTER PANEL
SPEAKER - PASSENGER DOOR (MID-BASS)	DP19	2-WAY / BLACK	PASSENGER DOOR CASING
SPEAKER - PASSENGER DOOR (TWEETER)	DP18	2-WAY / BLACK	PASSENGER DOOR
SPEAKER - REAR (COUPE)	RH26 RH27	2-WAY / BLACK 2-WAY / BLACK	PARCEL SHELF
SPEAKER - RH SIDE FASCIA	FC39	2-WAY / GREY	FASCIA / RH SIDE
SPEAKER - RH SIDE REAR (CONVERTIBLE)	RH27	2-WAY / BLACK	INTERIOR REAR QUARTER PANEL
SPEAKER - RH SIDE REAR QUARTER (COUPE)	RH31	2-WAY / BLACK	INTERIOR REAR QUARTER PANEL

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC14	14-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET / 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
IC1	20-WAY / YELLOW / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC2	14-WAY / WHITE / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC4	14-WAY / WHITE / IN-CAR ENTERTAINMENT HARNESS TO TRUNK HARNESS	TRUNK / LEFT OF ANTENNA ASSEMBLY
RH1	20-WAY / GREY / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY
SC3	12-WAY / GREY / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN
SW1	12-WAY / BLACK / STEERING WHEEL CASSETTE	INSIDE STEERING COLUMN COWL

GROUNDS

Ground	Location
BT1	ADJACENT TO BATTERY
CE2	ABOVE RIGHT HAND SIDE OF TRANSMISSION TUNNEL
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

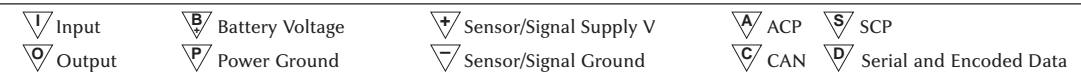
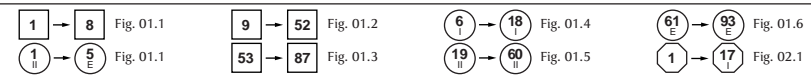
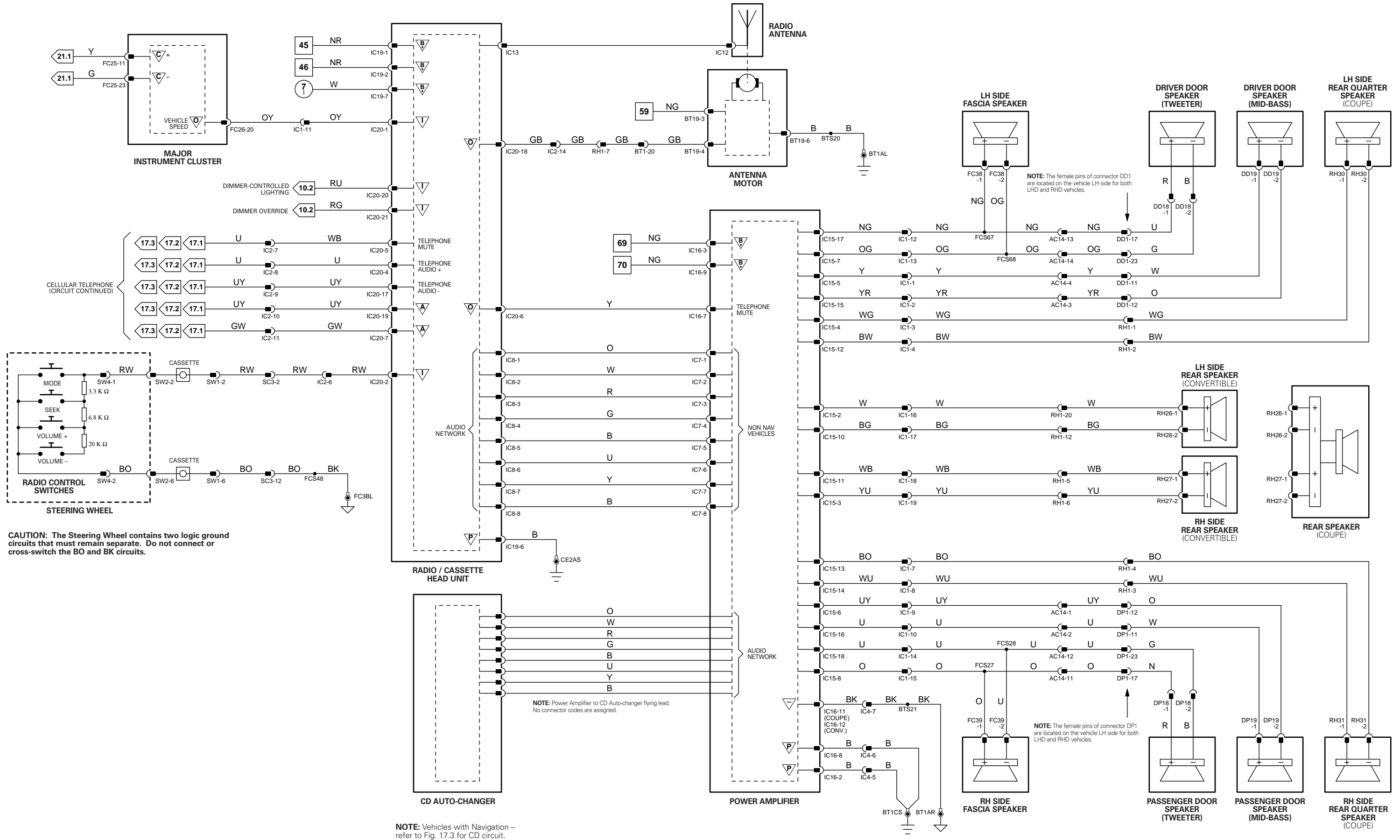
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



VARIANT: Premium ICE Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

Fig. 17.1**COMPONENTS**

Component	Connector(s)	Connector Description	Location
CELLULAR PHONE CONTROL MODULE	RT9 RT10	32-WAY / BLUE 2-WAY / GREY	BEHIND REAR SEAT
MICROPHONE	RF9	2-WAY / BLUE	ROOF CONSOLE
TELEPHONE HAND SET	HARD WIRED		CENTER CONSOLE GLOVE BOX

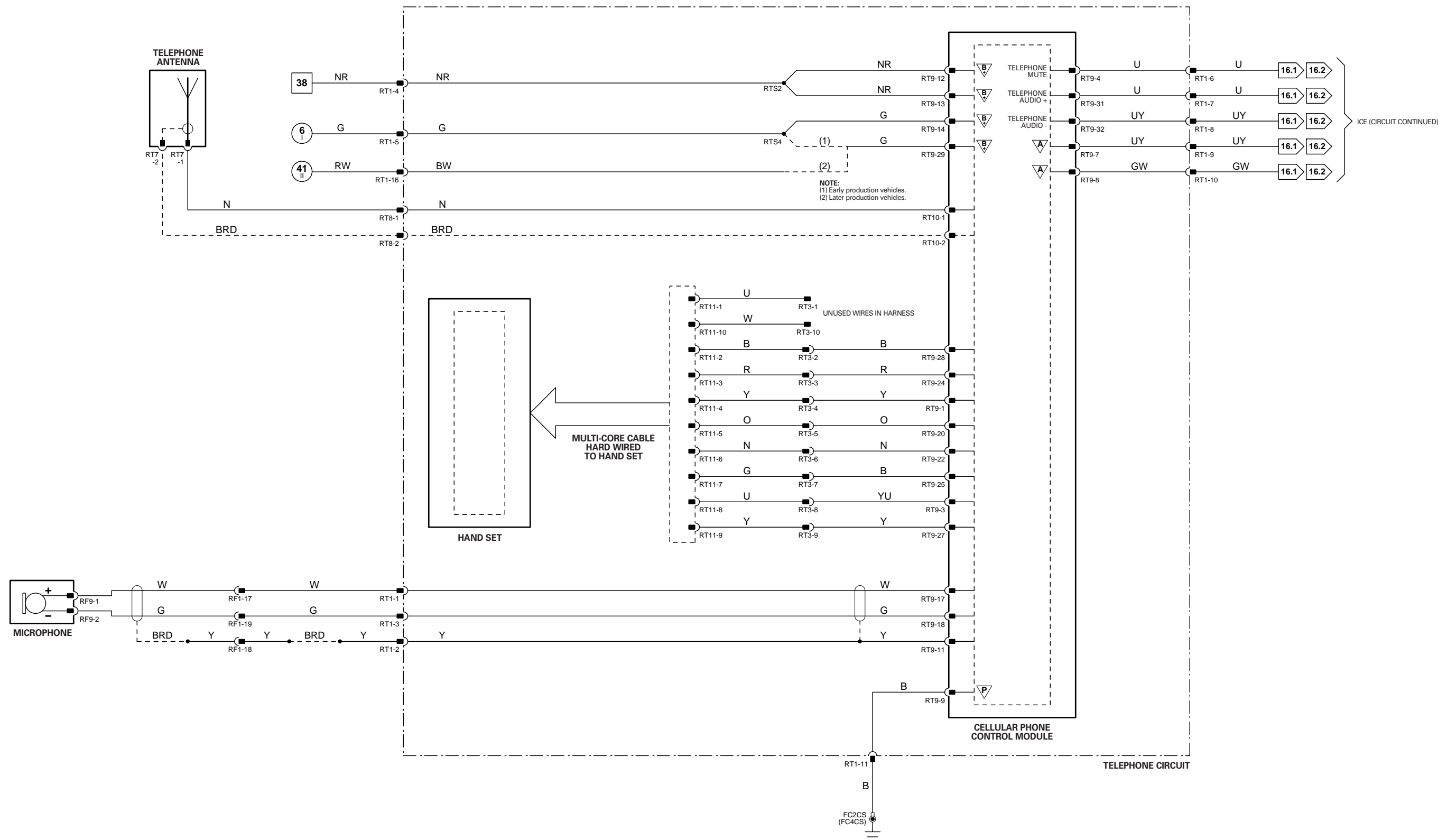
HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RT1	18-WAY / YELLOW / FASCIA HARNESS TO TELEPHONE HARNESS	BELOW CENTER CONSOLE
RT3	10-WAY / GREY / FASCIA HARNESS TO TELEPHONE HARNESS	BELOW CENTER CONSOLE
RT8	2-WAY / GREY / TELEPHONE ANTENNA	BEHIND REAR SEAT
RT11	10-WAY / BLACK / TELEPHONE HAND SET	CENTER CONSOLE GLOVE BOX

GROUNDS

Ground	Location
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	▽ Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	▽ Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: ROW Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

Fig. 17.2**COMPONENTS**

Component	Connector(s)	Connector Description	Location
CELLULAR PHONE CONTROL MODULE	RT2 RT5	12-WAY / BLACK 16-WAY / BLACK	BEHIND REAR SEAT
MICROPHONE	RF9	2-WAY / BLUE	ROOF CONSOLE
TELEPHONE ANTENNA	RT7	2-WAY / GREY	TRUNK / ABOVE LH WHEEL ARCH
TELEPHONE HAND SET RECEIVER	RT4	6-WAY / BLACK	CENTER CONSOLE

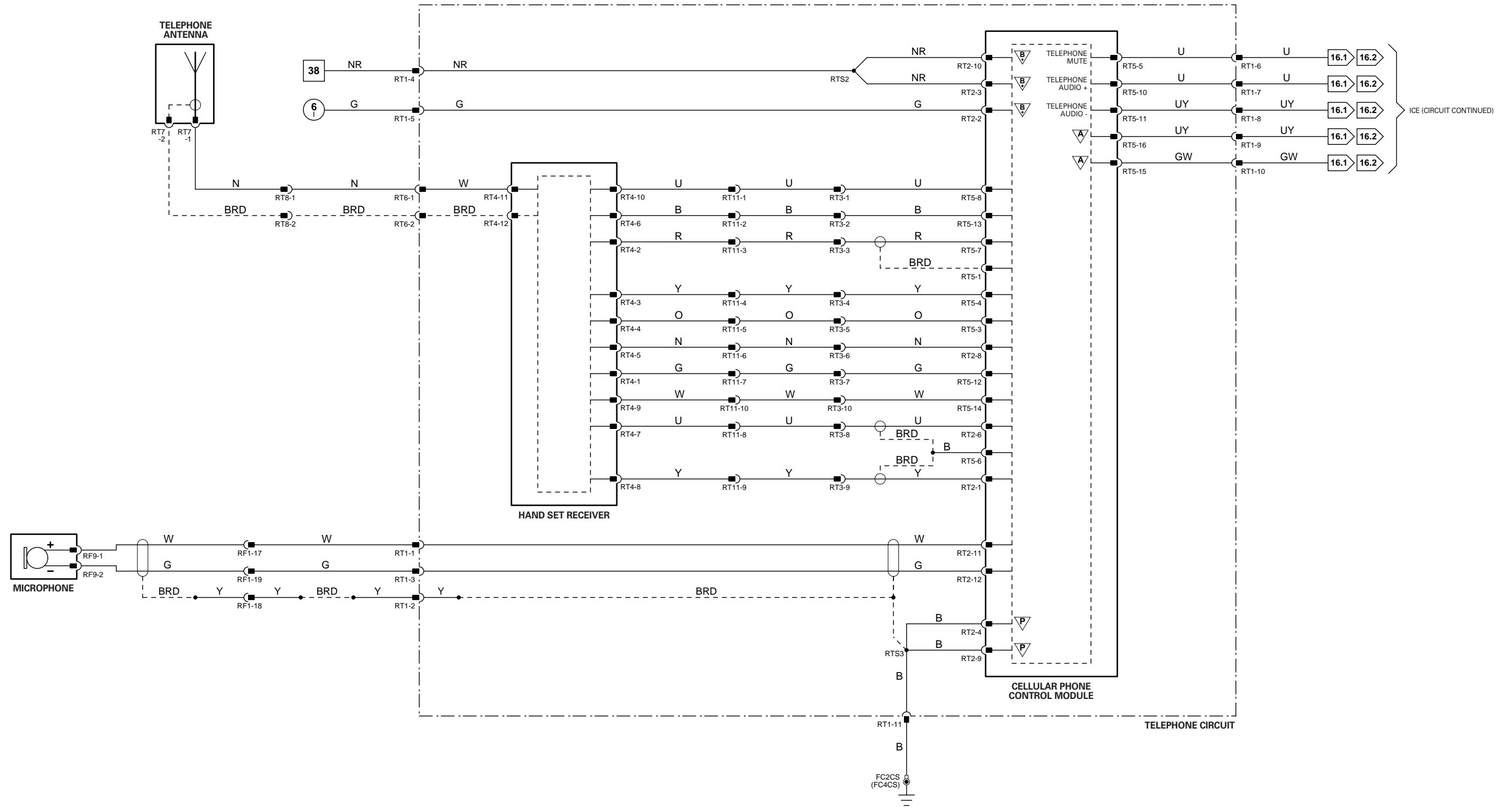
HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RT1	18-WAY / YELLOW / FASCIA HARNESS TO TELEPHONE HARNESS	BELOW CENTER CONSOLE
RT3	10-WAY / GREY / FASCIA HARNESS TO TELEPHONE HARNESS	BELOW CENTER CONSOLE
RT6	2-WAY / GREY / TELEPHONE ANTENNA	BELOW CENTER CONSOLE
RT8	2-WAY / GREY / TELEPHONE ANTENNA	BEHIND REAR SEAT
RT11	10-WAY / BLACK / TELEPHONE HAND SET	CENTER CONSOLE GLOVE BOX

