

Publication number S 96/SED © 1995 Jaguar Cars PRINTED IN USA

All rights reserved. All material contained herein is based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

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. Included are a Table of Contents, a Component Index, a description of the layout of the book, definitions of symbols and abbreviations used, and illustrations which identify the type and location of common vehicle 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 on the following pages should help to guide the user.

Standard Abbreviations

The following abbreviations are used throughout this Electrical Guide:

DI Direction Indicator

LH Left-Hand

- LHD Left-Hand Drive
- LWB Long Wheelbase
- NA Normally Aspirated
- NAS North American Specification
- RH Right-Hand
- RHD Right-Hand Drive
- ROW Rest of World
- SC Super Charged
- SRS Supplementary Restraint System
- SWB Short Wheelbase

VIN Vehicle Identification Number

Refer to the vehicle Service Manual for a glossary of standard terms and their abbreviations.

Vehicle Identification Numbers (VIN)

✓IN ranges are presented throughout the book in the following manner:
 ✓ VIN 123456 indicates "up to VIN 123456"; VIN 123456 → indicates "from VIN 123456 on".

Market Variants

A This Electrical Guide includes information for all market variants and specifications of the 1996 Sedan Range. The user must be certain to refer to the appropriate Figure (Fig.) in order to ensure that the information is specific to the particular vehicle. Market variants are detailed in the Table of Contents.

Vehicle Features – ROW

A This Electrical Guide includes all new / revised features for vehicles manufactured from VIN 746613 on (1995.75 Model Year). Some of the new / revised features were not introduced until VIN 754304 (1996 Model Year).

Vehicle Features – NAS

This Electrical Guide includes all new / revised features for vehicles manufactured from VIN 746613 on (1996 Model Year). Thirty percent of NAS AJ16 NA vehicles will be equipped with On-board Vapor Recovery Systems. Figure 04.1 includes this system. On AJ16 NA vehicles without On-board Vapor Recovery, the Canister Close Valve and the Fuel Tank Pressure Sensor are deleted. The basic EMS (PI) wiring harness is identical for both vehicles.

Table of Contents



Component Index	6 – 1	12
User Instructions	13 – 1	17
Harness Layout and Connectors	18 –	19
Control Module Identification and Location	20 – 2	21
Control Module Connector Pin Identification and Location	.22 – 2	25
Relay and Fuse Box Identification and Location	26	
Ground Point Identification and Location	. 27	

مستعلم من المستعلم الم المستعلم الم المستعلم الم

ð



FIGURE	S	
Fig.	Description	Variant
01	Power Distribution	
01.1	. Battery Power Distribution – Main	All Vehicles
01.2	. Battery Power Distribution – Heel Board Fuse Boxes	. All Vehicles
01.3	. Battery Power Distribution – Engine Bay, Trunk Fuse Boxes	. All Vehicles
01.4	. Ignition Switched Power Distribution	All Vehicles
02	Ground Distribution	
02.1	. Ignition Switched Ground Distribution	All Vehicles
	. Logic Ground Distribution	
02	Battomu Storton Conceptor	
03	Battery; Starter; Generator . Battery; Starter; Generator – AJ16 4.0L NA Automatic	A 116 4 01 NIA Automatia Transmission Vahiolos
	. Battery; Starter; Generator – AJ16 4.0L NA Automatic	
05.2	. Dattery, Starter, Generator – AS 10 4.0E SC and S.ZE Automatic	Automatic Transmission Vehicles
03.3	. Battery; Starter; Generator – Manual	
	. Battery; Starter; Generator – V12	
00.4		
04	Engine Management	
04.1	. ÁJ16 NA Federal Engine Management	. AJ16 NA Federal Vehicles
04.2	. AJ16 NA ROW Engine Management	AJ16 4.0L and 3.2L NA ROW Vehicles
04.3	. AJ16 SC Engine Management	XJR Vehicles
04.4	. V12 Federal Engine Management, Part 1	. V12 Federal Vehicles
04.5	. V12 Federal Engine Management, Part 2	. V12 Federal Vehicles
04.6	. V12 ROW Engine Management, Part 1	V12 ROW Vehicles
04.7	. V12 ROW Engine Management, Part 2	V12 ROW Vehicles
05	Transmission	
05.1	. AJ16 4.0L NA Automatic Transmission	AJ16 4.0L NA Automatic Transmission Vehicles
05.2	. AJ16 SC Automatic Transmission	XJR Automatic Transmission Vehicles
05.3	. AJ16 3.2L Automatic Transmission	AJ16 3.2L Automatic Transmission Vehicles
05.4	. V12 Automatic Transmission	V12 Automatic Transmission Vehicles
05.5	. Gearshift Interlock	. All Automatic Transmission Vehicles
06	Anti-Lock Braking; Traction Control	
	. Anti-Lock Braking; Traction Control – LHD	. LHD Vehicles
	. Anti-Lock Braking; Traction Control – RHD	
07	Radiator Cooling; Air Conditioning Compressor . Radiator Cooling; Air Conditioning Compressor – AJ16	A 116 Vahiolog
	. Radiator Cooling; Air Conditioning Compressor – AJ to	
U7.Z		
08	Speed Control	
08.1	. Speed Control	. All Vehicles

ø

Table of Contents



FIGURES	6	
Fig.	Description	Variant
09	Exterior Lighting	
09.1	Headlamps; Front Fog Lamps; Front Side Lamps	All Vehicles
09.2	Tail Lamps; Rear Fog Lamps; Rear Side Lamps	All Vehicles
09.3	Stop Lamps; Reverse Lamps	All Vehicles
09.4	Direction Indicators; Hazard Warning Lamps	All Vehicles
09.5	Headlamp Leveling; Clock	All Vehicles
10	Interior Lighting	
	Interior Lighting	All Vehicles
	Dimmer Controlled Lighting – SWB	
	Dimmer Controlled Lighting – LWB	
11	Instrument Pack	
11.1	Instrument Normal Display	All Vehicles
11.2	Instrument Hazard / Warning Display	All Vehicles
11.3	Audible Warnings	All Vehicles
12	Climate Control	
	AJ16 Climate Control System, Part 1	AJ16 Vehicles
	V12 Climate Control System, Part 1	
	AJ16 and V12 Climate Control Systems, Part 2	
13	Steering	
	Variable Power Steering – LHD and RHD	
	Column and Mirror Movement – Memory, LHD	-
	Column and Mirror Movement – Memory, RHD	
	Mirror Movement – LHD	
13.5	Mirror Movement – RHD	RED Manual Column vehicles
14	Seat Systems	
14.1	Driver Seat – Memory, ROW	ROW Memory Seat Vehicles
14.2	Driver Seat – Memory, NAS	NAS Vehicles
14.3	Driver Seat – Non-Memory	Non-Memory Seat Vehicles
	Driver Seat - Raise / Lower Only	
14.5	Passenger Seat – Memory, ROW/SWB	ROW/SWB Memory Seat Vehicles
14.6	Passenger Seat – Memory, ROW/LWB	ROW/LWB Memory Seat Vehicles
	Passenger Seat – Memory, NAS/SWB	
	Passenger Seat – Memory, NAS/LWB	
	Passenger Seat – Non-Memory	
14.10	Passenger Seat – Raise / Lower Only	Raise / Lower Seat Vehicles

14.11 Passenger Seat – Manual (Heater Only) Manual Passenger Seat Vehicles

14.13 Rear Seat Heaters Heated Rear Seat Vehicles

đ

14.12 Rear Seats - Powered ROW/LWB Powered Rear Seat Vehicles



FIGURES

Fig.	Description	Variant
15	Door Locking; Security	
15.1	Central Door Locking – LHD	LHD ROW Vehicles
15.2	Central Door Locking – NAS	NAS Vehicles
15.3	Central Door Locking – RHD	RHD Vehicles
15.4	. Security System – ROW	ROW Vehicles
	. Security System – NAS	
16	Wash / Wipe System	
16.1	Wash / Wipe System	All Vehicles
17	Window Lifts; Sliding Roof	
17.1	Window Lifts; Sliding Roof – LHD	LHD Vehicles
17.2	Window Lifts; Sliding Roof – RHD	RHD Vehicles
18	In-Car Entertainment; Telephone	
18.1	In-Car Entertainment; Telephone	Standard ICE Vehicles
18.2	Premium In-Car Entertainment; Telephone	Premium ICE ROW Vehicles
18.3	In-Car Entertainment; Telephone – NAS	NAS Vehicles
19	Supplementary Restraint System	
19.1	. Air Bag System	Air Bag Vehicles
20	Ancillaries	
20.1	Ancillaries: Horns; Cigar Lighters;	All Vehicles
	Electrochromic Rear View Mirror; Caravan / T	railer Connector;
	Accessory Connectors; Universal Garage Doc	or Opener; Fold Back Mirrors
21	Serial Communication	
21.1	Serial Communication Data Link	All Vehicles

ą

ABS / TRACTION CONTROL CONTROL MODULE (LHD)	Fig. 06.1 Fig. 21.1
ABS / TRACTION CONTROL CONTROL MODULE (RHD)	
ACCESSORY CONNECTORS	Fig. 20.1
AIR BAG DIAGNOSTIC MONITOR	Fig. 19.1
AIR BAGS	Fig. 19.1
AIR CONDITIONING COMPRESSOR CLUTCH	
AIR CONDITIONING CONTROL MODULE	
	Fig. 10.2
	Fig. 10.3
	Fig. 12.2
	Fig. 12.3 Fig. 21.1
AIR CONDITIONING CONTROL PANEL	
	Fig. 10.3
AMBIENT TEMPERATURE SENSOR	
	-
AMBIENT TEMPERATURE SWITCH	•
ASPIRATOR MOTOR	
AUTO TILT SWITCH (COLUMN SWITCHGEAR)	Fig. 10.0
	Fig. 13.3
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3 Fig. 12.3 Fig. 01.1 Fig. 03.1
BATTERY.	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3 Fig. 01.1 Fig. 03.1 Fig. 03.2
BATTERY.	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 03.4 Fig. 05.5
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 03.4 Fig. 05.5 Fig. 09.1 Fig. 09.2
BATTERY.	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 03.4 Fig. 05.5 Fig. 09.1 Fig. 09.2 Fig. 09.4 Fig. 10.1
BATTERY.	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 12.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 03.5 Fig. 03.4 Fig. 03.4 Fig. 03.5 Fig. 09.1 Fig. 09.2 Fig. 09.4 Fig. 10.1 Fig. 11.2
BATTERY.	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 12.3 Fig. 01.1 Fig. 03.3 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 03.5 Fig. 03.4 Fig. 03.4 Fig. 03.5 Fig. 09.1 Fig. 09.2 Fig. 09.4 Fig. 10.1 Fig. 11.2 Fig. 11.3 Fig. 14.1
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 12.3 Fig. 01.1 Fig. 03.3 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 03.5 Fig. 03.4 Fig. 03.4 Fig. 03.5 Fig. 09.1 Fig. 09.2 Fig. 09.4 Fig. 10.1 Fig. 11.3 Fig. 14.1 Fig. 14.3
BATTERY.	Fig. 13.3Fig. 01.1Fig. 03.1Fig. 03.2Fig. 03.3Fig. 12.3Fig. 12.3Fig. 01.1Fig. 03.1Fig. 03.2Fig. 03.3Fig. 03.4Fig. 05.5Fig. 09.1Fig. 09.2Fig. 09.4Fig. 11.2Fig. 11.3Fig. 14.1Fig. 14.3Fig. 14.4
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3 Fig. 01.1 Fig. 03.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.3 Fig. 03.4 Fig. 03.3 Fig. 03.4 Fig. 05.5 Fig. 09.1 Fig. 09.2 Fig. 09.4 Fig. 11.2 Fig. 11.3 Fig. 14.1 Fig. 14.2 Fig. 14.4 Fig. 14.5 Fig. 14.6
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 12.3 Fig. 01.1 Fig. 03.2 Fig. 03.3 Fig. 03.4 Fig. 03.3 Fig. 03.3 Fig. 03.4 Fig. 03.5 Fig. 09.1 Fig. 09.2 Fig. 09.4 Fig. 10.1 Fig. 10.1 Fig. 10.1 Fig. 14.2 Fig. 14.3 Fig. 14.4 Fig. 14.5 Fig. 14.6 Fig. 14.7
BATTERY	Fig. 13.3Fig. 01.1Fig. 03.1Fig. 03.2Fig. 03.3Fig. 03.4Fig. 12.3Fig. 03.1Fig. 03.1Fig. 03.2Fig. 03.3Fig. 03.4Fig. 03.5Fig. 03.4Fig. 03.4Fig. 03.5Fig. 03.4Fig. 03.4Fig. 03.4Fig. 03.4Fig. 03.4Fig. 03.4Fig. 03.4Fig. 03.4Fig. 03.4Fig. 10.1Fig. 10.1Fig. 11.2Fig. 14.1Fig. 14.2Fig. 14.3Fig. 14.4Fig. 14.4Fig. 14.5Fig. 14.6Fig. 14.7Fig. 14.8Fig. 14.9
BATTERY	Fig. 13.3 Fig. 01.1 Fig. 03.1 Fig. 03.2 Fig. 03.3 Fig. 12.3 Fig. 12.3 Fig. 03.1 Fig. 03.3 Fig. 03.1 Fig. 03.3 Fig. 03.4 Fig. 03.3 Fig. 03.4 Fig. 03.5 Fig. 03.4 Fig. 09.2 Fig. 14.1 Fig. 14.2 Fig. 14.3 Fig. 14.4 Fig. 14.4 Fig. 14.5 Fig. 14.10 Fig. 14.11

4

BODY PROCESSOR MODULE (cont'd)	Fig.	. 15.5
	Fig.	. 17.2
	Fig.	. 21.1
BRAKE FLUID LEVEL SWITCH	-	
BRAKE SWITCH		
	Fig.	. 06.1
	Fig.	.09.3
	Fig.	. 14.1
	Fig. Fig	14.2
March 1		
CAMSHAFT POSITION SENSOR (AJ16)		
CAMSHAFT POSITION SENSOR (V12)	Fia	.04.4
CANISTER CLOSE VALVE	Fia	.04.1
CARAVAN / TRAILER CONNECTOR	-	
	-	
CATALYST SWITCHING MODULE		
CATALYST THERMOCOUPLES	-	
CD AUTO CHANGER		
	Fig.	18.2
	Fig.	. 18.3
CENTER CONSOLE SWITCH PACK		
	Fig.	10.2
	Fig.	11.3
	Fig. Fig	.14.1
	-	
	Fig.	14.7
	-	
	-	
	-	
	-	
	•	
CIGAR LIGHTERS	Fig.	10.2
CLOCK (PART OF CENTER CONSOLE SWITCH PACK)	Fig.	09.5
CLUTCH SWITCH (MANUAL TRANSMISSION)	Fig.	08.1
CLUTCH SWITCH (MANUAL TRANSMISSION) CLUTCH SWITCH LINK (AUTOMATIC TRANSMISSION)		



Comp	onent	Index

COIL (COLUMN SWITCHGEAR)	. Fig. 15.4	۵
COLUMN / MIRROR MOVEMENT CONTROL MODULE	Fig. 13.2	•
		•
	Fig. 21.1	Ľ
COLUMN JOYSTICK (COLUMN SWITCHGEAR)	Fig. 13.2	·
	Fig. 13.3	
COMPRESSOR LOCK SENSOR	. Fig. 12.2	I
COOL AIR BYPASS SERVO	-	•
COOL AIR BTPASS SERVO		
		Г
COOLANT LEVEL SWITCH	•	
COOLANT TEMPERATURE SENSOR	. Fig. 11.1	
CRANKSHAFT POSITION SENSOR	. Fig. 04.1	
	-	
	•	
DATA LINK CONNECTOR	. Fig. 21.1	
DECODER MODULE		
	. Fig. 05.1	
DEFROST SERVO		
	. Fig. 12.2	
DIFFERENTIAL CONTROL POTENTIOMETER		
	. Fig. 12.2	
DIMMER MODULE (COLUMN SWITCHGEAR)	. Fig. 10.2	
	Fig. 10.3	
DIMMER CONTROL (COLUMN SWITCHGEAR)	. Fig. 10.2	•
DIODE (BT51) – HIGH MOUNTED STOP LAMP	Fig. 09.9	•
DIODE (FC58) – WASH / WIPE SWITCH	. Fia. 16.1	•
DIODE (FC59) – RH DI INDICATOR	-	
DIODE (FC60) – LH DI INDICATOR	-	
	-	•
DIODE (FC61) – WASH / WIPE SWITCH	. Fig. 16.1	(
DIODE (PI81) – AIRP SOLENOID SUPPRESSION		•
·		
		Γ
DIRECTION INDICATOR SWITCHES		
(COLUMN SWITCHGEAR)	. Fig. 09.4	·
		•
DIRECTION INDICATORS	. Fig. 09.4	
DOOR KEY BARREL SWITCH – DRIVER		•
·		•
	U	
DOOR LOCK ACTUATOR – DRIVER		L
	Fig. 15.4	•
	⊦ig. 15.5	•
DOOR LOCK ACTUATOR - PASSENGER	-	
	-	
		•

DOOR LOCK ACTUATOR – LH REAR	Fig.	15.3	2
DOOR [®] LOCK ACTUATOR – RH REAR	Fig.	15.:	2
DOOR MIRROR MOTORS	Fig. Fig.	13.: 13.4	3 4
DOOR SWITCH PACK – DRIVER			
	Fig.	10.	3
	Fig.	11.	3
	Fig.	13.	2
	Fig.	13.	.4
	Fig.	14.	.1
	Fig.	. 14.	.3
	Fig.	17.	.2
DOOR SWITCH PACK – PASSENGER	Fig.	10.	.2
· · · · · · · · · · · · · · · · · · ·	Fig.	10.	.3
	Fig.	14.	6
	Fig.	14.	8
	Fig. Fig.	15. 15.	4 5
DOOR SWITCH PACK – LH REAR	-		
	Fig.	10.3	3
DOOR SWITCH PACK – RH REAR			
	Fig.	10.	3
DOOR SWITCH – DRIVER			
	Fig.	11.3	3
	Fig.	13.:	3
	Fig.	14.	2
	Fig.	15.4	4
DOOR SWITCH – PASSENGER	Fig.	10.	1
	Fig.	14.	5
	Fig.	14.	7
	Fig.	14.9	9
	rıg. Fig.	15.4	4 5

Ň

DOOR SWITCH - LH REAR	. Fig	. 10.1
	Fig Fig	. 15.4 . 15.5
DOOR SWITCH – RH REAR	Fig	. 11.2
	Fig	. 15.5
E-POST LAMPS		
EGR TEMPERATURE SENSOR	Fig.	. 04.3
EGR VALVE	Fig.	.04.1
ELECTROCHROMIC REAR VIEW MIRROR		
ENGINE CONTROL MODULE (AJ16)		
	Fig.	.04.1
	Fig.	.04.2
	Fig.	21.1
ENGINE CONTROL MODULE (V12)		
	Fig.	04.5
	Fig.	04.7
	Fig.	07.2
ENGINE COOLANT TEMPERATURE SENSOR (AJ16)		
ENGINE COOLANT TENTFERATORE SENSOR (APTO)	Fig.	04.1
ENGINE COOLANT TEMPERATURE SENSOR (V12)		
ENGINE SPEED SENSOR		
EVAPORATIVE EMISSION CONTROL VALVE (AJ16)	Fig.	04.1
	Fig.	04.2
	•	
EVAPORATIVE EMISSION CONTROL VALVES (V12)		
EVAPORATOR TEMPERATURE SENSOR	-	
FAN CONTROL RELAY MODULE		
FASCIA SWITCH PACK	Fig.	06.1
	Fig.	06.2
FASCIA TRUNK RELEASE SWITCH	Fig.	15.1
	Fig.	15.2
	-	
FLUID TEMPERATURE SENSOR	-	
FOG LAMPS	Fig.	09.1

ð

Sedan Range 1996



	FOLD-BACK MIRROR SWITCH	Fig.	20.1	
	FOLD-BACK MIRRORS	Fig.	20.1	
	FOOT WELL SERVO			
		Fig.	12.2	
	FRESH / RECIRCULATION SERVOS	•		
	FUEL FILLER FLAP ACTUATOR	Fig.	15.1	
		-		
	FUEL INJECTORS (V12)			
	FUEL INJECTORS (AJ16 1, 2, 3)	Fig.	04.1	
		Fia.	04.2	
17 .5	y deng			
	FUEL INJECTORS (AJ16 4, 5, 6)	-		
	FUEL LEVEL SENSOR	Fig.	11.1	
	FUEL PUMP 1	-		
		Fig.	04.4	
		-		D
	FUEL PUMP 2			
	······			
	FUEL PUMP CONTROL MODULE	Fig.	04.3	
	FUEL TANK PRESSURE SENSOR	Fig.	04.1	
	FUSE BOX – LH ENGINE BAY	Fig.	01.1	
		•		
		-		
	FUSE BOX – LH HEELBOARD			
	FUSE BOX – RH ENGINE BAY	Fig.	01.1	
		Ũ		
	FUSE BOX – RH HEELBOARD			
		•		
	FUSE BOX – TRUNK	Fig.	01.1	
		-		
		гıg.	01.4	
	GEAR SELECTOR INDICATOR MODULE (AJ16 3.2L, 4.0L SC; V12)	Fia.	05.2	
	,	-		
		Fig.	05.4	
	GEAR SELECTOR INDICATOR MODULE (AJ16 4.0L)	Fig.	05.1	
	GEARSHIFT INTERLOCK SOLENOID	-		
	GENERATOR			
		Fig.	03.4	
	GLOVÉ BOX LAMP	Fig.	10.1	



- (j.)

С	O	m	po	on	en	It	In	de	ЭХ

HAND BRAKE SWITCH	Fig	111
	Fig.	13.3
	Fig.	14.1
	Fig. Fig.	14.2
HEADLAMP FLASH SWITCH (COLUMN SWITCHGEAR)	-	
HEADLAMP LEVELING ACTUATORS	Fig.	09.5
HEADLAMPS	-	
HEATED BACKLIGHT	Fig.	12.3
HEATED OXYGEN SENSORS (AJ16)		
HEATED OXYGEN SENSORS (V12)	Fig.	04.4
HEATER MATRIX TEMPERATURE SENSOR		
HEATER PUMP	Fig	. 12.3
HEATER VALVE	Fig	. 12.3
HIGH MOUNTED STOP LAMP	Fig	. 09.3
HOOD SWITCH	Fig	. 15.4
	Fig	. 15.5
HORN SWITCHES	Fig	. 20.1
HORNS	Fig	. 20.1
IDLE AIR CONTROL VALVE (AJ16)		
	Fig	. 04.2
IDLE AIR CONTROL VALVES (V12)		
IGNITION COILS (AJ16)		
IGNITION COILS (V12)	Fia	. 04.5
IGNITION MODULES (V12)	Fig	. 04.5
	Fig	. 04.7
IGNITION SWITCH		
	Fig	. 03.1
	Fia	. 03.4
	Fig	. 10.1
······	Fig	. 11.3
	Fig	. 13.2
	Fig	. 14.2
	Fig	. 14.3
	Fig	. 14.5
	Fig	. 14.8
	Fig	. 15.3

IMPACT SENSORS	Fig. 1	9.1
IN-CAR TEMPERATURE SENSOR	Fig. 1 Fig. 1	2.1 2.2
INCLINATION SENSOR	Fig. 1 Fig. 1	5.4 5.5
INERTIA SWITCH	Fig. 0	2.1
INPUT SPEED SENSOR	Fig. 0 Fig. 0	5.2 5.4
INSTRUMENT PACK	Fig. 1 Fig. 1	0.2
	Fig 1	11
	Fig. 1 Fig. 2	1.2 1.1
INTAKE AIR TEMPERATURE SENSOR (AJ16)	Fig. 0)4.1
	Fig. 0)4.3
INTAKE AIR TEMPERATURE SENSOR (V12)	Fig. 0)4.4
INTERIOR / MAP LAMPS CONSOLE		
INTRUSION SENSORS		
	Fig. 1	5.5
KEYLOCK SOLENOID (COLUMN SWITCHGEAR)	Fig. 0)5.5
KICKDOWN SWITCH	Fig. 0)5.1
	Fig. C)5.4)5.4
KNOCK SENSORS	Fig. C)4.1
	Fig. C)4.2)4.3
LAMP CONTROL MODULE		
	Fig. C	9.3
LIGHTING SWITCHES		
	Fig. C)9.2
	Fig. 1	1.3
LINEAR GEAR POSITION SWITCHES	Fig. C)3.2
	Fig. C)5.2
	Fig. C)5.3)5.4
	Fig. C)9.3
	Fig. 1 Fig. 1	3.2
MANIFOLD ABSOLUTE PRESSURE SENSORS		
MASS AIR FLOW SENSOR	Fig. C)4.1
MICROPHONE		
	Fig. 1	8.2
	Fig. 1	8.3

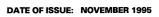
đ



MID-BASS SPEAKERS	Fig. 1	8.2
MIRRORS	-	
MODE SWITCH	Fig. C)5.2
NOT IN-PARK MICROSWITCH	Fig. 1 Fig. 1 Fig. 1 Fig. 1 Fig. 1 Fig. 1 Fig. 1 Fig. 1 Fig. 1 Fig. 1	1.3 3.2 3.3 4.1 4.2 5.1 5.2 5.3
NUMBER PLATE LAMPS	-	
OIL PRESSURE SWITCH	Fig. C Fig. C Fig. C)5.1)5.2)5.4
POWER AMPLIFIER		
POWER STEERING PRESSURE SWITCH		
POWER WASH PUMP	Fig. 1	16.1
PRESSURE REGULATOR		
PRESSURE SWITCH MANIFOLD	Fig. C Fig. C)5.2)5.4
PUDDLE LAMPS	Fig. 1	10.1
RADIATOR COOLING FANS		
RADIATOR THERMOSTATIC SWITCH		
RADIO	Fig. 1	0.2
RADIO ANTENNA	Fig. 1	18.2
RADIO ANTENNA MOTOR	Fig. 1	18.2
RADIO CASSETTE	Fig. 1	18.2
READER / EXCITER CONTROL MODULE		
REFRIGERANT DUAL PRESSURE SWITCH		
REFRIGERANT TRIPLE PRESSURE SWITCH		
REPEATERS	⊢ıg. (J 9 .4

A

REVERSE SWITCH (AJ16 MANUAL)	Fig.	13.2
ROTARY SWITCH	Fig. Fig. Fig.	05.1 09.3 13.2
SAFING SENSOR	Fig.	11.2
SEAT CONTROL MODULE – DRIVER (NAS VEHICLES)	Fig. Fig. Fig.	11.2 11.3 14.2
SEAT CONTROL MODULE – DRIVER (ROW, MEMORY SEAT VEHICLES)	Fig. Fig. Fig.	11.2 11.3 14.1
SEAT CONTROL MODULE – PASSENGER	Fig.	21.1
(NAS VEHICLES)	Fig.	14.9
SEAT CONTROL MODULE – PASSENGER (ROW, MEMORY SEAT VEHICLES)	Fig. Fig. Fig. Fig.	14.5 14.6 14.7 14.8
SEAT CONTROL MODULE - REAR		
SEAT CUSHION – DRIVER	Fig. Fig.	14.2 14.3
SEAT CUSHION – PASSENGER	Fig. Fig. Fig. Fig. Fig.	14.6 14.7 14.8 14.9 14.10
SEAT CUSHION – LH REAR	Fig.	14.12
SEAT CUSHION – RH REAR	Fig.	14.12
SEAT FORE/AFT MOTOR – LH REAR SEAT FORE/AFT MOTOR – RH REAR	Fig.	14.12
SEAT FORE/AFT SWITCH – LH REAR	Fig.	10.3
SEAT FORE/AFT SWITCH – RH REAR	Fig.	10.3



Sedan Range 1996

Component Index

SEAT FORE/AFT SWITCHES – PASSENGER, REAR	Fig. 14.6
SEAT HEADREST MOTOR - LH REAR	Fig. 14.12
SEAT HEADREST MOTOR – RH REAR	Fig. 14.12
SEAT HEADREST SWITCH – LH REAR	
SEAT HEADREST SWITCH – RH REAR	
SEAT HEATER TIMER – LH REAR	
SEAT HEATER TIMER – RH REAR	Fig 14 13
SEAT HEATER SWITCH – LH REAR	Fig. 14.12
SEAT HEATER SWITCH – RH REAR	Fig. 14.12
SEAT LUMBAR PUMP – DRIVER	Fig. 14.2
SEAT LUMBAR PUMP – PASSENGER	Fig. 14.6 Fig. 14.7 Fig. 14.8 Fig. 14.9
SEAT LUMBAR PUMP – LH REAR	. Fig. 14.12
SEAT LUMBAR PUMP – RH REAR	Fig. 10.3
SEAT LUMBAR SWITCH – RH REAR	Fig. 10.3
SEAT MOTORS – DRIVER	Fig. 14.2 Fig. 14.3
SEAT MOTOR – DRIVER (RAISE / LOWER SEAT VEHICLES)	
SEAT MOTORS – PASSENGER	Fig. 14.6 Fig. 14.7 Fig. 14.8
SEAT MOTOR - PASSENGER (RAISE / LOWER SEAT VEHICLES)	
SEAT RECLINE SWITCHES – PASSENGER, REAR	Fig. 14.6
SEAT SQUAB – DRIVER	Fig. 14.2 Fig. 14.3

SEAT SQUAB – PASSENGER	Fig.	14.6
	Fig. Fig. Fig.	14.8 14.9 14.10
SEAT SQUAB – LH REAR		
SEAT SQUAB – RH REAR	Fig. Fig.	14.12 14.13
SEAT SWITCH PACK – DRIVER	Fig.	14.2
SEAT SWITCH PACK – DRIVE (RAISE / LOWER SEAT VEHICLES) Fi	g. 14	1.4
SEAT SWITCH PACK – PASSENGER SEAT SWITCH PACK – PASSENGER	Fig. Fig. Fig. Fig.	14.6 14.7 14.8 14.9
(SEAT RAISE / LOWER VEHICLES) Fi SECONDARY AIR INJECTION CLUTCH	Fig.	04.5
SECONDARY AIR INJECTION PUMP	Fig.	04.1
SECONDARY AIR INJECTION SWITCHING VALVE		
SECURITY AND LOCKING CONTROL MODULE	Fig. Fig. Fig. Fig. Fig. Fig. Fig.	03.2 03.3 03.4 15.1 15.2 15.3 15.4 15.5
SECURITY ANTENNA		
SECURITY SOUNDER		
SHIFT SOLENOIDS		
SHORTING LINK		
SIDE MARKER LAMPS	Fig.	09.1
SLIDING ROOF CONTROL MODULE	Fig.	17.1
SLIDING ROOF MOTOR	Fig.	17.1
SLIDING ROOF SWITCH	Fig.	

đ



SOLAR SENSOR	-
SPEAKER (COLUMN SWITCHGEAR)	U U
SPEED CONTROL BRAKE SWITCH	. Fig. 08.1
SPEED CONTROL CONTROL MODULE	. Fig. 08.1
SPEED CONTROL SWITCHES	Fig. 08.1
STARTER MOTOR	
	. Fig. 03.4
STEERING COLUMN MOTORS	
SUBWOOFER	
	-
SUNVISOR LAMPS	. Fig. 10.1
SUPERCHARGER INTERCOOLER COOLANT PUMP	. Fig. 07.1
SUPPRESSION MODULE	-
	-
	. Fig. 03.4
TAIL LAMP UNITS	
	-
TELEPHONE ANTENNA	
TELEPHONE HANDSET	Fig. 18.1
TELEPHONE HANDSET	. Fig. 18.2
TELEPHONE TRANSCEIVER	•
	. Fig. 18.2
	•
THROTTLE POSITION SENSOR (AJ16)	
ſ	. Fig. 04.3
THROTTLE POSITION SENSOR (V12)	
TORQUE CONVERTER CLUTCH SOLENOID	•
TRACTION CONTROL ACTUATOR (LHD)	. Fig. 06.1
TRACTION CONTROL ACTUATOR (RHD)	. Fig. 06.2
TRANSMISSION CONTROL MODULE (AJ16 NA)	
TRANSMISSION CONTROL MODULE (V12 & AJ16 SC)	
TRANSMISSION SOLENOID VALVES	-
TRIP CYCLE (COLUMN SWITCHGEAR)	
TRUNK LAMPS	

đ

TRUNK RELEASE ACTUATOR	Fig. 15.2 Fig. 15.3
TRUNK RELËASE SWITCH	Fig. 15.2
TRUNK SWITCH	Fig. 11.2 Fig. 15.4 Fig. 15.5
TWEETERS	
VACUUM PUMP AND CONTROL VALVE	-
VÄLET SWITCH	Fig. 15.1 Fig. 15.2 Fig. 15.3 Fig. 15.4 Fig. 15.5
VARIABLE FORCE MOTOR	Fig. 05.2 Fig. 05.4
VARIABLE POWER STEERING CONTROL MODULE	Fig. 13.1
VARIABLE STEERING CONVERTER	Fig. 13.1
VENT SERVO	Fig. 12.1 Fig. 12.2
WASH / WIPE SWITCHES (COLUMN SWITCHGEAR)	Fig. 16.1
WASHER FLUID LEVEL SWITCH	
WHEEL SPEED SENSORS	Fig. 06.1 Fig. 06.2
WINDOW LIFT MOTORS	Fig. 17.1 Fig. 17.2
WINDOW LIFT SWITCH PACKS	Fig. 17.1 Fig. 17.2
WINDSHIELD HEATERS	Fig. 12.3
WINDSHIELD WASH HEATERS	Fig. 16.1
WINDSHIELD WASH PUMP	-
WIPER MOTOR	Fig. 16.1

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 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 <u>to</u> a specific Figure and <u>from</u> a specific Figure back to the Power Distribution Figures. This eliminates the need to include detailed Power Distribution information <u>on</u> each of the Figures. Similarly, the Figures **02 – Ground Distribution** detail the vehicle ground distribution. The reference symbols are defined on page 15.

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.

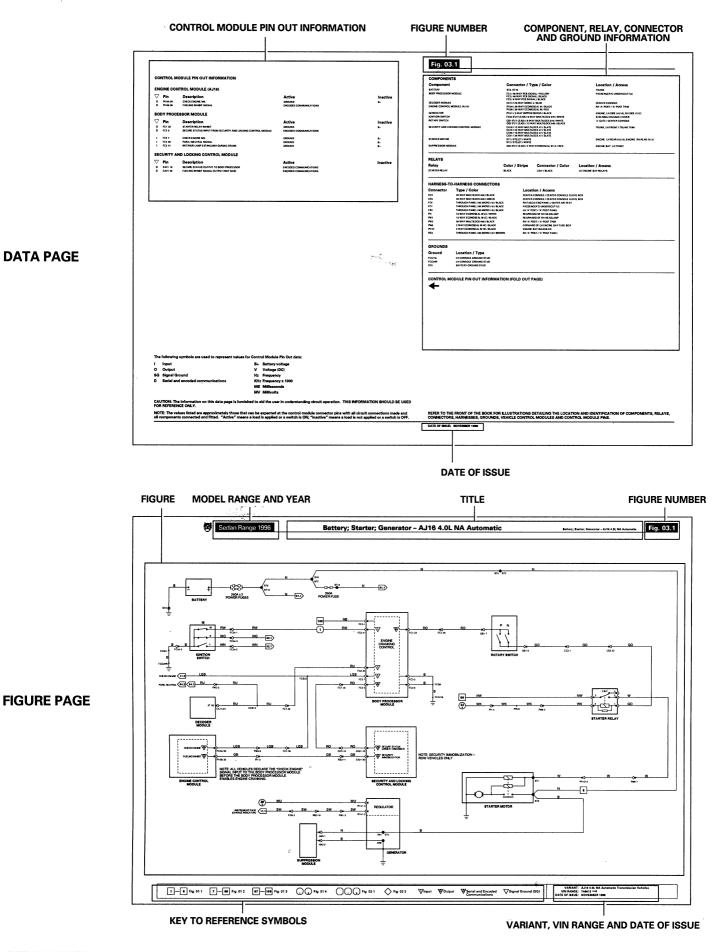
In addition, where circuits include a Control Module, Pin Out information is provided with values for "active" and "inactive" states. The values listed are approximately those that can be expected at the control module connector pins with all circuit connections made and all components connected and fitted. "Active" means a load is applied or a switch is ON; "inactive" means a load is not applied or a switch is OFF. This information is provided to assist the user in understanding circuit operation and should be used FOR REFERENCE ONLY.

Samples of the Figure and Data pages are shown on the following page.

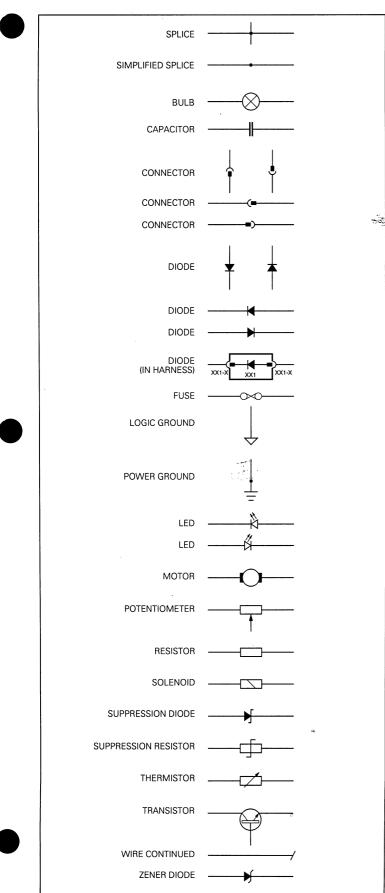
User Instructions

Sedan Range 1996





Wiring Symbols



Wiring Color Codes

Ν	Brown	0	Orange
В	Black	S	Slate
W	White	L	Light
Κ	Pink	U	Blue
G	Green	Р	Purple
R	Red	BRD	Braid
Υ	Yellow		

When a wire has two or more color code letters, the first letter indicates the main color and the subsequent letter(s) indicate the tracer color(s).

Wiring Harness Codes

K. MR		Description
'ØR	Code	Description
	AB	Air bag
	AN	Generator suppression
	BB	Rear powered seat
	BL	Front bumper – left
	BR	Front bumper – right
	BS	Rear seat
	ΒT	Boot (trunk)
	CA	Cabin
	CC	Center console
	CF	Cooling fan link
	CL	Air bag impact sensor link – left
	CR	Air bag impact sensor link – right
	CS	Clutch shorting link
	CV	Canister valve
	DD	Driver door
	DL	Non dead locking shorting link
	EL	Evaporation pressure sensor link
	FC	Facia
	FU	Fuel pump
	GB	Automatic transmission
	GI	Glove box link
	IC	In-car entertainment
	LL	Variable steering converter
	LS	Left forward
	ML	Manual seat link
	OL	Octane select link
	PD	Passenger door – front
	PI	Engine management
	PL	Powered seat link
	RD	Rear door (suffix L – left, suffix R – right)
	RF	Roof security
	RS	Right forward
	RT	Radio telephone
	SA	Starter solenoid
	SH	Front screen (windshield) heater
	SL	Starter solenoid link
	SM	Memory seat
	SR	Side marker link (rear)
	TL	Tail lamps
	TS	Traction shorting link
1		

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

Harness Component Numbers

Connectors

HARNESS CODE + CONNECTOR NUMBER + PIN NUMBER

EXAMPLE: FC7-24 (pin number is separated by a dash)

NOTE: Door harnesses use common connector numbers with D, P, L or R added to indicate the door – Driver, Passenger, Left rear, Right rear.

Splices

HARNESS CODE + S + IDENTIFICATION NUMBER

EXAMPLE: CAS3 (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.

EXAMPLE: _____

Grounds

HARNESS CODE + G + IDENTIFICATION NUMBER

EXAMPLE: BTG14 (no dash is used)

NOTE: Ground identifications that include 'L' or 'R' after the number indicate that the eyelet has two 'legs'. The 'L' or 'R' identifies the particular leg of the eyelet to which the wire is connected.

Diodes

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

EXAMPLE:

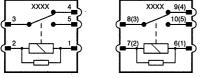
XX1-X

Relay Connectors

Relay connector numbers are shown within the relay. The harness code is shown in the upper portion of the relay; the pin (terminal) number is shown adjacent to the pin.

NOTE: Certain relays are paired and share a modular connector. In this instance, the relay terminal code is included in parentheses.

EXAMPLE:



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.

$(\widehat{xx})(\widehat{xy})$ Ignition Switched Power Supply

This symbol represents ignition switched power supply and refers the user to Figure 01.4.

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).

$(\mathbf{X}\mathbf{X})(\mathbf{X}\mathbf{X})(\mathbf{X}\mathbf{X})$ Ignition Switched Ground

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

No 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).

⟨x⟩ Logic Ground

This symbol represents a logic ground and refers the user to Figure 02.2.

XX.X BPM 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 02.2, 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.

BPM Because the Body Processor Module appears numerous times, the abbreviation BPM is used in the reference flag on Figure 01.3 in order to conserve space.

Control Module Input, Output, Data Line and Signal Ground

VInput Output Serial and Encoded Signal Ground (SG)

communications

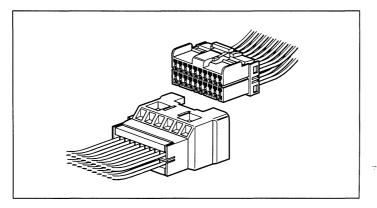
These four symbols are employed to assist the user in visualizing the 'logic' of circuits containing control modules. The symbols identify control module input, output, data line and signal ground pins. These symbols are also employed on the corresponding data page.

Connectors

The following connectors are the common harness-to-harness connectors used throughout the vehicle.

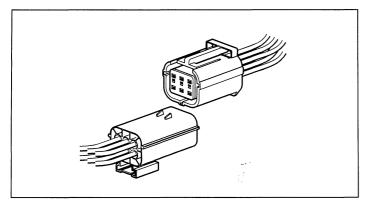
Multilock 040

Low current (used as harness and 'direct' connection connector).



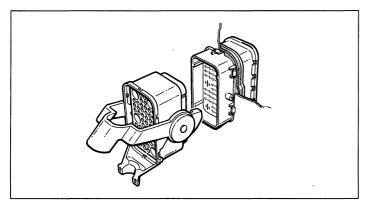
Econoseal III LC

Low current sealed connector.



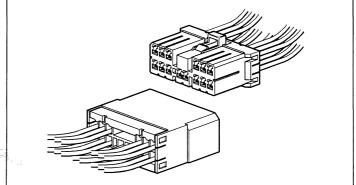
Through-Panel

48 low-current pins / 6 high-current pins.



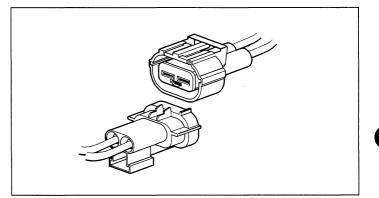
Multilock 070

High current (used as harness and 'direct' connection connector).

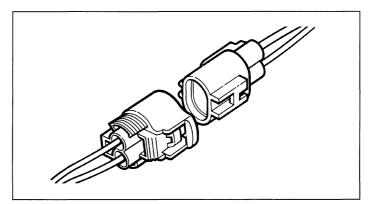


Econoseal III HC

High current sealed connector.

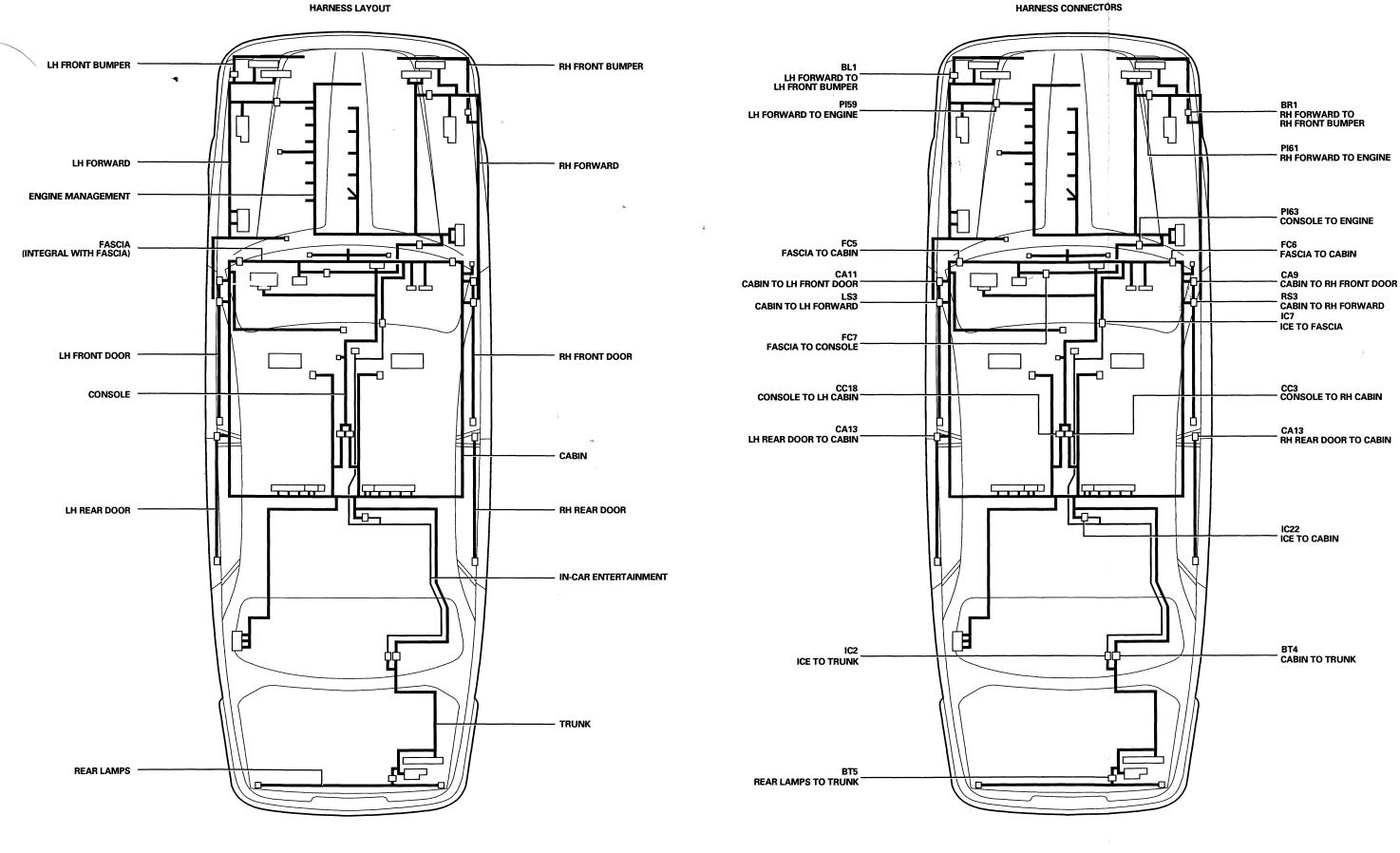


Ford Card Used for SRS only.

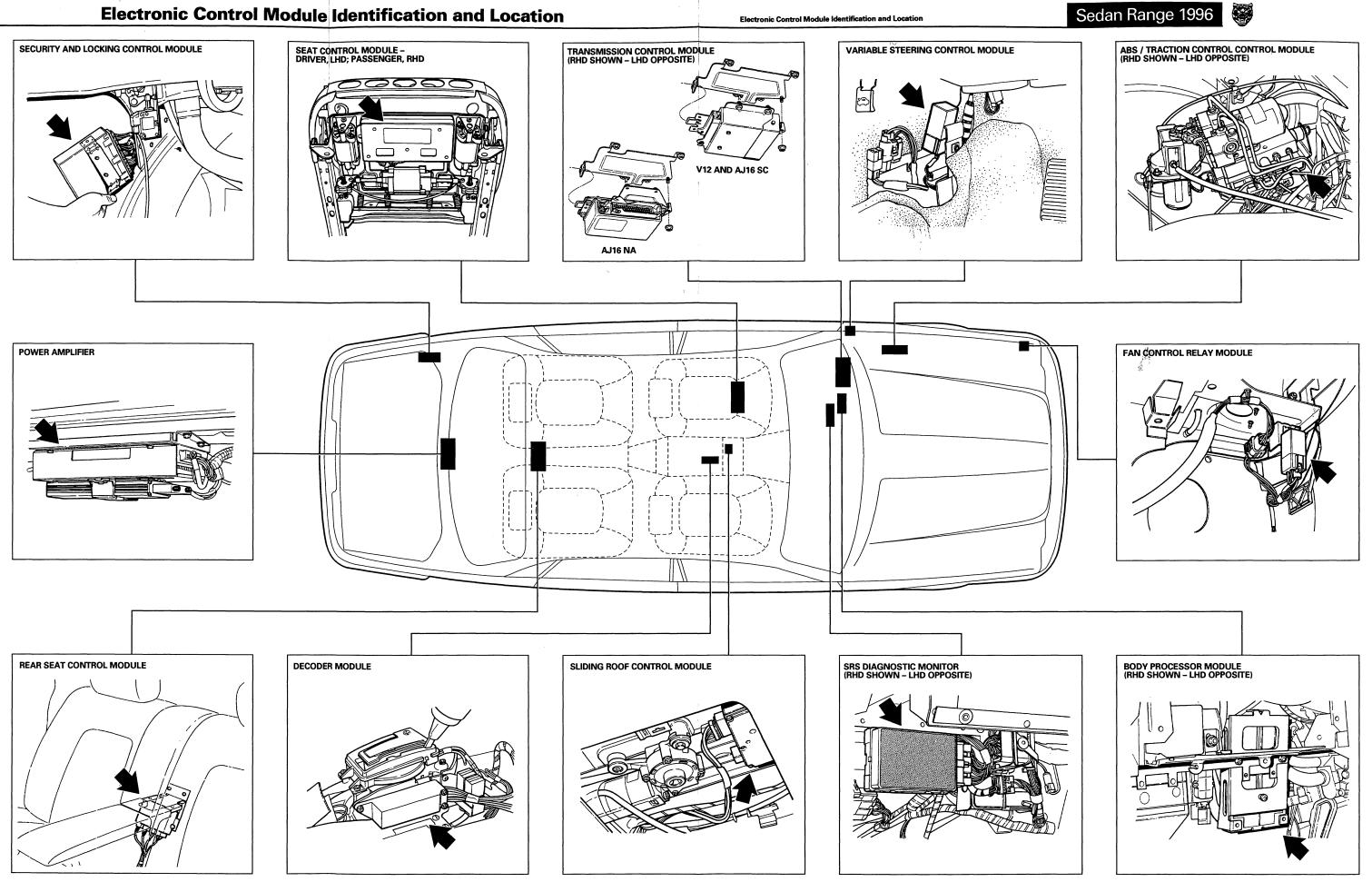


Harness Layout and Connectors

Sedan Range 1996





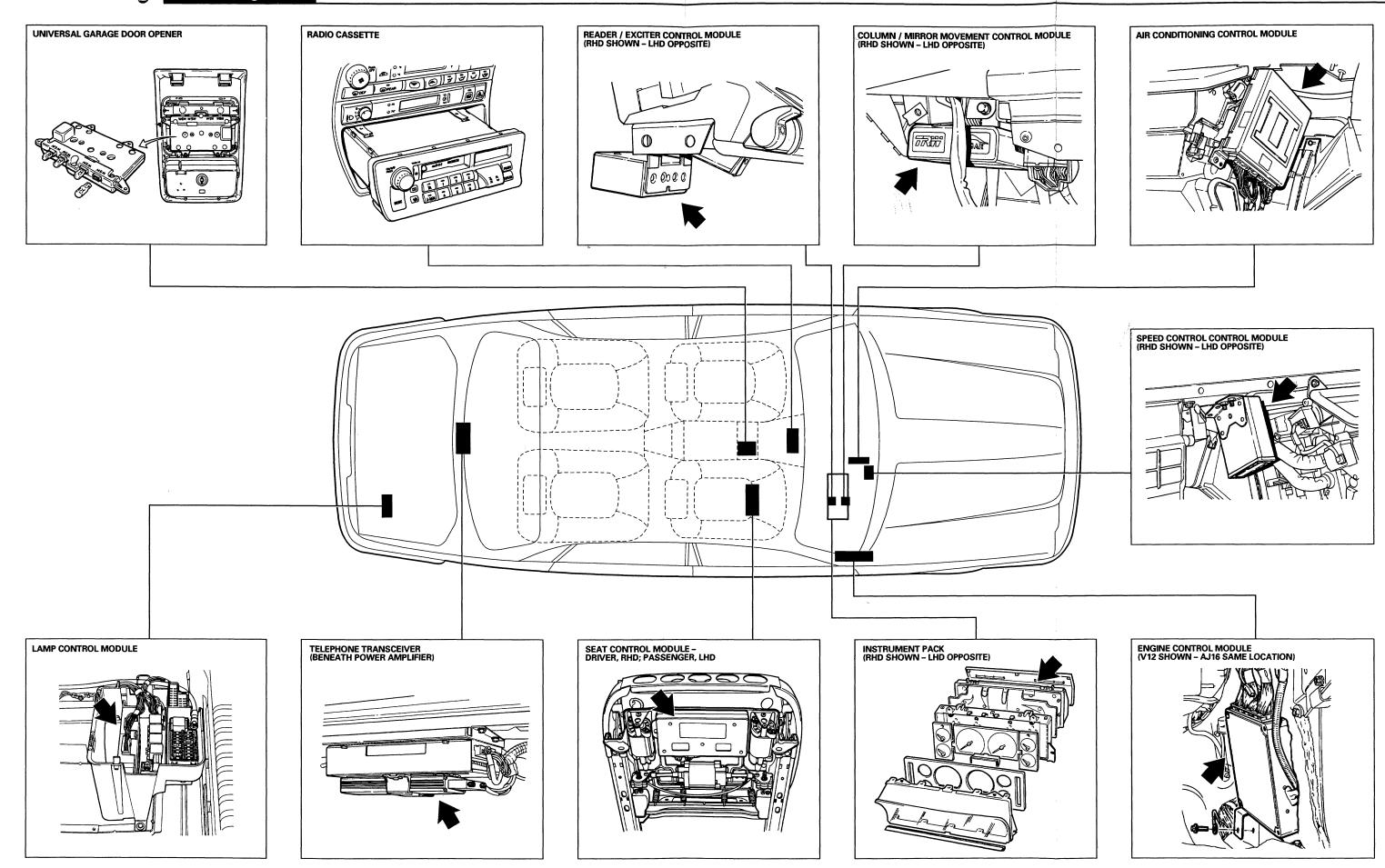


Sedan Range 1996

 \bigcirc

Sedan Range 1996

Electronic Control Module Identification and Location

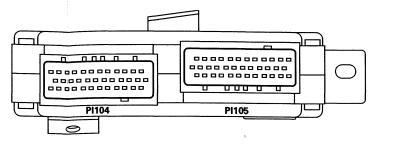


, .



Control Module Connector Pin Identification and Location

ENGINE CONTROL MODULE - AJ16



PI104 / 36-WAY / BLACK (AJ16 NA FEDERAL)

12 11 10 9 8 7 6 5 4 3 2 1 B LGP LGU LGO LGS GB LGK LGR UK OY BU B
24 23 22 21 20 19 18 17 16 15 14 13 BLG W PY RY LGB KN NP KR OB BS BG BR
36 35 34 33 32 31 30 29 28 27 26 25 B GR PG PW GN OG UN OG OR BO O BP

PI105 / 36-WAY / RED (AJ16 NA FEDERAL)		

- SU RU UP KS BG BN W WK NG GB UN
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
1 2 3 4 5 6 7 8 9 10 11 12 UB ULG RN GK RG G BG UP U O UW GY

PI104 / 36-WAY / BLACK (AJ16 NA ROW)

12 11 10 9 8 7 6 5 4 3 2 1 B LGP LGU LGO LGS GB LGK LGR UK OY BU B
24 23 22 21 20 19 18 17 16 15 14 13 BLG W PY RY LGB KN NP KR OB BS BG BR
36 35 34 33 32 31 30 29 28 27 26 25 B - PG PW GN - - OG OR BO 0 BP

PI105 / 36-WAY / RED (AJ16 NA ROW)

- SU RU UP KS BG BN W WK NG GB UN
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

PI105 / 36-WAY / RED (AJ16 SC)

25 26 27 28 29 30 31 32 33 34 35 36 — SU RU UP KS BG BN W WK NG GB UN
13 14 15 16 17 18 19 20 21 22 23 24 UY RK U BLG R N BW R GU
1 2 3 4 5 6 7 8 9 10 11 12 UB ULG RN GK — G BG UP U 0 UW GY

12 11 10 9 B LGP LGU LGO I 24 23 22 21 BLG W PY RY 36 35 34 33 B GR PG PW

PI104 / 36-WAY / BLACK (AJ16 SC)

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
1 2 3 4 5 6 7 8 9 10 11 UB ULG RN GK — G BG UP U O UW

8 7 6 5 4 3 2 1	25
LGS GB LGK LGR UK OY BU B	— SU
20 19 18 17 16 15 14 13	13 14
LGB KN NP KR OB BS BG BR	— UY
32 GN UN OG OR BO O BP	1 UB ULG

PI46 / 22-WAY / SLATE

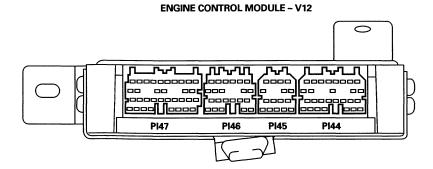
PU PS PR

11 10 9 B B -

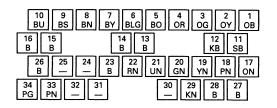
22 21 20 B SG SLG

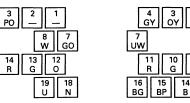
17 16 15 GB RY —

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$]
20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 - ON RP BS PU OY	
38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 - OR S GU OW OP - O - - - OS N R OB WS B NR	

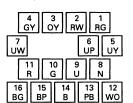


PI47 / 34-WAY / SLATE

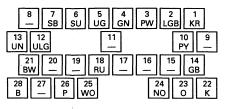




PI45 / 16-WAY / SLATE

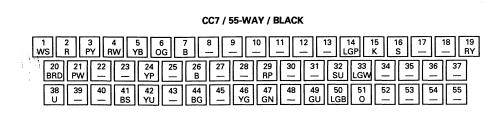


PI44 / 28-WAY / SLATE













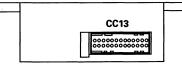
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 OR S GU OW OP O OS N R OB WS B NR

	2	3	4)U R	5 W
20			23 RP	_
- 38 	39 OR	40 S	41 GU	c c

DATE OF ISSUE: NOVEMBER 1995

)5 26 — 13 LGB - | B | B

CC13 / 26-WAY / BLUE
6 17 18 19 20 21 22 23 24 25





CC48 / 55-WAY / BLACK (V12)

	į.
CC48	1
CC48 / 55-WAY / BLACK (AJ16 SC)	
6 7 8 9 10 11 12 13 14 15 16 17 1	8 15

TRANSMISSION CONTROL MODULE - V12 AND AJ16 SC

------______ CC7

Sedan Range 1996

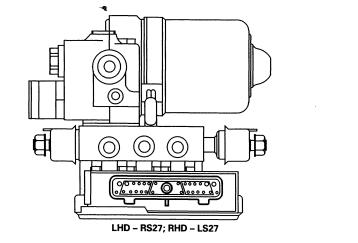
TRANSMISSION CONTROL MODULE - AJ16 NA

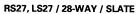


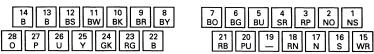
Sedan Range 1996

Control Module Connector Pin Identification and Location

ABS / TRACTION CONTROL CONTROL MODULE





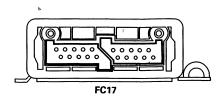


25 —

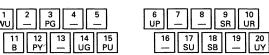
29

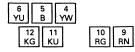
28

SPEED CONTROL CONTROL MODULE



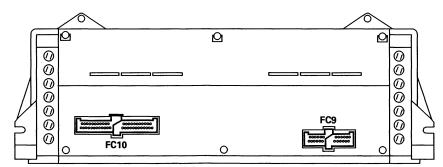
FC17 / 20-WAY / BLACK





114

INSTRUMENT PACK





13 OR

38 RLG

37 OP

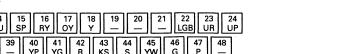
11 12 -- 0

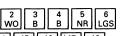
36

35 RG

9 SW 10 BY

33 34

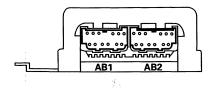




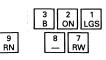


E.

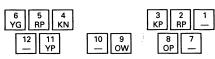








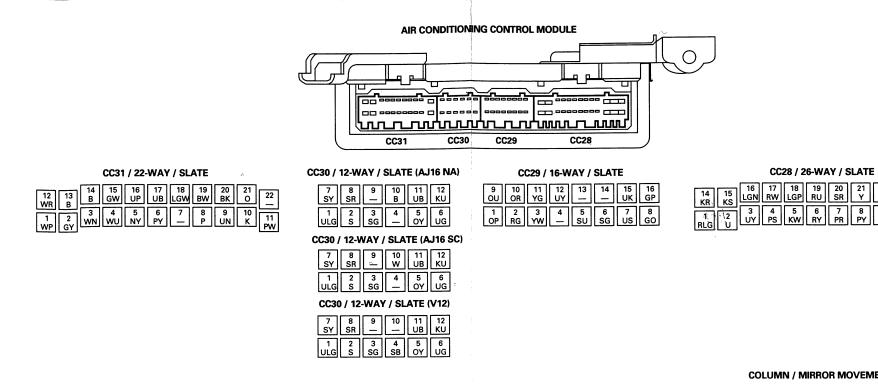
AB2 / 12-WAY / BLACK



FC9 / 24-WAY / BLACK

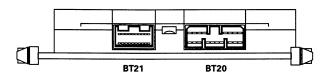
7 R	в	8	9	10 R(11 —	12 —
19 OK	20 BW	21 OS	S	22 6G	2:	3 -	24 PY

Control Module Connector Pin Identification and Location



0 FC45

LAMP CONTROL MODULE



FC45 / 26-WAY / SLATE

13 12 11	10 9 8 7 6 5 4	3 2	1
OG PLG ON	OB SN OR YN YR SK PU	PR	PN
26 25 24	23 22 21 20 19 18 17	16	14
BS PG WU	WN UR — KS UN UP US V	WG BP	BR

FC2 / 48-WAY / BLACK (LHD)

1 2 3 4 5 6 7 8 9 10	11 12
RY SK ULG UP RO PO LGB KR	— OY
25 26 27 28 29 30 31 32 33 34 3 BO LGP YR YLG GR P WY RY PR KG P	15 36 10

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
37 38 39 40 41 42 43 44 45 46 47 48 PG OP LGG OLG RW KU RLG KU PLG YN LGR UR

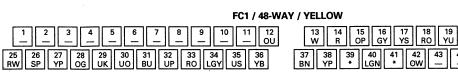
18 19 YU —

39 40 41 42 43 LGG OLG RW KU RLG

35 36	37	38	39	40	41	42	R
PU	PG	OP	LGG	OLG	RW	KU	

FC2 / 48-WAY / BLACK (RHD)

1 2 3 4	5 6	7 8 9	10 11	12	13 14
RY SK ULG UP	RO PO	LGB — –	- KR —	OP	— LG
25 26 27 28	29 30 31	1 32 33	34 35	36	37 38
BO LGP YR YLG	GR P W	Y RY PR	KG PU	—	PG OY



BODY PROCESSOR MODULE

6 5 NY NG

16 G

8 GO

18 17 NP NO

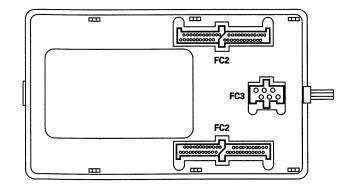
7 GU

BT20 / 18-WAY / WHITE

15 14 13 12 GW U B NLG

10 9 GN NU

11 NK



-4

BT21 / 20-WAY / BLACK

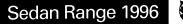
20 19 18 17 16 15 14 13 12 11 RK WS KU R KG YS PU KS SLG RU

5 YU

10 9 8 7 6 PG RG UG PW KR

2 1 YG YK

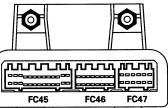
3 YO



(

21 Y	22 NR		24	25 UR	26 GU	
8 PY	9 RB	10 —		12 UW		•

COLUMN / MIRROR MOVEMENT CONTROL MODULE



FC46 / 16-WAY / SLATE

8	7	6	5	4	3	2	1
US	YB	SLG	PS	YO	0K	YK	0U
16	15	14	13	12	11	10	9
	—		—	—	KN	PG	0Y

FC47 / 12-WAY / SLATE

6	5	4	3	2	1
NO	0	K		B	NB
12 —	11 	10 —	9	8	7

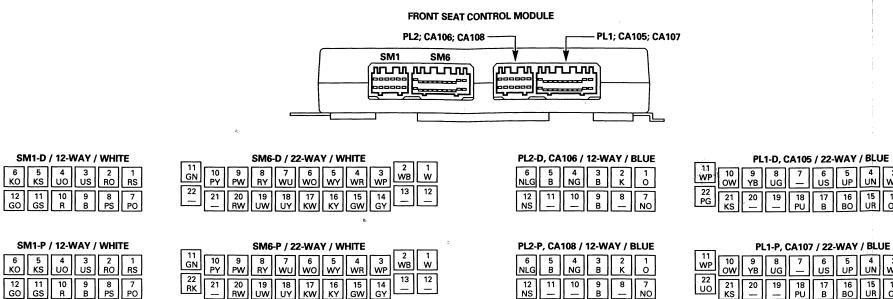
	0 2 U -						
44	45	46	4	i7	41	B	
KU	PLG	YN	L(GR	U	R	

FC3 / 6	WAY	/ BLACK
---------	-----	---------

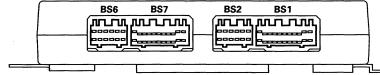
1 NB	2	3 0	
4 K			6 B

20		1 iR	22 GB	2:	3 N	24 RLG
44 —	45 RU	4	6	47 RU	4	8

Control Module Connector Pin Identification and Location



REAR SEAT CONTROL MODULE



6 NW

12 NW

BS2 / 12-WAY / BLUE

7

SY	10	9	8	7	6
22 W	21	20	19	18	17
		— I			I —

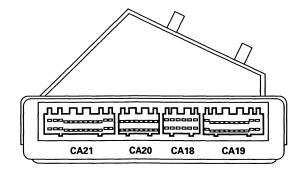
	BS7 / 22-WAY / WHITE						
	8 RY	7	6	5	4	3	2 1
/	19 UW	18 UY	17 KW	16 KY	15 GW	14 GY	13 12

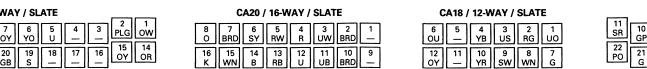
11 10 PW	9 PY	8 RY	7	6	5	4	3	2
22 21	20 RW	19 UW	18 UY	17 KW	16 KY	15 GW	14 GY	13

6 GO	5 GS	4 PO	3 PS	2	1
12 GR					

BS6 / 12-WAY / WHITE

SECURITY AND LOCKING CONTROL MODULE





			1 / 26		• • • •				
13 12 11 WB NU PW	10 BO	9 1 GP	8 11P	7	6 V0	5 U	4	3	2 PLG
26 25 24 WO B GU						18		16	15 0Y
	SK	YLG	UN	GB	S	-		-	

n	ATE	OF	ISSI IE-	NOVEMBER	1995
υ.	AIE	UF	133UE.	INC VEINIBER	1999

	/ DLC			L	
5	4	3 WN	ов	_	
_	_		13	12	i
16	15	14	13	1 12	

16 BO	15 UR	14 0Y	US	KN

VAY	/ BLU	<u> </u>		
5 11P	4 11N	3 WN	OB	RK
16 BO	15 UR	14 OY	13 US	12 KN

BS1 / 22-WAY / BLUE

5	4	3	2	1
16	15	14	13 —	12 W

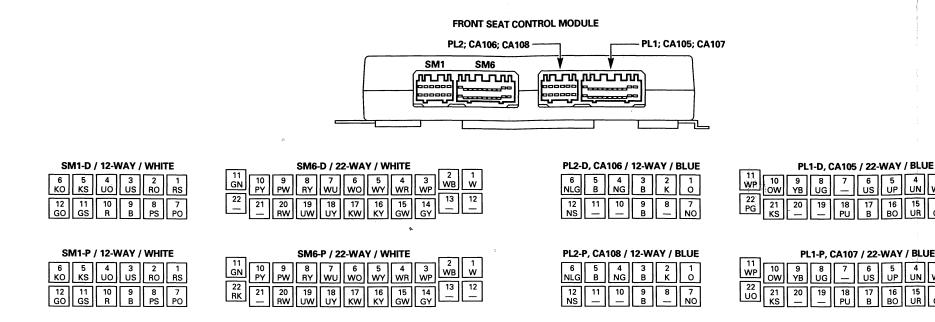
CA19 / 22-WAY / SLATE

s w	5	4	3	2	1 R
7	16	15 —	14	13 PO	12 KN

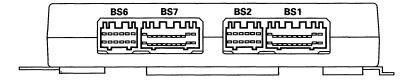
Sedan Range 1996

-4

Control Module Connector Pin Identification and Location



REAR SEAT CONTROL MODULE



BS1 / 22-WAY / BLUE

SY	10 —	9	8	7	6 —
22 W	21	20	19	18	17

BS7 /	22-WAY	1	WHITE	

11	10 PW	9 PY	8 RY	7	6	5	4	3	2	1 _
22	21	20	19	18	17	16	15	14	13	12
	—	RW	UW	UY	KW	KY	GW	GY	—	—

6 GO			3 PS		
12 GR	11 GW	10 OW	9	8 PW	7 PR

BS6 / 12-WAY / WHITE

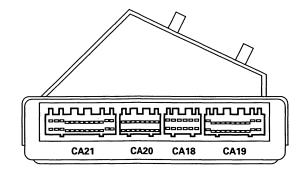
SECURITY AND LOCKING CONTROL MODULE

6 NW

12

BS2 / 12-WAY / BLUE

4 NK



	CA20 / 16-WAY / SLATE	CA18 / 12-WAY / SLATE	CA19 / 22-WAY
WB NU PW 10 9 8 7 6 5 4 3 PLG OW WB NU PW RO LGP UP OY YO U PLG OW	8 7 6 5 4 3 2 1 O BRD SY RW R UW BRD —	6 5 4 3 2 1 OU - YB US RG UO	11 10 9 8 7 6 GP UW PG LGS YW
26 25 24 23 22 21 20 19 18 17 16 15 14 WO B GU SK YLG UN GB S - 17 07 0R	16 15 14 13 12 11 10 9 K WN B RB U UB BRD —	12 11 10 9 8 7 OY — YR SW WN G	22 PO G RY SG UR WO

DATE OF ISSUE: NOVEMBER 1995

UE		
3 WN	OB	1
14 OY	13 US	12 KN
	3 WN	3 WN 0B 14 0Y US

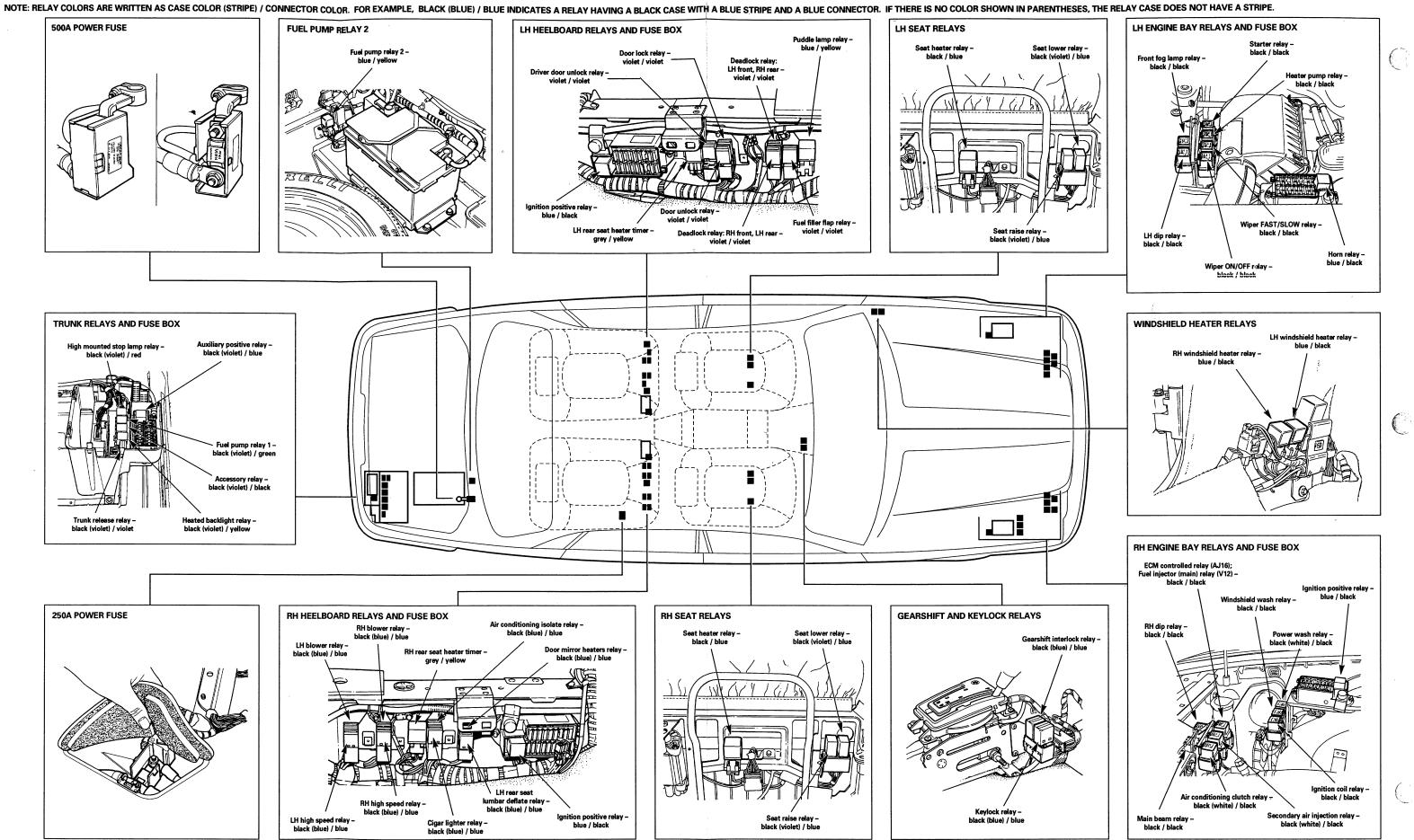
AY	/ BLU			
5 IP	4 11N	3	OB	1 RK
16 BO	15 UR	14 OY	13 US	12 KN

5	4	3	2	1
16 —	15	14	13 —	12 W

22-WAY / SLATE

~	5	4	3	2	1 R
7	16	15	14	13	12
0	—	—	—	PO	KN

Relay and Fuse Box Identification and Location

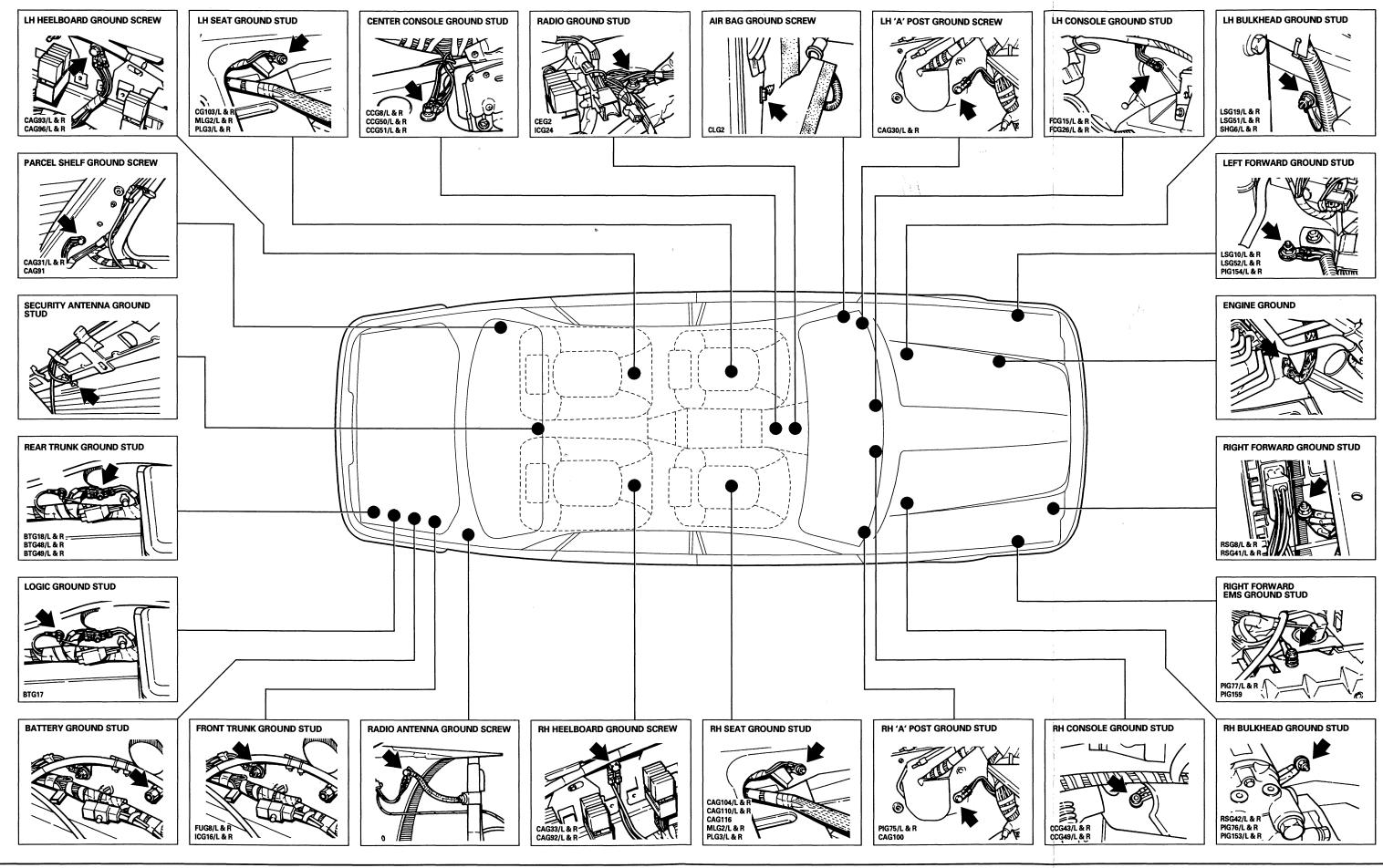


Sedan Range 1996





Ground Point Identification and Location



DATE OF ISSUE: NOVEMBER 1995

 $(\cdot \cdot)$

ia. 01.1

COMPONENTS

Component	Connector / Type / Color	Location / Access
BATTERY	ST8, ST10	TRUNK
BODY PROCESSOR MODULE	FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK	PASSENGER'S UNDERSCUTTLE
FUSE BOX – LH ENGINE BAY	LS1 / 10-WAY UTA / BLACK LS37 / 10-WAY UTA / BLACK	ENGINE BAY, LH FRONT
FUSE BOX – RH ENGINE BAY	RS1 / 10-WAY UTA / BLACK RS6 / 10-WAY UTA / BLACK	ENGINE BAY, RH FRONT
FUSE BOX – LH HEELBOARD	CA1 / 10-WAY UTA / NATURAL CA2 / 10-WAY UTA / BLACK	LH HEELBOARD
FUSE BOX – RH HEELBOARD	CA36 / 10-WAY UTA / NATURAL CA44 / 10-WAY UTA / BLACK	RH HEELBOARD
FUSE BOX – TRUNK	BT9 / 10-WAY UTA / BLACK BT36 / 10-WAY UTA / NATURAL	TRUNK ELECTRICAL CARRIER
RELAYS		

Relay

AUXILIARY POSITIVE RELAY (TRUNK FUSE BOX) HORN RELAY (LH ENGINE BAY FUSE BOX) IGNITION POSITIVE RELAY (LH HEELBOARD FUSE BOX) IGNITION POSITIVE RELAY (RH HEELBOARD FUSE BOX) IGNITION POSITIVE RELAY (RH ENGINE BAY FUSE BOX) TRANSIT ISOLATION DEVICE

Color / Stripe **Connector / Color** BLACK / VIOLET — / BLUE BLUE BLUE BLUE

BLUE

-/BLACK — / BLACK --- / BLACK -/BLACK втз7 / —

Location / Access

TRUNK FUSE BOX LH ENGINE BAY FUSE BOX LH HEELBOARD FUSE BOX RH HEELBOARD FUSE BOX RH ENGINE BAY FUSE BOX BATTERY POSITIVE POST

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TA
FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTT
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUT

GROUNDS

Ground FCG15L ST9

Location / Type LH CONSOLE GROUND STUD BATTERY GROUND STUD

EL TANK / FUEL TANK TRIM ER'S UNDERSCUTTLE END PANEL / OUTER AIR VENT

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

7

CONTROL MODULE PIN OUT INFORMATION

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active 🦟	Inactive
ο	FC1-13	TRANSIT ISOLATION DEVICE	GROUND	В+
1	FC2-31	IGNITION SWITCHED GROUND	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

ŝ

The form

l Input

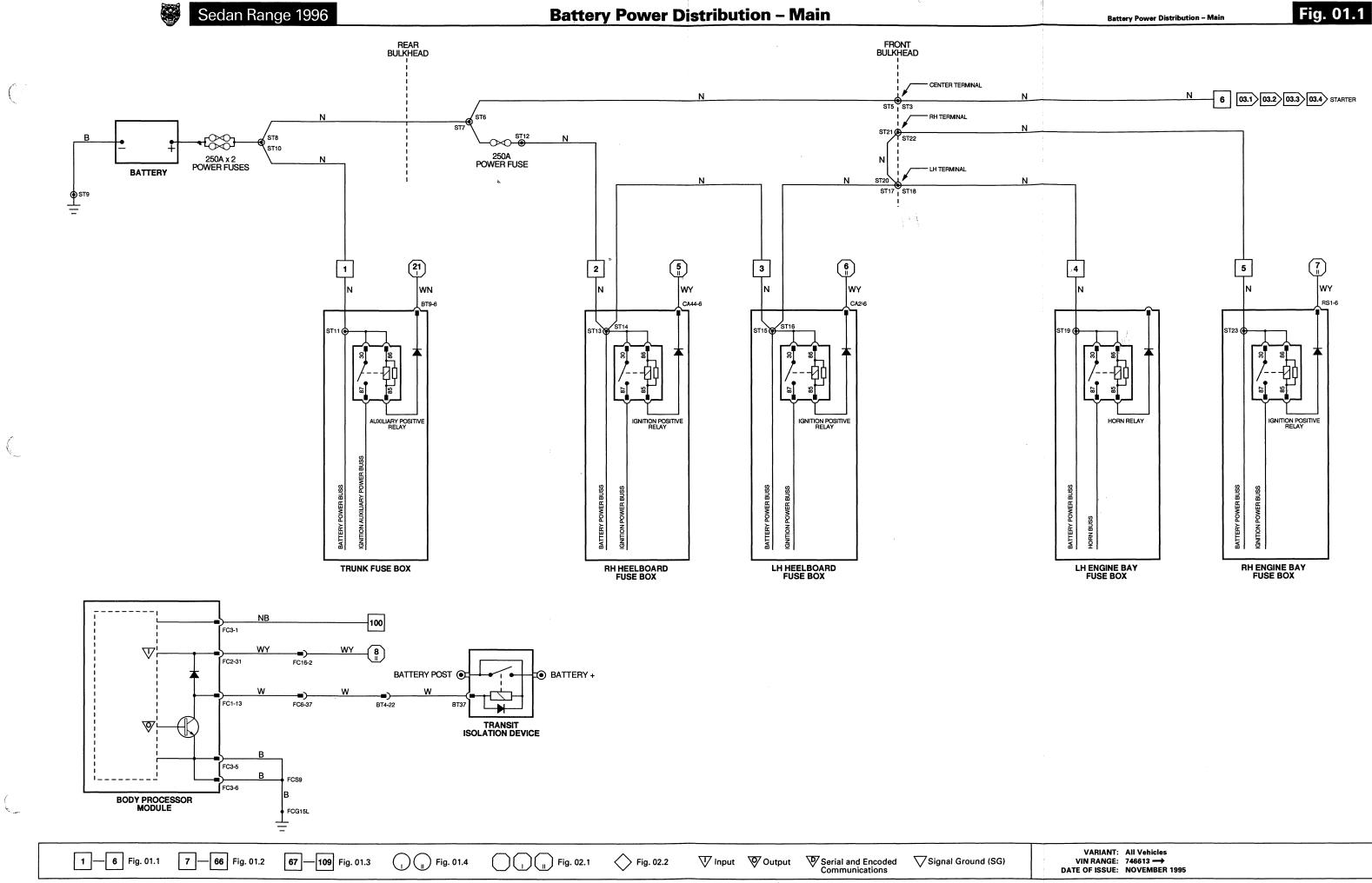
- O Output
- SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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. "Active" means a load is applied or a switch is ON; "Inactive" means a load is not applied or a switch is OFF.



COMPONENTS

Component

FUSE BOX - LH HEELBOARD

FUSE BOX - RH HEELBOARD

Connector / Type / Color

CA1 / 10-WAY UTA / NATURAL CA2 / 10-WAY UTA / BLACK CA36 / 10-WAY UTA / NATURAL CA44 / 10-WAY UTA / BLACK

Location / Access

RH HEELBOARD

. a.