GROUNDS

Ground	Location
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	⌚ Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
▽ Output	⌚ Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: NAS Early Production Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

Fig. 17.3**COMPONENTS**

Component	Connector(s)	Connector Description	Location
CELLULAR PHONE CONTROL MODULE	RT9	32-WAY / BLUE	BEHIND REAR SEAT
MICROPHONE (ROOF CONSOLE)	RF9	2-WAY / BLUE	ROOF CONSOLE
TELEPHONE ANTENNA	RT7	2-WAY / GREY	TRUNK / ABOVE LH WHEEL ARCH
TELEPHONE HAND SET RECEIVER	RT4	6-WAY / BLACK	CENTER CONSOLE

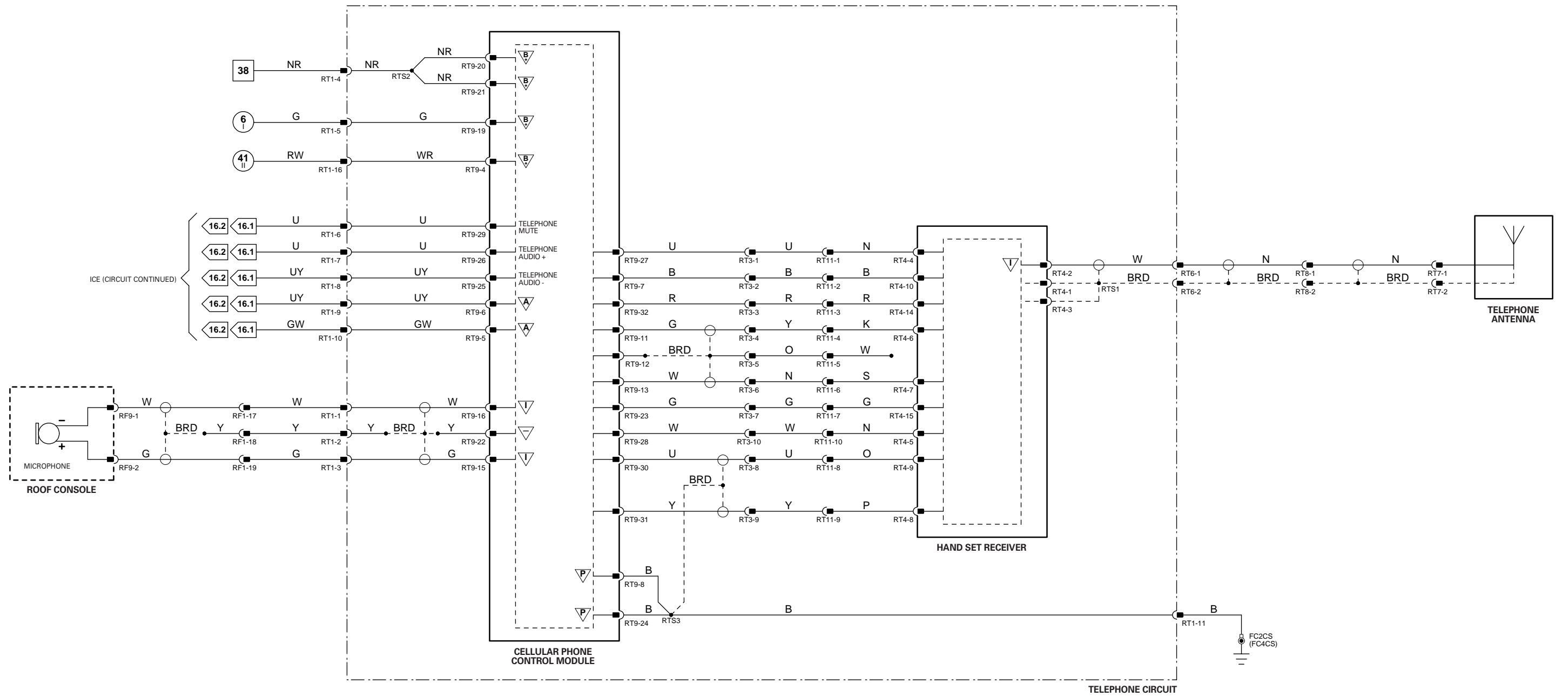
HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
RF1	24-WAY / BLACK / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RT1	18-WAY / YELLOW / FASCIA HARNESS TO TELEPHONE HARNESS	BELOW CENTER CONSOLE
RT3	10-WAY / GREY / FASCIA HARNESS TO TELEPHONE HARNESS	BELOW CENTER CONSOLE
RT6	2-WAY / GREY / TELEPHONE ANTENNA	BELOW CENTER CONSOLE
RT8	2-WAY / GREY / TELEPHONE ANTENNA	BEHIND REAR SEAT
RT11	10-WAY / BLACK / TELEPHONE HAND SET	CENTER CONSOLE GLOVE BOX

GROUNDS

Ground	Location
FC2	RIGHT HAND 'A' POST
FC4	LEFT HAND 'A' POST

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTE: This system to be introduced Mid-2003 MY.

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	⌋ Battery Voltage	▽ Sensor/Signal Supply V	⌋ ACP	⌋ SCP
▽ Output	⌋ Power Ground	▽ Sensor/Signal Ground	⌋ CAN	⌋ Serial and Encoded Data

VARIANT: NAS Later Production Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

Fig. 17.4**COMPONENTS**

Component	Connector(s)	Connector Description	Location
CD AUTO-CHANGER (PREMIUM ICE)	PROPRIETARY LINK LEAD		TRUNK / RH SIDE
CD AUTO-CHANGER (STANDARD ICE)	PROPRIETARY LINK LEAD		TRUNK / RH SIDE
MAJOR INSTRUMENT CLUSTER	FC25	26-WAY / BLACK	FASCIA
	FC26	26-WAY / YELLOW	
NAVIGATION CONTROL MODULE	IC7	8-WAY / BLACK	TRUNK / RH SIDE
	IC22	16-WAY / BLACK	
	IC23	24-WAY / BLACK	
NAVIGATION DISPLAY MODULE	FC97	12-WAY / BLACK	BEHIND NAVIGATION DISPLAY
	FC98	16-WAY / BLACK	
NAVIGATION GPS ANTENNA	IC5	2-WAY / GREY	BELOW PARCEL SHELF
POWER AMPLIFIER	IC16	12-WAY / WHITE	TRUNK / RH SIDE
	PROPRIETARY LINK LEAD		
RADIO / CASSETTE HEAD UNIT	IC8	8-WAY / BLACK	CENTER CONSOLE
	IC19	12-WAY / WHITE	
	IC20	26-WAY / YELLOW	

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
IC1	20-WAY / YELLOW / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC2	14-WAY / WHITE / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC3	14-WAY / GREY / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC4	14-WAY / WHITE / IN-CAR ENTERTAINMENT HARNESS TO TRUNK HARNESS	TRUNK / LEFT OF ANTENNA ASSEMBLY

GROUND

Ground	Location
BT2	TRUNK, RIGHT REAR
CE2	ABOVE RIGHT HAND SIDE OF TRANSMISSION TUNNEL

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.

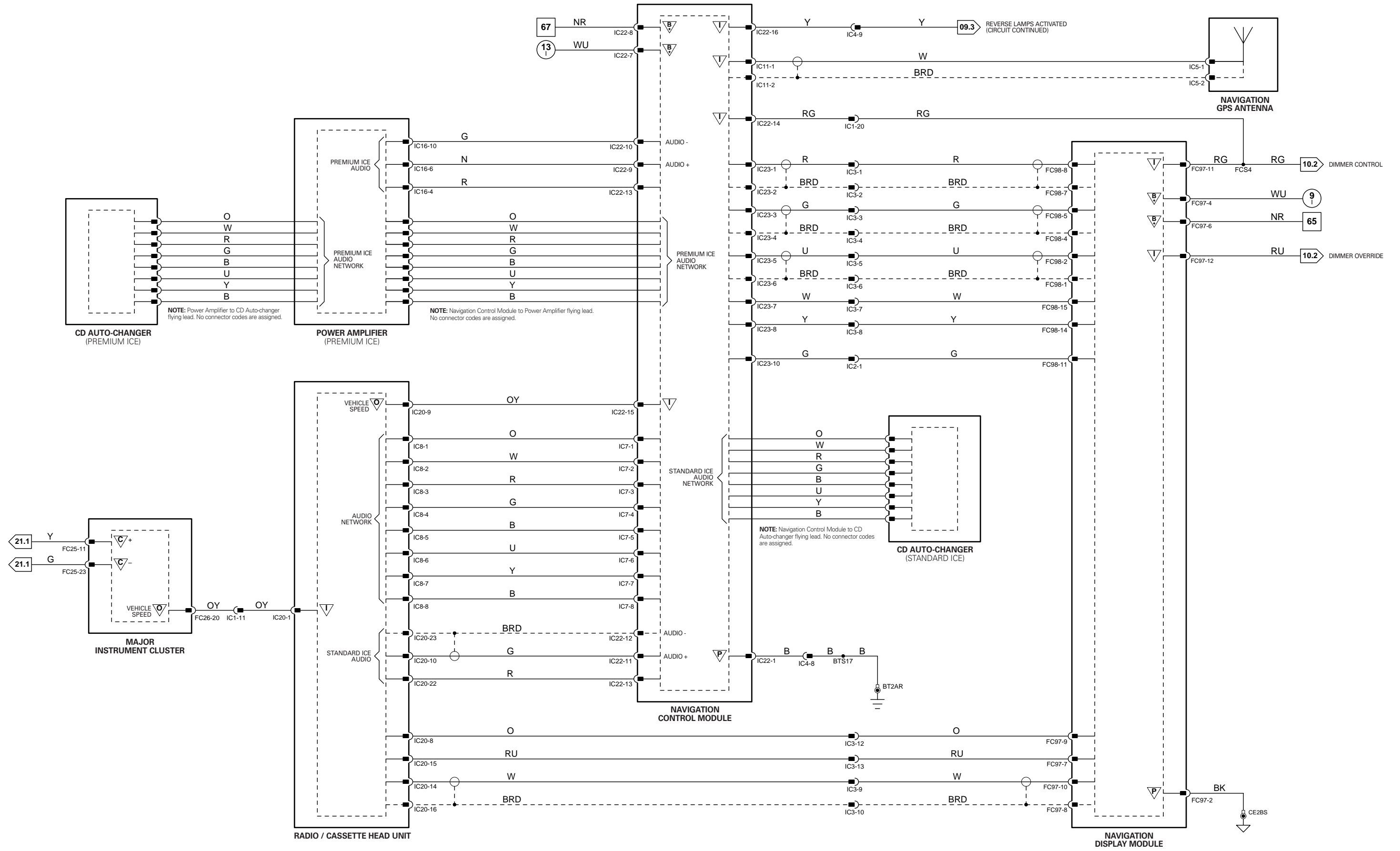


Fig. 17.5

COMPONENTS

Component	Connector(s)	Connector Description	Location
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
NAVIGATION CONTROL MODULE	IC22 IC23	16-WAY / BLACK 24-WAY / BLACK	
NAVIGATION DISPLAY MODULE	FC97 FC98	12-WAY / BLACK 16-WAY / BLACK	BEHIND NAVIGATION DISPLAY
NAVIGATION GPS ANTENNA	IC5	2-WAY / GREY	BELOW PARCEL SHELF
PARKING BRAKE SWITCH	FC19	1-WAY / BLACK	BELOW PARKING BRAKE LEVER
POWER AMPLIFIER	IC16	12-WAY / WHITE	TRUNK / RH SIDE
RADIO / CASSETTE HEAD UNIT	IC8 IC19 IC20	8-WAY / BLACK 12-WAY / WHITE 26-WAY / YELLOW	CENTER CONSOLE
TELEVISION ANTENNA – LH #3	TV3	1-WAY / BLACK	REAR WINDOW
TELEVISION ANTENNA – LH #4	TV35	1-WAY / METALLIC	REAR WINDOW
TELEVISION ANTENNA – RH #1	TV4	1-WAY / BLACK	REAR WINDOW
TELEVISION ANTENNA – RH #2	TV34	1-WAY / METALLIC	REAR WINDOW
TELEVISION ANTENNA AMPLIFIER	TV15 TV18	3-WAY / BLUE 2-WAY / GREY	ABOVE LH REAR INNER WHEEL ARCH
TELEVISION MODULE	TV5 TV6 TV7 TV8	2-WAY / BLACK 2-WAY / BLACK 2-WAY / BLACK 8-WAY / BLACK	ON TRUNK FUSE BOX HOUSING
VEHICLE INFORMATION CONTROL BEACON MODULE	IR2 TV10	2-WAY / GREY 8-WAY / BLACK	SPARE WHEEL WELL
VEHICLE INFORMATION CONTROL INFRARED SENSOR	IR1	2-WAY / GREY	INSTRUMENT PANEL
VEHICLE INFORMATION CONTROL MODULE	TV12 TV14	4-WAY / BLACK 8-WAY / BLACK	SPARE WHEEL WELL

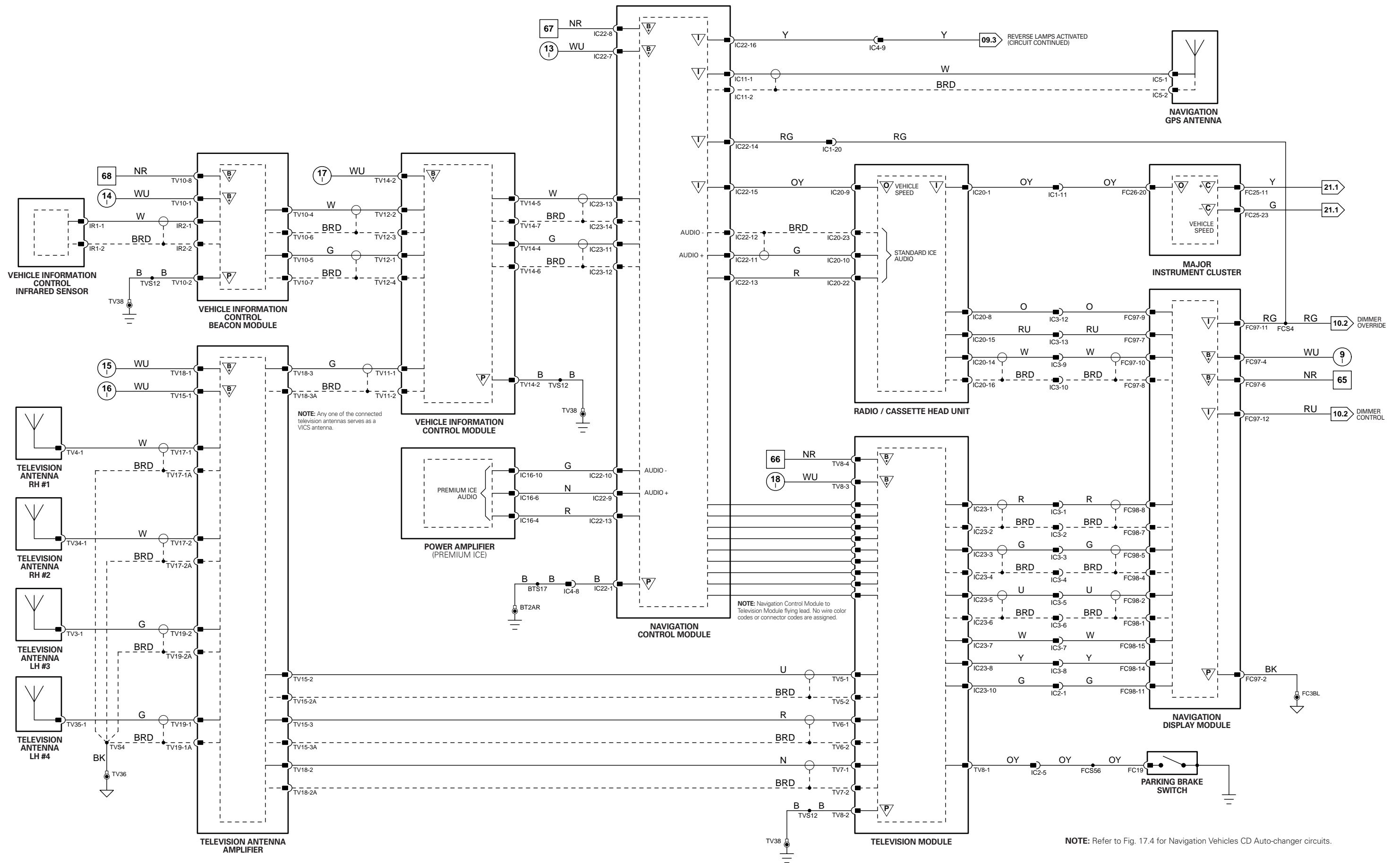
HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
IC1	20-WAY / YELLOW / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC2	14-WAY / WHITE / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC3	14-WAY / GREY / FASCIA HARNESS TO IN-CAR ENTERTAINMENT HARNESS	BELOW CENTER CONSOLE GLOVE BOX
IC4	14-WAY / WHITE / IN-CAR ENTERTAINMENT HARNESS TO TRUNK HARNESS	TRUNK / LEFT OF ANTENNA ASSEMBLY

GROUNDS

Ground	Location
BT2	TRUNK, RIGHT REAR
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
TV36	BELOW PARCEL SHELF
TV38	ADJACENT TO BATTERY

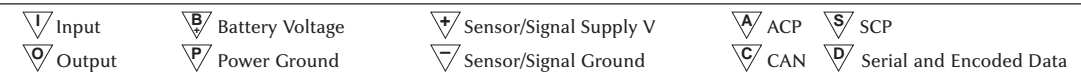
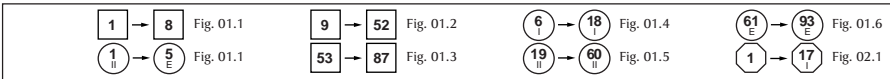
Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTE: Any one of the connected television antennas serves as a VICS antenna.

NOTE: Navigation Control Module to Television Module flying lead. No wire color codes or connector codes are assigned.

NOTE: Refer to Fig. 17.4 for Navigation Vehicles CD Auto-changer circuits.



VARIANT: Japan Navigation Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

Fig. 18.1**COMPONENTS**

Component	Connector(s)	Connector Description	Location
DRIVER DUAL AIRBAG IGNITERS	SW12 SW13	2-WAY / GREY 2-WAY / BLACK	CENTER OF STEERING WHEEL
DRIVER SEAT POSITION SWITCH	SD21	2-WAY / BLACK	BELOW SEAT CUSHION
IMPACT SENSOR – FRONT	LF50	2-WAY / BLACK	FORWARD OF RADIATOR
RESTRAINTS CONTROL MODULE	FC8 FC9	24-WAY / BLACK 40-WAY / BLACK	CENTER CONSOLE
SEAT BELT PRETENSIONER IGNITER – DRIVER (LHD)	PT2	2-WAY / YELLOW	BEHIND LH REAR QUARTER TRIM PANEL
SEAT BELT PRETENSIONER IGNITER – DRIVER (RHD)	PT3	2-WAY / YELLOW	BEHIND LH REAR QUARTER TRIM PANEL
SEAT BELT PRETENSIONER IGNITER – PASSENGER (LHD)	PT3	2-WAY / YELLOW	BEHIND LH REAR QUARTER TRIM PANEL
SEAT BELT PRETENSIONER IGNITER – PASSENGER (RHD)	PT2	2-WAY / YELLOW	BEHIND LH REAR QUARTER TRIM PANEL
SEAT BELT SWITCH – DRIVER	SD20	6-WAY / WHITE	BELOW SEAT CUSHION
SEAT BELT SWITCH – PASSENGER	SP20	6-WAY / WHITE	BELOW SEAT CUSHION
SIDE AIRBAG IGNITER – DRIVER	SD15	2-WAY / BROWN	SEAT BACK
SIDE AIRBAG IGNITER – PASSENGER	SD16	2-WAY / BROWN	SEAT BACK
SIDE IMPACT SENSOR – DRIVER (LHD)	RH15	2-WAY / BLACK	BEHIND SEAT BELT RETRACTOR / REAR QUARTER TRIM PANEL
SIDE IMPACT SENSOR – DRIVER (RHD)	RH16	2-WAY / BLACK	BEHIND SEAT BELT RETRACTOR / REAR QUARTER TRIM PANEL
SIDE IMPACT SENSOR – PASSENGER (LHD)	RH16	2-WAY / BLACK	BEHIND SEAT BELT RETRACTOR / REAR QUARTER TRIM PANEL
SIDE IMPACT SENSOR – PASSENGER (RHD)	RH15	2-WAY / BLACK	BEHIND SEAT BELT RETRACTOR / REAR QUARTER TRIM PANEL

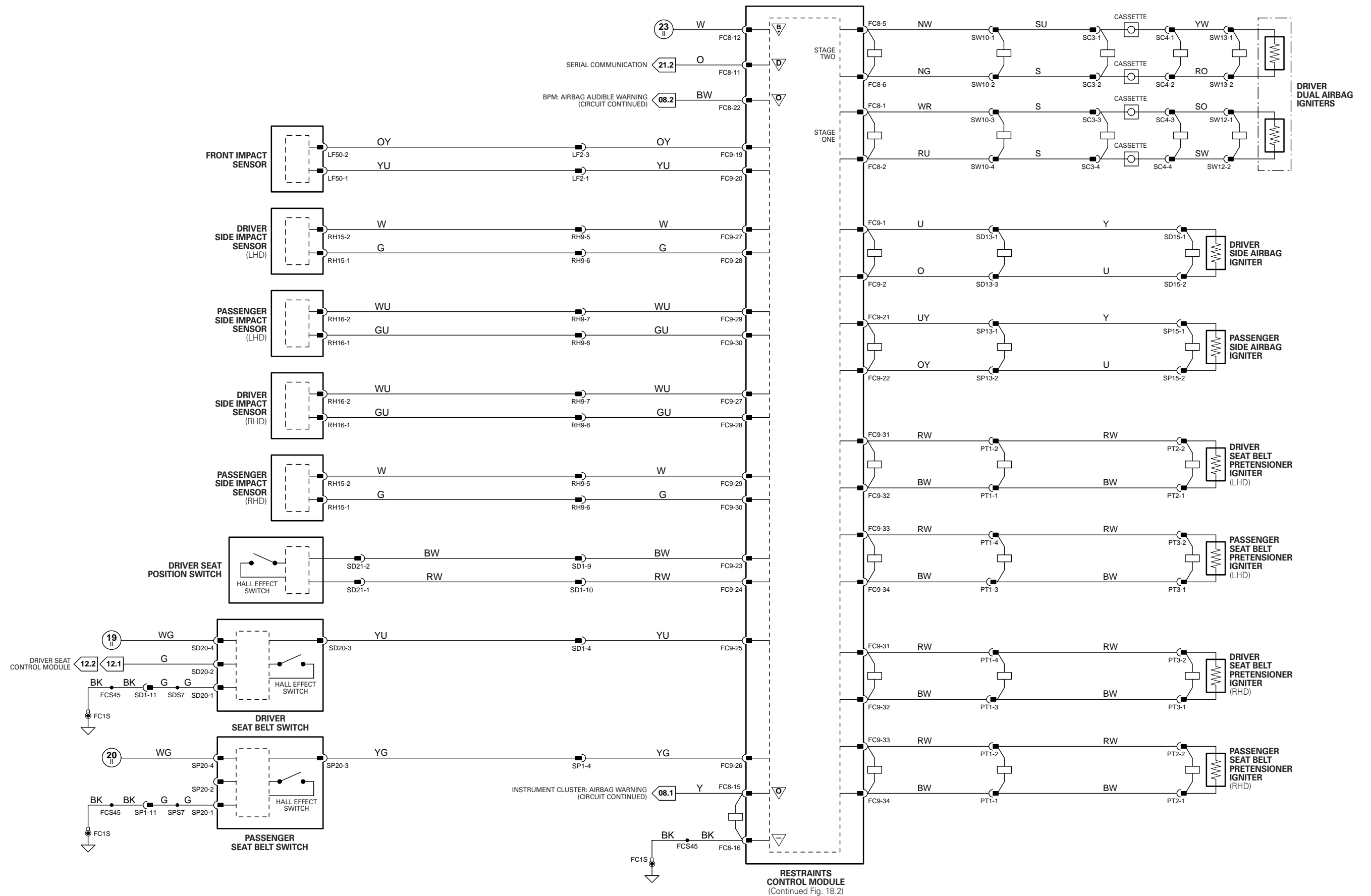
HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
LF2	4-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
PT1	4-WAY / WHITE / FASCIA HARNESS TO REARWARD HARNESS	BELOW CENTER CONSOLE ASSEMBLY
RH9	20-WAY / BLUE / FASCIA HARNESS TO REARWARD HARNESS	BELOW CENTER CONSOLE
SD1	14-WAY / YELLOW / FASCIA HARNESS TO DRIVER SEAT HARNESS	BELOW DRIVER SEAT
SD13	3-WAY / BLACK / DRIVER SEAT SIDE AIRBAG IGNITER	BELOW SEAT CUSHION
SP1	14-WAY / YELLOW / FASCIA HARNESS TO PASSENGER SEAT HARNESS	BELOW PASSENGER SEAT
SP13	3-WAY / BLACK / PASSENGER SEAT SIDE AIRBAG IGNITER	BELOW SEAT CUSHION
SW10	4-WAY / GREY / FASCIA HARNESS TO DRIVER AIRBAG HARNESS	INSIDE STEERING COLUMN COWL