HARNESS-TO-HARNESS CONNECTORS

Connector		
CC18		
FC7		

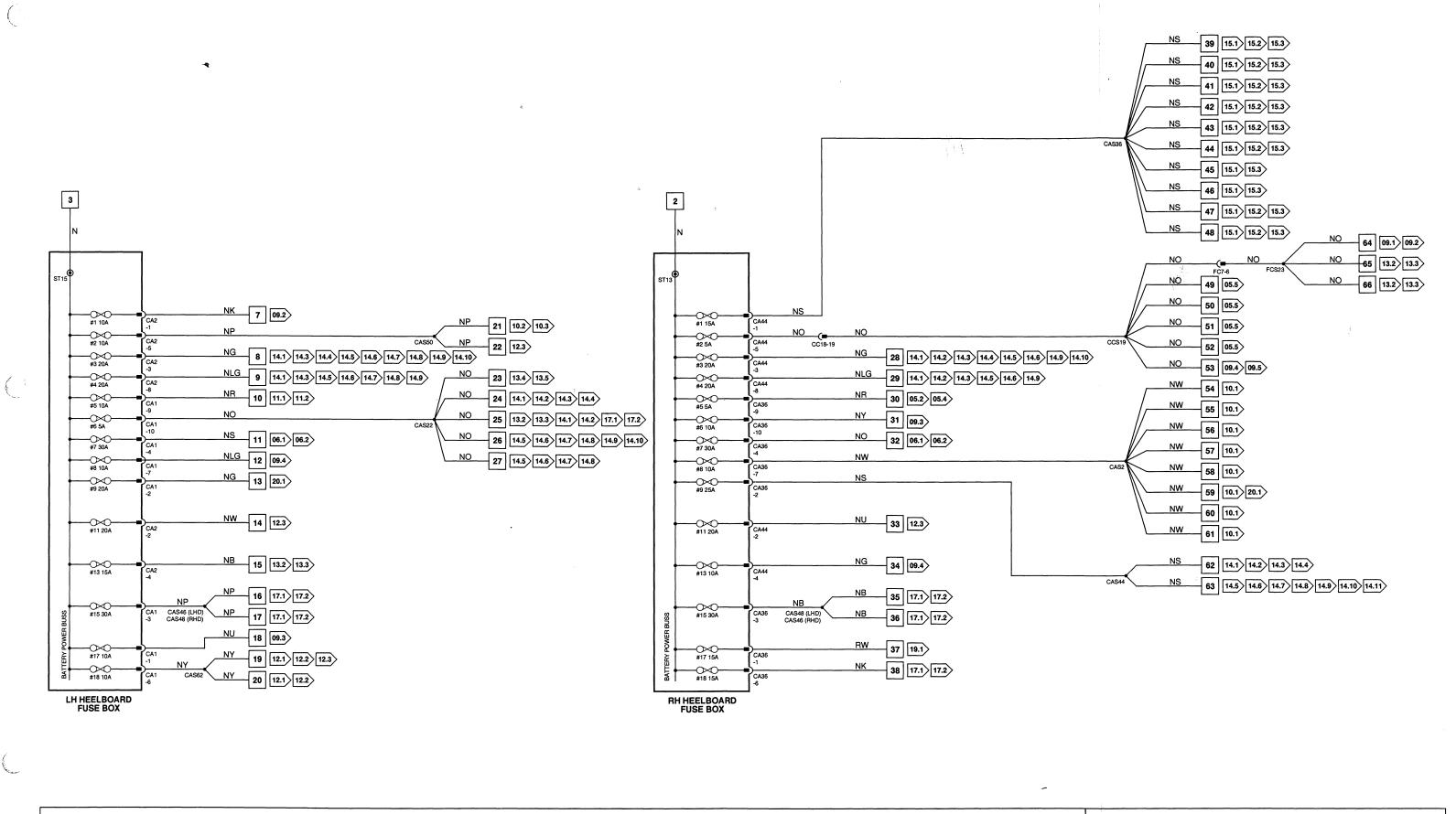
Type / Color 20-WAY MULTILOCK 040 / BLUE THROUGH-PANEL (48 MICRO / 6) / BLACK

Location / Access CENTER CONSOLE / CENTER CONSOLE GLOVE BOX PASSENGER'S UNDERSCUTTLE

n siga Nga

đ

Sedan Range 1996



1 - 6 Fig. 01.1 7 - 66 Fig. 01.2 67 - 109 Fig. 01.3 1 Fig. 01.4 1 Fig. 02.1 1 Fig. 02.2 V Input V Serial and Encoded V Signal Ground (SG) Communications

Fig. 01.2

Fig. 01.3

COMPONENTS

Component

FUSE BOX - LH ENGINE BAY

FUSE BOX - RH ENGINE BAY

FUSE BOX - TRUNK

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK
CC4	14-WAY MULTILOCK 070 / WHITE
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK

Connector / Type / Color

LS1 / 10-WAY UTA / BLACK LS37 / 10-WAY UTA / BLACK

RS1 / 10-WAY UTA / BLACK RS6 / 10-WAY UTA / BLACK

۰

Ą

BT9 / 10-WAY UTA / BLACK BT35 / 10-WAY UTA / NATURAL

> Location / Access ABOVE FUEL TANK / FUEL TANK TRIM CENTER CONSOLE / CENTER CONSOLE GLOVE BOX PASSENGER'S UNDERSCUTTLE

> > Sal age

Location / Access

ENGINE BAY, LH FRONT

ENGINE BAY, RH FRONT

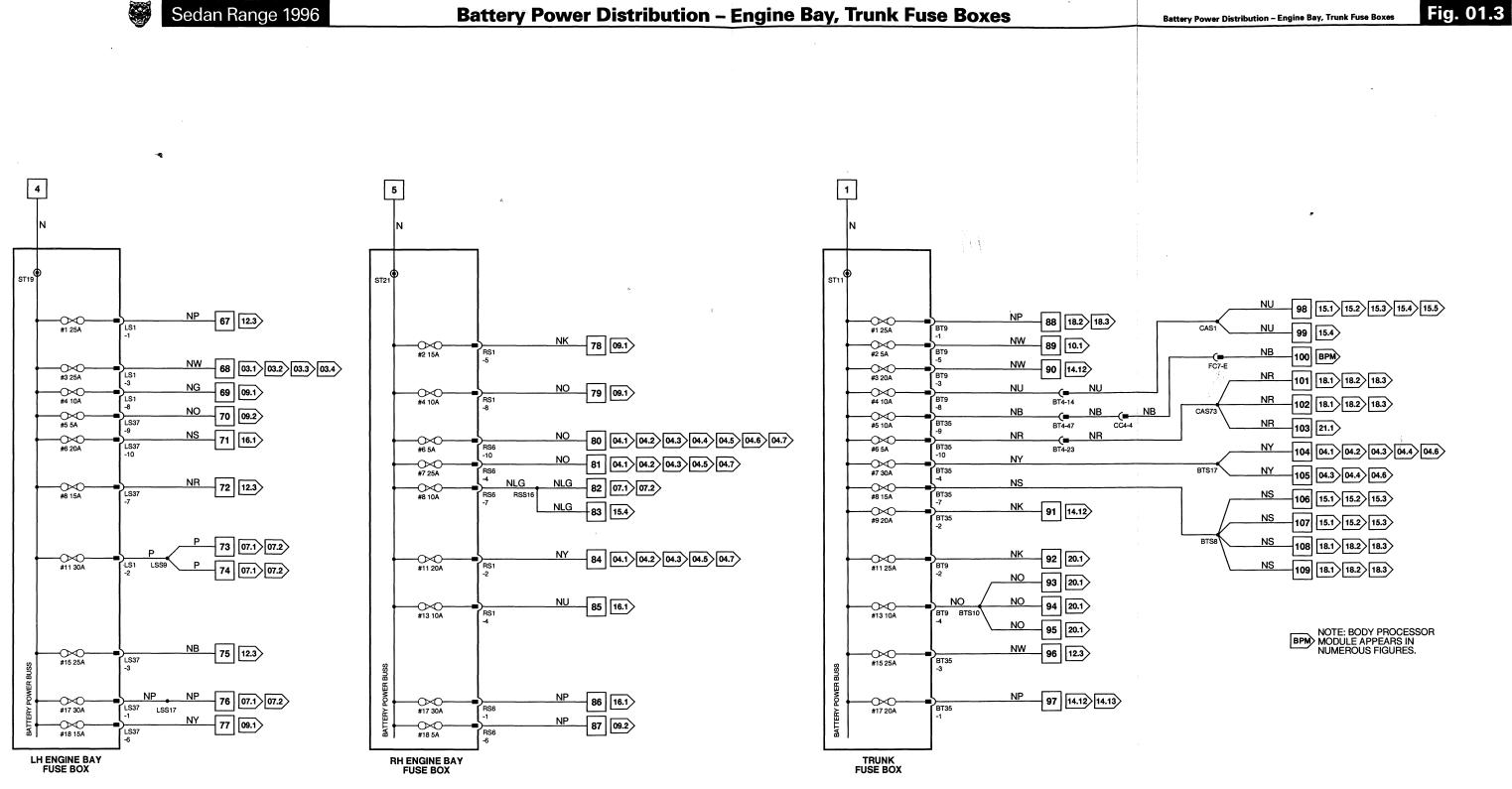
TRUNK ELECTRICAL CARRIER

6

- 54

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

DATE OF ISSUE: NOVEMBER 1995



1 6 Fig. 01.1 7 66 Fig. 01.2 67 109 Fig. 01.3 () || Fig. 01.4 (1) (1) Fig. 02.1

V Input V Output Serial and Encoded Communications **Fig. 02.2**

Signal Ground (SG)

Fia. 01.4

COMPONENTS

Component

FUSE BOX - RH ENGINE BAY

FUSE BOX - LH HEELBOARD FUSE BOX - RH HEELBOARD

FUSE BOX - TRUNK

RELAYS

Relay

AUXILIARY POSITIVE RELAY (TRUNK FUSE BOX) IGNITION POSITIVE RELAY (LH HEELBOARD FUSE BOX) IGNITION POSITIVE RELAY (RH HEELBOARD FUSE BOX) IGNITION POSITIVE RELAY (RH ENGINE BAY FUSE BOX)

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

Connector	Type / Color
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK
PI61	13-WAY ECONOSEAL III LC / BLACK
SH8	4-WAY MULTILOCK 070 / WHITE

Connector / Type / Color RS1 / 10-WAY UTA / BLACK RS6 / 10-WAY UTA / BLACK CA1 / 10-WAY UTA / BLACK CA1 / 10-WAY UTA / NATURAL CA2 / 10-WAY UTA / BLACK CA36 / 10-WAY UTA / NATURAL CA44 / 10-WAY UTA / BLACK BT9 / 10-WAY UTA / BLACK BT35 / 10-WAY UTA / NATURAL

BLUE

BLUE

BLUE

Color / Stripe **Connector / Color** BLACK / VIOLET — / BLUE -/BLACK — / BLACK -/BLACK

> Location / Access ABOVE FUEL TANK / FUEL TANK TRIM LH 'A' POST / 'A' POST PANEL REARWARD OF RH HEADLAMP LH 'A' POST / 'A' POST PANEL

 $2\pi s^2$

Location / Access

Location / Access

TRUNK ELECTRICAL CARRIER

6 10 1

ENGINE BAY, RH FRONT

I H HEELBOARD

RH HEELBOARD

TRUNK FUSE BOX LH HEELBOARD FUSE BOX RH HEELBOARD FUSE BOX RH ENGINE BAY FUSE BOX

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

ú

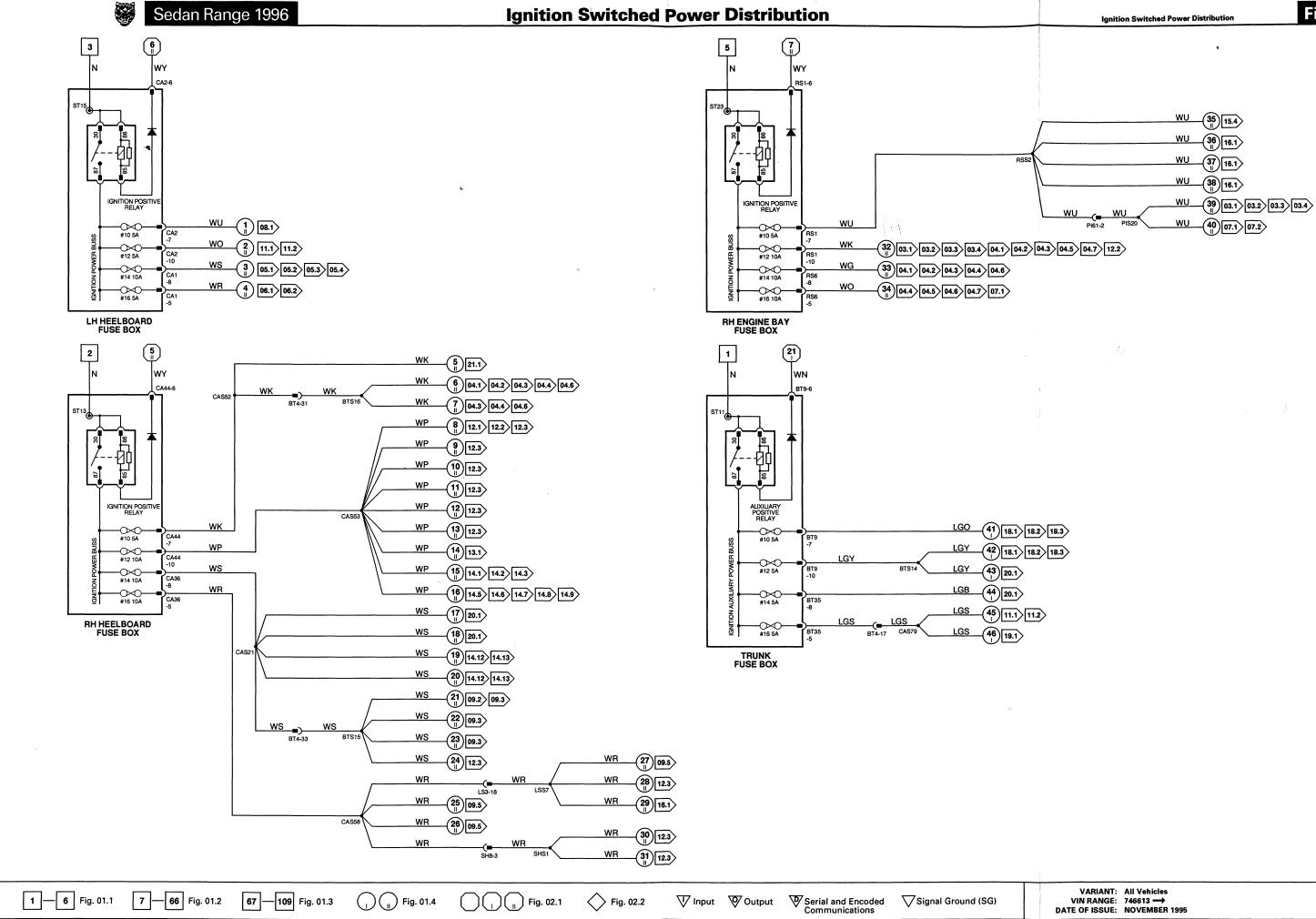




Fig. 01.4

Component

IGNITION SWITCH

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK
CC5	20-WAY MULTILOCK 040 / GREEN
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN

Location / Access

Connector / Type / Color

CA6 / 3-WAY ECONOSEAL III LC / BLACK

Section .

FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

ABOVE FUEL TANK / FUEL TANK TRIM CENTER CONSOLE / CENTER CONSOLE GLOVE BOX LH FASCIA END PANEL / OUTER AIR VENT RH FASCIA END PANEL / OUTER AIR VENT RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground Location / Type FCG26R LH CONSOLE GROUND STUD

- All Carlos

Location / Access

STEERING COLUMN / COVER

e di "

RH 'A' POST

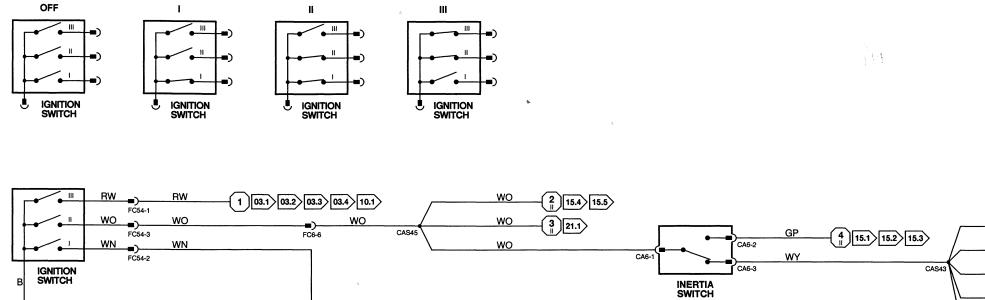
REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

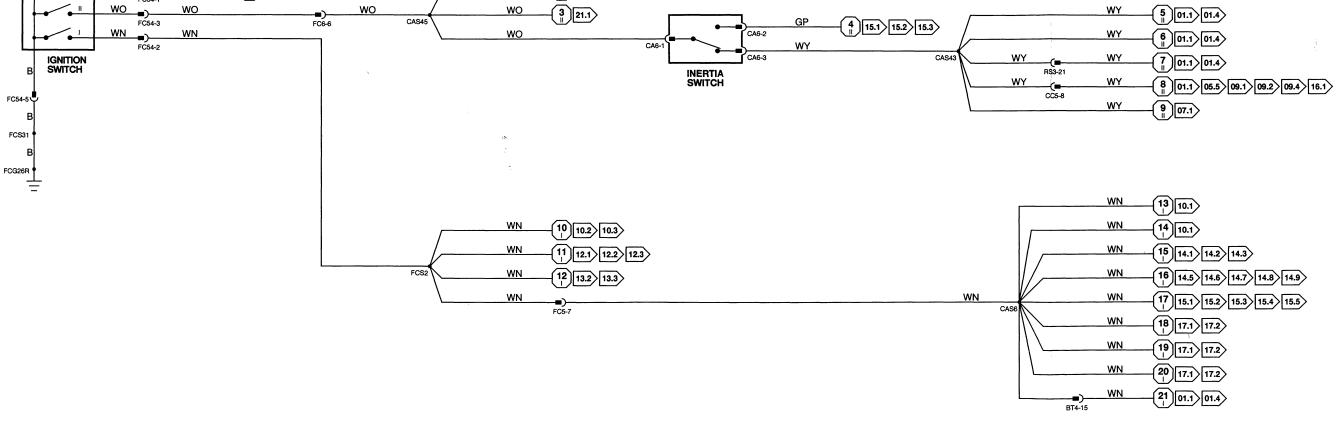
ø

Sedan Range 1996

-4

. .





1 - 6 Fig. 01.1 7 - 66 Fig. 01.2 67 - 109 Fig. 01.3 1 Fig. 01.4 Fig. 02.1 Fig. 02.2 V Input V Serial and Encoded Signal Ground (SG)

Fig. 02.2

COMPONENTS

Component

BATTERY

Connector / Type / Color ST8, ST10

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CC4	14-WAY MULTILOCK 070 / WHITE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE

GROUNDS

ر

Ground Location / Type BTG17 LOGIC GROUND STUD

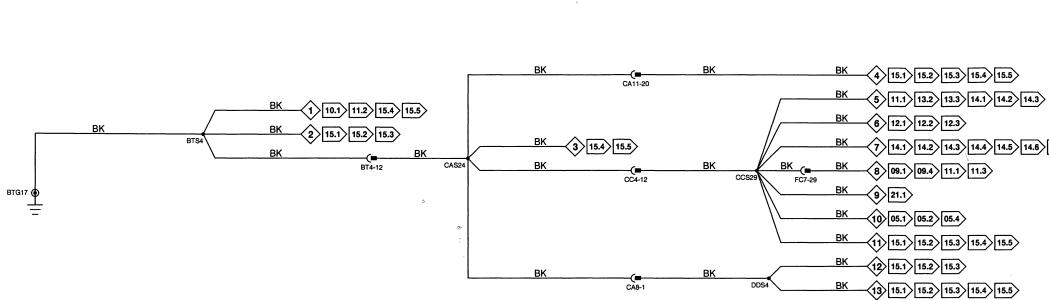
Location / Access

TRUNK

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

ø

-4



1 - 6 Fig. 01.1 7 - 66 Fig. 01.2 67 - 109 Fig. 01.3 (1) Fig. 01.4 V Input Output V Serial and Encoded Communications Signal Ground (SG)

7 14.1 14.2 14.3 14.4 14.5 14.6 14.7 14.8 14.9 14.10 14.11 15.4 15.5

03

COMPONENTS

Component

BATTERY BODY PROCESSOR MODULE

DECODER MODULE ENGINE CONTROL MODULE (AJ16)

GENERATOR IGNITION SWITCH ROTARY SWITCH

SECURITY AND LOCKING CONTROL MODULE

STARTER MOTOR

SUPPRESSION MODULE

Connector / Type / Color ST8, ST10 FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CC13 / 26-WAY MODU 4 / BLUE PI104 / 36-WAY ECONOSEAL III / BLACK PI105 / 36-WAY ECONOSEAL III / RED PI141 / 3-WAY NIPPON DENSO / BLACK FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE GB1 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE GB2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE ST1 / EYELET / WHITE ST2 / EYELET / WHITE AN3 (FLY LEAD) / 2-WAY ECONOSEAL III LC / RED

Location / Access

TRUNK PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE RH 'A' POST / 'A' POST TRIM

ENGINE, LH SIDE (AJ16), RH SIDE (V12) STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE

TRUNK, LH FRONT / TRUNK TRIM

ENGINE, LH REAR (AJ16); ENGINE, RH REAR (V12)

ENGINE BAY, LH FRONT

RELAYS

Color / Stripe **Connector / Color** Relav LS47 / BLACK STARTER RELAY BLACK

Location / Access LH ENGINE BAY RELAYS

· · · ·

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
PI63	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM
PI66	2-WAY ECONOSEAL III HC / BLACK	FORWARD OF LH ENGINE BAY FUSE BOX
P1142	2-WAY ECONOȘEAL III HC / BLACK	ENGINE BAY BULKHEAD
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

-

GROUNDS

Ground	Location / Type
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD
ST9	BATTERY GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ENGINE CONTROL MODULE (AJ16)

Ŧ

FC2-20

\bigtriangledown	Pin	Description	Active	Inactive		
о	PI104-20	CHECK ENGINE MIL	GROUND	B+		
D	PI105-35	FUELING INHIBIT SIGNAL	ENCODED COMMUNICATIONS			
BOI	BODY PROCESSOR MODULE					
\bigtriangledown	Pin	Description	Active	Inactive		
0	FC1-33	STARTER RELAY INHIBIT	GROUND	B+		
D	FC2-5	SECURE STATUS INPUT FROM SECURITY AND LOCKING CONTROL MODULE	ENCODED COMMUNICATIONS			
	FC2-7	CHECK ENGINE MIL	GROUND	B+		

PARK / NEUTRAL SIGNAL INTERIOR LAMP EXTINGUISH DURING CRANK FC2-41 ÷

SECURITY AND LOCKING CONTROL MODULE

∇ Pin Description CA21-10 SECURE STATUS OUTPUT TO BODY PROCESSOR D FUELING INHIBIT SIGNAL OUTPUT (NOT NAS) D CA21-20

Active ENCODED COMMUNICATIONS ENCODED COMMUNICATIONS

GROUND

GROUND

Inactive

B+

B+

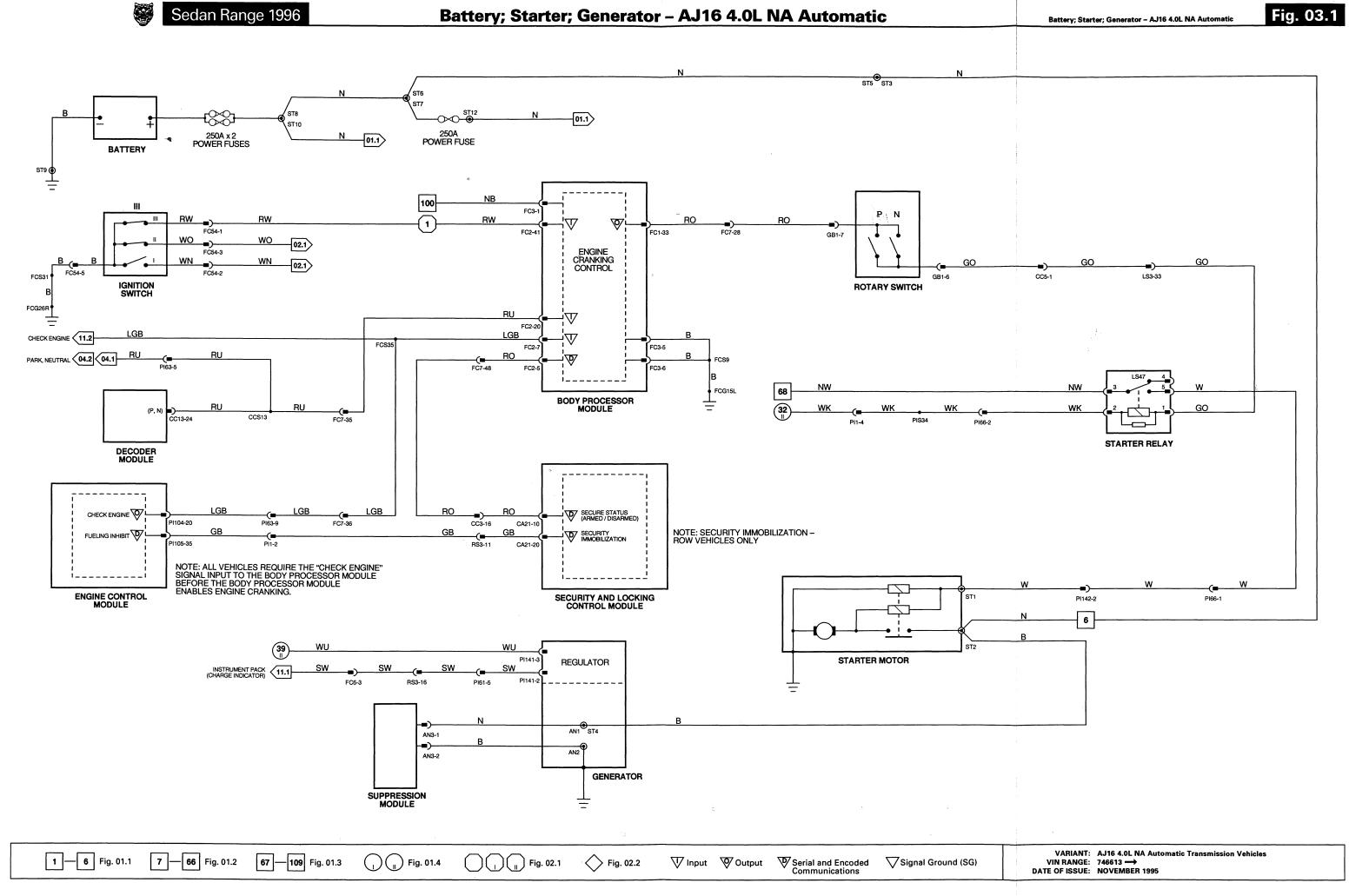
The following symbols are used to represent values for Control Module Pin Out data:

ø

Input 1

- Output 0
- SG Signal Ground
- Serial and encoded communications D
- **B+ Battery voltage** Voltage (DC) V Hz Frequency KHz Frequency x 1000 **MS Milliseconds MV** Millivolts

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.



Component

BATTERY BODY PROCESSOR MODULE

ENGINE CONTROL MODULE (AJ16)

GENERATOR IGNITION SWITCH LINEAR GEAR POSITION SWITCHES SECURITY AND LOCKING CONTROL MODULE

STARTER MOTOR

SUPPRESSION MODULE

RELAYS

Relay STARTER RELAY

ST8, ST10 FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK PI104 / 36-WAY ECONOSEAL III / BLACK PI105 / 36-WAY ECONOSEAL III / RED PI141 / 3-WAY NIPPON DENSO / BLACK FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE CC21 / 20-WAY MULTILOCK 040 / BLACK CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE ST1 / EYELET / WHITE ST2 / EYELET / WHITE AN3 (FLY LEAD) / 2-WAY ECONOSEAL III LC / RED

Connector / Type / Color

Location / Access

TRUNK PASSENGER'S UNDERSCUTTLE

RH 'A' POST / 'A' POST TRIM

ENGINE, LH SIDE (AJ16), RH SIDE (V12) STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE TRUNK, LH FRONT / TRUNK TRIM

ENGINE, LH REAR (AJ16); ENGINE, RH REAR (V12)

ENGINE BAY, LH FRONT

Color / Stripe Connector / Color LS47 / BLACK

Location / Access LH ENGINE BAY RELAYS

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GRÉEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
P163	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM
P166	2-WAY ECONOSEAL III HC / BLACK	FORWARD OF LH ENGINE BAY FUSE BOX
PI142	2-WAY ECONOSEAL III HC / BLACK	ENGINE BAY BULKHEAD
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
CCG51R	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD
ST9	BATTERY GROUND STUD

BLACK

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ð

ENGINE CONTROL MODULE (AJ16)

\bigtriangledown	Pin	Description	Active	Inactive
о	PI104-20	CHECK ENGINE MIL	GROUND	B+
D	PI105-35	FUELING INHIBIT SIGNAL	ENCODED COMMUNICATIONS	
BO	DY PROCE	SSOR MODULE		
\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-33	STARTER RELAY INHIBIT	GROUND	B+
D	FC2-5	SECURE STATUS INPUT FROM SECURITY AND LOCKING CONTROL MODULE	ENCODED COMMUNICATIONS	
ı.	FC2-7	CHECK ENGINE MIL	GROUND	B+
1	FC2-20	PARK / NEUTRAL SIGNAL	GROUND	B+
I.	FC2-41	INTERIOR LAMP EXTINGUISH DURING CRANK	GROUND	B+
SEC	CURITY AN	ID LOCKING CONTROL MODULE		
\bigtriangledown	Pin	Description	Active	Inactive

CA21-10 SECURE STATUS OUTPUT TO BODY PROCESSOR D CA21-20 FUELING INHIBIT SIGNAL OUTPUT (NOT NAS) D

ENCODED COMMUNICATIONS ENCODED COMMUNICATIONS

.....

ð

The following symbols are used to represent values for Control Module Pin Out data:

Input

- Output 0
- SG Signal Ground
- D
- Serial and encoded communications
- **B+ Battery voltage**
- V Voltage (DC)

¢

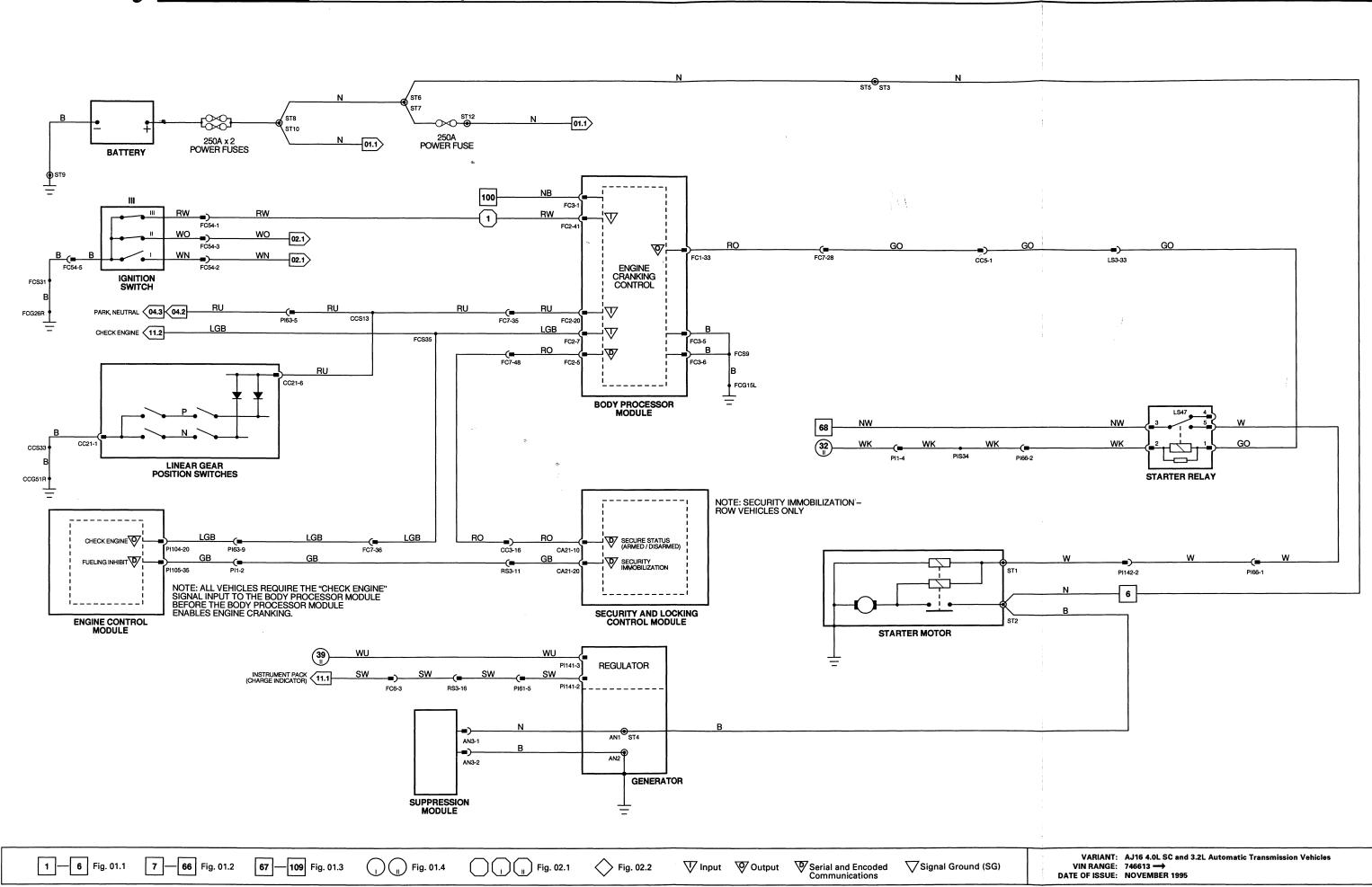
- Hz Frequency
- KHz Frequency x 1000 MS Milliseconds
- **MV Millivolts**

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.

Sedan Range 1996

Fig. 03.2

Battery; Starter; Generator - AJ16 4.0L SC and 3.2L Automatic



Component Connector / Type / Color ST8, ST10 BATTERY FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK BODY PROCESSOR MODULE ENGINE CONTROL MODULE (AJ16) PI104 / 36-WAY ECONOSEAL III / BLACK PI105 / 36-WAY ECONOSEAL III / RED PI141 / 3-WAY NIPPON DENSO / BLACK GENERATOR IGNITION SWITCH FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE SECURITY AND LOCKING CONTROL MODULE ST1 / EYELET / WHITE ST2 / EYELET / WHITE STARTER MOTOR

SUPPRESSION MODULE

RELAYS

RELAYS			
Relay	Color / Stripe	Connector / Color	Location / Access
STARTER RELAY	BLACK	LS47 / BLACK	LH ENGINE BAY RELAYS
		a con	

AN3 (FLY LEAD) / 2-WAY ECONOSEAL III LC / RED

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
PI63	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM
P166	2-WAY ECONOSEAL III HC / BLACK	FORWARD OF LH ENGINE BAY FUSE BOX
PI142	2-WAY ECONOSEAL III HC / BLACK	ENGINE BAY BULKHEAD
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

Location / Access

PASSENGER'S UNDERSCUTTLE

RH 'A' POST / 'A' POST TRIM

STEERING COLUMN / COVER

ENGINE BAY, LH FRONT

TRUNK, LH FRONT / TRUNK TRIM

ENGINE, LH SIDE (AJ16), RH SIDE (V12)

ENGINE, LH REAR (AJ16); ENGINE, RH REAR (V12)

TRUNK

GROUNDS

 Ground
 Location / Type

 FCG15L
 LH CONSOLE GROUND STUD

 FCG26R
 LH CONSOLE GROUND STUD

 ST9
 BATTERY GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ø

ENGINE CONTROL MODULE (AJ16)

\bigtriangledown	Pin	Description	Active	Inactive
о	PI104-20	CHECK ENGINE MIL	GROUND	B+
D	PI105-35	FUELING INHIBIT SIGNAL	ENCODED COMMUNICATIONS	
BO	DY PROCE	SSOR MODULE		
\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-33	STARTER RELAY INHIBIT	GROUND	B+
D	FC2-5	SECURE STATUS INPUT FROM SECURITY AND LOCKING CONTROL MODULE	ENCODED COMMUNICATIONS	
ı.	FC2-7	CHECK ENGINE MIL	GROUND	B+
1	FC2-20	PARK / NEUTRAL SIGNAL	GROUND	B+
I.	FC2-41	INTERIOR LAMP EXTINGUISH DURING CRANK	GROUND	B+

SECURITY AND LOCKING CONTROL MODULE

\bigtriangledown	Pin	Description	Active
D	CA21-10	SECURE STATUS OUTPUT TO BODY PROCESSOR	ENCODED COMMUNICATIONS
D	CA21-20	FUELING INHIBIT SIGNAL OUTPUT (NOT NAS)	ENCODED COMMUNICATIONS

The following symbols are used to represent values for Control Module Pin Out data:

-a

l Input

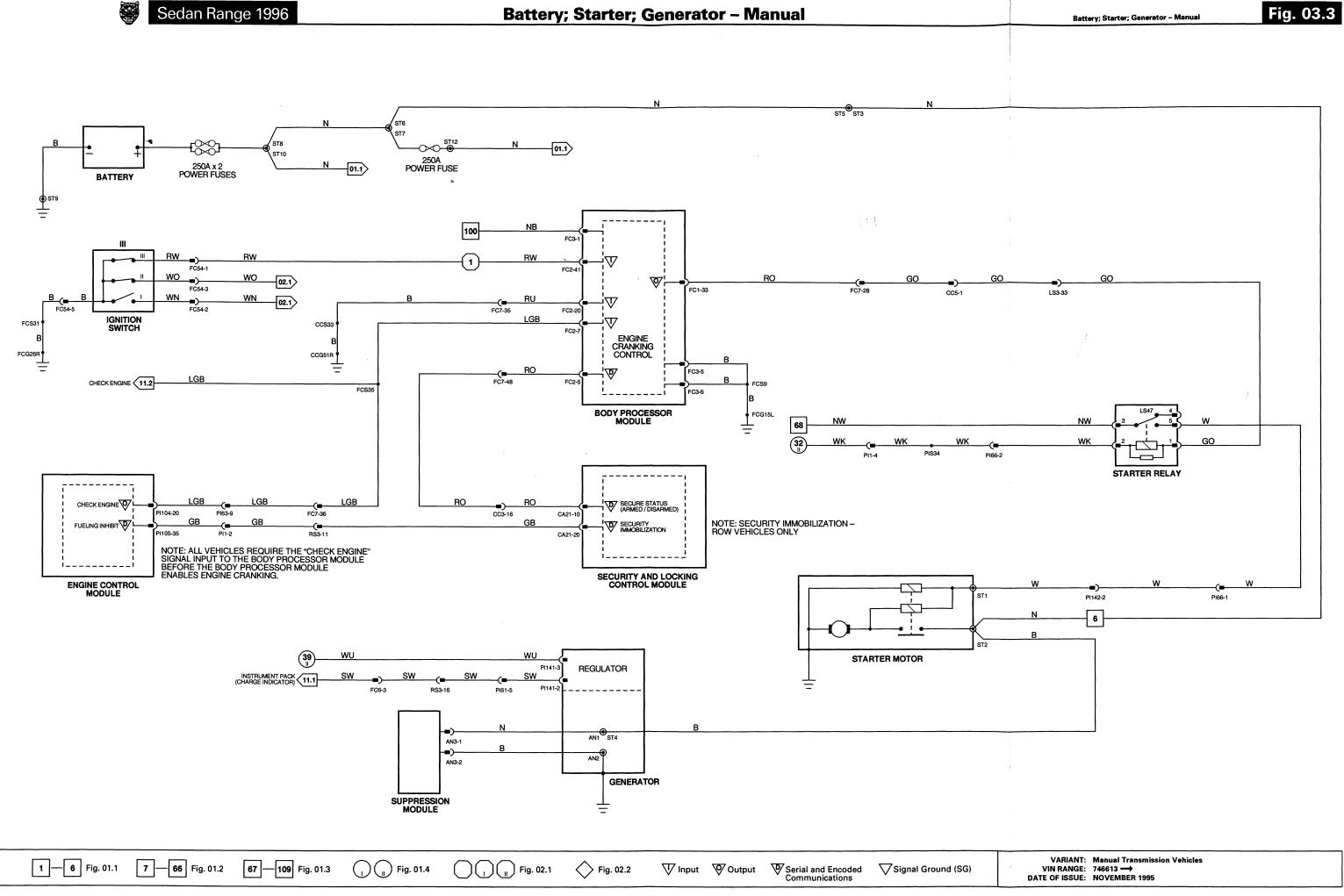
- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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. "Active" means a load is applied or a switch is ON; "Inactive" means a load is not applied or a switch is OFF.

Inactive

()



iq. 03.4

COMPONENTS

Component BATTERY

BODY PROCESSOR MODULE

ENGINE CONTROL MODULE (V12)

GENERATOR IGNITION SWITCH LINEAR GEAR POSITION SWITCHES SECURITY AND LOCKING CONTROL MODULE

STARTER MOTOR

SUPPRESSION MODULE

RELAYS

STARTER RELAY

ST8, ST10 FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK PI44 / 28-WAY MULTILOCK 040 / SLATE PI45 / 16-WAY MULTILOCK 040 / SLATE PI46 / 22-WAY MULTILOCK 040 / SLATE PI47 / 34-WAY MULTILOCK 040 / SLATE PI141 / 3-WAY NIPPON DENSO / BLACK FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE CC21 / 20-WAY MULTILOCK 040 / BLACK CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE ST1 / EYELET / WHITE ST2 / EYELET / WHITE AN3 (FLY LEAD) / 2-WAY ECONOSEAL III LC / RED

Connector / Type / Color

Location / Access

TRUNK PASSENGER'S UNDERSCUTTLE

RH 'A' POST / 'A' POST TRIM

ENGINE, LH SIDE (AJ16), RH SIDE (V12) STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE TRUNK, LH FRONT / TRUNK TRIM

ENGINE, LH REAR (AJ16); ENGINE, RH REAR (V12)

ENGINE BAY, LH FRONT

Relay

Connector / Color Color / Stripe LS47 / BLACK BLACK

Location / Access LH ENGINE BAY RELAYS

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
P163	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM
PI66	2-WAY ECONOSEAL III HC / BLACK	FORWARD OF LH ENGINE BAY FUSE BOX
PI142	2-WAY ECONOSEAL III HC / BLACK	ENGINE BAY BULKHEAD
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground Location / Type CCG51R CENTER CONSOLE GROUND STUD FCG15L LH CONSOLE GROUND STUD FCG26R LH CONSOLE GROUND STUD ST9 BATTERY GROUND STUD

Ð

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ENGINE CONTROL MODULE (V12)

∇	Pin	Description	Active	Inactive
o	PI44-2	CHECK ENGINE MIL	GROUND	B+
D	PI44-14	START INHIBIT	GROUND	B+
BO	DY PROC	ESSOR MODULE		
\bigtriangledown	Pin	Description	Active	Inactive
ο	FC1-33	STARTER RELAY INHIBIT	GROUND	В+
D	FC2-5	SECURE STATUS INPUT FROM SECURITY AND LOCKING CONTROL MODULE	ENCODED COMMUNICATIONS	
Т	FC2-7	CHECK ENGINE MIL	GROUND	B+
	FC2-20	PARK / NEUTRAL SIGNAL	GROUND	B+
	FC2-41	INTERIOR LAMP EXTINGUISH DURING CRANK	GROUND	B+

Inactive

\bigtriangledown	Pin	Description	Active
D	CA21-10	SECURE STATUS OUTPUT TO BODY PROCESSOR	ENCODED COMMUNICATIONS
D	CA21-20	FUELING INHIBIT SIGNAL OUTPUT (NOT NAS)	ENCODED COMMUNICATIONS

The following symbols are used to represent values for Control Module Pin Out data:

ø

4

l Input

O Output

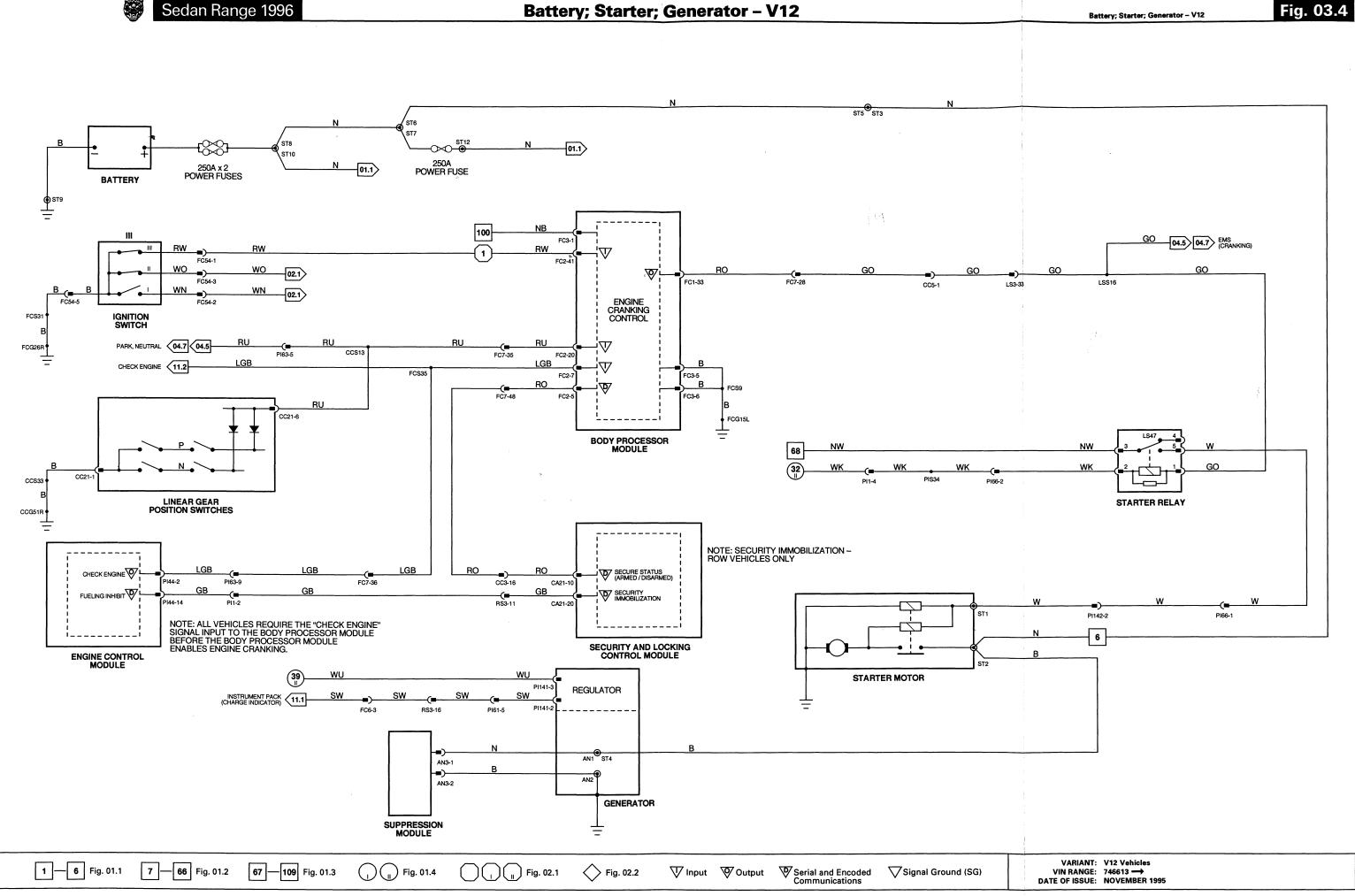
SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.

Sedan Range 1996



Component

CAMSHAFT POSITION SENSOR (AJ16) CANISTER CLOSE VALVE CRANKSHAFT POSITION SENSOR DIODE (PIB1) – AIRP SOLENOID SUPPRESSION EGR TEMPERATURE SENSOR EGR VALVE ENGINE CONTROL MODULE (AJ16)

ENGINE COOLANT TEMPERATURE SENSOR (AJ16) EVAPORATIVE EMISSION CONTROL VALVE (AJ16) FUEL INJECTOR (AJ16 1) FUEL INJECTOR (AJ16 2) FUEL INJECTOR (AJ16 3) FUEL INJECTOR (AJ16 4) FUEL INJECTOR (AJ16 5) FUEL INJECTOR (AJ16 6) FUEL PUMP (1) FUEL TANK PRESSURE SENSOR HEATED OXYGEN SENSOR (AJ16 - 1,2,3 DOWNSTREAM) HEATED OXYGEN SENSOR (AJ16 - 4,5,6 DOWNSTREAM) HEATED OXYGEN SENSOR (AJ16 - 1,2,3 UPSTREAM) HEATED OXYGEN SENSOR (AJ16 - 4,5,6 UPSTREAM) IDLE AIR CONTROL VALVE (AJ16) IGNITION COIL (AJ16 1) IGNITION COIL (AJ16 2) **IGNITION COIL (AJ16 3)** IGNITION COIL (AJ16 4) **IGNITION COIL (AJ16 5) IGNITION COIL (AJ16 6)** INTAKE AIR TEMPERATURE SENSOR (AJ16) KNOCK SENSOR (A) KNOCK SENSOR (B) MASS AIR FLOW SENSOR SECONDARY AIR INJECTION PUMP THROTTLE POSITION SENSOR (AJ16)

Connector / Type / Color

PI112 / 3-WAY JUNIOR TIMER / BLACK CV2 (FLY LEAD) / 2-WAY YAZAKI 090 / BLACK PI111 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI81 / DIODE / BLACK PI110 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI117 / 5-WAY PACKARD / BLACK PI104 / 36-WAY ECONOSEAL III / BLACK PI105 / 36-WAY ECONOSEAL III / RED PI107 / 2-WAY JUNIOR TIMER / BLACK PI130 / 2-WAY JUNIOR TIMER / BLACK PI120 / 2-WAY JUNIOR TIMER / SLATE PI121 / 2-WAY JUNIOR TIMER / SLATE PI122 / 2-WAY JUNIOR TIMER / SLATE PI123 / 2-WAY JUNIOR TIMER / SLATE PI124 / 2-WAY JUNIOR TIMER / SLATE PI125 / 2-WAY JUNIOR TIMER / SLATE BT6 (FLY LEAD) / 4-WAY SUMITOMO 90 / WHITE FL1 / 3-WAY SUMITOMO 90 / BLACK PI126 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI127 (FLY LEAD) / 4-WAY ECONOSEAL III LC./BLACK PI128 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI129 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI113 / 4-WAY PACKARD / BLACK PI131 / 2-WAY SUMITOMO 90 / BROWN PI132 / 2-WAY SUMITOMO 90 / BROWN PI133 / 2-WAY SUMITOMO 90 / BROWN PI134 / 2-WAY SUMITOMO 90 / BROWN PI135 / 2-WAY SUMITOMO 90 / BROWN PI136 / 2-WAY SUMITOMO 90 / BROWN PI106 / 2-WAY JUNIOR TIMER / BLACK PI108 / 2-WAY JUNIOR TIMER / BLACK PI109 / 2-WAY JUNIOR TIMER / BLACK PI116 / 3-WAY JUNIOR TIMER / BLACK PI115 / 3-WAY PACKARD / BLACK PI118 / 3-WAY JUNIOR TIMER / BLACK

Location / Access

ENGINE RH SIDE RH REAR UNDER FLOOR PANEL ENGINE TIMING COVER EMS HARNESS / SECONDARY AIR INJECTION PUMP INTAKE MANIFOLD INTAKE MANIFOLD RH 'A' POST / 'A' POST TRIM

ENGINE THERMOSTAT HOUSING BELOW LH FRONT RELAYS FUEL RAIL, INTAKE MANIFOLD FUEL TANK / FUEL TANK TRIM FUEL TANK EVAPORATIVE FLANGE EXHAUST, DOWNSTREAM OF PRIMARY CATALYST EXHAUST, DOWNSTREAM OF PRIMARY CATALYST EXHAUST, UPSTREAM OF PRIMARY CATALYST EXHAUST, UPSTREAM OF PRIMARY CATALYST THROTTLE BODY CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER ENGINE AIR INTAKE ELBOW ENGINE BLOCK, LH FRONT ENGINE BLOCK, LH REAR ENGINE AIR INTAKE ENGINE, LH FRONT THROTTLE BODY

RELAYS

Relay

ECM CONTROLLED RELAY (AJ16) FUEL PUMP RELAY (1) SECONDARY AIR INJECTION RELAY (AJ16)

Color / Stripe Connector / Color BLACK PI119 / BLACK BLACK / VIOLET BT26 / GREEN BLACK / WHITE PI146 / BLACK

TRUNK ELECTRICAL CARRIER RH ENGINE BAY RELAYS

Location / Access

BH ENGINE BAY BELAYS

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CV1	6-WAY MULTILOCK 070 / WHITE	LH REAR INNER FENDER / TRUNK TRIM
CV3	3-WAY METRIPACK 150 / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
P163	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM
PI16	16-WAY MULTILOCK 070 / WHITE	RH 'A' POST / 'A' POST TRIM
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
CAG100	RH 'A' POST GROUND STUD
FUG8L	FRONT TRUNK GROUND STUD
PIG153L	RH BULKHEAD GROUND STUD
PIG153R	RH BULKHEAD GROUND STUD
PIG154R	LEFT FORWARD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ENGINE CONTROL MODULE (AJ16)

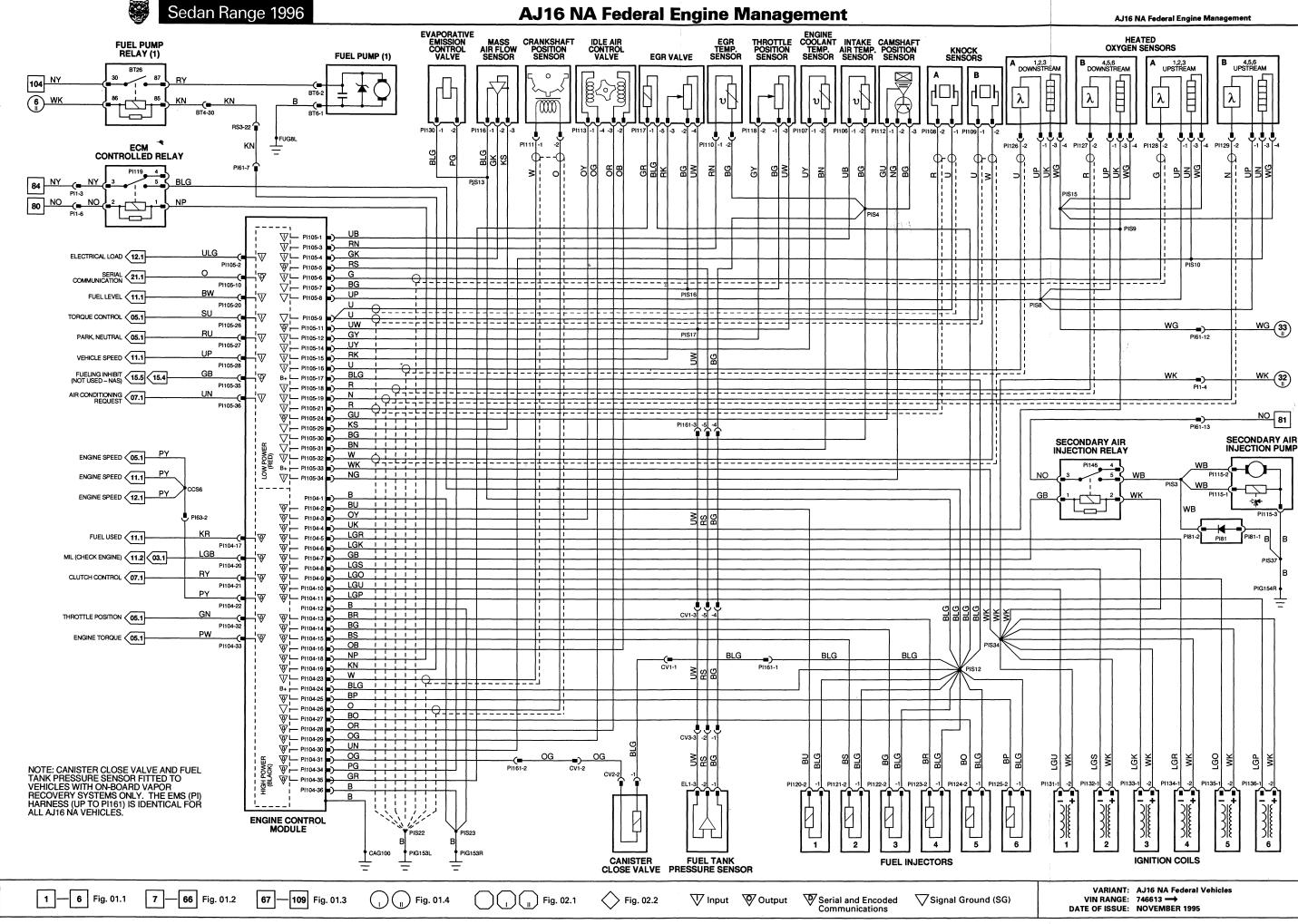
\bigtriangledown	Pin	Description	Active	Inactive
0	PI104-2	INJECTOR 1	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-3	IDLE SPEED CONTROL 1	12 V, 0 V	8 V (NOT MOVING)
0	Pi104-4	DOWNSTREAM HO2S HEATERS	0.4-13 V, 10 Hz @ IDLE	
0	PI104-5	IGNITION COIL 4	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI104-6	IGNITION COIL 3	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI104-7	SECONDARY AIR INJECTION RELAY	GROUND	B+
0	PI104-8	IGNITION COIL 2	GROUND PULSE, 1000 RPM = 15 Hz	
0	Pi104-9	IGNITION COIL 5	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI104-10	IGNITION COIL 1	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI104-11	IGNITION COIL 6	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI104-13	INJECTOR 4	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-14	INJECTOR 3	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-15	INJECTOR 2	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-16	IDLE SPEED CONTROL 4	12 V, 0 V	8 V (NOT MOVING)
0	PI104-17	FUEL USED	GROUND PULSE, 6 Hz @ IDLE	
0	PI104-18	ECM CONTROLLED RELAY	GROUND	B+
ο	PI104-19	FUEL PUMP RELAY 1	GROUND	B+
0	PI104-20	CHECK ENGINE MIL	GROUND	B+
0	PI104-21	AIR CONDITIONING CLUTCH RELAY	GROUND	B+
ο	PI104-22	ENGINE SPEED SIGNAL	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
1	PI104-23	CRANKSHAFT POSITION SENSOR	GROUND @ 1000 RPM = 900 Hz, 2000 RPM = 1800 Hz	
ο	PI104-25	INJECTOR 6	GROUND PULSE, 2.8 MS @ IDLE	B+
SG	PI104-26	CRANKSHAFT POSITION SENSOR GROUND	GROUND	GROUND
о	PI104-27	INJECTOR 5	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-28	IDLE SPEED CONTROL 3	12 V, 0 V	8 V (NOT MOVING)
о	PI104-29	IDLE SPEED CONTROL 2	12 V, 0 V	8 V (NOT MOVING)
0	PI104-30	UPSTREAM HO2S HEATERS	0.4-13 V, 10 Hz @ IDLE	
0	PI104-31	CANISTER CLOSE VALVE	0V	B+
0	PI104-32	THROTTLE POSITION	1.25 V @ IDLE	4.9 V @ FULL THROTTLE
0	PI104-33	ENGINE TORQUE	10.4 V (NO LOAD), DECREASING WITH LOAD INCREASE	
0	PI104-34	EVAPORATIVE EMISSION CONTROL VALVE	B+	GROUND
0	PI104-35	EGR VALVE SOLENOID	0.1 – 9 V	
1	PI105-1	INTAKE AIR TEMPERATURE SENSOR	0.98 V @ 10° C, INCREASING WITH TEMPERATURE	
ł	PI105-2	ELECTRICAL LOAD: HEATED WINDSHIELD, HEATED BACKLIGHT, OR BLOWERS ON HIGH SPEED	B+	GROUND
1	PI105-3	EGR TEMPERATURE SENSOR	4.9 V @ IDLE (NO EGR), DECREASES WITH EGR FLOW INCREASE	
1	PI105-4	MASS AIR FLOW SENSOR	1.2 V @ IDLE, INCREASES WITH RPM INCREASE	
0	PI105-5	FUEL TANK PRESSURE SENSOR FEEDBACK	4.9V = LOW PRESSURE 0.2V = HIGH PRESSURE	
1	PI105-6	UPSTREAM H02S FEEDBACK - CYLINDERS 1, 2, 3	0.1 - 4.7 V @ IDLE (SWING)	
SG	PI105-7	SENSOR COMMON REFERENCE GROUND	GROUND	GROUND
SG	PI105-8	HO2S COMMON SIGNAL GROUND	GROUND	GROUND
SG	PI105-9	KNOCK SENSORS COMMON REFERENCE GROUND	GROUND	GROUND
D	PI105-10	SERIAL COMMUNICATION (BI-DIRECTIONAL)		
0	PI105-11	SENSOR COMMON REFERENCE VOLTAGE	5 V	5 V
1	PI105-12	THROTTLE POSITION SENSOR FEEDBACK	0.6 V @ IDLE	4.9 V = FULL THROTTLE
1	PI105-14	ENGINE COOLANT TEMPERATURE SENSOR	0.41 V @ 90° C, INCREASING WITH TEMPERATURE INCREASE	
1	PI105-15	EGR VALVE POSITION FEEDBACK	0.7 V @ IDLE (NO EGR)	5 V = MAXIMUM EGR
1	PI105-16	DOWNSTREAM HO2S FEEDBACK – CYLINDERS 1, 2, 3	0.1 - 4.7 V @ IDLE (SWING)	
1	PI105-18	DOWNSTREAM HO2S FEEDBACK – CYLINDERS 4, 5, 6	0.1 – 4.7 V @ IDLE (SWING)	
1	PI105-19	UPSTREAM H02S FEEDBACK – CYLINDERS 4, 5, 6	0.1 - 4.7 V @ IDLE (SWING)	
I.	PI105-20	LOW FUEL LEVEL	GROUND	B+
1	PI105-21	KNOCK SENSOR – A BANK	0 Hz = NO KNOCK, 2 – 20 Hz = KNOCK	
0	PI105-24	CAMSHAFT POSITION SENSOR SUPPLY	B+	B+
۱.	PI105-26	TORQUE REDUCTION REQUEST	GROUND PULSE @ SHIFT	9.4 V @ IDLE
ł	PI105-27	PARK / NEUTRAL	GROUND	B+
F	PI105-28	VEHICLE SPEED	GROUND PULSE @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	
SG	PI105-29	MASS AIR FLOW SENSOR GROUND	GROUND	GROUND
SG	PI105-30	SENSOR COMMON SIGNAL GROUND	GROUND	GROUND
SG	PI105-31	ENGINE COOLANT TEMPERATURE SENSOR GROUND	GROUND	GROUND
1	PI105-32	KNOCK SENSOR – B BANK	0 Hz = NO KNOCK, 2 – 20 Hz = KNOCK	
ł	PI105-34	CAMSHAFT POSITION SENSOR SIGNAL	1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
D	PI105-35	FUELING INHIBIT SIGNAL	ENCODED COMMUNICATIONS	
I.	PI105-36	AIR CONDITIONING REQUEST	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

1	Input	B+	Battery voltage
0	Output	V	Voltage (DC)
SG	Signal Ground	Hz	Frequency
D	Serial and encoded communications	KHz	Frequency x 1000
		MS MS	Milliseconds
		MV	Millivolts

đ

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.



VARIANT:	AJ16 NA Federal Vehicles
VIN RANGE:	746613 →
DATE OF ISSUE:	NOVEMBER 1995

Fig. 04.1

Component

CAMSHAFT POSITION SENSOR (AJ16) CATALYST SWITCHING MODULE CATALYST THERMOCOUPLES CRANKSHAFT POSITION SENSOR DIODE (PI81) – AIRP SOLENOID SUPPRESSION ENGINE CONTROL MODULE (AJ16)

ENGINE COOLANT TEMPERATURE SENSOR (AJ16) EVAPORATIVE EMISSION CONTROL VALVE (AJ16) FUEL INJECTOR (AJ16 1) FUEL INJECTOR (AJ16 2) FUEL INJECTOR (AJ16.3) FUEL INJECTOR (AJ16 4) FUEL INJECTOR (AJ16 5) FUEL INJECTOR (AJ16 6) FUEL PUMP (1) HEATED OXYGEN SENSOR (AJ16 - 1,2,3) HEATED OXYGEN SENSOR (AJ16 - 4,5,6) IDLE AIR CONTROL VALVE (AJ16) **IGNITION COIL (AJ16 1) IGNITION COIL (AJ16 2) IGNITION COIL (AJ16 3)** IGNITION COIL (AJ16 4) **IGNITION COIL (AJ16 5)** IGNITION COIL (AJ16 6) INTAKE AIR TEMPERATURE SENSOR (AJ16) KNOCK SENSOR (A) KNOCK SENSOR (B) MASS AIR FLOW SENSOR SECONDARY AIR INJECTION PUMP THROTTLE POSITION SENSOR (AJ16)

Connector / Type / Color PI112 / 3-WAY JUNIOR TIMER / BLACK PI155 / 8-WAY MULTILOCK 070 / WHITE PI156 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI111 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI81 / DIODE / BLACK PI104 / 36-WAY ECONOSEAL III / BLACK PI105 / 36-WAY ECONOSEAL III / RED PI107 / 2-WAY JUNIOR TIMER / BLACK PI130 / 2-WAY JUNIOR TIMER / BLACK PI120 / 2-WAY JUNIOR TIMER / SLATE PI121 / 2-WAY JUNIOR TIMER / SLATE PI122 / 2-WAY JUNIOR TIMER / SLATE PI123 / 2-WAY JUNIOR TIMER / SLATE PI124 / 2-WAY JUNIOR TIMER / SLATE PI125 / 2-WAY JUNIOR TIMER / SLATE BT6 (FLY LEAD) / 4-WAY SUMITOMO 90 / WHITE PI126 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI127 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI113 / 4-WAY PACKARD / BLACK PI131 / 2-WAY SUMITOMO 90 / BROWN PI132 / 2-WAY SUMITOMO 90 / BROWN PI133 / 2-WAY SUMITOMO 90 / BROWN

Location / Access

ENGINE RH SIDE RH 'A' POST, ECM / 'A' POST TRIM REAR OF ENGINE ENGINE TIMING COVER EMS HARNESS / SECONDARY AIR INJECTION PUMP RH 'A' POST / 'A' POST TRIM ENGINE THERMOSTAT HOUSING

BELOW LH FRONT RELAYS FUEL BAIL, INTAKE MANIFOLD FUEL RAIL, INTAKE MANIFOLD FUEL TANK / FUEL TANK TRIM EXHAUST, DOWNSTREAM OF PRIMARY CATALYST EXHAUST, DOWNSTREAM OF PRIMARY CATALYST THROTTLE BODY CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER ENGINE AIR INTAKE ELBOW ENGINE BLOCK, LH FRONT ENGINE BLOCK, LH REAR ENGINE AIR INTAKE ENGINE, LH FRONT THROTTLE BODY

RELAYS

Relay ECM CONTROLLED RELAY (AJ16) FUEL PUMP RELAY (1) SECONDARY AIR INJECTION RELAY (AJ16)

Color / Stripe Connector / Color BLACK PI119 / BLACK BLACK / VIOLET BT26 / GREEN BLACK / WHITE PI146 / BLACK

PI134 / 2-WAY SUMITOMO 90 / BROWN

PI135 / 2-WAY SUMITOMO 90 / BROWN

PI136 / 2-WAY SUMITOMO 90 / BROWN

PI106 / 2-WAY JUNIOR TIMER / BLACK

PI108 / 2-WAY JUNIOR TIMER / BLACK

PI109 / 2-WAY JUNIOR TIMER / BLACK

PI116 / 3-WAY JUNIOR TIMER / BLACK

PI118 / 3-WAY JUNIOR TIMER / BLACK

PI115 / 3-WAY PACKARD / BLACK

Location / Access RH ENGINE BAY RELAYS TRUNK ELECTRICAL CARRIER RH ENGINE BAY RELAYS

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
P163	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
CAG100	RH 'A' POST GROUND STUD
FUG8L	FRONT TRUNK GROUND STUD
PIG153L	RH BULKHEAD GROUND STUD
PIG153R	RH BULKHEAD GROUND STUD
PIG154L	LEFT FORWARD GROUND STUD
PIG154R	LEFT FORWARD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ENGINE CONTROL MODULE (AJ16)

∇	Pin	Description	Active ***	Inactive
0	PI104-2	INJECTOR 1	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-3	IDLE SPEED CONTROL 1	12 V, 0 V	8 V (NOT MOVING)
ο	PI104-4	HO2S HEATERS	0.4 – 13 V, 10 Hz @ IDLE	
ο	PI104-5	IGNITION COIL 4	GROUND PULSE, 1000 RPM = 15 Hz	
ο	PI104-6	IGNITION COIL 3	GROUND PULSE, 1000 RPM = 15 Hz	
о	PI104-7	SECONDARY AIR INJECTION RELAY	GROUND	B+
o	PI104-8	IGNITION COIL 2	GROUND PULSE, 1000 RPM = 15 Hz	
о	PI104-9	IGNITION COIL 5	GROUND PULSE, 1000 RPM = 15 Hz	
ο	PI104-10	IGNITION COIL 1	GROUND PULSE, 1000 RPM = 15 Hz	
о	PI104-11	IGNITION COIL 6	GROUND PULSE, 1000 RPM = 15 Hz	
о	PI104-13	INJECTOR 4	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-14	INJECTOR 3	GROUND PULSE, 2.8 MS @ IDLE	B+
ο	PI104-15	INJECTOR 2	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-16	IDLE SPEED CONTROL 4	12 V, 0 V	8 V (NOT MOVING)
0	PI104-17	FUEL USED	GROUND PULSE, 6 Hz @ IDLE	
0	PI104-18	ECM CONTROLLED RELAY	GROUND	B+
ō	PI104-19		GROUND	B+
0	PI104-20	CHECK ENGINE MIL	GROUND	B+
ō	PI104-21	AIR CONDITIONING CLUTCH RELAY	GROUND	B+
ō	PI104-22	ENGINE SPEED SIGNAL	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
- î	PI104-23	CRANKSHAFT POSITION SENSOR	GROUND @ 1000 RPM = 900 Hz, 2000 RPM = 1800 Hz	
ò	PI104-25	INJECTOR 6	GROUND PULSE, 2.8 MS @ IDLE	B+
SG	PI104-26	CRANKSHAFT POSITION SENSOR GROUND	GROUND	GROUND
0	PI104-27	INJECTOR 5	GROUND PULSE, 2.8 MS @ IDLE	B+
ō	PI104-28	IDLE SPEED CONTROL 3	12 V, 0 V	8 V (NOT MOVING)
ō	PI104-29	IDLE SPEED CONTROL 2	12 V, 0 V	8 V (NOT MOVING)
ō	PI104-32	THROTTLE POSITION	1.25 V @ IDLE	4.9 V @ FULL THROTTLE
ō	PI104-33	ENGINE TORQUE	10.4 V (NO LOAD), DECREASING WITH LOAD INCREASE	
ō	PI104-34	EVAPORATIVE EMISSION CONTROL VALVE	B+	GROUND
1	PI105-1	INTAKE AIR TEMPERATURE SENSOR	0.98 V @ 10° C, INCREASING WITH TEMPERATURE	
I.	PI105-2	ELECTRICAL LOAD: HEATED WINDSHIELD, HEATED BACKLIGHT, OR BLOWERS ON HIGH SPEED	B+	GROUND
1	PI105-4	MASS AIR FLOW SENSOR	1.2 V @ IDLE, INCREASES WITH RPM INCREASE	
SG	PI105-7	SENSOR COMMON REFERENCE GROUND	GROUND	GROUND
SG	PI105-8	HO2S COMMON SIGNAL GROUND	GROUND	GROUND
SG	PI105-9	KNOCK SENSORS COMMON REFERENCE GROUND	GROUND	GROUND
D	PI105-10	SERIAL COMMUNICATION (BI-DIRECTIONAL)		
ο	PI105-11	SENSOR COMMON REFERENCE VOLTAGE	5 V	5 V
1	PI105-12	THROTTLE POSITION SENSOR FEEDBACK	0.6 V @ IDLE	4.9 V = FULL THROTTLE
I	PI105-14	ENGINE COOLANT TEMPERATURE SENSOR	0.41 V @ 90° C, INCREASING WITH TEMPERATURE INCREASE	
I.	PI105-16	HO2S FEEDBACK - CYLINDERS 1, 2, 3	0.1 - 4.7 V @ IDLE (SWING)	
I.	PI105-18	HO2S FEEDBACK – CYLINDERS 4, 5, 6	0.1 - 4.7 V @ IDLE (SWING)	
I.	PI105-20	LOW FUEL LEVEL	GROUND	B+
1	PI105-21	KNOCK SENSOR – A BANK	0 Hz = NO KNOCK, 2 – 20 Hz = KNOCK	
о	PI105-24	CAMSHAFT POSITION SENSOR SUPPLY	B+	B+
1	PI105-26	TORQUE REDUCTION REQUEST	GROUND PULSE @ SHIFT	9.4 V @ IDLE
E.	PI105-27	PARK / NEUTRAL	GROUND	B+
I.	PI105-28	VEHICLE SPEED	GROUND PULSE @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	
SG	PI105-29	MASS AIR FLOW SENSOR GROUND	GROUND	GROUND
SG	PI105-30	SENSOR COMMON SIGNAL GROUND	GROUND	GROUND
SG	PI105-31	ENGINE COOLANT TEMPERATURE SENSOR GROUND	GROUND	GROUND
1	PI105-32	KNOCK SENSOR – B BANK	0 Hz = NO KNOCK, 2 – 20 Hz = KNOCK	
1	PI105-34	CAMSHAFT POSITION SENSOR SIGNAL	1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
D	PI105-35	FUELING INHIBIT SIGNAL	ENCODED COMMUNICATIONS	
1	PI105-36	AIR CONDITIONING REQUEST	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

Ą

Input L

0

Output SG Signal Ground

Serial and encoded communications D

B+ Battery voltage V Voltage (DC) Hz Frequency KHz Frequency x 1000 MS Milliseconds **MV Millivolts**

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.

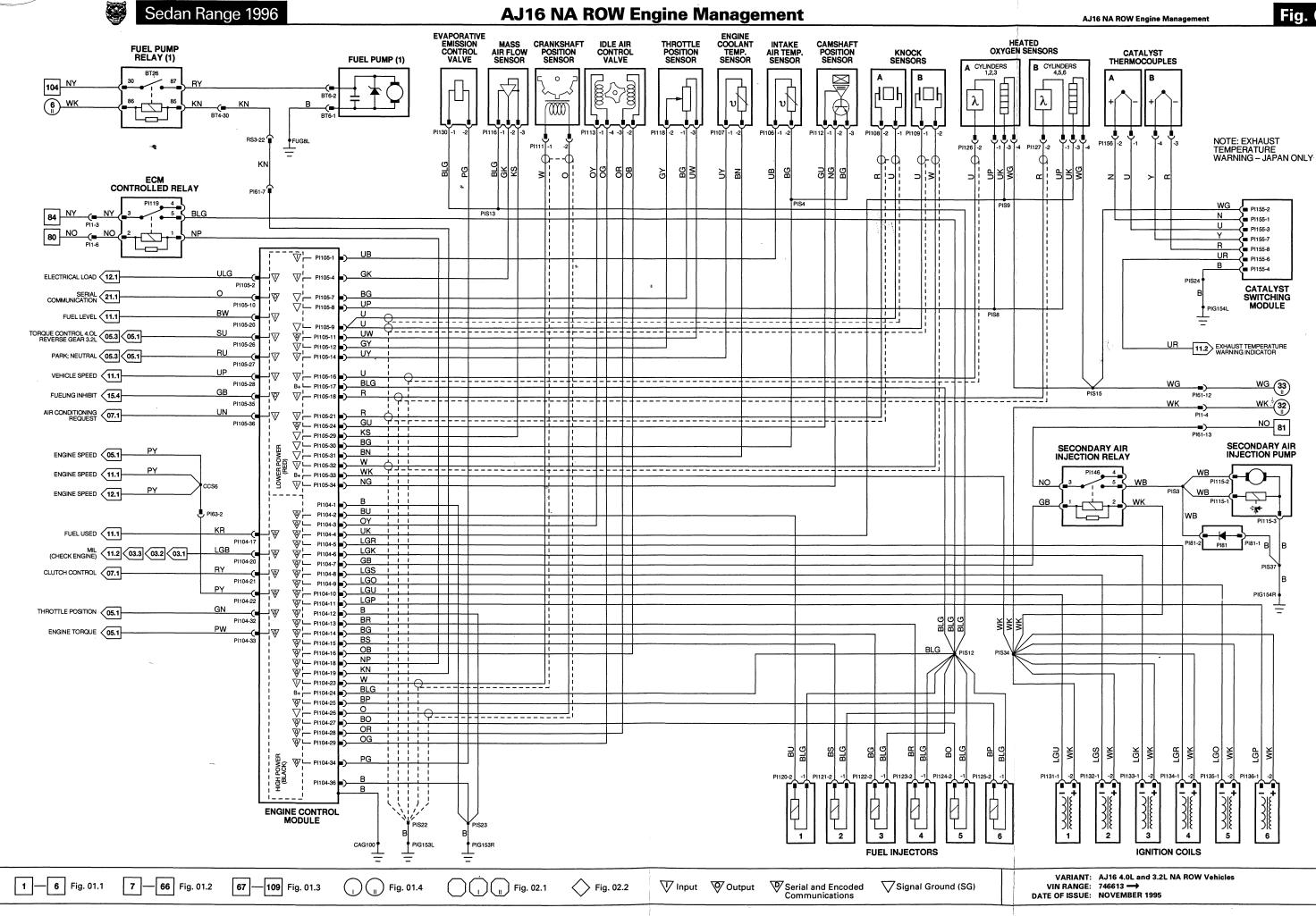


Fig. 04.2

Component

CAMSHAFT POSITION SENSOR (AJ16) CRANKSHAFT POSITION SENSOR DIODE (PI81) – AIRP SOLENOID SUPPRESSION EGR TEMPERATURE SENSOR EGR VALVE ENGINE CONTROL MODULE (AJ16)

ENGINE COOLANT TEMPERATURE SENSOR (AJ16) EVAPORATIVE EMISSION CONTROL VALVE (AJ16) FUEL INJECTORS (AJ16 1) FUEL INJECTORS (AJ16 2) FUEL INJECTORS (AJ16 3) FUEL INJECTOR (AJ16 4) FUEL INJECTOR (AJ16 5) FUEL INJECTOR (AJ16 6) FUEL PUMP (1) FUEL PUMP (2) FUEL PUMP CONTROL MODULE HEATED OXYGEN SENSOR (AJ16 - 1,2,3 DOWNSTREAM) HEATED OXYGEN SENSOR (AJ16 - 4.5.6 DOWNSTREAM) HEATED OXYGEN SENSOR (AJ16 - 1.2.3 UPSTREAM) HEATED OXYGEN SENSOR (AJ16 - 4,5,6 UPSTREAM) IDLE AIR CONTROL VALVE (AJ16) **IGNITION COIL (AJ16 1) IGNITION COIL (A.I16 2) IGNITION COIL (AJ16 3) IGNITION COIL (AJ16 4) IGNITION COIL (AJ16 5) IGNITION COIL (AJ16 6)** INTAKE AIR TEMPERATURE SENSOR (AJ16) KNOCK SENSOR (A) KNOCK SENSOR (B) MASS AIR FLOW SENSOR SECONDARY AIR INJECTION PUMP THROTTLE POSITION SENSOR (AJ16)

Connector / Type / Color

PI112 / 3-WAY JUNIOR TIMER / BLACK PI111 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI81 / DIODE / BLACK PI110 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI117 / 5-WAY PACKARD / BLACK PI104 / 36-WAY ECONOSEAL III / BLACK PI105 / 36-WAY ECONOSEAL III / RED PI107 / 2-WAY JUNIOR TIMER / BLACK PI130 / 2-WAY JUNIOR TIMER / BLACK PI120 / 2-WAY JUNIOR TIMER / SLATE PI121 / 2-WAY JUNIOR TIMER / SLATE PI122 / 2-WAY JUNIOR TIMER / SLATE PI123 / 2-WAY JUNIOR TIMER / SLATE PI124 / 2-WAY JUNIOR TIMER / SLATE PI125 / 2-WAY JUNIOR TIMER / SLATE BT6 (FLY LEAD) / 4-WAY SUMITOMO 90 / WHITE BT6 (FLY LEAD) / 4-WAY SUMITOMO 90 / WHITE FU3 / RELAY CONNECTOR / BLACK PI126 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI127 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI128 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI129 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI113 / 4-WAY PACKARD / BLACK PI131 / 2-WAY SUMITOMO 90 / BROWN PI132 / 2-WAY SUMITOMO 90 / BROWN PI133 / 2-WAY SUMITOMO 90 / BROWN PI134 / 2-WAY SUMITOMO 90 / BROWN PI135 / 2-WAY SUMITOMO 90 / BROWN PI136 / 2-WAY SUMITOMO 90 / BROWN PI106 / 2-WAY JUNIOR TIMER / BLACK PI108 / 2-WAY JUNIOR TIMER / BLACK PI109 / 2-WAY JUNIOR TIMER / BLACK PI116 / 3-WAY JUNIOR TIMER / BLACK PI115 / 3-WAY PACKARD / BLACK PI118 / 3-WAY JUNIOR TIMER / BLACK

Location / Access

ENGINE RH SIDE ENGINE TIMING COVER EMS HARNESS / SECONDARY AIR INJECTION PUMP INTAKE MANIFOLD INTAKE MANIFOLD RH 'A' POST / 'A' POST TRIM

ENGINE THERMOSTAT HOUSING BELOW LH FRONT RELAYS FUEL RAIL, INTAKE MANIFOLD FUEL TANK / FUEL TANK TRIM FUEL TANK / FUEL TANK TRIM TRUNK, RH FRONT / TRUNK TRIM EXHAUST, DOWNSTREAM OF PRIMARY CATALYST EXHAUST, DOWNSTREAM OF PRIMARY CATALYST EXHAUST, UPSTREAM OF PRIMARY CATALYST EXHAUST, UPSTREAM OF PRIMARY CATALYST THROTTLE BODY CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER CAMSHAFT COVER ENGINE AIR INTAKE ELBOW ENGINE BLOCK, LH FRONT ENGINE BLOCK, LH REAR ENGINE AIR INTAKE ENGINE, LH FRONT THROTTLE BODY

RELAYS

Relay

FUEL PUMP RELAY (1) FUEL PUMP RELAY (2) ECM CONTROLLED RELAY (AJ16) SECONDARY AIR INJECTION RELAY (AJ16)

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color Location / Access		
		•
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CC4	14-WAY MULTILOCK 070 / WHITE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FU1	6-WAY MULTILOCK 070 / WHITE	FUEL TANK TRIM / BATTERY COVER
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
PI63	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

Connector / Color

BT26 / GREEN

EU2/ YELLOW

PI119 / BLACK

PI146 / BLACK

Location / Access

RH ENGINE BAY RELAYS

RH ENGINE BAY RELAYS

BATTERY COVER

TRUNK ELECTRICAL CARRIER

Color / Stripe

BLACK / VIOLET

BLACK / WHITE

BLUE

BLACK

GROUNDS

Ground	Location / Type
CAG100	RH 'A' POST GROUND STUD
FUG8L	FRONT TRUNK GROUND STUD
FUG8R	FRONT TRUNK GROUND STUD
PIG153L	RH BULKHEAD GROUND STUD
PIG153R	RH BULKHEAD GROUND STUD
PIG159	RIGHT FORWARD EMS GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ENGINE CONTROL MODULE (AJ16)

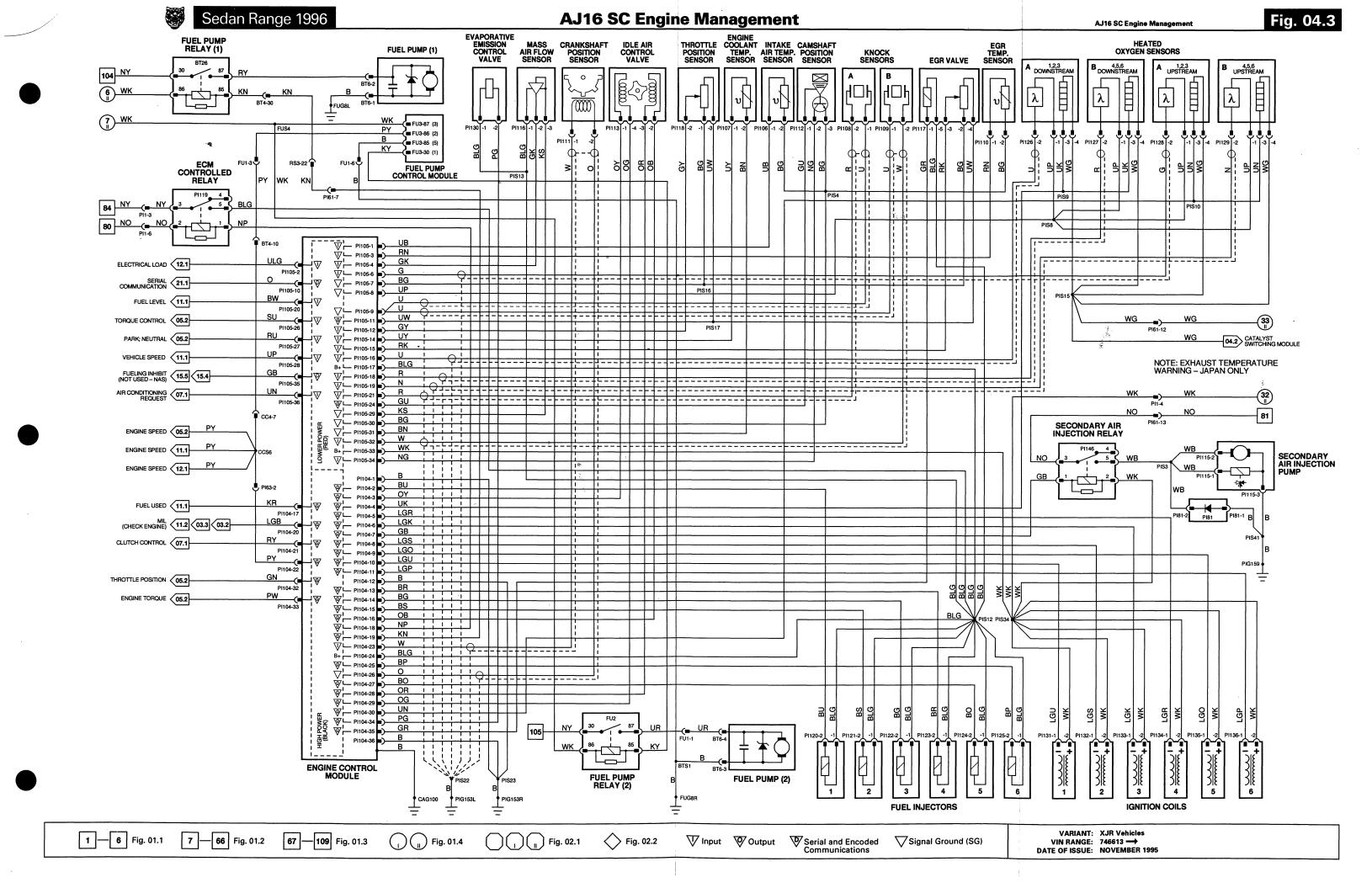
\bigtriangledown	Pin	Description	Active	Inactive
0	PI104-2	INJECTOR 1	GROUND PULSE, 2.8 MS @ IDLE	B+
ο	PI104-3	IDLE SPEED CONTROL 1	12 V, 0 V	8 V (NOT MOVING)
0	PI104-4	DOWNSTREAM HO2S HEATERS	0.4 – 13 V, 10 Hz @ IDLE	
0	PI104-5	IGNITION COIL 4	GROUND PULSE, 1000 RPM = 15 Hz	
ο	PI104-6	IGNITION COIL 3	GROUND PULSE, 1000 RPM = 15 Hz	
о	PI104-7	SECONDARY AIR INJECTION RELAY	GROUND	B+
ο	PI104-8	IGNITION COIL 2	GROUND PULSE, 1000 RPM = 15 Hz	
о	Pi104-9	IGNITION COIL 5	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI104-10	IGNITION COIL 1	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI104-11	IGNITION COIL 6	GROUND PULSE, 1000 RPM = 15 Hz	
ο	PI104-13	INJECTOR 4	GROUND PULSE, 2.8 MS @ IDLE	B+
ο	PI104-14	INJECTOR 3	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-15	INJECTOR 2	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-16	IDLE SPEED CONTROL 4	12 V, 0 V	8 V (NOT MOVING)
ο	PI104-17	FUEL USED	GROUND PULSE, 6 Hz @ IDLE	
о	PI104-18	ECM CONTROLLED RELAY	GROUND	B+
0	PI104-19	FUEL PUMP RELAY 1	ĠROUND	B+
0	PI104-20	CHECK ENGINE MIL	GRÖUND	B+
о	PI104-21	AIR CONDITIONING CLUTCH RELAY	GROUND	B+
ο	PI104-22	ENGINE SPEED SIGNAL	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
1	P1104-23	CRANKSHAFT POSITION SENSOR	GROUND @ 1000 RPM = 900 Hz, 2000 RPM = 1800 Hz	
о	PI104-25	INJECTOR 6	GROUND PULSE, 2.8 MS @ IDLE	B+
SG	PI104-26	CRANKSHAFT POSITION SENSOR GROUND	GROUND	GROUND
0	PI104-27	INJECTOR 5	GROUND PULSE, 2.8 MS @ IDLE	B+
0	PI104-28	IDLE SPEED CONTROL 3	12 V, 0 V	8 V (NOT MOVING)
0	PI104-29	IDLE SPEED CONTROL 2	12 V, 0 V	8 V (NOT MOVING)
0	PI104-30	UPSTREAM HO2S HEATERS	0.4 – 13 V, 10 Hz @ IDLE	
ο	PI104-32	THROTTLE POSITION	1.25 V @ IDLE	4.9 V @ FULL THROTTLE
0	PI104-33	ENGINE TORQUE	10.4 V (NO LOAD), DECREASING WITH LOAD INCREASE	
0	PI104-34	EVAPORATIVE EMISSION CONTROL VALVE	B+	GROUND
0	PI104-35	EGR VALVE SOLENOID	0.1 – 9 V	
1	PI105-1	INTAKE AIR TEMPERATURE SENSOR	0.98 V @ 10° C, INCREASING WITH TEMPERATURE	
i	P1105-1 P1105-2	ELECTRICAL LOAD: HEATED WINDSHIELD, HEATED BACKLIGHT,	B+	GROUND
•	F1105-2	OR BLOWERS ON HIGH SPEED		GROUND
1	PI105-3	EGR TEMPERATURE SENSOR	4.9 V @ IDLE (NO EGR), DECREASES WITH EGR FLOW INCREASE	
I.	PI105-4	MASS AIR FLOW SENSOR	1.2 V @ IDLE, INCREASES WITH RPM INCREASE	
I.	PI105-6	UPSTREAM H02S FEEDBACK – CYLINDERS 1, 2, 3	0.1 – 4.7 V @ IDLE (SWING)	
SG	PI105-7	SENSOR COMMON REFERENCE GROUND	GROUND	GROUND
SG	PI105-8	HO2S COMMON SIGNAL GROUND	GROUND	GROUND
SG	PI105-9	KNOCK SENSORS COMMON REFERENCE GROUND	GROUND	GROUND
D	PI105-10	SERIAL COMMUNICATION (BI-DIRECTIONAL)		
0	P1105-11	SENSOR COMMON REFERENCE VOLTAGE	5 V	5 V
1	PI105-12	THROTTLE POSITION SENSOR FEEDBACK	0.6 V @ IDLE	4.9 V = FULL THROTTLE
I.	PI105-14	ENGINE COOLANT TEMPERATURE SENSOR	0.41 V @ 90° C, INCREASING WITH TEMPERATURE INCREASE	
1	PI105-15	EGR VALVE POSITION FEEDBACK	0.7 V @ IDLE (NO EGR)	5 V = MAXIMUM EGR
1	PI105-16	DOWNSTREAM HO2S FEEDBACK – CYLINDERS 1, 2, 3	0.1 - 4.7 V@ IDLE (SWING)	
1	PI105-18	DOWNSTREAM HO2S FEEDBACK – CYLINDERS 4, 5, 6	0.1 - 4.7 V @ IDLE (SWING)	
1	PI105-19	UPSTREAM H02S FEEDBACK - CYLINDERS 4, 5, 6	0.1 – 4.7 V @ IDLE (SWING)	-
1	PI105-20	LOW FUEL LEVEL	GROUND	B+
	PI105-21	KNOCK SENSOR – A BANK	0 Hz = NO KNOCK, 2 – 20 Hz = KNOCK	
0	PI105-24	CAMSHAFT POSITION SENSOR SUPPLY		B+
1	PI105-26		GROUND PULSE @ SHIFT	9.4 V @ IDLE
	PI105-27			B+
1	PI105-28		GROUND PULSE @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	CROUND
SG	PI105-29	MASS AIR FLOW SENSOR GROUND	GROUND GROUND	GROUND GROUND
SG SG	PI105-30	SENSOR COMMON SIGNAL GROUND ENGINE COOLANT TEMPERATURE SENSOR GROUND	GROUND	GROUND
50	PI105-31			GROUND
	PI105-32	KNOCK SENSOR - B BANK	0 Hz = NO KNOCK, 2 – 20 Hz = KNOCK 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
D	PI105-34 PI105-35	CAMSHAFT POSITION SENSOR SIGNAL FUELING INHIBIT SIGNAL	1000 RPM = 45 Hz, 2000 RPM = 90 Hz ENCODED COMMUNICATIONS	
	PI105-35 PI105-36	AIR CONDITIONING REQUEST	GROUND	B+
'	1100-30			

The following symbols are used to represent values for Control Module Pin Out data:

I	Input	B+	Battery voltage
0	Output	v	Voltage (DC)
SG	Signal Ground	Hz	Frequency
D	Serial and encoded communications	KHz	Frequency x 1000
		MS	Milliseconds
		MV	Millivolts

ø

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.



Component

CAMSHAFT POSITION SENSOR (V12) CRANKSHAFT POSITION SENSOR ENGINE CONTROL MODULE (V12)

ENGINE COOLANT TEMPERATURE SENSOR (V12) ENGINE SPEED SENSOR FUEL PUMP (1) FUEL PUMP (2) HEATED OXYGEN SENSOR (V12 A DOWNSTREAM) HEATED OXYGEN SENSOR (V12 A UPSTREAM) HEATED OXYGEN SENSOR (V12 B UPSTREAM) IDLE AIR CONTROL VALVE (V12 A BANK) IDLE AIR CONTROL VALVE (V12 B BANK) INTAKE AIR TEMPERATURE SENSOR (V12) MANIFOLD ABSOLUTE PRESSURE SENSOR (V12 A BANK) MANIFOLD ABSOLUTE PRESSURE SENSOR (V12 B BANK)

Connector / Type / Color

PI3 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI2 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI44 / 28-WAY MULTILOCK 040 / SLATE PI45 / 16-WAY MULTILOCK 040 / SLATE PI46 / 22-WAY MULTILOCK 040 / SLATE PI47 / 34-WAY MULTILOCK 040 / SLATE PI5 / 2-WAY ECONOSEAL J / SLATE PI23 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK BT6 (FLY LEAD) / 4-WAY SUMITOMO 90 / WHITE BT6 (FLY LEAD) / 4-WAY SUMITOMO 90 / WHITE CA98 (FLY LEAD) / 4-WAY YAZAKI / WHITE PI25 (FLY LEAD) / 4-WAY SUMITOMO 90 / SLATE CA99 (FLY LEAD) / 4-WAY YAZAKI / WHITE PI27 (FLY LEAD) / 4-WAY SUMITOMO 90 / SLATE PI29 / 3-WAY SUMITOMO 90/ SLATE PI30 / 3-WAY SUMITOMO 90/ SLATE PI6 / 2-WAY JUNIOR TIMER / BLACK PI9 / 3-WAY SUMITOMO 90 / BLACK PI50 / 3-WAY SUMITOMO 90 / BLACK PI7 / 4-WAY ECONOSEAL J / BLACK

Location / Access A BANK CAMSHAFT COVER ENGINE TIMING COVER

Location / Access

BATTERY COVER

TRUNK ELECTRICAL CARRIER

RH 'A' POST/ 'A' POST TRIM B BANK THERMOSTAT HOUSING ENGINE VEE, REAR FUEL TANK / FUEL TANK TRIM FUEL TANK / FUEL TANK TRIM

A BANK EXHAUST, DOWNSTREAM OF PRIMARY CATALYST A BANK EXHAUST, UPSTREAM OF PRIMARY CATALYST B BANK EXHAUST, DOWNSTREAM OF PRIMARY CATALYST B BANK EXHAUST, DOWNSTREAM OF PRIMARY CATALYST A BANK THROTTLE BODY B BANK THROTTLE BODY A BANK AIR INTAKE A BANK INTAKE MANIFOLD, REAR B BANK INTAKE MANIFOLD, REAR B BANK INTAKE MANIFOLD, REAR HROTTLE TURNTABLE

RELAYS

Relay

FUEL PUMP RELAY (1) FUEL PUMP RELAY (2)

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK
FU1	6-WAY MULTILOCK 070 / WHITE
PI1	13-WAY ECONOSEAL III LC / WHITE
PI61	13-WAY ECONOSEAL III LC / BLACK
P173	2-WAY MULTILOCK 070 / YELLOW
PI74	8-WAY MULTILOCK 070 / YELLOW
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN

Location / Access

Color / Stripe

BLACK / VIOLET

BLUE

ABOVE FUEL TANK / FUEL TANK TRIM FUEL TANK TRIM / BATTERY COVER REARWARD OF RH HEADLAMP REARWARD OF RH HEADLAMP RH 'A' POST, 'A' POST TRIM RH 'A' POST, 'A' POST PANEL

BT26 / GREEN

FU2/ YELLOW

Connector / Color

GROUNDS

PIG75L PIG75B

PIG76I

Ground Location / Type FUG8L FRONT TRUNK GROUND STUD FRONT TRUNK GROUND STUD

FRONT TRUNK GROUND STUD FRONT TRUNK GROUND STUD RH 'A' POST GROUND STUD RH 'A' POST GROUND STUD RH BULKHEAD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ENGINE CONTROL MODULE (V12)

\bigtriangledown	Pin	Description	Active	Inactive
I	P144-26	FLEXIBLE FUEL SELECT LINK (DEALER FIT)	GROUND (FITTED)	B+
Т	PI45-1	MAP SENSOR FEEDBACK – B BANK	1.7 V @ IDLE, INCREASING WITH MANIFOLD ABSOLUTE PRESSURE	
1	PI45-2	MAP SENSOR FEEDBACK – A BANK	1.7 V @ IDLE, INCREASING WITH MANIFOLD ABSOLUTE PRESSURE	
1	PI45-3	IDLE SWITCH	GROUND	B+
1	PI45-4	THROTTLE POSITION SENSOR FEEDBACK VOLTAGE	0.58 V @ IDLE, 4.75 V @ FULL THROTTLE	
1	PI45-5	COOLANT TEMPERATURE SENSOR	0.41 V @ 90° C, INCREASING WITH TEMPERATURE	
I.	PI45-6	INTAKE AIR TEMPERATURE SENSOR	0.59 V @ 10° C, INCREASING WITH TEMPERATURE	
0	PI45-7	COMMON SENSOR REFERENCE VOLTAGE	5 V	5 V
I	PI45-8	DOWNSTREAM HO2S FEEDBACK – B BANK	0.1 – 0.8 V (SWING)	
1	PI45-9	DOWNSTREAM HO2S FEEDBACK – A BANK	0.1 – 0.8 V (SWING)	
1	PI45-10	UPSTREAM HO2S FEEDBACK – B BANK	0.1 – 0.8 V (SWING)	
1	PI45-11	UPSTREAM HO2S FEEDBACK – A BANK	0.1 – 0.8 V (SWING)	
SG	PI45-15	COMMON SENSOR SHIELD GROUND	GROUND	GROUND
SG	PI45-16	COMMON SENSOR REFERENCE GROUND	GROUND	GROUND
о	PI46-3	DOWNSTREAM HO2S HEATER GROUND – B BANK	GROUND	B+
0	PI46-4	DOWNSTREAM HO2S HEATER GROUND - A BANK	GROUND	B+
ο	PI46-5	UPSTREAM HO2S HEATER GROUND – B BANK	GROUND	B+
ο	PI46-6	UPSTREAM HO2S HEATER GROUND – A BANK	GROUND	B+
1	PI46-8	CAMSHAFT POSITION SENSOR	GROUND PULSE @ 1000 RPM = 8 Hz, 2000 RPM = 16 Hz	
SG	PI46-12	CAMSHAFT POSITION SENSOR	GROUND	GROUND
I.	PI46-13	CRANKSHAFT POSITION SENSOR	GROUND PULSE @ 1000 RPM = 15 Hz, 2000 RPM = 30 Hz	
1	PI46-14	ENGINE SPEED SENSOR	GROUND PULSE @ 1000 RPM = 175 Hz, 2000 RPM = 350 Hz	
SG	PI46-18	CRANKSHAFT POSITION SENSOR	GROUND	GROUND
SG	PI46-19	ENGINE SPEED SENSOR	GROUND	
o	PI47-1	IDLE AIR CONTROL VALVE CLOSE – B BANK	4.8 V @ IDLE	
0	P147-2	IDLE AIR CONTROL VALVE OPEN – B BANK	9.8 V @ IDLE	
0	P147-3	IDLE AIR CONTROL VALVE CLOSE – A BANK	4.8 V @ IDLE	
0	P147-4	IDLE AIR CONTROL VALVE OPEN – A BANK	9.8 V @ IDLE	
0	PI47-12	FUEL PUMP RELAY 2	GROUND	B+
0	PI47-29	FUEL PUMP RELAY 1	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

æ

I Input

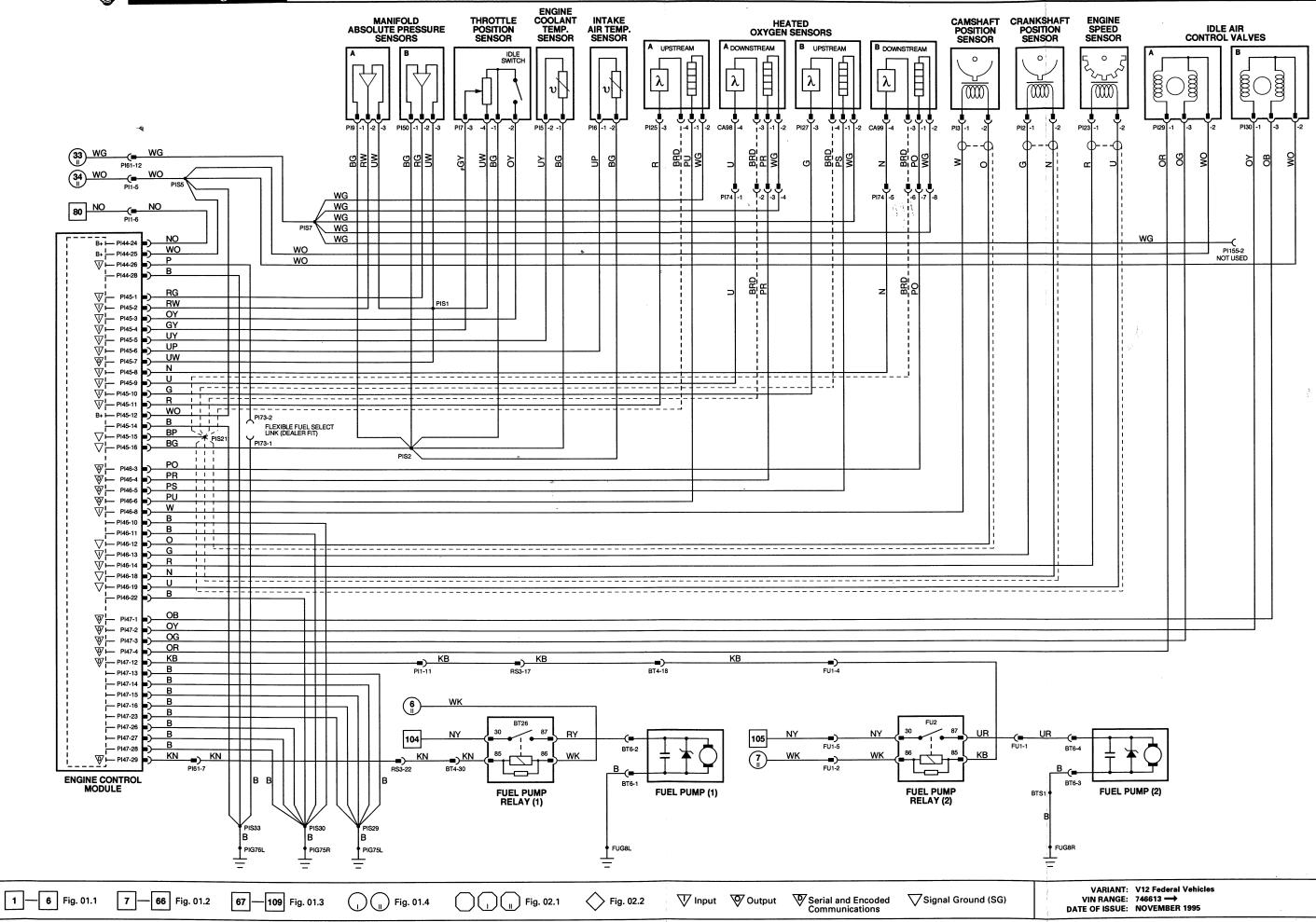
- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

V12 Federal Engine Management, Part 1





Component

DIODE (PI81) – AIRP SOLENOID SUPPRESSION ENGINE CONTROL MODULE (V12)

EVAPORATIVE EMISSION CONTROL VALVE (V12 A BANK) EVAPORATIVE EMISSION CONTROL VALVE (V12 B BANK) FUEL INJECTOR (V12 A BANK 1)

FUEL INJECTOR (V12 A BANK 2) FUEL INJECTOR (V12 A BANK 3) FUEL INJECTOR (V12 A BANK 4) FUEL INJECTOR (V12 A BANK 5) FUEL INJECTOR (V12 A BANK 6) FUEL INJECTOR (V12 B BANK 1) FUEL INJECTOR (V12 B BANK 2) FUEL INJECTOR (V12 B BANK 3) FUEL INJECTOR (V12 B BANK 4) FUEL INJECTOR (V12 B BANK 5) FUEL INJECTOR (V12 B BANK 6) IGNITION COIL (V12 A BANK) IGNITION COIL (V12 B BANK) **IGNITION MODULE (V12 A BANK)** IGNITION MODULE (V12 B BANK) POWER STEERING PRESSURE SWITCH SECONDARY AIR INJECTION CLUTCH SECONDARY AIR INJECTION SWITCHING VALVE

Connector / Type / Color

PI81 / DIODE / BLACK

PI44 / 28-WAY MULTILOCK 040 / SLATE PI45 / 16-WAY MULTILOCK 040 / SLATE PI46 / 22-WAY MULTILOCK 040 / SLATE PI47 / 34-WAY MULTILOCK 040 / SLATE PI18 / 2-WAY JUNIOR TIMER / BLACK PI19 / 2-WAY JUNIOR TIMER / BLACK PI32 / 2-WAY JUNIOR TIMER / SLATE PI33 / 2-WAY JUNIOR TIMER / SLATE PI34 / 2-WAY JUNIOR TIMER / SLATE PI35 / 2-WAY JUNIOR TIMER / SLATE PI36 / 2-WAY JUNIOR TIMER / SLATE PI37 / 2-WAY JUNIOR TIMER / SLATE PI38 / 2-WAY JUNIOR TIMER / SLATE PI39 / 2-WAY JUNIOR TIMER / SLATE PI40 / 2-WAY JUNIOR TIMER / SLATE PI41 / 2-WAY JUNIOR TIMER / SLATE PI42 / 2-WAY JUNIOR TIMER / SLATE PI43 / 2-WAY JUNIOR TIMER / SLATE PI12 / 4-WAY SUB-MINIATURE / BLACK PI13 / 4-WAY SUB-MINIATURE / BLACK PI10 / 8-WAY SUMITOMO 90 / SLATE PI11 / 8-WAY SUMITOMO 90 / SLATE PI68 / 2-WAY JUNIOR TIMER / BLACK PI21 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI22 / 2-WAY DENSO / BLUE

Location / Access

EMS HARNESS / SECONDARY AIR INJECTION PUMP RH 'A' POST/ 'A' POST TRIM

BELOW LH FRONT RELAYS BELOW LH FRONT RELAYS FUEL RAIL, INTAKE MANIFOLD ENGINE VEE ENGINE VEE ENGINE BAY, RH INNER FENDER ENGINE BAY, RH INNER FENDER POWER STEERING PUMP SECONDARY AIR INJECTION PUMP A BANK INTAKE MANIFOLD / REAR

8 14

RELAYS

Relay Color / Stripe Connector / Color Location / Access
FUEL INJECTOR RELAY (MAIN RELAY) (V12) BLACK PI20 / BLACK RH ENGINE BAY RELAYS
SECONDARY AIR INJECTION RELAY (V12) BLACK / WHITE PI52 / BLACK RH ENGINE BAY RELAYS
IGNITION COIL RELAY (V12) BLACK PI53 / BLACK RH ENGINE BAY RELAYS

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
P159	13-WAY ECONOSEAL III LC / BLACK	FORWARD OF LH ENGINE BAY FUSE BOX
PI61	13-WAY ECONOSEAL III LC / BLACK	 REARWARD OF RH HEADLAMP
P163	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST/ 'A' POST TRIM
PI73	2-WAY MULTILOCK 070 / YELLOW	RH 'A' POST/ 'A' POST TRIM

GROUNDS

Ground	Location / Type
PIG75L	RH 'A' POST GROUND STUD
PIG75R	RH 'A' POST GROUND STUD
PIG76L	RH BULKHEAD GROUND STUD
PIG77R	RIGHT FORWARD EMS GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ENGINE CONTROL MODULE (V12)

0 PM4-1 PUEL USED GROUNP DUES GROUNP DUES PUEL 0 PM4-3 ENKINE TORQUE SIGNAL 1.5 V g DUE, DECREASING WTM TORQUE INCREASE - 0 PM4-4 THROTTLE FORTION 1.5 V g DUE, S V g FULL THROTTLE - 0 PM4-5 LOAD INHIBIT SIGNAL GROUND PUES G SHIFT 1.5 V g DUE, S V g FULL THROTTLE - 0 PM4-7 VIENCLE SPEED GROUND PUES G SHIFT 1.5 V g DUE, S SHIFT - 1 PM4-13 ENGINE SO NIEGH SPEED GROUND PUES G SHIFT - - 1 PM4-11 ELCTHICAL LOAD: HEATED WINDSHIELD, HEATED BACKLIGHT, GROUND COMMUNICATIONS B- - 1 PM4-13 AR CONDITIONING REQUEST B- - - 1 PM4-14 PUELING MUNINCATION INPUT - - - - 1 PM4-13 SERIAL COMMUNICATION INPUT - - - - 1 PM4-32 SERIAL COMMUNICATION INPUT - - - - 1 PM4-32 SERI	\bigtriangledown	Pin	Description	Active	Inactive
0 PH44.3 ENGINE TORQUE SIGNAL 11.5 V @ IDLE, 5 V @ FULL THROTTLE 0 PH44.5 LOAD INHIRT SIGNAL 11.5 V @ IDLE, 5 V @ FULL THROTTLE 0 PH44.5 LOAD INHIRT SIGNAL GROUND PULSE @ SHIFT 11.5 V @ IDLE 1 PH44.7 VIENCIE SPEED GROUND PULSE @ SHIFT 11.5 V @ IDLE 0 PH44.7 VIENCIE SPEED GROUND PULSE @ SHIFT 8+ 1 PH44.7 VIENCIE SPEED GROUND 8+ 1 PH44.7 ELECTRICAL LOAD INHEATED WINDSHIELD, HEATED BACKLIGHT, GROUND 8+ 1 PH44.7 ELECTRICAL LOAD. INELATED GROUND 8+ 1 PH44.7 FUELING INHIBIT SIGNAL ENCODED COMMUNICATIONS 8+ 1 PH44.7 FUELING INHIBIT SIGNAL GROUND 8+ 1 PH44.7 FUELING INFRITURAL GROUND 8+ 1 PH44.7 FUELING INFRITURAL GROUND 8+ 1 PH44.7 FUELING INFRICAL DALLING INFRITURAL GROUND 8+ 1 PH44.7<	о	PI44-1	FUEL USED	GROUND PULSE, 10 Hz @ IDLE	
0 Pi444 THROTTLE POSITION 1.4 Y BIDLE, 9 Y PULL THROTTLE 0 Pi445 LOAD INMET SIGNAL GROUND B+ 1 Pi445 TOROUE REDUCTON GROUND PULSE @ SHIFT 11.5 V @ IDLE 1 Pi447 VENCLE SHEED GROUND PULSE @ SHIFT 11.5 V @ IDLE 1 Pi447 ELECTRICAL LOAD, HEATED WINDSHELD, HEATED BACKLIGHT, OR BLOWERS ON NIGH SPEED B+ GROUND B+ 1 Pi4471 CELCTRICAL LOAD, HEATED WINDSHELD, HEATED BACKLIGHT, OR BLOWERS ON NIGH SPEED B+ GROUND B+ 1 Pi4471 AIR CONDITIONING REQUEST B+ GROUND B+ 1 Pi4473 FUEL LEVEL GROUND B+ GROUND B+ 1 Pi4473 FUEL LEVEL GROUND ONTPUT GROUND (FITTED) B+ 1 Pi4473 SERIAL COMMUNICATION INFUT GROUND B+ I 1 Pi4478 SERIAL COMMUNICATION INFUT GROUND B+ I 1 Pi4428 SERIAL COMMUNICATION INFUT GROUND B+ <td>ο</td> <td>Pi44-2 🛁</td> <td>CHECK ENGINE MIL</td> <td>GROUND</td> <td>B+</td>	ο	Pi44-2 🛁	CHECK ENGINE MIL	GROUND	B+
0 Pi44-5 LOAD INHIBIT SIGNAL GROUND GROUND PULSE @ SHIFT 11.5 V @ IDLE 1 Pi44-6 TORQUE REDUCTION GROUND PULSE @ SHIFT 11.5 V @ IDLE 1 Pi44-10 ENGINE SPEED S Q @ IDD RPM - 45 Hz, 2000 RPM - 90 Hz B- 0 Pi44-10 ELCETTICAL LOAD: HEATED WINDSHIELD, HEATED BACKLIGHT, ON BLOWERS ON INCH SPEED S Q @ IDD RPM - 45 Hz, 2000 RPM - 90 Hz B- 1 Pi44-14 FUELING LIADA: HEATED WINDSHIELD, HEATED BACKLIGHT, ON BLOWERS ON INCH SPEED S ReGUND B- 1 Pi44-14 FUELING LINNIET SIGNAL ENCODED COMMUNICATIONS GROUND 1 Pi44-13 FUELING INNIET SIGNAL ENCODED COMMUNICATIONS B- 1 Pi44-14 FUELING INNIET SIGNAL ENCODED COMMUNICATIONS B- 1 Pi44-13 FUELING INNIET SIGNAL ENCODED COMMUNICATIONS B- 1 Pi44-23 SERIAL COMMUNICATION INTUT GROUND B- 1 Pi44-23 SERIAL COMMUNICATION INTUT GROUND B- 1 Pi44-23 SERIAL COMMUNICATION INTUT GROUND	о	PI44-3	ENGINE TORQUE SIGNAL	11.5 V @ IDLE, DECREASING WITH TORQUE INCREASE	
I Pi44-6 TORQUE REDUCTION GROUND PULSE @ SHIFT 11.5 V @ IDLE I Pi44-7 VENCLE SPEED GROUND PULSE @ SHIFT 8+ I Pi44-10 EXIGNE SPEED SV @ IDDO RPM - 45 Hz, 2000 RPM - 90 Hz 8+ I Pi44-13 AR CONDITIONING REQUEST B+ GROUND B+ I Pi44-13 AR CONDITIONING REQUEST B+ GROUND GROUND I Pi44-14 FUEL INSTRACT GROUND B+ GROUND GROUND I Pi44-13 FUEL LEVEL GROUND B+ GROUND GROUND B+ I Pi44-12 FUEL LEVEL GROUND COMMUNCATION INPUT B+ GROUND B+ I Pi44-23 SERIAL COMMUNICATION INPUT GROUND B+ B+ I Pi44-23 SERIAL COMMUNICATION INPUT GROUND B+ I Pi44-23 SERIAL COMMUNICATION INFOLIDEAL FUEL SELECT LINK (DEALER FIT) GROUND GROUND B+ I I Pi44-23 SERIAL COMMUNICATION INPULSE AS MS B B+ <td< td=""><td>о</td><td>P144-4</td><td>THROTTLE POSITION</td><td>1.4 V @ IDLE, 9 V @ FULL THROTTLE</td><td></td></td<>	о	P144-4	THROTTLE POSITION	1.4 V @ IDLE, 9 V @ FULL THROTTLE	
I PI44-7 VEHICLE SPEED GROUND B+ O PI44-10 ENGINE SPEED SV @ 1000 RPM -45 Hz, 2000 RPM -90 Hz B+ I PI44-13 AR CONTIONING REQUEST B+ GROUND GROUND B+ I PI44-14 FUELING INHIGH SPEED B+ GROUND B+ I PI44-14 FUELING INHIGH SIGNAL ENCODED COMMUNICATIONS B+ I PI44-13 PIAK-USTANL GROUND B+ I PI44-12 FUEL LEVEL B+ GROUND B+ I PI44-23 SERIAL COMMUNICATION NUTPUT B+ GROUND B+ I PI44-23 SERIAL COMMUNICATION NUTPUT GROUND B+ B+ I PI44-26 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND GROUND B+ I PI44-26 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND GROUND B+ I PI44-26 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND GROUND B+ I <tr< td=""><td>о</td><td>PI44-5</td><td>LOAD INHIBIT SIGNAL</td><td>GROUND</td><td>B+</td></tr<>	о	PI44-5	LOAD INHIBIT SIGNAL	GROUND	B+
0 Pi44-10 ENCINE SPEED 5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz B+ 1 Pi44-12 ELECTICAL LADE, HEATED WINDSHIELD, HEATED BACKLIGHT, OR BLOWERS ON HIGH SPEED GROUND GROUND 1 Pi44-13 AIR CONDITIONING REQUEST B+ GROUND GROUND 1 Pi44-18 FUEL INBITI SIGNAL ENCODED COMMUNICATIONS B+ 1 Pi44-13 FUEL LEVEL GROUND B+ 1 Pi44-13 COMUNICATION INFUT GROUND B+ 1 Pi44-23 SERIAL COMMUNICATION NUTUT GROUND B+ 1 Pi44-24 SERIAL COMMUNICATION NUTUT GROUND B+ 1 Pi44-25 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND B+ 1 Pi44-26 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND B+ 1 Pi44-16 AIR CONDITIONING CUTCH RELAY GROUND B+ 1 Pi46-17 SEGNAL COMMUNICATION RELAY GROUND PULSE, 3.5 MS @ IDLE I.7 V 1 Pi46-20 IGNITION FALLURE - BANK	1	PI44-6	TORQUE REDUCTION	GROUND PULSE @ SHIFT	11.5 V @ IDLE
I Pi44-12 ELECTRICAL LOAD: HEATED WINDSHIELD, HEATED BACKLIGHT, MELOWERS ON HIGH SPEED GROUND B+ I Pi44-13 AIR CONDITIONING REQUEST B+ GROUND GROUND D Pi44-14 FUELING INHIBIT SIGNAL ENCODED COMMUNICATIONS B+ I Pi44-12 FUELING INHIBIT SIGNAL GROUND B+ D Pi44-23 SERIAL COMMUNICATION INPUT B+ GROUND GROUND D Pi44-23 SERIAL COMMUNICATION OUTPUT GROUND (FITTED) B+ I Pi44-28 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND B+ I Pi44-29 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND B+ I Pi44-29 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND B+ I Pi44-29 ICANDITIONING CLUTCH RELAY GROUND B+ I Pi46-21 IGNITION FALLURE - B BANK B+ 1.7 V I Pi46-21 IGNITION FALLURE - A BANK GROUND PULSE, 3.5 MS @ IDLE IS I Pi46-21 <td< td=""><td>I.</td><td>PI44-7</td><td>VEHICLE SPEED</td><td>GROUND</td><td>B+</td></td<>	I.	PI44-7	VEHICLE SPEED	GROUND	B+
I Pi42 AR CONTRONING RECUEST B- GROUND D Pi44-14 FUELING INHIBET SIGNAL ENCODED COMMUNICATIONS B+ I Pi44-13 PARK / NEUTRAL GROUND B+ I Pi44-21 FUEL LEVEL B+ GROUND GROUND D Pi44-23 SERIAL COMMUNICATION OUTPUT I I I Pi44-24 SERIAL COMMUNICATION OUTPUT I I Pi44-26 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND (FITTED) B+ I Pi46-73 CRANK SIGNAL GROUND B+ I Pi46-74 AR CONDITION RECUETOR RELAY GROUND B+ I Pi46-71 CRANK SIGNAL GROUND B+ I Pi46-73 CRONDATAY AR INJECTION RELAY GROUND B+ I Pi46-74 GROUNDATAY AR INJECTION RELAY GROUND PULSE, 3.5 MS @ IDLE I.7 V I Pi46-75 FUEL INJECTORS 3 & 5 - B BANK GROUND PULSE, 3.5 MS @ IDLE I.7 V I Pi46-75 FUEL INJECTORS 3 & 5 - B BANK <td>0</td> <td>PI44-10</td> <td>ENGINE SPEED</td> <td>5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz</td> <td></td>	0	PI44-10	ENGINE SPEED	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
D PI44-14 FUELING INHIBIT SIGNAL ENCODED COMMUNICATIONS I PI44-18 PARK / NEUTRAL GROUND GROUND D PI44-23 SERIAL COMMUNICATION INPUT B+ D PI44-23 SERIAL COMMUNICATION NUT GROUND (FITTED) B+ 1 PI44-23 SERIAL COMMUNICATION NUT B+ 1 PI44-24 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND (FITTED) B+ 1 PI46-73 FOWER STEERING PRESSURE SWITCH GROUND B+ 1 PI46-73 SECONDARY AIR INJECTION RELAY GROUND B+ 0 PI46-16 AIR CONDITIONIN CLUTCH RELAY GROUND B+ 1.7 V 1 PI46-21 IGNITION FAILURE - A BANK GROUND PULSE, 3.5 MS @ IDLE B+ 0 PI47-5 FUEL INJECTORS 2 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE FUEL INJECTORS 2 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE	I	PI44-12		GROUND	B+
I P44-18 PARK / NEUTRAL GROUND B+ I PI44-21 FUEL LEVEL B- GROUND D PI44-23 SERIAL COMMUNICATION INPUT B- GROUND (FITTED) B+ D PI44-23 SERIAL COMMUNICATION UTPUT GROUND (FITTED) B+ I PI44-23 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND (FITTED) B+ I PI44-23 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND (FITTED) B+ I PI46-7 CRANK SIGNAL GROUND MD B+ I PI46-7 CRANK SIGNAL GROUND RELAY B+ I PI46-7 CRANK SIGNAL GROUND RELAY B+ I PI46-7 SECONDARY AIR INJECTION RELAY GROUND PULSE, 3.5 MS @ IDLE B+ I PI46-17 SECONDARY AIR INJECTION RELAY GROUND PULSE, 3.5 MS @ IDLE IDL I PI46-20 IGNITION FALURE - BAANK GROUND PULSE, 3.5 MS @ IDLE IDL I PI47-6 FUEL INJECTORS 2 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE	1	PI44-13	AIR CONDITIONING REQUEST	B+	GROUND
I PI44-21 FUEL LEVEL B+ GROUND D PI44-22 SERIAL COMMUNICATION INPUT GROUND (FITTED) B+ I PI44-23 SERIAL COMMUNICATION OUTPUT GROUND (FITTED) B+ I PI44-26 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND (FITTED) B+ I PI46-73 CRANK SIGNAL GROUND (FITTED) B+ O PI46-73 CRANK SIGNAL GROUND (GROUND CUTCH RELAY GROUND PUESCA O PI46-73 SECONDARY AIR INJECTION RELAY GROUND PUESCA B+ O PI46-73 IGNITION FAILURE - A BANK B+ 1.7 V I PI46-73 IGNITION FAILURE - A BANK GROUND PULSE, 3.5 MS @ IDLE D O PI47-5 FUEL INJECTORS 3 & 5 - B BANK GROUND PULSE, 3.5 MS @ IDLE D O PI47-6 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 3.5 MS @ IDLE GROUND PULSE, 1.5 MS @ IDLE O PI47-8 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 1.5 MS @ IDLE GROUND PULSE, 1.5 MS @ IDLE O PI47-10 <td>D</td> <td>Pl44-14</td> <td>FUELING INHIBIT SIGNAL</td> <td>ENCODED COMMUNICATIONS</td> <td></td>	D	Pl44-14	FUELING INHIBIT SIGNAL	ENCODED COMMUNICATIONS	
D PI44-22 SERIAL COMMUNICATION UNPUT B D PI44-23 SERIAL COMMUNICATION OUTPUT GROUND (FITED) B+ I PI44-26 PLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND (FITED) B+ I PI44-26 PLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND B+ I PI46-13 PLAE-13 CRANK SIGNAL GROUND B+ I PI46-7 PLAE-16 CRANK SIGNAL GROUND B+ I PI46-7 PLAE-17 SECONDARY ARI NJECTION RELAY GROUND B+ I PI46-20 PLAE-21 IGNITION FAILURE - B BANK B+ 1.7 V I PI46-21 IGNITION FAILURE - B BANK GROUND PULSE, 3.5 MS @ IDLE B+ I PI46-21 IGNITION FAILURE - A BANK GROUND PULSE, 3.5 MS @ IDLE I.7 V O PI47-5 FUEL INJECTORS 3 & 5 - B BANK GROUND PULSE, 3.5 MS @ IDLE FUELINJECTORS 2 & 4 - B BANK GROUND PULSE, 3.5 MS @ IDLE O PI47-7 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 3.5 MS @ IDLE FUELINJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE O PI47-70 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE FUELINJE	I I	PI44-18	PARK / NEUTRAL	GROUND	B+
D PI44-23 SERIAL COMMUNICATION OUTPUT B+ I PI44-26 FLEXIBLE FUEL SELECT LINK (DEALER FIT) GROUND (FITTED) B+ I PI46-13 POWER STEERING PRESSURE SWITCH GROUND B+ 0 PI46-17 CRANK SIGNAL GROUND B+ 0 PI46-18 AIR CONDITIONING CLUTCH RELAY GROUND B+ 0 PI46-17 SECONDARY AIR INJECTION RELAY GROUND B+ 1 PI46-21 IGNITION FAILURE - A BANK GROUND B+ 1 PI46-21 IGNITION FAILURE - A BANK B+ 1.7 V 0 PI47-5 FUEL INJECTORS 3 & 5 - B BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V 0 PI47-6 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V 0 PI47-7 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V 0 PI47-8 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V 0 PI47-10 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V 0 PI47-10 FUEL INJECTORS 1 &	1	PI44-21	FUEL LEVEL	B+	GROUND
IPI44-26FLEXIBLE FUEL SELECT LINK (DEALER FIT)GROUND (FITTED)B+IPI45-13POWER STEERING PRESSURE SWITCHGROUNDB+IPI46-7CRANK SIGNALGROUNDB+0PI46-16AIR CONDITIONING CLUTCH RELAYGROUNDB+0PI46-17SECONDARY AIR INJECTION RELAYGROUNDB+1PI46-20IGNITION FAILURE - B BANKB+1.7 V1PI46-21IGNITION FAILURE - B BANKB+1.7 V0PI47-5FUEL INJECTORS 3 & 5 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-6FUEL INJECTORS 2 & 4 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-7FUEL INJECTORS 3 & 6 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-7FUEL INJECTORS 1 & 4 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-7FUEL INJECTORS 1 & 4 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-7FUEL INJECTORS 1 & 4 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-7FUEL INJECTORS 1 & 5 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-10FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-10FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 1000 RPM = 15 Hz0PI47-11SECONDARY AIR VACUUM SOLENOID VALVEB+FUEL0PI47-13IGNITION MODULE NEGATIVE - 38GROUND PULSE, 1000 RPM = 15 Hz0PI47-19IGNITION MODULE NEGATIVE	D	PI44-22	SERIAL COMMUNICATION INPUT		
I PI45-13 POWER STEERING PRESSURE SWITCH GROUND B+ I PI46-7 CRANK SIGNAL GROUND B+ O PI46-16 AIR CONDITIONING CLUTCH RELAY GROUND B+ O PI46-17 SECONDARY AIR INJECTION RELAY GROUND B+ I PI46-20 IGNITION FAILURE - B BANK B+ 1.7 V I PI46-21 IGNITION FAILURE - A BANK B+ 1.7 V O PI47-5 FUEL INJECTORS 3 & 5 - B BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V O PI47-6 FUEL INJECTORS 3 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V O PI47-7 FUEL INJECTORS 3 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V O PI47-8 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V O PI47-7 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V O PI47-8 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V O PI47-10 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V O	D	Pi44-23	SERIAL COMMUNICATION OUTPUT		
I PI46-7 CRANK SIGNAL GROUND B+ 0 PI46-16 AIR CONDITIONING CLUTCH RELAY GROUND B+ 0 PI46-17 SECONDARY AR INJECTION RELAY GROUND B+ 1 PI46-20 IGNITION FAILURE - B BANK B+ 1.7 V 1 PI46-21 IGNITION FAILURE - A BANK B+ 1.7 V 1 PI46-21 IGNITION FAILURE - A BANK B+ 1.7 V 0 PI47-5 FUEL INJECTORS 2 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE 1.7 V 0 PI47-6 FUEL INJECTORS 2 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE PI47-7 0 PI47-7 FUEL INJECTORS 2 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE PI47-8 0 PI47-8 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE PI47-9 0 PI47-9 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE PI47-10 0 PI47-10 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE PI47-10 0 PI47-10 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE PI47-11 0 <td>I</td> <td>P144-26</td> <td>FLEXIBLE FUEL SELECT LINK (DEALER FIT)</td> <td>GROUND (FITTED)</td> <td>B+</td>	I	P144-26	FLEXIBLE FUEL SELECT LINK (DEALER FIT)	GROUND (FITTED)	B+
0PI46-16AIR CONDITIONING CLUTCH RELAYGROUNDB+0PI46-17SECONDARY AIR INJECTION RELAYGROUNDB+1PI46-20IGNITION FAILURE - B BANKB+1.7 V1PI46-21IGNITION FAILURE - A BANKB+1.7 V1PI46-21IGNITION FAILURE - A BANKGROUND PULSE, 3.5 MS @ IDLE1.7 V0PI47-6FUEL INJECTORS 3 & 5 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 3 & 4 - B BANK0PI47-6FUEL INJECTORS 1 & 4 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-7FUEL INJECTORS 3 & 6 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-8FUEL INJECTORS 3 & 6 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-9FUEL INJECTORS 3 & 6 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-10FUEL INJECTORS 3 & 6 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL0PI47-10FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-11IGNITION MODULE NEGATIVE - 28GROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-20IGNITION MODULE NEGATIVE - 14GROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-21IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-22IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-22IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-22<	I	PI45-13	POWER STEERING PRESSURE SWITCH	GROUND	В+
0PI46-17SECONDARY AIR INJECTION RELAYGROUNDB+1PI46-20IGNITION FAILURE - B BANKB+1.7 V1PI46-21IGNITION FAILURE - A BANKB+1.7 V0PI47-5FUEL INJECTORS 3 & 5 - B BANKGROUND PULSE, 3.5 MS @ IDLE1.7 V0PI47-6FUEL INJECTORS 2 & 4 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 4 - A BANK0PI47-7FUEL INJECTORS 2 & 4 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 4 - A BANK0PI47-7FUEL INJECTORS 2 & 4 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 6 - B BANK0PI47-7FUEL INJECTORS 1 & 4 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 6 - B BANK0PI47-9FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 1 & 5 - A BANK0PI47-10FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 1 & 5 - A BANK0PI47-11SECONDARY AIR VACUUM SOLENOID VALVEB+GROUND PULSE, 1000 RPM = 15 Hz0PI47-13IGNITION MODULE NEGATIVE - 2BGROUND PULSE, 1000 RPM = 15 Hz0PI47-19IGNITION MODULE NEGATIVE - 3AGROUND PULSE, 1000 RPM = 15 Hz0PI47-21IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 Hz0PI47-21IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 Hz0PI47-23IGNITION MODULE NEGATIVE - 3AGROUND PULSE, 1000 RPM = 15 Hz0PI47-21IGNITION MODULE NEGATIVE - 2A	I.	P146-7	CRANK SIGNAL	GROUND	B+
IPI46-20IGNITION FAILURE - B BANKB+1.7 VIPI46-21IGNITION FAILURE - A BANKB+1.7 VOPI47-5FUEL INJECTORS 3 & 5 - B BANKGROUND PULSE, 3.5 MS @ IDLE1.7 VOPI47-6FUEL INJECTORS 2 & 4 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 4 - A BANKOPI47-7FUEL INJECTORS 1 & 4 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 6 - A BANKOPI47-8FUEL INJECTORS 2 & 6 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 6 - B BANKOPI47-9FUEL INJECTORS 2 & 6 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 1 & 5 - A BANKOPI47-10FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 1 & 5 - A BANKOPI47-11SECONDARY AIR VACUUM SOLENOID VALVEB+GROUND PULSE, 1000 RPM = 15 HzOPI47-11IGNITION MODULE NEGATIVE - 3BGROUND PULSE, 1000 RPM = 15 HzOPI47-13IGNITION MODULE NEGATIVE - 18GROUND PULSE, 1000 RPM = 15 HzOPI47-20IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 HzOPI47-21IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 HzOPI47-22IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 HzOPI47-23IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 HzOPI47-23IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 HzOPI47-23IGNITION MODULE NEGATIVE - 1AGROUND PULSE	о	PI46-16	AIR CONDITIONING CLUTCH RELAY	GROUND	B+
IPI46-21IGNITION FAILURE - A BANKB+1.7 V0PI47-56FUEL INJECTORS 3 & 5 - B BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 4 - A BANKGROUND PULSE, 3.5 MS @ IDLE0PI47-6FUEL INJECTORS 2 & 4 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 1 & 4 - B BANKGROUND PULSE, 3.5 MS @ IDLE0PI47-7FUEL INJECTORS 3 & 6 - A BANKGROUND PULSE, 3.5 MS @ IDLEFUEL INJECTORS 2 & 6 - B BANKGROUND PULSE, 3.5 MS @ IDLE0PI47-8FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 3.5 MS @ IDLEGROUND PULSE, 3.5 MS @ IDLE0PI47-10FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 3.5 MS @ IDLEGROUND0PI47-11SECONDARY AIR VACUUM SOLENOID VALVEB+GROUND PULSE, 1000 RPM = 15 Hz0PI47-12IGNITION MODULE NEGATIVE - 28GROUND PULSE, 1000 RPM = 15 Hz0PI47-13IGNITION MODULE NEGATIVE - 18GROUND PULSE, 1000 RPM = 15 Hz0PI47-20IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 Hz0PI47-21IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 Hz0PI47-22IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 Hz0PI47-23IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 Hz0PI47-23IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 Hz0PI47-23IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 Hz0PI47-33EVAP VALVE - B BANKB+GROUND <td>0</td> <td>PI46-17</td> <td>SECONDARY AIR INJECTION RELAY</td> <td>GROUND</td> <td>B+</td>	0	PI46-17	SECONDARY AIR INJECTION RELAY	GROUND	B+
0 Pi47-5 FUEL INJECTORS 3 & 5 - B BANK GROUND PULSE, 3.5 MS @ IDLE 0 Pi47-6 FUEL INJECTORS 2 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 Pi47-7 FUEL INJECTORS 2 & 4 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 Pi47-7 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 Pi47-8 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE 0 Pi47-9 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 Pi47-10 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 Pi47-11 SECONDARY AIR VACUUM SOLENOID VALVE B+ GROUND 0 Pi47-13 IGNITION MODULE NEGATIVE - 3B GROUND PULSE, 1000 RPM = 15 Hz GROUND 0 Pi47-19 IGNITION MODULE NEGATIVE - 2B GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 Pi47-20 IGNITION MODULE NEGATIVE - 3A GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 Pi47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 Pi47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz FUEL	1				
0PI47-6FUEL INJECTORS 2 & 4 - A BANKGROUND PULSE, 3.5 MS @ IDLE0PI47-7FUEL INJECTORS 1 & 4 - B BANKGROUND PULSE, 3.5 MS @ IDLE0PI47-8FUEL INJECTORS 3 & 6 - A BANKGROUND PULSE, 3.5 MS @ IDLE0PI47-9FUEL INJECTORS 2 & 6 - B BANKGROUND PULSE, 3.5 MS @ IDLE0PI47-10FUEL INJECTORS 1 & 5 - A BANKGROUND PULSE, 3.5 MS @ IDLE0PI47-11SECONDARY AIR VACUUM SOLENOID VALVEB+GROUND PULSE, 3.5 MS @ IDLE0PI47-11SECONDARY AIR VACUUM SOLENOID VALVEB+GROUND PULSE, 1000 RPM = 15 Hz0PI47-13IGNITION MODULE NEGATIVE - 2BGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-19IGNITION MODULE NEGATIVE - 1BGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-20IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-21IGNITION MODULE NEGATIVE - 2AGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-22IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-22IGNITION MODULE NEGATIVE - 1AGROUND PULSE, 1000 RPM = 15 HzFUEL0PI47-33EVAP VALVE - B BANKB+GROUND PULSE, 1000 RPM = 15 Hz	I	PI46-21	IGNITION FAILURE – A BANK	B+	1.7 V
0 PI47-7 FUEL INJECTORS 1 & 4 - B BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-8 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-9 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-10 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-10 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-11 SECONDARY AIR VACUUM SOLENOID VALVE B+ GROUND 0 PI47-17 IGNITION MODULE NEGATIVE - 3B GROUND PULSE, 1000 RPM = 15 Hz GROUND 0 PI47-18 IGNITION MODULE NEGATIVE - 2B GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-19 IGNITION MODULE NEGATIVE - 1B GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-20 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-23 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 1	о	PI47-5	FUEL INJECTORS 3 & 5 – B BANK	GROUND PULSE, 3.5 MS @ IDLE	
0 PI47-8 FUEL INJECTORS 3 & 6 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-9 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-10 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-10 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-11 SECONDARY AIR VACUUM SOLENOID VALVE B+ GROUND 0 PI47-17 IGNITION MODULE NEGATIVE - 3B GROUND PULSE, 1000 RPM = 15 Hz GROUND 0 PI47-18 IGNITION MODULE NEGATIVE - 2B GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-19 IGNITION MODULE NEGATIVE - 1B GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-20 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-21 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz FUEL 0 PI47-23 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz GROUND 0 PI47-33 EVAP VALVE - B BANK B+	о	PI47-6	FUEL INJECTORS 2 & 4 – A BANK	GROUND PULSE, 3.5 MS @ IDLE	
0 PI47-9 FUEL INJECTORS 2 & 6 - B BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-10 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-11 SECONDARY AIR VACUUM SOLENOID VALVE B+ GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-17 IGNITION MODULE NEGATIVE - 2B GROUND PULSE, 1000 RPM = 15 Hz FUEL INJECTORS 1 & 5 - A BANK 0 PI47-19 IGNITION MODULE NEGATIVE - 2B GROUND PULSE, 1000 RPM = 15 Hz FUEL INJECTORS 1 & 5 - A BANK 0 PI47-19 IGNITION MODULE NEGATIVE - 1B GROUND PULSE, 1000 RPM = 15 Hz FUEL INJECTORS 1 & 5 - A BANK 0 PI47-20 IGNITION MODULE NEGATIVE - 3A GROUND PULSE, 1000 RPM = 15 Hz FUEL INJECTORS 1 & 5 - A BANK 0 PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz FUEL INJECTORS 1 & 5 - A BANK 0 PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-33 EVAP VALVE - B BANK B+ GROUND PULSE, 1000 RPM = 15 Hz	0	PI47-7	FUEL INJECTORS 1 & 4 – B BANK	GROUND PULSE, 3.5 MS @ IDLE	
0 PI47-10 FUEL INJECTORS 1 & 5 - A BANK GROUND PULSE, 3.5 MS @ IDLE 0 PI47-11 SECONDARY AIR VACUUM SOLENOID VALVE B+ GROUND 0 PI47-17 IGNITION MODULE NEGATIVE - 3B GROUND PULSE, 1000 RPM = 15 Hz GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-18 IGNITION MODULE NEGATIVE - 2B GROUND PULSE, 1000 RPM = 15 Hz F 0 PI47-19 IGNITION MODULE NEGATIVE - 3A GROUND PULSE, 1000 RPM = 15 Hz F 0 PI47-20 IGNITION MODULE NEGATIVE - 3A GROUND PULSE, 1000 RPM = 15 Hz F 0 PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz F 0 PI47-22 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz F 0 PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz F 0 PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-33 EVAP VALVE - B BANK B+ GROUND	0	P147-8	FUEL INJECTORS 3 & 6 – A BANK	GROUND PULSE, 3.5 MS @ IDLE	
O PI47-11 SECONDARY AIR VACUUM SOLENOID VALVE B+ GROUND O PI47-17 IGNITION MODULE NEGATIVE - 38 GROUND PULSE, 1000 RPM = 15 Hz GROUND O PI47-18 IGNITION MODULE NEGATIVE - 28 GROUND PULSE, 1000 RPM = 15 Hz GROUND PULSE, 1000 RPM = 15 Hz O PI47-19 IGNITION MODULE NEGATIVE - 18 GROUND PULSE, 1000 RPM = 15 Hz GROUND PULSE, 1000 RPM = 15 Hz O PI47-20 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz GROUND PULSE, 1000 RPM = 15 Hz O PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz GROUND PULSE, 1000 RPM = 15 Hz O PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz GROUND PULSE, 1000 RPM = 15 Hz O PI47-33 EVAP VALVE - B BANK B+ GROUND PULSE, 1000 RPM = 15 Hz	0	P147-9	FUEL INJECTORS 2 & 6 – B BANK	GROUND PULSE, 3.5 MS @ IDLE	
0 PI47-17 IGNITION MODULE NEGATIVE - 3B GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-18 IGNITION MODULE NEGATIVE - 2B GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-19 IGNITION MODULE NEGATIVE - 1B GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-20 IGNITION MODULE NEGATIVE - 3A GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-33 EVAP VALVE - B BANK B+ GROUND	0	PI47-10	FUEL INJECTORS 1 & 5 – A BANK	GROUND PULSE, 3.5 MS @ IDLE	
O PI47-18 IGNITION MODULE NEGATIVE - 2B GROUND PULSE, 1000 RPM = 15 Hz O PI47-19 IGNITION MODULE NEGATIVE - 1B GROUND PULSE, 1000 RPM = 15 Hz O PI47-20 IGNITION MODULE NEGATIVE - 3A GROUND PULSE, 1000 RPM = 15 Hz O PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz O PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz O PI47-33 EVAP VALVE - B BANK GROUND PULSE, 1000 RPM = 15 Hz	0	PI47-11	SECONDARY AIR VACUUM SOLENOID VALVE	B+	GROUND
0 PI47-19 IGNITION MODULE NEGATIVE - 1B GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-20 IGNITION MODULE NEGATIVE - 3A GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz 0 PI47-33 EVAP VALVE - B BANK B+ GROUND	0	PI47-17	IGNITION MODULE NEGATIVE – 3B	GROUND PULSE, 1000 RPM = 15 Hz	
O PI47-20 IGNITION MODULE NEGATIVE - 3A GROUND PULSE, 1000 RPM = 15 Hz O PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz O PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz O PI47-33 EVAP VALVE - B BANK B+ GROUND	о	PI47-18	IGNITION MODULE NEGATIVE - 2B	GROUND PULSE, 1000 RPM = 15 Hz	
O PI47-21 IGNITION MODULE NEGATIVE - 2A GROUND PULSE, 1000 RPM = 15 Hz O PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz O PI47-33 EVAP VALVE - B BANK B+ GROUND	0	PI47-19	IGNITION MODULE NEGATIVE – 1B	GROUND PULSE, 1000 RPM = 15 Hz	
O PI47-22 IGNITION MODULE NEGATIVE - 1A GROUND PULSE, 1000 RPM = 15 Hz O PI47-33 EVAP VALVE - B BANK B+ GROUND	0	PI47-20	IGNITION MODULE NEGATIVE – 3A	GROUND PULSE, 1000 RPM = 15 Hz	
O PI47-33 EVAP VALVE – B BANK B+ GROUND	-				
	0	PI47-22	IGNITION MODULE NEGATIVE - 1A	GROUND PULSE, 1000 RPM = 15 Hz	
O PI47-34 EVAP VALVE – A BANK B+ GROUND					
	0	PI47-34	EVAP VALVE - A BANK	B+	GROUND

The following symbols are used to represent values for Control Module Pin Out data:

I Input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+ Battery voltage
 V Voltage (DC)
 Hz Frequency
 KHz Frequency x 1000
 MS Milliseconds
 MV Millivolts

4

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.

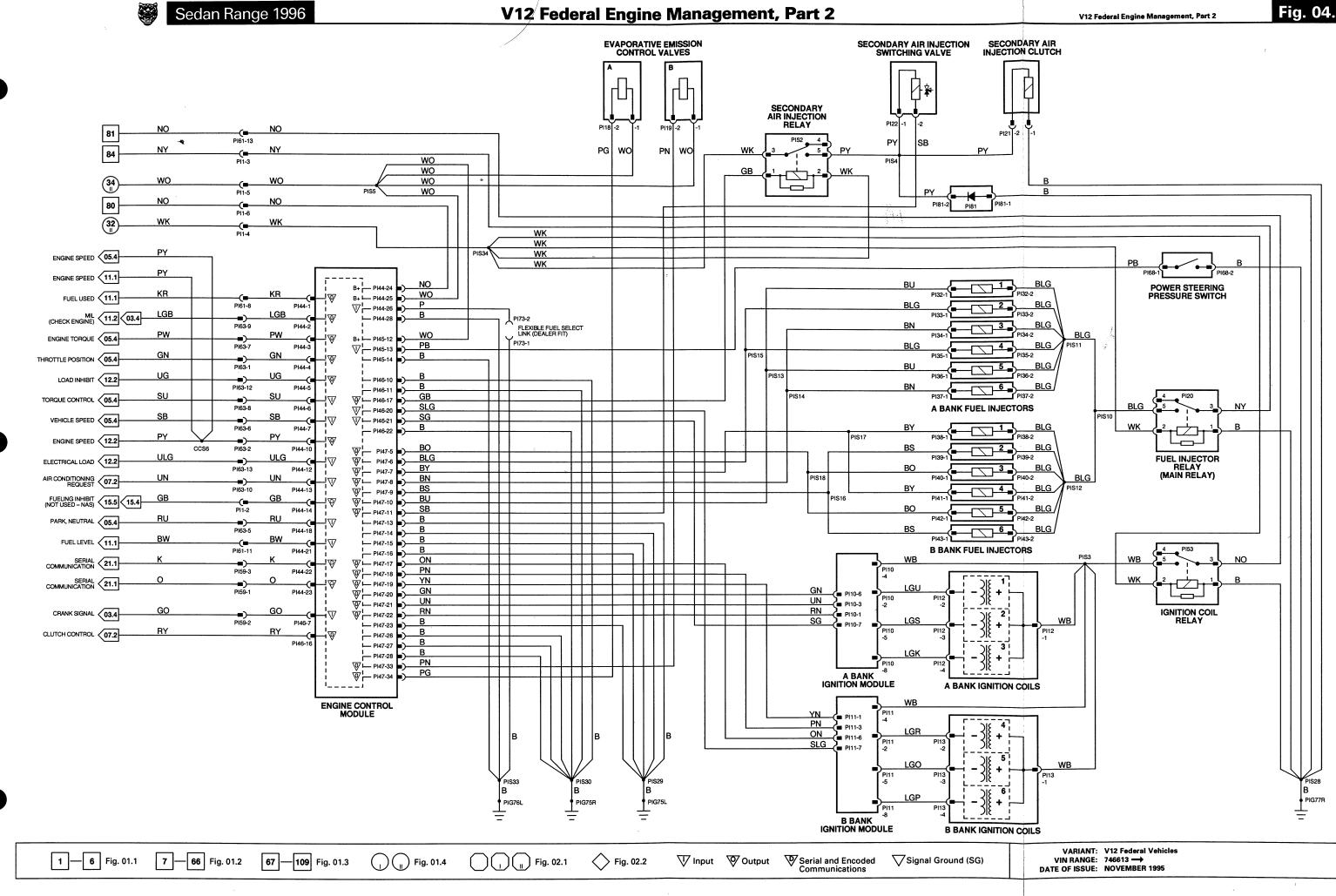


Fig. 04.5

Component

CAMSHAFT POSITION SENSOR (V12) CATALYST SWITCHING MODULE CATALYST THERMOCOUPLES CRANKSHAFT POSITION SENSOR ENGINE CONTROL MODULE (V12)

ENGINE COOLANT TEMPERATURE SENSOR (V12) ENGINE SPEED SENSOR FUEL PUMP (1) FUEL PUMP (2) HEATED OXYGEN SENSOR (V12 A BANK) HEATED OXYGEN SENSOR (V12 A BANK) IDLE AIR CONTROL VALVE (V12 A BANK) IDLE AIR CONTROL VALVE (V12 A BANK) INTAKE AIR TEMPERATURE SENSOR (V12) MANIFOLD ABSOLUTE PRESSURE SENSOR (V12 A BANK) MANIFOLD ABSOLUTE PRESSURE SENSOR (V12 B BANK) Connector / Type / Color PI3 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI155 / 8-WAY MULTILOCK 070 / WHITE

PI156 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK PI2 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI44 / 28-WAY MULTILOCK 040 / SLATE PI45 / 16-WAY MULTILOCK 040 / SLATE PI45 / 22-WAY MULTILOCK 040 / SLATE PI46 / 22-WAY MULTILOCK 040 / SLATE PI5 / 2-WAY ECONOSEAL J / SLATE PI23 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK BT6 (FLY LEAD) / 4-WAY SUMITOMO 90 / WHITE BT6 (FLY LEAD) / 4-WAY SUMITOMO 90 / WHITE PI25 (FLY LEAD) / 4-WAY SUMITOMO 90 / SLATE PI27 (FLY LEAD) / 4-WAY SUMITOMO 90 / SLATE PI29 / 3-WAY SUMITOMO 90/ SLATE PI30 / 3-WAY SUMITOMO 90/ SLATE PI6 / 2-WAY JUNIOR TIMER / BLACK PI9 / 3-WAY SUMITOMO 90 / BLACK PI50 / 3-WAY SUMITOMO 90 / BLACK PI7 / 4-WAY ECONOSEAL J / BLACK S. ag

Location / Access A BANK CAMSHAFT COVER RH 'A' POST, ECM / 'A' POST TRIM REAR OF ENGINE ENGINE TIMING COVER RH 'A' POST/ 'A' POST TRIM

B BANK THERMOSTAT HOUSING ENGINE VEE, REAR FUEL TANK / FUEL TANK TRIM FUEL TANK / FUEL TANK TRIM A BANK EXHAUST, DOWNSTREAM OF PRIMARY CATALYST B BANK EXHAUST, DOWNSTREAM OF PRIMARY CATALYST A BANK THROTTLE BODY B BANK THROTTLE BODY B BANK THROTTLE BODY A BANK AIR INTAKE A BANK AIR INTAKE A BANK INTAKE MANIFOLD, REAR B BANK INTAKE MANIFOLD, REAR THROTTLE TURNTABLE

1

8 .

RELAYS

Relay

FUEL PUMP RELAY (1) FUEL PUMP RELAY (2) Color / Stripe BLACK / VIOLET BLUE

BT26 / GREEN FU2/ YELLOW

Location / Access ABOVE FUEL TANK / FUEL TANK TRIM FUEL TANK TRIM / BATTERY COVER REARWARD OF RH HEADLAMP RH 'A' POST/ 'A' POST TRIM RH 'A' POST/ 'A' POST PANEL

Location / Access

TRUNK ELECTRICAL CARRIER BATTERY COVER

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK
FU1	6-WAY MULTILOCK 070 / WHITE
PI1	13-WAY ECONOSEAL III LC / WHITE
PI61	13-WAY ECONOSEAL III LC / BLACK
PI73	2-WAY MULTILOCK 070 / YELLOW
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN

GROUNDS

Ground	Location / Type
FUG8L	FRONT TRUNK GROUND STUD
FUG8R	FRONT TRUNK GROUND STUD
PIG75L	RH 'A' POST GROUND STUD
PIG75R	RH 'A' POST GROUND STUD
PIG76L	RH BULKHEAD GROUND STUD
PIG76R	RH BULKHEAD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ENGINE CONTROL MODULE (V12)

\bigtriangledown	Pin	Description	Active	Inactive
I	PI44-26	FLEXIBLE FUEL SELECT LINK (DEALER FIT)	GROUND (FITTED)	B+
ı	PI45-1	MAP SENSOR FEEDBACK – B BANK	1.7 V @ IDLE, INCREASING WITH MANIFOLD ABSOLUTE PRESSURE	
1	PI45-2	MAP SENSOR FEEDBACK – A BANK	1.7 V @ IDLE, INCREASING WITH MANIFOLD ABSOLUTE PRESSURE	
1	PI45-3	IDLE SWITCH	GROUND	B+
1	PI45-4	THROTTLE POSITION SENSOR FEEDBACK VOLTAGE	0.58 V @ IDLE, 4.75 V @ FULL THROTTLE	
1	PI45-5	COOLANT TEMPERATURE SENSOR	0.41 V @ 90° C, INCREASING WITH TEMPERATURE	
1	PI45-6	INTAKE AIR TEMPERATURE SENSOR	0.59 V @ 10° C, INCREASING WITH TEMPERATURE	
ο	PI45-7	COMMON SENSOR REFERENCE VOLTAGE	5 V	5 V
1	PI45-10	UPSTREAM HO2S FEEDBACK – B BANK	0.1 – 0.8 V (SWING)	
1	PI45-11	UPSTREAM HO2S FEEDBACK – A BANK	0.1 – 0.8 V (SWING)	
SG	Pi45-15	COMMON SENSOR SHIELD GROUND	GROUND	GROUND
SG	PI45-16	COMMON SENSOR REFERENCE GROUND	GROUND	GROUND
о	P146-5	UPSTREAM HO2S HEATER GROUND – B BANK	GROUND	B+
0	PI46-6	UPSTREAM HO2S HEATER GROUND – A BANK	GROUND	B+
1	PI46-8	CAMSHAFT POSITION SENSOR	GROUND PULSE @ 1000 RPM = 8 Hz, 2000 RPM = 16 Hz	
SG	PI46-12	CAMSHAFT POSITION SENSOR	GROUND	GROUND
E.	PI46-13	CRANKSHAFT POSITION SENSOR	GROUND PULSE @ 1000 RPM = 15 Hz, 2000 RPM = 30 Hz	
1	PI46-14	ENGINE SPEED SENSOR	GROUND PULSE @ 1000 RPM = 175 Hz, 2000 RPM = 350 Hz	
SG	Pi46-18	CRANKSHAFT POSITION SENSOR	GROUND	GROUND
SG	Pi46-19	ENGINE SPEED SENSOR	GROUND	
о	PI47-1	IDLE AIR CONTROL VALVE CLOSE – B BANK	4.8 V @ IDLE	
0	PI47-2	IDLE AIR CONTROL VALVE OPEN B BANK	9.8 V @ IDLE	
0	PI47-3	IDLE AIR CONTROL VALVE CLOSE – A BANK	4.8 V @ IDLE	
о	PI47-4	IDLE AIR CONTROL VALVE OPEN – A BANK	9.8 V @ IDLE	
0	PI47-12	FUEL PUMP RELAY 2	GROUND	B+
0	PI47-29	FUEL PUMP RELAY 1	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

الم **المين :** المراجع : الموادي :

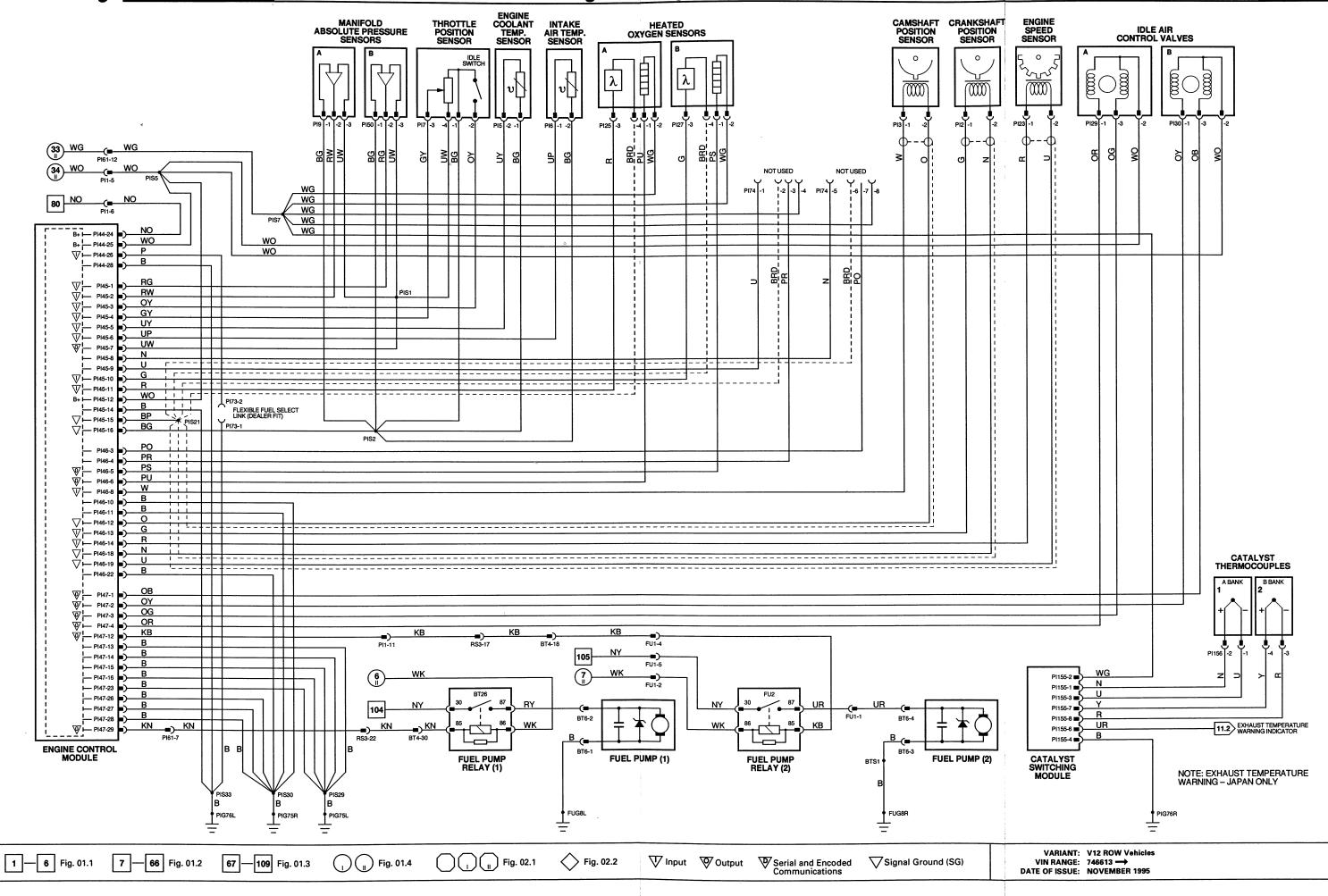
I Input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+ Battery voltage
- V Voltage (DC)
- Hz Frequency
- KHz Frequency x 1000 MS Milliseconds
- **MV** Millivolts

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.

Sedan Range 1996

V12 ROW Engine Management, Part 1





Component

DIODE (PI81) – AIRP SOLENOID SUPPRESSION ENGINE CONTROL MODULE (V12)

EVAPORATIVE EMISSION CONTROL VALVE (V12 A BANK) EVAPORATIVE EMISSION CONTROL VALVE (V12 B BANK) FUEL INJECTOR (V12 A BANK 1)

FUEL INJECTOR (V12 A BANK 2) FUEL INJECTOR (V12 A BANK 3) FUEL INJECTOR (V12 A BANK 4) FUEL INJECTOR (V12 A BANK 5) FUEL INJECTOR (V12 A BANK 6) FUEL INJECTOR (V12 B BANK 1) FUEL INJECTOR (V12 B BANK 2) FUEL INJECTOR (V12 B BANK 3) FUEL INJECTOR (V12 B BANK 4) FUEL INJECTOR (V12 B BANK 5) FUEL INJECTOR (V12 B BANK 6) IGNITION COIL (V12 A BANK) IGNITION COIL (V12 B BANK) IGNITION MODULE (V12 A BANK) IGNITION MODULE (V12 B BANK) POWER STEERING PRESSURE SWITCH SECONDARY AIR INJECTION CLUTCH SECONDARY AIR INJECTION SWITCHING VALVE

Connector / Type / Color PI81 / DIODE / BLACK

PI44 / 28-WAY MULTILOCK 040 / SLATE PI45 / 16-WAY MULTILOCK 040 / SLATE PI46 / 22-WAY MULTILOCK 040 / SLATE PI47 / 34-WAY MULTILOCK 040 / SLATE PI18 / 2-WAY JUNIOR TIMER / BLACK PI19 / 2-WAY JUNIOR TIMER / BLACK PI32 / 2-WAY JUNIOR TIMER / SLATE PI33 / 2-WAY JUNIOR TIMER / SLATE PI34 / 2-WAY JUNIOR TIMER / SLATE PI35 / 2-WAY JUNIOR TIMER / SLATE PI36 / 2-WAY JUNIOR TIMER / SLATE PI37 / 2-WAY JUNIOR TIMER / SLATE PI38 / 2-WAY JUNIOR TIMER / SLATE PI39 / 2-WAY JUNIOR TIMER / SLATE PI40 / 2-WAY JUNIOR TIMER / SLATE PI41 / 2-WAY JUNIOR TIMER / SLATE PI42 / 2-WAY JUNIOR TIMER / SLATE PI43 / 2-WAY JUNIOR TIMER / SLATE PI12 / 4-WAY SUB-MINIATURE / BLACK PI13 / 4-WAY SUB-MINIATURE / BLACK PI10 / 8-WAY SUMITOMO 90 / SLATE PI11 / 8-WAY SUMITOMO 90 / SLATE PI68 / 2-WAY JUNIOR TIMER / BLACK PI21 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK PI22 / 2-WAY DENSO / BLUE

Color / Stripe

BLACK

BLACK

BLACK / WHITE

Location / Access

EMS HARNESS / SECONDARY AIR INJECTION PUMP RH 'A' POST/ 'A' POST TRIM

BELOW LH FRONT RELAYS BELOW LH FRONT RELAYS FUEL RAIL, INTAKE MANIFOLD FUEL RAIL, INTAKE MANIFOLD FUEL RAIL, INTAKE MANIFOLD FUEL BAIL, INTAKE MANIFOLD FUEL RAIL, INTAKE MANIFOLD ENGINE VEE ENGINE VEE ENGINE BAY, RH INNER FENDER ENGINE BAY, RH INNER FENDER POWER STEERING PUMP SECONDARY AIR INJECTION PUMP A BANK INTAKE MANIFOLD / REAR

6 · · ·

Location / Access RH ENGINE BAY RELAYS

RH ENGINE BAY RELAYS

RH ENGINE BAY RELAYS

RELAYS

Relay

FUEL INJECTOR RELAY (MAIN RELAY) (V12) IGNITION COIL RELAY (V12) SECONDARY AIR INJECTION RELAY (V12)

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access	
P11	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP	
PI59	13-WAY ECONOSEAL III LC / BLACK	FORWARD OF LH ENGINE BAY FUSE BOX	
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP	
PI63	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST/ 'A' POST TRIM	
PI73	2-WAY MULTILOCK 070 / YELLOW	RH 'A' POST/ 'A' POST TRIM	
F1/3	2-WAT MOLITEOCK 0/0/ TELEOW		

Connector / Color

PI20 / BLACK

PI53 / BLACK

PI52 / BLACK

GROUNDS

Ground	Location / Type
PIG75L	RH 'A' POST GROUND STUD
PIG75R	RH 'A' POST GROUND STUD
PIG76L	RH BULKHEAD GROUND STUD
PIG77R	RIGHT FORWARD EMS GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

đ



ENGINE CONTROL MODULE (V12)

\bigtriangledown	Pin	Description	Active	Inactive
о	PI44-1	FUEL USED	GROUND PULSE, 10 Hz @ IDLE	
о	PI44-2	CHECK ENGINE MIL	GROUND	B+
о	PI44-3	ENGINE TORQUE SIGNAL	11.5 V @ IDLE, DECREASING WITH TORQUE INCREASE	
о	PI44-4	THROTTLE POSITION	1.4 V @ IDLE, 9 V @ FULL THROTTLE	
0	PI44-5	LOAD INHIBIT SIGNAL	GROUND	B+
1	PI44-6	TORQUE REDUCTION	GROUND PULSE @ SHIFT	11.5 V @ IDLE
1	PI44-7	VEHICLE SPEED	GROUND	B+
о	PI44-10	ENGINE SPEED	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
I	PI44-12	ELECTRICAL LOAD: HEATED WINDSHIELD, HEATED BACKLIGHT, OR BLOWERS ON HIGH SPEED	GROUND	B+
1	PI44-13	AIR CONDITIONING REQUEST	B+	GROUND
D	PI44-14	FUELING INHIBIT SIGNAL	ENCODED COMMUNICATIONS	
1	PI44-18	PARK / NEUTRAL	GROUND	B+
1	PI44-21	FUEL LEVEL	B+	GROUND
D	PI44-22	SERIAL COMMUNICATION INPUT		
D	PI44-23	SERIAL COMMUNICATION OUTPUT		
I	PI44-26	FLEXIBLE FUEL SELECT LINK (DEALER FIT)	GROUND (FITTED)	B+
I	PI45-13	POWER STEERING PRESSURE SWITCH	GROUND	B+
ı	P146-7	CRANK SIGNAL	GROUND	. B+
0	PI46-16	AIR CONDITIONING CLUTCH RELAY	GROUND	B+
0	PI46-17	SECONDARY AIR INJECTION RELAY	GROUND	B+
1	PI46-20	IGNITION FAILURE – B BANK	B+	1.7 V
I	PI46-21	IGNITION FAILURE – A BANK	B+	1.7 V
о	PI47-5	FUEL INJECTORS 3 & 5 – B BANK	GROUND PULSE, 3.5 MS @ IDLE	
0	PI47-6	FUEL INJECTORS 2 & 4 – A BANK	GROUND PULSE, 3.5 MS @ IDLE	
0	PI47-7	FUEL INJECTORS 1 & 4 – B BANK	GROUND PULSE, 3.5 MS @ IDLE	
0	PI47-8	FUEL INJECTORS 3 & 6 – A BANK	GROUND PULSE, 3.5 MS @ IDLE	
0	PI47-9	FUEL INJECTORS 2 & 6 – B BANK	GROUND PULSE, 3.5 MS @ IDLE	
0	PI47-10	FUEL INJECTORS 1 & 5 – A BANK	GROUND PULSE, 3.5 MS @ IDLE	
0	PI47-11	SECONDARY AIR VACUUM SOLENOID VALVE	B+	GROUND
0	PI47-17	IGNITION MODULE NEGATIVE – 3B	GROUND PULSE, 1000 RPM = 15 Hz	
o	PI47-18	IGNITION MODULE NEGATIVE – 2B	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI47-19	IGNITION MODULE NEGATIVE – 1B	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI47-20	IGNITION MODULE NEGATIVE – 3A	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI47-21	IGNITION MODULE NEGATIVE – 2A	GROUND PULSE, 1000 RPM = 15 Hz	
0	PI47-22	IGNITION MODULE NEGATIVE - 1A	GROUND PULSE, 1000 RPM = 15 Hz	0001015
0	PI47-33	EVAP VALVE – B BANK	B+	GROUND
0	PI47-34	EVAP VALVE – A BANK	B+	GROUND

The following symbols are used to represent values for Control Module Pin Out data:

Ń

l Input

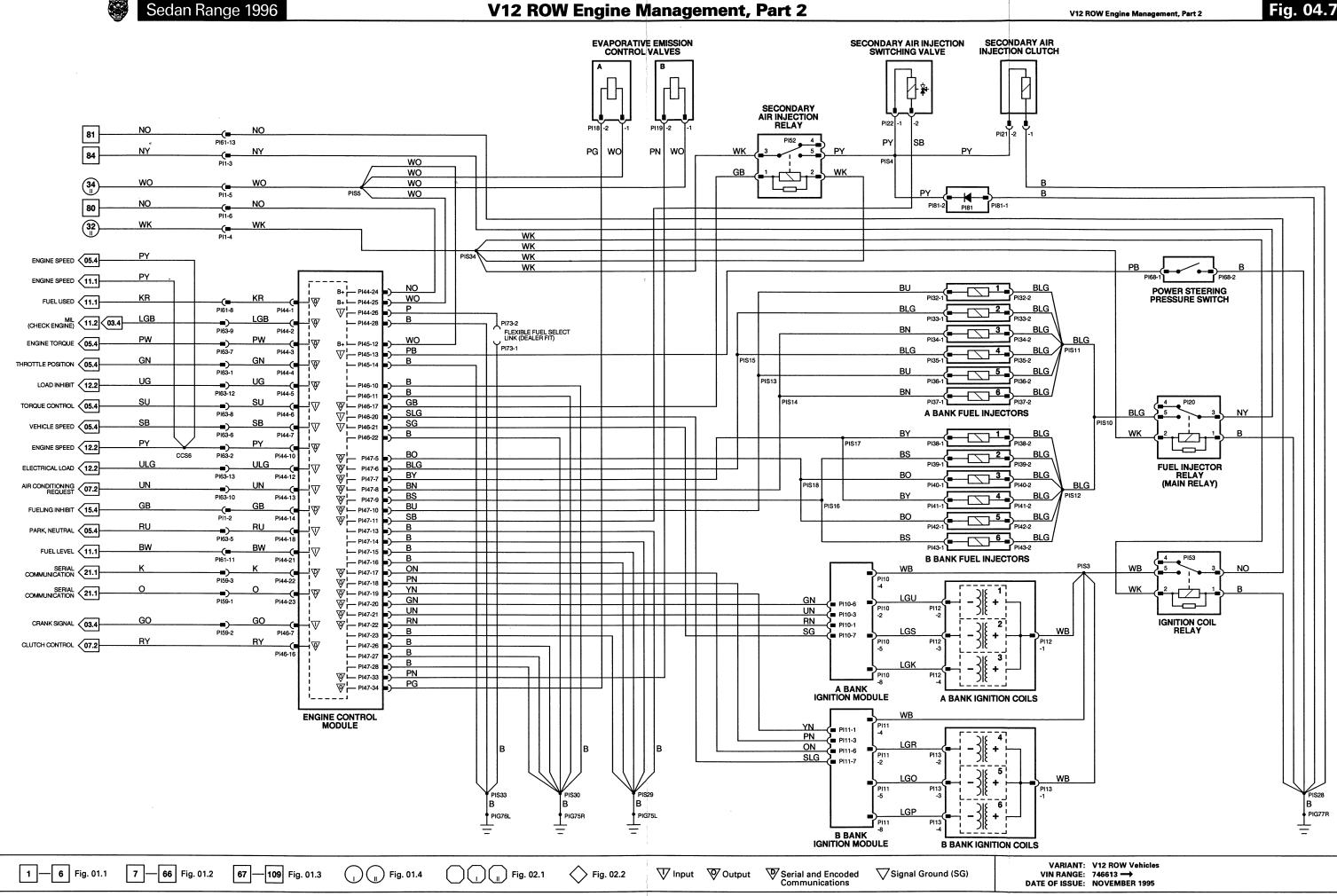
O Output

SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.