GROUNDS

Ground	Location
FC1	TRANSMISSION TUNNEL, RIGHT HAND SIDE

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1
 1 → 5 Fig. 01.1

9 → 52 Fig. 01.2
 53 → 87 Fig. 01.3

6 → 18 Fig. 01.4
 19 → 60 Fig. 01.5

61 → 93 Fig. 01.6
 1 → 17 Fig. 02.1

▽ Input
 ▽ Output

B Battery Voltage
 P Power Ground

▽ Sensor/Signal Supply V
 ▽ Sensor/Signal Ground

A ACP S SCP
 C CAN D Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

Fig. 18.2**COMPONENTS**

Component	Connector(s)	Connector Description	Location
OCCUPANCY SENSING CONTROL MODULE	FC10	26-WAY / YELLOW	'A' POST / RH SIDE OF FASCIA
PASSENGER AIRBAG DEACTIVATED INDICATOR LAMP	FC15	3-WAY / BLACK	PASSENGER SIDE FASCIA
PASSENGER DUAL AIRBAG IGNITERS	FC75 FC76	2-WAY / BLACK 2-WAY / BLACK	SIDE OF AIRBAG ASSEMBLY
PASSENGER SEAT WEIGHT PRESSURE SENSOR	SP18	3-WAY / BLACK	BELOW SEAT CUSHION
PASSENGER SEAT WEIGHT SENSING CONTROL MODULE	SP21	10-WAY / BLACK	BELOW SEAT CUSHION
RESTRAINTS CONTROL MODULE	FC8 FC9	24-WAY / BLACK 40-WAY / BLACK	CENTER CONSOLE
SPATIAL SENSOR – CENTER CONSOLE	RZ2	4-WAY / WHITE	BEHIND ROOF CONSOLE
SPATIAL SENSOR – PASSENGER 'A' POST (LHD)	RF3	8-WAY / YELLOW	UPPER RH 'A' POST / 'A' POST TRIM
SPATIAL SENSOR – PASSENGER 'A' POST (RHD)	RZ3	4-WAY / BLACK	UPPER LH 'A' POST / 'A' POST TRIM
SPATIAL SENSOR – PASSENGER 'B' POST (LHD)	RH11	4-WAY / WHITE	'B' POST (COUPE); REAR QUARTER (CONV.) / TRIM
SPATIAL SENSOR – PASSENGER 'B' POST (RHD)	RH10	4-WAY / WHITE	'B' POST (COUPE); REAR QUARTER (CONV.) / TRIM

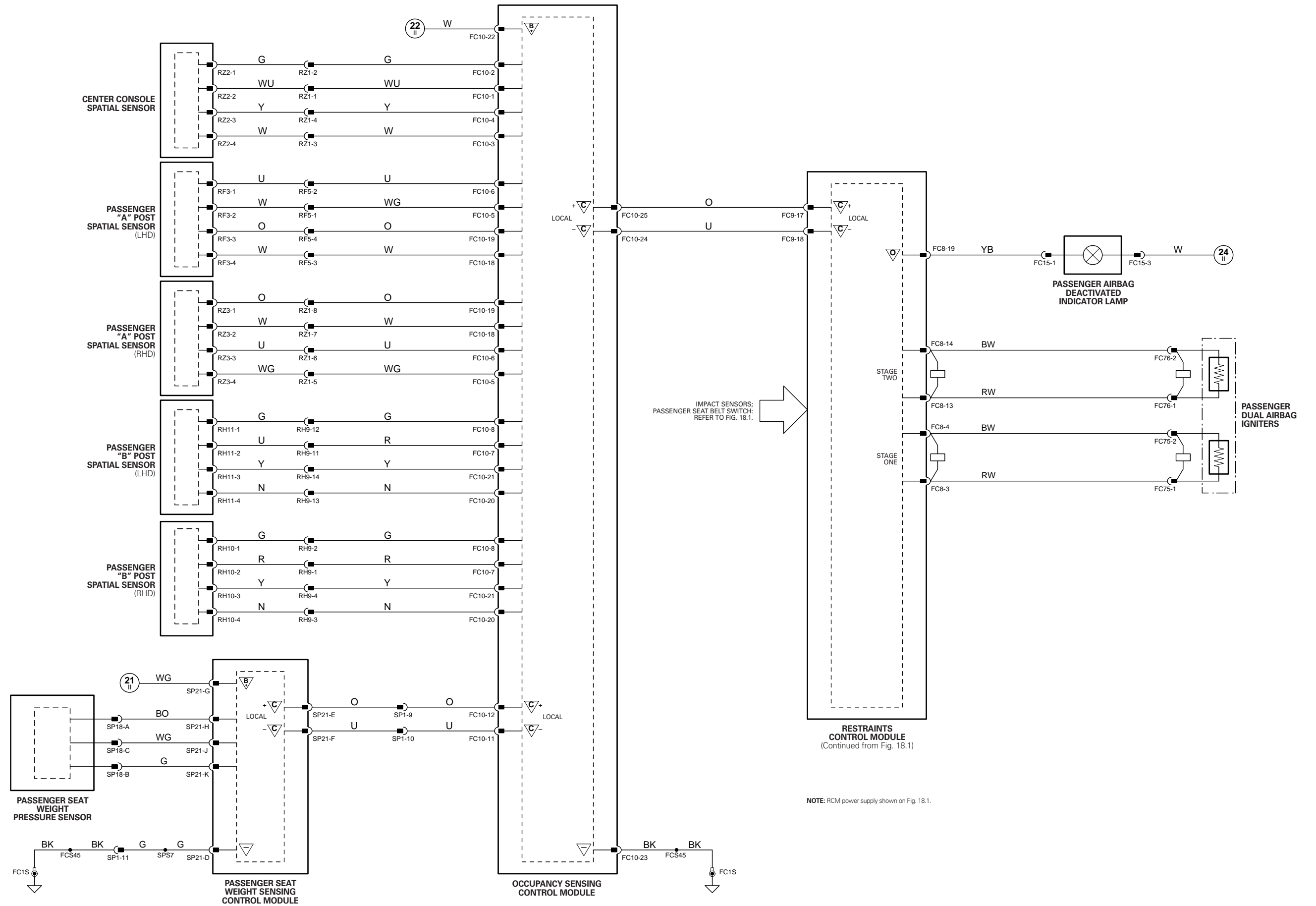
HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
RF5	8-WAY / WHITE / FASCIA HARNES TO ROOF HARNES	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH9	20-WAY / BLUE / FASCIA HARNES TO REARWARD HARNES	BELOW CENTER CONSOLE
RZ1	8-WAY / YELLOW / FASCIA HARNES TO ROOF HARNES	LOWER LH 'A' POST / 'A' POST TRIM
SP1	14-WAY / YELLOW / FASCIA HARNES TO PASSENGER SEAT HARNES	BELOW PASSENGER SEAT

GROUNDS

Ground	Location
FC1	TRANSMISSION TUNNEL, RIGHT HAND SIDE

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



NOTE: RCM power supply shown on Fig. 18.1.

1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6	▽ Input	B Battery Voltage	▽ Sensor/Signal Supply V	▽ ACP	▽ SCP
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1	▽ Output	P Power Ground	▽ Sensor/Signal Ground	▽ CAN	▽ Serial and Encoded Data

VARIANT: All Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

Fig. 19.1**COMPONENTS**

Component	Connector(s)	Connector Description	Location
PARKING AID CONTROL MODULE	BT4 BT5	16-WAY / WHITE 6-WAY / BLACK	TRUNK / SPARE WHEEL WELL
PARKING AID SENSOR – CENTER LH	RB3	3-WAY / BLACK	BEHIND REAR BUMPER
PARKING AID SENSOR – CENTER RH	RB4	3-WAY / BLACK	BEHIND REAR BUMPER
PARKING AID SENSOR – LH	RB2	3-WAY / BLACK	BEHIND REAR BUMPER
PARKING AID SENSOR – RH	RB5	3-WAY / BLACK	BEHIND REAR BUMPER
PARKING AID SOUNDER	RH4	2-WAY / WHITE	BELOW CENTER CONSOLE GLOVE BOX

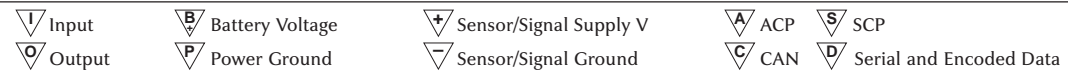
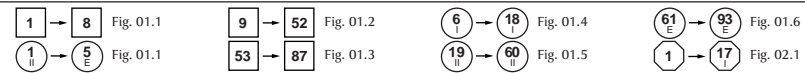
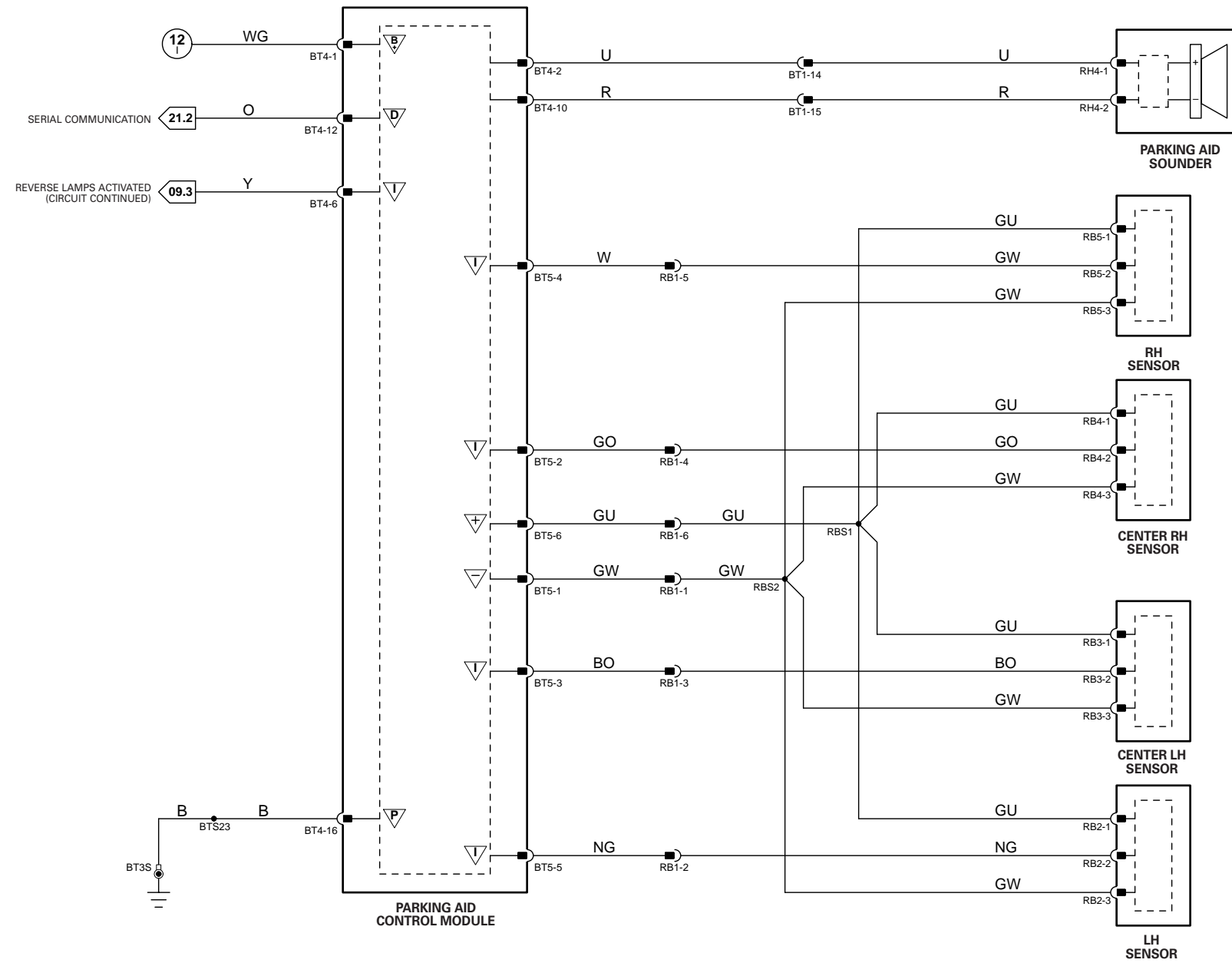
HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
RB1	6-WAY / BLACK / TRUNK HARNESS TO PARKING AID SENSORS LINK HARNESS	TRUNK / SPARE WHEEL WELL

GROUNDS

Ground	Location
BT3	TRUNK, LEFT REAR

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



VARIANT: Parking Aid Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

CONTROL MODULE PIN-OUT INFORMATION

Fig. 20.1

Body Processor Module

Pin	Description and Characteristic
I	FC14-04 HORN SWITCH SIGNAL: GROUND WHEN ACTIVATED (MOMENTARY)
O	FC14-70 HORN RELAY ACTIVATE: TO ACTIVATE, BPM SWITCHES CIRCUIT TO GROUND
B+	FC14-80 BATTERY POWER SUPPLY (LOGIC): B+

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

COMPONENTS

Component	Connector(s)	Connector Description	Location
ACCESSORY CONNECTOR – FASCIA	FC51	3-WAY / BLACK	FASCIA / ADJACENT TO RH SIDE OF GLOVE BOX
ACCESSORY CONNECTOR – TRUNK	BT25	3-WAY / BLACK	TRUNK / ADJACENT TO BATTERY
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
CIGAR LIGHTER	FC42	2-WAY / METALLIC	FORWARD OF GEAR SELECTOR
	FC59	1-WAY / BLACK	
FUSE BOX – ENGINE COMPARTMENT	LF5	10-WAY / NATURAL	ENGINE COMPARTMENT / LEFT FRONT
	LF6	10-WAY / BLACK	
	LF7	10-WAY / GREEN	
	LF8	10-WAY / BLUE	
	LF70	EYELET	
GARAGE DOOR OPENER (ROOF CONSOLE)	RF10	6-WAY / GREY	ROOF CONSOLE
HORN SWITCHES (STEERING WHEEL)	HP1	1-WAY / METALLIC	CENTER OF STEERING WHEEL
	HP2	1-WAY / METALLIC	
	HP3	EYELET	
HORNS	LF12	2-WAY / BLACK	BEHIND FRONT BUMPER

RELAYS

Relay	Connector / Color	Location
HORN RELAY	BUS / BROWN	ENGINE COMPARTMENT FUSE BOX – R6

HARNES IN-LINE CONNECTORS

Connector	Connector Description	Location
LF60	20-WAY / WHITE / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RF5	8-WAY / WHITE / FASCIA HARNESS TO ROOF HARNESS	RIGHT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
SC2	10-WAY / YELLOW / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	ADJACENT TO STEERING COLUMN MOTOR
SC3	12-WAY / GREY / FASCIA HARNESS TO COLUMN SWITCH GEAR HARNESS	RIGHT HAND SIDE OF STEERING COLUMN
SW1	12-WAY / BLACK / STEERING WHEEL CASSETTE	INSIDE STEERING COLUMN COWL

GROUNDS

Ground	Location
BT2	TRUNK, RIGHT REAR
FC2	RIGHT HAND 'A' POST
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE
FC4	LEFT HAND 'A' POST

FOR CONTROL MODULE PIN-OUT INFORMATION, UNFOLD PAGE TO LEFT.