Component

DECODER MODULE FLUID TEMPERATURE SENSOR GEAR SELECTOR INDICATOR MODULE (AJ16 4.0L) KICKDOWN SWITCH

MODE SWITCH OUTPUT SHAFT SENSOR PRESSURE REGULATOR ROTARY SWITCH

TRANSMISSION CONTROL MODULE (AJ16 NA) TRANSMISSION SOLENOID VALVES

HARNESS-TO-HARNESS CONNECTORS

Location / Access

CENTER CONSOLE TRANSMISSION / SUMP 'J' GATE / CENTER CONSOLE UNDER ACCELERATOR

CENTER CONSOLE TRANSMISSION TRANSMISSION / SUMP 'J' GATE / CENTER CONSOLE

PASSENGER'S UNDERSCUTTLE TRANSMISSION / SUMP

Connector	Type / Color	Location / Access
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
PI63	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM

Connector / Type / Color

CC14 / 12-WAY MULTILOCK 040 / BLACK

GB3 / 9-WAY HELLERMAN DEUTSCH / BLACK

GB1 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

GB2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

CA74 (RHD) (FLY LEAD) / 3-WAY MULTILOCK 070 / SLATE CC54 (LHD) (FLY LEAD) / 3-WAY MULTILOCK 070 / SLATE CC11 / 6-WAY MULTILOCK 040 / BLACK

CC13 / 26-WAY MODU 4 / BLUE

CC7 / 55-WAY BOSCH / BLACK

GROUNDS

Ground	Location / Type
CCG8L	CENTER CONSOLE GROUND STUD
CCG8R	CENTER CONSOLE GROUND STUD
CCG51R	CENTER CONSOLE GROUND STUD

..

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)



REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

A

DECODER MODULE

\bigtriangledown	Pin	Description	Active	Inactive
ο	CC13-1	GEAR POSITION 3	GROUND	5 V
0	CC13-2	GEAR POSITION 2	GROUND	5 V
0	CC13-3	GEAR POSITION 'R'	GROUND	5 V
ο	CC13-4	GEAR POSITION 'D'	GROUND	5 V
1	CC13-11	GEAR POSITION 'Y'	GROUND = R, N, D, 3	2 V = P, 2
1	CC13-12	GEAR POSITION 'Z'	GROUND = D, 3, 2	2 V = P, R, N
1	CC13-13	GEAR POSITION 'X'	GROUND = P, R, 3, 2	2 V = N, D
0	CC13-14	GEAR SELECTOR 'NEUTRAL' ILLUMINATION	GROUND = N	5 V = P, R, D, 3, 2
ο	CC13-15	GEAR SELECTOR 'PARK' ILLUMINATION	GROUND = P	5 V = R, N, D, 3, 2
0	CC13-23	SPEED CONTROL INHIBIT	GROUND = D, 3, 2	B+ = P, R, N
0	CC13-24	PARK, NEUTRAL OUTPUT	GROUND = P, N	B+ = R, D, 3, 2

TRANSMISSION CONTROL MODULE (AJ16 NA)

\bigtriangledown	Pin	Description	Active	Inactive
1	CC7-2	OUTPUT SHAFT SPEED SENSOR	1.51 V @ 10 MPH (16 KPH) = 280 Hz, 20 MPH (32 KPH) = 560 Hz	
1	CC7-3	ENGINE SPEED SENSOR	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
1	CC7-4	MODE SWITCH SELECTION	GROUND = NORMAL	B+ = SPORT
0	CC7-5	SHIFT SOLENOID 1 (MV1)	GROUND = 2, 3	B+ = P, N, D, 1, 4
0	CC7-6	PRESSURE REGULATOR	9.5V @ IDLE, DECREASING WITH PRESSURE INCREASE	
1	CC7-14	POSITION CODE 'Y'	GROUND = R, N, D, 3	2 V = P, 2
D	CC7-15	SERIAL COMMUNICATION INPUT		
0	CC7-16	TRANSMISSION MIL	GROUND	9.4 V
0	CC7-19	PRESSURE REGULATOR / SHIFT SOLENOIDS SUPPLY	B+	B+
I.	CC7-21	ENGINE TORQUE	10.4 V = NO LOAD, DECREASING WITH ENGINE LOAD	
0	CC7-24	SHIFT SOLENOID 2 (MV2)	GROUND = P, N, D, 2, 1	B+ = 3, 4
1	CC7-29	TRACTION ACTIVE	GROUND PULSE	B+
0	CC7-32	TORQUE REDUCTION REQUEST	GROUND PULSE @ SHIFT (7.8 V)	9.4 V @ IDLE
1	CC7-33	POSITION CODE 'Z'	GROUND = D, 3, 2	B+ = P, R, N
SG	CC7-38	OUTPUT SHAFT SPEED SENSOR	GROUND	GROUND
1	CC7-41	KICK DOWN SWITCH	GROUND	B+
0	CC7-42	LOCK UP SOLENOID (MV3)	GROUND	B+
SG	CC7-44	FLUID TEMPERATURE SENSOR	1.31 V	
1	CC7-46	FLUID TEMPERATURE SENSOR	1.15 V @ 90° C	
1	CC7-47	THROTTLE POSITION SENSOR FEEDBACK VOLTAGE	1.31 V @ IDLE, 4.9 V = FULL THROTTLE	
0	CC7-49	SPORT MODE INDICATOR	GROUND	B+
- 1	CC7-50	POSITION CODE 'X'	GROUND = P, R, 3, 2	2 V = D, N
D	CC7-51	SERIAL COMMUNICATION OUTPUT		

The following symbols are used to represent values for Control Module Pin Out data:

R

i input

O Output

SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.

AJ16 4.0L NA Automatic Transmission

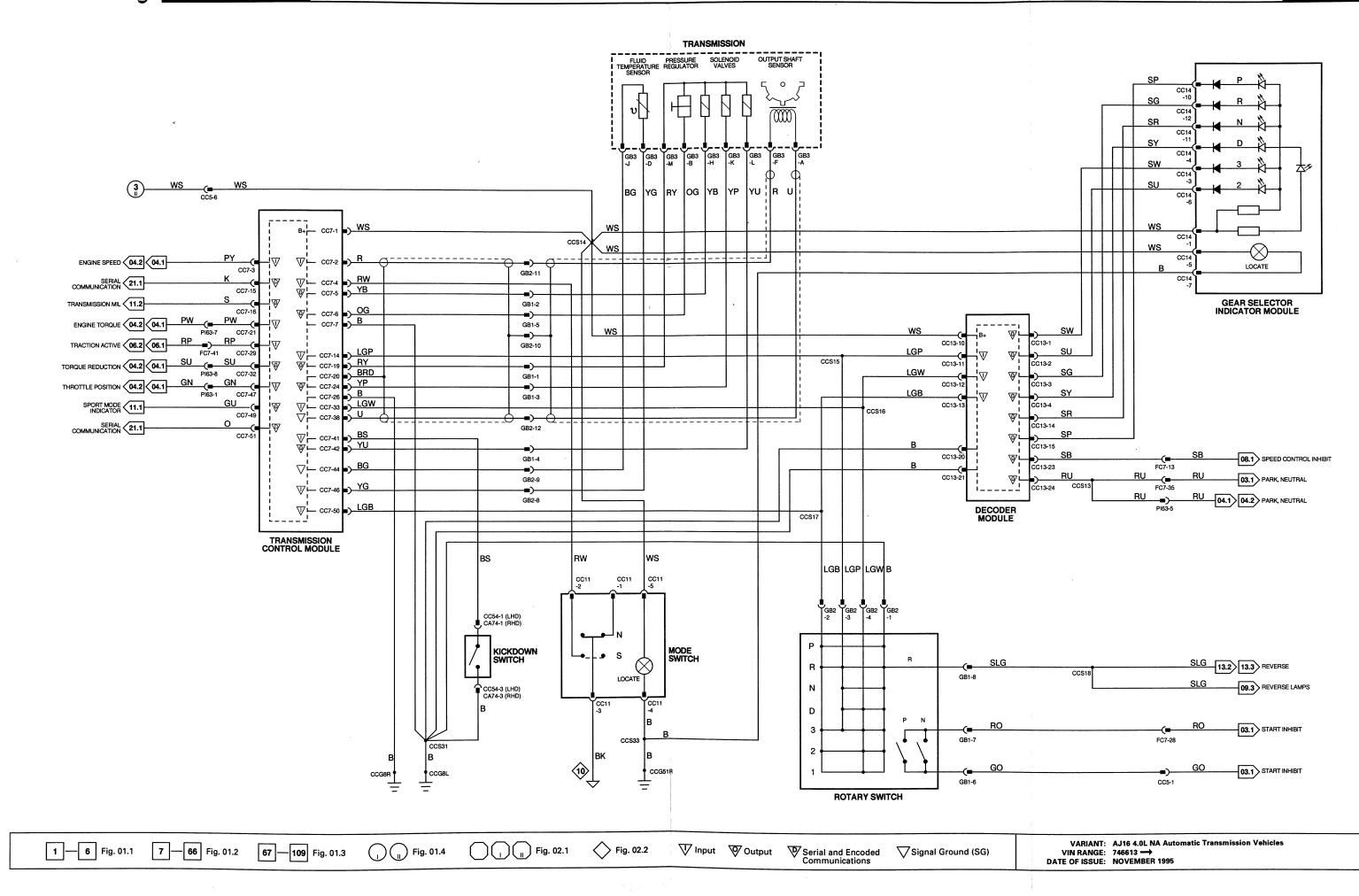




Fig. 05.1

Component BRAKE SWITCH

GEAR SELECTOR INDICATOR MODULE (AJ16 3.2L, 4.0L SC; V12) INPUT SPEED SENSOR KICKDOWN SWITCH

LINEAR GEAR POSITION SWITCHES MODE SWITCH OUTPUT SPEED SENSOR PRESSURE SWITCH MANIFOLD SHIFT SOLENOID (A) SHIFT SOLENOID (B) TORQUE CONVERTER CLUTCH SOLENOID TRANSMISSION CONTROL MODULE (V12 & AJ16 SC) TRANSMISSION TEMPERATURE SENSOR VARIABLE FORCE MOTOR

Connector / Type / Color

Location / Access

PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE CENTER CONSOLE 'J' GATE / LH SIDE CENTER CONSOLE 'J' GATE / LH SIDE RH 'A' POST / 'A' POST TRIM

CA72 / 4-WAY MULTILOCK 070 / WHITE GB11 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK GB14 (FLY LEAD) / 3-WAY PACKARD / BLACK CA74 (RHD) (FLY LEAD) / 3-WAY MULTILOCK 070 / SLATE CC21 / 20-WAY MULTILOCK 040 / BLACK CC11 / 6-WAY MULTILOCK 040 / BLACK CC11 / 6-WAY MULTILOCK 040 / BLACK GB12 / 12-WAY HELLERMAN DEUTSCH / BLACK

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX

Location / Access

DRIVER'S UNDERSCUTTLE 'J' GATE / CENTER CONSOLE TRANSMISSION, LH SIDE UNDER ACCELERATOR

'J' GATE / CENTER CONSOLE CENTER CONSOLE TRANSMISSION, LH SIDE TRANSMISSION / SUMP TRANSMISSION / SUMP TRANSMISSION / SUMP PASSENGER'S UNDERSCUTTLE TRANSMISSION / SUMP

HARNESS-TO-HARNESS CONNECTORS

CC3	20-WAY MULTILOCK 040 / BLACK
CC4	14-WAY MULTILOCK 070 / WHITE
CC5	20-WAY MULTILOCK 040 / GREEN
CC38	2-WAY MULTILOCK 070 / YELLOW
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK
GB10	12-WAY MULTILOCK 040 / BLACK
GB15	8-WAY MULTILOCK 070 / WHITE
PI63	20-WAY MULTILOCK 040 / BLACK

GROUNDS

Ground	Location / Type
CAG30R	LH 'A' POST GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
CCG51R	CENTER CONSOLE GROUND STUD
CCG8L	CENTER CONSOLE GROUND STUD
CCG8R	CENTER CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

TRANSMISSION CONTROL MODULE (AJ16 SC)

\bigtriangledown	Pin	Description	Active	Inactive
I.	CC48-3	PRESSURE SWITCH MANIFOLD	B+	B+
1	CC48-4	PRESSURE SWITCH MANIFOLD	B+	B+
1	CC48-5	MODE SWITCH	GROUND ≈ SPORT	B+ = NORMAL
I.	CC48-6	CALIBRATION SELECT LINK (DEALER FIT)	GROUND = (FITTED)	8+
0	CC48-7	TORQUE REDUCTION	GROUND PULSE @ SHIFT	11.5 V @ IDLE
1	CC48-11	THROTTLE POSITION	1.4 V @ IDLE	9 V @ FULL THROTTLE
1	CC48-12	ENGINE TORQUE	11.5 V @ IDLE, DECREASING WITH TORQUE INCREASE	
SG	CC48-14	TRANSMISSION TEMPERATURE SENSOR	GROUND	GROUND
D	CC48-16	SERIAL COMMUNICATION INPUT		
1	CC48-22	PRESSURE SWITCH MANIFOLD	GROUND	GROUND
1	CC48-23	TRACTION ACTIVE	GROUND	B+
- F	CC48-24	KICK DOWN SWITCH	GROUND	B+
1	CC48-25	BRAKE SWITCH	GROUND	B+
1	CC48-26	TRANSMISSION TEMPERATURE SENSOR	1.93 V @ 90° C	
1	CC48-30	ENGINE SPEED SIGNAL	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
SG	CC48-36	OUTPUT SPEED SENSOR	GROUND	GROUND
SG	CC48-37	INPUT SPEED SENSOR	GROUND	GROUND
0	CC48-39	SHIFT SOLENOID 'A'	GROUND = 1, 4	B+ = 2, 3
0	CC48-40	TRANSMISSION MIL	GROUND	B+
0	CC48-41	SPORT MODE INDICATOR LAMP	GROUND	B+
0	CC48-42	TORQUE CONVERTER CLUTCH SOLENOID	GROUND	B+
0	CC48-43	SHIFT SOLENOID 'B'	GROUND = 3, 4	B+ = 1, 2
D	CC48-45	SERIAL COMMUNICATION OUTPUT		
0	CC48-49	VARIABLE FORCE MOTOR	1.3 V @ IDLE, DECREASING WITH PRESSURE INCREASE	
I	CC48-50	INPUT SPEED SENSOR	GROUND @ 1000 RPM = 450 Hz, 2000 RPM = 900 Hz	
1	CC48-51	OUTPUT SPEED SENSOR	GROUND @ 10 MPH (16 KPH) = 300 Hz, 20 MPH (32 KPH) = 600 Hz	
0	CC48-52	VARIABLE FORCE MOTOR	7.7 V @ IDLE, DECREASING WITH PRESSURE INCREASE	

The following symbols are used to represent values for Control Module Pin Out data:

l Input

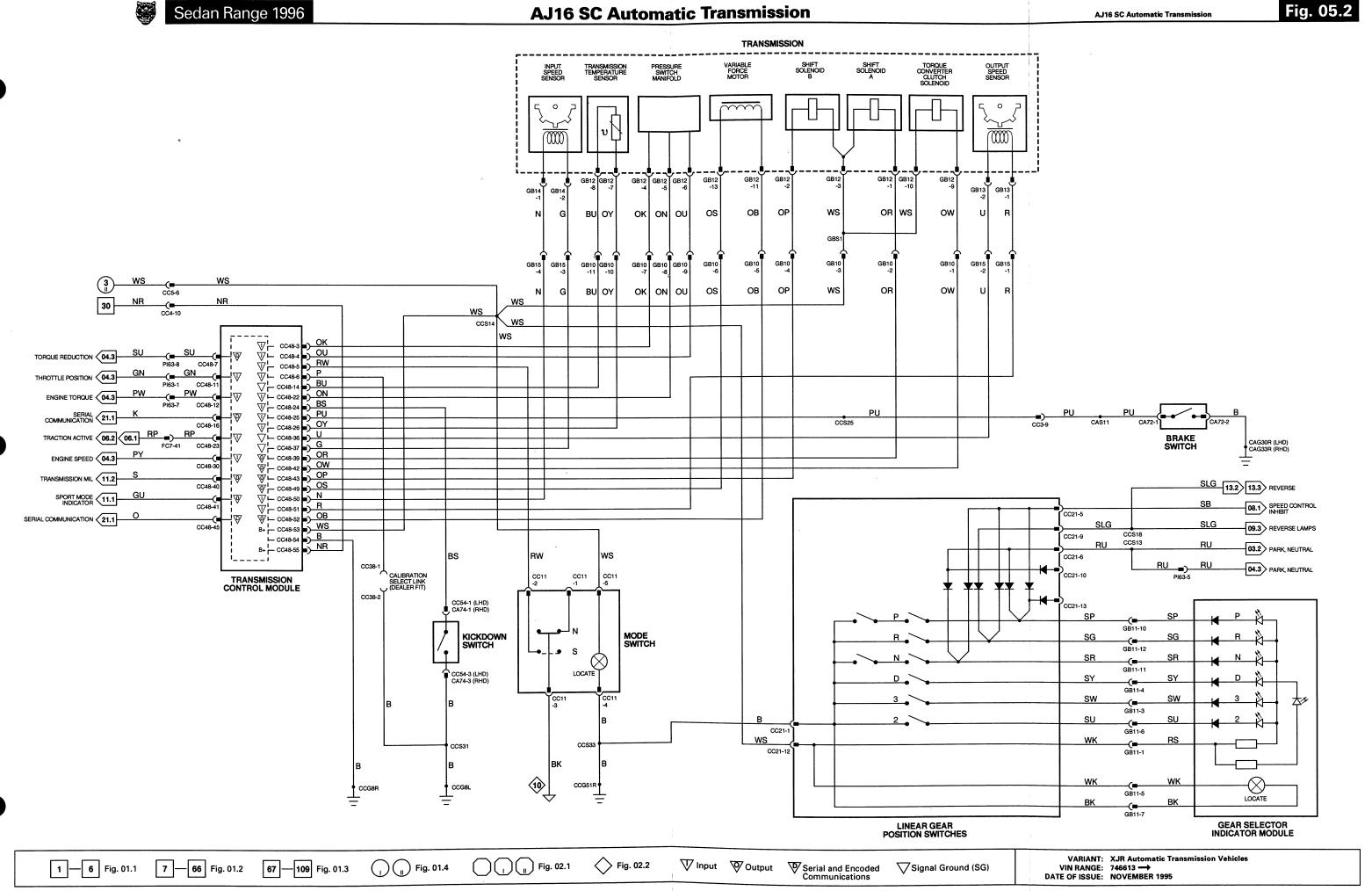
O Output

SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.



Component

LINEAR GEAR POSITION SWITCHES GEAR SELECTOR INDICATOR MODULE (AJ16 3.2L, 4.0L SC; V12)

Connector / Type / Color

CC21 / 20-WAY MULTILOCK 040 / BLACK GB11 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK Location / Access 'J' GATE / CENTER CONSOLE 'J' GATE / CENTER CONSOLE

HARNESS-TO-HARNESS CONNECTORS

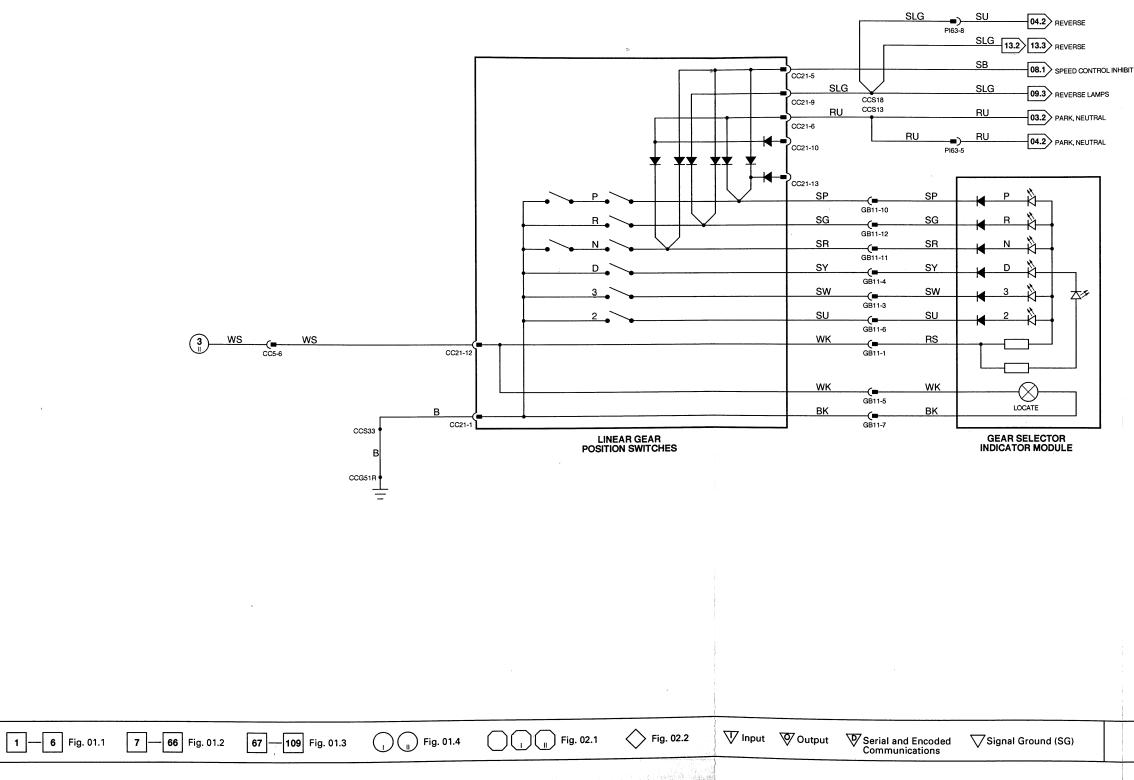
Connector	Type / Color	Locat
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER
PI63	20-WAY MULTILOCK 040 / BLACK	RH 'A' PC

GROUNDS

Ground Location / Type CCG51R CENTER CONSOLE GROUND STUD Location / Access CENTER CONSOLE / CENTER CONSOLE GLOVE BOX RH 'A' POST / 'A' POST TRIM

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

ø





VARIANT: AJ16 3.2L Automatic Transmission Vehicles VIN RANGE: 746613 → DATE OF ISSUE: NOVEMBER 1995

Component

BRAKE SWITCH GEAR SELECTOR INDICATOR MODULE (AJ16 3.2L, 4.0L SC; V12) INPUT SPEED SENSOR KICKDOWN SWITCH

LINEAR GEAR POSITION SWITCHES MODE SWITCH OUTPUT SPEED SENSOR PRESSURE SWITCH MANIFOLD SHIFT SOLENOID (A) SHIFT SOLENOID (B) TORQUE CONVERTER CLUTCH SOLENOID TRANSMISSION CONTROL MODULE (V12 & AJ16 SC) TRANSMISSION TEMPERATURE SENSOR VARIABLE FORCE MOTOR

Connector / Type / Color

Location / Access

PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE CENTER CONSOLE 'J' GATE / LH SIDE CENTER CONSOLE 'J' GATE / LH SIDE RH 'A' POST / 'A' POST TRIM

CA72 / 4-WAY MULTILOCK 070 / WHITE GB11 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK GB14 (FLY LEAD) / 3-WAY PACKARD / BLACK CA74 (RHD) (FLY LEAD) / 3-WAY MULTILOCK 070 / SLATE CC54 (LHD) (FLY LEAD) / 3-WAY MULTILOCK 070 / SLATE CC21 / 20-WAY MULTILOCK 040 / BLACK CC11 / 6-WAY MULTILOCK 040 / BLACK GB12 / 12-WAY HELLERMAN DEUTSCH / BLACK CC48 / 55-WAY AMP 55 / BLACK GB12 / 12-WAY HELLERMAN DEUTSCH / BLACK

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX

Location / Access

DRIVER'S UNDERSCUTTLE 'J' GATE / CENTER CONSOLE TRANSMISSION, LH SIDE UNDER ACCELERATOR

'J' GATE / CENTER CONSOLE CENTER CONSOLE TRANSMISSION, LH SIDE TRANSMISSION / SUMP TRANSMISSION / SUMP TRANSMISSION / SUMP PASSENGER'S UNDERSCUTTLE TRANSMISSION / SUMP

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

	71
CC3	20-WAY MULTILOCK 040 / BLACK
CC4	14-WAY MULTILOCK 070 / WHITE
CC5	20-WAY MULTILOCK 040 / GREEN
CC38	2-WAY MULTILOCK 070 / YELLOW
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK
GB10	12-WAY MULTILOCK 040 / BLACK
GB15	8-WAY MULTILOCK 070 / WHITE
P163	20-WAY MULTILOCK 040 / BLACK

GROUNDS

Ground	Location / Type
CAG30R	LH 'A' POST GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
CCG51R	CENTER CONSOLE GROUND STUD
CCG8L	CENTER CONSOLE GROUND STUD
CCG8R	CENTER CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)



REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

ø

TRANSMISSION CONTROL MODULE (V12)

\bigtriangledown	Pin	Description	Active	Inactive
1	CC48-3	PRESSURE SWITCH MANIFOLD	B+	B+
1	CC48-4	PRESSURE SWITCH MANIFOLD	B+	B+
1	CC48-5	MODE SWITCH	GROUND = SPORT	B+ = NORMAL
1	CC48-6	CALIBRATION SELECT LINK (DEALER FIT)	GROUND = (FITTED)	B+
0	CC48-7	TORQUE REDUCTION	GROUND PULSE @ SHIFT	11.5 V @ IDLE
1	CC48-11	THROTTLE POSITION	1.4 V @ IDLE	9 V @ FULL THROTTLE
1	CC48-12	ENGINE TORQUE	11.5 V @ IDLE, DECREASING WITH TORQUE INCREASE	
SG	CC48-14	TRANSMISSION TEMPERATURE SENSOR	GROUND	GROUND
D	CC48-16	SERIAL COMMUNICATION INPUT		
1	CC48-22	PRESSURE SWITCH MANIFOLD	GROUND	GROUND
1	CC48-23	TRACTION ACTIVE	GROUND	B+
1	CC48-24	KICK DOWN SWITCH	GROUND	B+
1	CC48-25	BRAKE SWITCH	GROUND	B+
1	CC48-26	TRANSMISSION TEMPERATURE SENSOR	1.93 V @ 90° C	
1	CC48-30	ENGINE SPEED SIGNAL	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
0	CC48-34	VEHICLE SPEED SIGNAL	GROUND	B+
SG	CC48-36	OUTPUT SPEED SENSOR	GROUND	GROUND
SG	CC48-37	INPUT SPEED SENSOR	GROUND	GROUND
0	CC48-39	SHIFT SOLENOID 'A'	GROUND = 1, 4	B+ = 2, 3
о	CC48-40	TRANSMISSION MIL	GROUND	B+
0	CC48-41	SPORT MODE INDICATOR LAMP	GROUND	B+
0	CC48-42	TORQUE CONVERTER CLUTCH SOLENOID	GROUND	B+
0	CC48-43	SHIFT SOLENOID 'B'	GROUND = 3, 4	B+ = 1, 2
D	CC48-45	SERIAL COMMUNICATION OUTPUT		
0	CC48-49	VARIABLE FORCE MOTOR	1.3 V @ IDLE, DECREASING WITH PRESSURE INCREASE	
I	CC48-50	INPUT SPEED SENSOR	GROUND @ 1000 RPM = 450 Hz, 2000 RPM = 900 Hz	
I.	CC48-51	OUTPUT SPEED SENSOR	GROUND @ 10 MPH (16 KPH) = 300 Hz, 20 MPH (32 KPH) = 600 Hz	
0	CC48-52	VARIABLE FORCE MOTOR	7.7 V @ IDLE, DECREASING WITH PRESSURE INCREASE	

The following symbols are used to represent values for Control Module Pin Out data:

۵

l Input

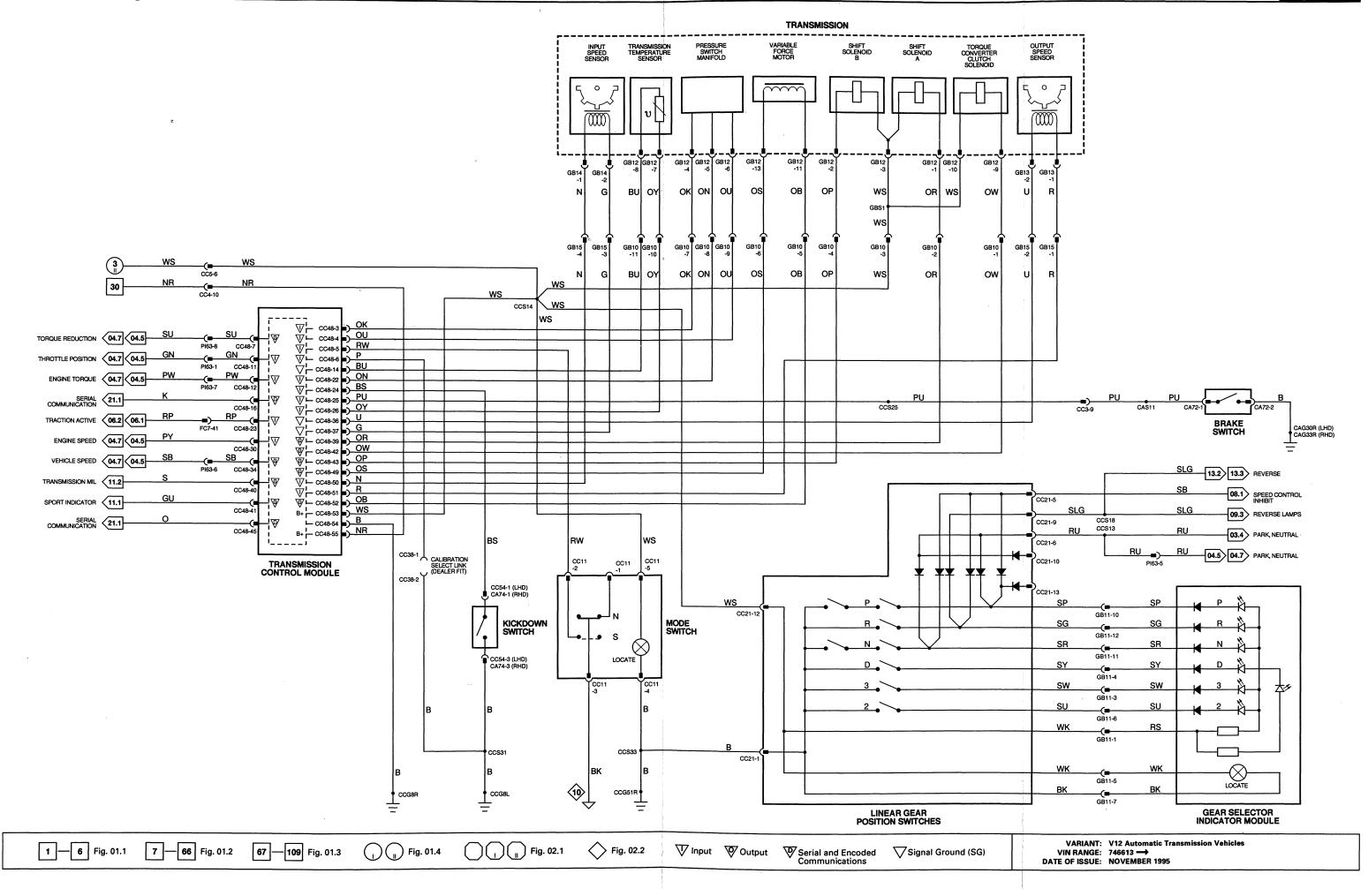
- O Output
- SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.

V12 Automatic Transmission





Component

BODY PROCESSOR MODULE

BRAKE SWITCH GEARSHIFT INTERLOCK SOLENOID KEYLOCK SOLENOID (COLUMN SWITCHGEAR) NOT IN-PARK MICROSWITCH

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CA72 / 4-WAY MULTILOCK 070 / WHITE CC12 / MULTILOCK 070 / WHITE SC6 / 2-WAY MULTILOCK 040 / BLUE CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

Location / Access PASSENGER'S UNDERSCUTTLE

DRIVER'S UNDERSCUTTLE

'J' GATE / CENTER CONSOLE STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE

RELAYS

Relay	Color / Stripe	Connector / Color	Location / Access
GEARSHIFT INTERLOCK RELAY	BLUE	CC23 / BLUE	CENTER CONSOLE
KEYLOCK SOLENOID RELAY	BLACK / BLUE	CC23 / BLUE	CENTER CONSOLE

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access	
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX	
- FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE	
FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE	
FC8	12-WAY MULTILOCK 040 / BLACK	DRIVER'S UNDERSCUTTLE	
GROUNDS			
Ground	Location / Type		

CAG30R	LH 'A' POST GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
CCG51R	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

á

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-25	KEY LOCK SOLENOID RELAY	GROUND	В+
0	FC1-28	GEARSHIFT INTERLOCK RELAY	GROUND	B+
1	FC2-16	NOT IN PARK MICRO SWITCH	GROUND	B+
I	FC2-31	IGNITION SWITCHED GROUND	GROUND	B+
I.	FC2-35	BRAKE SWITCH	GROUND	8+

The following symbols are used to represent values for Control Module Pin Out data:

ŝ

l Input

O Output

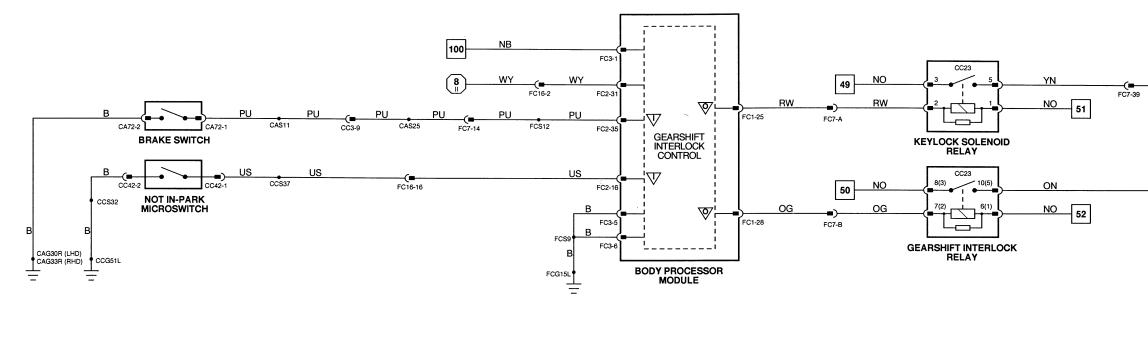
SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.





1 - 6 Fig. 01.1 7 - 66 Fig. 01.2 67 - 109 Fig. 01.3 1 Fig. 01.4 Fig. 02.1 Fig. 02.2 V Input V Output Serial and Encoded Signal Ground (SG)

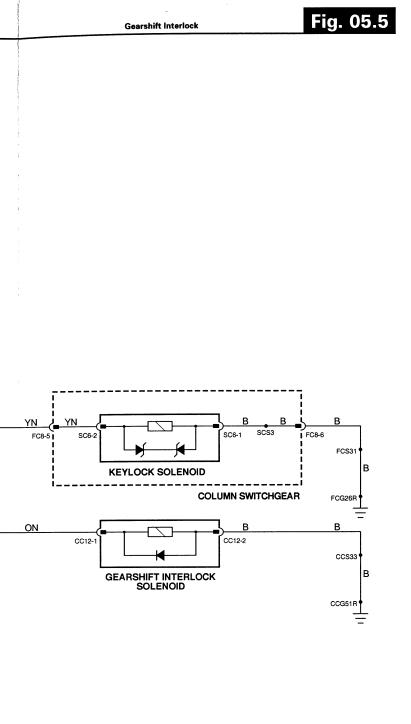


Fig. 06.1

COMPONENTS

Component

ABS / TRACTION CONTROL CONTROL MODULE (LHD) BRAKE SWITCH FASCIA SWITCH PACK TRACTION CONTROL ACTUATOR (LHD)

WHEEL SPEED SENSOR – LH FRONT WHEEL SPEED SENSOR – LH REAR WHEEL SPEED SENSOR – RH FRONT WHEEL SPEED SENSOR – RH REAR

Connector / Type / Color

RS27 / 28-WAY FORD GTE / SLATE CA72 / 4-WAY MULTILOCK 070 / WHITE FC18 / 16-WAY MULTILOCK 070 / WHITE RS39 (FLV LEAD) / 2-WAY FORD / BLACK RS50 / 3-WAY JUNIOR TIMER / BLACK LS34 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK CA48 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK RS28 (FLV LEAD) / 2-WAY ECONOSEAL III LC / BLACK

Location / Access

ENGINE BAY / RH REAR DRIVER'S UNDERSCUTTLE STEERING COLUMN / DRIVER'S UNDERSCUTTLE ENGINE BAY, LH REAR

e ·· ·

LH FRONT WHEEL LH REAR WHEEL RH FRONT WHEEL RH REAR WHEEL

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC57	12-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
CAG30R	LH 'A' POST GROUND SCREW
FCG26L	LH CONSOLE GROUND STUD
RSG41L	RIGHT FORWARD GROUND STUD
RSG41R	RIGHT FORWARD GROUND STUD
RSG42L	RH BULKHEAD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

a

ABS / TRACTION CONTROL CONTROL MODULE (LHD)

\bigtriangledown	Pin	Description	Active	Inactive
0	RS27-3	TRACTION CONTROL ACTIVE SIGNAL TO TCM	GROUND	В+
0	RS27-4	SPEED CONTROL INHIBIT REQUEST	GROUND	B+
1	RS27-5	LH FRONT WHEEL SPEED SENSOR	2.5 V @ 10 MPH (16 KPH) = 100 Hz; 20 MPH (32 KPH) = 200 Hz	
SG	RS27-6	LH FRONT WHEEL SPEED SENSOR GROUND	2.5 V (AT REST)	2.5 V
1	RS27-7	RH FRONT WHEEL SPEED SENSOR	2.5 V @ 10 MPH (16 KPH) = 100 Hz; 20 MPH (32 KPH) = 200 Hz	
SG	RS27-8	RH FRONT WHEEL SPEED SENSOR GROUND	2.5 V (AT REST)	2.5 V
1	RS27-9	LH REAR WHEEL SPEED SENSOR	2.5 V @ 10 MPH (16 KPH) = 100 Hz; 20 MPH (32 KPH) = 200 Hz	
SG	RS27-10	LH REAR WHEEL SPEED SENSOR GROUND	2.5 V (AT REST)	2.5 V
1	RS27-11	RH REAR WHEEL SPEED SENSOR	2.5 V @ 10 MPH (16 KPH) = 100 Hz; 20 MPH (32 KPH) = 200 Hz	
SG	RS27-12	RH REAR WHEEL SPEED SENSOR GROUND	2.5 V (AT REST)	2.5 V
0	RS27-16	TRACTION CONTROL ACTUATOR MOTOR	GROUND	7 V
0	RS27-17	TRACTION CONTROL ACTUATOR MOTOR	GROUND	7 V
1	RS27-18	TRACTION CONTROL INHIBIT SWITCH	GROUND	B+
E.	RS27-20	BRAKE SWITCH INPUT	GROUND	B+
0	RS27-21	ABS FAILURE LAMP	GROUND	2.3 V
0	RS27-23	TRACTION INDICATOR LAMP	B+	FAILURE = GROUND TRACTION OFF = 4 Hz GROUND PULSE
0	RS27-24	VEHICLE SPEED SIGNAL	B+ @ 10 MPH (16 KPH) = 200 Hz; 20 MPH (32 KPH) = 400 Hz	
о	RS27-25	ACTUATOR POTENTIOMETER REFERENCE VOLTAGE	5 V	5 V
1	RS27-26	ACTUATOR POTENTIOMETER FEEDBACK	0 – 5 V (FLUCTUATING)	0.47 V (AT REST)
SG	RS27-27	ACTUATOR POTENTIOMETER REFERENCE GROUND	GROUND	GROUND
D	RS27-28	SERIAL COMMUNICATION (BI-DIRECTIONAL)		

The following symbols are used to represent values for Control Module Pin Out data:

ŝ

l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

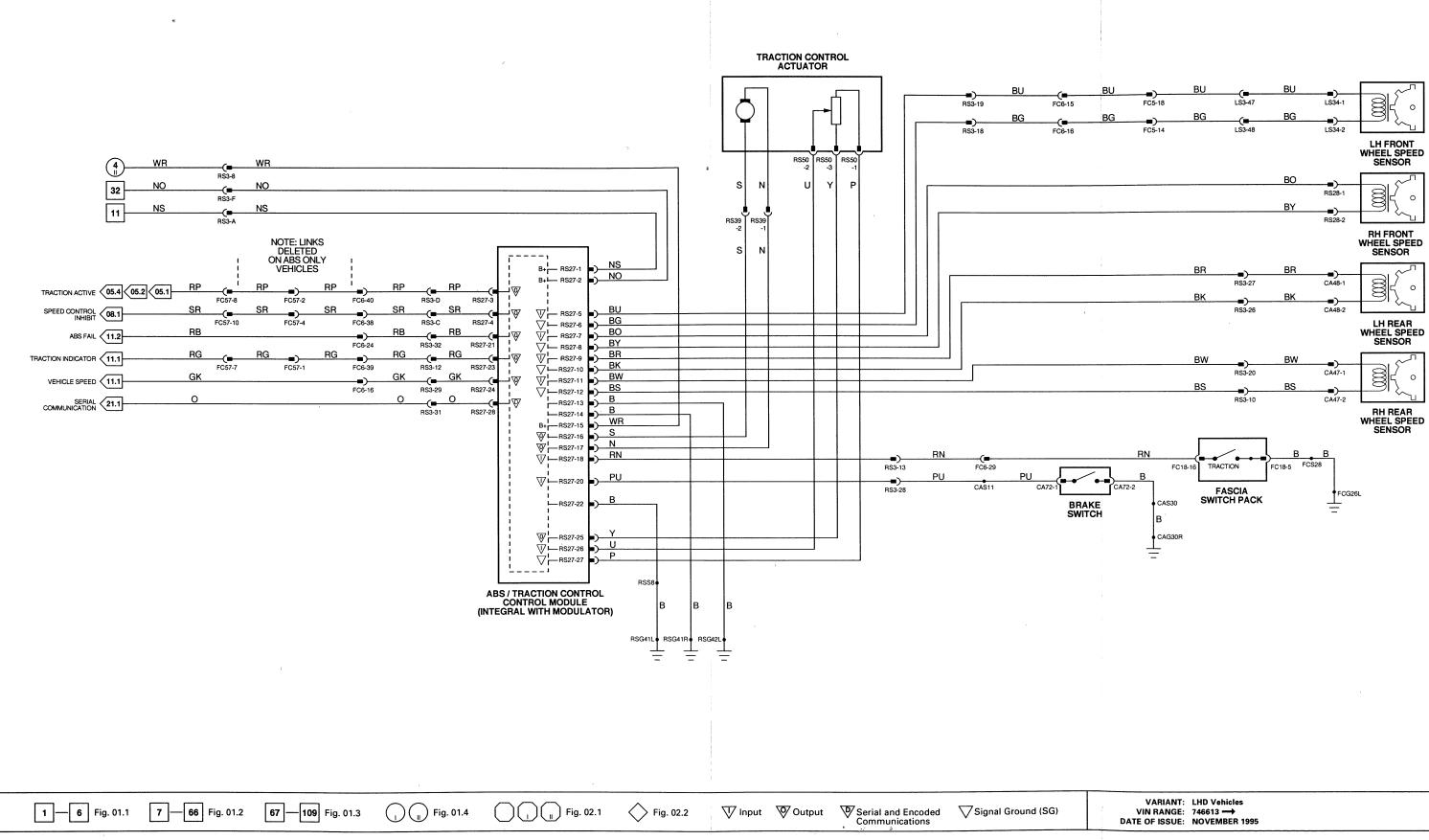


Fig. 06.1

Component

ABS / TRACTION CONTROL CONTROL MODULE (RHD) BRAKE SWITCH FASCIA SWITCH PACK TRACTION CONTROL ACTUATOR (RHD)

WHEEL SPEED SENSOR - LH FRONT WHEEL SPEED SENSOR - LH REAR WHEEL SPEED SENSOR - RH FRONT WHEEL SPEED SENSOR - RH REAR

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color Location / Access FC5 THROUGH-PANEL (48 MICRO / 6) / BLACK LH FASCIA END PANEL / OUTER AIR VENT FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK RH FASCIA END PANEL / OUTER AIR VENT FC57 12-WAY MULTILOCK 040 / BLACK PASSENGER'S UNDERSCUTTLE LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST / 'A' POST PANEL RS3 THROUGH-PANEL (48 MICRO / 6) / BROWN RH 'A' POST / 'A' POST PANEL

Location / Access

DRIVER'S UNDERSCUTTLE

STEERING COLUMN / DRIVER'S UNDERSCUTTLE

ENGINE BAY / LH REAR

ENGINE BAY, RH REAR

LH REAR WHEEL

RH REAR WHEEL

RH FRONT WHEEL

Connector / Type / Color

CA72 / 4-WAY MULTILOCK 070 / WHITE

FC18 / 16-WAY MULTILOCK 040 / BLACK

LS39 (FLY LEAD) / 2-WAY FORD / BLACK LS50 / 3-WAY JUNIOR TIMER / BLACK

LS34 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK CA48 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK

RS28 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK

CA47 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK

LS27 / 28-WAY FORD GTE / SLATE

GROUNDS

Ground	Location / Type
CAG33R	RH HEELBOARD GROUND SCREW
FCG26L	LH CONSOLE GROUND STUD
LSG10R	LEFT FORWARD GROUND STUD
LSG19R	LH BULKHEAD GROUND STUD
LSG51L	LH BULKHEAD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

ABS / TRACTION CONTROL CONTROL MODULE (RHD)

\bigtriangledown	Pin	Description	Active	Inactive
ο	LS27-3	TRACTION CONTROL ACTIVE SIGNAL TO TCM	GROUND	B+
0	LS27-4	SPEED CONTROL INHIBIT REQUEST	GROUND	В+
1	LS27-5	LH FRONT WHEEL SPEED SENSOR	2.5 V @ 10 MPH (16 KPH) = 100 Hz; 20 MPH (32 KPH) = 200 Hz	
SG	LS27-6	LH FRONT WHEEL SPEED SENSOR GROUND	2.5 V (AT REST)	2.5 V
1	LS27-7	RH FRONT WHEEL SPEED SENSOR	2.5 V @ 10 MPH (16 KPH) = 100 Hz; 20 MPH (32 KPH) = 200 Hz	
SG	LS27-8	RH FRONT WHEEL SPEED SENSOR GROUND	2.5 V (AT REST)	2.5 V
1	LS27-9	LH REAR WHEEL SPEED SENSOR	2.5 V @ 10 MPH (16 KPH) = 100 Hz; 20 MPH (32 KPH) = 200 Hz	
SG	LS27-10	LH REAR WHEEL SPEED SENSOR GROUND	2.5 V (AT REST	2.5 V
I.	LS27-11	RH REAR WHEEL SPEED SENSOR	2.5 V @ 10 MPH (16 KPH) = 100 Hz; 20 MPH (32 KPH) = 200 Hz	
SG	LS27-12	RH REAR WHEEL SPEED SENSOR GROUND	2.5 V (AT REST)	2.5 V
о	LS27-16	TRACTION CONTROL ACTUATOR MOTOR	GROUND	7 V
о	LS27-17	TRACTION CONTROL ACTUATOR MOTOR	GROUND	7 V
1	LS27-18	TRACTION CONTROL INHIBIT SWITCH	GROUND	B+
1	LS27-20	BRAKE SWITCH INPUT	GROUND	B+
0	LS27-21	ABS FAILURE LAMP	GROUND	2.3V
0	LS27-23	TRACTION INDICATOR LAMP	B+	FAILURE = GROUND TRACTION OFF = 4 Hz GROUND PULSE
0	LS27-24	VEHICLE SPEED SIGNAL	B+@ 10 MPH (16 KPH) = 200 Hz; 20 MPH (32 KPH) = 400 Hz	
0	LS27-25	ACTUATOR POTENTIOMETER REFERENCE VOLTAGE	5 V	5 V
1	LS27-26	ACTUATOR POTENTIOMETER FEEDBACK	0 – 5 V (FLUCTUATING)	0.47 V (AT REST)
SG	LS27-27	ACTUATOR POTENTIOMETER REFERENCE GROUND	GROUND	GROUND
D	LS27-28	SERIAL COMMUNICATION (BI-DIRECTIONAL)		

The following symbols are used to represent values for Control Module Pin Out data:

l input

O Output

SG Signal Ground

D Serial and encoded communications

B+ Battery voltage V Voltage (DC)

- Hz Frequency
- KHz Frequency x 1000

MS Milliseconds

MV Millivolts

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.

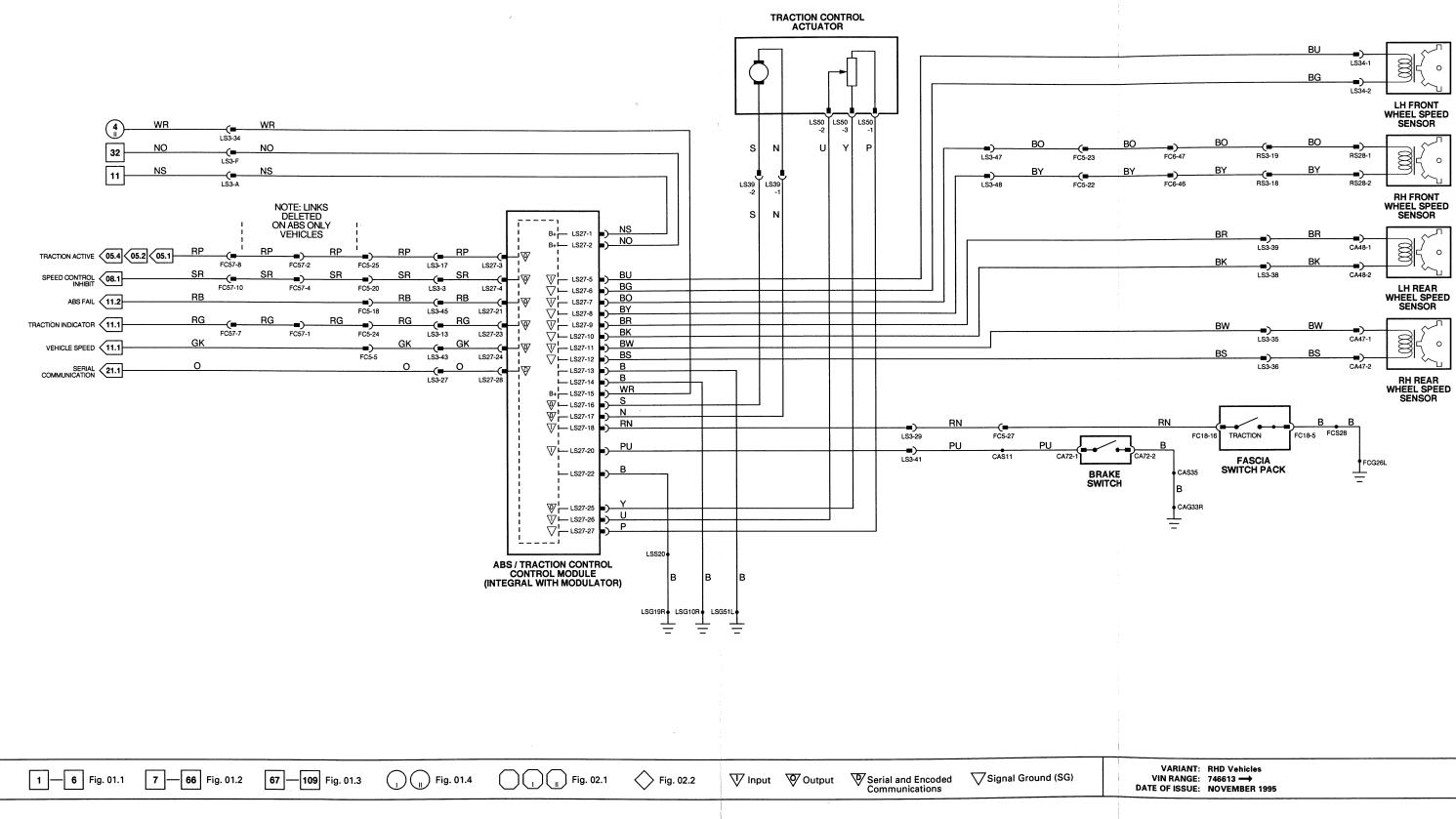


Fig. 06.2

VARIANT:	RHD Vehicles
VIN RANGE:	746613 👄
DATE OF ISSUE:	NOVEMBER 1995

Component	Connector / Type / Color	Location / Access
AIR CONDITIONING COMPRESSOR CLUTCH	PI138/ 3-WAY JUNIOR TIMER / BLACK	A/C COMPRESSOR
AIR CONDITIONING CONTROL MODULE	CC28 / 26-WAY MULTILOCK 47 / SLATE CC29 / 16-WAY MULTILOCK 47 / SLATE CC30 / 12-WAY MULTILOCK 47 / SLATE CC31 / 22-WAY MULTILOCK 47 / SLATE	A/C UNIT, RH SIDE / RH UNDERSCUTTLE
ENGINE CONTROL MODULE (AJ16)	PI104 / 36-WAY ECONOSEAL III / BLACK PI105 / 36-WAY ECONOSEAL III / RED	RH 'A' POST / 'A' POST TRIM
FAN CONTROL RELAY MODULE	LS18 / 8-WAY TRW / BLACK	BELOW LH HEADLAMPS
RADIATOR COOLING FAN (LH)	CF1 / 2-WAY REINSHAGEN / BLACK	ENGINE BAY, FRONT
RADIATOR COOLING FAN (RH)	CF2 / 2-WAY REINSHAGEN / BLACK	ENGINE BAY, FRONT
RADIATOR THERMOSTATIC SWITCH	LS12 /3-WAY JUNIOR TIMER / BLACK	RADIATOR, LOWER LH SIDE
REFRIGERANT SINGLE PRESSURE SWITCH	PI102 (FLY LEAD) / 2-WAY ECONOSEAL III LC / WHITE	ENGINE BAY, RH REAR
REFRIGERANT TRIPLE PRESSURE SWITCH	PI103 (FLY LEAD) / 4-WAY ECONOSEAL III LC / BLACK	ENGINE BAY, RH REAR
SUPERCHARGER INTERCOOLER COOLANT PUMP	PI143 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK	ENGINE BAY, LH FRONT

RELAYS

Relay	Color / Stripe	Connector / Color	Location / Access
AIR CONDITIONING CLUTCH RELAY	BLACK / WHITE	PI145 / BLACK	RH ENGINE BAY RELAYS

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color
LS11	4-WAY ECONOSEAL III HC / BLACK
PI1	13-WAY ECONOSEAL III LC / WHITE
PI59	13-WAY ECONOSEAL III LC / BLACK
PI61	13-WAY ECONOSEAL III LC / BLACK
P163	20-WAY MULTILOCK 040 / BLACK
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN

GROUNDS

Ground	Location / Type
LSG10L	LEFT FORWARD GROUND STUD
LSG10R	LEFT FORWARD GROUND STUD
LSG51R	LH BULKHEAD GROUND STUD
LSG52R	LEFT FORWARD GROUND STUD
PIG153R	RH BULKHEAD GROUND STUD
PIG154L	LEFT FORWARD GROUND STUD
PIG154R	LEFT FORWARD GROUND STUD

Location / Access

SPOILER, LH SIDE / SPOILER REARWARD OF RH HEADLAMP FORWARD OF LH ENGINE BAY FUSE BOX REARWARD OF RH HEADLAMP RH 'A' POST / 'A' POST PANEL

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ð

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

AIR CONDITIONING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
1	CC28-1	COMPRESSOR CLUTCH ON SIGNAL	B+	GROUND
0	CC31-9	COMPRESSOR CLUTCH REQUEST	GROUND	B+
I	CC31-17	REFRIGERANT TRIPLE PRESSURE SWITCH – 4.0L REFRIGERANT DUAL PRESSURE SWITCH – V12	GROUND	B+

ENGINE CONTROL MODULE (AJ16)

\bigtriangledown	Pin	Description	Active	Inactive
о	PI104-21	AIR CONDITIONING CLUTCH RELAY	GROUND	В+
I.	PI105-36	AIR CONDITIONING REQUEST	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

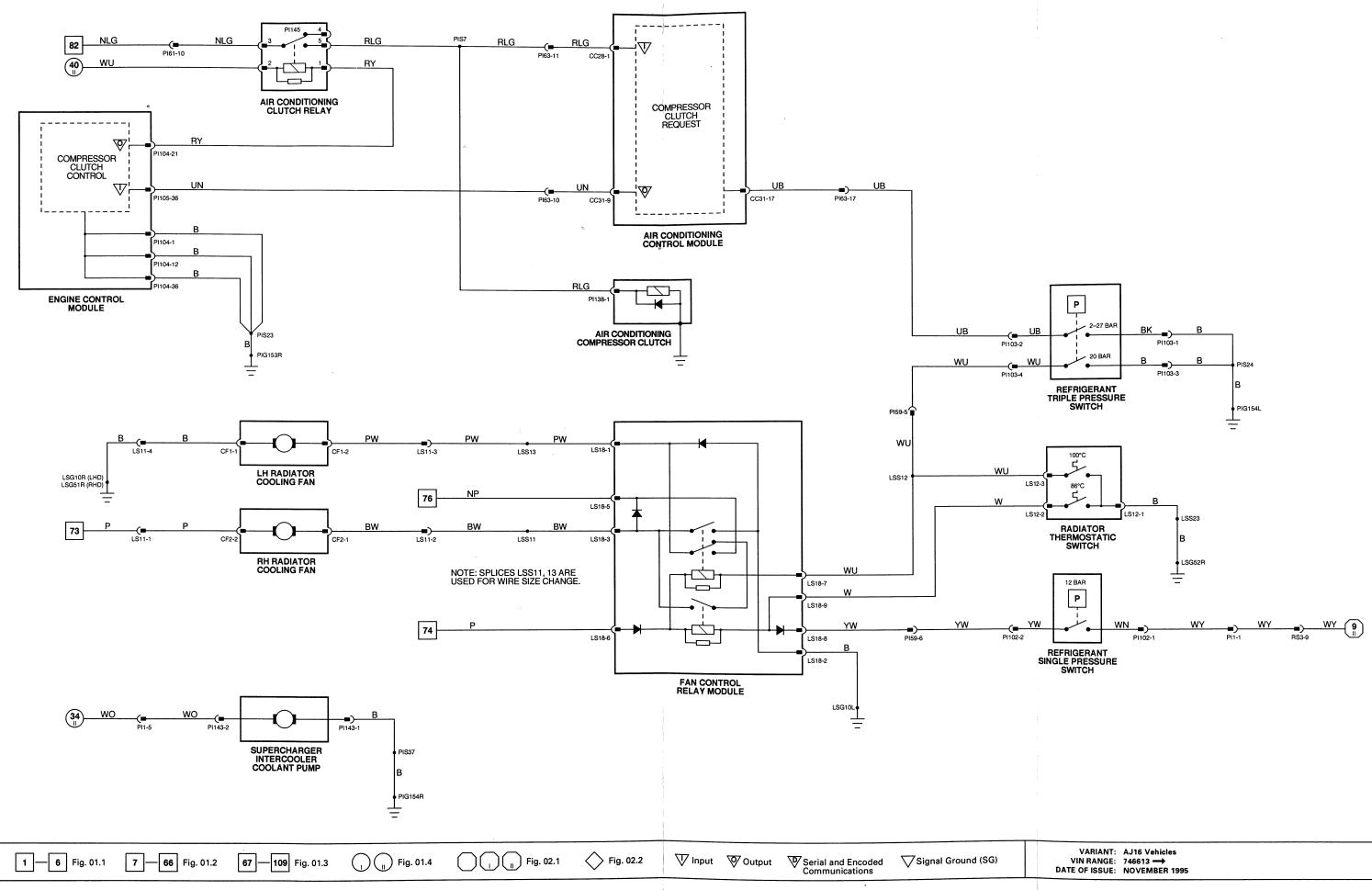
l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.



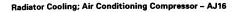


Fig. 07.1

VARIANT:	AJ16 Vehicles
VIN RANGE:	746613 →
DATE OF ISSUE:	NOVEMBER 1995

Component	mponent Connector / Type / Color		Location / Access			
AIR CONDITIONING COMPRESSOR CLUTCH PI16/ 3-WAY JUNI			3-WAY JUNIOR TIMER / BLACK A/C COMPRESSOR			
AIR CONDITIONING CONTROL MODULE		CC28 / 26-WAY MULTIL		A/C UNIT, RH SIDE / RH UNDERSCUTTLE		
		CC29 / 16-WAY MULTIL CC30 / 12-WAY MULTIL			\subseteq	
		CC31 / 22-WAY MULTIL				
ENGINE CONTROL N	IODULE (V12)	PI44 / 28-WAY MULTIL		RH 'A' POST / 'A' POST TRIM		
	N .	PI45 / 16-WAY MULTILO PI46 / 22-WAY MULTILO				
		PI47 / 34-WAY MULTIL				
FAN CONTROL RELA	Y MODULE	LS18 / 8-WAY TRW / BL	ACK	BELOW LH HEADLAMPS		
RADIATOR COOLING		CF1 / 2-WAY REINSHAG		ENGINE BAY, FRONT		
RADIATOR COOLING		CF2 / 2-WAY REINSHAG		ENGINE BAY, FRONT		
RADIATOR THERMO		LS12 /3-WAY JUNIOR 1		RADIATOR, LOWER LH SIDE		
REFRIGERANT DUAL	PRESSURE SWITCH	P154 (FLY LEAD) / 2-WA	Y ECONOSEAL III LC / BLACK	ENGINE BAY, RH REAR		
RELAYS						
NELA I S						
		Color / Stripe	Connector / Color	Location / Access		
Relay AIR CONDITIONING	CLUTCH RELAY	Color / Stripe BLACK / WHITE	Connector / Color PI17 / BLACK	Location / Access RH ENGINE BAY RELAYS		
Relay AIR CONDITIONING		BLACK / WHITE	• • • • • • • • • • • • • • • • • • • •	-		
Relay AIR CONDITIONING HARNESS-TC	O-HARNESS CONNECTORS	BLACK / WHITE	PI17 / BLACK	-		
Relay AIR CONDITIONING HARNESS-TC Connector)-HARNESS CONNECTORS Type / Color	BLACK / WHITE	PI17 / BLACK	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11	D-HARNESS CONNECTORS Type / Color 4-way econoseal III hc / Black	BLACK / WHITE	PI17 / BLACK tion / Access 3, LH SIDE / SPOILER	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11 PI61	D-HARNESS CONNECTORS Type / Color 4-WAY ECONOSEAL III HC / BLACK 13-WAY ECONOSEAL III LC / BLACK	BLACK / WHITE	PI17 / BLACK tion / Access R, LH SIDE / SPOILER ARD OF RH HEADLAMP	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11	D-HARNESS CONNECTORS Type / Color 4-way econoseal III hc / Black	BLACK / WHITE	PI17 / BLACK tion / Access 3, LH SIDE / SPOILER	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11 PI61	D-HARNESS CONNECTORS Type / Color 4-WAY ECONOSEAL III HC / BLACK 13-WAY ECONOSEAL III LC / BLACK	BLACK / WHITE	PI17 / BLACK tion / Access R, LH SIDE / SPOILER ARD OF RH HEADLAMP	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11 PI61 PI63	D-HARNESS CONNECTORS Type / Color 4-WAY ECONOSEAL III HC / BLACK 13-WAY ECONOSEAL III LC / BLACK	BLACK / WHITE	PI17 / BLACK tion / Access A, LH SIDE / SPOILER ARD OF RH HEADLAMP	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11 PI61 PI63 GROUNDS	D-HARNESS CONNECTORS Type / Color 4-WAY ECONOSEAL III HC / BLACK 13-WAY ECONOSEAL III LC / BLACK 20-WAY MULTILOCK 040 / BLACK	BLACK / WHITE	PI17 / BLACK tion / Access A, LH SIDE / SPOILER ARD OF RH HEADLAMP	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11 PI61 PI63 GROUNDS GROUNDS Ground	D-HARNESS CONNECTORS Type / Color 4-WAY ECONOSEAL III HC / BLACK 13-WAY ECONOSEAL III LC / BLACK 20-WAY MULTILOCK 040 / BLACK Location / Type	BLACK / WHITE	PI17 / BLACK tion / Access A, LH SIDE / SPOILER ARD OF RH HEADLAMP	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11 PI61 PI63 GROUNDS GROUNDS Ground LSG10L LSG10R	D-HARNESS CONNECTORS Type / Color 4-WAY ECONOSEAL III HC / BLACK 13-WAY ECONOSEAL III LC / BLACK 20-WAY MULTILOCK 040 / BLACK Location / Type LEFT FORWARD GROUND STUD	BLACK / WHITE	PI17 / BLACK tion / Access A, LH SIDE / SPOILER ARD OF RH HEADLAMP	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11 PI61 PI63 GROUNDS GROUNDS Ground LSG10L	D-HARNESS CONNECTORS Type / Color 4-WAY ECONOSEAL III HC / BLACK 13-WAY ECONOSEAL III LC / BLACK 20-WAY MULTILOCK 040 / BLACK ELOCATION / Type LEFT FORWARD GROUND STUD LEFT FORWARD GROUND STUD	BLACK / WHITE	PI17 / BLACK tion / Access A, LH SIDE / SPOILER ARD OF RH HEADLAMP	-		
Relay AIR CONDITIONING HARNESS-TC Connector LS11 PI61 PI63 GROUNDS GROUNDS Ground LSG10L LSG10R LSG51R	D-HARNESS CONNECTORS Type / Color 4-WAY ECONOSEAL III HC / BLACK 13-WAY ECONOSEAL III LC / BLACK 20-WAY MULTILOCK 040 / BLACK Location / Type LEFT FORWARD GROUND STUD LEFT FORWARD GROUND STUD LH BULKHEAD GROUND STUD	BLACK / WHITE	PI17 / BLACK tion / Access A, LH SIDE / SPOILER ARD OF RH HEADLAMP	-		

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

←

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

÷

\$

AIR CONDITIONING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
I.	CC28-1	COMPRESSOR CLUTCH ON SIGNAL	B+	GROUND
о	CC31-9	COMPRESSOR CLUTCH REQUEST	GROUND	B+
I	CC31-17	REFRIGERANT TRIPLE PRESSURE SWITCH - 4.0L REFRIGERANT DUAL PRESSURE SWITCH - V12	GROUND	В+

ENGINE CONTROL MODULE (V12)

\bigtriangledown I	Pin	Description	Active	Inactive
I I	PI44-13	AIR CONDITIONING REQUEST	B+	GROUND
O F	PI46-16	AIR CONDITIONING CLUTCH RELAY	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.

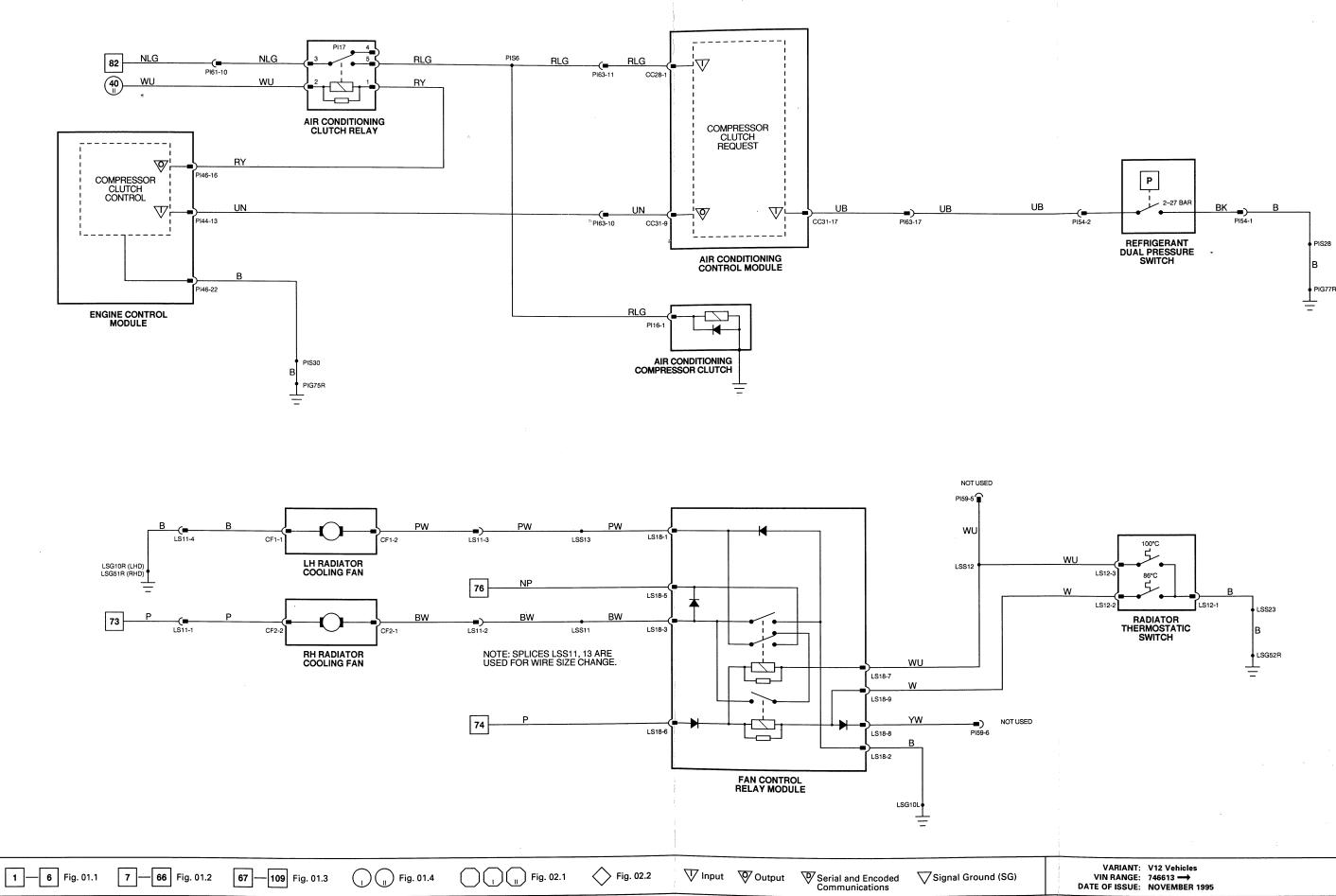




Fig. 07.2

VARIANT:	V12 Vehicles
VIN RANGE:	746613 📥
DATE OF ISSUE:	NOVEMBER 1995

Component

BRAKE SWITCH CLUTCH SWITCH (MANUAL TRANSMISSION) CLUTCH SWITCH LINK (AUTOMATIC TRANSMISSION) DUMP VALVE SPEED CONTROL CONTROL MODULE SPEED CONTROL BRAKE SWITCH SPEED CONTROL SWITCHES VACUUM PUMP AND CONTROL VALVE

Connector / Type / Color

CA72 / 4-WAY MULTILOCK 070 / WHITE CA73 / 2-WAY MULTILOCK 070 / YELLOW CA73 / 2-WAY MULTILOCK 070 / YELLOW LS22 / 2-WAY ECONOSEAL III LC / BLACK FC17 / 20-WAY PCB / BLACK CA72 / 4-WAY MULTILOCK 070 / WHITE FC18 / 16-WAY MULTILOCK 040 / BLACK LS23 / 3-WAY SPEED CONTROL / BLACK

Location / Access

DRIVER'S UNDERSCUTTLE ABOVE CLUTCH PEDAL DRIVER'S UNDERSCUTTLE BELOW LH FRONT RELAYS DRIVER'S UNDERSCUTTLE DRIVER'S UNDERSCUTTLE FASCIA SWITCH PACK ENGINE BAY, LH FRONT

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
CAG30R	LH 'A' POST GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
FCG26L	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

Ā

SPEED CONTROL CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC17-3	DUMP VALVE, VACUUM PUMP & CONTROL VALVE POWER FEED	B+	B+
1	FC17-6	VEHICLE SPEED INPUT	GROUND @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	
I.	FC17-9	ANTI-LOCK / TRACTION ACTIVE INHIBIT	GROUND	B+
0	FC17-10	CONTROL VALVE GROUND	GROUND	GROUND
1	FC17-12	SPEED CONTROL BRAKE / CLUTCH SWITCH	B+	GROUND
0	FC17-14	DUMP VALVE GROUND	GROUND	B+
I.	FC17-15	BRAKE LIGHT SWITCH	GROUND	B+
1	FC17-17	SET / ACCELERATE / RESUME SWITCH	SET / ACCELERATE = 2.7 V, RESUME / COAST = 5.5 V	
1	FC17-18	PARK / NEUTRAL SPEED CONTROL INHIBIT	GROUND = D, 3, 2	B+ = P, R, N
0	FC17-20	VACUUM PUMP GROUND	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

I Input

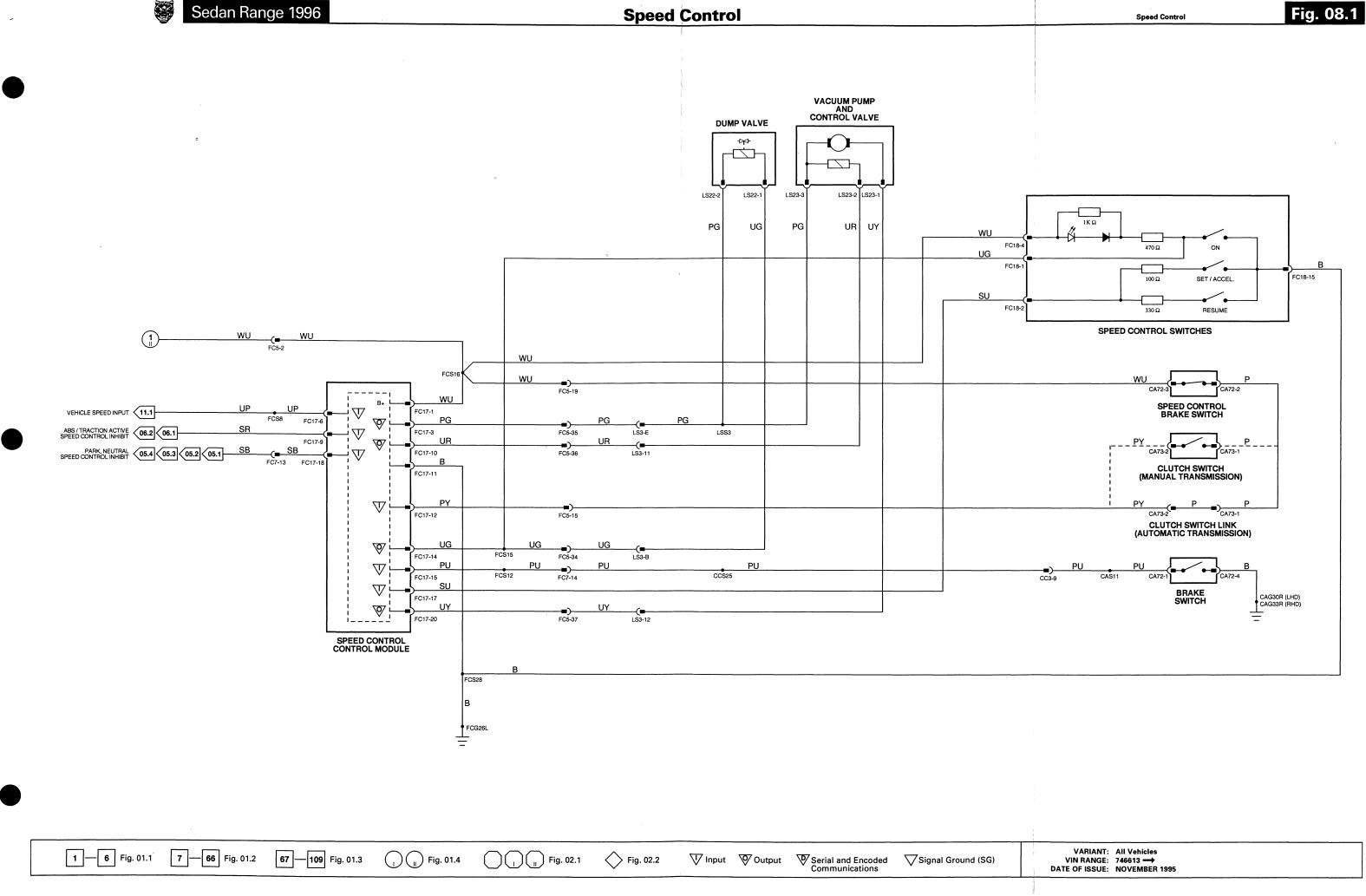
O Output

SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.



Component

BODY PROCESSOR MODULE

FOG LAMP - LH FOG LAMP - RH HEADLAMP FLASH SWITCH (COLUMN SWITCHGEAR) HEADLAMP - LH HEADLAMP - RH LIGHTING SWITCHES SIDE MARKER LAMP - LH (NAS ONLY) SIDE MARKER LAMP - RH (NAS ONLY)

RELAYS

Connector	1	Туре	1	Color
-----------	---	------	---	-------

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK BR4 / 2-WAY JUNIOR TIMER / BLACK SC3 / 6-WAY JUNIOR TIMER / BLACK SC3 / 6-WAY MULTILOCK 070 / WHITE LS38 / 6-WAY ECONOSEAL III LC / BLACK FC12 / 16-WAY ECONOSEAL III LC / BLACK FC12 / 16-WAY MULTILOCK 040 / BLUE BL5 / 2-WAY JUNIOR TIMER / BLACK

Location / Access

PASSENGER'S UNDERSCUTTLE

LH REAR LAMP UNIT RH REAR LAMP UNIT STEERING COLUMN / COVER LH HEADLAMP FASCIA SWITCH PACK LH FRONT LAMP UNIT RH FRONT LAMP UNIT

Relay	Color / Stripe	Connector / Color	Location / Access
DIP RELAY - LH	BLACK	LS54 / BLACK	ENGINE BAY, LH FRONT
DIP RELAY – RH	BLACK	RS47 / BLACK	ENGINE BAY, RH FRONT
FRONT FOG LAMP RELAY	BLACK	LS55 / BLACK	ENGINE BAY, LH FRONT
MAIN BEAM RELAY	BLACK	RS46 / BLACK	ENGINE BAY, RH FRONT

RH 'A' POST/ 'A' POST PANEL

HARNESS-TO-HARNESS CONNECTORS

Type / Color Connector Location / Access 13-WAY ECONOSEAL III LC / BLACK LH FRONT WHEEL ARCH LINER / SPOILER AND SPOILER TRAY BL1 15-WAY ECONOSEAL III LC / BLACK RH FRONT WHEEL ARCH LINER / SPOILER AND SPOILER TRAY BR1 20-WAY MULTILOCK 040 / BLUE DRIVER'S UNDERSCUTTLE FC4 FC5 THROUGH-PANEL (48 MICRO / 6) / BLACK LH FASCIA END PANEL / OUTER AIR VENT THROUGH-PANEL (48 MICRO / 6) / BLACK RH FASCIA END PANEL / OUTER AIR VENT FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK PASSENGER'S UNDERSCUTTLE FC7 20-WAY MULTILOCK 040 / BLACK PASSENGER'S UNDERSCUTTLE FC16 LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST/ 'A' POST PANEL PI1 13-WAY ECONOSEAL III LC / WHITE REARWARD OF RH HEADLAMP 13-WAY ECONOSEAL III LC / BLACK FORWARD OF LH ENGINE BAY FUSE BOX PI59

THROUGH-PANEL (48 MICRO / 6) / BROWN

GROUNDS

RS3

Ground	Location / Type
FCG15L	LH CONSOLE GROUND STUD
LSG52L	LEFT FORWARD GROUND STUD
RSG8R	RIGHT FORWARD GROUND STUD
RSG41R	RIGHT FORWARD GROUND STUD
RSG42R	RH BULKHEAD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-18	FRONT FOG LAMPS AND STATE LAMP ON	GROUND	B+
о	FC1-29	LH DIPPED BEAM ON	GROUND	B+
0	FC1-32	HEADLAMP MAIN BEAM INDICATOR	GROUND	B+
о	FC1-39	RH DIPPED BEAM ON	GROUND	B+
0	FC1-41	MAIN BEAM ON	GROUND	B+
- F	FC2-3	SIDE LAMPS ON	GROUND	B+
1	FC2-6	HEADLAMP CONVENIENCE	GROUND PULSE	B+
1	FC2-31	IGNITION SWITCHED GROUND	GROUND	B+
1	FC2-37	HEADLAMP FLASH SWITCH	GROUND	B+
1	FC2-40	HEADLAMPS ON	GROUND	B+
1	FC2-43	FRONT FOG LAMPS	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

Input Т

- Output 0
- SG Signal Ground
- D Serial and encoded communications
- B+ Battery voltage V Voltage (DC)
- Hz Frequency
- KHz Frequency x 1000 MS Milliseconds
- **MV Millivolts**

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.

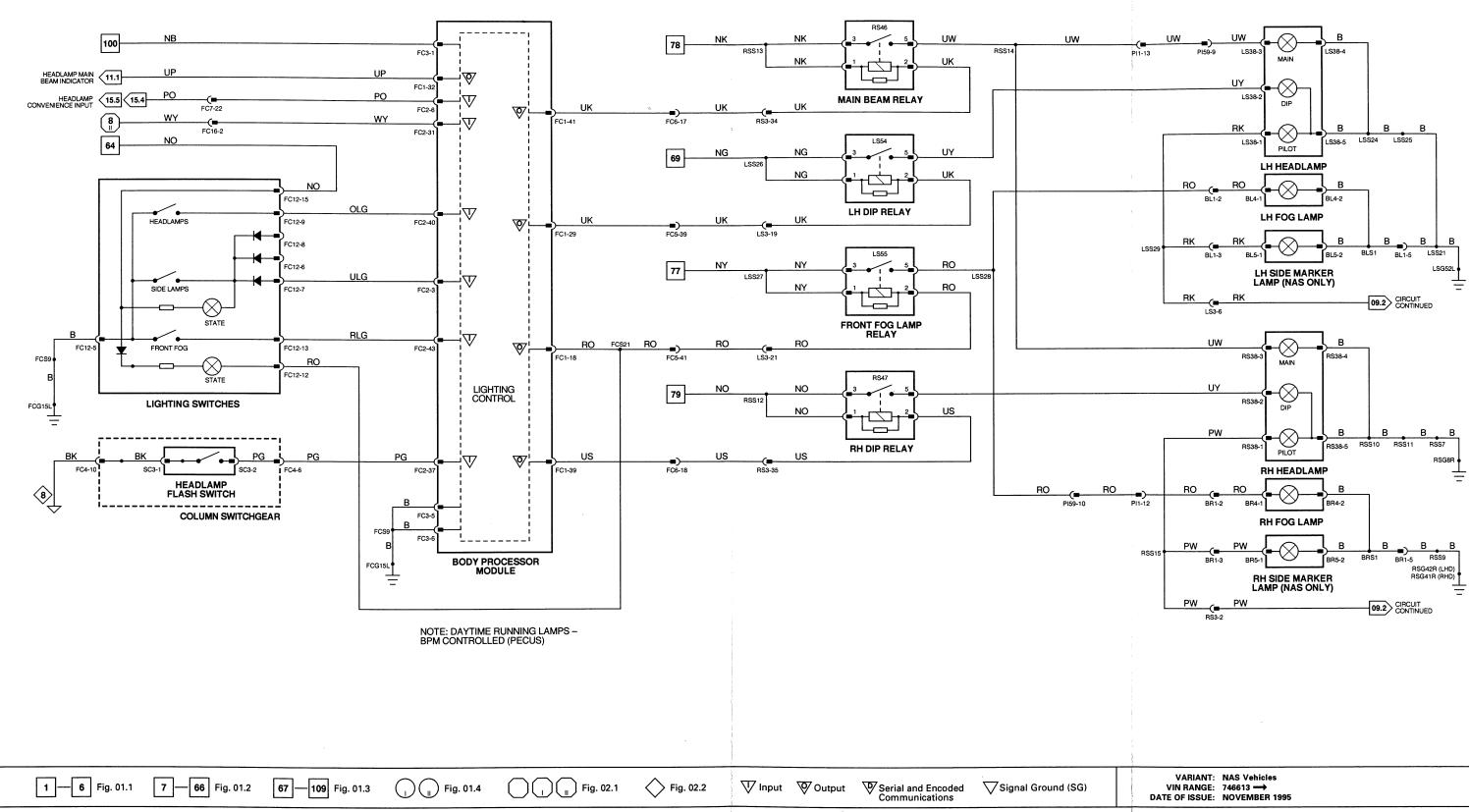


Fig. 09.1

Component

BODY PROCESSOR MODULE

LAMP CONTROL MODULE

LIGHTING SWITCHES NUMBER PLATE LAMP – LH NUMBER PLATE LAMP – RH SIDE MARKER LAMP – LH SIDE MARKER LAMP – RH TAIL LAMP UNIT – LH TAIL LAMP UNIT – RH

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK BT20 / 18-WAY MULTILOCK 070 / WHITE BT21 / 20-WAY MULTILOCK 040 / BLACK FC12 / 16-WAY MULTILOCK 040 / BLUE BT27 / 2-WAY MULTILOCK 040 / BLUE BT27 / 2-WAY MULTILOCK 040 / BLUE BT27 / 2-WAY JUNIOR TIMER / BLACK SR1-R / 2-WAY JUNIOR TIMER / BLACK TL4 / 7-WAY JUNIOR TIMER / BLACK TL3 / 7-WAY JUNIOR TIMER / BLACK

Location / Access

PASSENGER'S UNDERSCUTTLE

TRUNK ELECTRICAL CARRIER

FASCIA SWITCH PACK TRUNK LID / TRUNK LID TRIM TRUNK LID / TRUNK LID TRIM LH FRONT LAMP UNIT RH FRONT LAMP UNIT LH REAR / TRUNK TRIM RH REAR / TRUNK TRIM

♦ 11 1

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
BT50	18-WAY MULTILOCK 070 / WHITE	ADJACENT TO TRUNK FUSE BOX
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST
TL5	2-WAY MULTILOCK 040 / GREEN	ADJACENT TO RH TAIL LAMP CLUSTER
TL6	2-WAY MULTILOCK 040 / GREEN	ADJACENT TO LH TAIL LAMP CLUSTER

GROUNDS

Ground	Location / Type
BTG48L	REAR TRUNK GROUND STUD
BTG49L	REAR TRUNK GROUND STUD
FCG15L	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

\$

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-14	LH PILOT BEAM, SIDE LAMPS AND TAIL LAMPS ON	GROUND	B+
0	FC1-47	REAR FOG LAMPS AND STATE LAMP ON	GROUND	B+
I.	FC2-3	SIDE LAMPS ON	GROUND	B+
1	FC2-31	IGNITION SWITCHED GROUND	GROUND	B+
Т	FC2-45	REAR FOG GUARD LAMP REQUEST	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

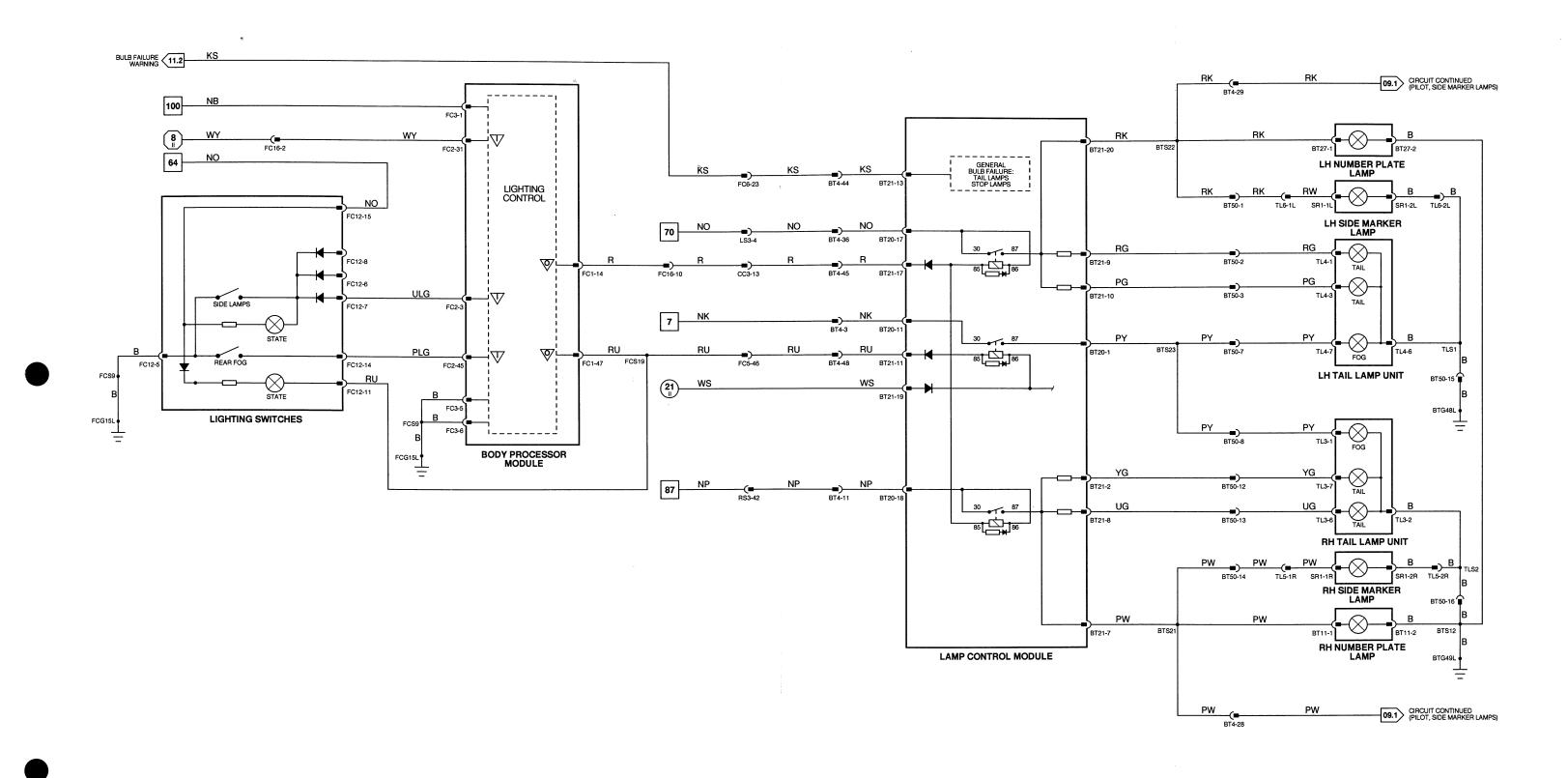


Fig. 09.2

VARIANT:	All Vehicles
VIN RANGE:	746613
DATE OF ISSUE:	NOVEMBER 1995

Component

BRAKE SWITCH DIODE (BT51) – HIGH MOUNTED STOP LAMP HIGH MOUNTED STOP LAMP LAMP CONTROL MODULE

LINEAR GEAR POSITION SWITCHES REVERSE SWITCH (AJ16 MANUAL) ROTARY SWITCH

TAIL LAMP UNIT – LH TAIL LAMP UNIT – RH

RELAYS

Relay

HIGH MOUNTED STOP LAMP RELAY

Connector / Type / Color

CA72 / 4-WAY MULTILOCK 070 / WHITE BT51 / DIODE / BLACK CA35 / 3-WAY MT EDGE / SLATE BT20 / 18-WAY MULTILOCK 070 / WHITE BT21 / 20-WAY MULTILOCK 070 / BLACK CC21 / 20-WAY MULTILOCK 040 / BLACK CC45 / 2-WAY SUMITOMO / WHITE GB1 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE GB2 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE GB2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK TL4 / 7-WAY JUNIOR TIMER / BLACK

Location / Access

DRIVER'S UNDERSCUTTLE TRUNK HARNESS, ADJACENT TO BATTERY / RH FLOOR PANEL BACKLIGHT TRUNK ELECTRICAL CARRIER

'J' GATE / CENTER CONSOLE TRANSMISSION TUNNEL / CENTER CONSOLE 'J' GATE / CENTER CONSOLE

LH REAR / TRUNK TRIM RH REAR / TRUNK TRIM

Color / Stripe BLACK / VIOLET

Stripe Connector / Color

Location / Access

TRUNK ELECTRICAL CARRIER

HARNESS-TO-HARNESS CONNECTORS

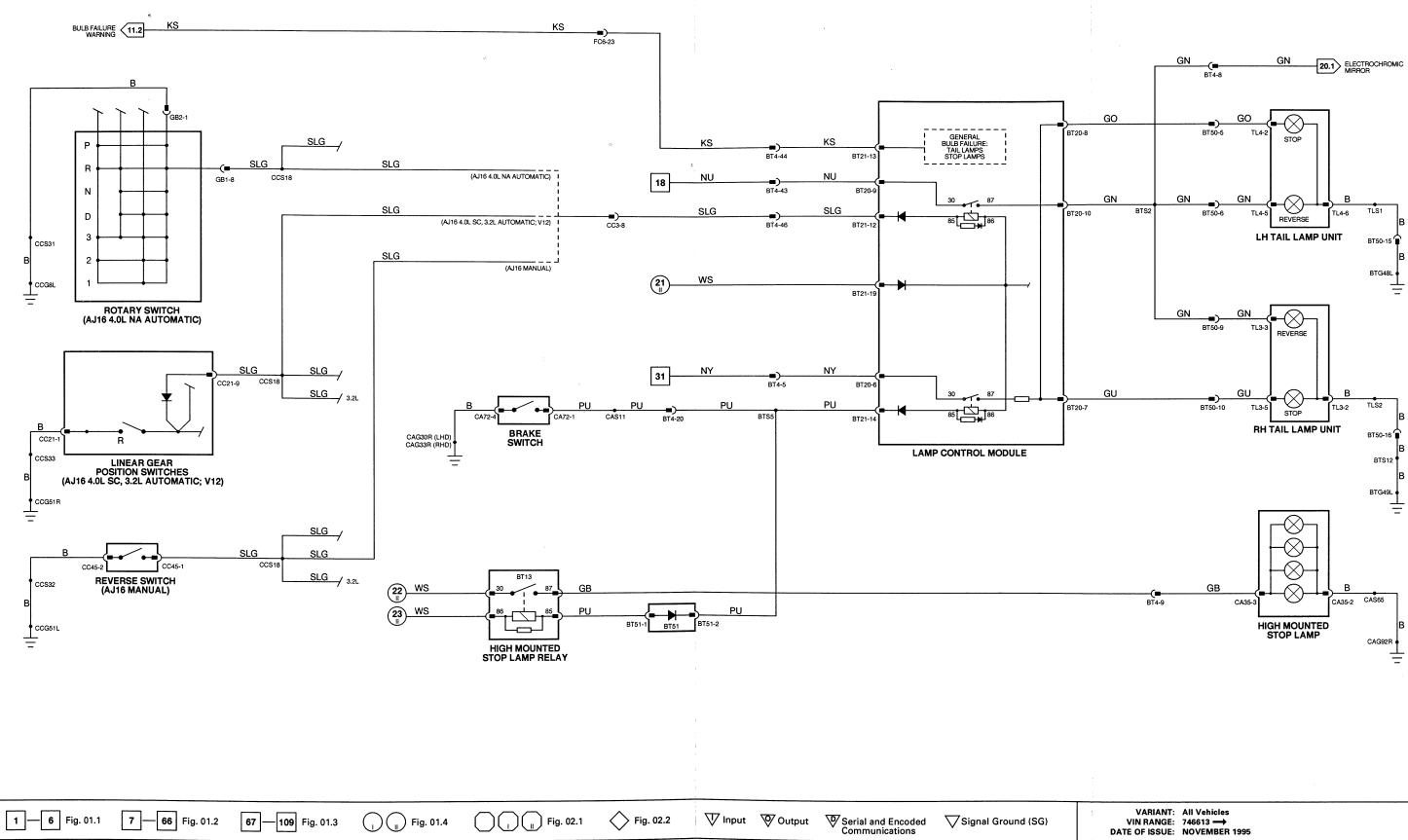
Connector Type / Color

BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK
BT50	18-WAY MULTILOCK 070 / WHITE
CC3	20-WAY MULTILOCK 040 / BLACK
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK

Location / Access ABOVE FUEL TANK / FUEL TANK TRIM ADJACENT TO TRUNK FUSE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX RH FASCLA END PANEL / OUTER AIR VENT

GROUNDS

Ground	Location / Type
BTG18L	REAR TRUNK GROUND STUD
BTG49L	REAR TRUNK GROUND STUD
CAG30R	LH 'A' POST GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
CCG51R	CENTER CONSOLE GROUND STUD
CCG8L	CENTER CONSOLE GROUND STUD





VARIANT:	All Vehicles
VIN RANGE:	746613 🛶
DATE OF ISSUE:	NOVEMBER 1995

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK DIODE (FC59) - RH DI INDICATOR DIODE (FC60) - LH DI INDICATOR DIRECTION INDICATOR SWITCHES (COLUMN SWITCHGEAR) DIRECTION INDICATORS - LH FRONT DIRECTION INDICATORS - RH FRONT LAMP CONTROL MODULE

REPEATER – LH FRONT REPEATER – RH FRONT TAIL LAMP UNIT – LH TAIL LAMP UNIT – RH

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color 13-WAY ECONOSEAL III LC / BLACK BL1 15-WAY ECONOSEAL III LC / BLACK BR1 THROUGH-PANEL (48 MICRO / 6) / BLACK BT4 **BT50** 18-WAY MULTILOCK 070 / WHITE FC16 20-WAY MULTILOCK 040 / BLACK 20-WAY MULTILOCK 040 / BLUE FC4 THROUGH-PANEL (48 MICRO / 6) / BLACK FC5 THROUGH-PANEL (48 MICRO / 6) / BLACK FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK FC7 20-WAY MULTILOCK 040 / BLACK FC16 1.53 THROUGH-PANEL (48 MICRO / 6) / BLACK RS3 THROUGH-PANEL (48 MICRO / 6) / BROWN

RS12 / 2-WAY JUNIOR TIMER / BLACK TL4 / 7-WAY JUNIOR TIMER / BLACK

Connector / Type / Color

CC1 / 16-WAY MULTILOCK 040 / BLACK

SC3 / 6-WAY MULTILOCK 070 / WHITE

BL2 / 3-WAY JUNIOR TIMER / BLACK

BR2 / 3-WAY JUNIOR TIMER / BLACK

BT20 / 18-WAY MULTILOCK 070 / WHITE BT21 / 20-WAY MULTILOCK 040 / BLACK

LS17 / 2-WAY JUNIOR TIMER / BLACK

TL3 / 7-WAY JUNIOR TIMER / BLACK

FC1 / 48-WAY PCB SIGNAL / YELLOW

FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK

FC59 / DIODE / BLACK

FC60 / DIODE / BLACK

Location / Access

PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE FASCIA HARNESS / INSTRUMENT PACK FASCIA HARNESS / INSTRUMENT PACK STEERING COLUMN / COVER LH FRONT / SPOILER RH FRONT / SPOILER TRUNK ELECTRICAL CARRIER

LH FRONT FENDER RH FRONT FENDER LH REAR / TRUNK TRIM RH REAR / TRUNK TRIM

Location / Access

LH FRONT WHEEL ARCH LINER / SPOILER AND SPOILER TRAY RH FRONT WHEEL ARCH LINER / SPOILER AND SPOILER TRAY ABOVE FUEL TANK / FUEL TANK TRIM ADJACENT TO TRUNK FUSE BOX PASSENGER'S UNDERSCUTTLE LH FASCIA END PANEL / OUTER AIR VENT RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE LH 'A' POST/ 'A' POST PANEL RH 'A' POST/ 'A' POST PANEL

GROUNDS

Ground	Location / Type
BTG48L	REAR TRUNK GROUND STUD
BTG48R	REAR TRUNK GROUND STUD
BTG49L	REAR TRUNK GROUND STUD
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
LSG19R	LH BULKHEAD GROUND STUD
LSG52L	LEFT FORWARD GROUND STUD
RSG41R	RIGHT FORWARD GROUND STUD
RSG42R	RH BULKHEAD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ø

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-17	LH DI INDICATOR	GROUND PULSE	B+
ο	FC1-19	RH DI INDICATOR	GROUND PULSE	B+
0	FC1-38	HAZARD WARNING STATE LAMP	GROUND PULSE	B+
0	FC1-46	DI BULB FAIL WARNING LAMP	GROUND	B+
I.	FC2-10	LH DI BULB FAILURE	GROUND	B+
I.	FC2-18	RH DI REQUEST	GROUND	B+
1	FC2-27	HAZARD LAMPS REQUEST	GROUND	B+
I.	FC2-31	IGNITION SWITCHED GROUND	GROUND	B+
1	FC2-34	RH DI FAILURE	GROUND	B+
1	FC2-42	RH GROUND DISCONNECT LOOP	GROUND	B+
1	FC2-44	LH GROUND DISCONNECT LOOP	GROUND	B+
I.	FC2-46	LH DI REQUEST	GROUND	B+

瘰

The following symbols are used to represent values for Control Module Pin Out data:

-9

I Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.

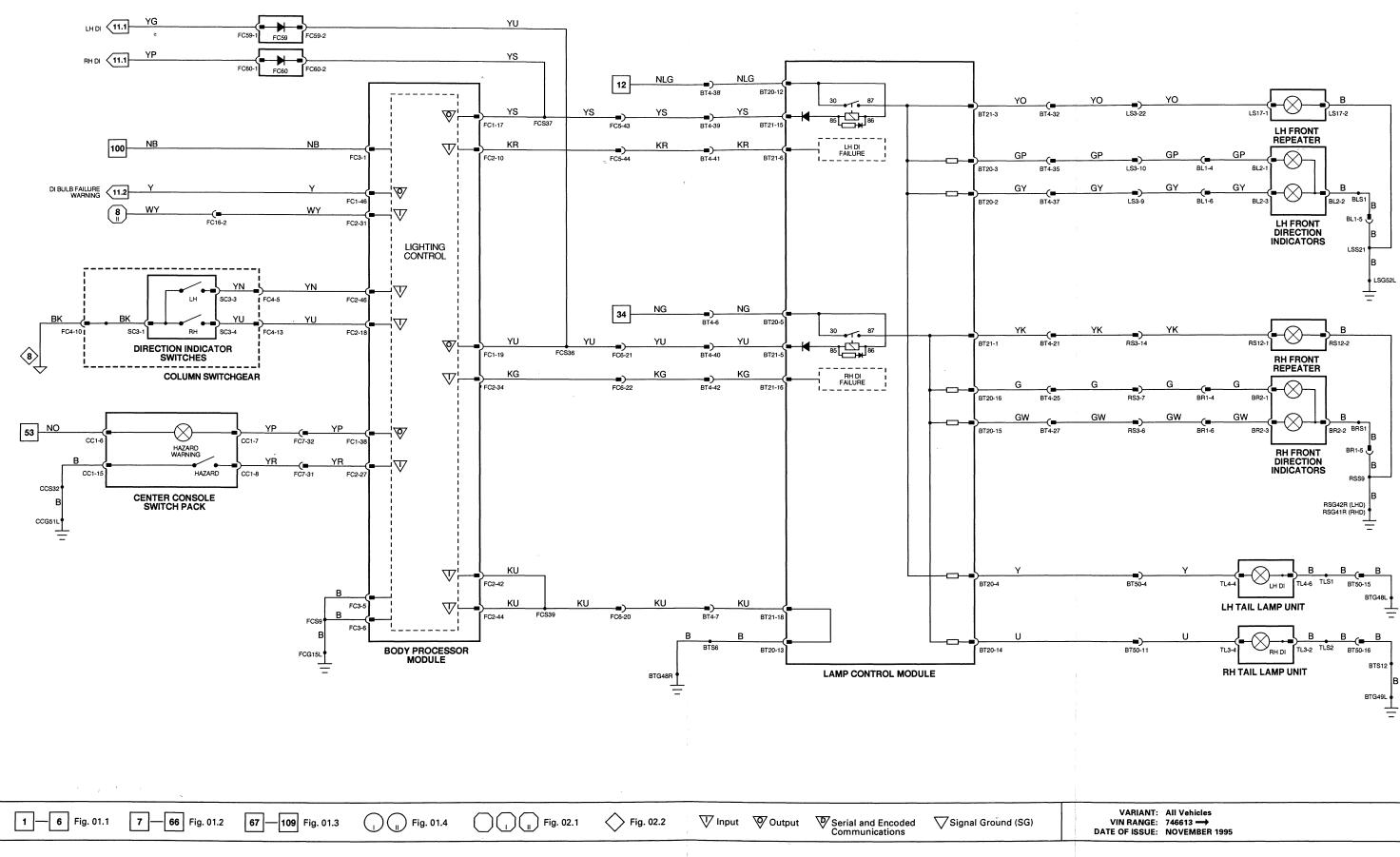


Fig. 09.4

VARIANT:	All Vehicles
VIN RANGE:	746613 👄
DATE OF ISSUE:	NOVEMBER 1995

Component

CENTER CONSOLE SWITCH PACK AND CLOCK HEADLAMP LEVELING ACTUATOR – LH HEADLAMP LEVELING ACTUATOR – RH

Connector / Type / Color

CC1 / 16-WAY MULTILOCK 040 / BLACK LS41 / 3-WAY GROTE AND HARTMAN / BLACK RS22 / 3-WAY GROTE AND HARTMAN / BLACK

Location / Access

Location / Access

CENTER CONSOLE LH HEADLAMP, REAR RH HEADLAMP, REAR

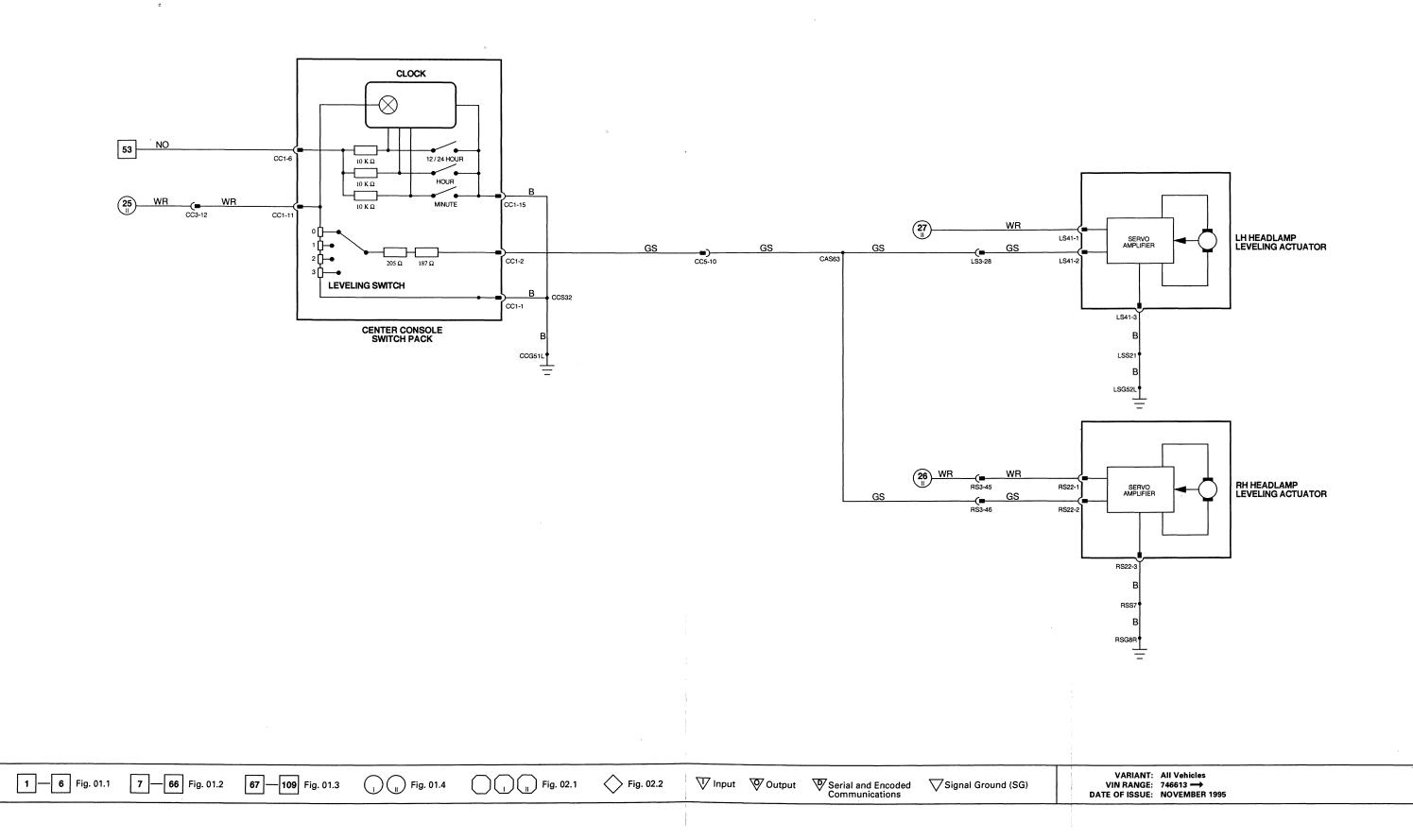
HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX	
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX	
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL	
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL	

GROUNDS

Ground	Location / Type
CCG51L	CENTER CONSOLE GROUND STUD
LSG52L	LEFT FORWARD GROUND STUD
RSG8R	RIGHT FORWARD GROUND



Component

BODY PROCESSOR MODULE

DOOR SWITCH PACK - DRIVER

DOOR SWITCH PACK - LH REAR DOOR SWITCH PACK - PASSENGER DOOR SWITCH PACK - RH REAR DOOR SWITCH - DRIVER DOOR SWITCH - LH REAR DOOR SWITCH - PASSENGER DOOR SWITCH - RH REAR E-POST LAMP - LH E-POST LAMP - RH GLOVE BOX LAMP

IGNITION SWITCH INTERIOR / MAP LAMPS CONSOLE PUDDLE LAMP – DRIVER DOOR PUDDLE LAMP – LH REAR DOOR

PUDDLE LAMP – PASSENGER DOOR PUDDLE LAMP – RH REAR DOOR

SUNVISOR LAMP – LH SUNVISOR LAMP – RH TRUNK LAMP – LH TRUNK LAMP – RH TRUNK SWITCH

RELAYS

 Relay
 Color / Stripe
 Connector / Color
 Location / Access

 PUDDLE LAMP RELAY - DRIVER
 BLUE
 CA53 / YELLOW
 LH HEELBOARD

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST / 'A' POST TRIM
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA10	8-WAY MULTILOCK 070 / WHITE	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
CA13	12-WAY MULTILOCK 040 / BLACK	LH 'BC' POST / 'BC' POST PANEL
CA14	2-WAY MULTILOCK 070 / WHITE	LH 'BC' POST / 'BC' POST PANEL
CA15	12-WAY MULTILOCK 040 / BLACK	RH 'BC' POST / 'BC' POST PANEL
CA16	2-WAY MULTILOCK 040 / WHITE	RH 'BC' POST / 'BC' POST PANEL
ССЗ	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC4	14-WAY MULTILOCK 070 / WHITE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC18	20-WAY MULTILOCK 040 / BLUE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC53	2-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE

GROUNDS

Location / Type
LH 'A' POST GROUND SCREW
LH 'A' POST GROUND SCREW
PARCEL SHELF GROUND SCREW
RH HEELBOARD GROUND SCREW
RH HEELBOARD GROUND SCREW
LH HEELBOARD GROUND SCREW
LH CONSOLE GROUND STUD
LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

A

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

Connector / Type / Color FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE BD1-L / 12-WAY MULTILOCK 070 / WHITE PD1 / 26-WAY MULTILOCK 47 / SLATE RD1-R / 12-WAY MULTILOCK 070 / WHITE DD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-L / 6-WAY ECONOSEAL III LC / BLACK PD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-R / 6-WAY ECONOSEAL III LC / BLACK CA89 / 4-WAY MULTILOCK 040 / BLACK CA90 / 4-WAY MULTILOCK 040 / BLACK GI1 / LUCAR / WHITE GI2 / LUCAR / WHITE FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE CA83 / 8-WAY MULTILOCK / BLACK DD14 / 2-WAY JUNIOR TIMER / BLACK RD7L / LUCAR / WHITE RD8L / LUCAR / WHITE PD14 / 2-WAY JUNIOR TIMER / BLACK RD7R / LUCAR / WHITE RD8R / LUCAR / WHITE CA69 / 2-WAY MULTILOCK 040 / BLACK CA70 / 2-WAY MULTILOCK 040 / BLACK BT46 / 2-WAY JUNIOR TIMER / BLACK BT47 / 2-WAY JUNIOR TIMER / BLACK BT15 / 2-WAY FORD DIAGNOSTIC / BLACK

Location / Access PASSENGER'S UNDERSCUTTLE

ARM REST / TOP ROLL

DOOR CASING ARM REST / TOP ROLL DOOR CASING DOOR CASING DOOR CASING DOOR CASING COOR CASING COOR CASING COOR CASING GLOVE BOX GLOVE BOX STEERING COLUMN / COVER ROOF CONSOLE DOOR CASING

DOOR CASING DOOR CASING

LH SUNVISOR RH SUNVISOR TRUNK, LH SIDE, REAR TRUNK ,RH SIDE, REAR TRUNK LID / TRUNK LID TRIM

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-12	RH TRUNK LAMP	GROUND	В+
0	FC1-15	LH TRUNK LAMP	GROUND	B+
0	FC1-24	INTERIOR AND COURTESY LAMPS	GROUND	B+
0	FC1-30	PUDDLE LAMP RELAY	GROUND	B+
1	FC2-2	INTERIOR LAMPS ON	GROUND	В+
I.	FC2-29	CONSOLE INTERIOR LAMP SWITCH	GROUND	В+
1	FC2-30	PASSENGER DOOR AJAR	GROUND	B+
I.	FC2-32	TRUNK AJAR	GROUND	B+
1	FC2-33	DRIVER DOOR AJAR	GROUND	B+
I.	FC2-41	INTERIOR LAMP EXTINGUISH DURING CRANK	GROUND	B+
I	FC2-48	KEY IN IGNITION SWITCH	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

ġ

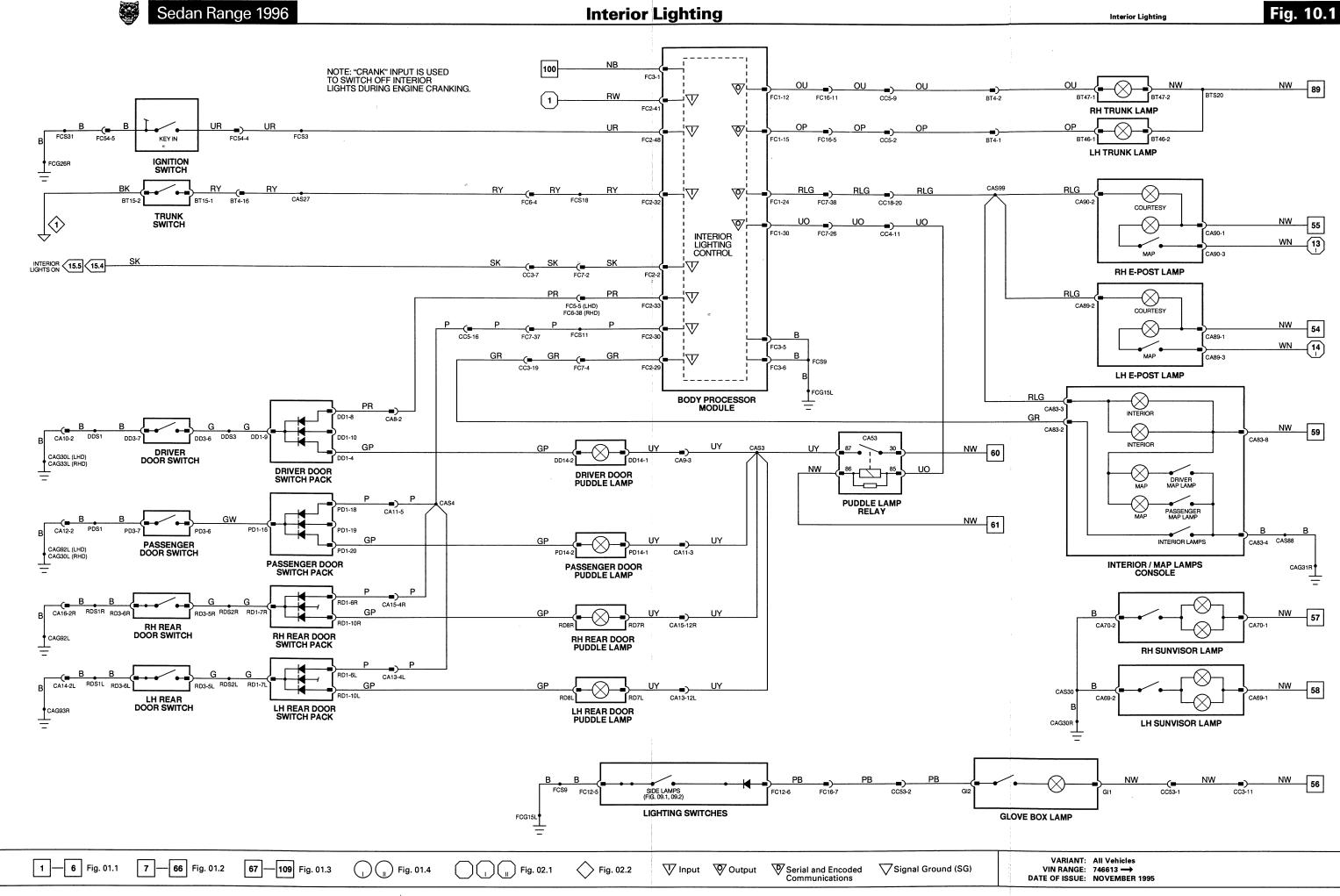
l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.



Component

AIR CONDITIONING CONTROL MODULE

AIR CONDITIONING CONTROL PANEL CENTER CONSOLE SWITCH PACK CIGAR LIGHTER – FRONT

CIGAR LIGHTER - REAR

DIMMER MODULE (COLUMN SWITCHGEAR) DIMMER CONTROL (COLUMN SWITCHGEAR) DOOR SWITCH PACK - DRIVER

DOOR SWITCH PACK - LH REAR DOOR SWITCH PACK - PASSENGER DOOR SWITCH PACK - RH REAR FASCIA SWITCH PACK INSTRUMENT PACK

INTERIOR / MAP LAMPS CONSOLE LIGHTING SWITCHES RADIO

HARNESS-TO-HARNESS CONNECTORS

Connector / Type / Color

CC28 / 26-WAY MULTILOCK 47 / SLATE CC29 / 16-WAY MULTILOCK 47 / SLATE CC30 / 12-WAY MULTILOCK 47 / SLATE CC31 / 22-WAY MULTILOCK 47 / SLATE CC2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLUE CC1 / 16-WAY MULTILOCK 040 / BLACK CC9 / 2-WAY SERIES 250 / BLACK CC10 / LUCAR / BLACK CC16 / 2-WAY SERIES 250 / BLACK CC17 / LUCAR / BLACK SC1 / 8-WAY MULTILOCK 040 / WHITE NO CODE / 6-WAY MULTILOCK 040 / NO COLOR DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE RD1-L / 12-WAY MULTILOCK 070 / WHITE PD1 / 26-WAY MULTILOCK 47 / SLATE RD1-R / 12-WAY MULTILOCK 070 / WHITE FC18 / 16-WAY MULTILOCK 040 / BLACK FC9 / 24-WAY IDC / BLACK FC10 / 48-WAY IDC / BLACK CA83 / 8-WAY MULTILOCK / BLACK FC12 / 16-WAY MULTILOCK 040 / BLUE IC1 / 20-WAY MULTILOCK 070 / WHITE

Location / Access

A/C UNIT, RH SIDE / RH UNDERSCUTTLE

CENTER CONSOLE CENTER CONSOLE CENTER CONSOLE

CENTER CONSOLE

STEERING COLUMN / COVER STEERING COLUMN / COVER ARM REST / TOP ROLL

DOOR CASING ARM REST / TOP ROLL DOOR CASING STEERING COLUMN / DRIVER'S UNDERSCUTTLE INSTRUMENT PACK

ROOF CONSOLE FASCIA SWITCH PACK CENTER CONSOLE

Connector	Type / Color	Location / Access
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA10	8-WAY MULTILOCK 070 / WHITE	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
CA13	12-WAY MULTILOCK 040 / BLACK	LH 'BC' POST / 'BC' POST PANEL
CA14	2-WAY MULTILOCK 070 / WHITE	LH 'BC' POST / 'BC' POST PANEL
CA15	12-WAY MULTILOCK 040 / BLACK	RH 'BC' POST / 'BC' POST PANEL
CA16	2-WAY MULTILOCK 040 / WHITE	RH 'BC' POST / 'BC' POST PANEL
CC18	20-WAY MULTILOCK 040 / BLUE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC4	20-WAY MULTILOCK 040 / BLUE	DRIVER'S UNDERSCUTTLE
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
IC7	8-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE

GROUNDS

ICG24

Ground Location / Type CAG30L LH 'A' POST GROUND SCREW PARCEL SHELF GROUND SCREW CAG31R RH HEELBOARD GROUND SCREW CAG33R CAG92L RH HEELBOARD GROUND SCREW CAG92B RH HEELBOARD GROUND SCREW RH CONSOLE GROUND STUD CCG49R CCG50I CENTER CONSOLE GROUND CENTER CONSOLE GROUND CCG50R CENTER CONSOLE GROUND STUD CCG51L LH CONSOLE GROUND STUD FCG15L FCG26R LH CONSOLE GROUND STUD

RADIO GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

DIMMER

\bigtriangledown	Pin	Description	Active	Inactive
0	SC1-1	ILLUMINATION SUPPLY	B+	GROUND
1	SC1-2	SIDE LAMPS ON	0.6 V	B+
0	SC1-7	ILLUMINATION SUPPLY	B+	GROUND
SG	G	DIMMER POTENTIOMETER GROUND	1.27V = DIM, 1.46V = BRIGHT	
1	Y	DIMMER POTENTIOMETER FEEDBACK VOLTAGE	1.27V = DIM, 4.10V = BRIGHT	
0	U	DIMMER POTENTIOMETER REFERENCE VOLTAGE	3.91V = DIM, 4.10V = BRIGHT	

The following symbols are used to represent values for Control Module Pin Out data:

l Input

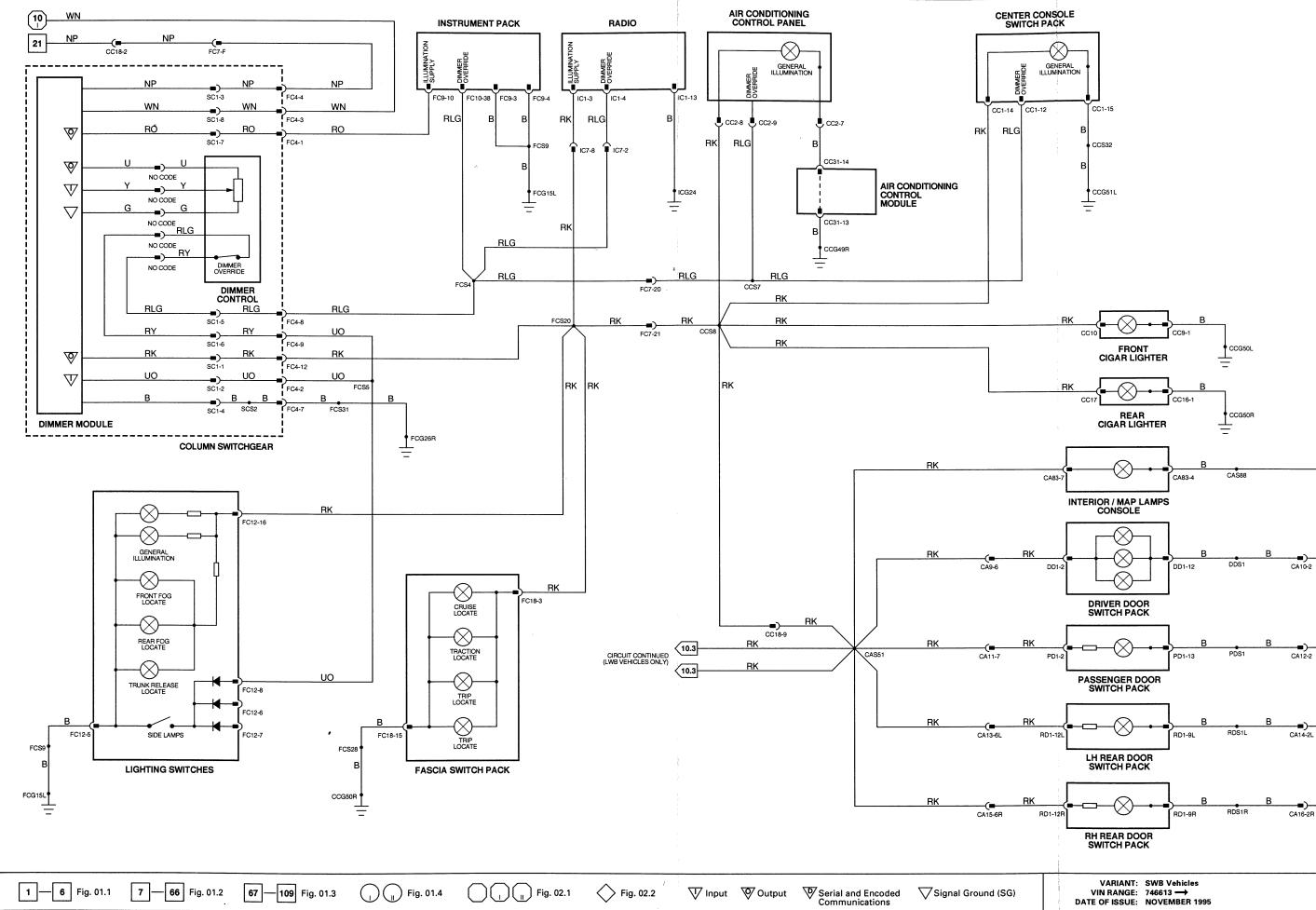
- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Dimmer Controlled Lighting – SWB







CAG31R

CAG30L

CAG33R

CAG92F

CAG92L <u>+</u>

-

_

_

Component

AIR CONDITIONING CONTROL MODULE

AIR CONDITIONING CONTROL PANEL CENTER CONSOLE SWITCH PACK CIGAR LIGHTER – FRONT

CIGAR LIGHTER - REAR

DIMMER MODULE (COLUMN SWITCHGEAR) DIMMER CONTROL (COLUMN SWITCHGEAR) DOOR SWITCH PACK – DRIVER

DOOR SWITCH PACK – LH REAR DOOR SWITCH PACK – PASSENGER DOOR SWITCH PACK – RH REAR FASCIA SWITCH PACK INSTRUMENT PACK

INTERIOR / MAP LAMPS CONSOLE LIGHTING SWITCHES RADIO SEAT CONTROL MODULE - PASSENGER (NAS VEHICLES)

SEAT CONTROL MODULE – PASSENGER (ROW, MEMORY SEAT VEHICLES)

SEAT FORE/AFT SWITCH - LH REAR SEAT FORE/AFT SWITCH - RH REAR SEAT FORE/AFT SWITCH - RH REAR SEAT HEADREST SWITCH - LH REAR SEAT HEADREST SWITCH - RH REAR SEAT HEATER SWITCH - LH REAR SEAT HEATER SWITCH - RH REAR SEAT LUMBAR SWITCH - LH REAR SEAT LUMBAR SWITCH - RH REAR SEAT RECLINE SWITCH ES - PASSENGER, REAR

HARNESS-TO-HARNESS CONNECTORS

20-WAY MULTILOCK 070 / WHITE

20-WAY MULTILOCK 040 / BLACK

8-WAY MULTILOCK 070 / WHITE

20-WAY MULTILOCK 040 / BLACK

15-WAY MULTILOCK 070 / WHITE

12-WAY MULTILOCK 040 / BLACK

2-WAY MULTILOCK 070 / WHITE

12-WAY MULTILOCK 040 / BLACK

2-WAY MULTILOCK 040 / WHITE

6-WAY MULTILOCK 070 / WHITE

12-WAY MULTILOCK 070 / WHITE

20-WAY MULTILOCK 040 / BLUE

20-WAY MULTILOCK 040 / BLUE

8-WAY MULTILOCK 070 / WHITE

THROUGH-PANEL (48 MICRO / 6) / BLACK

Connector Type / Color

Connector / Type / Color

CC28 / 26-WAY MULTILOCK 47 / SLATE CC29 / 16-WAY MULTILOCK 47 / SLATE CC30 / 12-WAY MULTILOCK 47 / SLATE CC31 / 22-WAY MULTILOCK 47 / SLATE CC2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLUE CC1 / 16-WAY MULTILOCK 040 / BLACK CC9 / 2-WAY SERIES 250 / BLACK CC10 / LUCAR / BLACK CC16 / 2-WAY SERIES 250 / BLACK CC17 / LUCAR / BLACK SC1 / 8-WAY MULTILOCK 040 / WHITE NO CODE / 6-WAY MULTILOCK 040 / NO COLOR DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE RD1-L / 12-WAY MULTILOCK 070 / WHITE PD1 / 26-WAY MULTILOCK 47 / SLATE RD1-R / 12-WAY MULTILOCK 070 / WHITE FC18 / 16-WAY MULTILOCK 040 / BLACK FC9 / 24-WAY IDC / BLACK FC10 / 48-WAY IDC / BLACK CA83 / 8-WAY MULTILOCK / BLACK FC12 / 16-WAY MULTILOCK 040 / BLUE IC1 / 20-WAY MULTILOCK 070 / WHITE CA107 / 22-WAY MULTILOCK 47 / WHITE CA108 / 12-WAY MULTILOCK 47 / WHITE SM1-P / 12-WAY MULTILOCK 47 / BLUE SM6-P / 16-WAY MULTILOCK 040 / BLACK PL1 / 22-WAY MULTILOCK 47 / WHITE PL2 / 12-WAY MULTILOCK 47 / WHITE SM1-P / 12-WAY MULTILOCK 47 / BLUE SM6-P / 16-WAY MULTILOCK 040 / BLACK BC3 / 10-WAY AMP MLQ / BLACK BC5 / 10-WAY AMP MLQ / BLACK SM19 / 10-WAY AMP MQL / BLACK BC4 / 10-WAY AMP MLQ / BLACK BC7 / 10-WAY AMP MLQ / BLACK BC1 / 10-WAY AMP MLQ / BLACK BC2 / 10-WAY AMP MLQ / BLACK BC8 / 10-WAY AMP MLQ / BLACK BC6 / 10-WAY AMP MLQ / BLACK SM20 / 10-WAY AMP MQL / NATURAL

Location / Access

A/C UNIT, RH SIDE / RH UNDERSCUTTLE

CENTER CONSOLE CENTER CONSOLE CENTER CONSOLE

CENTER CONSOLE

STEERING COLUMN / COVER STEERING COLUMN / COVER ARM REST / TOP ROLL

DOOR CASING ARM REST / TOP ROLL DOOR CASING STEERING COLUMN / DRIVER'S UNDERSCUTTLE INSTRUMENT PACK

ROOF CONSOLE FASCIA SWITCH PACK CENTER CONSOLE PASSENGER'S SEAT

PASSENGER'S SEAT

REAR SEAT SWITCH PACK / UNDER REAR SEAT SWITCH PACK / UNDER FRONT LOWER SEAT / INSIDE REAR SEAT SWITCH PACK / UNDER CENTER CONSOLE / REAR CENTER CONSOLE / REAR REAR SEAT SWITCH PACK / UNDER REAR SEAT SWITCH PACK / UNDER REAR SEAT SWITCH PACK / UNDER REAR SEAT SWITCH PACK / UNDER

Location / Access

REAR SEAT CONSOLE / UNDER DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S UNDERSCUTTLE / ECM LH 'BC' POST / 'BC' POST PANEL LH 'BC' POST / 'BC' POST PANEL RH 'BC' POST / 'BC' POST PANEL PASSENGER'S SEAT / UNDER RH REAR SEAT / UNDER CENTER CONSOLE / CENTER CONSOLE GLOVE BOX DRIVER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE

GROUNDS

BS4

CA9

CA10

CA11

CA12

CA13

CA14

CA15

CA16

CA27

CA109 CC18

FC4

FC7

IC7

Ground	Location / Type	Ground	Location / Type
CAG30L	LH 'A' POST GROUND SCREW	CCG50L	CENTER CONSOLE GROUND
CAG31R	PARCEL SHELF GROUND SCREW	CCG50R	CENTER CONSOLE GROUND
CAG33R	RH HEELBOARD GROUND SCREW	CCG51L	CENTER CONSOLE GROUND STUD
CAG92L	RH HEELBOARD GROUND SCREW	FCG15L	LH CONSOLE GROUND STUD
CAG92R	RH HEELBOARD GROUND SCREW	FCG26R	LH CONSOLE GROUND STUD
CAG104L	LH SEAT GROUND STUD	ICG24	RADIO GROUND STUD
CAG110L	RH SEAT GROUND STUD	PLG3L	LH SEAT GROUND SCREW
CCG49R	RH CONSOLE GROUND STUD		

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ñ

DIMMER

\bigtriangledown	Pin	Description	Active	Inactive
о	SC1-1	ILLUMINATION SUPPLY	B+	GROUND
1	SC1-2	SIDE LAMPS ON	0.6 V	B+
0	SC1-7	ILLUMINATION SUPPLY	B+	GROUND
SG	G	DIMMER POTENTIOMETER GROUND	1.27V = DIM, 1.46V = BRIGHT	
1	Y	DIMMER POTENTIOMETER FEEDBACK VOLTAGE	1.27V = DIM, 4.10V = BRIGHT	
0	U	DIMMER POTENTIOMETER REFERENCE VOLTAGE	3.91V = DIM, 4.10V = BRIGHT	

The following symbols are used to represent values for Control Module Pin Out data:

4

l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Dimmer Controlled Lighting – LWB

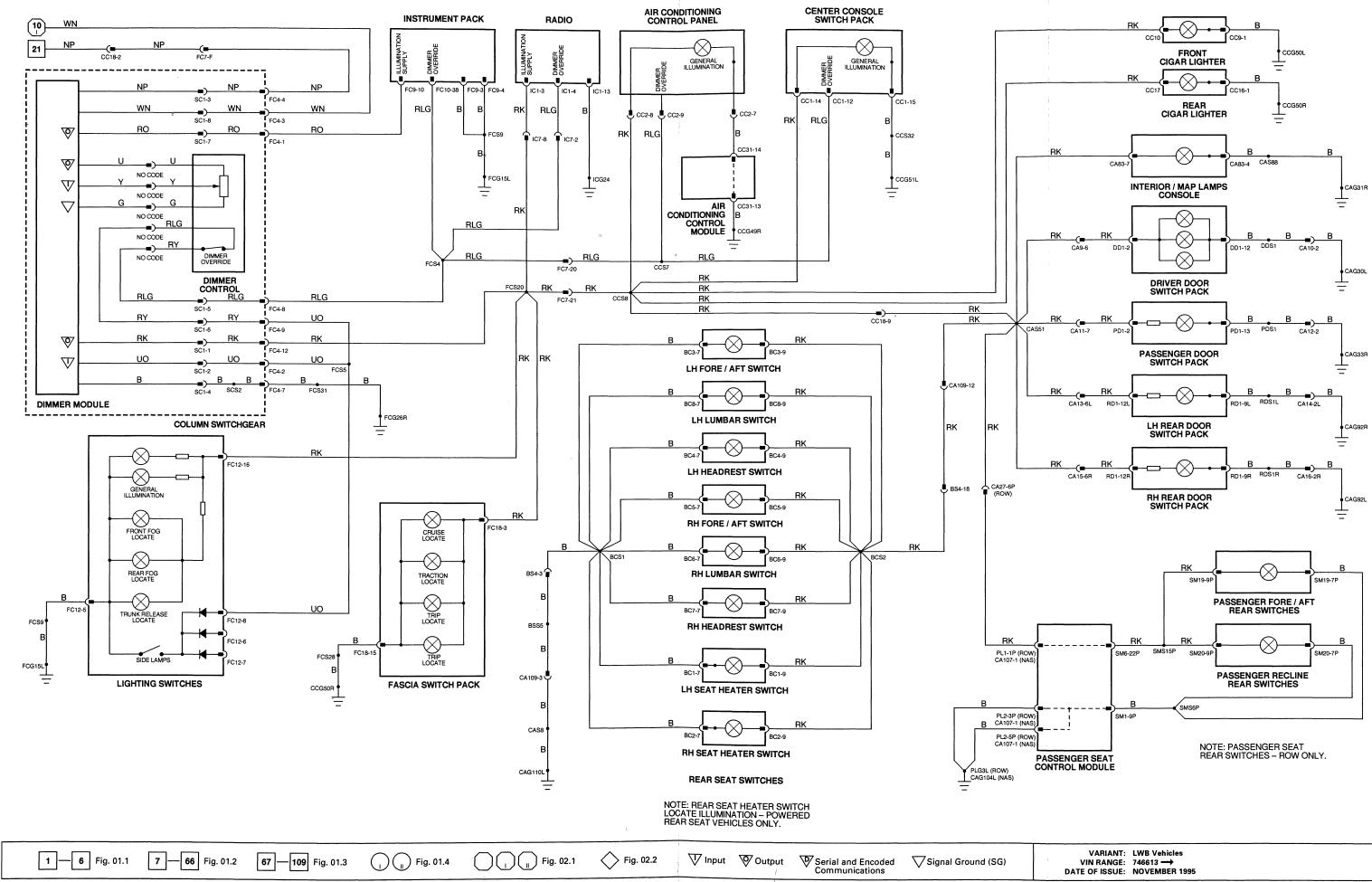


Fig. 10.3

Component

COOLANT TEMPERATURE SENSOR FASCIA SWITCH PACK FUEL LEVEL SENSOR HAND BRAKE SWITCH INSTRUMENT PACK

OIL PRESSURE SWITCH TRIP CYCLE (COLUMN SWITCHGEAR)

Connector / Type / Color

PI140 / LUCAR / BLACK FC18 / 16-WAY MULTILOCK 040 / BLACK BT32; BT33 / LUCAR / WHITE CC52 / 2-WAY MULTILOCK 040 / BLACK FC9 / 24-WAY IDC / BLACK FC10 / 48-WAY IDC / BLACK P1139 / LUCAR / BLACK SC3 / 6-WAY MULTILOCK 070 / WHITE

Location / Access

ENGINE THERMOSTAT HOUSING STEERING COLUMN / DRIVER'S UNDERSCUTTLE FUEL TANK / FUEL TANK TRIM CENTER CONSOLE, LH SIDE INSTRUMENT PACK

ENGINE BLOCK, LH SIDE (AJ16); ENGINE VEE, REAR (V12) STEERING COLUMN / COVER

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC4	20-WAY MULTILOCK 040 / BLUE	DRIVER'S UNDERSCUTTLE
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE
IC7	8-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
P163	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL
,		

GROUNDS

Ground	Location / Type
BTG48R	REAR TRUNK GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26L	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

4-

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

A

INSTRUMENT PACK

\bigtriangledown	Pin	Description	Active	Inactive
D	FC9-13	SERIAL COMMUNICATION INPUT		
D	FC9-14	SERIAL COMMUNICATION OUTPUT		
1	FC9-15	VEHICLE SPEED INPUT	B+ @ 10 MPH = 200 Hz, 20 MPH = 400 Hz	
1	FC9-19	COOLANT TEMPERATURE INDICATOR LAMP	GROUND	B+
1	FC9-20	FUEL LEVEL	GROUND = FULL	B+ = EMPTY
1	FC9-21	ENGINE OIL PRESSURE	GROUND = MAXIMUM PRESSURE	B+ = MINIMUM PRESSURE
0	FC9-22	ENGINE COOLANT TEMPERATURE	2.5 V @ 90° C, INCREASING WITH TEMPERATURE INCREASE	
1	FC9-24	TACHOMETER	GROUND PULSE @ 1000 RPM = 15 Hz	
o	FC10-2	VEHICLE SPEED SIGNAL	B+ @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	
ο	FC10-3	VEHICLE SPEED SIGNAL	GROUND @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	
1	FC10-4	TRIP STALK CYCLE	GROUND	B+
1	FC10-9	GENERATOR INDICATOR VOLTAGE	< 10.4 V OR > 15.6 V	10.5-15.5 V
1	FC10-12	TRIP RESET	GROUND	B+
ł	FC10-14	TRANSMISSION SPORT MODE	GROUND = SPORT	B+
1	FC10-17	PARK BRAKE ON	GROUND	B+
1	FC10-24	MAIN BEAM	GROUND	B+
1	FC10-35	TRACTION CONTROL STATUS	B+	FAILURE = GROUND TRACTION OFF = 4 Hz GROUND PULSE
1	FC10-36	TRIP CLEAR	GROUND	B+
1	FC10-40	LH DI ON	GROUND PULSE	В+
I.	FC10-41	RH DI ON	GROUND PULSE	B+
1	FC10-42	МРН / КРН	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

ŝ

I Input

O Output

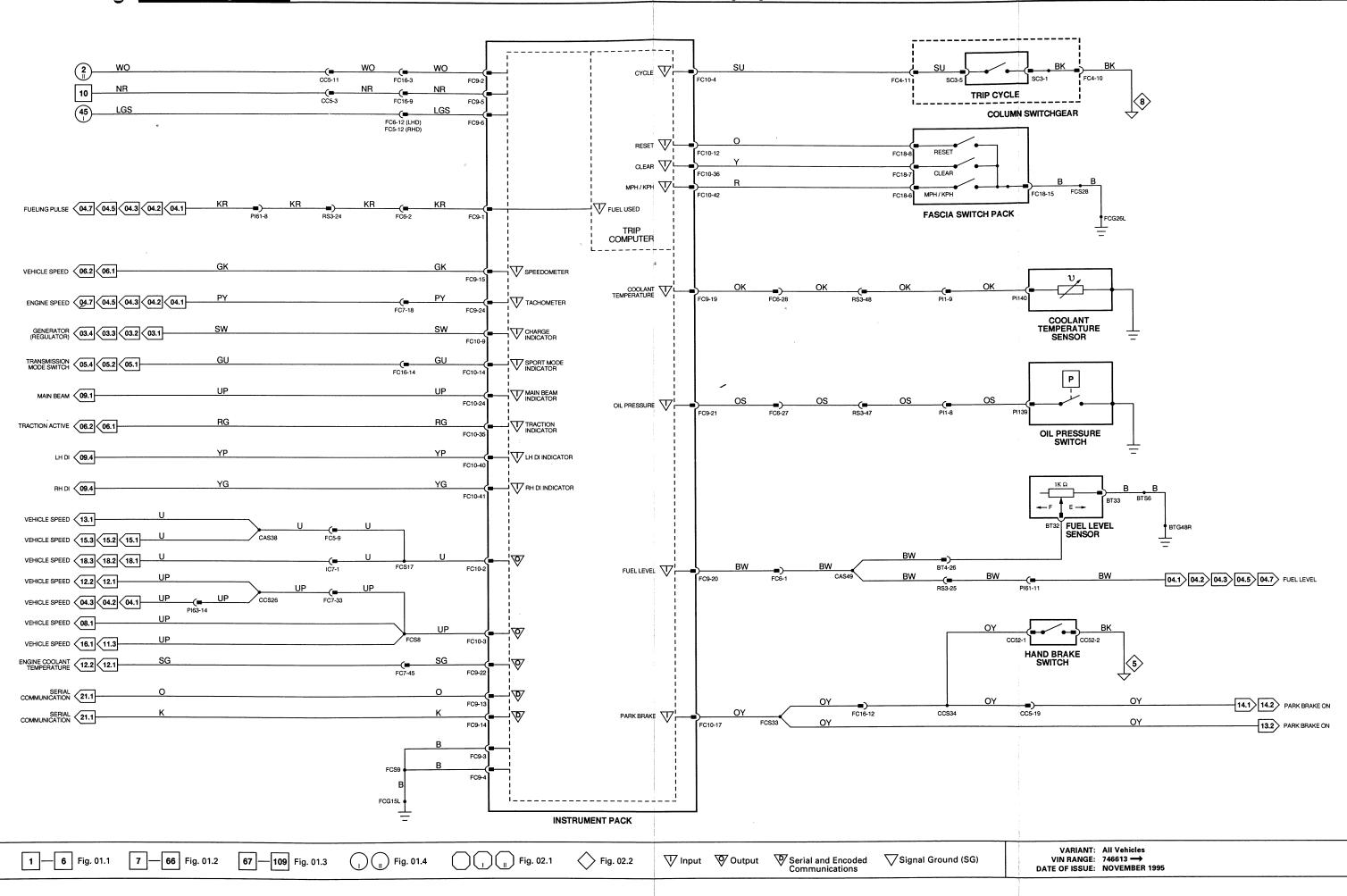
SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Instrument Normal Display







Component

BODY PROCESSOR MODULE

BRAKE FLUID LEVEL SWITCH (LHD) BRAKE FLUID LEVEL SWITCH (RHD) COOLANT LEVEL SWITCH DOOR SWITCH PACK – LH REAR DOOR SWITCH PACK – PASSENGER DOOR SWITCH – DRIVER DOOR SWITCH – DRIVER DOOR SWITCH – LH REAR DOOR SWITCH – H REAR DOOR SWITCH – RH REAR INSTRUMENT PACK

SEAT BELT SWITCH SEAT CONTROL MODULE – DRIVER (NAS VEHICLES)

SEAT CONTROL MODULE – DRIVER (ROW, MEMORY SEAT VEHICLES)

TRUNK SWITCH WASHER FLUID LEVEL SWITCH

Connector

BT4

CA9

CA10

CA11

CA12

CA13

CA14 CA15

CA16 CA23

CA25

CC5 CC18

FC5

FC6

FC7 FC16

LS3

PI61 PI63

BS3

ML1-D

HARNESS-TO-HARNESS CONNECTORS

Type / Color

THROUGH-PANEL (48 MICRO / 6) / BLACK

20-WAY MULTILOCK 040 / BLACK

8-WAY MULTILOCK 070 / WHITE 20-WAY MULTILOCK 040 / BLACK

15-WAY MULTILOCK 070 / WHITE

12-WAY MULTILOCK 040 / BLACK

2-WAY MULTILOCK 070 / WHITE

12-WAY MULTILOCK 040 / BLACK 2-WAY MULTILOCK 040 / WHITE

20-WAY MULTILOCK 040 / BLACK

3-WAY MULTILOCK 070 / YELLOW 20-WAY MULTILOCK 040 / GREEN

20-WAY MULTILOCK 040 / BLUE THROUGH-PANEL (48 MICRO / 6) / BLACK

20-WAY MULTILOCK 040 / BLACK

13-WAY ECONOSEAL III LC / BLACK

20-WAY MULTILOCK 040 / BLACK THROUGH-PANEL (48 MICRO / 6) / BROWN

THROUGH-PANEL (48 MICRO / 6) / BLACK

THROUGH-PANEL (48 MICRO / 6) / BLACK

THROUGH-PANEL (48 MICRO / 6) / BLACK 10-WAY MULTILOCK 070 / WHITE

Location / Access

Connector / Type / Color FC1/48-WAY PCB SIGNAL/YELLOW

FC2 / 48-WAY PCB SIGNAL / BLACK

LS28 / 2-WAY JUNIOR TIMER / BLACK

RS36 / 2-WAY JUNIOR TIMER / BLACK

LS33 / 2-WAY JUNIOR TIMER / BROWN

PD1 / 26-WAY MULTILOCK 47 / SLATE

RD1-L / 12-WAY MULTILOCK 070 / WHITE

BD1-B / 12-WAY MULTH OCK 070 / WHITE

DD3 / 13-WAY ECONOSEAL III LC / BLACK

RD3-L / 6-WAY ECONOSEAL III LC / BLACK

PD3 / 13-WAY ECONOSEAL III LC / BLACK

RD3-R / 6-WAY ECONOSEAL III LC / BLACK

SM8 / 2-WAY MULTILOCK 040 / BLACK

CA105 / 22-WAY MULTILOCK 47 / BLUE CA106 / 12-WAY MULTILOCK 47 / BLUE

SM1-D / 12-WAY MULTILOCK 47 / WHITE SM6-D / 22-WAY MULTILOCK 47 / WHITE

PL2 / 12-WAY MULTILOCK 47 / BLUE SM1-D / 12-WAY MULTILOCK 47 / WHITE SM6-D / 22-WAY MULTILOCK 47 / WHITE

BT15 / 2-WAY FORD DIAGNOSTIC / BLACK

RS18 / 2-WAY ECONOSEAL III LC / RED

PL1 / 22-WAY MULTILOCK 47 / BLUE

FC9 / 24-WAY IDC / BLACK FC10 / 48-WAY IDC / BLACK

Location / Acocss
ABOVE FUEL TANK / FUEL TANK TRIM
DRIVER'S 'A' POST / 'A' POST TRIM
DRIVER'S 'A' POST / 'A' POST TRIM
PASSENGER'S 'A' POST / 'A' POST TRIM
PASSENGER'S UNDERSCUTTLE / ECM
LH 'BC' POST / 'BC' POST PANEL
LH 'BC' POST / 'BC' POST PANEL
RH 'BC' POST / 'BC' POST PANEL
RH 'BC' POST / 'BC' POST PANEL
DRIVER'S SEAT / UNDER
RH 'A' POST, ECM / 'A' POST PANEL
CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
LH FASCIA END PANEL / OUTER AIR VENT
RH FASCIA END PANEL / OUTER AIR VENT
PASSENGER'S UNDERSCUTTLE
PASSENGER'S UNDERSCUTTLE
LH 'A' POST / 'A' POST PANEL
DRIVER'S SEAT / UNDER
REARWARD OF RH HEADLAMP
RH 'A' POST / 'A' POST TRIM
RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
CAG30L	LH 'A' POST GROUND SCREW
CAG33L	RH HEELBOARD GROUND SCREW
CAG92L	RH HEELBOARD GROUND SCREW
CAG93R	LH HEELBOARD GROUND SCREW
CAG103L	LH SEAT GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
LSG19R	LH BULKHEAD GROUND STUD
MLG2L	LH SEAT GROUND SCREW
PLG3L	LH SEAT GROUND SCREW
RSG41L	RIGHT FORWARD GROUND

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

đ

Location / Access

PASSENGER'S UNDERSCUTTLE

BRAKE FLUID RESERVOIR BRAKE FLUID RESERVOIR COOLANT RESERVOIR DOOR CASING ARM REST / TOP ROLL DOOR CASING DOOR CASING DOOR CASING DOOR CASING DOOR CASING INSTRUMENT PACK

DRIVER'S SEAT / UNDER DRIVER'S SEAT

DRIVER'S SEAT

TRUNK LID / TRUNK LID TRIM WASHER FLUID RESERVOIR

ē 19

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
o	FC1-26	SEAT BELT WARNING LAMP	GROUND	B+
I.	FC2-24	SEAT BELT WARNING LAMP	GROUND	В+
DRI	VER SEAT	CONTROL MODULE (NAS)		
\bigtriangledown	Pin	Description	Active	Inactive
0	CA105-20	SEAT BELT WARNING	GROUND	В+
1	SM6-21D	SEAT BELT FASTENED	GROUND	B+
DRI		T CONTROL MODULE (ROW)		
\bigtriangledown	Pin	Description	Active	Inactive
0	PL1-20D	SEAT BELT WARNING	GROUND	В+
ł	SM6-21D	SEAT BELT FASTENED	GROUND	В+
INS	TRUMEN	Т РАСК		
∇	Pin	Description	Active	Inactive
	FC9-7	ANTI-LOCK FAILURE	< 5 V OR > 11.9 V	5.1 – 11.8 V
D	FC9-13	SERIAL COMMUNICATION INPUT		
D	FC9-14	SERIAL COMMUNICATION OUTPUT		
Т	FC10-10	BRAKE FLUID LEVEL	GROUND	В+
1	FC10-13	WASHER FLUID LEVEL	GROUND	B+
1	FC10-15	SEAT BELT WARNING	GROUND	B+
1	FC10-16	TRUNK AJAR	GROUND	7.9 V
I.	FC10-18	DI BULB FAILURE	GROUND	B+
1	FC10-22	CHECK ENGINE MIL	GROUND	B+
1		EVALATION TEMPERATURE (TARAN) ONLY	GROUND	B+
	FC10-23	EXHAUST TEMPERATURE (JAPAN ONLY)		
I.	FC10-37	COOLANT LEVEL	GROUND	B+
l i	FC10-37 FC10-43	COOLANT LEVEL GENERAL BULB FAIL	GROUND GROUND	B+
 	FC10-37 FC10-43 FC10-44	COOLANT LEVEL GENERAL BULB FAIL TRANSMISSION MIL	GROUND GROUND	B+ B+
 	FC10-37 FC10-43 FC10-44 FC10-45	COOLANT LEVEL GENERAL BULB FAIL TRANSMISSION MIL AIR BAG FAILURE	GROUND GROUND GROUND	B+ B+ B+
 	FC10-37 FC10-43 FC10-44	COOLANT LEVEL GENERAL BULB FAIL TRANSMISSION MIL	GROUND GROUND	B+ B+

The following symbols are used to represent values for Control Module Pin Out data:

Ň

l Input

O Output

SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

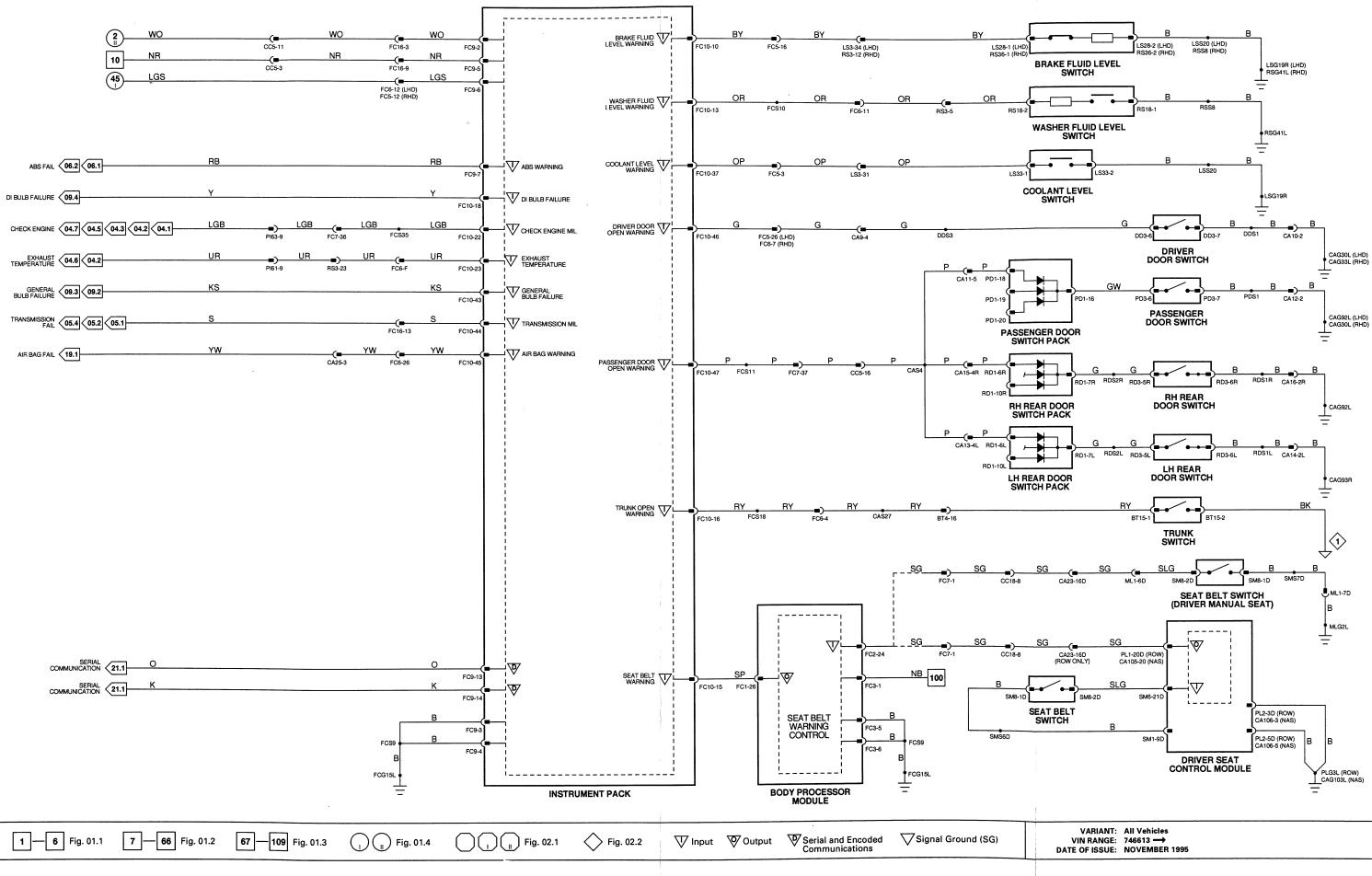


Fig. 11.2

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK DIRECTION INDICATOR SWITCHES (COLUMN SWITCHGEAR) DOOR SWITCH - DRIVER DOOR SWITCH PACK - DRIVER

SEAT CONTROL MODULE – DRIVER (NAS VEHICLES)

SEAT CONTROL MODULE - DRIVER (ROW, MEMORY SEAT VEHICLES)

IGNITION SWITCH LIGHTING SWITCHES NOT IN-PARK MICROSWITCH SEAT BELT SWITCH SPEAKER (COLUMN SWITCHGEAR)

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color CA8 20-WAY MULTILOCK 040 / GREEN CA10 8-WAY MULTILOCK 070 / WHITE CA23 20-WAY MULTILOCK 040 / BLACK ССЗ 20-WAY MULTILOCK 040 / BLACK CC18 20-WAY MULTILOCK 040 / BLUE 20-WAY MULTILOCK 040 / BLUE FC4 FC5 THROUGH-PANEL (48 MICRO / 6) / BLACK FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK THROUGH-PANEL (48 MICRO / 6) / BLACK FC7 20-WAY MULTILOCK 040 / BLACK FC16 10-WAY MULTILOCK 070 / WHITE ML1-D

Location / Access

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK

CC1 / 16-WAY MULTILOCK 040 / BLACK

SC3 / 6-WAY MULTILOCK 070 / WHITE

DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE

CA105 / 22-WAY MULTILOCK 47 / BLUE CA106 / 12-WAY MULTILOCK 47 / BLUE SM1-D / 12-WAY MULTILOCK 47 / WHITE

SM6-D / 22-WAY MULTILOCK 47 / WHITE PL1 / 22-WAY MULTILOCK 47 / BLUE PL2 / 12-WAY MULTILOCK 47 / BLUE SM1-D / 12-WAY MULTILOCK 47 / WHITE

SM6-D / 22-WAY MULTILOCK 47 / WHITE

FC12 / 16-WAY MULTILOCK 040 / BLUE

SM8 / 2-WAY MULTILOCK 040 / BLACK

SC4 / 3-WAY MULTILOCK 070 / WHITE

FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

DD3 / 13-WAY ECONOSEAL III LC / BLACK

DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S SEAT / UNDER CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX DRIVER'S UNDERSCUTTLE LH FASCIA END PANEL / OUTER AIR VENT RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE DRIVER'S SEAT / UNDER

GROUNDS

Location / Type

Ground LH 'A' POST GROUND SCREW CAG30L RH HEELBOARD GROUND SCREW CAG33L LH SEAT GROUND STUD CAG103L CCG51L CENTER CONSOLE GROUND STUD FCG15L LH CONSOLE GROUND STUD FCG26R LH CONSOLE GROUND STUD MLG2L LH SEAT GROUND SCREW PLG3L LH SEAT GROUND SCREW

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ð

Location / Access PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE STEERING COLUMN / COVER DOOR CASING ARM REST / TOP ROLL

DRIVER'S SEAT

DRIVER'S SEAT

STEERING COLUMN / COVER FASCIA SWITCH PACK 'J' GATE / CENTER CONSOLE DRIVER'S SEAT / UNDER STEERING COLUMN / COVER

÷ · ·

S)

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive		
о	FC1-21	AUDIBLE TONE SPEAKER				
0	FC1-22	AUDIBLE TONE SPEAKER				
I.	FC2-3	SIDE LAMPS ON	GROUND	B+		
1	FC2-4	VEHICLE SPEED SENSOR	GROUND PULSE @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz			
1	FC2-16	NOT IN PARK MICRO SWITCH	GROUND	B+		
1	FC2-18	RH DI REQUEST	GROUND	B+		
1	FC2-24	SEAT BELT WARNING LAMP	GROUND	B+		
1	FC2-25	SEAT MEMORY AUDIBLE WARNING	GROUND	B+		
1	FC2-27	HAZARD LAMPS REQUEST	GROUND	B+		
1	FC2-33	DRIVER DOOR AJAR	GROUND	B+		
1	FC2-46	LH DI REQUEST	GROUND	B+		
I	FC2-48	KEY IN IGNITION SWITCH	GROUND	B+		
DRI	VER SEAT	CONTROL MODULE (NAS)				
\bigtriangledown	Pin	Description	Active	Inactive		
о	CA105-20	SEAT BELT WARNING	GROUND	В+		
I.	SM6-21D	SEAT BELT FASTENED	GROUND	B+		
DRI	DRIVER SEAT CONTROL MODULE (ROW)					

\bigtriangledown	Pin	Description	Active	Inactive
ο	PL1-20D	SEAT BELT WARNING	GROUND	B+
1	SM6-21D	SEAT BELT FASTENED	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

ð

I Input

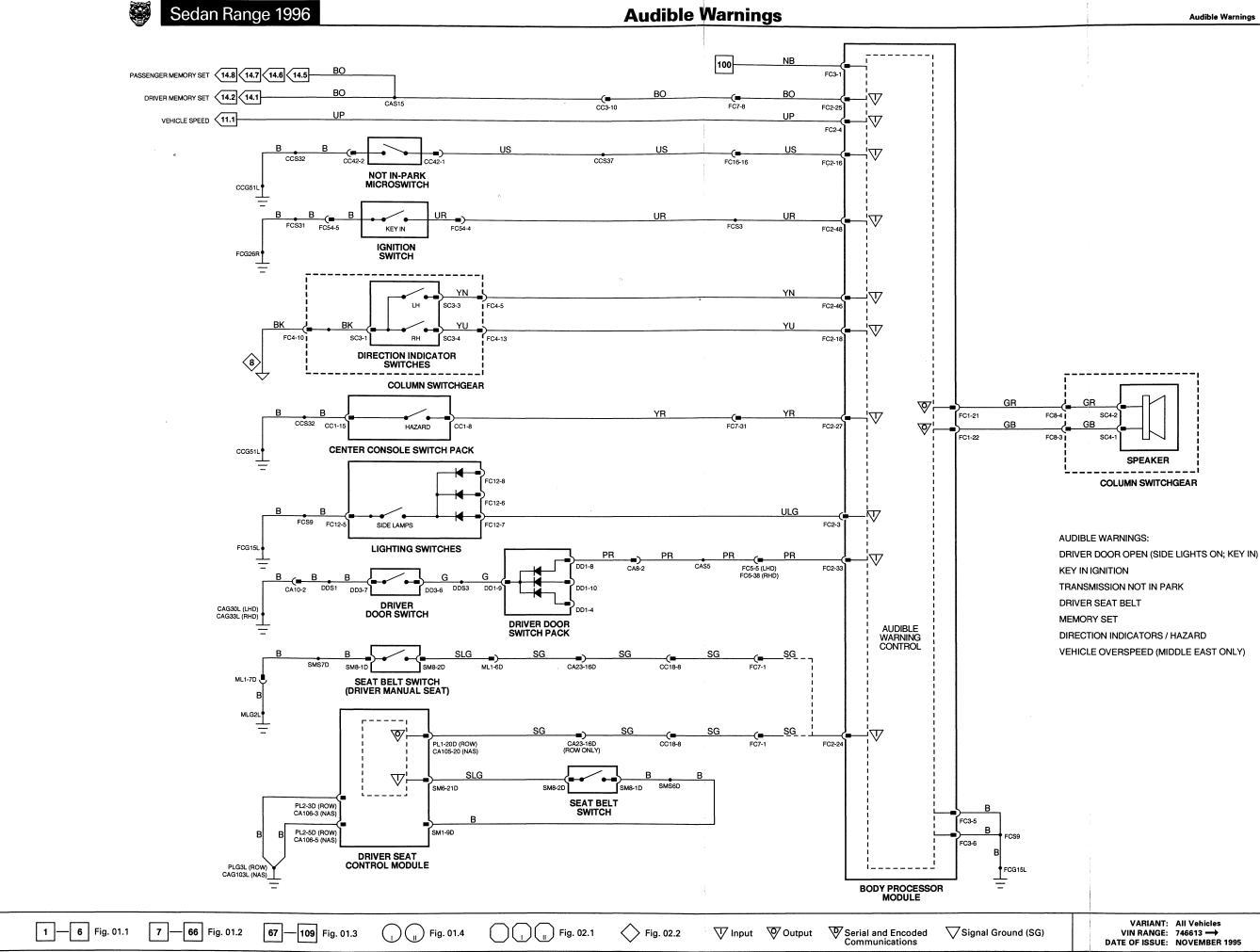
O Output

SG Signal Ground

D Serial and encoded communications

B+ Battery voltage
V Voltage (DC)
Hz Frequency
KHz Frequency x 1000
MS Milliseconds
MV Millivolts

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.



VARIANT:	All Vehicles
VIN RANGE:	746613 🛶
DATE OF ISSUE:	NOVEMBER 1995

VEHICLE OVERSPEED (MIDDLE EAST ONLY)

Component

AIR CONDITIONING CONTROL MODULE

AIR CONDITIONING CONTROL PANEL AMBIENT TEMPERATURE SENSOR ASPIRATOR MOTOR COOL AIR BYPASS SERVO DEFROST SERVO DIFFERENTIAL CONTROL POTENTIOMETER EVAPORATOR TEMPERATURE SENSOR FOOT WELL SERVO FRESH / RECIRCULATION SERVO - LH FRESH / RECIRCULATION SERVO - LH FRESH / RECIRCULATION SERVO - LH HEATER MATRIX TEMPERATURE SENSOR IN-CAR TEMPERATURE SENSOR SOLAR SENSOR VENT SERVO

Connector / Type / Color

CC28 / 26-WAY MULTILOCK 47 / SLATE CC29 / 16-WAY MULTILOCK 47 / SLATE CC30 / 12-WAY MULTILOCK 47 / SLATE CC31 / 22-WAY MULTILOCK 47 / SLATE CC2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLUE BL6 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK FC40 (FLY LEAD) / 4-WAY MULTILOCK 070 / WHITE CC34 (FLY LEAD) 12-WAY MULTILOCK 040 / BLACK FC42 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK FC20 (FLY LEAD) / 3-WAY MULTILOCK 070 / WHITE CC34 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK CC34 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK CC32 (FLY LEAD) / 15-WAY SUMITOMO 90 / GREEN CC33 (FLY LEAD) / 15-WAY SUMITOMO 90 / GREEN CC34 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK FC40 (FLY LEAD) / 4-WAY MULTILOCK 040 / WHITE FC34 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK FC42 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

Location / Access

A/C UNIT, RH SIDE / RH UNDERSCUTTLE

CENTER CONSOLE LH FRONT WHEEL ARCH LINER / SPOILER TRAY DRIVER'S UNDERSCUTTLE A/C UNIT, LH SIDE; /LH UNDERSCUTTLE A/C UNIT, LH SIDE; FASCIA A/C UNIT, LH SIDE / LH UNDERSCUTTLE A/C UNIT, LH SIDE / LH UNDERSCUTTLE BLOWER HOUSING BLOWER HOUSING A/C UNIT, LH SIDE / LH UNDERSCUTTLE DRIVER'S UNDERSCUTTLE FASCIA, TOP FRONT A/C UNIT, LH SIDE / LH UNDERSCUTTLE

ê 10 ¹

RELAYS

Relay	Color / Stripe	Connector / Color	Location / Access
AIR CONDITIONING ISOLATE RELAY	BLACK / BLUE	CA57 / BLUE	RH HEELBOARD

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BL1	13-WAY ECONOSEAL III LC / BLACK	LH FRONT WHEEL ARCH LINER / SPOILER AND SPOILER TRAY
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC18	20-WAY MULTILOCK 040 / BLUE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
PI63	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM

GROUNDS

Ground	Location / Type
CAG92R	RH HEELBOARD GROUND SCREW
CCG49L	RH CONSOLE GROUND STUD
CCG49R	RH CONSOLE GROUND STUD
FCG15R	LH CONSOLE GROUND STUD
PIG153L	RH BULKHEAD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ð

AIR CONDITIONING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
I.	CC28-1	COMPRESSOR CLUTCH ON SIGNAL	B+	GROUND
0	CC28-6	DEFROST VENT SERVO MOTOR	B+	GROUND
0	CC28-7	CENTER VENT SERVO MOTOR	B+	GROUND
0	CC28-8	LH RECIRCULATION VENT SERVO MOTOR	B+	GROUND
0	CC28-9	RH RECIRCULATION VENT SERVO MOTOR	B+	GROUND
0	CC28-12	FOOTWELL VENT SERVO MOTOR	B+	GROUND
0	CC28-13	COOL AIR BY-PASS VENT SERVO MOTOR	B+	GROUND
0	CC28-19	DEFROST VENT SERVO MOTOR	B+	GROUND
0	CC28-20	CENTER VENT SERVO MOTOR	B+	GROUND
0	CC28-21	LH RECIRCULATION VENT SERVO MOTOR	B+	GROUND
0	CC28-22	RH RECIRCULATION VENT SERVO MOTOR	B+	GROUND
ο	CC28-25	FOOTWELL VENT SERVO MOTOR	B+	GROUND
о	CC28-26	COOL AIR BY-PASS VENT SERVO MOTOR	B+	GROUND
1	CC29-1	SOLAR SENSOR FEEDBACK VOLTAGE	0.75 – 4.75 V, INCREASING WITH LAMP BRIGHTNESS	
1	CC29-2	CENTER VENT POTENTIOMETER FEEDBACK VOLTAGE	> 3.5 V (OPEN)	< 1 V (CLOSED)
1	CC29-3	RH RECIRCULATION POTENTIOMETER FEEDBACK VOLTAGE	> 3.5 V (OPEN)	< 1 V (CLOSED)
1	CC29-5	COOL AIR BY-PASS POTENTIOMETER FEEDBACK VOLTAGE	> 3.5 V (OPEN)	< 1 V (CLOSED)
1	CC29-6		2.5 V @ 90° C, INCREASING WITH TEMPERATURE	
1	CC29-9	TEMPERATURE DIFFERENTIAL POTENTIOMETER FEEDBACK	0.75V = RED; 4.75V = BLUE	
1	CC29-10	DEFROST VENT POTENTIOMETER FEEDBACK	> 3.5 V (OPEN)	< 1 V (CLOSED)
	CC29-11		> 3.5 V (OPEN); < 1 V (CLOSED)	
I	CC29-13	FOOTWELL VENT POTENTIOMETER FEEDBACK	> 3.5 V (OPEN); < 1 V (CLOSED)	
о	CC30-1	AIR CONDITIONING ELECTRICAL LOAD SIGNAL	B+	GROUND
0	CC30-2	CLOCK	B+ (1.45 KHz)	B+
D	CC30-3	SERIAL DATA OUTPUT TO CONTROL PANEL		
1	CC30-5	AMBIENT TEMPERATURE SENSOR FEEDBACK	2.18 V @ 25° C, INCREASING WITH TEMPERATURE	
ł	CC30-6	HEATER MATRIX AIR TEMPERATURE SENSOR FEEDBACK	2.25 V @ 20° C, INCREASING WITH TEMPERATURE	
D	CC30-7	SERIAL DATA INPUT FROM CONTROL PANEL		
0	CC30-8	START	B+	GROUND
1	CC30-11	IN CAR TEMPERATURE SENSOR FEEDBACK	3.25 V @ 0° C, INCREASING WITH TEMPERATURE	
I	CC30-12	EVAPORATOR TEMPERATURE SENSOR FEEDBACK	3.25 V @ 0° C, INCREASING WITH TEMPERATURE	
ī	CC31-3	IGNITION SWITCHED GROUND	GROUND	B+
0	CC31-4	IGNITION SWITCHED POWER SUPPLY TO CONTROL PANEL	B+	GROUND
1	CC31-6	ENGINE SPEED SIGNAL	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
0	CC31-8	SERVO POTENTIOMETER COMMON REFERENCE VOLTAGE	5V	5 V
0	CC31-9	COMPRESSOR CLUTCH REQUEST	GROUND	B+
D	CC31-10	SERIAL COMMUNICATION INPUT		
0	CC31-12	BATTERY POWER SUPPLY TO CONTROL PANEL	B+	B+
о	CC31-15	AIR CONDITIONING ISOLATE RELAY	B+	GROUND
1	CC31-16	VEHICLE SPEED SIGNAL	B+ @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	
I	CC31-17	REFRIGERANT TRIPLE PRESSURE SWITCH – 4.0L REFRIGERANT DUAL PRESSURE SWITCH – V12	GROUND	B+
о	CC31-18	ASPIRATOR MOTOR	B+	GROUND
SG	CC31-19	SERVO POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND
D	CC31-21	SERIAL COMMUNICATION OUTPUT		

AIR CONDITIONING CONTROL PANEL

\bigtriangledown	Pin	Description	Active	Inactive
1	CC2-1	CLOCK	B+ (1.45 KHz)	B+
1	CC2-2	START	B+	GROUND
D	CC2-3	SERIAL DATA OUTPUT TO A/C CONTROL MODULE		
D	CC2-4	SERIAL DATA INPUT FROM A/C CONTROL MODULE		
- 1	CC2-5	IGNITION SWITCHED POWER SUPPLY	B+	GROUND
I.	CC2-6	BATTERY POWER SUPPLY	B+	B+

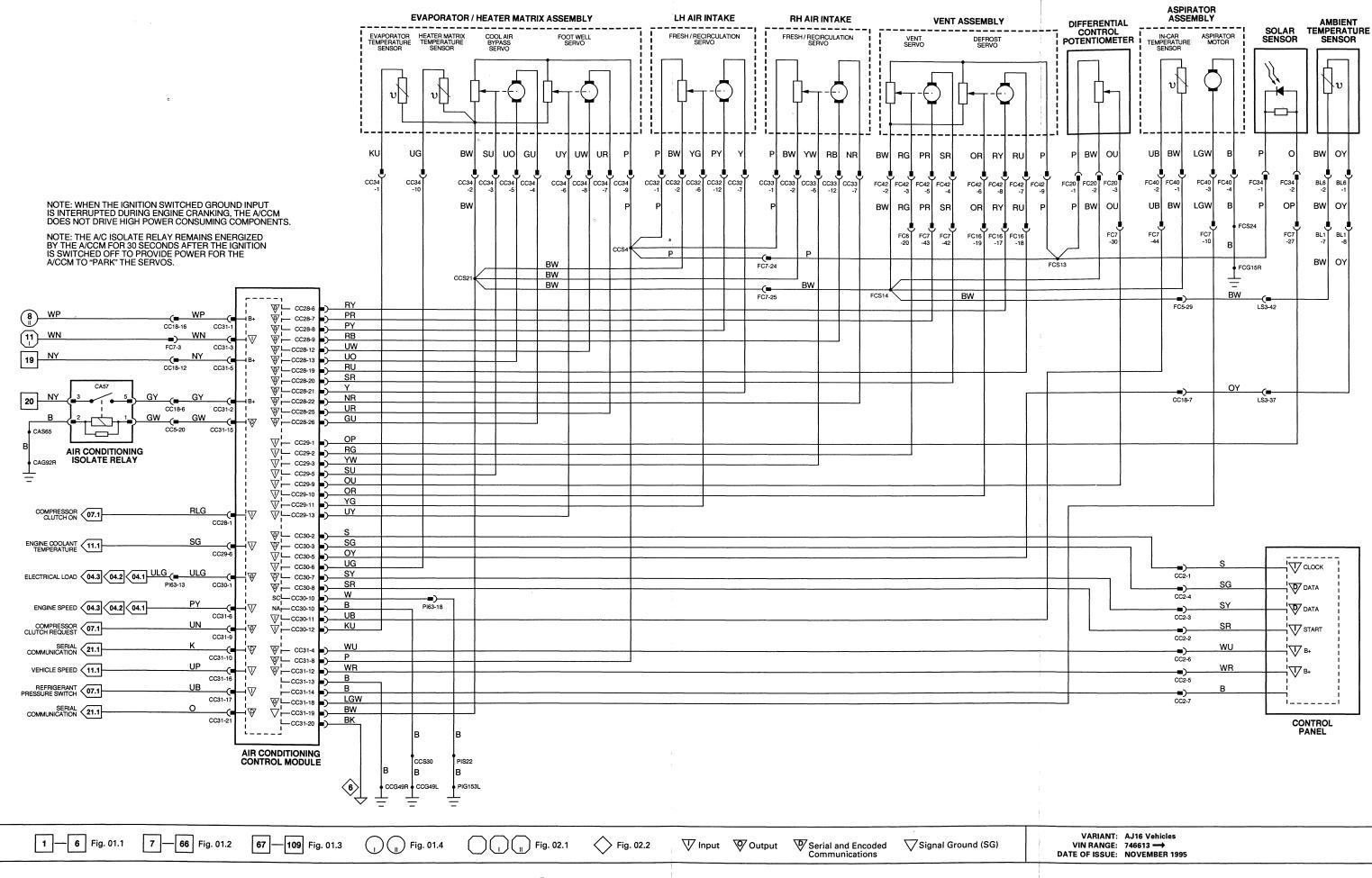
The following symbols are used to represent values for Control Module Pin Out data:

1	Input	B+	Battery voltage
0	Output	V	Voltage (DC)
SG	Signal Ground	Hz	Frequency
D	Serial and encoded communications	KHz	Frequency x 1000
		✓ MS	Milliseconds
		MV	Millivolts

ß

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.