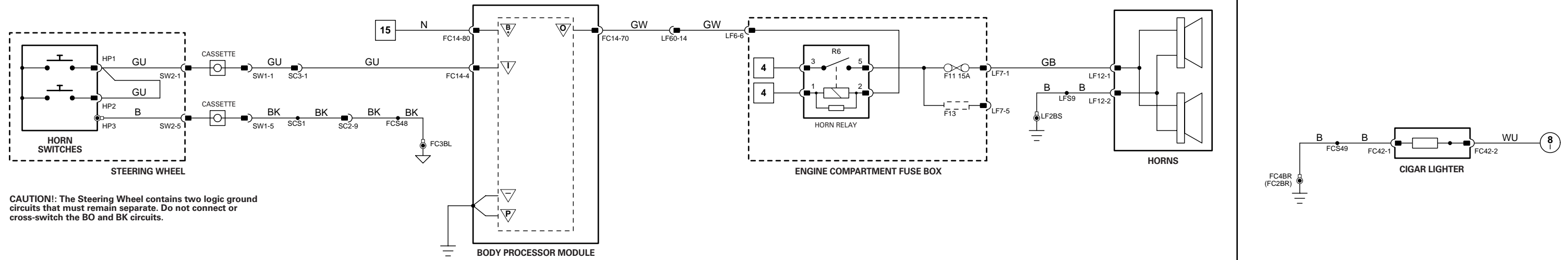
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	V	Voltage (DC)
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	PWM	Pulse Width Modulated
B+	Battery Voltage	SG	Sensor / Signal Ground	D	Serial and Encoded Data		

CAUTION: The information on this data page is furnished to aid the user in understanding circuit operation. THIS INFORMATION SHOULD BE USED FOR REFERENCE ONLY.

NOTE: The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted.

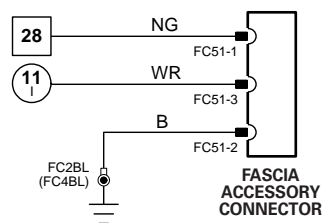
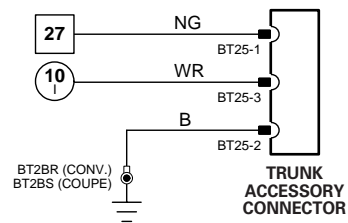
Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



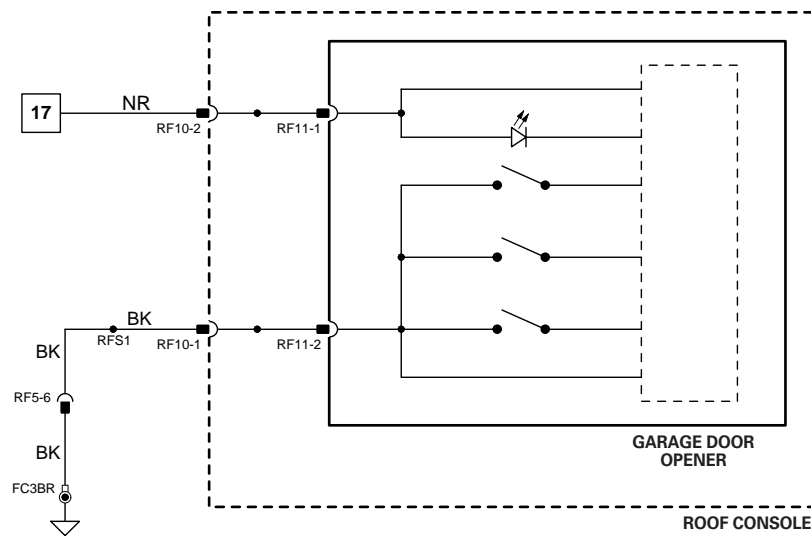
CAUTION! The Steering Wheel contains two logic ground circuits that must remain separate. Do not connect or cross-switch the BO and BK circuits.

HORNS

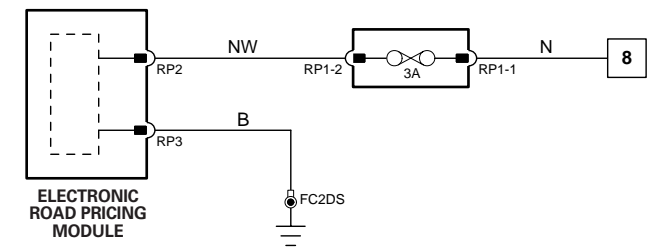
CIGAR LIGHTER



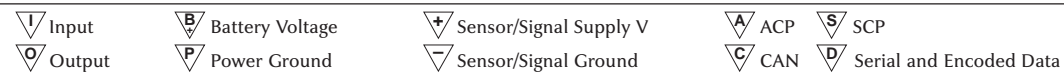
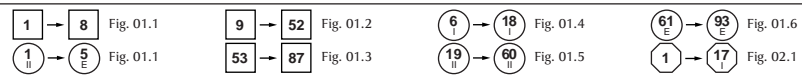
ACCESSORY CONNECTORS



GARAGE DOOR OPENER



ELECTRONIC ROAD PRICING



VARIANT: All Vehicles
VIN RANGE: All
DATE OF ISSUE: December 2002

Fig. 21.1**COMPONENTS**

Component	Connector(s)	Connector Description	Location
ADAPTIVE SPEED CONTROL CONTROL MODULE	LF61	12-WAY / BLACK	ENGINE COMPARTMENT / FORWARD OF RADIATOR
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DATA LINK CONNECTOR	FC53	16-WAY / BLACK	BELOW DRIVER SIDE FUSE BOX
DOOR CONTROL MODULE – DRIVER	DD10 DD11	22-WAY / BLUE 22-WAY / BLACK	DRIVER DOOR / DOOR CASING
DOOR CONTROL MODULE – PASSENGER	DP10 DP11	22-WAY / BLUE 22-WAY / BLACK	PASSENGER DOOR / DOOR CASING
DYNAMIC STABILITY CONTROL CONTROL MODULE	LF37	25-WAY / BLACK	ENGINE COMPARTMENT / LH FRONT
ENGINE CONTROL MODULE	EM80	134-WAY / BLACK	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
HEAD RESTRAINT CONTROL MODULE – DRIVER	SD22	16-WAY / BLACK	BEHIND SEAT BACK FINISHER
HEAD RESTRAINT CONTROL MODULE – PASSENGER	SP22	16-WAY / BLACK	BEHIND SEAT BACK FINISHER
J GATE ILLUMINATION MODULE	FC88	10-WAY / WHITE	FRONT OF GEAR SELECTOR ASSEMBLY
LINEAR SWITCH MODULE	FC100	12-WAY / GREY	LH SIDE OF GEAR SELECTOR / CENTER CONSOLE
MAJOR INSTRUMENT CLUSTER	FC25 FC26	26-WAY / BLACK 26-WAY / YELLOW	FASCIA
SEAT CONTROL MODULE – DRIVER	SD3 SD4 SD5	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK	BELOW SEAT CUSHION
SEAT CONTROL MODULE – PASSENGER	SP3 SP5	16-WAY / BLACK 10-WAY / BLACK	BELOW SEAT CUSHION
SECURITY AND LOCKING CONTROL MODULE	BT40 BT41 BT42 RH20	16-WAY / BLACK 26-WAY / BLACK 10-WAY / BLACK COAXIAL CONNECTOR	TRUNK / ELECTRICAL CARRIER
TRANSMISSION CONTROL MODULE	GB2	16-WAY / BLACK	TRANSMISSION CONTROL VALVE ASSEMBLY

HARNESS IN-LINE CONNECTORS

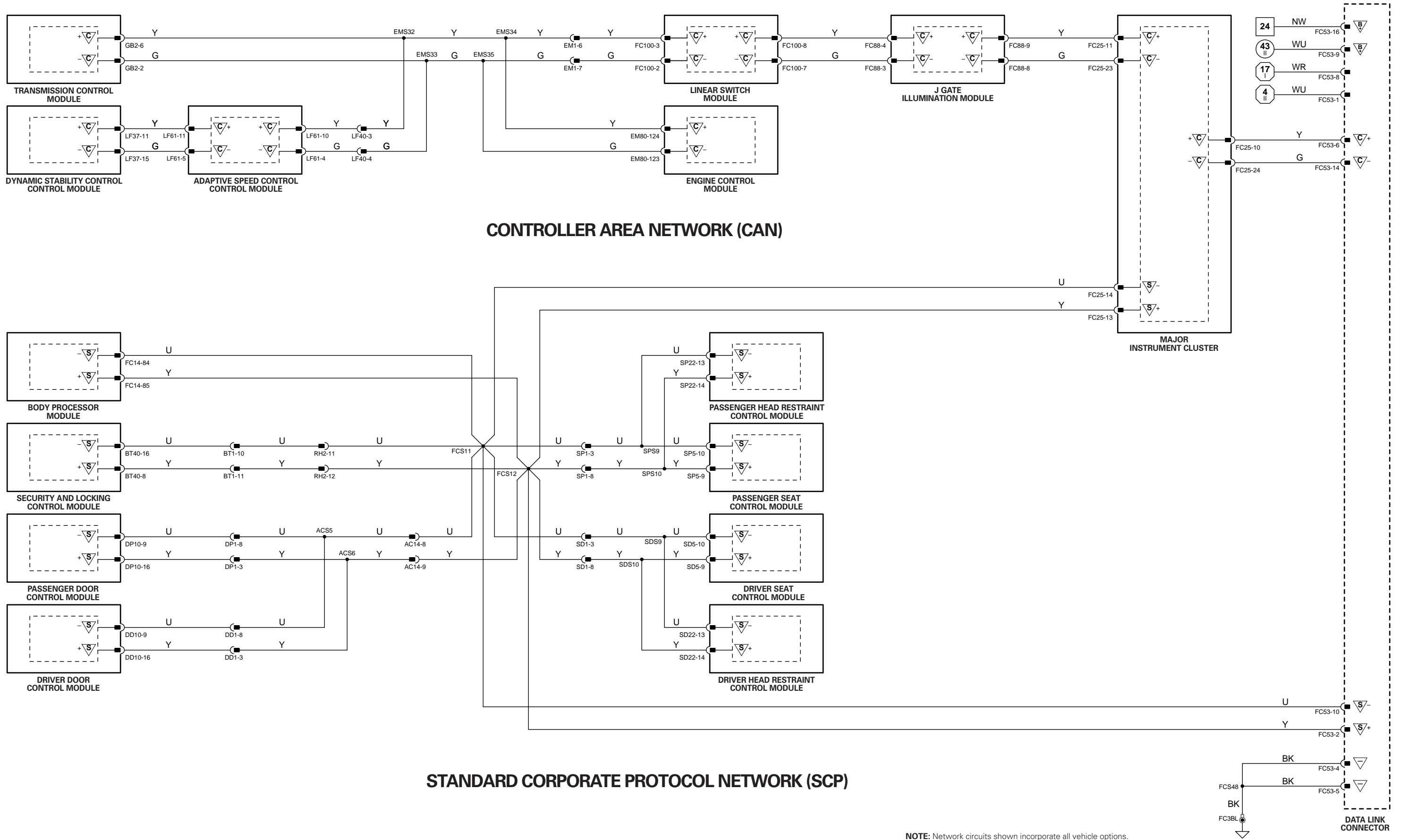
Connector	Connector Description	Location
AC14	14-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BT1	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
DD1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO DRIVER DOOR HARNESS	DRIVER SIDE 'A' POST MOUNTING BRACKET/ 'A' POST TRIM
DP1	23-WAY / BLACK / CLIMATE CONTROL HARNESS TO PASSENGER DOOR HARNESS	PASSENGER SIDE 'A' POST / 'A' POST TRIM
EM1	20-WAY / WHITE / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF40	13-WAY / BLACK / ENGINE MANAGEMENT HARNESS TO LEFT FORWARD HARNESS	ENGINE COMPARTMENT / FORWARD OF BRAKE FLUID RESERVOIR
SD1	14-WAY / YELLOW / FASCIA HARNESS TO DRIVER SEAT HARNESS	BELOW DRIVER SEAT
SP1	14-WAY / YELLOW / FASCIA HARNESS TO PASSENGER SEAT HARNESS	BELOW PASSENGER SEAT

GROUNDS

Ground	Location
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE

NOTE: Refer to the Appendix at the rear of this book for Network Messages.

Refer to the front of this book for detailed information and illustrations regarding the location and identification of harnesses, relays, fuses, grounds, control modules and control module pins.