AJ16 Climate Control System, Part 1



Component

AIR CONDITIONING CONTROL MODULE

AIR CONDITIONING CONTROL PANEL AMBIENT TEMPERATURE SENSOR ASPIRATOR MOTOR COMPRESSOR LOCK SENSOR COOL AIR BYPASS SERVO DEFROST SERVO DIFFERENTIAL CONTROL POTENTIOMETER EVAPORATOR TEMPERATURE SENSOR FOOT WELL SERVO FRESH / RECIRCULATION SERVO - LH FRESH / RECIRCULATION SERVO - RH HEATER MATRIX TEMPERATURE SENSOR IN-CAR TEMPERATURE SENSOR SOLAR SENSOR VENT SERVO

Connector / Type / Color

CC28 / 26-WAY MULTILOCK 47 / SLATE CC29 / 16-WAY MULTILOCK 47 / SLATE CC30 / 12-WAY MULTILOCK 47 / SLATE CC31 / 22-WAY MULTILOCK 47 / SLATE CC2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLUE BL6 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK FC40 (FLY LEAD) / 4-WAY MULTILOCK 070 / WHITE PI57 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK CC34 (FLY LEAD) 12-WAY MULTILOCK 040 / BLACK FC42 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK FC20 (FLY LEAD) / 3-WAY MULTILOCK 070 / WHITE CC34 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK CC34 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK CC32 (FLY LEAD) / 15-WAY SUMITOMO 90 / GREEN CC33 (FLY LEAD) / 15-WAY SUMITOMO 90 / GREEN CC34 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK FC40 (FLY LEAD) / 4-WAY MULTILOCK 040 / WHITE FC34 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK FC42 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

Location / Access

A/C UNIT, RH SIDE / RH UNDERSCUTTLE

CENTER CONSOLE LH FRONT WHEEL ARCH LINER / SPOILER TRAY DRIVER'S UNDERSCUTTLE A/C COMPRESSOR A/C UNIT, LH SIDE; /LH UNDERSCUTTLE A/C UNIT, RH SIDE; FASCIA A/C UNIT, LH SIDE; FASCIA A/C UNIT, LH SIDE / LH UNDERSCUTTLE A/C UNIT, LH SIDE / LH UNDERSCUTTLE BLOWER HOUSING BLOWER HOUSING A/C UNIT, LH SIDE / LH UNDERSCUTTLE DRIVER'S UNDERSCUTTLE FASCIA, TOP FRONT A/C UNIT, LH SIDE / LH UNDERSCUTTLE

e 11 - 1

RELAYS

Relay	Color / Stripe	Connector / Color	Location / Access
AIR CONDITIONING ISOLATE RELAY	BLACK / BLUE	CA57 / BLUE	RH HEELBOARD

HARNESS-TO-HARNESS CONNECTORS

BL1 13-WAY ECONOSEAL III LC / BLACK LH FRONT WHEEL ARCH LINER / SPOILER AND SPOILER TRAY CC5 20-WAY MULTILOCK 040 / GREEN CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CC18 20-WAY MULTILOCK 040 / BLUE CENTER CONSOLE / CENTER CONSOLE GLOVE BOX FC5 THROUGH-PANEL (48 MICRO / 6) / BLACK LH FASCIA END PANEL / OUTER AIR VENT FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK RH FASCIA END PANEL / OUTER AIR VENT FC7 THROUGH-PANEL (48 MICRO / 6) / BLACK PASSENGER'S UNDERSCUTTLE FC16 20-WAY MULTILOCK 040 / BLACK PASSENGER'S UNDERSCUTTLE LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST / A' POST PANEL P11 13-WAY ECONOSEAL III LC / WHITE RHAWARD OF RH HEADLAMP P163 20-WAY MULTILOCK 040 / BLACK RH 'A' POST / 'A' POST T FIM	Connector	Type / Color	Location / Access	
CC18 20-WAY MULTILOCK 040 / BLUE CENTER CONSOLE / CENTER CONSOLE GLOVE BOX FC5 THROUGH-PANEL (48 MICRO / 6) / BLACK LH FASCIA END PANEL / OUTER AIR VENT FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK RH FASCIA END PANEL / OUTER AIR VENT FC7 THROUGH-PANEL (48 MICRO / 6) / BLACK PASSENGER'S UNDERSCUTTLE FC16 20-WAY MULTILOCK 040 / BLACK PASSENGER'S UNDERSCUTTLE LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST / 'A' POST PANEL P11 13-WAY ECONOSEAL III LC / WHITE REARWARD OF RH HEADLAMP	BL1	13-WAY ECONOSEAL III LC / BLACK	LH FRONT WHEEL ARCH LINER / SPOILER AND SPOILER TRAY	
FC5 THROUGH-PANEL (48 MICRO / 6) / BLACK LH FASCIA END PANEL / OUTER AIR VENT FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK RH FASCIA END PANEL / OUTER AIR VENT FC7 THROUGH-PANEL (48 MICRO / 6) / BLACK PASSENGER'S UNDERSCUTTLE FC16 20-WAY MULTILOCK 040 / BLACK PASSENGER'S UNDERSCUTTLE LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST / 'A' POST PANEL P11 13-WAY ECONOSEAL III LC / WHITE REARWARD OF RH HEADLAMP	CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX	
FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK RH FASCIA END PANEL / OUTER AIR VENT FC7 THROUGH-PANEL (48 MICRO / 6) / BLACK PASSENGER'S UNDERSCUTTLE FC16 20-WAY MULTILOCK 040 / BLACK PASSENGER'S UNDERSCUTTLE LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST / 'A' POST PANEL P11 13-WAY ECONOSEAL III LC / WHITE REARWARD OF RH HEADLAMP	CC18	20-WAY MULTILOCK 040 / BLUE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX	
FC7 THROUGH-PANEL (48 MICRO / 6) / BLACK PASSENGER'S UNDERSCUTTLE FC16 20-WAY MULTILOCK 040 / BLACK PASSENGER'S UNDERSCUTTLE LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST / 'A' POST PANEL PI1 13-WAY ECONOSEAL III LC / WHITE REARWARD OF RH HEADLAMP	FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT	
FC16 20-WAY MULTILOCK 040 / BLACK PASSENGER'S UNDERSCUTTLE LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST / 'A' POST PANEL PI1 13-WAY ECONOSEAL III LC / WHITE REARWARD OF RH HEADLAMP	FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT	
LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK LH 'A' POST / 'A' POST PANEL PI1 13-WAY ECONOSEAL III LC / WHITE REARWARD OF RH HEADLAMP	FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE	
PI1 13-WAY ECONOSEAL III LC / WHITE REARWARD OF RH HEADLAMP	FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE	
	LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL	
PI63 20-WAY MULTILOCK 040 / BLACK RH 'A' POST / 'A' POST / TRIM	PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP	
	PI63	20-WAY MULTILOCK 040 / BLACK	RH 'A' POST / 'A' POST TRIM	

GROUNDS

Ground	Location / Type
CAG92R	RH HEELBOARD GROUND SCREW
CCG49R	RH CONSOLE GROUND STUD
FCG15R	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

đ

AIR CONDITIONING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
1	CC28-1	COMPRESSOR CLUTCH ON SIGNAL	B+	GROUND
0	CC28-6	DEFROST VENT SERVO MOTOR	B+	GROUND
0	CC28-7	CENTER VENT SERVO MOTOR	B+	GROUND
0	CC28-8	LH RECIRCULATION VENT SERVO MOTOR	В+	GROUND
0	CC28-9	RH RECIRCULATION VENT SERVO MOTOR	B+	GROUND
0	CC28-12	FOOTWELL VENT SERVO MOTOR	B+	GROUND
0	CC28-13	COOL AIR BY-PASS VENT SERVO MOTOR	В+	GROUND
0	CC28-19	DEFROST VENT SERVO MOTOR	B+	GROUND
0	CC28-20	CENTER VENT SERVO MOTOR	В+	GROUND
0	CC28-21	LH RECIRCULATION VENT SERVO MOTOR	B+	GROUND
0	CC28-22	RH RECIRCULATION VENT SERVO MOTOR	В+	GROUND
ο	CC28-25	FOOTWELL VENT SERVO MOTOR	B+	GROUND
0	CC28-26	COOL AIR BY-PASS VENT SERVO MOTOR	B+	GROUND
ı	CC29-1	SOLAR SENSOR FEEDBACK VOLTAGE	0.75 – 4.75 V, INCREASING WITH LAMP BRIGHTNESS	
I	CC29-2	CENTER VENT POTENTIOMETER FEEDBACK VOLTAGE	> 3.5 V (OPEN)	< 1 V (CLOSED)
1	CC29-3	RH RECIRCULATION POTENTIOMETER FEEDBACK VOLTAGE	> 3.5 V (OPEN)	< 1 V (CLOSED)
E.	CC29-5	COOL AIR BY-PASS POTENTIOMETER FEEDBACK VOLTAGE	> 3.5 V (OPEN)	< 1 V (CLOSED)
1	CC29-6	COOLANT TEMPERATURE SIGNAL	2.5 V @ 90° C, INCREASING WITH TEMPERATURE	
1	CC29-9	TEMPERATURE DIFFERENTIAL POTENTIOMETER FEEDBACK	0.75V = RED; 4.75V = BLUE	
1	CC29-10	DEFROST VENT POTENTIOMETER FEEDBACK	> 3.5 V (OPEN)	< 1 V (CLOSED)
1	CC29-11	LH RECIRCULATION POTENTIOMETER FEEDBACK	> 3.5 V (OPEN); < 1 V (CLOSED)	
I	CC29-13	FOOTWELL VENT POTENTIOMETER FEEDBACK	> 3.5 V (OPEN); < 1 V (CLOSED)	
о	CC30-1	AIR CONDITIONING ELECTRICAL LOAD SIGNAL	B+	GROUND
0	CC30-2	CLOCK	B+ (1.45 KHz)	8+
D	CC30-3	SERIAL DATA OUTPUT TO CONTROL PANEL		
I.	CC30-4	COMPRESSOR LOCK SIGNAL (V12 ONLY)	0.43 V	GROUND
1	CC30-5	AMBIENT TEMPERATURE SENSOR FEEDBACK	2.18 V @ 25° C, INCREASING WITH TEMPERATURE	
1	CC30-6	HEATER MATRIX AIR TEMPERATURE SENSOR FEEDBACK	2.25 V @ 20° C, INCREASING WITH TEMPERATURE	
D	CC30-7	SERIAL DATA INPUT FROM CONTROL PANEL	_	000100
0	CC30-8			GROUND
	CC30-11		3.25 V @ 0° C, INCREASING WITH TEMPERATURE	
'	CC30-12	EVAPORATOR TEMPERATURE SENSOR FEEDBACK	3.25 V @ 0° C, INCREASING WITH TEMPERATURE	
1	CC31-3	IGNITION SWITCHED GROUND	GROUND	B+
0	CC31-4	IGNITION SWITCHED POWER SUPPLY TO CONTROL PANEL	B+	GROUND
1	CC31-6	ENGINE SPEED SIGNAL	5 V @ 1000 RPM = 45 Hz, 2000 RPM = 90 Hz	
- F	CC31-7	LOAD INHIBIT (V12 ONLY)	GROUND	B+
0	CC31-8	SERVO POTENTIOMETER COMMON REFERENCE VOLTAGE	5V	5 V
0	CC31-9	COMPRESSOR CLUTCH REQUEST	GROUND	B+
D	CC31-10	SERIAL COMMUNICATION INPUT		
0	CC31-12	BATTERY POWER SUPPLY TO CONTROL PANEL	B+	B+
0	CC31-15	AIR CONDITIONING ISOLATE RELAY	B+	GROUND
1	CC31-16	VEHICLE SPEED SIGNAL	B+ @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	
I	CC31-17	REFRIGERANT TRIPLE PRESSURE SWITCH – 4.0L REFRIGERANT DUAL PRESSURE SWITCH – V12	GROUND	B+
0	CC31-18	ASPIRATOR MOTOR	B+	GROUND
SG	CC31-19	SERVO POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND
D	CC31-21	SERIAL COMMUNICATION OUTPUT		

AIR CONDITIONING CONTROL PANEL

\bigtriangledown	Pin	Description	Active	Inactive
1	CC2-1	CLOCK	B+ (1.45 KHz)	B+
1	CC2-2	START	B+	GROUND
D	CC2-3	SERIAL DATA OUTPUT TO A/C CONTROL MODULE		
D	CC2-4	SERIAL DATA INPUT FROM A/C CONTROL MODULE		
1	CC2-5	IGNITION SWITCHED POWER SUPPLY	B+	GROUND
I	CC2-6	BATTERY POWER SUPPLY	B+	B+

The following symbols are used to represent values for Control Module Pin Out data:

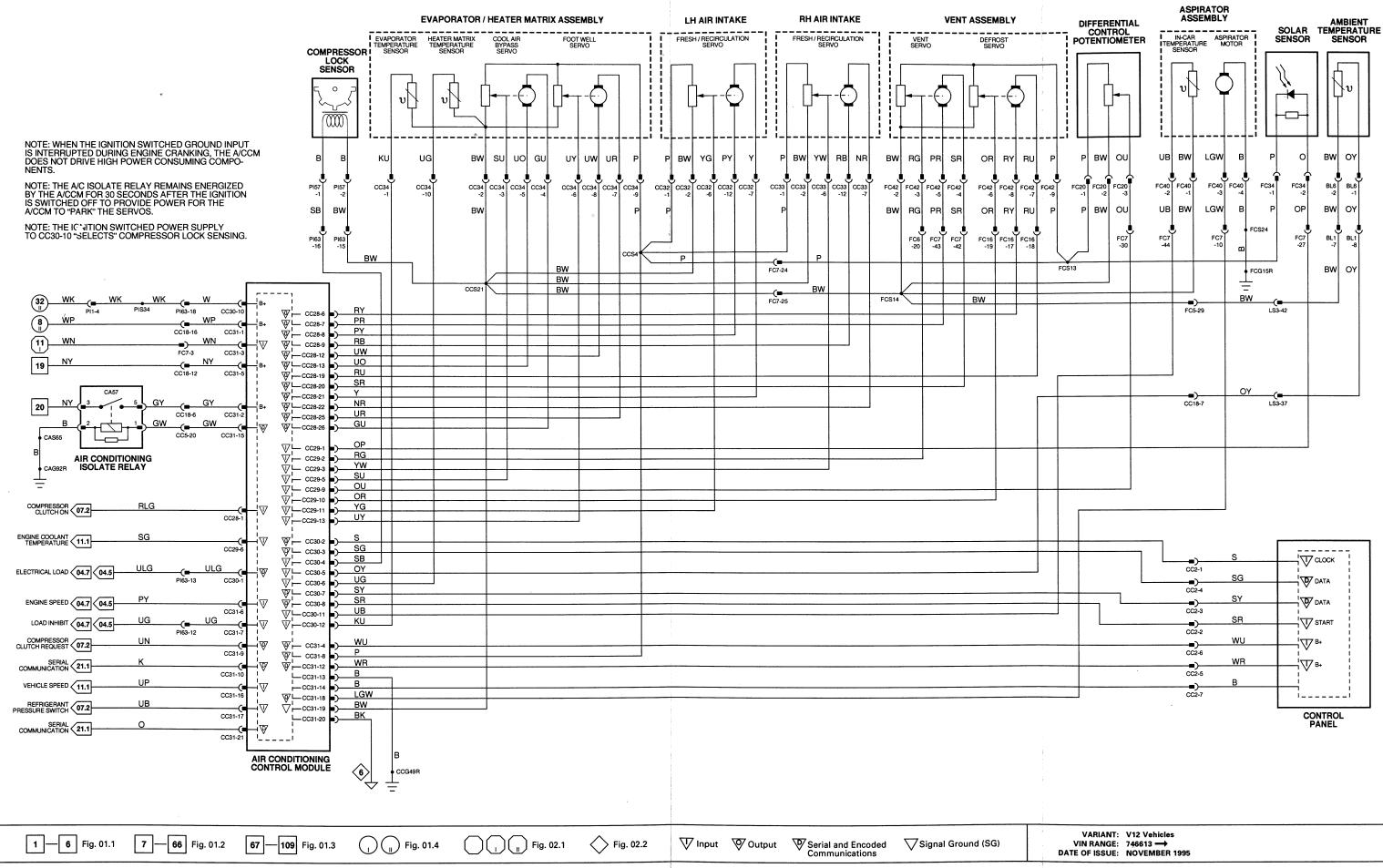
I	Input	B+	Battery voltage
0	Output	V	Voltage (DC)
SG	Signal Ground	Hz	Frequency
D	Serial and encoded communications	KH	Frequency x 1000
		° MS	Milliseconds

3

MV Millivolts

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.

V12 Climate Control System, Part 1



VARIANT:	V12 Vehicles
VIN RANGE:	746613 →
DATE OF ISSUE:	NOVEMBER 1995

Component

AIR CONDITIONING CONTROL MODULE

BLOWER MOTOR - LH **BLOWER MOTOR - RH** HEATED BACKLIGHT

HEATER PUMP HEATER VALVE MIRROR - DRIVER MIRROR - PASSENGER WINDSHIELD HEATER - LH WINDSHIELD HEATER - RH

RELAYS

Relay

-	
BLOWER MOTOR RELAY – LH	
BLOWER MOTOR RELAY – RH	
DOOR MIRROR HEATER RELAY	
HEATED BACKLIGHT RELAY	
HEATER PUMP RELAY	
HIGH SPEED RELAY - LH	
HIGH SPEED RELAY – RH	
WINDSHIELD HEATER RELAY – LH	
WINDSHIELD HEATER RELAY – RH	

PD10 / 12-WAY MULTILOCK 040 / BLACK SH4 / 2-WAY SERIES 187C / SLATE SH5 / 2-WAY SERIES 187C / SLATE Color / Stripe BLACK / BLUE BLACK / BLUE

DD10 / 12-WAY MULTILOCK 040 / BLACK

Connector / Type / Color

CC28 / 26-WAY MULTILOCK 47 / SLATE CC29 / 16-WAY MULTILOCK 47 / SLATE CC30 / 12-WAY MULTILOCK 47 / SLATE

CC31 / 22-WAY MULTILOCK 47 / SLATE

CA17 / LUCAR / BLACK CA42 / LUCAR / BLACK

VIOLET

BLACK

BLACK / VIOLET

BLACK / BLUE

BLACK / BLUE

LIGHT BLUE

LIGHT BLUE

CC32 (FLY LEAD) / 15-WAY SUMITOMO 090 / GREEN

CC33 (FLY LEAD) / 15-WAY SUMITOMO 090 / GREEN

LS7 (FLY LEAD) / 2-WAY ECONOSEAL III LC / BLACK

LS15 (FLY LEAD) / 2-WAY ECONOSEAL III LC / WHITE

Location / Access

A/C UNIT, RH SIDE / RH UNDERSCUTTLE

LH UNDERSCUTTLE RH UNDERSCUTTLE BACKLIGHT / LH 'E' POST TRIM BACKLIGHT / RH 'E' POST TRIM ENGINE BAY, LH REAR ENGINE BAY, LH REAR MIRROR ASSEMBLY MIRROR ASSEMBLY WINDSHIELD / WINDSHIELD BASE, ENGINE BAY WINDSHIELD / WINDSHIELD BASE, ENGINE BAY R.

Connector / Color CA59 / BLUE CA58 / BLUE CA54 / BLUE BT42 / YELLOW LS46 / BLACK CA59 / BLUE CA58 / BLUE SH2 / BLACK

SH3 / BLACK

Location / Access

RH HEELBOARD RH HEELBOARD RH HEELBOARD TRUNK ELECTRICAL CARRIER LH ENGINE BAY RELAYS RH HEELBOARD RH HEELBOARD LH 'A' POST LH 'A' POST

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA10	8-WAY MULTILOCK 070 / WHITE	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC4	14-WAY MULTILOCK 070 / WHITE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
SH1	2-WAY AMP 87C SERIES / SLATE	LH 'A' POST / 'A' POST PANEL
SH8	4-WAY MULTILOCK 070 / WHITE	LH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
CAG30L	LH 'A' POST GROUND SCREW
CAG31L	PARCEL SHELF GROUND SCREW
CAG33L	RH HEELBOARD GROUND SCREW
CAG92L	RH HEELBOARD GROUND SCREW
CAG96L	LH HEELBOARD GROUND SCREW
CAG96R	LH HEELBOARD GROUND SCREW
CCG43L	RH CONSOLE GROUND STUD
CCG43R	RH CONSOLE GROUND STUD
CCG49L	RH CONSOLE GROUND STUD
CCG49R	RH CONSOLE GROUND STUD
LSG19L	LH BULKHEAD GROUND STUD
SHG6L	LH BULKHEAD GROUND STUD
SHG6R	LH BULKHEAD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

AIR CONDITIONING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	CC28-2	HEATER VALVE SUPPLY	B+	GROUND
0	CC28-3	R/H BLOWER MOTOR RELAY	GROUND	B+
0	CC28-4	LH AND RH WINDSHIELD HEATER RELAYS	GROUND	B+
0	CC28-5	DOOR MIRROR HEATER RELAY	GROUND	B+
0	CC28-14	RH HIGH SPEED BLOWER RELAY	GROUND	B+
0	CC28-15	LH HIGH SPEED BLOWER RELAY	GROUND	B+
0	CC28-16	LH BLOWER MOTOR RELAY	GROUND	B+
0	CC28-17	HEATER PUMP RELAY	GROUND	B+
0	CC28-18	HEATED BACKLIGHT RELAY	GROUND	B+
ı.	CC29-7	RH BLOWER SPEED FEEDBACK	7.6 V = LOW SPEED; 0.83 V = HIGH SPEED	
0	CC29-8	RH BLOWER SPEED CONTROL DRIVE SIGNAL	1.3 V = LOW SPEED; 0V = HIGH SPEED	
I.	CC29-15	LH BLOWER SPEED FEEDBACK	7.6 V = LOW SPEED; 0.83 V = HIGH SPEED	
0	CC29-16	LH BLOWER SPEED CONTROL DRIVE SIGNAL	1.3 V = LOW SPEED; 0 V = HIGH SPEED	
ı.	CC31-3	IGNITION SWITCHED GROUND	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

à

I Input

- O Output
- SG Signal Ground

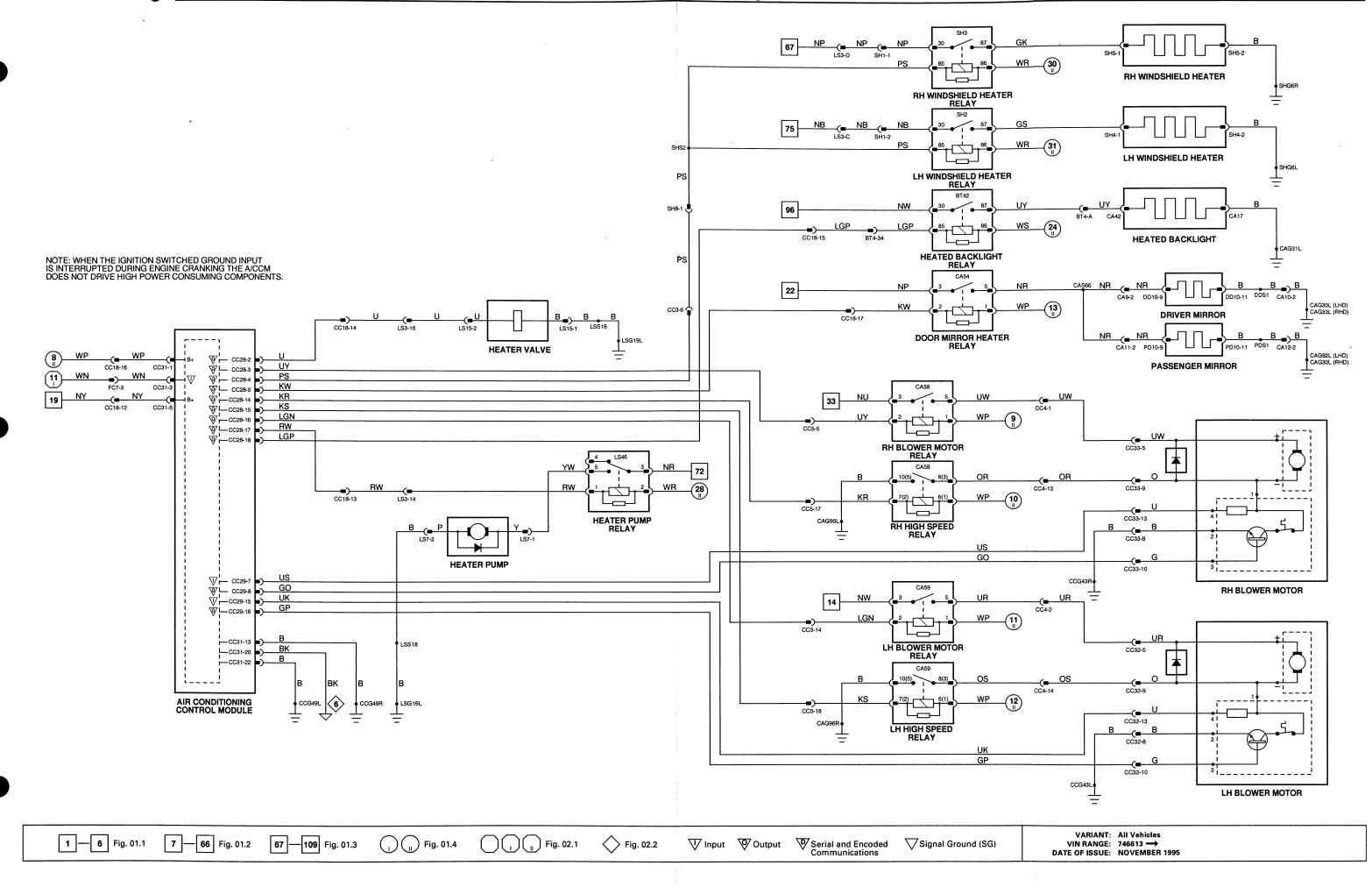
D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

۰.

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.





Component

VARIABLE POWER STEERING CONTROL MODULE VARIABLE STEERING CONVERTER

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

LL2 3-WAY ECONOSEAL III LC / BLACK LS3 THROUGH-PANEL (48 MICRO / 6) / BLACK PI59 13-WAY ECONOSEAL III LC / BLACK

Location / Access

Connector / Type / Color

LL3 / 2-WAY JUNIOR TIMER / BLACK

CA32 / 9-WAY RISTS / BLACK

LH FRONT WHEEL ARCH LINER LH 'A' POST / 'A' POST PANEL FORWARD OF LH ENGINE BAY FUSE BOX REARWARD OF RH HEADLAMP Location / Access LH 'A' POST / 'A' POST TRIM STEERING RACK, PINION HOUSING

 Pi59
 13-WAY ECONOSEAL III LC / BLACK

 Pi61
 13-WAY ECONOSEAL III LC / BLACK

GROUNDS

Ground CAG30R

Location / Type

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)



REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

ß

VARIABLE STEERING CONTROL MODULE

\bigtriangledown Pin Description

0	CA32-2	TRANSDUCER NEGATIVE
1	CA32-4	VEHICLE SPEED

0 CA32-5 TRANSDUCER POSITIVE

Active

2 V @ IDLE, DECREASING WITH VEHICLE SPEED B+ @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz 9 V @ IDLE, INCREASING WITH VEHICLE SPEED Inactive

The following symbols are used to represent values for Control Module Pin Out data:

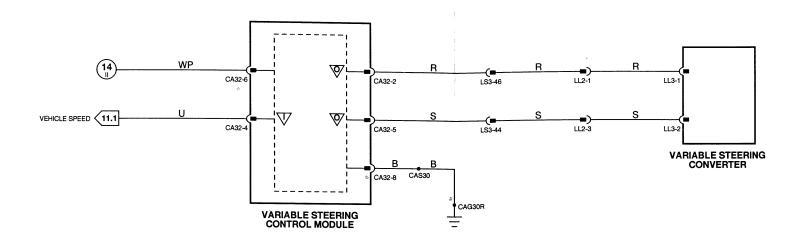
8

l Input

- O Output SG Signal Ground
- D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.



LHD

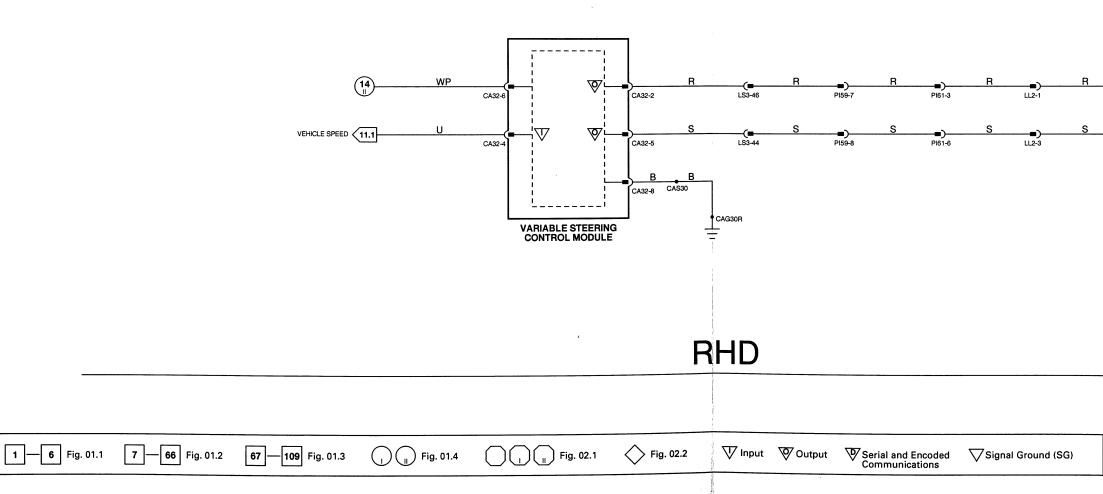
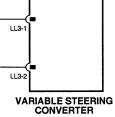


Fig. 13.1



VARIANT:	All Vehicles
VIN RANGE:	746613 🛶
DATE OF ISSUE:	NOVEMBER 1995

Component

AUTO TILT SWITCH (COLUMN SWITCHGEAR) COLUMN / MIRROR MOVEMENT CONTROL MODULE

COLUMN JOYSTICK (COLUMN SWITCHGEAR) DOOR MIRROR MOTORS - DRIVER DOOR MIRROR MOTORS - PASSENGER DOOR SWITCH - DRIVER DOOR SWITCH PACK - DRIVER

HAND BRAKE SWITCH **IGNITION SWITCH** LINEAR GEAR POSITION SWITCHES NOT IN-PARK MICROSWITCH REVERSE SWITCH (AJ16 MANUAL) ROTARY SWITCH

STEERING COLUMN MOTORS

Connector

CA8

CA9

CA10

CA11

CA12

CC3

FC4

FC5

FC6 FC7

FC16

HARNESS-TO-HARNESS CONNECTORS

Type / Color

20-WAY MULTILOCK 040 / GREEN

20-WAY MULTILOCK 040 / BLACK

8-WAY MULTILOCK 070 / WHITE

20-WAY MULTILOCK 040 / BLACK

15-WAY MULTILOCK 070 / WHITE

20-WAY MULTILOCK 040 / BLACK 20-WAY MULTILOCK 040 / BLUE

20-WAY MULTILOCK 040 / BLACK

Location / Type

THROUGH-PANEL (48 MICRO / 6) / BLACK

THROUGH-PANEL (48 MICRO / 6) / BLACK

THROUGH-PANEL (48 MICRO / 6) / BLACK

Location / Access

Connector / Type / Color

FC45 / 26-WAY MULTILOCK 47 / SLATE FC46 / 16-WAY MULTILOCK 47 / SLATE FC47 / 12-WAY MULTILOCK 47 / SLATE

DD3 / 13-WAY ECONOSEAL III LC / BLACK

DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE

CC52 / 2-WAY MULTILOCK 040 / BLACK

CC21 / 20-WAY MULTH OCK 040 / BLACK

CC45 / 2-WAY SUMITOMO / WHITE

SC5 (FLY LEAD) / 8-WAY GROTE AND HARTMAN / BLACK

SC5 (FLY LEAD) / 8-WAY GROTE AND HARTMAN / BLACK

DD10 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

PD10 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

GB1 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

GB2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK FC49 (FLY LEAD) / 6-WAY MULTILOCK 070 / WHITE FC50 (FLY LEAD) / 8-WAY MULTILOCK 070 / YELLOW

> DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S UNDERSCUTTLE / ECM CENTER CONSOLE / CENTER CONSOLE GLOVE BOX DRIVER'S UNDERSCUTTLE LH FASCIA END PANEL / OUTER AIR VENT RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE

Location / Access

STEERING COLUMN / COVER

STEERING COLUMN / COVER

RH UNDERSCUTTLE

MIRROR ASSEMBLY

MIRROR ASSEMBLY

ARM REST / TOP ROLL

CENTER CONSOLE, LH SIDE

STEERING COLUMN / COVER

'J' GATE / CENTER CONSOLE

'J' GATE / CENTER CONSOLE

'J' GATE / CENTER CONSOLE

TRANSMISSION TUNNEL / CENTER CONSOLE

STEERING COLUMN / DRIVER'S UNDERSCUTTLE

DOOR CASING

GROUNDS Ground

CAG30L	LH 'A' POST GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
CCG51R	CENTER CONSOLE GROUND STUD
CCG8L	CENTER CONSOLE GROUND STUD
FCG15R	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

\$

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

COLUMN / MIRROR MOVEMENT CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC45-1	PASSENGER MIRROR UP / DOWN MOTOR	B+ (UP)	GROUND
0	FC45-2	STEERING COLUMN TILT MOTOR	B+ (UP)	GROUND
I.	FC45-4	PASSENGER MIRROR RIGHT / LEFT POTENTIOMETER FEEDBACK	0.5 V (LEFT), 4 V (RIGHT)	
I	FC45-5	STEERING COLUMN MOVEMENT JOYSTICK	6.8 V (OUT), 8.5 V (IN) 10.1 V (UP), 12.1 V (DOWN)	GROUND GROUND
1	FC45-6	PASSENGER MIRROR UP / DOWN REQUEST	B+ (UP), GROUND (DOWN)	OPEN CIRCUIT
1	FC45-7	DRIVER MIRROR UP / DOWN REQUEST	B+ (UP), GROUND (DOWN)	OPEN CIRCUIT
1	FC45-8	PASSENGER MIRROR RIGHT / LEFT REQUEST	B+ (RIGHT), GROUND (LEFT)	OPEN CIRCUIT
1	FC45-9	DRIVER MIRROR RIGHT / LEFT REQUEST	B+ (RIGHT), GROUND (LEFT)	OPEN CIRCUIT
1	FC45-10	MIRROR SELECT	SAME AS DIRECTIONAL REQUEST IN USE	OPEN CIRCUIT
0	FC45-11	DRIVER MIRROR UP / DOWN MOTOR	B+ (UP)	
0	FC45-12	STEERING COLUMN REACH MOTOR	B+ (IN)	GROUND
о	FC45-13	DRIVER MIRROR RIGHT / LEFT MOTOR	B+ (RIGHT)	GROUND
о	FC45-14	STEERING COLUMN TILT MOTOR	B+ (DOWN)	GROUND
о	FC45-15	STEERING COLUMN REACH MOTOR	B+ (OUT)	GROUND
SG	FC45-16	COLUMN AND MIRROR POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND
I.	FC45-17	MEMORY 3 SWITCH REQUEST	В+	GROUND
I.	FC45-18	MEMORY 2 SWITCH REQUEST	В+	GROUND
1	FC45-19	MEMORY 1 SWITCH REQUEST	В+	GROUND
1	FC45-20	MEMORY SET SWITCH REQUEST	В+	GROUND
Т	FC45-22	KEY IN IGNITION SWITCH SIGNAL	GROUND	B+
I.	FC45-23	IGNITION SWITCHED GROUND	GROUND	B+
0	FC45-24	COLUMN AND MIRROR POTENTIOMETER COMMON REFERENCE VOLTAGE	5 V	5 V
0	FC45-25	PASSENGER MIRROR RIGHT / LEFT MOTOR	B+ (RIGHT)	GROUND
0	FC45-26	DRIVER AND PASSENGER MIRROR MOTORS COMMON	B+ (LEFT), GROUND (RIGHT)	GROUND
Т	FC46-1	DRIVER MIRROR RIGHT / LEFT POTENTIOMETER FEEDBACK	0.5 V (LEFT), 4 V (RIGHT)	
I.	FC46-2	PASSENGER MIRROR UP / DOWN POTENTIOMETER FEEDBACK	0.5 V (DOWN), 4 V (UP)	
1	FC46-3	DRIVER MIRROR UP / DOWN POTENTIOMETER FEEDBACK	0.5 V (DOWN), 4 V (UP)	
1	FC46-4	STEERING COLUMN TILT POTENTIOMETER FEEDBACK	0.5 V (DOWN), 4 V (UP)	
1	FC46-5	STEERING COLUMN REACH POTENTIOMETER FEEDBACK	0.5 V (OUT), 4 V (IN)	
I.	FC46-6	IGNITION VOLTAGE	B+	GROUND
1	FC46-7	AUTO / MANUAL TILT SELECTION SWITCH	GROUND = AUTO	B+ = OFF
1	FC46-8	NOT IN PARK	GROUND	B+
I	FC46-9	HANDBRAKE ON	GROUND	B+
1	FC46-10	DRIVER DOOR AJAR	GROUND	7.9 V
I	FC46-11	REMOTE SEAT / MIRROR / COLUMN REQUEST	GROUND PULSE	B+
D	FC47-4	SERIAL COMMUNICATION OUTPUT		

D FC47-5 SERIAL COMMUNICATION INPUT

FC47-5 SERIAL COMMUNICATION INPUT

The following symbols are used to represent values for Control Module Pin Out data:

Ň

l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Column and Mirror Movement – Memory, LHD

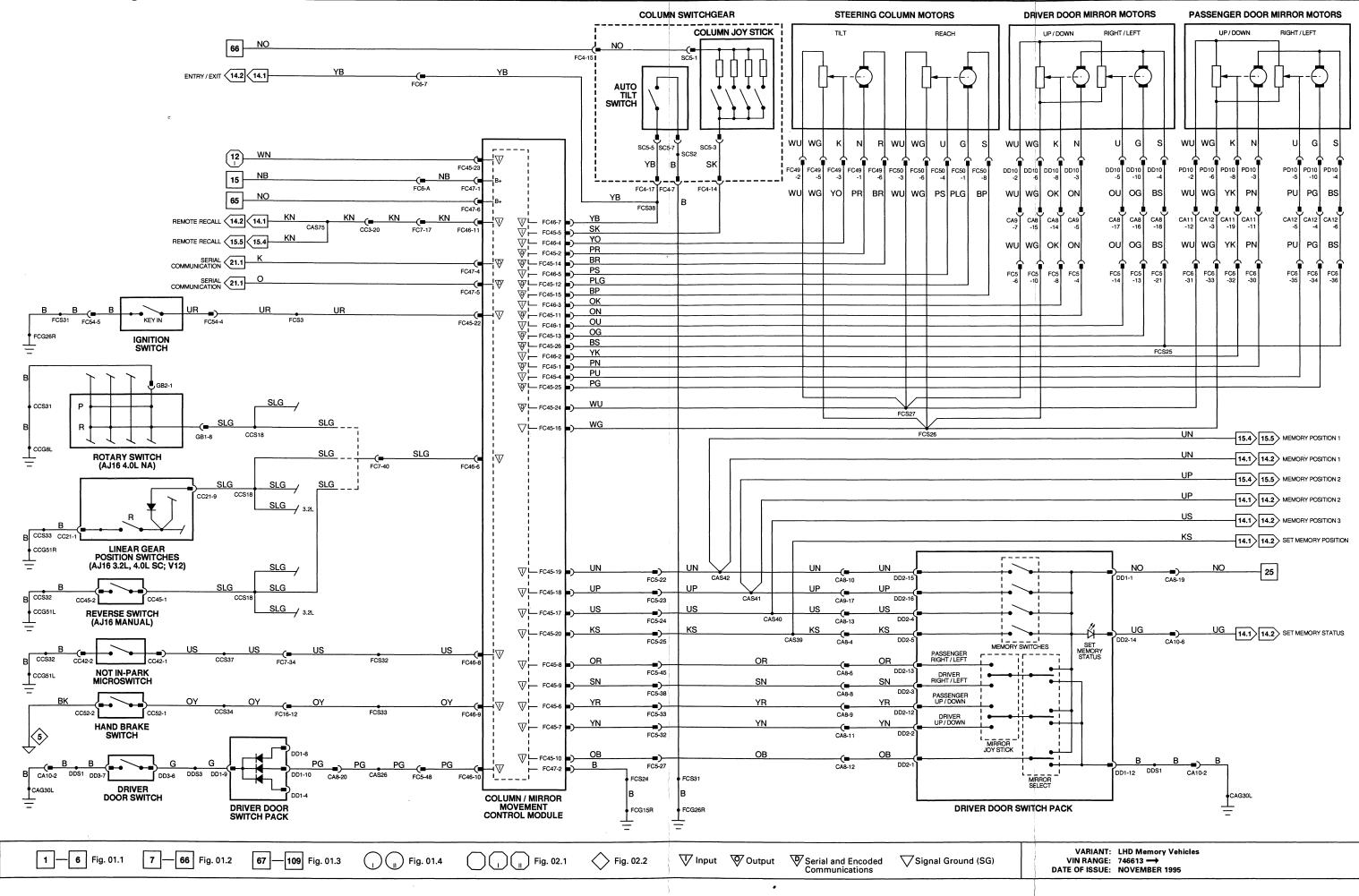


Fig. 13.2

Component

AUTO TILT SWITCH (COLUMN SWITCHGEAR) COLUMN / MIRROR MOVEMENT CONTROL MODULE

COLUMN JOYSTICK (COLUMN SWITCHGEAR) DOOR MIRROR MOTORS - DRIVER DOOR MIRROR MOTORS - PASSENGER DOOR SWITCH - DRIVER DOOR SWITCH PACK - DRIVER

HAND BRAKE SWITCH IGNITION SWITCH LINEAR GEAR POSITION SWITCHES NOT IN-PARK MICROSWITCH REVERSE SWITCH (AJ16 MANUAL) ROTARY SWITCH

STEERING COLUMN MOTORS

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color
CA8	20-WAY MULTILOCK 040 / GREEN
CA9	20-WAY MULTILOCK 040 / BLACK
CA10	8-WAY MULTILOCK 070 / WHITE
CA11	20-WAY MULTILOCK 040 / BLACK
CA12	15-WAY MULTILOCK 070 / WHITE
CC3	20-WAY MULTILOCK 040 / BLACK
FC4	20-WAY MULTILOCK 040 / BLUE
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC16	20-WAY MULTILOCK 040 / BLACK

Location / Access

Connector / Type / Color

FC45 / 26-WAY MULTILOCK 47 / SLATE FC46 / 16-WAY MULTILOCK 47 / SLATE FC47 / 12-WAY MULTILOCK 47 / SLATE

DD3 / 13-WAY ECONOSEAL III LC / BLACK

DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE

CC52 / 2-WAY MULTILOCK 040 / BLACK

CC21 / 20-WAY MULTILOCK 040 / BLACK

CC45 / 2-WAY SUMITOMO / WHITE

SC5 (FLY LEAD) / 8-WAY GROTE AND HARTMAN / BLACK

SC5 (FLY LEAD) / 8-WAY GROTE AND HARTMAN / BLACK

DD10 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

PD10 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

GB1 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE GB2 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

FC49 (FLY LEAD) / 6-WAY MULTILOCK 070 / WHITE

FC50 (FLY LEAD) / 8-WAY MULTILOCK 070 / YELLOW

DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S UNDERSCUTTLE / ECM CENTER CONSOLE / CENTER CONSOLE GLOVE BOX DRIVER'S UNDERSCUTTLE LH FASCIA END PANEL / OUTER AIR VENT RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE

Location / Access

STEERING COLUMN / COVER RH UNDERSCUTTLE

STEERING COLUMN / COVER MIRROR ASSEMBLY MIRROR ASSEMBLY DOOR CASING ARM REST / TOP ROLL

CENTER CONSOLE, LH SIDE STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE 'J' GATE / CENTER CONSOLE TRANSMISSION TUNNEL / CENTER CONSOLE 'J' GATE / CENTER CONSOLE

STEERING COLUMN / DRIVER'S UNDERSCUTTLE

GROUNDS Ground

CAG33L

CCG511

Location / Type RH HEELBOARD GROUND SCREW CENTER CONSOLE GROUND STUD CENTER CONSOLE GROUND STUD

CCG51R CCG8L CENTER CONSOLE GROUND STUD FCG15R LH CONSOLE GROUND STUD FCG26R LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

đ

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

COLUMN / MIRROR MOVEMENT CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC45-1	PASSENGER MIRROR UP / DOWN MOTOR	B+ (UP)	GROUND
о	FC45-2	STEERING COLUMN TILT MOTOR	B+ (UP)	GROUND
1	FC45-4	PASSENGER MIRROR RIGHT / LEFT POTENTIOMETER FEEDBACK	0.5 V (LEFT), 4 V (RIGHT)	
T	FC45-5	STEERING COLUMN MOVEMENT JOYSTICK	6.8 V (OUT), 8.5 V (IN) 10.1 V (UP), 12.1 V (DOWN)	GROUND GROUND
1	FC45-6	PASSENGER MIRROR UP / DOWN REQUEST	B+ (UP), GROUND (DOWN)	OPEN CIRCUIT
E.	FC45-7	DRIVER MIRROR UP / DOWN REQUEST	B+ (UP), GROUND (DOWN)	OPEN CIRCUIT
1	FC45-8	PASSENGER MIRROR RIGHT / LEFT REQUEST	B+ (RIGHT), GROUND (LEFT)	OPEN CIRCUIT
1	FC45-9	DRIVER MIRROR RIGHT / LEFT REQUEST	B+ (RIGHT), GROUND (LEFT)	OPEN CIRCUIT
1	FC45-10	MIRROR SELECT	SAME AS DIRECTIONAL REQUEST IN USE	OPEN CIRCUIT
о	FC45-11	DRIVER MIRROR UP / DOWN MOTOR	B+ (UP)	
0	FC45-12	STEERING COLUMN REACH MOTOR	B+ (IN)	GROUND
0	FC45-13	DRIVER MIRROR RIGHT / LEFT MOTOR	B+ (RIGHT)	GROUND
0	FC45-14	STEERING COLUMN TILT MOTOR	B+ (DOWN)	GROUND
ο	FC45-15	STEERING COLUMN REACH MOTOR	B+ (OUT)	GROUND
SG	FC45-16	COLUMN AND MIRROR POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND
I	FC45-17	MEMORY 3 SWITCH REQUEST	B+	GROUND
1	FC45-18	MEMORY 2 SWITCH REQUEST	B+	GROUND
1	FC45-19	MEMORY 1 SWITCH REQUEST	B+	GROUND
ł	FC45-20	MEMORY SET SWITCH REQUEST	В+	GROUND
I.	FC45-22	KEY IN IGNITION SWITCH SIGNAL	GROUND	B+
i i	FC45-23	IGNITION SWITCHED GROUND	GROUND	B+
0	FC45-24	COLUMN AND MIRROR POTENTIOMETER COMMON REFERENCE VOLTAGE	5 V	5 V
0	FC45-25	PASSENGER MIRROR RIGHT / LEFT MOTOR	B+ (RIGHT)	GROUND
0	FC45-26	DRIVER AND PASSENGER MIRROR MOTORS COMMON	B+ (LEFT), GROUND (RIGHT)	GROUND
1	FC46-1	DRIVER MIRROR RIGHT / LEFT POTENTIOMETER FEEDBACK	0.5 V (LEFT), 4 V (RIGHT)	
1	FC46-2	PASSENGER MIRROR UP / DOWN POTENTIOMETER FEEDBACK	0.5 V (DOWN), 4 V (UP)	
1	FC46-3	DRIVER MIRROR UP / DOWN POTENTIOMETER FEEDBACK	0.5 V (DOWN), 4 V (UP)	
1	FC46-4	STEERING COLUMN TILT POTENTIOMETER FEEDBACK	0.5 V (DOWN), 4 V (UP)	
1	FC46-5	STEERING COLUMN REACH POTENTIOMETER FEEDBACK	0.5 V (OUT), 4 V (IN)	
1	FC46-6	IGNITION VOLTAGE	B+	GROUND
1	FC46-7	AUTO / MANUAL TILT SELECTION SWITCH	GROUND = AUTO	B+ = OFF
1	FC46-8	NOT IN PARK	GROUND	B+
- E	FC46-9	HANDBRAKE ON	GROUND	B+
1	FC46-10	DRIVER DOOR AJAR	GROUND	7.9 V
I	FC46-11	REMOTE SEAT / MIRROR / COLUMN REQUEST	GROUND PULSE	B+
D	FC47-4	SERIAL COMMUNICATION OUTPUT		

FC47-4 SERIAL COMMUNICATION OUTPUT

SERIAL COMMUNICATION INPUT FC47-5 D

The following symbols are used to represent values for Control Module Pin Out data:

-9

1 Input

- 0 Output
- SG Signal Ground
- Serial and encoded communications D
- **B+ Battery voltage**
- V Voltage (DC)
- MS Milliseconds
- **MV** Millivolts

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. "Active" means a load is applied or a switch is ON; "Inactive" means a load is not applied or a switch is OFF.

Hz Frequency KHz Frequency x 1000

Column and Mirror Movement – Memory, RHD

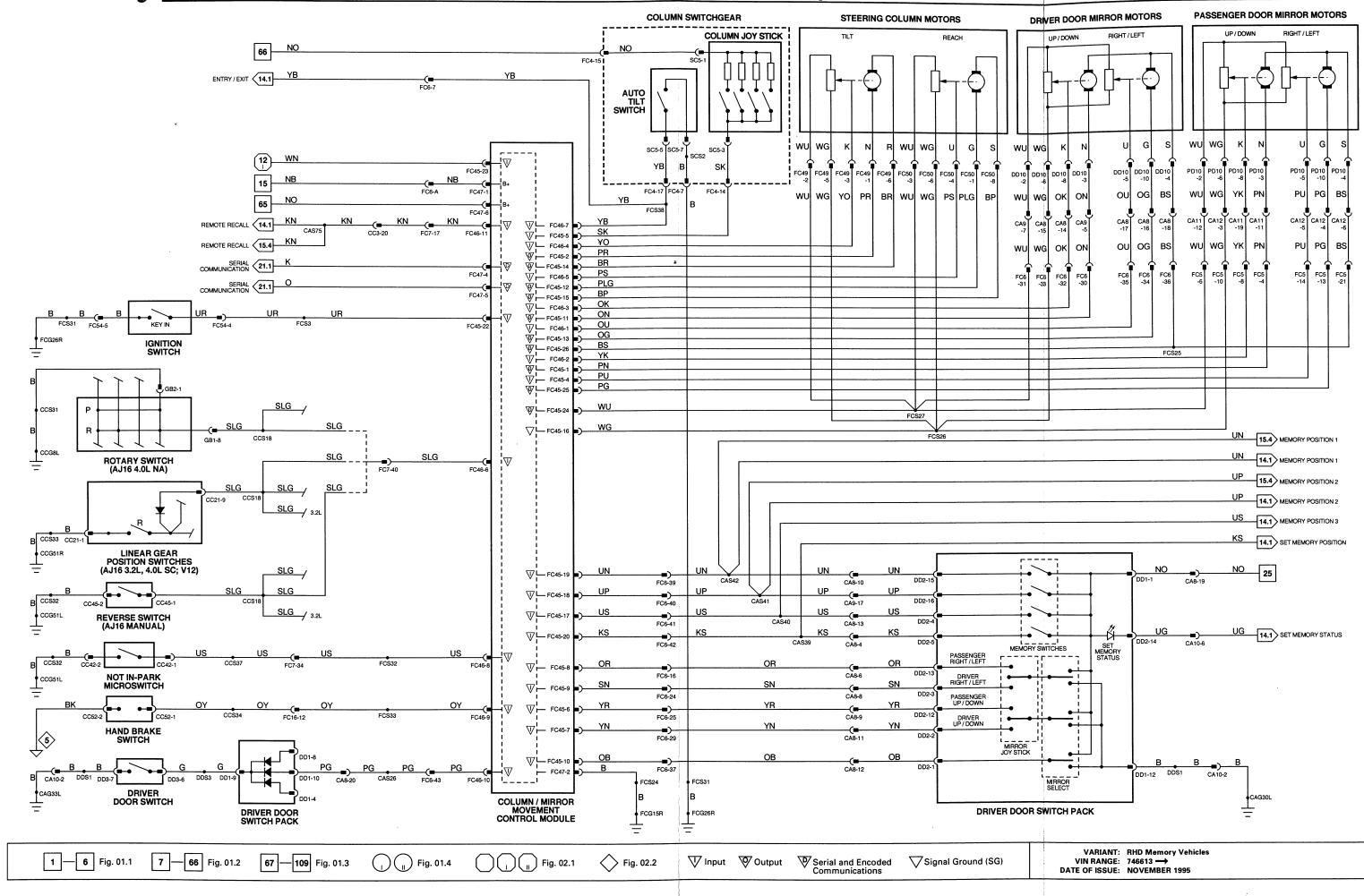


Fig. 13.3

Component

DOOR MIRROR MOTORS - DRIVER DOOR MIRROR MOTORS - PASSENGER_ DOOR SWITCH PACK - DRIVER

Connector / Type / Color

DD10 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK PD10 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE Location / Access MIRROR ASSEMBLY MIRROR ASSEMBLY ARM REST / TOP ROLL

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST / 'A' POST TRIM
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA10	8-WAY MULTILOCK 070 / WHITE	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT

GROUNDS

Ground	Location / Type
CAG30L	LH 'A' POST GROUND SCREW

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

R



23

CAG30L

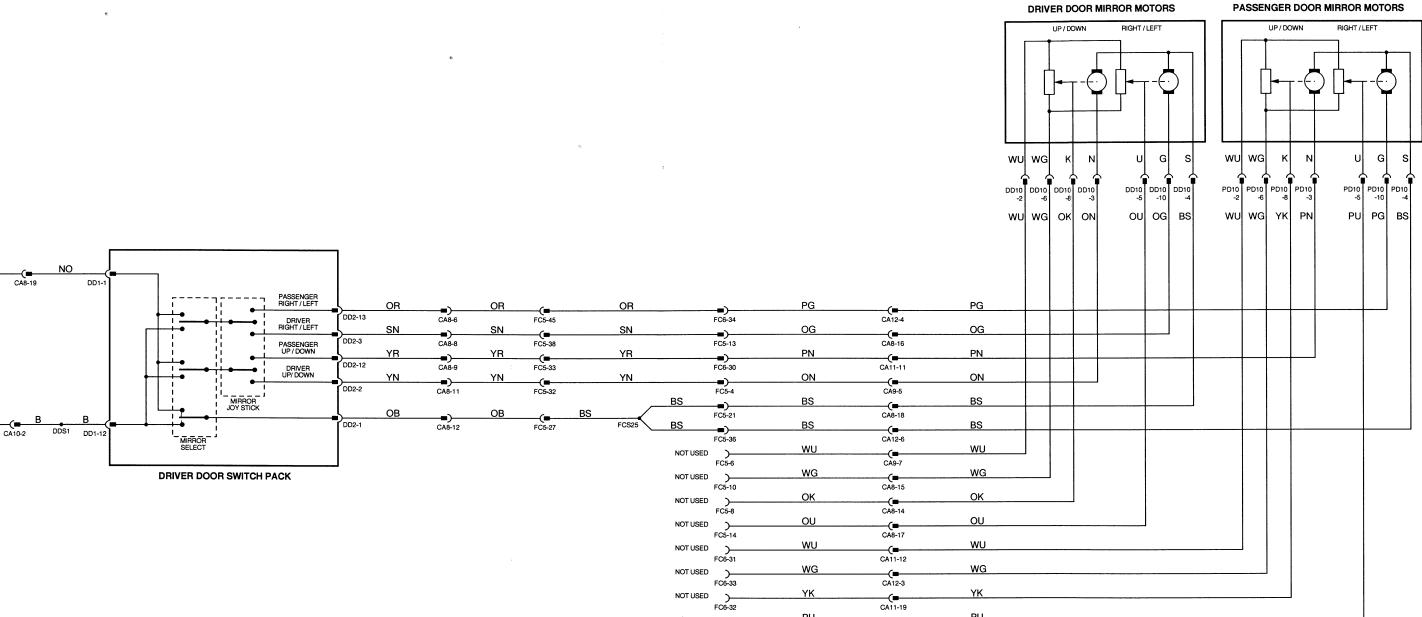
Ŧ

NO





.



	FC5-14		CA8-17		
NOT USED	`	WU	(=	WU	
	FC6-31		CA11-12		
NOT USED	2	WG		WG	
	FC6-33		CA12-3		
NOT USED	``	YK	(=	YK	
	FC6-32		CA11-19		
NOT USED	`	PU	(=	PU	
	FC6-35		CA12-5		

1 - 6 Fig. 01.1 7 - 66 Fig. 01.2 67 - 109 Fig. 01.3 1 Fig. 01.4 1 Fig. 01.4 Fig. 02.1 Fig. 02.2

VARIANT: LHD Manual Column Vehicles

Component

DOOR MIRROR MOTORS – DRIVER DOOR MIRROR MOTORS – PASSENGER DOOR SWITCH PACK – DRIVER

Connector / Type / Color

DD10 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK PD10 (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE

> Location / Access DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S UNDERSCUTTLE / ECM LH FASCIA END PANEL / OUTER AIR VENT

> **RH FASCIA END PANEL / OUTER AIR VENT**

Location / Access MIRROR ASSEMBLY MIRROR ASSEMBLY ARM REST / TOP ROLL

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

CA8	20-WAY MULTILOCK 040 / GREEN
CA9	20-WAY MULTILOCK 040 / BLACK
CA10	8-WAY MULTILOCK 070 / WHITE
CA11	20-WAY MULTILOCK 040 / BLACK
CA12	15-WAY MULTILOCK 070 / WHITE
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK

GROUNDS

Ground	Location / Type
CAG30L	LH 'A' POST GROUND SCREW

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

ŝ

NO

-(-CA8-19

CA10-2

23

CAG30L

<u>_</u>

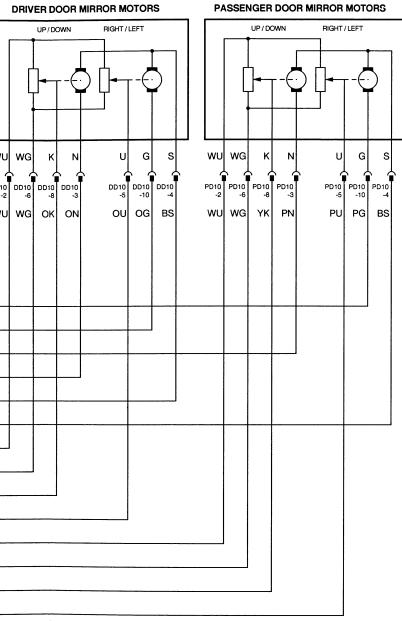
NO

DDS1 DD1-1

MIRROR SELECT

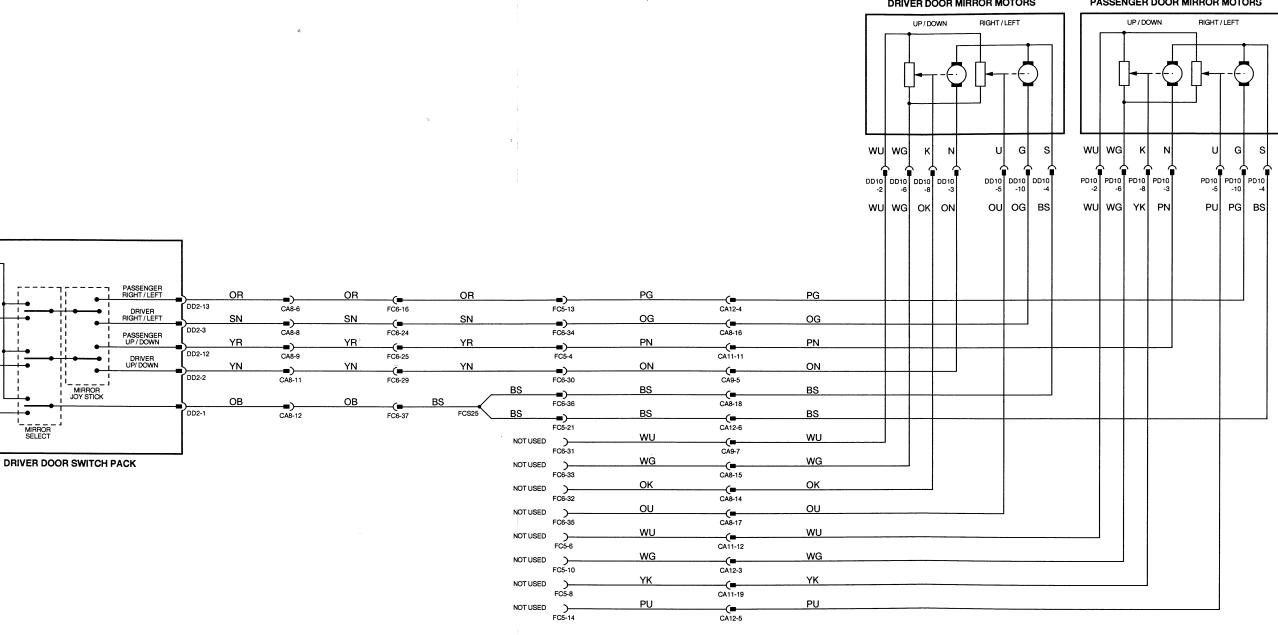
DD1-











VARIANT: RHD Manual Column Vehicles

Component

BODY PROCESSOR MODULE

BRAKE SWITCH CENTER CONSOLE SWITCH PACK DOOR SWITCH – DRIVER DOOR SWITCH PACK – DRIVER

SEAT CONTROL MODULE – DRIVER (ROW, MEMORY SEAT VEHICLES)

SEAT CUSHION – DRIVER SEAT LUMBAR PUMP – DRIVER SEAT MOTORS – DRIVER

SEAT SWITCH PACK - DRIVER SQUAB - DRIVER HAND BRAKE SWITCH IGNITION SWITCH NOT IN-PARK MICROSWITCH

HARNESS-TO-HARNESS CONNECTORS

Type / Color

20-WAY MULTILOCK 040 / GREEN

20-WAY MULTH OCK 040 / BLACK

8-WAY MULTILOCK 070 / WHITE

20-WAY MULTILOCK 040 / BLACK

6-WAY MULTILOCK 070 / WHITE

20-WAY MULTILOCK 040 / BLACK

14-WAY MULTILOCK 070 / WHITE

20-WAY MULTILOCK 040 / GREEN

THROUGH-PANEL (48 MICRO / 6) / BLACK

THROUGH-PANEL (48 MICRO / 6) / BLACK

THROUGH-PANEL (48 MICRO / 6) / BLACK

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CA72 / 4-WAY MULTILOCK 070 / WHITE CC1 / 16-WAY MULTILOCK 040 / BLACK DD3 / 13-WAY ECONOSEAL III LC / BLACK DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE PL1 / 22-WAY MULTILOCK 47 / BLUE PL2 / 12-WAY MULTILOCK 47 / BLUE SM1-D / 12-WAY MULTILOCK 47 / WHITE SM6-D / 22-WAY MULTILOCK 47 / WHITE SM7-D / 3-WAY MULTILOCK 070 / YELLOW SM10-D / 3-WAY MULTILOCK 070 / YELLOW SM2-D / 6-WAY MULTILOCK 070 / WHITE SM3-D / 6-WAY MULTILOCK 070 / YELLOW SM4-D / 6-WAY MULTILOCK 070 / SLATE SM11-D / 6-WAY MULTILOCK 070 / WHITE SM13-D / 6-WAY MULTILOCK 070 / WHITE SM5-D / 16-WAY MULTILOCK 040 / BLACK SM9-D / 3-WAY MULTILOCK 070 / SLATE CC52 / 2-WAY MULTILOCK 040 / BLACK FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

Location / Access

PASSENGER'S UNDERSCUTTLE

DRIVER'S UNDERSCUTTLE CENTER CONSOLE DOOR CASING ARM REST / TOP ROLL

DRIVER'S SEAT

DRIVER'S SEAT / UNDER DRIVER'S SEAT / SQUAB DRIVER'S SEAT DRIVER'S SEAT DRIVER'S SEAT CENTER CONSOLE, LH SIDE STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE

DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S SEAT / UNDER DRIVER'S SEAT / UNDER CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX LH FASCIA END PANEL / OUTER AIR VENT RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE

Location / Access

GROUNDS

Connector

CA8

CA9

CA10

CA23

CA24

CC3

CC4

CC5

FC5

FC6

FC7

Ground Location / Type CAG30L LH 'A' POST GROUND SCREW CAG30E 1 H 'A' POST GROUND SCREW CAG33L RH HEELBOARD GROUND SCREW CAG33B BH HEELBOARD GROUND SCREW CCG51L CENTER CONSOLE GROUND STUD ECG15I LH CONSOLE GROUND STUD FCG26R LH CONSOLE GROUND STUD PLG3I TH SEAT GROUND SCREW PLG3R LH SEAT GROUND SCREW

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

DRIVER SEAT CONTROL MODULE (ROW, MEMORY SEAT VEHICLES)

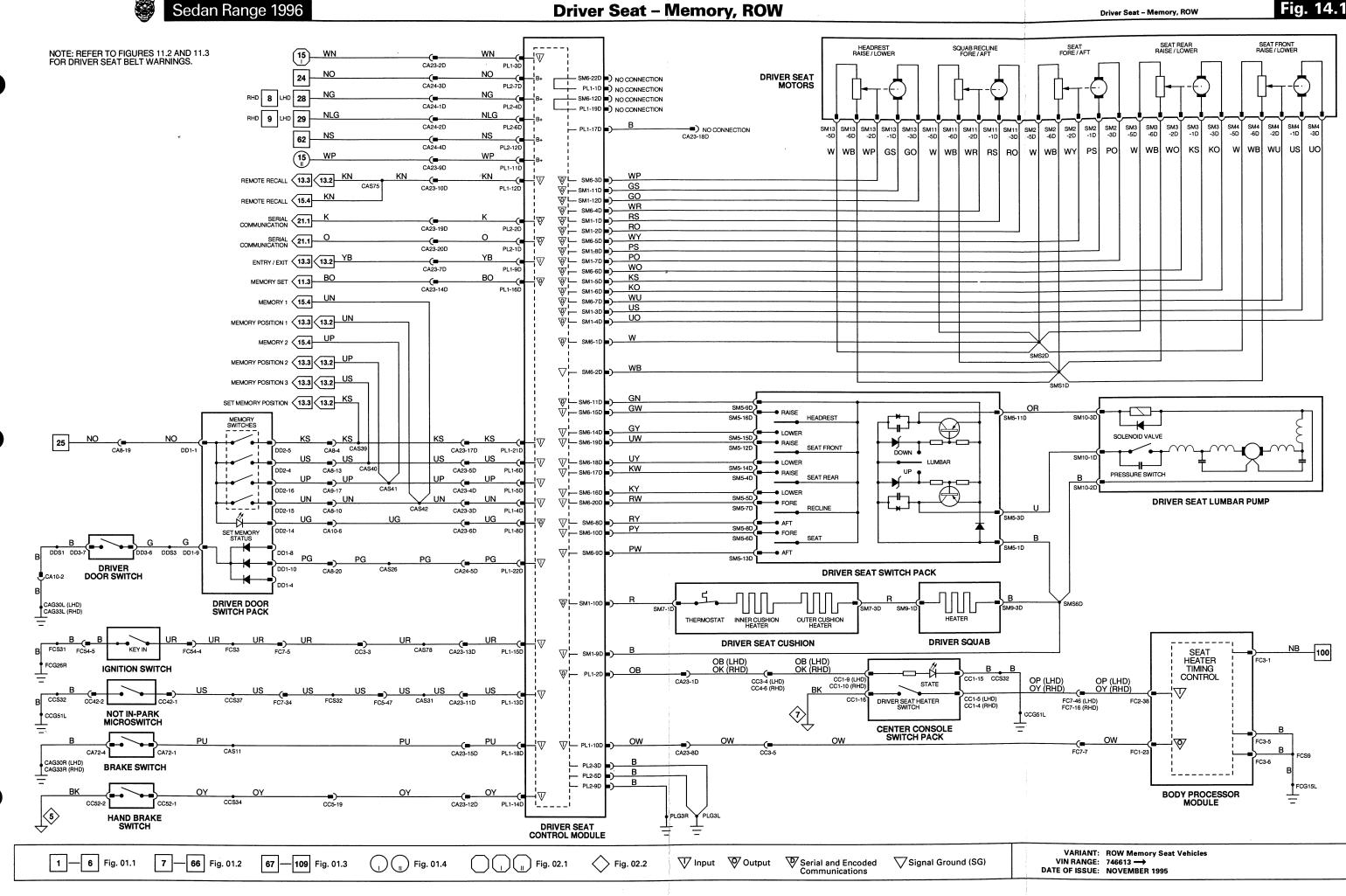
∇	Pin	Description	Active	Inactive
ò	PL1-2D	SEAT HEATER ON (STATE)	B+	GROUND
ĩ	PL1-3D	IGNITION SWITCHED GROUND	GROUND	B+
÷	PL1-4D	MEMORY POSITION 1 REQUEST	B+	GROUND
÷	PL1-4D PL1-5D	MEMORY POSITION TREQUEST	B+	
÷	PL1-5D PL1-6D	MEMORY POSITION 2 REQUEST	B+ B+	GROUND
0	PL1-8D	SET MEMORY STATUS (STATE)		
1	PL1-8D PL1-9D	ENTRY / EXIT SIGNAL	GROUND	B+
1	PL1-9D PL1-10D	SEAT HEATER REQUEST	GROUND	B+
	PL1-10D	REMOTE RECALL REQUEST	GROUND GROUND PULSE ON UNLOCK	B+
1	PL1-12D PL1-13D	NOT IN PARK		B+
	PL1-13D PL1-14D	HANDBRAKE ON	GROUND GROUND	B+
	PL1-14D PL1-15D	KEY IN IGNITION		B+
0	PL1-15D PL1-16D	MEMORY SET	GROUND GROUND	B+
1	PL1-16D PL1-18D	BRAKE SWITCH	GROUND	B+
•		SEAT MEMORY POSITION REQUEST		B+
1	PL1-21D	DRIVER'S DOOR AJAR	B+ GROUND	GROUND
1	PL1-22D	DRIVER S DOOR AJAR	GROUND	7.9 V
D	PL2-1D	SERIAL COMMUNICATION INPUT		
D	PL2-2D	SERIAL COMMUNICATION OUTPUT		
0				
0	SM1-1D	SQUAB RECLINE FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-2D	SQUAB RECLINE FORE / AFT MOTOR	B+ (FORE)	GROUND
о	SM1-3D	SEAT FRONT RAISE / LOWER MOTOR	B+ (RAISE)	GROUND
0	SM1-4D	SEAT FRONT RAISE / LOWER MOTOR	B+ (LOWER)	GROUND
о	SM1-5D	SEAT REAR RAISE / LOWER MOTOR	B+ (RAISE)	GROUND
0	SM1-6D	SEAT REAR RAISE / LOWER MOTOR	B+ (LOWER)	GROUND
0	SM1-7D	SEAT FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-8D	SEAT FORE / AFT MOTOR	B+ (FORE)	GROUND
I.	SM1-9D	COMMON GROUND	GROUND	GROUND
0	SM1-10D	HEATER ELEMENT SUPPLY	B+	GROUND
0	SM1-11D	HEADREST RAISE / LOWER MOTOR	B+ (RAISE)	GROUND
0	SM1-12D	HEADREST RAISE / LOWER MOTOR	B+ (LOWER)	GROUND
•		POTENTIOMETER COMMON REFERENCE VOLTAGE	5 V	5.14
0 SG	SM6-1D SM6-2D	POTENTIOMETER COMMON REFERENCE VOLTAGE	GROUND	5 V GROUND
0	SM6-2D SM6-3D	HEADREST POTENTIOMETER FEEDBACK	0.5 V (DOWN), 4 V (UP)	GROUND
0	SM6-3D SM6-4D	SQUAB RECLINE POTENTIOMETER FEEDBACK	0.5 V (BACK), 4 V (FORWARD)	
0	SM6-5D	SEAT FORE / AFT POTENTIOMETER FEEDBACK	0.5 V (BACK), 4 V (FORWARD)	
0	SM6-6D	SEAT REAR RAISE / LOWER POTENTIOMETER FEEDBACK	0.5 V (LOWER), 4 V (RAISE)	
0	SM6-7D	SEAT FRONT RAISE / LOWER POTENTIONETER FEEDBACK	0.5 V (LOWER), 4 V (RAISE)	
1	SM6-8D	RECLINE AFT MOVEMENT REQUEST	B+	GROUND
÷	SM6-9D	SEAT AFT MOVEMENT REQUEST	B+	GROUND
i	SM6-3D SM6-10D	SEAT FORE MOVEMENT REQUEST	B+	GROUND
ò	SM6-11D	LUMBAR SWITCH POWER SUPPLY	B+	B+
Ĩ.	SM6-14D	HEADREST LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-15D	HEADREST RAISE MOVEMENT REQUEST	B+	GROUND
1	SM6-16D	SEAT REAR LOWER MOVEMENT REQUEST	B+	GROUND
I.	SM6-17D	SEAT REAR RAISE MOVEMENT REQUEST	B+	GROUND
I.	SM6-18D	SEAT FRONT LOWER MOVEMENT REQUEST	B+	GROUND
I.	SM6-19D	SEAT FRONT RAISE MOVEMENT REQUEST	B+	GROUND
I.	SM6-20D	RECLINE FORE MOVEMENT REQUEST	B+	GROUND
D.C.				
RO	DY PROCE	SSOR MODULE		
∇	Pin	Description	Active	Inactive
ò	FC1-23	DRIVER SEAT HEATER ON	GROUND	В+
1	FC2-38	DRIVER SEAT HEATER REQUEST	GROUND	B+
				= .

The following symbols are used to represent values for Control Module Pin Out data:

i	Input	B+	Battery voltage
0	Output	v	Voltage (DC)
SG	Signal Ground	Hz	Frequency
D	Serial and encoded communications	KHz	Frequency x 1000
		MS	Milliseconds
		MV	Millivolts

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.

Driver Seat – Memory, ROW





Component

BODY PROCESSOR MODULE

BRAKE SWITCH CENTER CONSOLE SWITCH PACK DOOR SWITCH - DRIVER DOOR SWITCH PACK - DRIVER

SEAT CONTROL MODULE – DRIVER (NAS VEHICLES)

SEAT CUSHION - DRIVER SEAT LUMBAR PUMP - DRIVER SEAT MOTORS - DRIVER

SEAT SWITCH PACK - DRIVER SQUAB - DRIVER HAND BRAKE SWITCH IGNITION SWITCH NOT IN-PARK MICROSWITCH

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

CA8	20-WAY MULTILOCK 040 / GREEN
CA9	20-WAY MULTILOCK 040 / BLACK
CA10	8-WAY MULTILOCK 070 / WHITE
CC3	20-WAY MULTILOCK 040 / BLACK
CC5	20-WAY MULTILOCK 040 / GREEN
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK

GROUNDS

Ground	Location / Type
CAG30L	LH 'A' POST GROUND SCREW
CAG30R	LH 'A' POST GROUND SCREW
CAG103L	LH SEAT GROUND STUD
CAG103R	LH SEAT GROUND STUD
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

đ

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW

CA72 / 4-WAY MULTILOCK 070 / WHITE

CC1 / 16-WAY MULTILOCK 040 / BLACK

DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE CA105 / 22-WAY MULTILOCK 47 / BLUE CA106 / 12-WAY MULTILOCK 47 / BLUE SM1-D / 12-WAY MULTILOCK 47 / WHITE SM6-D / 22-WAY MULTILOCK 47 / WHITE

DD3 / 13-WAY ECONOSEAL III LC / BLACK

SM7-D / 3-WAY MULTILOCK 070 / YELLOW

SM10-D / 3-WAY MULTILOCK 070 / YELLOW

SM2-D / 6-WAY MULTILOCK 070 / WHITE SM3-D / 6-WAY MULTILOCK 070 / YELLOW SM4-D / 6-WAY MULTILOCK 070 / SLATE

SM11-D / 6-WAY MULTILOCK 070 / WHITE SM13-D / 6-WAY MULTILOCK 070 / YELLOW

SM5-D / 16-WAY MULTILOCK 040 / BLACK

SM9-D / 3-WAY MULTILOCK 070 / SLATE

CC52 / 2-WAY MULTILOCK 040 / BLACK

FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

Location / Access DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX LH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE

FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK

Location / Access PASSENGER'S UNDERSCUTTLE

DRIVER'S UNDERSCUTTLE CENTER CONSOLE DOOR CASING ARM REST / TOP ROLL

DRIVER'S SEAT

DRIVER'S SEAT / UNDER DRIVER'S SEAT / SQUAB DRIVER'S SEAT / UNDER DRIVER'S SEAT / UNDER DRIVER'S SEAT / UNDER DRIVER'S SEAT / SOUAB DRIVER'S SEAT / UNDER DRIVER'S SEAT DRIVER'S SEAT CENTER CONSOLE, LH SIDE STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

DRIVER SEAT CONTROL MODULE (NAS VEHICLES)

\bigtriangledown	Pin	Description	Active	Inactive
0	CA105-2	SEAT HEATER ON LED	B+	GROUND
1	CA105-3	IGNITION SWITCHED GROUND	GROUND	В+
I.	CA105-4	MEMORY POSITION 1 REQUEST	B+	GROUND
I.	CA105-5	MEMORY POSITION 2 REQUEST	В+	GROUND
1	CA105-6	MEMORY POSITION 3 REQUEST	B+	GROUND
ο	CA105-8	SEAT MEMORY STATUS LED	GROUND	B+
1	CA105-9	ENTRY / EXIT SIGNAL	GROUND	B+
1	CA105-10	SEAT HEATER REQUEST	GROUND	B+
i	CA105-12	REMOTE RECALL REQUEST	GROUND PULSE ON UNLOCK	B+
i	CA105-13	NOT IN PARK SIGNAL	GROUND	B+
I	CA105-14	PARK BRAKE ON SIGNAL	GROUND	B+
i i	CA105-15	KEY IN IGNITION SIGNAL	GROUND	В+
ο	CA105-16	MEMORY SET	GROUND	B+
ī	CA105-18	BRAKE SWITCH SIGNAL	GROUND	В+
1	CA105-21	SET MEMORY POSITION REQUEST	B+	GROUND
1	CA105-22	DRIVER DOOR AJAR	GROUND	7.9 V
D	CA106-1	SERIAL COMMUNICATION INPUT		
D	CA106-2	SERIAL COMMUNICATION OUTPUT		
о	SM1-1D	SQUAB RECLINE FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-1D SM1-2D	SQUAB RECLINE FORE / AFT MOTOR	B+ (FORE)	GROUND
o	SM1-2D SM1-3D	SEAT FRONT / RAISE LOWER MOTOR	B+ (UP)	GROUND
0	SM1-3D SM1-4D	SEAT FRONT / RAISE LOWER MOTOR	B+ (DOWN)	GROUND
o	SM1-40 SM1-5D	SEAT REAR RAISE / LOWER MOTOR	B+ (UP)	GROUND
o	SM1-5D SM1-6D	SEAT REAR RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
0	SM1-0D SM1-7D	SEAT FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-7D SM1-8D	SEAT FORE / AFT MOTOR	B+ (FORE)	GROUND
1	SM1-8D SM1-9D	COMMON GROUND	GROUND	GROUND
ò	SM1-9D SM1-10D	HEATER ELEMENT SUPPLY	B+	GROUND
õ	SM1-10D SM1-11D	HEADREST RAISE / LOWER MOTOR	B+ (RAISE)	GROUND
0	SM1-112D	HEADREST RAISE / LOWER MOTOR	B+ (LOWER)	GROUND
Ŭ				
о	SM6-1D	POTENTIOMETER COMMON REFERENCE VOLTAGE	5 V	5 V
SG	SM6-2D	POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND
0	SM6-3D	HEADREST FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
0	SM6-4D	SQUAB RECLINE FEEDBACK VOLTAGE	0.5 V (BACK), 4 V (FORWARD)	
0	SM6-5D	SEAT FORE / AFT FEEDBACK VOLTAGE	0.5 V (AFT), 4 V (FORE)	
0	SM6-6D	SEAT REAR RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
0	SM6-7D	SEAT FRONT RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
1	SM6-8D	RECLINE AFT MOVEMENT REQUEST	B+	GROUND
I.	SM6-9D	SEAT AFT MOVEMENT REQUEST	B+	GROUND
1	SM6-10D	SEAT FORE MOVEMENT REQUEST	B+	GROUND
0	SM6-11D	LUMBAR SWITCH POWER SUPPLY	B+	B+
1	SM6-14D	HEADREST LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-15D	HEADREST RAISE MOVEMENT REQUEST	B+	GROUND
1	SM6-16D	SEAT REAR LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-17D	SEAT REAR RAISE MOVEMENT REQUEST	B+	GROUND
1	SM6-18D	SEAT FRONT LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-19D	SEAT FRONT RAISE MOVEMENT REQUEST	B+	GROUND
I	SM6-20D	RECLINE FORE MOVEMENT REQUEST	B+	GROUND
во	DY PROCE	SSOR MODULE		
∇	Pin	Description	Active	Inactive
0	FC1-23	DRIVER SEAT HEATER ON	GROUND	B+
-	· - ·			

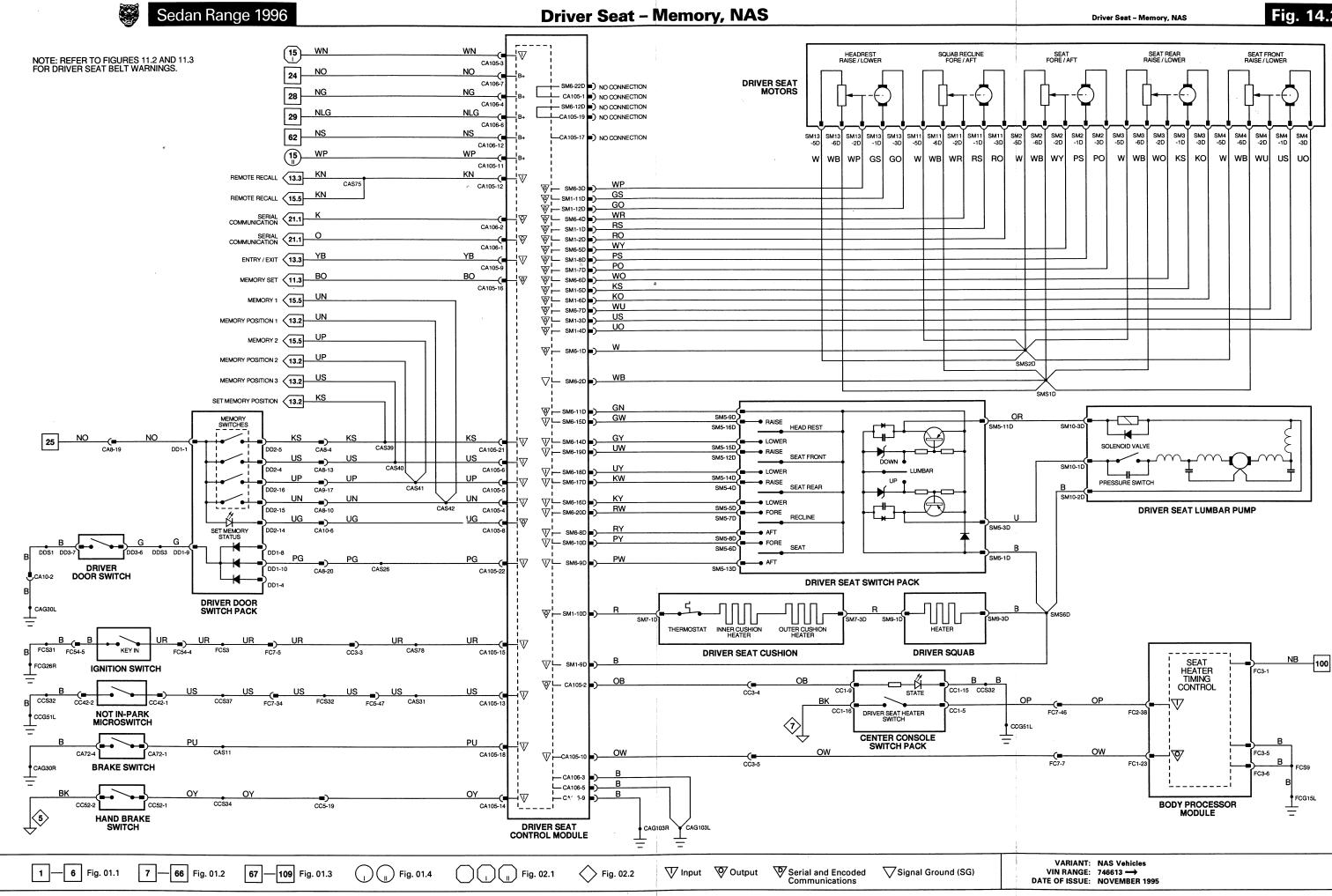
\sim	Pin	Description	Active	Inactive
0	FC1-23	DRIVER SEAT HEATER ON	GROUND	B+
L	FC2-38	DRIVER SEAT HEATER REQUEST	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

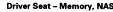
I Input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+ Battery voltageV Voltage (DC)Hz FrequencyKHz Frequency x 1000
- MS Milliseconds
- MV Millivolts

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.







14.3

COMPONENTS

Component

BODY PROCESSOR MODULE

BRAKE SWITCH CENTER CONSOLE SWITCH PACK DOOR SWITCH - DRIVER DOOR SWITCH PACK - DRIVER

SEAT CONTROL MODULE – DRIVER (ROW, MEMORY SEAT VEHICLES)

SEAT CUSHION - DRIVER SEAT LUMBAR PUMP - DRIVER SEAT MOTORS - DRIVER

SEAT SWITCH PACK - DRIVER SQUAB - DRIVER HAND BRAKE SWITCH IGNITION SWITCH NOT IN-PARK MICROSWITCH

HARNESS-TO-HARNESS CONNECTORS

Type / Color

20-WAY MULTILOCK 040 / GREEN

Location / Access

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK

CA72 / 4-WAY MULTILOCK 070 / WHITE

CC1 / 16-WAY MULTILOCK 040 / BLACK

DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE

PL1 / 22-WAY MULTILOCK 47 / BLUE PL2 / 12-WAY MULTILOCK 47 / BLUE

DD3 / 13-WAY ECONOSEAL III LC / BLACK

SM1-D / 12-WAY MULTILOCK 47 / WHITE SM6-D / 22-WAY MULTILOCK 47 / WHITE

SM7-D / 3-WAY MULTILOCK 070 / YELLOW

SM10-D / 3-WAY MULTILOCK 070 / YELLOW

SM-D / 6-WAY MULTILOCK 070 / WHITE SM3-D / 6-WAY MULTILOCK 070 / YELLOW SM4-D / 6-WAY MULTILOCK 070 / SLATE SM11-D / 6-WAY MULTILOCK 070 / WHITE SM13-D / 6-WAY MULTILOCK 070 / YELLOW

SM5-D / 16-WAY MULTILOCK 040 / BLACK SM9-D / 3-WAY MULTILOCK 070 / SLATE

CC52 / 2-WAY MULTILOCK 040 / BLACK

EC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S SEAT / UNDER DRIVER'S SEAT / UNDER CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX LH FASCIA END PANEL / OUTER AIR VENT RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE

Location / Access PASSENGER'S UNDERSCUTTLE

DRIVER'S UNDERSCUTTLE CENTER CONSOLE DOOR CASING ARM REST / TOP ROLL

DRIVER'S SEAT

DRIVER'S SEAT / UNDER DRIVER'S SEAT / SQUAB DRIVER'S SEAT / UNDER DRIVER'S SEAT / UNDER DRIVER'S SEAT / UNDER DRIVER'S SEAT / SQUAB DRIVER'S SEAT / UNDER DRIVER'S SEAT DRIVER'S SEAT CENTER CONSOLE, LH SIDE STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE

CA10 8-WAY MULTILOCK 070 / WHITE 20-WAY MULTILOCK 040 / BLACK CA23 6-WAY MULTILOCK 070 / WHITE CA24 20-WAY MULTH OCK 040 / BLACK CC3 CC4 14-WAY MULTILOCK 070 / WHITE CC5 20-WAY MULTILOCK 040 / GREEN FC5 THROUGH-PANEL (48 MICRO / 6) / BLACK FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK EC7 THROUGH-PANEL (48 MICRO / 6) / BLACK GROUNDS

Connector

CA8

Ground	Location / Type
CAG30L	LH 'A' POST GROUND SCREW
CAG30R	LH 'A' POST GROUND SCREW
CAG33L	RH HEELBOARD GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD
PLG3L	LH SEAT GROUND SCREW
PLG3R	LH SEAT GROUND SCREW

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS. RELAYS. CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

DRIVER SEAT CONTROL MODULE (ROW, MEMORY SEAT VEHICLES)

\bigtriangledown	Pin	Description	Active	Inactive
о	PL1-2D	SEAT HEATER ON (STATE)	B+	GROUND
1	PL1-3D	IGNITION SWITCHED GROUND	GROUND	B+
1	PL1-10D	SEAT HEATER REQUEST	GROUND	B+
1	PL1-13D	NOT IN PARK	GROUND	B+
1	PL1-14D	HANDBRAKE ON	GROUND	B+
1	PL1-15D	KEY IN IGNITION	GROUND	B+
1	PL1-18D	BRAKE SWITCH	GROUND	B+
1	PL1-22D	DRIVER'S DOOR AJAR	GROUND	7.9 V
D	PL2-1D	SERIAL COMMUNICATION INPUT		
D	PL2-2D	SERIAL COMMUNICATION OUTPUT		
o	SM1-1D	SQUAB RECLINE FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-2D	SQUAB RECLINE FORE / AFT MOTOR	B+ (FORE)	GROUND
о	SM1-3D	SEAT FRONT RAISE / LOWER MOTOR	B+ (RAISE)	GROUND
о	SM1-4D	SEAT FRONT RAISE / LOWER MOTOR	B+ (LOWER)	GROUND
0	SM1-5D	SEAT REAR RAISE / LOWER MOTOR	B+ (RAISE)	GROUND
о	SM1-6D	SEAT REAR RAISE / LOWER MOTOR	B+ (LOWER)	GROUND
о	SM1-7D	SEAT FORE / AFT MOTOR	B+ (AFT)	GROUND
о	SM1-8D	SEAT FORE / AFT MOTOR	B+ (FORE)	GROUND
I.	SM1-9D	COMMON GROUND	GROUND	GROUND
о	SM1-10D	HEATER ELEMENT SUPPLY	B+	GROUND
о	SM1-11D	HEADREST RAISE / LOWER MOTOR	B+ (RAISE)	GROUND
0	SM1-12D	HEADREST RAISE / LOWER MOTOR	B+ (LOWER)	GROUND
ı	SM6-8D	RECLINE AFT MOVEMENT REQUEST	B+	GROUND
1	SM6-9D	SEAT AFT MOVEMENT REQUEST	B+	GROUND
1	SM6-10D	SEAT FORE MOVEMENT REQUEST	B+	GROUND
о	SM6-11D	LUMBAR SWITCH POWER SUPPLY	B+	B+
1	SM6-14D	HEADREST LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-15D	HEADREST RAISE MOVEMENT REQUEST	B+	GROUND
1	SM6-16D	SEAT REAR LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-17D	SEAT REAR RAISE MOVEMENT REQUEST	B+	GROUND
1	SM6-18D	SEAT FRONT LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-19D	SEAT FRONT RAISE MOVEMENT REQUEST	B+	GROUND
I	SM6-20D	RECLINE FORE MOVEMENT REQUEST	B+	GROUND
BO	DY PROCES	SSOR MODULE		
\bigtriangledown	Pin	Description	Active	Inactive
ò	FC1-23	DRIVER SEAT HEATER ON	GROUND	B+
ĩ	FC2-38	DRIVER SEAT HEATER REQUEST	GROUND	B+
	. 52-50			

The following symbols are used to represent values for Control Module Pin Out data:

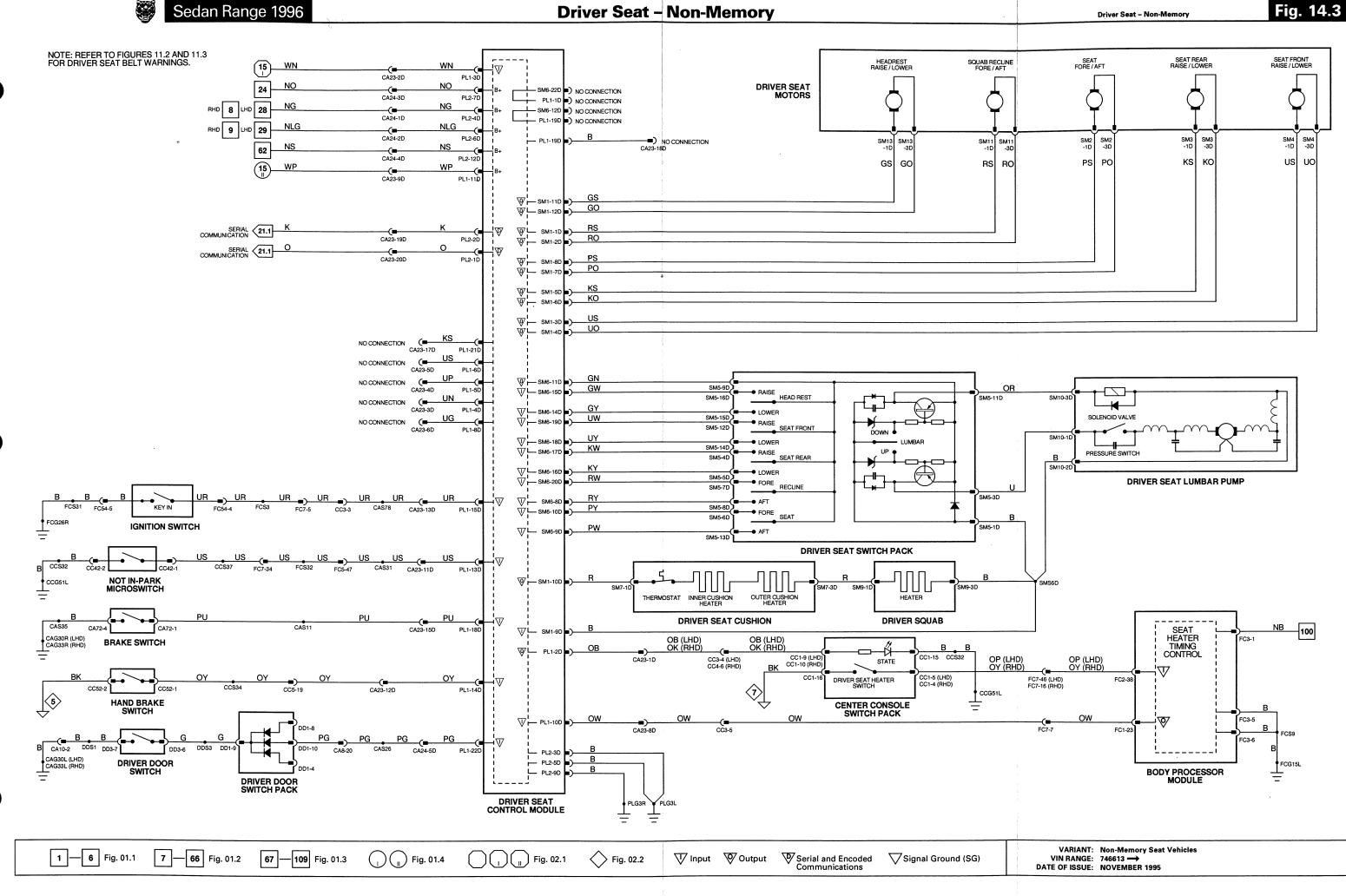
l Input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMilliseconds

MV Millivolts

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.

Driver Seat – Non-Memory





Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK SEAT CUSHION – DRIVER SEAT MOTOR – DRIVER (RAISE / LOWER SEAT VEHICLES) SEAT SWITCH PACK – DRIVER (RAISE / LOWER SEAT VEHICLES) SQUAB – DRIVER

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CC1 / 16-WAY MULTILOCK 040 / BLACK SM7-D / 3-WAY MULTILOCK 070 / YELLOW SM16-D / 6-WAY MULTILOCK 070 / SLATE SM17-D / 16-WAY MULTILOCK 040 / BLACK

SM9-D / 3-WAY MULTILOCK 070 / SLATE

Location / Access

PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE DRIVER'S SEAT / UNDER DRIVER'S SEAT / UNDER DRIVER'S SEAT

DRIVER'S SEAT

RELAYS

Color / Stripe	Connector / Color
BLACK	SM18-D / BLUE
BLACK / VIOLET	SM14-D / BLUE
BLACK / VIOLET	SM14-D / BLUE
	BLACK BLACK / VIOLET

Location / Access DRIVER'S SEAT DRIVER'S SEAT DRIVER'S SEAT

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CA23-D	20-WAY MULTILOCK 040 / BLACK	DRIVER'S SEAT / UNDER
CA24-D	6-WAY MULTILOCK 070 / WHITE	DRIVER'S SEAT / UNDER
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC4	14-WAY MULTILOCK 070 / WHITE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
ML1-D	10-WAY MULTILOCK 070 / WHITE	DRIVER'S SEAT / UNDER
	<u> </u>	
0001000		

GROUNDS

.

Ground	Location / Type
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
MLG2L	LH SEAT GROUND SCREW
MLG2R	LH SEAT GROUND SCREW

...

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)



REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-23	DRIVER SEAT HEATER ON	GROUND	B+
I	FC2-38	DRIVER SEAT HEATER REQUEST	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

ð

I Input

O Output

SG Signal Ground

- D Serial and encoded communications
- B+ Battery voltage
- V Voltage (DC)

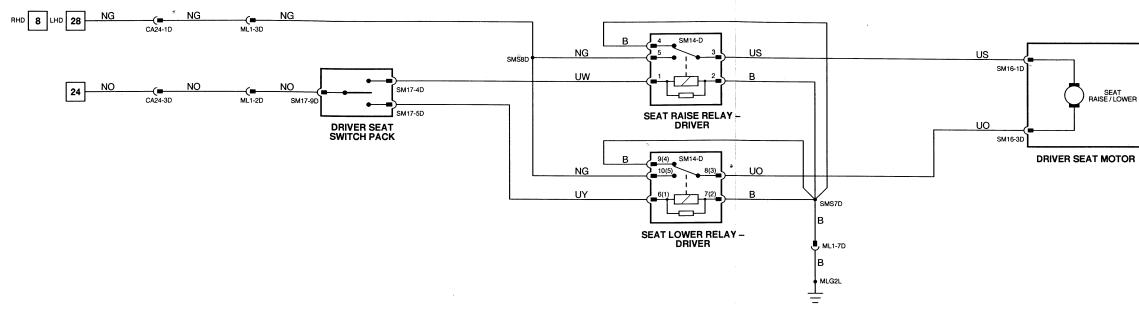
ø

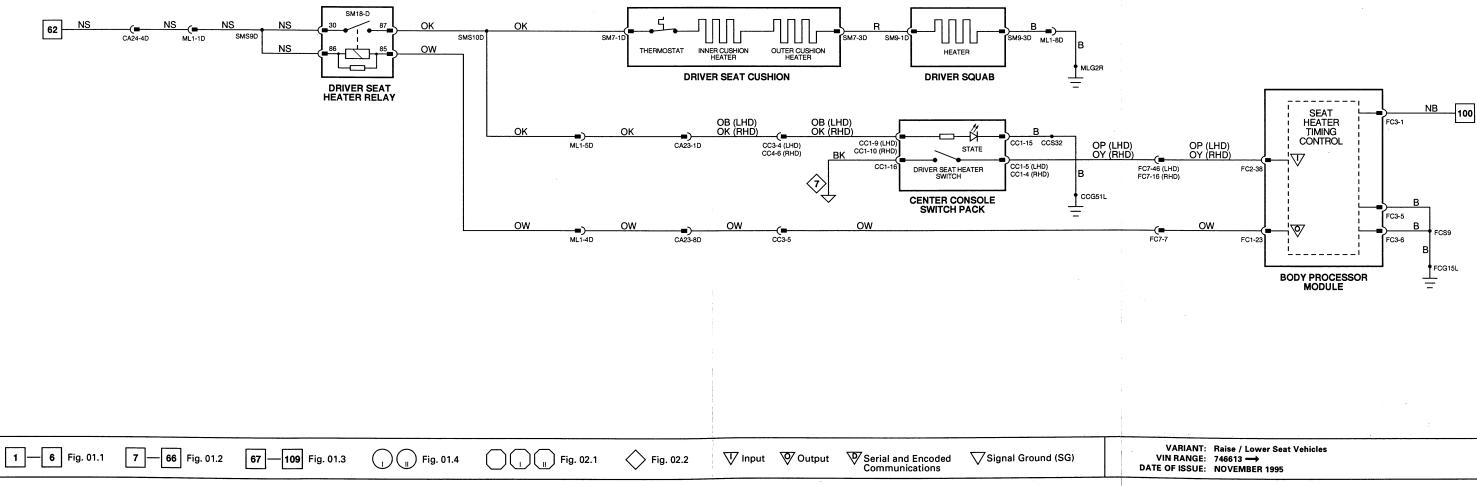
Hz Frequency

KHz Frequency x 1000 MS Milliseconds

MV Millivolts

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.











. VAI	RIANT:	Raise / Lower Seat Vehicles
VIN R	ANGE:	746613
DATE OF	SSUE:	NOVEMBER 1995

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK IGNITION SWITCH DOOR SWITCH PACK - PASSENGER DOOR SWITCH - PASSENGER SEAT CONTROL MODULE – PASSENGER (ROW, MEMORY SEAT VEHICLES)

SEAT CUSHION - PASSENGER SEAT LUMBAR PUMP - PASSENGER SEAT MOTORS - PASSENGER

SEAT SWITCH PACK - PASSENGER SQUAB - PASSENGER

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

CA11 20-WAY MULTILOCK 040 / BLACK CA12 15-WAY MULTILOCK 070 / WHITE CA27 6-WAY MULTILOCK 070 / WHITE CA28 20-WAY MULTILOCK 040 / BLACK ссз 20-WAY MULTILOCK 040 / BLACK CC4 14-WAY MULTILOCK 070 / WHITE FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK THROUGH-PANEL (48 MICRO / 6) / BLACK FC7

GROUNDS

Ground	Location / Type
CAG30R	LH 'A' POST GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CAG93L	LH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD
PLG3L	LH SEAT GROUND SCREW
PLG3R	LH SEAT GROUND SCREW

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

đ

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CC1 / 16-WAY MULTILOCK 040 / BLACK FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE PD1 / 26-WAY MULTILOCK 47 / SLATE PD3 / 13-WAY ECONOSEAL III LC / BLACK PL1 / 22-WAY MULTILOCK 47 / BLUE PL2 / 12-WAY MULTILOCK 47 / BLUE SM1-P / 12-WAY MULTILOCK 47 / WHITE SM6-P / 22-WAY MULTILOCK 47 / WHITE SM7-P / 3-WAY MULTILOCK 070 / YELLOW SM10-P / 3-WAY MULTILOCK 070 / YELLOW SM2-P / 6-WAY MULTILOCK 070 / WHITE SM3-P / 6-WAY MULTILOCK 070 / YHILL SM3-P / 6-WAY MULTILOCK 070 / SLATE SM11-P / 6-WAY MULTILOCK 070 / SLATE SM13-P / 6-WAY MULTILOCK 070 / YELLOW SM5-P / 16-WAY MULTILOCK 040 / BLACK SM9-P / 3-WAY MULTILOCK 070 / SLATE

> Location / Access PASSENGER'S UNDERSCUTTLE / ECM

PASSENGER'S SEAT / UNDER

PASSENGER'S SEAT / UNDER

PASSENGER'S UNDERSCUTTLE

PASSENGER'S UNDERSCUTTLE / ECM

RH FASCIA END PANEL / OUTER AIR VENT

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX

Location / Access

PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE STEERING COLUMN / COVER ARM REST / TOP ROLL DOOR CASING PASSENGER'S SEAT

PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / SQUAB PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / SQUAB PASSENGER'S SEAT / UNDER PASSENGER'S SEAT PASSENGER'S SEAT

é 11

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

PASSENGER SEAT CONTROL MODULE (ROW, MEMORY SEAT VEHICLES)

∇	Pin	Description	Active	Inactive
0	PL1-2P	SEAT HEATER ON STATE	В+	GROUND
I.	PL1-3P	IGNITION SWITCHED POWER	GROUND	B+
1	PL1-4P	MEMORY POSITION 1 REQUEST	B+	GROUND
1	PL1-5P	MEMORY POSITION 2 REQUEST	B+	GROUND
I.	PL1-6P	MEMORY POSITION 3 REQUEST	B+	GROUND
о	PL1-8P	SEAT MEMORY STATUS STATE	GROUND	B+
I.	PL1-10P	SEAT HEATER REQUEST	GROUND	B+
1	PL1-15P	KEY IN IGNITION SIGNAL	GROUND	B+
о	PL1-16P	MEMORY SET AUDIBLE TONE	GROUND	B+
1	PL1-21P	SET MEMORY POSITION REQUEST	B+	GROUND
I	PL1-22P	PASSENGER DOOR AJAR	GROUND	7.9 V
D	PL2-1P	SERIAL COMMUNICATION INPUT		
D	PL2-2P	SERIAL COMMUNICATION OUTPUT		
о	SM1-1P	SQUAB RECLINE FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-2P	SQUAB RECLINE FORE / AFT MOTOR	B+ (FORE)	GROUND
о	SM1-3P	SEAT FRONT RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-4P	SEAT FRONT RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
о	SM1-5P	SEAT REAR RAISE / LOWER MOTOR	B+ (UP)	GROUND
о	SM1-6P	SEAT REAR RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
о	SM1-7P	SEAT FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-8P	SEAT FORE / AFT MOTOR	B+ (FORE)	GROUND
i i	SM1-9P	COMMON GROUND	GROUND	GROUND
о	SM1-10P	HEATER ELEMENT SUPPLY	B+	B+
0	SM1-11P	HEADREST RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-12P	HEADREST RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
о	SM6-1P	POTENTIOMETER COMMON REFERENCE VOLTAGE	5 V	5 V
SG	SM6-2P	POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND
о	SM6-3P	HEADREST FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
о	SM6-4P	SQUAB RECLINE FEEDBACK VOLTAGE	0.5 V (BACK), 4 V (FORWARD)	
0	SM6-5P	SEAT FORE / AFT FEEDBACK VOLTAGE	0.5 V (AFT), 4 V (FORE)	
0	SM6-6P	SEAT REAR RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
0	SM6-7P	SEAT FRONT RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
1	SM6-8P	RECLINE AFT MOVEMENT REQUEST	B+	GROUND
I	SM6-9P	SEAT AFT MOVEMENT REQUEST	B+	GROUND
T	SM6-10P	SEAT FORE MOVEMENT REQUEST	B+	GROUND
0	SM6-11P	LUMBAR SWITCH POWER SUPPLY	B+	B+
I.	SM6-14P	HEADREST LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-15P	HEADREST RAISE MOVEMENT REQUEST	B+	GROUND
ł	SM6-16P	SEAT REAR LOWER MOVEMENT REQUEST	B+	GROUND
I	SM6-17P	SEAT REAR RAISE MOVEMENT REQUEST	B+	GROUND
1	SM6-18P	SEAT FRONT LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-19P	SEAT FRONT RAISE MOVEMENT REQUEST	B+	GROUND
1	SM6-20P	RECLINE FORE MOVEMENT REQUEST	B+	GROUND

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
о	FC1-42	PASSENGER SEAT HEATER REQUEST	GROUND	B+
1	FC2-12	PASSENGER SEAT HEATER SWITCH	GROUND	B+

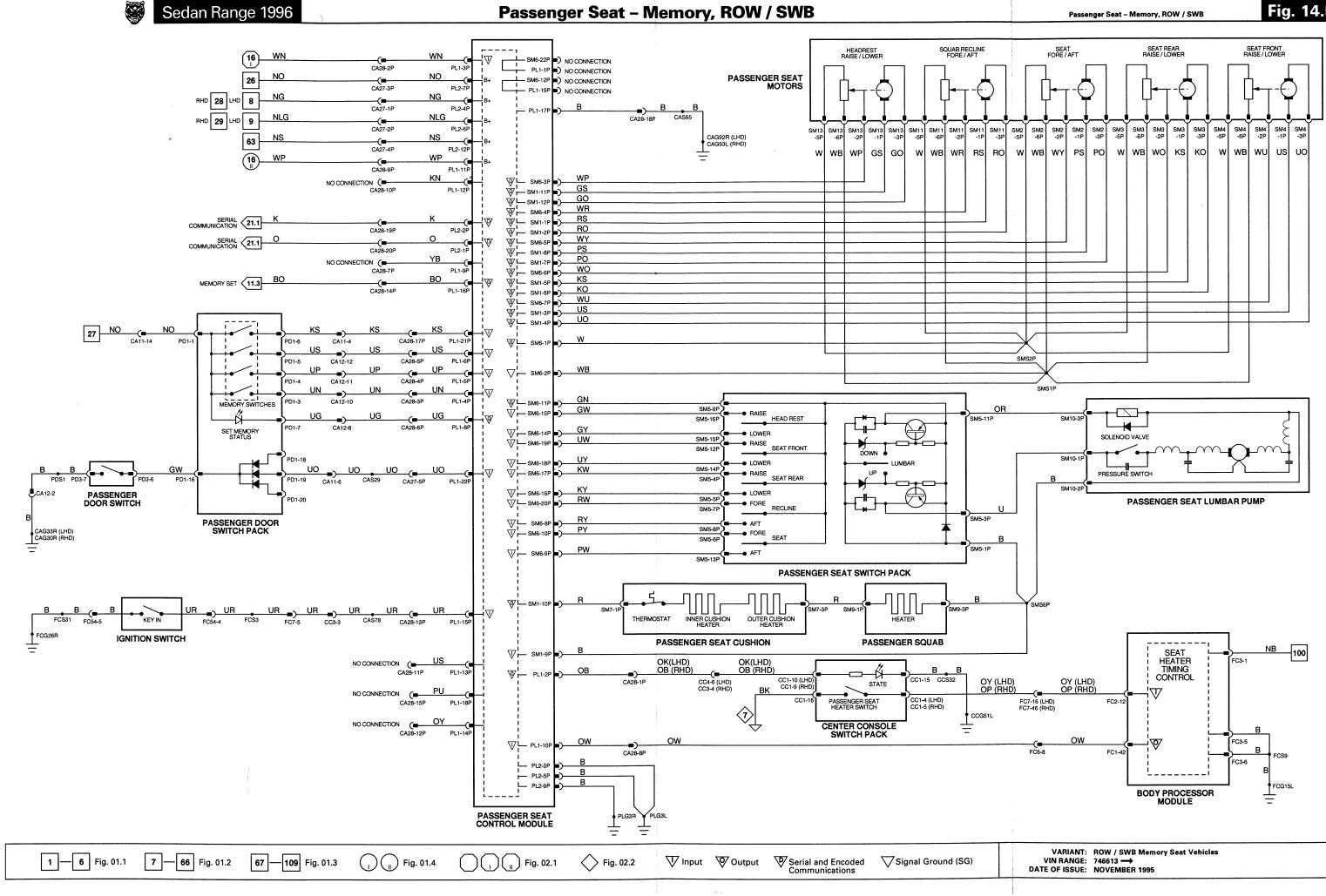
The following symbols are used to represent values for Control Module Pin Out data:

1	Input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Passenger Seat – Memory, ROW / SWB





Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK IGNITION SWITCH DOOR SWITCH PACK – PASSENGER DOOR SWITCH – PASSENGER SEAT CONTROL MODULE – PASSENGER (ROW, MEMORY SEAT VEHICLES)

SEAT CUSHION – PASSENGER SEAT FORE/AFT SWITCHES – PASSENGER, REAR SEAT LUMBAR PUMP – PASSENGER SEAT MOTORS – PASSENGER

SEAT RECLINE SWITCHES – PASSENGER, REAR SEAT SWITCH PACK – PASSENGER SQUAB – PASSENGER

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

CA11	20-WAY MULTILOCK 040 / BLACK
CA12	15-WAY MULTILOCK 070 / WHITE
CA27	6-WAY MULTILOCK 070 / WHITE
CA28	20-WAY MULTILOCK 040 / BLACK
CC3	20-WAY MULTILOCK 040 / BLACK
CC4	14-WAY MULTILOCK 070 / WHITE
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK

GROUNDS

Ground	Location / Type
CAG30R	LH 'A' POST GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CAG93L	LH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD
PLG3L	LH SEAT GROUND SCREW
PLG3R	LH SEAT GROUND SCREW

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

æ

Connector / Type / Color EC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CC1 / 16-WAY MULTILOCK 040 / BLACK FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE PD1 / 26-WAY MULTILOCK 47 / SLATE PD3 / 13-WAY ECONOSEAL III LC / BLACK PL1 / 22-WAY MULTILOCK 47 / BLUE PL2 / 12-WAY MULTILOCK 47 / BLUE SM1-P / 12-WAY MULTILOCK 47 / WHITE SM6-P / 22-WAY MULTILOCK 47 / WHITE SM7-P / 3-WAY MULTILOCK 070 / YELLOW SM19 / 10-WAY AMP MOL / BLACK SM10-P / 3-WAY MULTILOCK 070 / YELLOW SM2-P / 6-WAY MULTILOCK 070 / WHITE SM3-P / 6-WAY MULTILOCK 070 / YELLOW SM4-P / 6-WAY MULTILOCK 070 / SLATE SM11-P / 6-WAY MULTILOCK 070 / WHITE SM13-P / 6-WAY MULTILOCK 070 / YELLOW SM20 / 10-WAY AMP MQL / NATURAL SM5-P / 16-WAY MULTILOCK 040 / BLACK SM9-P / 3-WAY MULTILOCK 070 / SLATE

Location / Access

CENTER CONSOLE STEERING COLUMN / COVER ARM REST / TOP ROLL DOOR CASING PASSENGER'S SEAT

PASSENGER'S SEAT / UNDER FRONT LOWER SEAT / INSIDE PASSENGER'S SEAT / SQUAB PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER FRONT LOWER SEAT / INSIDE PASSENGER'S SEAT / PASSENGER'S SEAT PASSENGER'S SEAT

÷.

Location / Access

PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

PASSENGER SEAT CONTROL MODULE (ROW, MEMORY SEAT VEHICLES)

\bigtriangledown	Pin	Description	Active	Inactive
ο	PL1-2P	SEAT HEATER ON STATE	B+	GROUND
1	PL1-3P	IGNITION SWITCHED POWER	GROUND	В+
1	PL1-4P	MEMORY POSITION 1 REQUEST	B+	GROUND
- I	PL1-5P	MEMORY POSITION 2 REQUEST	B+	GROUND
1	PL1-6P	MEMORY POSITION 3 REQUEST	B+	GROUND
0	PL1-8P	SEAT MEMORY STATUS STATE	GROUND	B+
1	PL1-10P	SEAT HEATER REQUEST	GROUND	B+
ı	PL1-15P	KEY IN IGNITION SIGNAL	GROUND	B+
ο	PL1-16P	MEMORY SET AUDIBLE TONE	GROUND	B+
Т	PL1-21P	SET MEMORY POSITION REQUEST	B+	GROUND
I.	PL1-22P	PASSENGER DOOR AJAR	GROUND	7.9 V
D	PL2-1P	SERIAL COMMUNICATION INPUT		
D	PL2-2P	SERIAL COMMUNICATION OUTPUT		
U	r L2-2r	SENIAL COMMONICATION COTTOT		
о	SM1-1P	SQUAB RECLINE FORE / AFT MOTOR	B+ (AFT)	GROUND
о	SM1-2P	SQUAB RECLINE FORE / AFT MOTOR	B+ (FORE)	GROUND
о	SM1-3P	SEAT FRONT RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-4P	SEAT FRONT RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
0	SM1-5P	SEAT REAR RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-6P	SEAT REAR RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
0	SM1-7P	SEAT FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-8P	SEAT FORE / AFT MOTOR	B+ (FORE)	GROUND
1	SM1-9P	COMMON GROUND	GROUND	GROUND
0	SM1-10P	HEATER ELEMENT SUPPLY	B+	В+
0	SM1-11P	HEADREST RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-12P	HEADREST RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
0	SM6-1P	POTENTIOMETER COMMON REFERENCE VOLTAGE	5 V	5 V
SG	SM6-2P	POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND
0	SM6-3P	HEADREST FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	Ghoone
ō	SM6-4P	SQUAB RECLINE FEEDBACK VOLTAGE	0.5 V (BACK), 4 V (FORWARD)	
õ	SM6-5P	SEAT FORE / AFT FEEDBACK VOLTAGE	0.5 V (AFT), 4 V (FORE)	
ō	SM6-6P	SEAT REAR RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
ō	SM6-7P	SEAT FRONT RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
ī	SM6-8P	RECLINE AFT MOVEMENT REQUEST	B+	GROUND
i.	SM6-9P	SEAT AFT MOVEMENT REQUEST	B+	GROUND
i.	SM6-10P	SEAT FORE MOVEMENT REQUEST	B+	GROUND
Ó	SM6-11P	LUMBAR SWITCH POWER SUPPLY	B+	В+
i.	SM6-14P	HEADREST LOWER MOVEMENT REQUEST	B+	GROUND
I.	SM6-15P	HEADREST RAISE MOVEMENT REQUEST	B+	GROUND
I.	SM6-16P	SEAT REAR LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-17P	SEAT REAR RAISE MOVEMENT REQUEST	B+	GROUND
Т	SM6-18P	SEAT FRONT LOWER MOVEMENT REQUEST	B+	GROUND
Т	SM6-19P	SEAT FRONT RAISE MOVEMENT REQUEST	B+	GROUND
	SM6-20P	RECLINE FORE MOVEMENT REQUEST	B+	GROUND

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
ο	FC1-42	PASSENGER SEAT HEATER REQUEST	GROUND	B+
I.	FC2-12	PASSENGER SEAT HEATER SWITCH	GROUND	B+

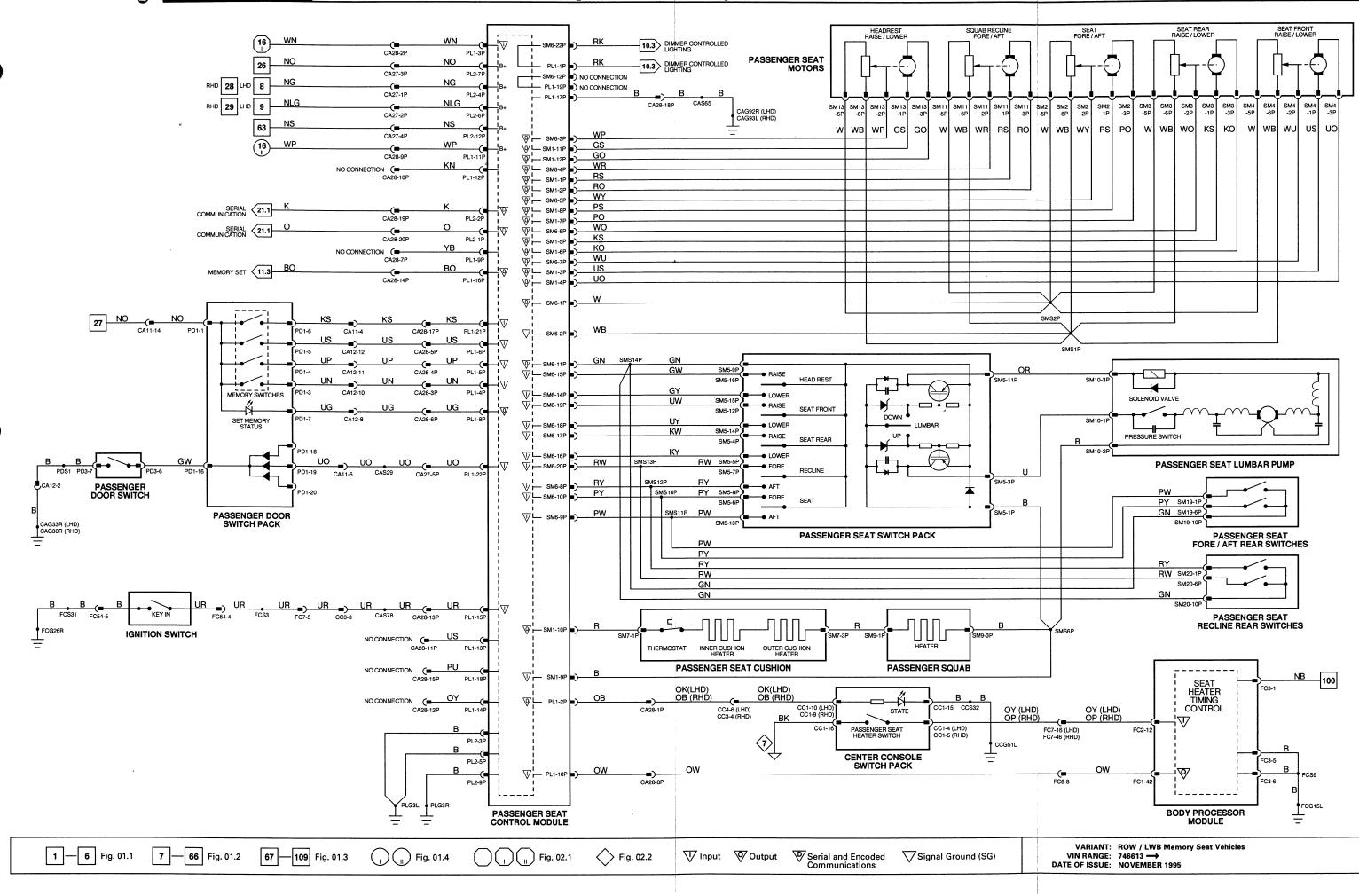
The following symbols are used to represent values for Control Module Pin Out data:

1	Input	B+	Batt
	_ • · · ·	DT	
0	Output	V	Volt
SG	Signal Ground	Hz	Freq
D	Serial and encoded communications	KHz	Fred

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Passenger Seat – Memory, ROW / LWB





Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK IGNITION SWITCH DOOR SWITCH PACK - PASSENGER DOOR SWITCH - PASSENGER SEAT CONTROL MODULE - PASSENGER (NAS VEHICLES)

SEAT CUSHION - PASSENGER SEAT LUMBAR PUMP - PASSENGER SEAT MOTORS - PASSENGER

SEAT SWITCH PACK - PASSENGER SQUAB - PASSENGER

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

CA11 20-WAY MULTILOCK 040 / BLACK CA12 15-WAY MULTILOCK 070 / WHITE ссз 20-WAY MULTILOCK 040 / BLACK CC4 14-WAY MULTILOCK 070 / WHITE FC6 THROUGH-PANEL (48 MICRO / 6) / BLACK THROUGH-PANEL (48 MICRO / 6) / BLACK FC7

GROUNDS

Ground	Location / Type
CAG104L	LH SEAT GROUND STUD
CAG104R	LH SEAT GROUND STUD
CAG33R	RH HEELBOARD GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ŝ



CC1 / 16-WAY MULTILOCK 040 / BLACK

PD1 / 26-WAY MULTILOCK 47 / SLATE

PD3 / 13-WAY ECONOSEAL III LC / BLACK

CA107 / 22-WAY MULTILOCK 47 / BLUE CA108 / 12-WAY MULTILOCK 47 / BLUE SM1-P / 12-WAY MULTILOCK 47 / BLUE SM6-P / 22-WAY MULTILOCK 47 / BLUE

SM7-P / 3-WAY MULTILOCK 070 / YELLOW

SM10-P / 3-WAY MULTILOCK 070 / YELLOW

SM2-P / 6-WAY MULTILOCK 070 / WHITE SM3-P / 6-WAY MULTILOCK 070 / YELLOW SM4-P / 6-WAY MULTILOCK 070 / SLATE SM11-P / 6-WAY MULTILOCK 070 / WHITE

SM13-P / 6-WAY MULTILOCK 070 / YELLOW

Location / Access

PASSENGER'S UNDERSCUTTLE / ECM

PASSENGER'S UNDERSCUTTLE / ECM

PASSENGER'S UNDERSCUTTLE

RH FASCIA END PANEL / OUTER AIR VENT

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX

SM5-P / 16-WAY MULTILOCK 040 / BLACK

SM9-P / 3-WAY MULTILOCK 070 / SLATE

FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE STEERING COLUMN / COVER ARM REST / TOP ROLL DOOR CASING PASSENGER'S SEAT

PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / SOLIAB PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / SQUAB PASSENGER'S SEAT / UNDER PASSENGER'S SEAT PASSENGER'S SEAT

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

PASSENGER SEAT CONTROL MODULE (NAS VEHICLES)

\bigtriangledown	Pin	Description	Active	Inactive
0	CA107-2	SEAT HEATER ON STATE	В+	GROUND
1	CA107-3	IGNITION SWITCHED GROUND	GROUND	В+
I.	CA107-4	MEMORY POSITION 1 REQUEST	В+	GROUND
1	CA107-5	MEMORY POSITION 2 REQUEST	B+	GROUND
1	CA107-6	MEMORY POSITION 3 REQUEST	B+	GROUND
о	CA107-8	SEAT MEMORY STATUS STATE	GROUND	B+
1	CA107-10	SEAT HEATER REQUEST	GROUND	B+
1	CA107-15	KEY IN IGNITION SWITCH	GROUND	B+
ο	CA107-16	MEMORY SET AUDIBLE TONE	GROUND	B+
1	CA107-21	SET MEMORY POSITION REQUEST	B+	GROUND
I.	CA107-22	PASSENGER DOOR SWITCH	GROUND	B+
D	CA108-1	SERIAL COMMUNICATION INPUT		
D	CA108-2	SERIAL COMMUNICATION OUTPUT		
0	SM1-1P	SQUAB RECLINE FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-2P	SQUAB RECLINE FORE / AFT MOTOR	B+ (FORE)	GROUND
0	SM1-3P	SEAT FRONT RAISE / LOWER MOTOR	B+ (UP)	GROUND
о	SM1-4P	SEAT FRONT RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
0	SM1-5P	SEAT REAR RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-6P	SEAT REAR RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
0	SM1-7P	SEAT FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-8P	SEAT FORE / AFT MOTOR	B+ (FORE)	GROUND
0	SM1-9P	COMMON GROUND	GROUND	GROUND
0	SM1-10P	HEATER ELEMENT SUPPLY	B+	B+
0	SM1-11P	HEADREST RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-12P	HEADREST RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
о	SM6-1P	POTENTIOMETER COMMON REFERENCE VOLTAGE	5 V	5 V
SG	SM6-2P	POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND
о	SM6-3P	HEADREST FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
0	SM6-4P	SQUAB RECLINE FEEDBACK VOLTAGE	0.5 V (BACK), 4 V (FORWARD)	
о	SM6-5P	SEAT FORE / AFT FEEDBACK VOLTAGE	0.5 V (BACK), 4V (FORWARD)	
0	SM6-6P	SEAT REAR RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
о	SM6-7P	SEAT FRONT RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)	
1	SM6-8P	RECLINE AFT MOVEMENT REQUEST	B+	GROUND
I.	SM6-9P	SEAT AFT MOVEMENT REQUEST	B+	GROUND
1	SM6-10P	SEAT FORE MOVEMENT REQUEST	B+	GROUND
0	SM6-11P	LUMBAR SWITCH POWER SUPPLY	B+	B+
I.	SM6-14P	HEADREST LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-15P	HEADREST RAISE MOVEMENT REQUEST	B+	GROUND
I.	SM6-16P	SEAT REAR LOWER MOVEMENT REQUEST	B+	GROUND
I.	SM6-17P	SEAT REAR RAISE MOVEMENT REQUEST	B+	GROUND
I.	SM6-18P	SEAT FRONT LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-19P	SEAT FRONT RAISE MOVEMENT REQUEST	B+	GROUND
I	SM6-20P	RECLINE FORE MOVEMENT REQUEST	B+	GROUND
во	DY PROC	ESSOR MODULE		
\bigtriangledown	Pin	Description	Active	Inactive

PASSENGER SEAT HEATER REQUEST

PASSENGER SEAT HEATER SWITCH

The following symbols are used to represent values for Control Module Pin Out data:

l Input

FC1-42

FC2-12

0

T

- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

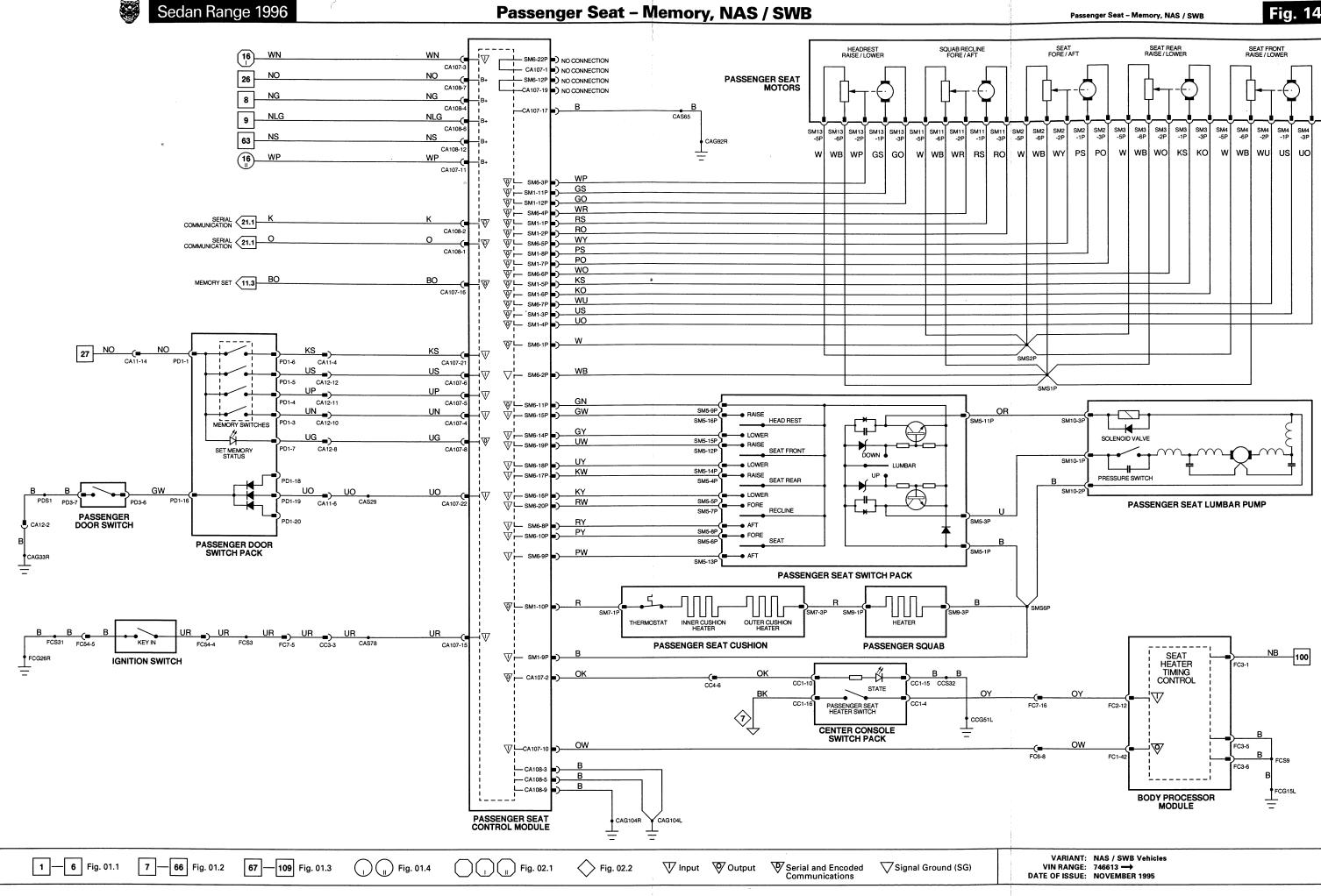
GROUND

GROUND

B+

B+

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.







Component BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK IGNITION SWITCH DOOR SWITCH PACK – PASSENGER DOOR SWITCH – PASSENGER SEAT CONTROL MODULE – PASSENGER (NAS VEHICLES)

SEAT CUSHION – PASSENGER SEAT FORE/AFT SWITCHES – PASSENGER, REAR SEAT LUMBAR PUMP – PASSENGER SEAT MOTORS – PASSENGER

SEAT RECLINE SWITCHES – PASSENGER, REAR SEAT SWITCH PACK – PASSENGER SQUAB – PASSENGER

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

 CA11
 20-WAY MULTILOCK 040 / BLACK

 CA12
 15-WAY MULTILOCK 070 / WHITE

 CC3
 20-WAY MULTILOCK 040 / BLACK

 CC4
 14-WAY MULTILOCK 070 / WHITE

 FC6
 THROUGH-PANEL (48 MICRO / 6) / BLACK

 FC7
 THROUGH-PANEL (48 MICRO / 6) / BLACK

GROUNDS

D

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

Ň

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CC1 / 16-WAY MULTILOCK 040 / BLACK FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE PD1 / 26-WAY MULTILOCK 47 / SLATE PD3 / 13-WAY ECONOSEAL III LC / BLACK CA107 / 22-WAY MULTILOCK 47 / BLUE CA108 / 12-WAY MULTILOCK 47 / BLUE SM6-P / 22-WAY MULTILOCK 47 / BLUE SM7-P / 3-WAY MULTILOCK 070 / YELLOW SM19 / 10-WAY AMP MQL / BLACK SM10-P / 3-WAY MULTILOCK 070 / YELLOW SM4-P / 6-WAY MULTILOCK 070 / YELLOW SM13-P / 6-WAY MULTILOCK 070 / YELLOW SM13-P / 6-WAY MULTILOCK 070 / YELLOW SM13-P / 6-WAY MULTILOCK 070 / YELLOW SM20- / 10-WAY AMP MQL / NATURAL SM5-P / 16-WAY MULTILOCK 070 / SLATE

Location / Access

PASSENGER'S UNDERSCUTTLE / ECM

PASSENGER'S UNDERSCUTTLE / ECM

RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX

Location / Access

PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE STEERING COLUMN / COVER ARM REST / TOP ROLL DOOR CASING PASSENGER'S SEAT

PASSENGER'S SEAT / UNDER FRONT LOWER SEAT / INSIDE PASSENGER'S SEAT / SQUAB PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER FRONT LOWER SEAT / INSIDE PASSENGER'S SEAT / PASSENGER'S SEAT PASSENGER'S SEAT

1 .

PASSENGER SEAT CONTROL MODULE (NAS VEHICLES)

∇	Pin	Description	Active	Inactive			
~ o	CA107-2	SEAT HEATER ON STATE	В+	GROUND			
1	CA107-3	IGNITION SWITCHED GROUND	GROUND	B+			
i	CA107-4	MEMORY POSITION 1 REQUEST	B+	GROUND			
1	CA107-5	MEMORY POSITION 2 REQUEST	В+	GROUND			
i	CA107-6	MEMORY POSITION 3 REQUEST	B+	GROUND			
Ó	CA107-8	SEAT MEMORY STATUS STATE	GROUND	B+			
Ĩ	CA107-10	SEAT HEATER REQUEST	GROUND	B+			
1	CA107-15	KEY IN IGNITION SWITCH	GROUND	B+			
o	CA107-16	MEMORY SET AUDIBLE TONE	GROUND	B+			
ĩ	CA107-21	SET MEMORY POSITION REQUEST	B+	GROUND			
i	CA107-22	PASSENGER DOOR SWITCH	GROUND	B+			
-							
D	CA108-1	SERIAL COMMUNICATION INPUT					
D	CA108-2	SERIAL COMMUNICATION OUTPUT					
0	SM1-1P	SQUAB RECLINE FORE / AFT MOTOR	B+ (AFT)	GROUND			
0	SM1-2P	SQUAB RECLINE FORE / AFT MOTOR	B+ (FORE)	GROUND			
0	SM1-3P	SEAT FRONT RAISE / LOWER MOTOR	B+ (UP)	GROUND			
0	SM1-4P	SEAT FRONT RAISE / LOWER MOTOR	B+ (DOWN)	GROUND			
0	SM1-5P	SEAT REAR RAISE / LOWER MOTOR	B+ (UP)	GROUND			
0	SM1-6P	SEAT REAR RAISE / LOWER MOTOR	B+ (DOWN)	GROUND			
0	SM1-7P	SEAT FORE / AFT MOTOR	B+ (AFT)	GROUND			
0	SM1-8P	SEAT FORE / AFT MOTOR	B+ (FORE)	GROUND			
0	SM1-9P	COMMON GROUND	GROUND	GROUND			
0	SM1-10P	HEATER ELEMENT SUPPLY	B+	B+			
0	SM1-11P	HEADREST RAISE / LOWER MOTOR	B+ (UP)	GROUND			
0	SM1-12P	HEADREST RAISE / LOWER MOTOR	B+ (DOWN)	GROUND			
о	SM6-1P	POTENTIOMETER COMMON REFERENCE VOLTAGE	5 V	5 V			
SG	SM6-2P	POTENTIOMETER COMMON REFERENCE GROUND	GROUND	GROUND			
о	SM6-3P	HEADREST FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)				
о	SM6-4P	SQUAB RECLINE FEEDBACK VOLTAGE	0.5 V (BACK), 4 V (FORWARD)				
0	SM6-5P	SEAT FORE / AFT FEEDBACK VOLTAGE	0.5 V (BACK), 4V (FORWARD)				
0	SM6-6P	SEAT REAR RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)				
о	SM6-7P	SEAT FRONT RAISE / LOWER FEEDBACK VOLTAGE	0.5 V (DOWN), 4 V (UP)				
1	SM6-8P	RECLINE AFT MOVEMENT REQUEST	B+	GROUND			
I.	SM6-9P	SEAT AFT MOVEMENT REQUEST	B+	GROUND			
1	SM6-10P	SEAT FORE MOVEMENT REQUEST	B+	GROUND			
0	SM6-11P	LUMBAR SWITCH POWER SUPPLY	B+	B+			
1	SM6-14P	HEADREST LOWER MOVEMENT REQUEST	B+	GROUND			
I.	SM6-15P	HEADREST RAISE MOVEMENT REQUEST	B+	GROUND			
1	SM6-16P	SEAT REAR LOWER MOVEMENT REQUEST	B+	GROUND			
1	SM6-17P	SEAT REAR RAISE MOVEMENT REQUEST	B+	GROUND			
1	SM6-18P	SEAT FRONT LOWER MOVEMENT REQUEST	B+	GROUND			
1	SM6-19P	SEAT FRONT RAISE MOVEMENT REQUEST	B+	GROUND			
1	SM6-20P	RECLINE FORE MOVEMENT REQUEST	B+	GROUND			
BODY PROCESSOR MODULE							
∇	Pin	Description	Active	Inactive			

\vee	Pin	Description	Active	Inactive
0	FC1-42	PASSENGER SEAT HEATER REQUEST	GROUND	B+
I.	FC2-12	PASSENGER SEAT HEATER SWITCH	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

l Input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Passenger Seat – Memory, NAS / LWB

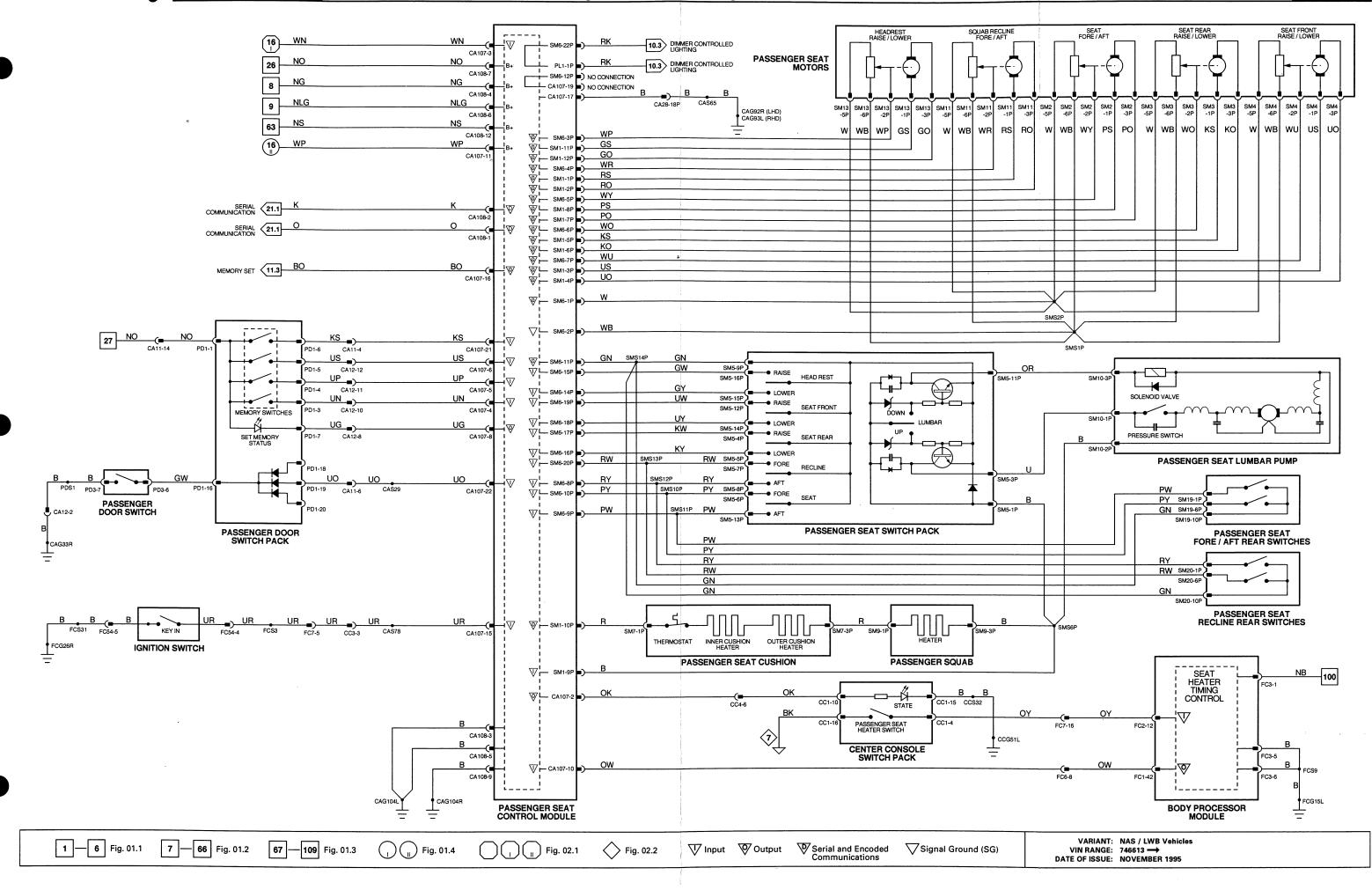


Fig. 14.8

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK IGNITION SWITCH DOOR SWITCH – PASSENGER DOOR SWITCH PACK – PASSENGER SEAT CONTROL MODULE – PASSENGER (ROW, MEMORY SEAT VEHICLES)

SEAT CUSHION – PASSENGER SEAT LUMBAR PUMP – PASSENGER SEAT MOTORS – PASSENGER

SEAT SWITCH PACK – PASSENGER SQUAB – PASSENGER

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

CA11	20-WAY MULTILOCK 040 / BLACK
CA12	15-WAY MULTILOCK 070 / WHITE
CA27	6-WAY MULTILOCK 070 / WHITE
CA28	20-WAY MULTILOCK 040 / BLACK
CC3	20-WAY MULTILOCK 040 / BLACK
CC4	14-WAY MULTILOCK 070 / WHITE
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK

GROUNDS

Ground	Location / Type
CAG30R	LH 'A' POST GROUND SCREW
CAG33R	RH HEELBOARD GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CAG93L	LH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD
PLG3L	LH SEAT GROUND SCREW
PLG3R	LH SEAT GROUND SCREW

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

Location / Access

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK

CC1 / 16-WAY MULTILOCK 040 / BLACK

PD3 / 13-WAY ECONOSEAL III LC / BLACK

PL1 / 22-WAY MULTILOCK 47 / BLUE PL2 / 12-WAY MULTILOCK 47 / BLUE SM1-P / 12-WAY MULTILOCK 47 / WHITE SM6-P / 22-WAY MULTILOCK 47 / WHITE

SM7-P / 3-WAY MULTILOCK 070 / YELLOW

SM10-P / 3-WAY MULTILOCK 070 / YELLOW

SM2-P / 6-WAY MULTILOCK 070 / WHITE SM3-P / 6-WAY MULTILOCK 070 / VELLOW SM4-P / 6-WAY MULTILOCK 070 / SLATE SM11-P / 6-WAY MULTILOCK 070 / WHITE SM13-P / 6-WAY MULTILOCK 070 / YELLOW

SM5-P / 16-WAY MULTILOCK 040 / BLACK

Location / Access

PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE

SM9-P / 3-WAY MULTILOCK 070 / SLATE

PD1 / 26-WAY MULTILOCK 47 / SLATE

FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE

PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE STEERING COLUMN / COVER DOOR CASING ARM REST / TOP ROLL PASSENGER'S SEAT

PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / SQUAB PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / SQUAB PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER PASSENGER'S SEAT PASSENGER'S SEAT

8 14

PASSENGER SEAT CONTROL MODULE (ROW, MEMORY SEAT VEHICLES)

\bigtriangledown	Pin	Description	Active	Inactive
о	PL1-2P	SEAT HEATER ON STATE	B+	GROUND
1	PL1-3P	IGNITION SWITCHED POWER	GROUND	B+
1	PL1-10P	SEAT HEATER REQUEST	GROUND	B+
1	PL1-15P	KEY IN IGNITION SIGNAL	GROUND	B+
1	PL1-22P	PASSENGER DOOR AJAR	GROUND	7.9 V
D	PL2-1P	SERIAL COMMUNICATION INPUT		
D	PL2-2P	SERIAL COMMUNICATION OUTPUT		
о	SM1-1P	SQUAB RECLINE FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-2P	SQUAB RECLINE FORE / AFT MOTOR	B+ (FORE)	GROUND
0	SM1-3P	SEAT FRONT RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-4P	SEAT FRONT RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
0	SM1-5P	SEAT REAR RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-6P	SEAT REAR RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
0	SM1-7P	SEAT FORE / AFT MOTOR	B+ (AFT)	GROUND
0	SM1-8P	SEAT FORE / AFT MOTOR	B+ (FORE)	GROUND
1	SM1-9P	COMMON GROUND	GROUND	GROUND
0	SM1-10P	HEATER ELEMENT SUPPLY	B+	B+
0	SM1-11P	HEADREST RAISE / LOWER MOTOR	B+ (UP)	GROUND
0	SM1-12P	HEADREST RAISE / LOWER MOTOR	B+ (DOWN)	GROUND
ı	SM6-8P	RECLINE AFT MOVEMENT REQUEST	В+	GROUND
1	SM6-9P	SEAT AFT MOVEMENT REQUEST	B+	GROUND
1	SM6-10P	SEAT FORE MOVEMENT REQUEST	B+	GROUND
0	SM6-11P	LUMBAR SWITCH POWER SUPPLY	B+	B+
I	SM6-14P	HEADREST LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-15P	HEADREST RAISE MOVEMENT REQUEST	B+	GROUND
ł	SM6-16P	SEAT REAR LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-17P	SEAT REAR RAISE MOVEMENT REQUEST	B+	GROUND
1	SM6-18P	SEAT FRONT LOWER MOVEMENT REQUEST	B+	GROUND
1	SM6-19P	SEAT FRONT RAISE MOVEMENT REQUEST	B+	GROUND
,	SM6-20P	RECLINE FORE MOVEMENT REQUEST	B+	GROUND

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-42	PASSENGER SEAT HEATER REQUEST	GROUND	B+
I.	FC2-12	PASSENGER SEAT HEATER SWITCH	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

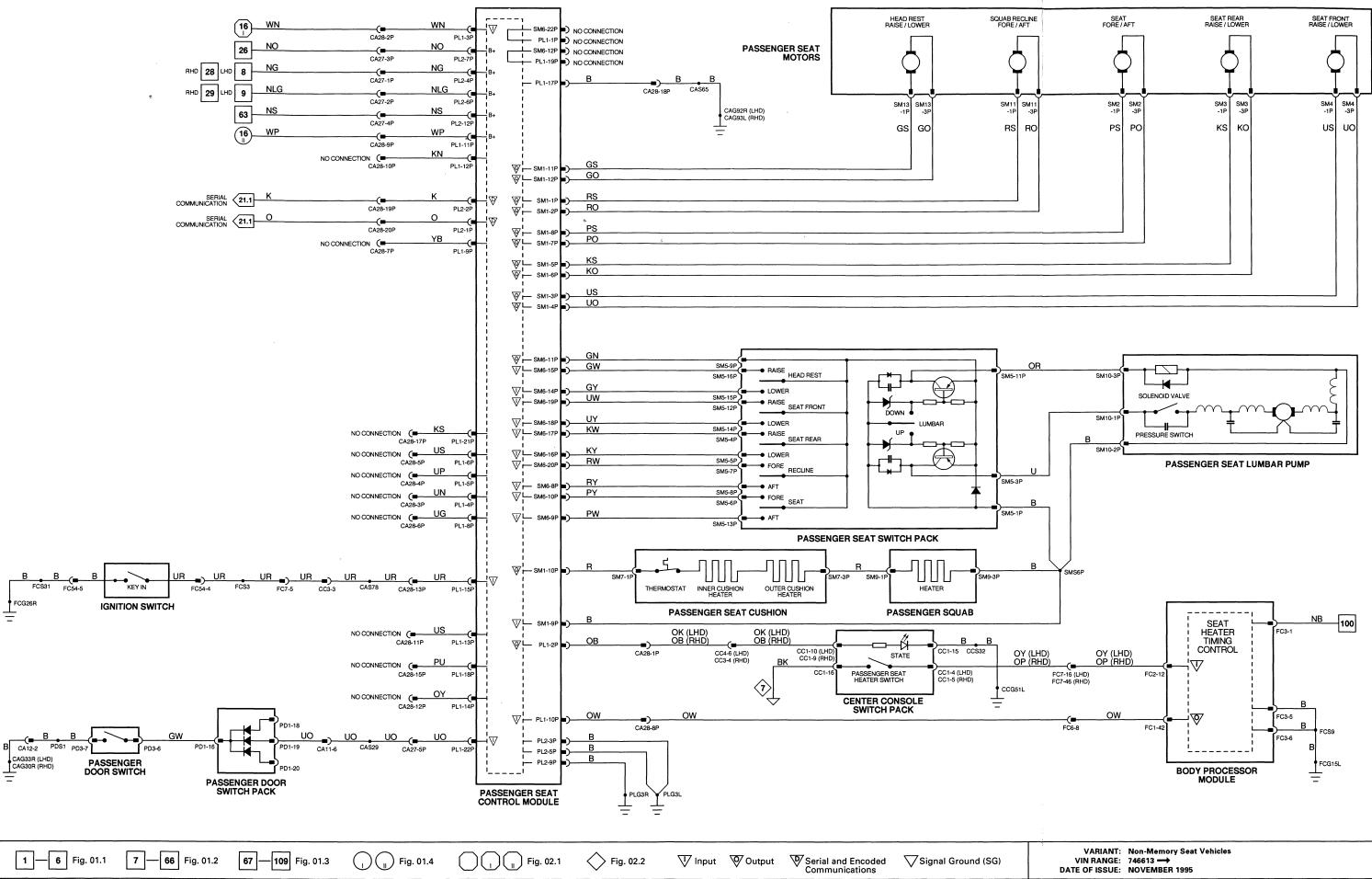
Ń

I Input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+ Battery voltage
- V Voltage (DC)
- Hz Frequency
- KHz Frequency x 1000 MS Milliseconds
- MV Millivolts

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.

Passenger Seat – Non-Memory





VARIANT:	Non-Memory Seat Vehicles
VIN RANGE:	746613 🛶
DATE OF ISSUE:	NOVEMBER 1995

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK SEAT CUSHION – PASSENGER SEAT MOTOR – PASSENGER (SEAT RAISE / LOWER VEHICLES) SEAT SWITCH PACK – PASSENGER (SEAT RAISE / LOWER VEHICLES) SQUAB – PASSENGER

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CC1 / 16-WAY MULTILOCK 040 / BLACK SM7-P / 3-WAY MULTILOCK 070 / YELLOW SM16-P / 6-WAY MULTILOCK 070 / SLATE

SM17-P / 16-WAY MULTILOCK 040 / BLACK

SM9-P / 3-WAY MULTILOCK 070 / SLATE

Location / Access

PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER

£.

PASSENGER'S SEAT

PASSENGER'S SEAT

RELAYS

Color / Stripe **Connector / Color** Location / Access Relay SEAT HEATER RELAY - PASSENGER BLACK SM18-P / BLUE PASSENGER'S SEAT BLACK / VIOLET SM14-P / BLUE PASSENGER'S SEAT SEAT LOWER RELAY - PASSENGER SM14-P / BLUE PASSENGER'S SEAT SEAT RAISE RELAY - PASSENGER BLACK / VIOLET

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

 CA27
 6-WAY MULTILOCK 070 / WHITE

 CA28
 20-WAY MULTILOCK 040 / BLACK

 CC3
 20-WAY MULTILOCK 040 / BLACK

 CC4
 14-WAY MULTILOCK 070 / WHITE

 FC6
 THROUGH-PANEL (48 MICRO / 6) / BLACK

 FC7
 THROUGH-PANEL (48 MICRO / 6) / BLACK

 ML1-P
 10-WAY MULTILOCK 070 / WHITE

Location / Access

PASSENGER'S SEAT / UNDER PASSENGER'S SEAT / UNDER CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX RH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE PASSENGER'S SEAT / UNDER

GROUNDS

ocation / Type
ENTER CONSOLE GROUND STUD
H CONSOLE GROUND STUD
H SEAT GROUND SCREW
H SEAT GROUND SCREW

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

đ

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-42	PASSENGER SEAT HEATER REQUEST	GROUND	B+
I.	FC2-12	PASSENGER SEAT HEATER SWITCH	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

I Input

O Output

SG Signal Ground

D Serial and encoded communications

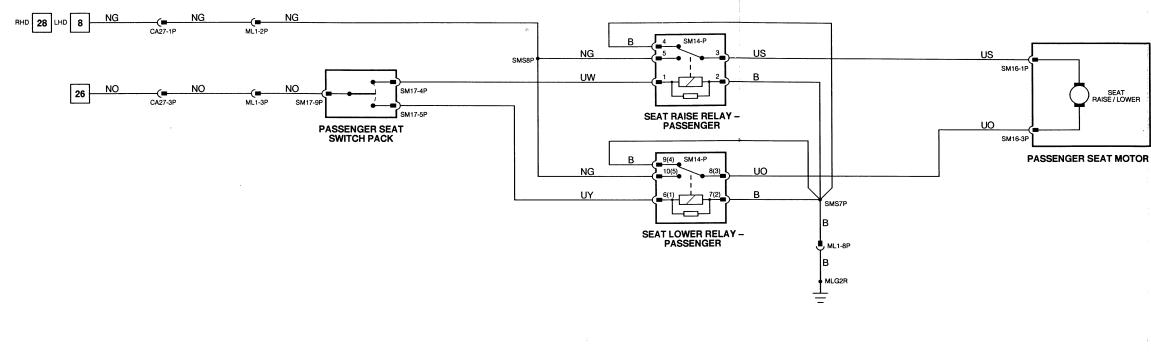
B+ Battery voltage

V Voltage (DC)

Hz Frequency

KHz Frequency x 1000 MS Milliseconds MV Millivolts

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.



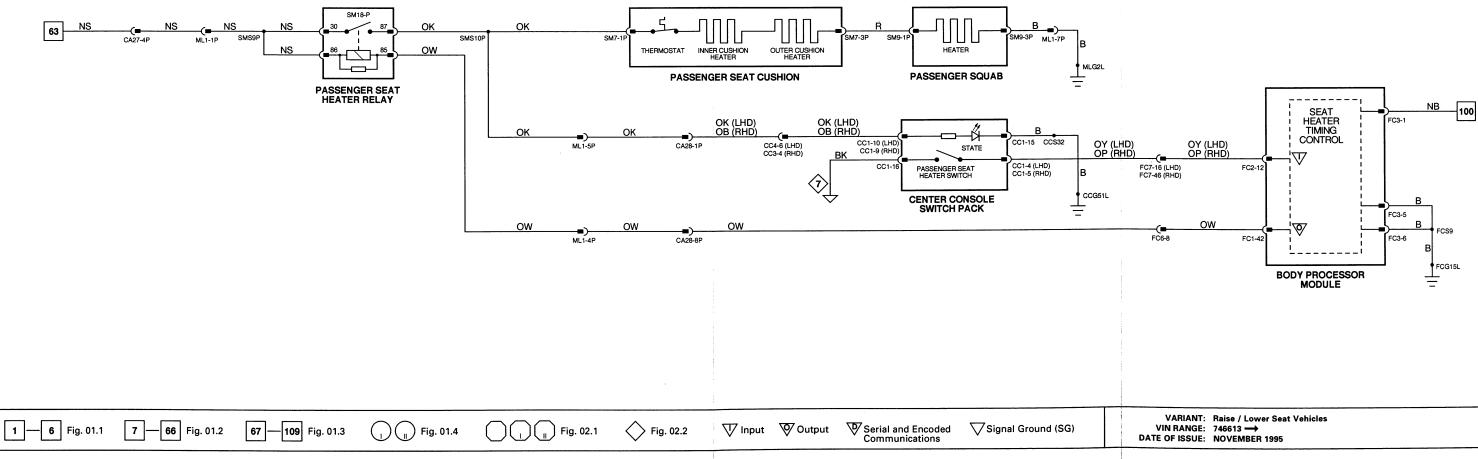




Fig. 14.10



VIN RANGE:	
DATE OF ISSUE:	NOVEMBER 1995

Fig. 14.11

COMPONENTS

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK SEAT CUSHION – PASSENGER SQUAB – PASSENGER

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CC1 / 16-WAY MULTILOCK 040 / BLACK SM7-P / 3-WAY MULTILOCK 070 / YELLOW SM9-P / 3-WAY MULTILOCK 070 / SLATE

Location / Access PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE PASSENGER'S SEAT / UNDER PASSENGER'S SEAT

RELAYS

HELATO			
Relay	Color / Stripe	Connector / Color	Location / Access
SEAT HEATER RELAY – PASSENGER	BLACK	SM18-P / BLUE	PASSENGER'S SEAT

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CA27	6-WAY MULTILOCK 070 / WHITE	PASSENGER'S SEAT / UNDER
CA28	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S SEAT / UNDER
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC4	14-WAY MULTILOCK 070 / WHITE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE
ML1-P	10-WAY MULTILOCK 070 / WHITE	PASSENGER'S SEAT / UNDER

GROUNDS

Ground	Location / Type
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
MLG2L	LH SEAT GROUND SCREW

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

BODY PROCESSOR MODULE

\vee	Pin	Description
--------	-----	-------------

 O
 FC1-42
 PASSENGER SEAT HEATER REQUEST

 I
 FC2-12
 PASSENGER SEAT HEATER SWITCH

Active GROUND GROUND Inactive

B+ B+

The following symbols are used to represent values for Control Module Pin Out data:

l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.



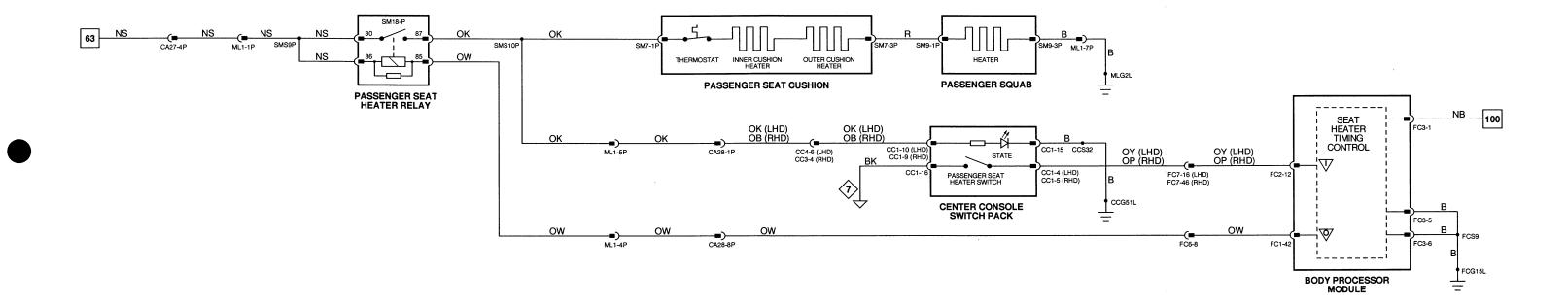




Fig. 14.11

VARIANT: Manual Passenger Seat Vehicles VIN RANGE: 746613 → DATE OF ISSUE: NOVEMBER 1995

Component

SEAT CONTROL MODULE - REAR BS2 / 12-WAY MULTILOCK 47 / BLUE BS6 / 12-WAY MULTILOCK 47 / WHITE BS7 / 22-WAY MULTILOCK 47 / WHITE SEAT CUSHION - LH REAR SEAT CUSHION -- RH REAR SEAT FORE/AFT MOTOR - LH REAR SEAT FORE/AFT MOTOR - RH REAR SEAT FORE/AFT SWITCH - LH REAR SEAT FORE/AFT SWITCH - RH REAR SEAT HEADREST MOTOR - LH REAR SEAT HEADREST MOTOR - RH REAR SEAT HEADREST SWITCH - LH REAR SEAT HEADREST SWITCH - RH REAR SEAT HEATER SWITCH - LH REAR SEAT HEATER SWITCH - RH REAR SEAT HEATER TIMER - LH REAR SEAT HEATER TIMER - RH REAR SEAT LUMBAR PUMP - LH REAR SEAT LUMBAR PUMP - RH REAR SEAT LUMBAR SWITCH - LH REAR SEAT LUMBAR SWITCH - RH REAR SEAT SQUAB - LH REAR SEAT SQUAB - RH REAR

Connector / Type / Color

BS1 / 22-WAY MULTILOCK 47 / BLUE REAR SEATS, CENTER / BEHIND REAR SEATS, CENTER / BEHIND REAR SEATS, CENTER / BEHIND BB1-L / 3-WAY MULTILOCK 070 / YELLOW BB1-R / 3-WAY MULTILOCK 070 / YELLOW BB2-L / 3-WAY MULTILOCK 070 / WHITE BB2-R / 3-WAY MULTILOCK 070 / WHITE BC3 / 10-WAY AMP MLQ / BLACK BC5 / 10-WAY AMP MLQ / BLACK BB3-L / 6-WAY MULTILOCK 070 / YELLOW BB3-R / 6-WAY MULTILOCK 070 / YELLOW BC4 / 10-WAY AMP MLQ / BLACK BC7 / 10-WAY AMP MLQ / BLACK BC1 / 10-WAY AMP MLQ / BLACK BC2 / 10-WAY AMP MLQ / BLACK CA111 / 5-WAY RELAY BASE / YELLOW CA112 / 5-WAY RELAY BASE / YELLOW BB4-L / 3-WAY MULTILOCK 070 / YELLOW BB4-R / 3-WAY MULTILOCK 070 / YELLOW BC8 / 10-WAY AMP MLQ / BLACK BC6 / 10-WAY AMP MLQ / BLACK BB5-L / 3-WAY MULTILOCK 070 / SLATE

Location / Access

REAR SEATS, CENTER / BEHIND

LH REAR SEAT / INSIDE **RH REAR SEAT / INSIDE** LH REAR SEAT / INSIDE RH REAR SEAT / INSIDE REAR SEAT SWITCH PACK / UNDER REAR SEAT SWITCH PACK / UNDER LH REAR SEAT / INSIDE RH REAR SEAT / INSIDE REAR SEAT SWITCH PACK / UNDER REAR SEAT SWITCH PACK / UNDER **CENTER CONSOLE / REAR** CENTER CONSOLE / REAR LH HEELBOARD / HEELBOARD COVER RH HEELBOARD / HEELBOARD COVER LH REAR SEAT / INSIDE RH REAR SEAT / INSIDE REAR SEAT SWITCH PACK / UNDER REAR SEAT SWITCH PACK / UNDER LH REAR SEAT / INSIDE BB5-R / 3-WAY MULTILOCK 070 / SLATERH REAR SEAT / INSIDE

RELAYS

Color / Stripe Connector / Color Location / Access Relay BLACK / BLUE RH HEELBOARD LUMBAR DEFLATE RELAY - LH REAR CA54 / BLUE

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BS3	8-WAY MULTILOCK 070 / YELLOW	LH REAR SEAT / UNDER
BS4	20-WAY MULTILOCK 070 / WHITE	REAR SEAT CONSOLE / UNDER
BS5	8-WAY MULTILOCK 070 / YELLOW	RH REAR SEAT / UNDER
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	PARCEL SHELF / FUEL TANK TRIM
CA109	12-WAY MULTILOCK 070 / WHITE	RH REAR SEAT / UNDER

GROUNDS

Ground Location / Type RH SEAT GROUND STUD CAG110L CAG110R RH SEAT GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ŝ

REAR SEAT CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
1	BS1-11	LH LUMBAR SWITCH INFLATE	B+	0V
o	BS6-1	RH REAR SEAT LUMBAR PUMP FEED	B+	B+
ο	BS6-2	RH REAR SEAT LUMBER DEFLATE SOLENOID VALVE	B+	0V
о	BS6-3	LH REAR SEAT MOTOR – FORE / AFT MOTOR	B+	0V
о	BS6-4	LH REAR SEAT MOTOR – FORE / AFT MOTOR	B+	0V
0	BS6-5	LH REAR SEAT – HEADREST MOTOR	B+	0V
0	BS6-6	LH REAR SEAT – HEADREST MOTOR	B+	0V
0	BS6-7	RH REAR SEAT MOTOR - FORE / AFT MOTOR	B+	0V
0	BS6-8	RH REAR SEAT MOTOR - FORE / AFT MOTOR	B+	0V
0	BS6-10	LH REAR SEAT LUMBAR PUMP FEED	B+	B+
0	BS6-11	RH REAR SEAT – HEADREST MOTOR	B+	0V
0	BS6-12	RH REAR SEAT – HEADREST MOTOR	B+	0V
ı.	BS7-8	RH LUMBAR SWITCH – INFLATE REQUEST	B+	ov
1	BS7-9	RH FORE / AFT SWITCH – AFT REQUEST	B+	0V
1 I	BS7-10	RH FORE / AFT SWITCH – FORE REQUEST	B+	0V
1	BS7-14	RH HEADREST SWITCH – LOWER REQUEST	B+	0V
1	BS7-15	RH HEADREST SWITCH – RAISE REQUEST	B+	0V
I	BS7-16	LH HEADREST SWITCH – LOWER REQUEST	B+	0V
I.	BS7-17	LH HEADREST SWITCH – RAISE REQUEST	B+	0V
1	BS7-18	LH FORE / AFT SWITCH – AFT REQUEST	B+	0V
I.	BS7-19	LH FORE / AFT SWITCH – FORE REQUEST	B+	0V
I	BS7-20	RH LUMBAR SWITCH – DEFLATE REQUEST	B+	0V

The following symbols are used to represent values for Control Module Pin Out data:

I Input

O Output

SG Signal Ground

D Serial and encoded communications

B+ Battery voltage

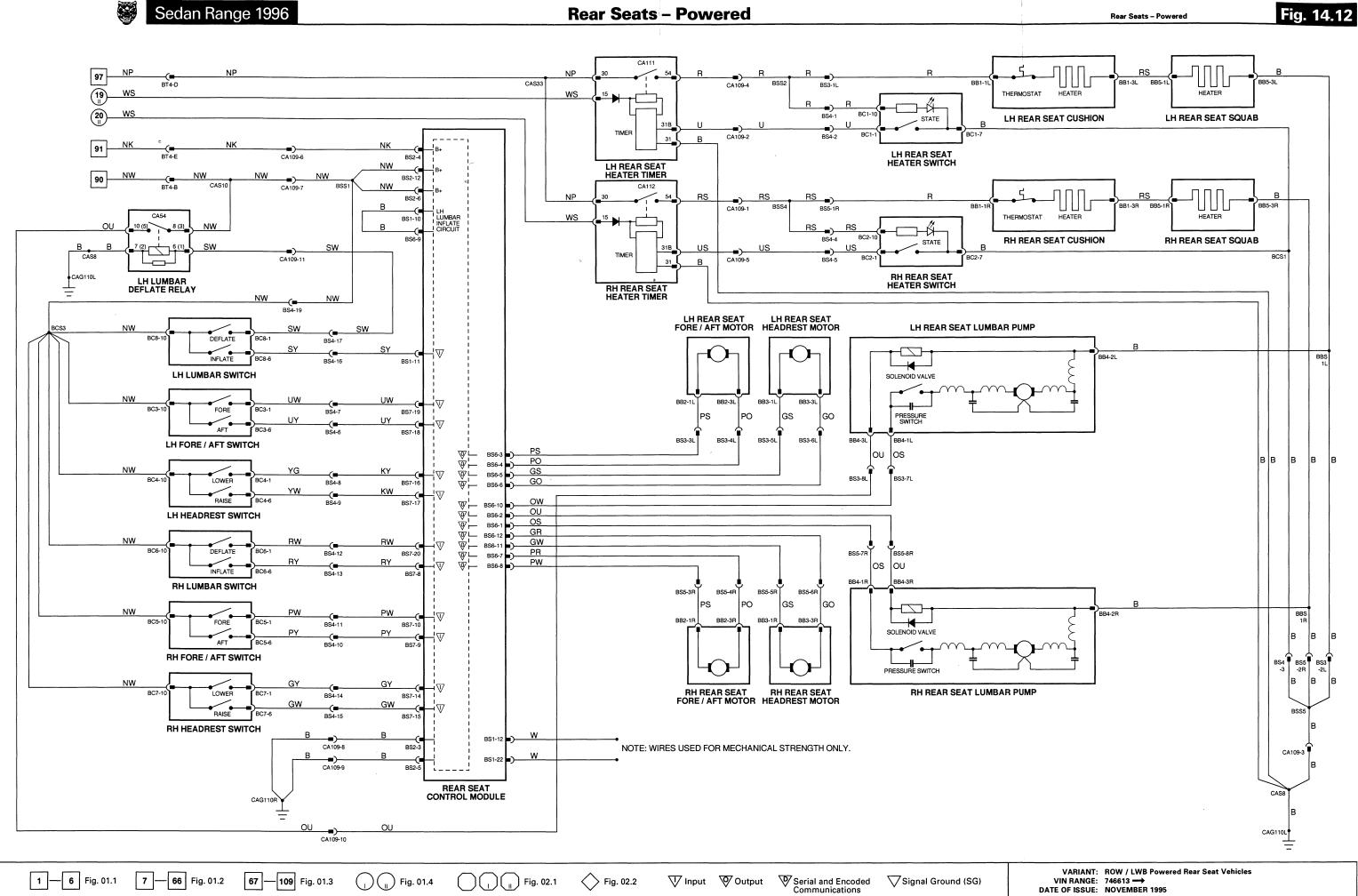
V Voltage (DC)

Hz Frequency

KHz Frequency x 1000 MS Milliseconds

MV Millivolts

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.