1 → 8 Fig. 01.1	9 → 52 Fig. 01.2	6 → 18 Fig. 01.4	61 → 93 Fig. 01.6
1 → 5 Fig. 01.1	53 → 87 Fig. 01.3	19 → 60 Fig. 01.5	1 → 17 Fig. 02.1

▽ Input	⌚ Battery Voltage	⌚ Sensor/Signal Supply V	⌚ ACP	⌚ SCP
▽ Output	⌚ Power Ground	⌚ Sensor/Signal Ground	⌚ CAN	⌚ Serial and Encoded Data

VARIANT: All Vehicles
 VIN RANGE: All
 DATE OF ISSUE: December 2002

Fig. 21.2**COMPONENTS**

Component	Connector(s)	Connector Description	Location
ADAPTIVE DAMPING CONTROL MODULE	BT69	35-WAY / BLACK	TRUNK / ADJACENT TO ELECTRICAL CARRIER
AIR CONDITIONING CONTROL MODULE	AC1 AC2 AC3 AC4	26-WAY / GREY 16-WAY / GREY 12-WAY / GREY 22-WAY / GREY	A/C UNIT / RH SIDE
BODY PROCESSOR MODULE	FC14	104-WAY / GREY	PASSENGER SIDE FASCIA / AIRBAG BRACKET
DATA LINK CONNECTOR	FC53	16-WAY / BLACK	BELOW DRIVER SIDE FUSE BOX
ENGINE CONTROL MODULE	EM80	134-WAY / BLACK	ENGINE COMPARTMENT / CONTROL MODULE ENCLOSURE
HID HEADLAMP UNIT – LH	LF30	9-WAY / BLACK	LH HEADLAMP ASSEMBLY
HID HEADLAMP UNIT – RH	LF23	9-WAY / BLACK	RH HEADLAMP ASSEMBLY
KEY TRANSPONDER MODULE	FC22	20-WAY / GREEN	ADJACENT TO DRIVER SIDE FUSE BOX
PARKING AID CONTROL MODULE	BT4 BT5	16-WAY / WHITE 6-WAY / BLACK	TRUNK / SPARE WHEEL WELL
RESTRAINTS CONTROL MODULE	FC8 FC9	24-WAY / BLACK 40-WAY / BLACK	CENTER CONSOLE
SECURITY SOUNDER – ACTIVE (ROW ONLY)	LF18	6-WAY / BLACK	REARWARD OF RIGHT FRONT HEADLAMP

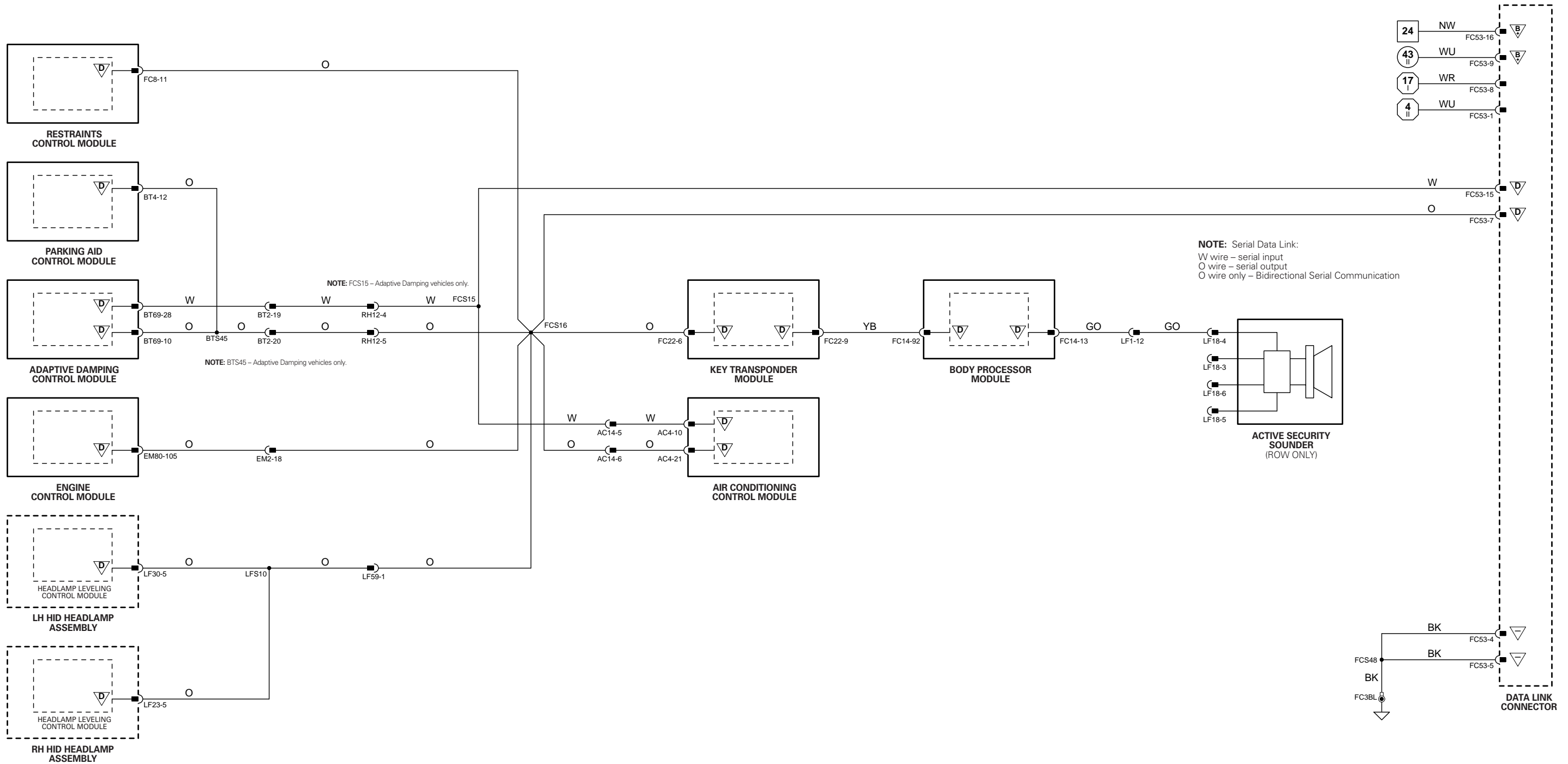
HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
AC14	14-WAY / GREY / INSTRUMENT PANEL HARNESS TO CLIMATE CONTROL HARNESS	FASCIA BOTTOM CONNECTOR MOUNTING BRACKET / RIGHT HAND SIDE
BT2	20-WAY / WHITE / REARWARD HARNESS TO TRUNK HARNESS	TRUNK / ABOVE RIGHT HAND REAR WHEEL ARCH
EM2	20-WAY / YELLOW / ENGINE MANAGEMENT HARNESS TO FASCIA HARNESS	ADJACENT TO RIGHT HAND BLOWER MOTOR
LF1	20-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
LF59	12-WAY / GREY / FASCIA HARNESS TO LEFT FORWARD HARNESS	LEFT HAND 'A' POST CONNECTOR MOUNTING BRACKET / 'A' POST TRIM
RH12	18-WAY / YELLOW / FASCIA HARNESS TO REARWARD HARNESS	REAR OF CENTER CONSOLE ASSEMBLY

GROUNDS

Ground	Location
FC3	TRANSMISSION TUNNEL, LEFT HAND SIDE

NOTE: Refer to the Appendix at the rear of this book for Network Messages.





This Appendix contains a listing of SCP and CAN Network messages.

NOTE: Passive Anti-Theft System and Security System messages are not included in this appendix.

The following acronyms and abbreviations are used throughout this section:

A/C	Air Conditioning
ASC	Adaptive Speed Control
ASCCM	Adaptive Speed Control Control Module
BPM	Body Processor Module
CAN	Controller Area Network
CM	Control Module
DDCM	Driver Door Control Module
DHRCM	Driver Head Restraint Control Module
DSC	Dynamic Stability Control
DSCCM	Dynamic Stability Control Control Module
DSCM	Driver Seat Control Module
DTC	Diagnostic Trouble Code
ECM	Engine Control Module
IC	Instrument Cluster
ID	Identification
JGM (ILL)	J Gate Module (Illumination)
LSM	Linear Switch Module
MIL	Malfunction Indicator Lamp
PDCM	Passenger Door Control Module
PHRCM	Passenger Head Restraint Control Module
PID	Parameter Identification
PSCM	Passenger Seat Control Module
SLCM	Security and Locking Control Module
SCP	Standard Corporate Protocol Network
TCM	Transmission Control Module
WDS	Worldwide Diagnostic System



SCP Message Matrix

Message Name	Source	Receivers													
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS				
ASC Driver Intervene Chime Command	IC		X												
All Photo Cell Dark Status - No (False)	BPM			X											
All Photo Cell Dark Status - Yes (True)	BPM			X											
Hood Ajar	BPM	X		X											
Hood Closed	BPM	X		X											
Trunk Ajar	SLCM		X	X											
Trunk Closed	SLCM		X	X											
BPM Data Transfer	WDS	X	X		X	X	X	X							
BPM Diagnostic Command	WDS		X												
BPM Diagnostic Routine Results	BPM														X
BPM DTCs Cleared	BPM														X
BPM DTCs Report	BPM														X
BPM Entering Sleep Mode	BPM	X		X	X	X	X	X							
BPM Freeze Frame Data	BPM														X
BPM General Response	BPM														X
BPM Memory Data	BPM														X
BPM Not Programmed	BPM			X											
BPM PID Data	BPM														X
BPM Security Access Response	BPM														X
BPM Write PID Response	BPM														X
Brake Pedal Pressed	IC		X												
Charging OK	IC					X							X		
Close Convertible Top	BPM	X													
Close Passenger Window	DDCM										X				
Convertible Vehicle	BPM	X													
DDCM Data Transfer	WDS	X	X		X	X	X	X							
DDCM Diagnostic Routine Results	DDCM														X
DDCM DTCs Cleared	DDCM														X
DDCM DTCs Report	DDCM														X
DDCM Entering Sleep Mode	DDCM	X	X	X		X	X	X						X	
DDCM Freeze Frame Data	DDCM														X



SCP Message Matrix

Message Name	Source	Receivers														
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS					
DDCM General Response	DDCM														X	
DDCM Memory 1 Recalled	DDCM		X													
DDCM Memory 2 Recalled	DDCM		X													
DDCM Memory Data	DDCM														X	
DDCM Not Programmed	DDCM			X												
DDCM PID Data	DDCM														X	
DDCM Security Access Response	DDCM														X	
DDCM Write PID Response	DDCM														X	
DHRCM Entering sleep mode	DHRCM	X	X	X	X	X					X	X				
DHRCM Memory 1 recalled	DHRCM		X													
DHRCM Memory 2 recalled	DHRCM		X								X	X				
Dip Beam Off	BPM			X												
Dip Beam On	BPM			X												
Driver Door Ajar	DDCM	X	X	X			X									
Driver Door Closed	DDCM	X	X	X							X					
Driver Door Locked	SLCM		X		X							X				
Driver Door Super locked	DDCM		X													
Driver Door Unlocked	SLCM		X		X							X				
Driver Door Unsuper locked	DDCM		X													
Driver Lock Switch Status	DDCM	X	X													
Driver Mirror Down	DDCM											X				
Driver Mirror Up	DDCM											X				
Driver Seat Heater Switch Press	BPM									X						
Driver Seat Heater Tell Tale Off	DSCM		X													
Driver Seat Heater Tell Tale On	DSCM		X													
Driver Window Position	DDCM	X														
DSCM Data Transfer	WDS	X	X		X	X					X	X				
DSCM Diagnostic Routine Results	DSCM															X
DSCM DTCs Cleared	DSCM															X
DSCM DTCs Report	DSCM															X
DSCM Entering Sleep Mode	DSCM	X	X	X	X	X					X	X			X	
DSCM Freeze Frame Data	DSCM															X



SCP Message Matrix

Message Name	Source	Receivers													
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS				
DSCM General Response	DSCM														X
DSCM Memory 1 Recalled	DSCM		X												
DSCM Memory 2 Recalled	DSCM		X												
DSCM Memory Data	DSCM														X
DSCM Not Programmed	DSCM			X											
DSCM PID Data	DSCM														X
DSCM Security Access Response	DSCM														X
DSCM Write PID Response	DSCM														X
Engine Running	IC	X	X			X						X			
Fold Flat Mirrors	DDCM					X						X			
Glass Break Detected	BPM	X													
Hazards Off	BPM			X											
Hazards On	BPM			X											
Convertible Top Latch Status	BPM														
Convertible Top Latch Warning Off	SLCM			X											
Convertible Top Latch Warning On	SLCM			X											
IC Entering Sleep Mode	IC	X	X		X	X	X	X	X	X	X	X	X	X	
Ignition Status	BPM	X		X	X	X	X	X	X	X	X	X	X	X	
Inertia Switch Active	BPM				X										
Inertia Switch Inactive	BPM				X										
Interior Lights Off	BPM			X											
Interior Lights On	BPM			X											
J-Gate Not-In-Park Switch Active	BPM	X			X	X	X	X	X	X	X	X	X	X	
J-Gate Not-In-Park Switch Inactive	BPM				X	X	X	X	X	X	X	X	X	X	
Key In Ignition	BPM	X			X	X	X	X	X	X	X	X	X	X	
Key Not In Ignition	BPM	X			X	X	X	X	X	X	X	X	X	X	
Key Valid with VIN Data	BPM	X		X											
Left Turn Signal Lamp Off	BPM			X											
Left Turn Signal Lamp On	BPM			X											
Left Hand Drive Vehicle	BPM			X									X		
Lock Front Doors	DDCM		X												



SCP Message Matrix

Message Name	Source	Receivers													
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS				
Lock Front Doors	PDCM		X												
Low Washer Fluid Warning Off	BPM			X											
Low Washer Fluid Warning On	BPM			X											
Main Beam Flash Off	BPM	X													
Main Beam Flash On	BPM	X													
Main Beam Off	BPM			X											
Main Beam On	BPM			X											
Network Awake (BPM)	BPM	X		X	X	X	X	X	X	X	X	X	X	X	X
Network Awake (DDCM)	DDCM	X	X	X											
Network Awake (DHRCM)	DHRCM	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Network Awake (DSCM)	DSCM	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Network Awake (IC)	IC	X	X		X	X	X	X	X	X	X	X	X	X	X
Network Awake (PDCM)	PDCM	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Network Awake (PHRCM)	PHRCM	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Network Awake (PSCM)	PSCM	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Network Awake (SLCM)	SLCM		X	X	X	X	X	X	X	X	X	X	X	X	X
Non Convertible Vehicle	BPM	X													
Open Trunk	BPM	X													
Open Fuel Filler Flap	BPM	X													
Open Convertible Top	BPM	X													
Open Passenger Window	DDCM										X				
Passenger Door Ajar	PDCM	X	X	X								X	X	X	X
Passenger Door Closed	PDCM	X	X	X									X	X	X
Passenger Door Locked	SLCM		X		X						X				
Passenger Door Super locked	PDCM	X	X												
Passenger Door Unlocked	SLCM	X	X								X				
Passenger Door Unsuper locked	PDCM	X	X												
Passenger Lock Switch Status	PDCM	X	X												
Passenger Mirror Down	DDCM											X			
Passenger Mirror Left	DDCM											X			
Passenger Mirror Right	DDCM											X			



SCP Message Matrix

Message Name	Source	Receivers																		
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS									
Passenger Mirror Up	DDCM							X												
Passenger Seat Heater Switch Press	BPM												X							
Passenger Seat Heater Tell Tale Off	PSCM		X																	
Passenger Seat Heater Tell Tale On	PSCM		X																	
Passenger Window Position	PDCM	X																		
PDCM Data Transfer	WDS	X	X		X	X						X	X							X
PDCM Diagnostic Routine Results	PDCM																			X
PDCM DTCs Cleared	PDCM																			X
PDCM DTCs Report	PDCM																			X
PDCM Entering Sleep Mode	PDCM	X	X	X	X	X							X	X						X
PDCM Freeze Frame Data	PDCM																			X
PDCM General Response	PDCM																			X
PDCM Memory 1 Recalled	PDCM		X																	
PDCM Memory 2 Recalled	PDCM		X																	
PDCM Memory Data	PDCM																			X
PDCM Not Programmed	PDCM			X																
PDCM PID Data	PDCM																			X
PDCM Security Access Response	PDCM																			X
PDCM Write PID Response	PDCM																			X
PHRCM Entering Sleep mode	PHRCM	X	X	X	X	X						X	X							X
Position Driver Window	SLCM				X															
Position Passenger Window	SLCM											X								
Position Rear Quarters	SLCM		X																	
PSCM Data Transfer	WDS	X	X		X	X						X	X							X
PSCM Diagnostic Routine Results	PSCM																			X
PSCM DTCs Cleared	PSCM																			X
PSCM DTCs Report	PSCM																			X
PSCM Entering Sleep Mode	PSCM	X	X	X	X	X						X	X							X
PSCM Freeze Frame Data	PSCM																			X
PSCM General Response	PSCM																			X
PSCM Memory Data	PSCM																			X



SCP Message Matrix

Message Name	Source	Receivers													
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS				
PSCM Not Programmed	PSCM			X											X
PSCM PID Data	PSCM														X
PSCM Security Access Response	PSCM														X
PSCM Write PID Response	PSCM														X
Rear Bulb Failure	SLCM			X											
Rear Bulbs OK	SLCM			X											
Rear Fog Lamps Off	BPM	X													
Rear Fog Lamps On	BPM	X													
Rear Fog Lamps Off	SLCM		X												
Rear Fog Lamps On	SLCM		X												
Recall Memory 1	DDCM		X			X			X						
Recall Memory 2	DDCM		X			X			X						
Recoding Key Ring Message	SLCM			X											
Recoding Key Ring Message Off	SLCM			X											
Remote Trunk Release	SLCM		X												
Remote Headlamp Convenience Off	SLCM		X												
Remote Headlamp Convenience On	SLCM		X												
Remote Lock	SLCM		X												
Remote Panic	SLCM				X						X				
Remote Super lock	SLCM				X						X				
Remote Unlock	SLCM		X		X						X				
Request All Photo Cell Dark Status	IC		X												
Request A3Wiper Mode Status															
Request Hood Ajar Status	SLCM		X												
Request Hood Ajar Status	IC		X												
Request Trunk Ajar Status	BPM	X													
Request Trunk Ajar Status	IC	X													
Request BPM Clear DTCs	WDS	X	X		X						X			X	
Request BPM Data Link Security Access	WDS	X	X		X						X			X	
Request BPM Data Transfer Exit	WDS	X	X		X						X			X	
Request BPM Diagnostic Routine Entry	WDS	X	X		X						X			X	



SCP Message Matrix

Message Name	Source	Receivers													
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS				
Request BPM Diagnostic Routine Exit	WDS	X	X		X	X		X	X						
Request BPM Diagnostic Routine Results	WDS	X	X		X	X		X	X						
Request BPM DTCs	WDS	X	X		X	X		X	X						
Request BPM Enter Diagnostic Mode	WDS	X	X		X	X		X	X						
Request BPM Freeze Frame Data	WDS	X	X		X	X		X	X						
Request BPM Input Integrity Test State Entry	WDS	X	X		X	X		X	X						
Request BPM Memory Data	WDS	X	X		X	X		X	X						
Request BPM PID	WDS	X	X		X	X		X	X						
Request BPM Return to Normal Operation	WDS	X	X		X	X		X	X						
Request BPM Write PID	WDS	X	X		X	X		X	X						
Request Data Download to BPM	WDS	X	X		X	X		X	X						
Request Data Download to DDCM	WDS	X	X		X	X		X	X						
Request Data Download to DSCM	WDS	X	X		X	X		X	X						
Request Data Download to PDCM	WDS	X	X		X	X		X	X						
Request Data Download to PSCM	WDS	X	X		X	X		X	X						
Request Data Download to SLCM	WDS	X	X		X	X		X	X						
Request DDCM Clear DTCs	WDS	X	X		X	X		X	X						
Request DDCM Data Link Security Access	WDS	X	X		X	X		X	X						
Request DDCM Data Transfer Exit	WDS	X	X		X	X		X	X						
Request DDCM Diagnostic Routine Entry	WDS	X	X		X	X		X	X						
Request DDCM Diagnostic Routine Exit	WDS	X	X		X	X		X	X						
Request DDCM Diagnostic Routine Results	WDS	X	X		X	X		X	X						
Request DDCM DTCs	WDS	X	X		X	X		X	X						
Request DDCM Enter Diagnostic Mode	WDS	X	X		X	X		X	X						
Request DDCM Freeze Frame Data	WDS	X	X		X	X		X	X						
Request DDCM Input Integrity Test State Entry	WDS	X	X		X	X		X	X						
Request DDCM Memory Data	WDS	X	X		X	X		X	X						
Request DDCM PID	WDS	X	X		X	X		X	X						
Request DDCM Return to Normal Operation	WDS	X	X		X	X		X	X						
Request DDCM Write PID	WDS	X	X		X	X		X	X						
Request Dip Beam Status	IC		X												



SCP Message Matrix

Message Name	Source	Receivers																		
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS									
Request Driver Door Ajar Status	SLCM				X															
Request Driver Door Ajar Status	BPM				X															
Request Driver Door Ajar Status	IC				X															
Request Driver Door Ajar Status	DHRCM				X															
Request Driver Door Ajar Status	DSCM				X															
Request Driver Door Lock Status	DDCM	X																		
Request Driver Key Barrel Status	SLCM				X															
Request Driver Key Barrel Status	BPM				X															
Request Driver Key Barrel Status	PDCM				X															
Request Driver Seat Heater Tell Tale Status	BPM					X														
Request Driver Window Position	SLCM				X															
Request Driver Door Switch pack Passenger Window Switch Status	PDCM				X															
Request DSCM Clear DTCs	WDS	X	X		X	X			X	X			X							
Request DSCM Data Link Security Access	WDS	X	X		X	X			X	X			X							
Request DSCM Data Transfer Exit	WDS	X	X		X	X			X	X			X							
Request DSCM Diagnostic Routine Entry	WDS	X	X		X	X			X	X			X							
Request DSCM Diagnostic Routine Exit	WDS	X	X		X	X			X	X			X							
Request DSCM Diagnostic Routine Results	WDS	X	X		X	X			X	X			X							
Request DSCM DTCs	WDS	X	X		X	X			X	X			X							
Request DSCM Enter Diagnostic Mode	WDS	X	X		X	X			X	X			X							
Request DSCM Freeze Frame Data	WDS	X	X		X	X			X	X			X							
Request DSCM Input Integrity Test State Entry	WDS	X	X		X	X			X	X			X							
Request DSCM Memory Data	WDS	X	X		X	X			X	X			X							
Request DSCM PID	WDS	X	X		X	X			X	X			X							
Request DSCM Return to Normal Operation	WDS	X	X		X	X			X	X			X							
Request DSCM Write PID	WDS	X	X		X	X			X	X			X							
Request Hazard Status	IC																			
Request Convertible Top Latch Switches Status	SLCM																			
Request Ignition Status	SLCM																			
Request Ignition Status	IC																			
Request Ignition Status	DDCM																			



SCP Message Matrix

Message Name	Source	Receivers																		
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS									
Request Ignition Status	DHRCM		X																	
Request Ignition Status	DSCM		X																	
Request Ignition Status	PDCM		X																	
Request Ignition Status	PHRCM		X																	
Request Ignition Status	PSCM		X																	
Request Inertia Switch Status	DDCM		X																	
Request Inertia Switch Status	PDCM		X																	
Request Interior Lighting Status	IC		X																	
Request J-Gate Status	DSCM		X																	
Request J-Gate Status	PSCM		X																	
Request Key In Status	SLCM		X																	
Request Key In Status	DDCM		X																	
Request Key In Status	PDCM		X																	
Request Left Turn Signal Status	IC		X																	
Request Main Beam Status	IC		X																	
Request Passenger Door Ajar Status	SLCM											X								
Request Passenger Door Ajar Status	BPM											X								
Request Passenger Door Ajar Status	IC											X								
Request Passenger Door Ajar Status	PHRCM											X								
Request Passenger Door Lock Status	PDCM												X							
Request Passenger Key Barrel Status	SLCM											X								
Request Passenger Key Barrel Status	BPM												X							
Request Passenger Key Barrel Status	DDCM													X						
Request Passenger Seat Heater Tell Tale Status	BPM														X					
Request Passenger Window Position	SLCM														X					
Request PDCM Clear DTCs	WDS		X						X						X					
Request PDCM Data Link Security Access	WDS		X						X						X					
Request PDCM Data Transfer Exit	WDS		X						X						X					
Request PDCM Diagnostic Routine Entry	WDS		X						X						X					
Request PDCM Diagnostic Routine Exit	WDS		X						X						X					
Request PDCM Diagnostic Routine Results	WDS		X						X						X					



SCP Message Matrix

Message Name	Source	Receivers																		
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS									
Request PDCM DTCs	WDS	X	X		X	X		X	X											
Request PDCM Enter Diagnostic Mode	WDS	X	X		X	X		X	X											
Request PDCM Freeze Frame Data	WDS	X	X		X	X		X	X											
Request PDCM Input Integrity Test State Entry	WDS	X	X		X	X		X	X											
Request PDCM Memory Data	WDS	X	X		X	X		X	X											
Request PDCM PID	WDS	X	X		X	X		X	X											
Request PDCM Return to Normal Operation	WDS	X	X		X	X		X	X											
Request PDCM Write PID	WDS	X	X		X	X		X	X											
Request PSCM Clear DTCs	WDS	X	X		X	X		X	X											
Request PSCM Data Link Security Access	WDS	X	X		X	X		X	X											
Request PSCM Data Transfer Exit	WDS	X	X		X	X		X	X											
Request PSCM Diagnostic Routine Entry	WDS	X	X		X	X		X	X											
Request PSCM Diagnostic Routine Exit	WDS	X	X		X	X		X	X											
Request PSCM Diagnostic Routine Results	WDS	X	X		X	X		X	X											
Request PSCM DTCs	WDS	X	X		X	X		X	X											
Request PSCM Enter Diagnostic Mode	WDS	X	X		X	X		X	X											
Request PSCM Freeze Frame Data	WDS	X	X		X	X		X	X											
Request PSCM Input Integrity Test State Entry	WDS	X	X		X	X		X	X											
Request PSCM Memory Data	WDS	X	X		X	X		X	X											
Request PSCM PID	WDS	X	X		X	X		X	X											
Request PSCM Return to Normal Operation	WDS	X	X		X	X		X	X											
Request PSCM Write PID	WDS	X	X		X	X		X	X											
Request Rear Bulb Fail Status	IC	X																		
Request Rear Fog Command	SLCM		X																	
Request Rear Fog Lamps Status	BPM	X																		
Request Remote Headlamp Convenience Status	BPM	X																		
Request Right Turn Signal Status	IC		X																	
Request Seatbelt Chime Status	BPM									X										
Request Security Arm Status	BPM	X																		
Request Security Arm Status	DDCM	X																		
Request Security Arm Status	PDCM	X																		



SCP Message Matrix

Message Name	Source	Receivers																		
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS									
Request Side Lights Status	IC		X																	
Request SLCM Clear DTCs	WDS	X	X		X	X				X		X		X						
Request SLCM Data Link Security Access	WDS	X	X		X	X				X		X		X						
Request SLCM Data Transfer Exit	WDS	X	X		X	X				X		X		X						
Request SLCM Diagnostic Routine Entry	WDS	X	X		X	X				X		X		X						
Request SLCM Diagnostic Routine Exit	WDS	X	X		X	X				X		X		X						
Request SLCM Diagnostic Routine Results	WDS	X	X		X	X				X		X		X						
Request SLCM DTCs	WDS	X	X		X	X				X		X		X						
Request SLCM Enter Diagnostic Mode	WDS	X	X		X	X				X		X		X						
Request SLCM Freeze Frame Data	WDS	X	X		X	X				X		X		X						
Request SLCM Input Integrity Test State Entry	WDS	X	X		X	X				X		X		X						
Request SLCM Memory Data	WDS	X	X		X	X				X		X		X						
Request SLCM PID	WDS	X	X		X	X				X		X		X						
Request SLCM Return to Normal Operation	WDS	X	X		X	X				X		X		X						
Request SLCM Write PID	WDS	X	X		X	X				X		X		X						
Request Super-lock Status	BPM								X											
Request Vehicle Drive Side	DDCM		X																	
Request Vehicle Lock Status	SLCM				X															
Request Vehicle Lock Status	BPM								X											
Request Washer Fluid Status	IC		X																	
Request Windscreen Wiper Motor Status	IC		X																	
Reverse Gear Selected	IC																			
Right Turn Signal Lamp Off	BPM			X																
Right Turn Signal Lamp On	BPM			X																
Right Hand Drive Vehicle	BPM				X															
Save Memory 1	DDCM		X											X						
Save Memory 2	DDCM		X											X						
Seatbelt Chime Off	DSCM		X																	
Seatbelt Chime On	DSCM		X																	
Seatbelt Tell Tale Off	DSCM			X																
Seatbelt Tell Tale On	DSCM			X																



SCP Message Matrix

Message Name	Source	Receivers												
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS			
Security Armed	SLCM		X		X			X						
Security Audible Indication	SLCM		X											
Security Audible Indication	IC		X											
Security Disarmed	SLCM		X		X			X						
Side Lights Off	BPM			X										
Side Lights On	BPM			X										
SLCM Data Transfer	WDS	X	X		X	X		X			X			
SLCM Diagnostic Routine Results	SLCM													X
SLCM DTCs Cleared	SLCM													X
SLCM DTCs Report	SLCM													X
SLCM Entering Sleep Mode	SLCM		X	X	X	X		X	X	X	X		X	
SLCM Freeze Frame Data	SLCM													X
SLCM General Response	SLCM													X
SLCM Memory Data	SLCM													X
SLCM Not Programmed	SLCM			X										
SLCM PID Data	SLCM													X
SLCM Security Access Response	SLCM													X
SLCM Write PID Response	SLCM													X
Stop Driver Mirror	DDCM										X			
Stop Fuel Filler Flap Open	BPM		X											
Stop Global Window Close	SLCM		X		X						X			
Stop Convertible Top Close	BPM	X												
Stop Convertible Top Open	BPM	X												
Stop Passenger Mirror	DDCM										X			
Stop Passenger Window Close	DDCM										X			
Stop Passenger Window Open	DDCM										X			
Super lock Driver Door	PDCM													
Super lock Passenger Door	DDCM													
Tester Present to BPM	WDS	X	X		X	X		X			X		X	
Tester Present to DDCM	WDS	X	X		X	X		X			X		X	
Tester Present to DSCM	WDS	X	X		X	X		X			X		X	



SCP Message Matrix

Message Name	Source	Receivers												
		SLCM	BPM	IC	DDCM	DSCM	DHRCM	PDCM	PSCM	PHRCM	WDS			
Tester Present to PDCM	WDS	X	X		X	X		X	X					
Tester Present to PSCM	WDS	X	X		X	X		X	X					
Tester Present to SLCM	WDS	X	X		X	X		X	X					
Unfold Mirrors	DDCM					X								
Unlock Driver Door	PDCM				X									
Unlock Passenger Door	DDCM									X				
Valet Mode Message	BPM			X										
Valet Mode Message Off	BPM			X										
Valet Mode Off	BPM	X												
Valet Mode On	BPM	X												
Vehicle Security Acknowledge	IC		X											
Vehicle Locked	DDCM	X	X											
Vehicle Speed	IC	X	X		X					X			X	
Vehicle Unlocked	DDCM	X	X											
Wake-up (BPM)	BPM													
Wake-up (DDCM)	DDCM													
Wake-up (DHRCM)	DHRCM													
Wake-up (DSCM)	DSCM													
Wake-up (IC)	IC													
Wake-up (PDCM)	PDCM													
Wake-up (PHRCM)	PHRCM													
Wake-up (PSCM)	PSCM													
Wake-up (SLCM)	SLCM													
Windscreen Wiper Motor Status	BPM			X										



CAN Message Matrix

Message Name	Source	Receivers											
		DSCCM	ECM	TCM	IC	ASCCM	JGM (ILL)	LSM	WDS				
CAN FLASH PROGRAM WDS ECM	WDS		X										
CAN FLASH PROGRAM WDS TCM	WDS			X									
CAN FLASH PROGRAM ECM WDS	ECM											X	
CAN FLASH PROGRAM TCM WDS	TCM												X
CAN ENGINE TORQUE REQUEST	DSCCM		X										
CAN TEMPORARY TORQUE REQUEST	DSCCM		X										
CAN ENGINE DRAG TORQUE REQUEST	DSCCM		X										
CAN BRAKE LINE PRESSURE	DSCCM			X									
CAN YAW RATE SIGNAL	DSCCM							X					
CAN LATERAL ACCELERATION SIGNAL	DSCCM							X					
CAN STEERING WHEEL ANGLE	DSCCM			X				X					
CAN STEERING WHEEL SPEED	DSCCM									X			
CAN INDICATED ENGINE TORQUE	ECM		X										
CAN ENGINE FRICTION TORQUE	ECM		X										
CAN ACTUAL ENGINE TORQUE	ECM		X										
CAN DRIVER DEMAND TORQUE	ECM		X										
CAN TORQUE REDUCTION REQUEST	TCM			X									
CAN TRANSMISSION TORQUE LIMIT	TCM		X										
CAN TORQUE CONVERTER SLIP	TCM		X										
CAN TRANSMISSION INPUT SPEED	TCM		X										
CAN TRANSMISSION OUTPUT SPEED	TCM		X										
CAN DSC CONFIGURATION	DSCCM									X			
CAN VEHICLE REFERENCE SPEED	DSCCM		X										
CAN DSC FAULT CODES	DSCCM		X										
CAN ODOMETER ROLLING COUNT	DSCCM								X				
CAN DSC MALFUNCTION	DSCCM		X						X				
CAN OBD II DSC CLEAR ACKNOWLEDGE	DSCCM		X										
CAN DSC FAULT CODE MIL STATUS	DSCCM		X										
CAN DSC STATUS	DSCCM												
CAN TRACTION SHIFT MAP	DSCCM			X									
CAN DSC ENGINE TORQUE CONTROL	DSCCM		X						X				



CAN Message Matrix

Message Name	Source	Receivers											
		DSCCM	ECM	TCM	IC	ASCCM	JGM (ILL)	LSM	WDS				
CAN DSC BRAKE CONTROL	DSCCM		X										
CAN YAW CONTROL	DSCCM		X										
CAN DSC SWITCH STATUS	DSCCM		X	X							X		
CAN TRANS INPUT INDICATED TORQUE	ECM	X		X									
CAN ENGINE ACCELERATION	ECM	X											
CAN THROTTLE POSITION	ECM			X									
CAN PEDAL POSITION	ECM	X		X				X					
CAN ENGINE SPEED	ECM	X		X									
CAN ALTERNATOR STATUS	ECM				X								
CAN CRUISE STATUS	ECM			X									
CAN KICKDOWN	ECM			X									
CAN OBD II CLEAR FAULT CODES	ECM	X		X									
CAN BRAKE PEDAL PRESSED	ECM	X		X				X					
CAN ENGINE CRANK IN PROGRESS	ECM	X		X				X					
CAN TRACTION ACKNOWLEDGE	ECM	X											
CAN FUEL CAP WARNING	ECM				X								
CAN ASC DISPLAY COMMANDS	ASCCM				X								
CAN HEADWAY SETTING	ASCCM				X								
CAN FOLLOW WARNING LIGHT	ASCCM				X								
CAN EXTRA CHIME	ASCCM				X								
CAN DISPLAY SET SPEED	ASCCM				X								
CAN FOLLOW SPEED	ASCCM		X										
CAN BRAKE DEMAND PRESSURE	ASCCM	X											
CAN ASC STATUS	ASCCM	X			X								
CAN ASC CONFIGURATION FLAG	ASCCM				X								
CAN ACTIVE BRAKE BOOSTER ENABLE	ASCCM	X											
CAN ASC SPARE													
CAN SET SPEED	ECM			X								X	
CAN TARGET SPEED	ECM											X	
CAN ECM ASC FAIL	ECM											X	
CAN HEADWAY INCREMENT	ECM											X	



CAN Message Matrix

Message Name	Source	Receivers									
		DSCCM	ECM	TCM	IC	ASCCM	JGM (ILL)	LSM	WDS		
CAN CANCEL REQUEST	ECM					X					
CAN BRAKE ACTUAL PRESSURE	DSCCM			X		X					
CAN BRAKE PRESSURE DEMAND ACKNOWLEDGE	DSCCM					X					
CAN ACTIVE BRAKE BOOSTER STATUS	DSCCM					X					
CAN PARK BRAKE STATUS	IC		X	X							
CAN DIPPED BEAM STATUS	IC		X								
CAN OIL PRESSURE LOW	IC										
CAN A/C ELECTRICAL LOAD STATUS	IC		X								
CAN FUEL LEVEL DAMPED	IC		X								
CAN FUEL LEVEL RAW 1	IC		X								
CAN RIGHT TURN SIGNAL STATUS	IC					X					
CAN LEFT TURN SIGNAL STATUS	IC					X					
CAN WIPER STATUS	IC					X					
CAN NATURAL LIGHT	IC					X					
CAN TRIP UNITS	IC		X			X					
CAN IC ASC ENABLE	IC		X			X					
CAN A/C CLUTCH REQUEST	IC		X								
CAN BACKLIGHT STATUS	IC					X					
CAN BACKLIGHT INTENSITY	IC					X					
CAN J-GATE POSITION SELECTED	LSM			X							
CAN INTERMEDIATE POSITION FAULT	LSM			X							
CAN J-GATE FAULT	LSM			X	X						
CAN PERFORMANCE MODE SWITCH	LSM			X							
CAN GEAR POSITION ACTUAL	TCM	X	X								
CAN GEAR POSITION SELECTED	TCM		X		X				X		
CAN TRANSMISSION SHIFT MAP	TCM		X								
CAN TRANSMISSION OIL TEMPERATURE	TCM		X		X						
CAN TRANSMISSION MALFUNCTION	TCM		X		X						
CAN TCM CONFIGURATION FLAG	TCM				X						
CAN TORQUE CONVERTER STATUS	TCM		X								
CAN GEAR SELECTION FAULT	TCM		X						X		



CAN Message Matrix

Message Name	Source	Receivers											
		DSCCM	ECM	TCM	IC	ASCCM	JGM (ILL)	LSM	WDS				
CAN IDLE NEUTRAL CONTROL	TCM		X										
CAN PERFORMANCE MODE INDICATION	TCM											X	
CAN TCM FAULT CODE MIL STATUS	TCM		X										
CAN OBD II TCM CLEAR ACKNOWLEDGE	TCM		X										
CAN TRANSMISSION FAULT CODES	TCM		X										
CAN GEAR POSITION TARGET	TCM		X										
CAN J-GATE SELECTION FAULT	TCM		X									X	
CAN TORQUE CONVERTER MULTIPLICATION	TCM		X										
CAN A/C PRESSURE TRANSDUCER	ECM						X						
CAN A/C LOAD INHIBIT	ECM						X						
CAN FUEL USED	ECM						X						
CAN ENGINE OBD II MIL	ECM						X						
CAN THROTTLE MALFUNCTION RED	ECM						X						
CAN THROTTLE MALFUNCTION AMBER	ECM						X						
CAN ECM FAULT CODE MIL STATUS	ECM			X									
CAN ECM CONFIGURATION FLAG	ECM						X						
CAN ENGINE FAULT CODES	ECM												
CAN ENGINE COOLANT TEMPERATURE	ECM					X							
CAN ENGINE OIL TEMPERATURE	ECM					X							
CAN BAROMETRIC PRESSURE	ECM					X							
CAN LH FRONT WHEEL SPEED	DSCCM		X							X			
CAN RH FRONT WHEEL SPEED	DSCCM		X							X			
CAN LH REAR WHEEL SPEED	DSCCM		X							X			
CAN RH REAR WHEEL SPEED	DSCCM		X							X			
CAN ODOMETER READING	IC		X			X							
CAN EMS SET SPEED	ECM								X				
CAN ADAPTIVE SPEED LIMIT DISPLAY COMMANDS	ECM								X				
CAN ADAPTIVE SPEED LIMIT STATUS	ECM								X				
CAN SPEED CONTROL DISPLAY COMMANDS	ECM								X				
CAN POWERTRAIN CONFIGURATION	ECM					X							
CAN DIAGNOSTIC DATA IN ECM	WDS		X										



CAN Message Matrix

Message Name	Source	Receivers								
		DSCCM	ECM	TCM	IC	ASCCM	JGM (ILL)	LSM	WDS	
CAN DIAGNOSTIC DATA IN TCM	WDS		X							
CAN DIAGNOSTIC DATA IN IC	WDS				X					
CAN DIAGNOSTIC DATA IN DSC	WDS	X								
CAN DIAGNOSTIC DATA OUT ECM	ECM									X
CAN DIAGNOSTIC DATA OUT TCM	TCM									X
CAN DIAGNOSTIC DATA OUT IC	IC									X
CAN DIAGNOSTIC DATA OUT DSC	DSCCM									X