Component

SEAT CUSHION - LH REAR SEAT CUSHION - RH REAR SEAT HEATER SWITCH - LH REAR SEAT HEATER SWITCH - RH REAR SEAT HEATER TIMER - LH REAR SEAT HEATER TIMER - RH REAR SEAT SOUAB - LH REAR SEAT SQUAB - RH REAR

Connector / Type / Color

BB1-L / 3-WAY MULTILOCK 070 / YELLOW BB1-R / 3-WAY MULTILOCK 070 / YELLOW BC1 / 10-WAY AMP MLQ / BLACK BC2 / 10-WAY AMP MLQ / BLACK CA111 / 5-WAY RELAY BASE / YELLOW CA112 / 5-WAY RELAY BASE / YELLOW BB5-L / 3-WAY MULTILOCK 070 / SLATE

Location / Access

LH REAR SEAT / INSIDE RH REAR SEAT / INSIDE CENTER CONSOLE / REAR CENTER CONSOLE / REAR LH HEELBOARD / HEELBOARD COVER RH HEELBOARD / HEELBOARD COVER LH REAR SEAT / INSIDE BB5-R / 3-WAY MULTILOCK 070 / SLATERH REAR SEAT / INSIDE

HARNESS-TO-HARNESS CONNECTORS

Type / Color Connector

BS10 3-WAY MULTILOCK 070 / YELLOW LH REAR SEAT / UNDER BS11 3-WAY MULTILOCK 070 / YELLOW RH REAR SEAT / UNDER
BSTI S-WAT MOLTILOCK 0/0/ TELLOW RH REAR SEAT / UNDER
BT4 THROUGH-PANEL (48 MICRO / 6) / BLACK PARCEL SHELF / FUEL TANK TRIM
CA109 12-WAY MULTILOCK 070 / WHITE RH REAR SEAT / UNDER

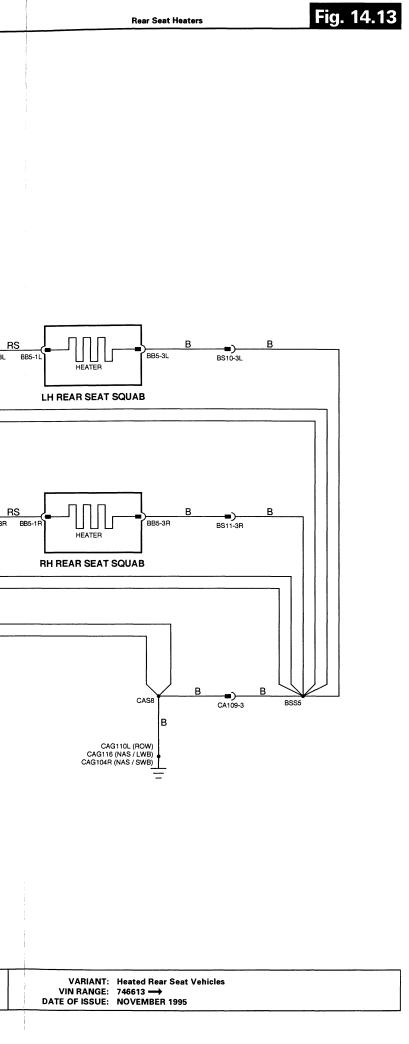
GROUNDS

Ground	Location / Type
CAG104R	LH SEAT GROUND STUD
CAG110L	RH SEAT GROUND STUD
CAG116	RH SEAT GROUND STUD

REFER TO THE FRONT OF THE BOOK FOR ILLUSTRATIONS DETAILING THE LOCATION AND IDENTIFICATION OF COMPONENTS, RELAYS, CONNECTORS, HARNESSES, GROUNDS, VEHICLE CONTROL MODULES AND CONTROL MODULE PINS.

Ń

Sedan Range 1996	Rear Seat Heaters
÷	
97 NP NP CAS33 19 WS US	R CA109-4 BSS2 R CA109-4 BSS2 R BSS-3 CA109-2 R BSS-3 CA109-2 R BSS-3 CA109-4 BSS-3 CA109-4 BSS-3 CA109-4 BSS-3 CA109-4 BSS-3 CA109-4 BSS-3 CA109-4 BSS-3 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-4 CA109-2 CA1
NP 30 US 15 15 15 15 15 1 10 10 10 10 10 10 10 10 10	RS CA109-1 US CA109-5 RS CA109-5 RS RS RS RS RS RS RS RS RS RS
1 6 Fig. 01.1 7 66 Fig. 01.2 67 109 Fig. 01.3 (Fig. 01.4 Fig. 02.1 Fig. 02.2 V Input V Output Serial and Encoded Signal Ground (SG)



Component

CENTER CONSOLE SWITCH PACK DOOR KEY BARREL SWITCH – DRIVER DOOR LOCK ACTUATOR – DRIVER DOOR LOCK ACTUATOR – DH REAR DOOR LOCK ACTUATOR – HREAR FASCIA TRUNK RELEASE SWITCH FUEL FILLER FLAP ACTUATOR IGNITION SWITCH NOT IN-PARK MICROSWITCH SECURITY AND LOCKING CONTROL MODULE

SHORTING LINK TRUNK RELEASE ACTUATOR TRUNK RELEASE SWITCH VALET SWITCH

Connector / Type / Color

CC1 / 16-WAY MULTILOCK 040 / BLACK DD3 / 13-WAY ECONOSEAL III LC / BLACK DD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-L / 6-WAY ECONOSEAL III LC / BLACK PD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-R / 6-WAY ECONOSEAL III LC / BLACK FC12 / 16-WAY MULTILOCK 040 / BLUE CA88 / 2-WAY LABINAL / NATURAL FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE CA43 / 6-WAY MULTILOCK 070 / YELLOW BT8 / 2-WAY LABINAL / BROWN BT10 / 2-WAY MULTILOCK 040 / GREEN CC47 / 2-WAY MULTILOCK 040 / BLACK

Location / Access

CENTER CONSOLE DOOR CASING DOOR CASING DOOR CASING DOOR CASING DOOR CASING STEERING COLUMN / DRIVER'S UNDERSCUTTLE TRUNK, LF FRONT / TRUNK TRIM STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE TRUNK, LH FRONT / TRUNK TRIM

REAR SEAT, LH SIDE / UNDER TRUNK LID / TRUNK LID TRIM TRUNK LID / TRUNK LID TRIM CENTER CONSOLE GLOVE BOX

RELAYS

Relay

DEADLOCK RELAY – DRIVER, RH REAR DEADLOCK RELAY – PASSENGER, LH REAR DOOR LOCK RELAY DOOR UNLOCK RELAY FUEL FILLER FLAP RELAY TRUNK RELEASE RELAY Color / Stripe VIOLET VIOLET VIOLET VIOLET VIOLET

BLACK / VIOLET

Location / Access

LH HEELBOARD LH HEELBOARD LH HEELBOARD LH HEELBOARD LH HEELBOARD TRUNK ELECTRICAL CARRIER

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST / 'A' POST TRIM
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
CA13	12-WAY MULTILOCK 040 / BLACK	LH 'BC' POST / 'BC' POST PANEL
CA15	12-WAY MULTILOCK 040 / BLACK	RH 'BC' POST / 'BC' POST PANEL
CC18	20-WAY MULTILOCK 040 / BLUE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE

Connector / Color

CA55 / VIOLET

CA55 / VIOLET

CA50 / VIOLET

CA50 / VIOLET

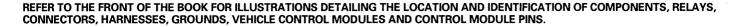
CA97 / VIOLET

BT43 / VIOLET

GROUNDS

Ground	Location / Type
BTG49L	REAR TRUNK GROUND STUD
CAG91	PARCEL SHELF GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CAG93L	LH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)



SECURITY AND LOCKING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
1	CA18-2	EXTERNAL TRUNK LID SWITCH	GROUND	1.74 V
1	CA18-3	NOT IN PARK MICROSWITCH	GROUND	B+
1	CA18-4	PASSENGER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
1	CA18-6	DRIVER DOOR LOCK BARREL UNLOCK / DISARM REQUEST	MOMENTARY GROUND	1.74 V
1	CA18-10	DRIVER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
1	CA18-12	DRIVER DOOR LOCK BARREL LOCK / ARM REQUEST	MOMENTARY GROUND	1.74 V
0	CA19-1	FUEL FILLER FLAP LOCK REQUEST	GROUND PULSE	B+
1	CA19-6	VALET SWITCH	MOMENTARY GROUND	2 V
1	CA19-8	FASCIA TRUNK RELEASE SWITCH	MOMENTARY GROUND	2.7 V
1	CA19-18	KEY IN IGNITION SWITCH	GROUND	9.5 V
1	CA19-19	CENTRAL LOCKING SWITCH ALL CLOSE REQUEST	GROUND	B+
0	CA19-22	DOOR UNLOCK RELAY	GROUND PULSE	В+
D	CA20-8	SERIAL COMMUNICATION INPUT		
D	CA20-16	SERIAL COMMUNICATION OUTPUT		
-				
0	CA21-1	RHF & LHR DOOR DEADLOCK RELAY (NOT NAS)	GROUND PULSE	B+
E	CA21-5	VEHICLE SPEED INPUT	B+ @ 10 MPH = 20 Hz, 20 MPH = 40 Hz	
0	CA21-11	TRUNK RELEASE RELAY	GROUND PULSE	B+
ο	CA21-14	LHF & RHR DOOR DEADLOCK RELAY	GROUND PULSE	В+
о	CA21-15	DOOR LOCK RELAY	GROUND PULSE	B+

The following symbols are used to represent values for Control Module Pin Out data:

ŝ

I Input

O Output

SG Signal Ground

- D Serial and encoded communications
- B+ Battery voltage
- V Voltage (DC)
- Hz Frequency

KHz Frequency x 1000

MS Milliseconds MV Millivolts

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.

Central Door Locking – LHD

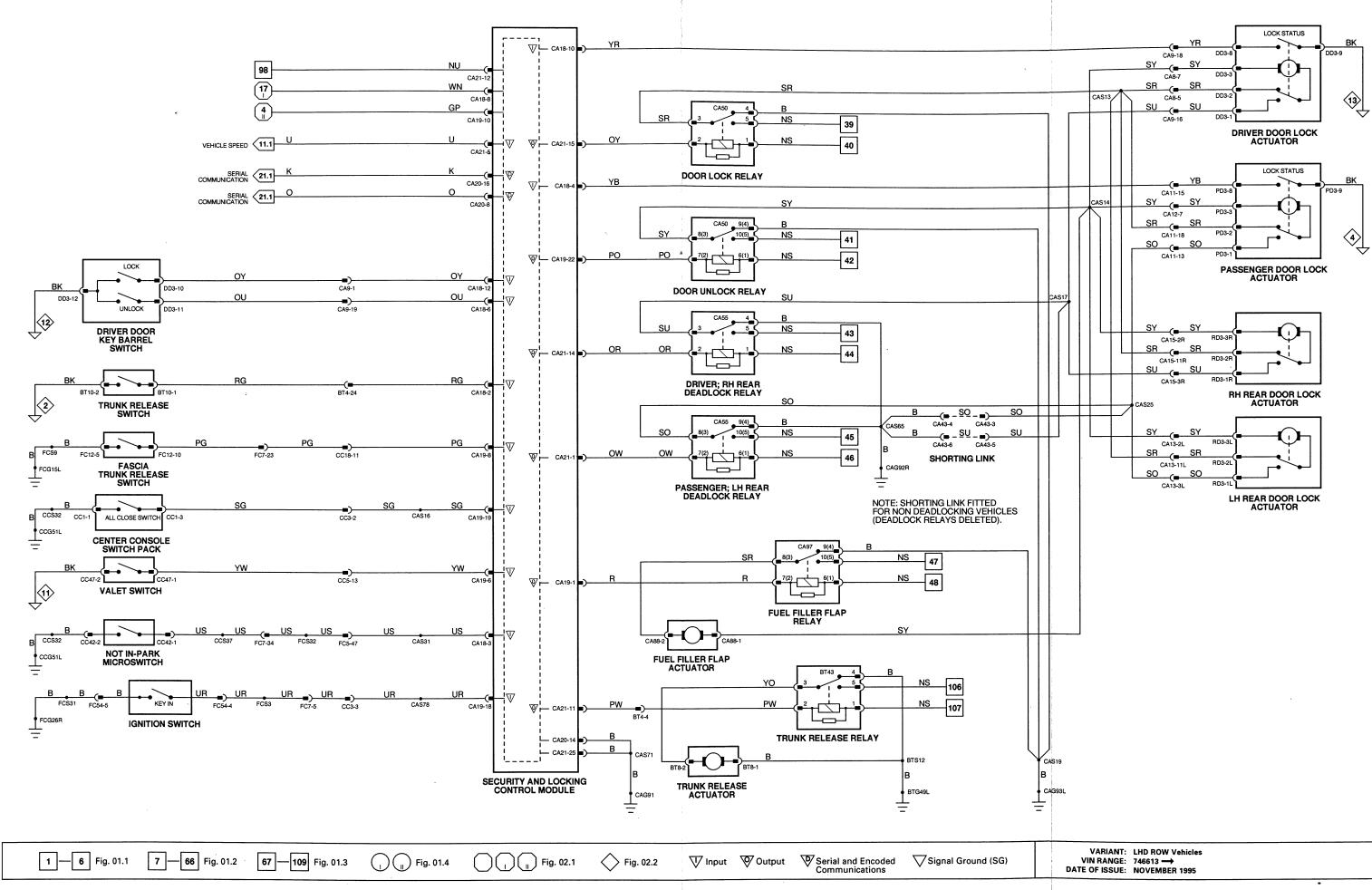


Fig. 15.1

Component

CENTER CONSOLE SWITCH PACK DOOR KEY BARREL SWITCH – DRIVER DOOR LOCK ACTUATOR – DRIVER DOOR LOCK ACTUATOR – LIN REAR DOOR LOCK ACTUATOR – RH REAR FASCIA TRUNK RELEASE SWITCH FUEL FILLER FLAP ACTUATOR IGNITION SWITCH NOT IN-PARK MICROSWITCH SECURITY AND LOCKING CONTROL MODULE

TRUNK RELEASE ACTUATOR TRUNK RELEASE SWITCH VALET SWITCH

Connector / Type / Color

CC1 / 16-WAY MULTILOCK 040 / BLACK DD3 / 13-WAY ECONOSEAL III LC / BLACK DD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-L / 6-WAY ECONOSEAL III LC / BLACK PD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-R / 6-WAY ECONOSEAL III LC / BLACK FC12 / 16-WAY MULTILOCK 040 / BLUE CA88 / 2-WAY LABINAL / NATURAL FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE CC42 (FLY LEAD) / 8-WAY MULTILOCK 040 / BLACK CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE BT8 / 2-WAY LABINAL / BROWN BT10 / 2-WAY MULTILOCK 040 / GREEN CC47 / 2-WAY MULTILOCK 040 / GLACK

Location / Access

CENTER CONSOLE DOOR CASING DOOR CASING DOOR CASING DOOR CASING DOOR CASING STEERING COLUMN / DRIVER'S UNDERSCUTTLE TRUNK, LF FRONT / TRUNK TRIM STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE TRUNK, LH FRONT / TRUNK TRIM

TRUNK LID / TRUNK LID TRIM TRUNK LID / TRUNK LID TRIM CENTER CONSOLE GLOVE BOX

RELAYS

Relay	Color / Stripe	Connector / Color	Location / Access
DRIVER DOOR UNLOCK RELAY	VIOLET	CA7 / VIOLET	LH HEELBOARD
DOOR LOCK RELAY	VIOLET	CA50 / VIOLET	LH HEELBOARD
DOOR UNLOCK RELAY	VIOLET	CA50 / VIOLET	LH HEELBOARD
FUEL FILLER FLAP RELAY	VIOLET	CA97 / VIOLET	LH HEELBOARD
TRUNK RELEASE RELAY	BLACK / VIOLET	BT43 / VIOLET	TRUNK ELECTRICAL CARRIER

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST / 'A' POST TRIM
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
CA13	12-WAY MULTILOCK 040 / BLACK	LH 'BC' POST / 'BC' POST PANEL
CA15	12-WAY MULTILOCK 040 / BLACK	RH 'BC' POST / 'BC' POST PANEL
CC18	20-WAY MULTILOCK 040 / BLUE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE

GROUNDS

Ground	Location / Type
BTG49L	REAR TRUNK GROUND STUD
CAG91	PARCEL SHELF GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CAG93L	LH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

SECURITY AND LOCKING CONTROL MODULE

	CA18-2		Active	Inactive
		EXTERNAL TRUNK LID SWITCH	GROUND	1.74 V
I C/	CA18-3	NOT IN PARK MICROSWITCH	GROUND	B+
I Ci	CA18-4	PASSENGER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
I C	CA18-6	DRIVER DOOR LOCK BARREL UNLOCK / DISARM REQUEST	MOMENTARY GROUND	1.74 V
I C	CA18-10	DRIVER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
I C/	CA18-12	DRIVER DOOR LOCK BARREL LOCK / ARM REQUEST	MOMENTARY GROUND	1.74 V
o c,	CA19-1	FUEL FILLER FLAP LOCK REQUEST	GROUND PULSE	B+
I C.	CA19-6	VALET SWITCH	MOMENTARY GROUND	2 V
I C.	CA19-8	FASCIA TRUNK RELEASE SWITCH	MOMENTARY GROUND	2.7 V
I C.	CA19-18	KEY IN IGNITION SWITCH	GROUND	9.5 V
I C.	CA19-19	CENTRAL LOCKING SWITCH ALL CLOSE REQUEST	GROUND	B+
0 C.	CA19-22	DOOR UNLOCK RELAY	GROUND PULSE	B+
D C,	CA20-8	SERIAL COMMUNICATION INPUT		
D C.	CA20-16	SERIAL COMMUNICATION OUTPUT		
o c	CA21-2	DRIVER DOOR UNLOCK RELAY (TWO STAGE REMOTE UNLOCKING)	GROUND PULSE	B+
I C	CA21-5	VEHICLE SPEED INPUT	B+ @ 10 MPH = 20 Hz, 20 MPH = 40 Hz	
0 C.	CA21-11	TRUNK RELEASE RELAY	GROUND PULSE	B+
0 C.	CA21-15	DOOR LOCK RELAY	GROUND PULSE	B+

The following symbols are used to represent values for Control Module Pin Out data:

l Input

- O Output
- SG Signal Ground
- D Serial and encoded communications

÷

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Central Door Locking – NAS

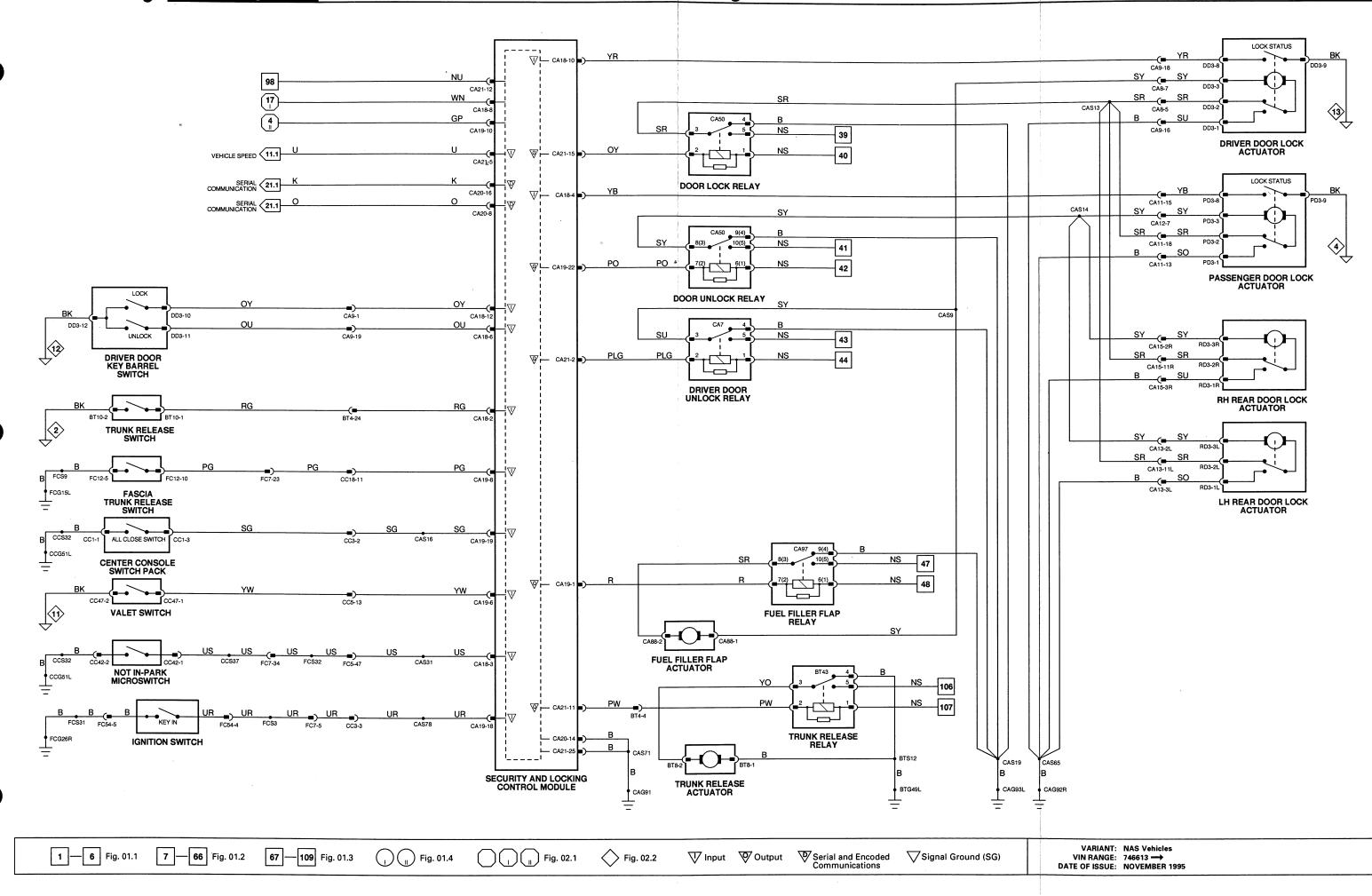


Fig. 15.2

Component

CENTER CONSOLE SWITCH PACK DOOR KEY BARREL SWITCH – DRIVER DOOR LOCK ACTUATOR – DRIVER DOOR LOCK ACTUATOR – LH REAR DOOR LOCK ACTUATOR – PASSENGER DOOR LOCK ACTUATOR – RH REAR FASCIA TRUNK RELEASE SWITCH FUEL FILLER FLAP ACTUATOR IGNITION SWITCH NOT IN-PARK MICROSWITCH SECURITY AND LOCKING CONTROL MODULE

SHORTING LINK TRUNK RELEASE ACTUATOR TRUNK RELEASE SWITCH VALET SWITCH

Connector / Type / Color

CC1 / 16-WAY MULTILOCK 040 / BLACK DD3 / 13-WAY ECONOSEAL III LC / BLACK DD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-L / 6-WAY ECONOSEAL III LC / BLACK PD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-R / 6-WAY ECONOSEAL III LC / BLACK FC12 / 16-WAY MULTILOCK 040 / BLUE CA88 / 2-WAY LABINAL / NATURAL FC54 (FLY LEAD) / 8-WAY MULTILOCK 070 / WHITE CC42 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE CA43 / 6-WAY MULTILOCK 070 / YELLOW BT8 / 2-WAY LABINAL / BROWN BT10 / 2-WAY MULTILOCK 040 / GREEN CC47 / 2-WAY MULTILOCK 040 / BLACK

Location / Access

CENTER CONSOLE DOOR CASING DOOR CASING DOOR CASING DOOR CASING DOOR CASING STEERING COLUMN / DRIVER'S UNDERSCUTTLE TRUNK, LF FRONT / TRUNK TRIM STEERING COLUMN / COVER 'J' GATE / CENTER CONSOLE TRUNK, LH FRONT / TRUNK TRIM

REAR SEAT, LH SIDE / UNDER TRUNK LID / TRUNK LID TRIM TRUNK LID / TRUNK LID TRIM CENTER CONSOLE GLOVE BOX

ŧ.

RELAYS

Relay	Color / Stripe	Connector / Color	Location / Access
DEADLOCK RELAY – DRIVER, LH REAR	VIOLET	CA55 / VIOLET	LH HEELBOARD
DEADLOCK RELAY – PASSENGER, RH REAR	VIOLET	CA55 / VIOLET	LH HEELBOARD
DOOR LOCK RELAY	VIOLET	CA50 / VIOLET	LH HEELBOARD
DOOR UNLOCK RELAY	VIOLET	CA50 / VIOLET	LH HEELBOARD
FUEL FILLER FLAP RELAY	VIOLET	CA97 / VIOLET	LH HEELBOARD
TRUNK RELEASE RELAY	BLACK / VIOLET	BT43 / VIOLET	TRUNK ELECTRICAL CARRIER

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST / 'A' POST TRIM
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
CA13	12-WAY MULTILOCK 040 / BLACK	LH 'BC' POST / 'BC' POST PANEL
CA15	12-WAY MULTILOCK 040 / BLACK	RH 'BC' POST / 'BC' POST PANEL
CC18	20-WAY MULTILOCK 040 / BLUE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK	PASSENGER'S UNDERSCUTTLE

GROUNDS

Ground	Location / Type
BTG49L	REAR TRUNK GROUND STUD
CAG91	PARCEL SHELF GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CAG93L	LH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ň

SECURITY AND LOCKING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
I.	CA18-2	EXTERNAL TRUNK LID SWITCH	GROUND	1.74 V
1	CA18-3	NOT IN PARK MICROSWITCH	GROUND	B+
I.	CA18-4	DRIVER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
I	CA18-6	DRIVER DOOR LOCK BARREL UNLOCK / DISARM REQUEST	MOMENTARY GROUND	1.74 V
1	CA18-10	PASSENGER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
ł	CA18-12	DRIVER DOOR LOCK BARREL LOCK / ARM REQUEST	MOMENTARY GROUND	1.74 V
o	CA19-1	FUEL FILLER FLAP LOCK REQUEST	GROUND PULSE	В+
I.	CA19-6	VALET SWITCH	MOMENTARY GROUND	2 V
1	CA19-8	FASCIA TRUNK RELEASE SWITCH	MOMENTARY GROUND	2.7 V
1	CA19-18	KEY IN IGNITION SWITCH	GROUND	9.5 V
I.	CA19-19	CENTRAL LOCKING SWITCH ALL CLOSE REQUEST	GROUND	В+
0	CA19-22	DOOR UNLOCK RELAY	GROUND PULSE	B+
D	CA20-8	SERIAL COMMUNICATION INPUT		
D	CA20-16	SERIAL COMMUNICATION OUTPUT		
о	CA21-1	RHF & LHR DOOR DEADLOCK RELAY (NOT NAS)	GROUND PULSE	В+
I	CA21-5	VEHICLE SPEED INPUT	B+ @ 10 MPH = 20 Hz, 20 MPH = 40 Hz	
0	CA21-11	TRUNK RELEASE RELAY	GROUND PULSE	B+
0	CA21-14	LHF & RHR DOOR DEADLOCK RELAY	GROUND PULSE	B+
0	CA21-15	DOOR LOCK RELAY	GROUND PULSE	В+

The following symbols are used to represent values for Control Module Pin Out data:

ġ

l Input

O Output

SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

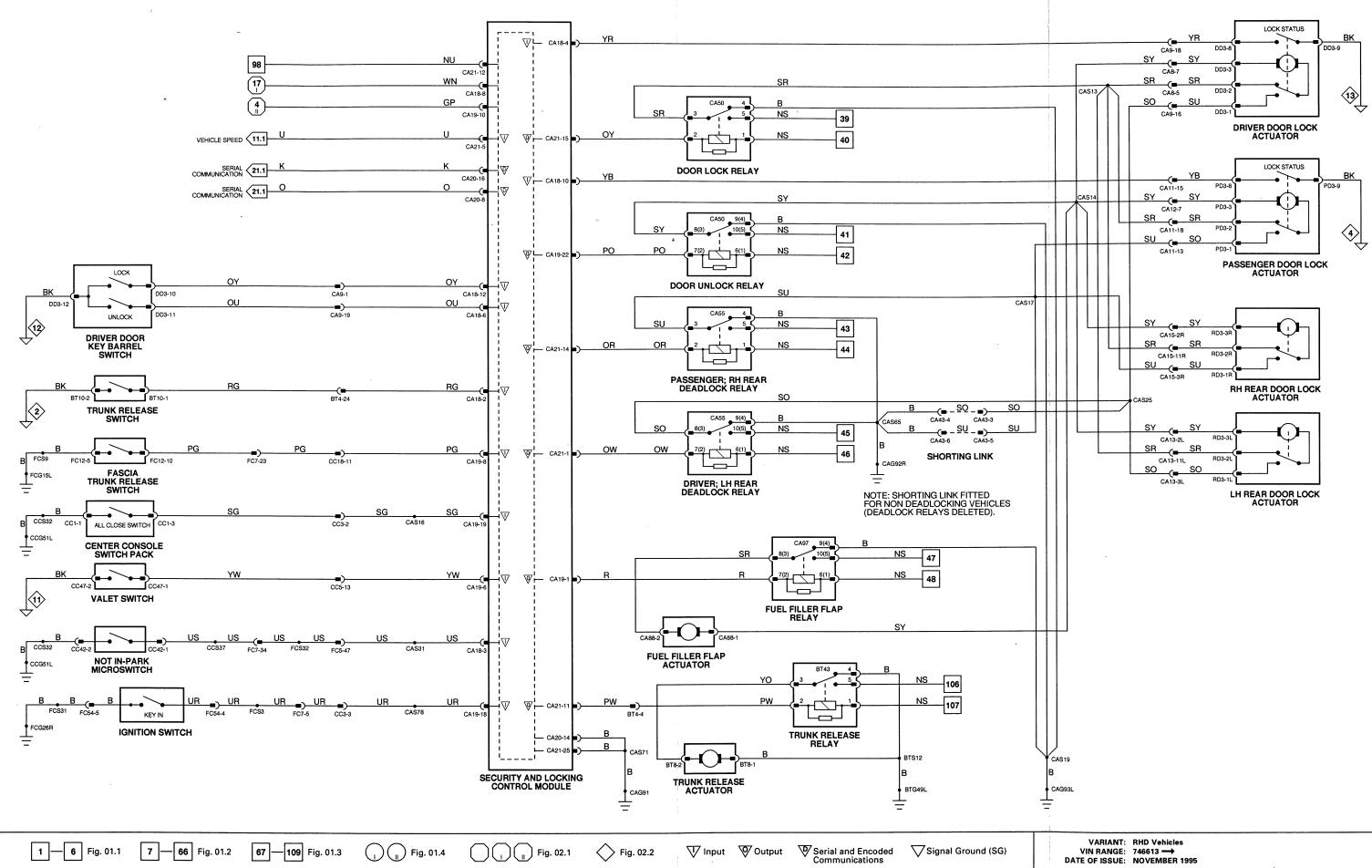


Fig. 15.3

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK COIL (COLUMN SWITCHGEAR) DOOR LOCK ACTUATOR – DRIVER DOOR LOCK ACTUATOR – PASSENGER DOOR SWITCH – DRIVER DOOR SWITCH – DRIVER DOOR SWITCH – LH REAR DOOR SWITCH – LH REAR DOOR SWITCH – RH REAR HOOD SWITCH – RH REAR READER / EXCITER CONTROL MODULE SECURITY AND LOCKING CONTROL MODULE

SECURITY ANTENNA SECURITY SOUNDER TRUNK SWITCH VALET SWITCH

GROUNDS Ground

CAG30L

CAG33I

CAG49

CAG91

CAG92L

CAG93E

CCG51L

RSG8L

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK
CA8	20-WAY MULTILOCK 040 / GREEN
CA9	20-WAY MULTILOCK 040 / BLACK
CA10	8-WAY MULTILOCK 070 / WHITE
CA11	20-WAY MULTILOCK 040 / BLACK
CA12	15-WAY MULTILOCK 070 / WHITE
CA13	12-WAY MULTILOCK 040 / BLACK
CA14	2-WAY MULTILOCK 070 / WHITE
CA15	12-WAY MULTILOCK 040 / BLACK
CA16	2-WAY MULTILOCK 040 / WHITE
CC3	20-WAY MULTILOCK 040 / BLACK
CC5 -	20-WAY MULTILOCK 040 / GREEN
CC18	20-WAY MULTILOCK 040 / BLUE
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC8	12-WAY MULTILOCK 040 / BLACK
FC16	20-WAY MULTILOCK 040 / BLACK
PI1	13-WAY ECONOSEAL III LC / WHITE
PI63	20-WAY MULTILOCK 040 / BLACK
RF4	12-WAY MULTILOCK 040 / BLACK
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN

Location / Type

LH 'A' POST GROUND SCREW

RH CONSOLE GROUND STUD

PARCEL SHELF GROUND SCREW

RH HEELBOARD GROUND SCREW

LH HEELBOARD GROUND SCREW

CENTER CONSOLE GROUND STUD

RIGHT FORWARD GROUND STUD

BH HEELBOARD GROUND SCREW

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK CC1 / 16-WAY MULTILOCK 040 / BLACK SC11 / 2-WAY MULTILOCK 040 / GREEN DD3 / 13-WAY ECONOSEAL III LC / BLACK PD3 / 13-WAY ECONOSEAL III LC / BLACK PD1 / 26-WAY MULTILOCK 47 / SLATE DD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-L / 6-WAY ECONOSEAL III LC / BLACK PD3 / 13-WAY ECONOSEAL III LC / BLACK RD3-R / 6-WAY ECONOSEAL III LC / BLACK RS17 / 2-WAY ECONOSEAL III LC / BLACK CA66 / 6-WAY CS-25 / ORANGE RF6 / 4-WAY MODU / BLACK RF5 / 4-WAY MODU / BLACK FC53 / 20-WAY MULTILOCK 040 / BLACK CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE CA26 / LUCAR / BLACK RS21 (FLY LEAD) / 6-WAY ECONOSEAL III LC / BLACK BT15 / 2-WAY FORD DIAGNOSTIC / BLACK CC47 / 2-WAY MULTILOCK 040 / BLACK

> Location / Access ABOVE FUEL TANK / FUEL TANK TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM PRIVER'S 'A' POST / 'A' POST TRIM PASSENGER'S UNDERSCUTTLE / ECM LH 'BC' POST / 'BC' POST PANEL LH 'BC' POST / 'BC' POST PANEL RH 'BC' POST / 'BC' POST PANEL BH 'BC' POST / 'BC' POST PANEL

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX LH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE REARWARD OF RH HEADLAMP RH 'A' POST / 'A' POST TRIM ROOF CONSOLE RH 'A' POST / 'A' POST PANEL

Location / Access

PASSENGER'S UNDERSCUTTLE

CENTER CONSOLE STEERING COLUMN / COVER DOOR CASING ARM REST / TOP ROLL DOOR CASING DOOR CASING DOOR CASING DOOR CASING ENGINE BAY, RH FRONT TRUNK, LH FRONT / TRUNK TRIM HEAD LINER, LH SIDE HEAD LINER, RH SIDE DRIVER'S UNDERSCUTTLE TRUNK, LH FRONT / TRUNK TRIM

BACKLIGHT ENGINE BAY, RH FRONT TRUNK LID / TRUNK LID TRIM CENTER CONSOLE GLOVE BOX

8 . . .

FCG15L LH CONSOLE GROUND STUD RSG41L RIGHT FORWARD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-14	LH PILOT BEAM, SIDE LAMPS AND TAIL LAMPS ON	GROUND	B+
0	FC1-16	REAR WINDOW RAISE	GROUND	В+
0	FC1-24	INTERIOR AND COURTESY LAMPS	GROUND	В+
0	FC1-29	LH DIPPED BEAM ON	GROUND	B+
0	FC1-31	FRONT PASSENGER WINDOW RAISE	GROUND	B+
0	FC1-33	STARTER RELAY INHIBIT	GROUND	B+
0	FC1-35	LH MAIN BEAM ON	GROUND	B+
0	FC1-36	SLIDING ROOF CLOSE	GROUND	B+
0	FC1-37	DRIVER WINDOW RAISE	GROUND	B+
0	FC1-39	RH DIPPED BEAM ON	GROUND	B+
0	FC1-41	RH MAIN BEAM ON	GROUND	B+
Т	FC2-2	INTERIOR LAMPS ON	GROUND	B+
D	FC2-5	SECURE STATUS INPUT FROM SECURITY AND LOCKING CONTROL MODULE	ENCODED COMMUNICATIONS	
1	FC2-6	HEADLAMP CONVENIENCE	GROUND PULSE	B+
1	FC2-26	SECURITY SYSTEM VISUAL WARNING	GROUND PULSE	B+
1	FC2-28	REMOTE ALL CLOSE REQUEST	GROUND	B+

SECURITY AND LOCKING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
I.	CA18-1	PASSENGER DOOR AJAR	GROUND	1.74 V
1	CA18-4	PASSENGER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
1	CA18-7	DRIVER DOOR AJAR	GROUND	7.9 V
D	CA18-9	TRANSPONDER IMMOBILIZATION OUTPUT (NOT NAS)	ENCODED COMMUNICATIONS	
1	CA18-10	DRIVER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
Т	CA19-6	VALET SWITCH	MOMENTARY GROUND	2 V
1	CA19-7	INCLINATION SENSOR VIOLATION	GROUND PULSE	1.3 V
1	CA19-9	HOOD AJAR	GROUND	1.7 V
D	CA19-11	TRANSPONDER IMMOBILIZATION ON OUTPUT (NOT NAS)	ENCODED COMMUNICATIONS	
0	CA19-12	MEMORY SEAT REMOTE INDICATOR	GROUND PULSE	B+
о	CA19-13	HEADLAMP CONVENIENCE	GROUND PULSE	7.89 V
1	CA19-19	CENTRAL LOCKING SWITCH ALL CLOSE REQUEST	GROUND	B+
1	CA19-20	TRUNK LID AJAR	GROUND	7.9 V
I	CA19-21	REAR PASSENGER DOOR AJAR	GROUND	7.9 V
I	CA20-4	RH INTRUSION SENSOR (NOT NAS)	SIGNAL	GROUND
0	CA20-5	RH INTRUSION SENSOR VOLTAGE FEED (NOT NAS)	8 V	GROUND
0	CA20-6	READER / EXCITER CONTROL MODULE GROUND (NOT NAS)	GROUND	GROUND
D	CA20-8	SERIAL COMMUNICATION INPUT		
i	CA20-12	LH INTRUSION SENSOR (NOT NAS)	SIGNAL	GROUND
0	CA20-13	LH INTRUSION SENSOR VOLTAGE FEED (NOT NAS)	8 V	GROUND
D	CA20-16	SERIAL COMMUNICATION OUTPUT		
о	CA21-6	INCLINATION SENSOR GROUND	GROUND	GROUND
D	CA21-7	INTELLIGENT SOUNDER OUTPUT	ENCODED COMMUNICATIONS	
о	CA21-8	MEMORY POSITION 2 REQUEST	B+ PULSE	GROUND
о	CA21-9	VISUAL WARNING	GROUND PULSE	B+
D	CA21-10	SECURE STATUS OUTPUT TO BODY PROCESSOR	ENCODED COMMUNICATIONS	
0	CA21-19	SECURITY ACTIVE LED	9V PULSE	GROUND
D	CA21-20	FUELING INHIBIT SIGNAL OUTPUT (NOT NAS)	ENCODED COMMUNICATIONS	
0	CA21-21	MEMORY POSITION 1 REQUEST	B+ PULSE	GROUND
0	CA21-22	ALL CLOSE REQUEST	GROUND	7.8 V
0	CA21-23	INTERIOR LIGHTS ON	GROUND PULSE	7.8 V
0	CA21-24	HORN	GROUND PULSE	B+

The following symbols are used to represent values for Control Module Pin Out data:

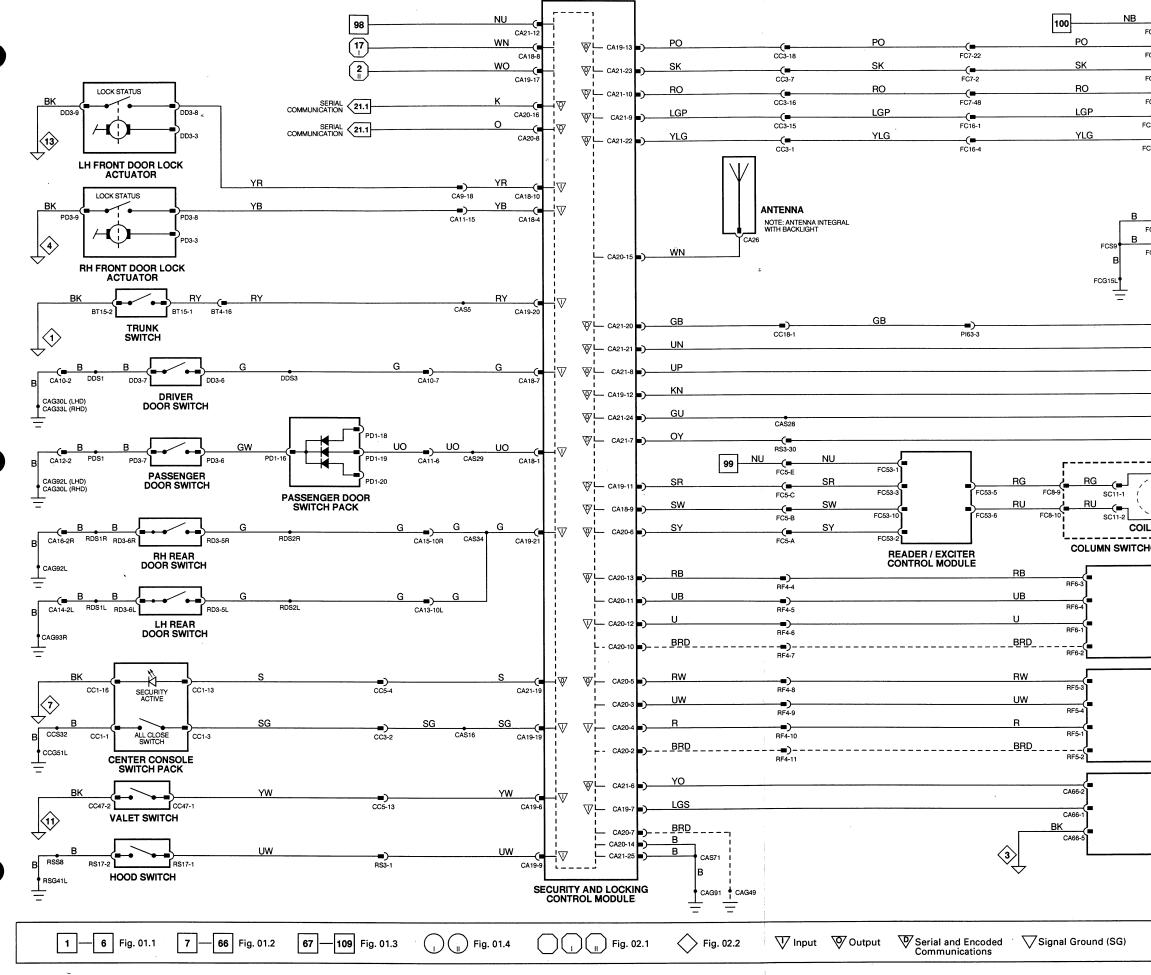
Ň

Input	

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Security System – ROW



500 Million			Security Sys	tem – ROW			Fig.	15.4
FC3-1 FC2-2 FC2-2 FC2-2 FC2-26 FC3-5 FC3-5		<u> </u>	FC1-33 FC1-29 FC1-39 FC1-41 FC1-14 FC1-14 FC1-24 FC1-24 FC1-16 FC1-31 FC1-37 FC1-36	RO 03.1 UK US UK R RLG GY BU BN YB)03.2)03.3 	-09.1) -09.1) -09.1) -09.1) -09.2) -10.1) >17.2) >17.2) >17.2) >17.2) >17.2)	STARTER RELAY HEADLAMPS HEADLAMPS SIDE LAMPS SIDE LAMPS INTERIOR LIGHT WINDOWS WINDOWS SLIDING ROOF PLITS	
i	BODY PROC			LOCKIN	G / SECURI	TY OUT	PUTS	
	MODU	E550R .E	GB					
			UN	-04.1>04.2	04.3 04.5	>04.7> >14.1>	FUELING INHIBIT	
ļ			UP		-13.2>[13.3		MEMORY 2	
1			KN		-13.2>13.3		REMOTE RECAL	L
į.			GU				HORNS	
			OY	(=	-			
L HGEAR		35) "" 83]	WU NLG RSS6 RSS6 RSG8L	RS21-3 RS21-3 RS21-6 B RS21-5	sou			
	NTRUSION ISOR							
	INTRUSION ISOR							
INC	LINATION ISOR							
			ROW Vehicle 746613 	es				

.

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK DOOR LOCK ACTUATOR - DRIVER DOOR LOCK ACTUATOR - PASSENGER DOOR SWITCH PACK - PASSENGER DOOR SWITCH - DRIVER DOOR SWITCH - I H REAR DOOR SWITCH - PASSENGER DOOR SWITCH - RH REAR HOOD SWITCH INCLINATION SENSOR INTRUSION SENSOR - LH INTRUSION SENSOR - RH SECURITY AND LOCKING CONTROL MODULE

SECURITY ANTENNA SECURITY SOUNDER TRUNK SWITCH VALET SWITCH

CC18

FC7

FC16

PI1

PI63

RF4

RS3

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Ad
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST /
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST /
CA10	8-WAY MULTILOCK 070 / WHITE	DRIVER'S 'A' POST /
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UND
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UND
CA13	12-WAY MULTILOCK 040 / BLACK	LH 'BC' POST / 'BC'
CA14	2-WAY MULTILOCK 070 / WHITE	LH 'BC' POST / 'BC'
CA15	12-WAY MULTILOCK 040 / BLACK	RH 'BC' POST / 'BC'
CA16	2-WAY MULTILOCK 040 / WHITE	RH 'BC' POST / 'BC'
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE /
CC5	20-WAY MULTILOCK 040 / GREEN	CENTER CONSOLE /

20-WAY MULTILOCK 040 / BLUE

20-WAY MULTILOCK 040 / BLACK

20-WAY MULTILOCK 040 / BLACK 12-WAY MULTILOCK 040 / BLACK

13-WAY ECONOSEAL III LC / WHITE

THROUGH-PANEL (48 MICRO / 6) / BLACK

THROUGH-PANEL (48 MICRO / 6) / BROWN

Location / Access

RS21 (FLY LEAD) / 6-WAY ECONOSEAL III LC / BLACK

Connector / Type / Color

CC1 / 16-WAY MULTILOCK 040 / BLACK

DD3 / 13-WAY ECONOSEAL III LC / BLACK

PD3 / 13-WAY ECONOSEAL III LC / BLACK

DD3 / 13-WAY ECONOSEAL III LC / BLACK

BD3-L / 6-WAY ECONOSEAL III LC / BLACK

PD3 / 13-WAY ECONOSEAL III LC / BLACK

RD3-R / 6-WAY ECONOSEAL III LC / BLACK

RS17 / 2-WAY ECONOSEAL III LC / BLACK

CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE

CA21 / 26-WAY MULTILOCK 47 / SLATE

BT15 / 2-WAY FORD DIAGNOSTIC / BLACK

CC47 / 2-WAY MULTILOCK 040 / BLACK

CA66 / 6-WAY CS-25 / ORANGE

RF6 / 4-WAY MODU / BLACK

RF5 / 4-WAY MODU / BLACK

CA26 / LUCAR / BLACK

PD1 / 26-WAY MULTILOCK 47 / SLATE

FC1 / 48-WAY PCB SIGNAL / YELLOW

FC2 / 48-WAY PCB SIGNAL / BLACK

Location / Access

CENTER CONSOLE

ARM REST / TOP ROLL

ENGINE BAY, RH FRONT

HEAD LINER, LH SIDE

HEAD LINER, RH SIDE

ENGINE BAY, RH FRONT

TRUNK LID / TRUNK LID TRIM

CENTER CONSOLE GLOVE BOX

8 14

TRUNK, LH FRONT / TRUNK TRIM

TRUNK, LH FRONT / TRUNK TRIM

DOOR CASING

DOOR CASING

DOOR CASING

DOOR CASING

DOOR CASING

DOOR CASING

BACKLIGHT

PASSENGER'S UNDERSCUTTLE

/ FUEL TANK TRIM / 'A' POST TRIM / 'A' POST TRIM / 'A' POST TRIM DERSCUTTLE / ECM DERSCUTTLE / ECM POST PANEL POST PANEL POST PANEL POST PANEL / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE REARWARD OF RH HEADLAMP RH 'A' POST / 'A' POST TRIM ROOF CONSOLE RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
CAG30L	LH 'A' POST GROUND SCREW
CAG49	RH CONSOLE GROUND STUD
CAG91	PARCEL SHELF GROUND SCREW
CAG92L	RH HEELBOARD GROUND SCREW
CAG93R	LH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD
RSG41L	RIGHT FORWARD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-14	LH PILOT BEAM, SIDE LAMPS AND TAIL LAMPS ON	GROUND	В+
0	FC1-16	REAR WINDOW RAISE	GROUND	B+
0	FC1-24	INTERIOR AND COURTESY LAMPS	GROUND	B+
0	FC1-29	LH DIPPED BEAM ON	GROUND	B+
0	FC1-31	FRONT PASSENGER WINDOW RAISE	GROUND	B+
0	FC1-33	STARTER RELAY INHIBIT	GROUND	B+
0	FC1-35	LH MAIN BEAM ON	GROUND	B+
0	FC1-36	SLIDING ROOF CLOSE	GROUND	B+
0	FC1-37	DRIVER WINDOW RAISE	GROUND	B+
0	FC1-39	RH DIPPED BEAM ON	GROUND	B+
0	FC1-41	RH MAIN BEAM ON	GROUND	B+
ı.	FC2-2	INTERIOR LAMPS ON	GROUND	В+
D	FC2-5	SECURE STATUS INPUT FROM SECURITY AND LOCKING CONTROL MODULE	ENCODED COMMUNICATIONS	
1	FC2-6	HEADLAMP CONVENIENCE	GROUND PULSE	B+
1	FC2-26	SECURITY SYSTEM VISUAL WARNING	GROUND PULSE	B+
1	FC2-28	REMOTE ALL CLOSE REQUEST	GROUND	B+

SECURITY AND LOCKING CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
1	CA18-1	PASSENGER DOOR AJAR	GROUND	1.74 V
1	CA18-4	PASSENGER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
1	CA18-7	DRIVER DOOR AJAR	GROUND	7.9 V
I.	CA18-10	DRIVER DOOR LOCK STATUS	GROUND = LOCKED	1.74 V = UNLOCKED
ī	CA19-6	VALET SWITCH	MOMENTARY GROUND	2 V
1	CA19-7	INCLINATION SENSOR VIOLATION	GROUND PULSE	1.3 V
1	CA19-9	HOOD AJAR	GROUND	1.7 V
0	CA19-12	MEMORY SEAT REMOTE INDICATOR	GROUND PULSE	B+
0	CA19-13	HEADLAMP CONVENIENCE	GROUND PULSE	7.89 V
1	CA19-19	CENTRAL LOCKING SWITCH ALL CLOSE REQUEST	GROUND	B+
I.	CA19-20	TRUNK LID AJAR	GROUND	7.9 V
I	CA19-21	REAR PASSENGER DOOR AJAR	GROUND	7.9 V
1	CA20-4	RH INTRUSION SENSOR (NOT NAS)	SIGNAL	GROUND
0	CA20-5	RH INTRUSION SENSOR VOLTAGE FEED (NOT NAS)	8 V	GROUND
D	CA20-8	SERIAL COMMUNICATION INPUT		
1	CA20-12	LH INTRUSION SENSOR (NOT NAS)	SIGNAL	GROUND
0	CA20-13	LH INTRUSION SENSOR VOLTAGE FEED (NOT NAS)	8 V	GROUND
D	CA20-16	SERIAL COMMUNICATION OUTPUT		
о	CA21-6	INCLINATION SENSOR GROUND	GROUND	GROUND
0	CA21-8	MEMORY POSITION 2 REQUEST	B+ PULSE	GROUND
0	CA21-9	VISUAL WARNING	GROUND PULSE	B+
D	CA21-10	SECURE STATUS OUTPUT TO BODY PROCESSOR	ENCODED COMMUNICATIONS	
0	CA21-13	SECURITY SOUNDER	5 V (480 – 1900 Hz)	GROUND
0	CA21-19	SECURITY ACTIVE LED	9V PULSE	GROUND
D	CA21-20	FUELING INHIBIT SIGNAL OUTPUT (NOT NAS)	ENCODED COMMUNICATIONS	
0	CA21-21	MEMORY POSITION 1 REQUEST	B+ PULSE	GROUND
о	CA21-22	ALL CLOSE REQUEST	GROUND	7.8 V
о	CA21-23	INTERIOR LIGHTS ON	GROUND PULSE	7.8 V
о	CA21-24	HORN	GROUND PULSE	B+
0	CA21-26	SECURITY SOUNDER	5 V (480 – 1900 Hz)	GROUND

The following symbols are used to represent values for Control Module Pin Out data:

l Input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Security System – NAS

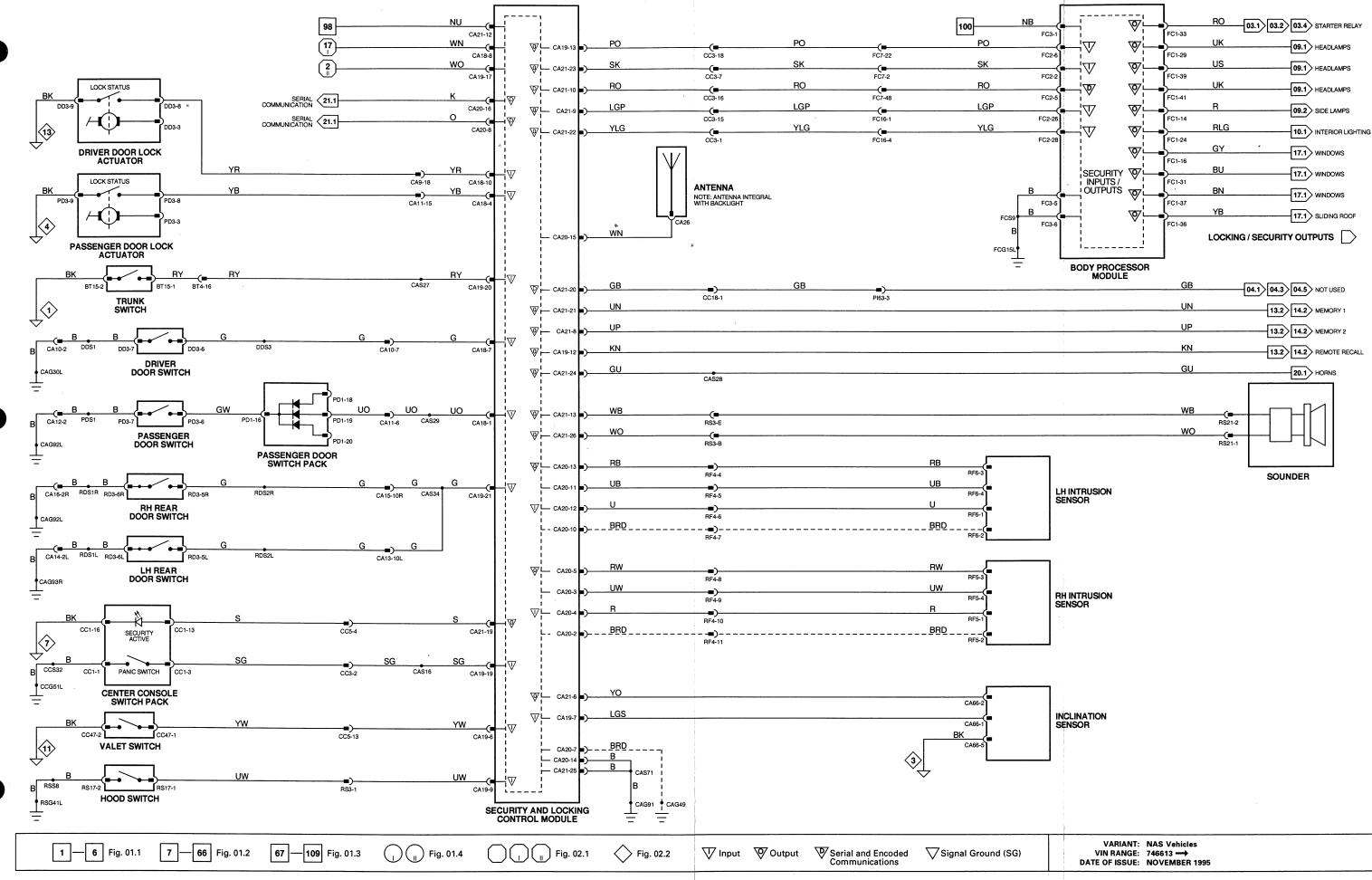






Fig. 15.5

Component

AMBIENT TEMPERATURE SWITCH BODY PROCESSOR MODULE

DIODE (FC58) - WASH / WIPE SWITCH

DIODE (FC61) - WASH / WIPE SWITCH

LIGHTING SWITCHES POWER WASH PUMP WASH / WIPE SWITCHES (COLUMN SWITCHGEAR) WASHER FLUID LEVEL SWITCH WINDSHIELD WASH HEATER - LH WINDSHIELD WASH HEATER - RH WINDSHIELD WASH PUMP WIPER MOTOR

RELAYS

Relay Color / Stripe **Connector / Color** Location / Access BLACK / WHITE RS20 / BLACK RH ENGINE BAY RELAYS POWER WASH PUMP RELAY WINDSHIELD WASH PUMP RELAY BLACK RS2 / BLACK RH ENGINE BAY RELAYS WIPER FAST / SLOW RELAY BLACK LS49 / BLACK LH ENGINE BAY RELAYS WIPER ON / OFF RELAY BLACK LS48 / BLACK LH ENGINE BAY RELAYS

Connector / Type / Color

BR7 / 2-WAY ECONOSEAL III LC / WHITE

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK

FC12 / 16-WAY MULTILOCK 040 / BLUE

RS26 / 2-WAY ECONOSEAL III HC / RED

SC2 / 6-WAY MULTILOCK 070 / WHITE

RS18 / 2-WAY ECONOSEAL III LC / RED

PI71 / 2-WAY SUMITOMO 90 / WHITE

PI72 / 2-WAY SUMITOMO 90 / WHITE

RS25 / 2-WAY ECONOSEAL III LC / BLACK

LS9 / 6-WAY ECONOSEAL III LC / BLACK

FC58 / DIODE / BLACK

FC61 / DIODE / BLACK

Location / Access

PASSENGER'S UNDERSCUTTLE

(PASSENGER SIDE FASCIA TRIM) FASCIA HARNESS / PASSENGER AIR BAG (PASSENGER SIDE FASCIA TRIM)

ENGINE BAY, RH INNER FENDER

STEERING COLUMN / COVER

WASHER FLUID RESERVOIR

PLENUM CHAMBER / COVER

PLENUM CHAMBER / COVER

WASHER FLUID RESERVOIR

PLENUM CHAMBER / COVER

FASCIA SWITCH PACK

LH FRONT WHEEL ARCH LINER / SPOILER TRAY

FASCIA HARNESS / PASSENGER AIR BAG

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BR1	15-WAY ECONOSEAL III LC / BLACK	RH FRONT WHEEL ARCH LINER / SPOILER AND SPOILER TRAY
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC8	12-WAY MULTILOCK 040 / BLACK	DRIVER'S UNDERSCUTTLE
FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
PI1	13-WAY ECONOSEAL III LC / WHITE	REARWARD OF RH HEADLAMP
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN	RH 'A' POST / 'A' POST PANEL

GROUNDS

Ground	Location / Type
FCG15L	LH CONSOLE GROUND STUD
FCG26R	LH CONSOLE GROUND STUD
LSG19L	LH BULKHEAD GROUND STUD
LSG19R	LH BULKHEAD GROUND STUD
LSG52R	LEFT FORWARD GROUND STUD
RSG41L	RIGHT FORWARD GROUND STUD
RSG41R	RIGHT FORWARD GROUND STUD
RSG42R	RH BULKHEAD GROUND STUD
RSG8L	RIGHT FORWARD GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-27	WIPER RELAY	GROUND	B+
0	FC1-34	WINDSHIELD WASH PUMP RELAY	GROUND	B+
ο	FC1-40	HEADLAMP POWER WASH PUMP RELAY	GROUND	В+
Т	FC2-1	WIPER MOTOR PARK SWITCH	GROUND	B+
1	FC2-3	SIDE LAMPS ON	GROUND	B+
1	FC2-4	VEHICLE SPEED SENSOR	GROUND PULSE @ 10 MPH (16 KPH) = 20 Hz, 20 MPH (32 KPH) = 40 Hz	
1	FC2-14	WASH (PRE-PROGRAMMED)	GROUND	B+
1	FC2-22	WASHER FLUID LEVEL	GROUND	B+
1	FC2-31	IGNITION SWITCHED GROUND	GROUND	B+
1	FC2-39	WIPER DELAY	GROUND	B+
I	FC2-47	SLOW / FLICK WIPER	GROUND	B+

The following symbols are used to represent values for Control Module Pin Out data:

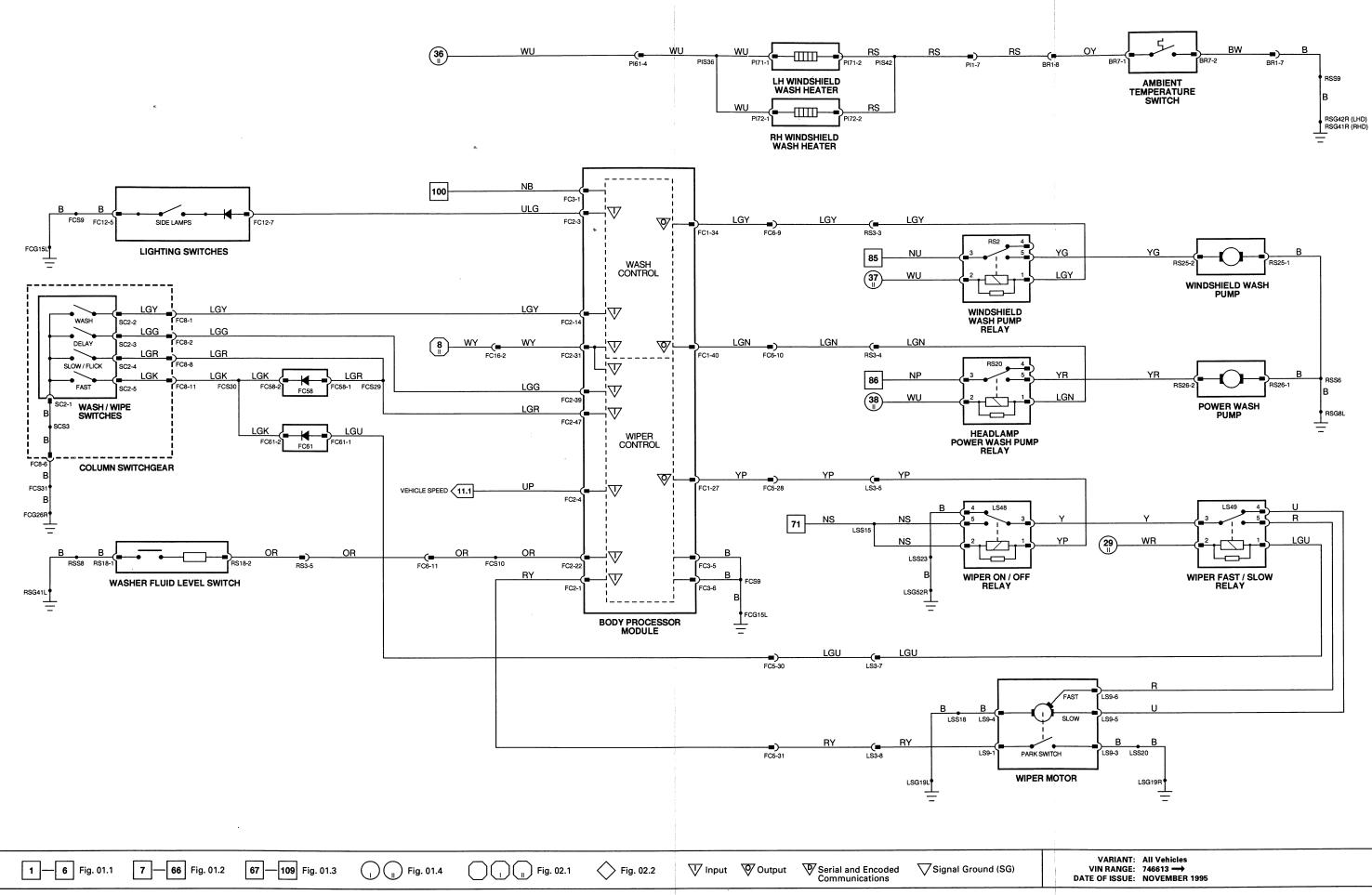
Â

l input

- O Output
- SG Signal Ground
- D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.







 _		
	VARIANT:	All Vehicles
1	VIN RANGE:	746613 🔿
	DATE OF ISSUE:	NOVEMBER 1995

Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK DOOR SWITCH PACK – DRIVER

SLIDING ROOF CONTROL MODULE

SLIDING ROOF MOTOR SLIDING ROOF SWITCH WINDOW LIFT MOTOR - DRIVER WINDOW LIFT MOTOR - LH REAR WINDOW LIFT MOTOR - PASSENGER WINDOW LIFT SWITCH PACK - LH REAR WINDOW LIFT SWITCH PACK - PASSENGER WINDOW LIFT SWITCH PACK - RH REAR

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color CA8 20-WAY MULTILOCK 040 / GREEN

CA9	20-WAY MULTILOCK 040 / BLACK
CA10	8-WAY MULTILOCK 070 / WHITE
CA11	20-WAY MULTILOCK 040 / BLACK
CA12	15-WAY MULTILOCK 070 / WHITE
CA13	12-WAY MULTILOCK 040 / BLACK
CA14	2-WAY MULTILOCK 070 / WHITE
CA15	12-WAY MULTILOCK 040 / BLACK
CA16	2-WAY MULTILOCK 040 / WHITE
CC3	20-WAY MULTILOCK 040 / BLACK
CC18	20-WAY MULTILOCK 040 / BLUE
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK
FC16	20-WAY MULTILOCK 040 / BLACK

. . .

Connector / Type / Color

CC1 / 16-WAY MULTILOCK 040 / BLACK

DD1 / 12-WAY MULTILOCK 47 / WHITE

DD2 / 22-WAY MULTILOCK 47 / WHITE

CA84 / 6-WAY MULTILOCK 070 / WHITE

SR1 / 3-WAY MULTILOCK 070 / WHITE

SR1 / 3-WAY MULTILOCK 070 / WHITE

CA83 / 8-WAY MULTILOCK 040 / BLACK

DD5 / 2-WAY ECONOSEAL III LC / BLACK

PD5 / 2-WAY ECONOSEAL III LC / BLACK

RD1-L / 26-WAY MULTILOCK 47 / SLATE

RD1-R / 26-WAY MULTILOCK 47 / SLATE

PD1 / 26-WAY MULTILOCK 47 / SLATE

RD5-L / 2-WAY ECONOSEAL III LC / BLACK

RD5-R / 2-WAY ECONOSEAL III LC / BLACK

FC1 / 48-WAY PCB SIGNAL / YELLOW

FC2 / 48-WAY PCB SIGNAL / BLACK

Location / Access DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM DRIVER'S 'A' POST / 'A' POST TRIM PASSENGER'S UNDERSCUTTLE / ECM PASSENGER'S UNDERSCUTTLE / ECM LH 'BC' POST / 'BC' POST PANEL LH 'BC' POST / 'BC' POST PANEL RH 'BC' POST / 'BC' POST PANEL CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX LH FASCIA END PANEL / OUTER AIR VENT PASSENGER'S UNDERSCUTTLE

Location / Access

CENTER CONSOLE ARM REST / TOP ROLL

ROOF CONSOLE

ROOF CONSOLE ROOF CONSOLE DRIVER'S DOOR / DOOR CASING LH REAR DOOR / DOOR CASING PASSENGER'S DOOR / DOOR CASING RH DOOR / DOOR CASING LH REAR DOOR ARM REST / TOP ROLL PASSENGER'S DOOR ARM REST / TOP ROLL RH REAR DOOR ARM REST / TOP ROLL

Ground Location / Ty CAG30L LH 'A' POST GROUT CAG31R PARCEL SHELF GRO CAG92L RH HEELBOARD GR

GROUNDS

CAG93B

CCG51L

FCG15L

Location / Type LH 'A' POST GROUND SCREW PARCEL SHELF GROUND SCREW RH HEELBOARD GROUND SCREW LH HEELBOARD GROUND SCREW CENTER CONSOLE GROUND STUD LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
ο	FC1-16	REAR WINDOW RAISE	GROUND	8+
0	FC1-31	FRONT PASSENGER WINDOW RAISE	GROUND	B+
0	FC1-36	SLIDING ROOF CLOSE	GROUND	B+
о	FC1-37	DRIVER WINDOW RAISE	GROUND	B+
I	FC2-28	N REMOTE ALL CLOSE REQUEST	GROUND	В+

SLIDING ROOF CONTROL MODULE

\bigtriangledown	Pin	Description	Active	Inactive
1	CA84-2	ALL CLOSE REQUEST	GROUND	B+
1	CA84-4	ALL CLOSE REQUEST TO BM	GROUND	B+
1	CA84-5	TILT OPEN / SLIDE CLOSE REQUEST	GROUND	8+
I	CA84-6	TILT CLOSE / SLIDE OPEN REQUEST	GROUND	B+
o	SR1-1	SLIDING ROOF MOTOR	В+	GROUND
о	SR1-3	SLIDING ROOF MOTOR	B+	GROUND

The following symbols are used to represent values for Control Module Pin Out data:

I Input

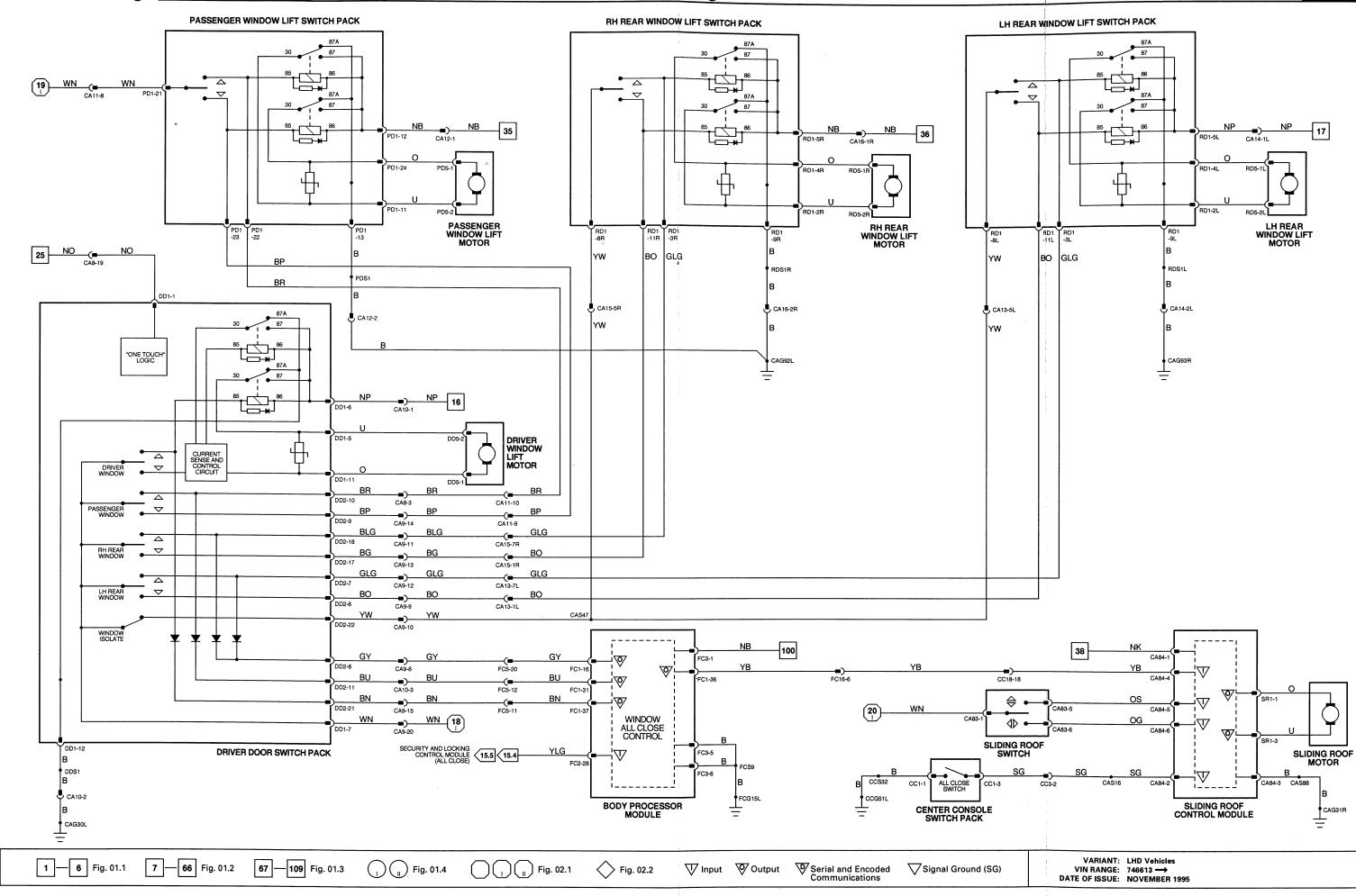
- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

Window Lifts; Sliding Roof – LHD



Component

BODY PROCESSOR MODULE

CENTER CONSOLE SWITCH PACK DOOR SWITCH PACK – DRIVER

SLIDING ROOF CONTROL MODULE

SLIDING ROOF MOTOR SLIDING ROOF SWITCH WINDOW LIFT MOTOR - DRIVER WINDOW LIFT MOTOR - LH REAR WINDOW LIFT MOTOR - PASSENGER WINDOW LIFT SWITCH PACK - LH REAR WINDOW LIFT SWITCH PACK - PASSENGER WINDOW LIFT SWITCH PACK - RH REAR

Connector / Type / Color

FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK CC1 / 16-WAY MULTILOCK 040 / BLACK DD1 / 12-WAY MULTILOCK 47 / WHITE DD2 / 22-WAY MULTILOCK 47 / WHITE SR1 / 3-WAY MULTILOCK 070 / WHITE CA83 / 8-WAY MULTILOCK 040 / BLACK DD5 / 2-WAY ECONOSEAL III LC / BLACK RD5-L / 2-WAY ECONOSEAL III LC / BLACK RD5-L / 2-WAY ECONOSEAL III LC / BLACK RD1-L / 26-WAY MULTILOCK 47 / SLATE RD1-R / 26-WAY MULTILOCK 47 / SLATE

Location / Access PASSENGER'S UNDERSCUTTLE

TASSENGEN S ONDERSCOTTE

CENTER CONSOLE ARM REST / TOP ROLL

ROOF CONSOLE

ROOF CONSOLE ROOF CONSOLE DRIVER'S DOOR / DOOR CASING LH REAR DOOR / DOOR CASING PASSENGER'S DOOR / DOOR CASING RH DOOR / DOOR CASING LH REAR DOOR ARM REST / TOP ROLL PASSENGER'S DOOR ARM REST / TOP ROLL RH REAR DOOR ARM REST / TOP ROLL

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST / 'A' POST TRIM
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA10	8-WAY MULTILOCK 070 / WHITE	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
CA13	12-WAY MULTILOCK 040 / BLACK	LH 'BC' POST / 'BC' POST PANEL
CA14	2-WAY MULTILOCK 070 / WHITE	LH 'BC' POST / 'BC' POST PANEL
CA15	12-WAY MULTILOCK 040 / BLACK	RH 'BC' POST / 'BC' POST PANEL
CA16	2-WAY MULTILOCK 040 / WHITE	RH 'BC' POST / 'BC' POST PANEL
CC3	20-WAY MULTILOCK 040 / BLACK	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
CC18	20-WAY MULTILOCK 040 / BLUE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT
FC16	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE

GROUNDS

Ground Location / Type

CAG30L	LH 'A' POST GROUND SCREW
CAG31R	PARCEL SHELF GROUND SCREW
CAG92L	RH HEELBOARD GROUND SCREW
CAG93R	LH HEELBOARD GROUND SCREW
CCG51L	CENTER CONSOLE GROUND STUD
FCG15L	LH CONSOLE GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

ı,Şi

BODY PROCESSOR MODULE

\bigtriangledown	Pin	Description	Active	Inactive
0	FC1-16	REAR WINDOW RAISE	GROUND	В+
0	FC1-31	FRONT PASSENGER WINDOW RAISE	GROUND	В+
0	FC1-36	SLIDING ROOF CLOSE	GROUND	B+
0	FC1-37	DRIVER WINDOW RAISE	GROUND	B+
I	FC2-28	REMOTE ALL CLOSE REQUEST	GROUND	B+
SLI	DING ROO	F CONTROL MODULE		
∇	Pin	Description	Active	Inactive
1	CA84-2	ALL CLOSE REQUEST	GROUND	B+
1	CA84-4	ALL CLOSE REQUEST TO BPM	GROUND	B+

1	CA84-4	ALL CLOSE REQUEST TO BPM	GROUND
- E	CA84-5	TILT OPEN / SLIDE CLOSE REQUEST	GROUND
1	CA84-6	TILT CLOSE / SLIDE OPEN REQUEST	GROUND
о	SR1-1	SLIDING ROOF MOTOR	B+
о	SR1-3	SLIDING ROOF MOTOR	B+

B+ B+ GROUND

GROUND

The following symbols are used to represent values for Control Module Pin Out data:

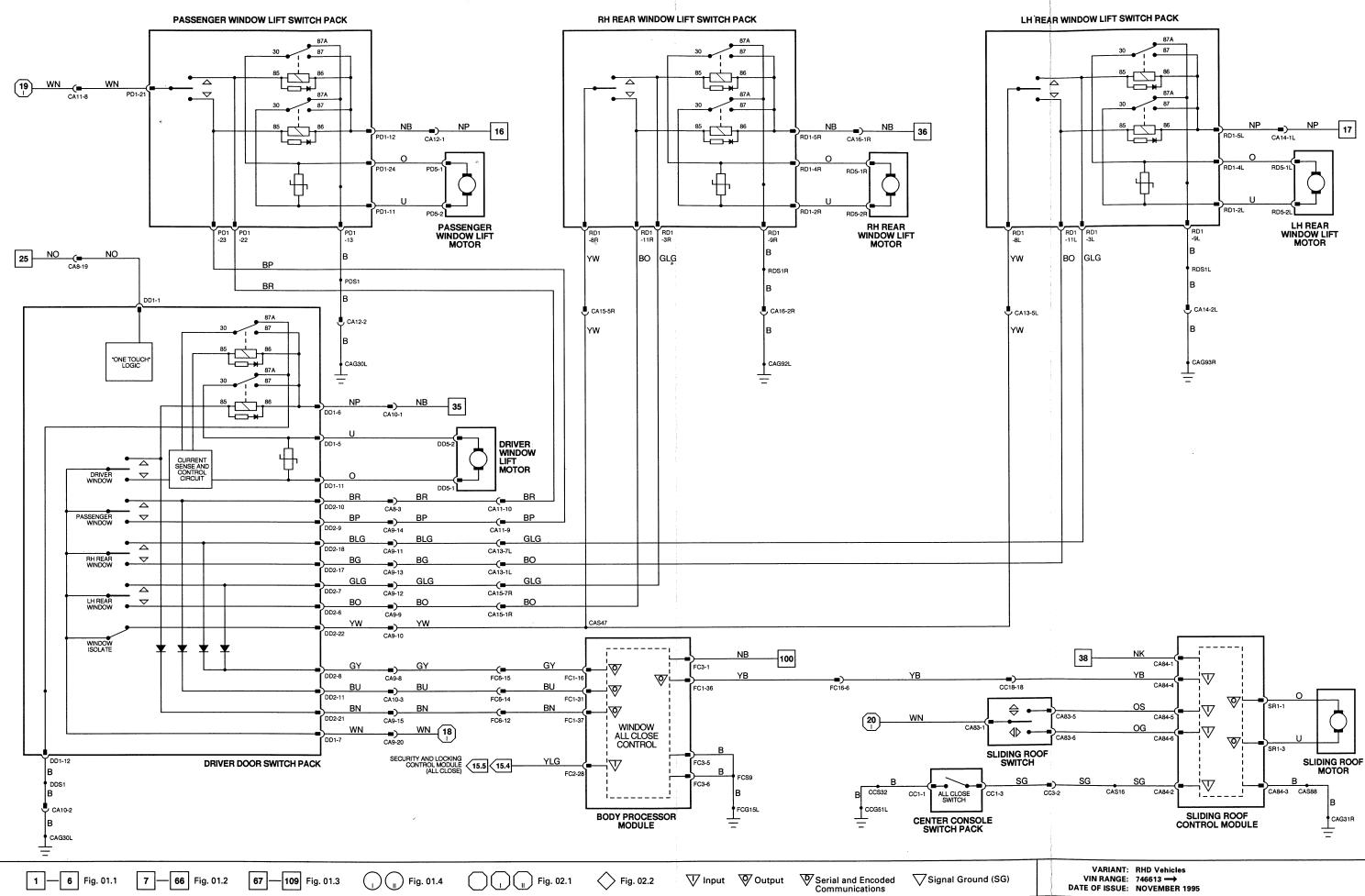
e)

L Input

- 0 Output
- SG Signal Ground
- Serial and encoded communications D

B+ Battery voltage Voltage (DC) V Hz Frequency KHz Frequency x 1000 **MS Milliseconds MV** Millivolts

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.



ia. 18.1

COMPONENTS

Component

CD AUTO CHANGER HANDSET

MICROPHONE MID-BASS - LH FRONT

MID-BASS – LH REAR MID-BASS - RH FRONT

MID-BASS - RH REAR RADIO ANTENNA RADIO ANTENNA MOTOR RADIO CASSETTE

TELEPHONE ANTENNA TELEPHONE TRANSCEIVER

TWEETER - LH FRONT, STANDARD ICE TWEETER - LH REAR, STANDARD ICE TWEETER - RH FRONT, STANDARD ICE TWEETER - RH REAR, STANDARD ICE

HARNESS-TO-HARNESS CONNECTORS

Location / Access

Connector / Type / Color

RT67 / 2-WAY MULTILOCK 040 / BLUE

CA67 / 2-WAY MULTILOCK 040 / BLUE

DD6 (LHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK PD6 (RHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

DD6 (RHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

PD6 (LHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

RD6-L (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

RD6-R (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

IC12 / 2-WAY ANTENNA CONNECTOR / BLACK

IC1 / 20-WAY MULTILOCK 070 / WHITE IC13 / 2-WAY ANTENNA CONNECTOR / WHITE IC19 / CD AUTOCHANGER CONNECTOR

RT65 / ANTENNA CONNECTOR / BLACK

RT64 / ANTENNA CONNECTOR / BLACK FC32 (FLY LEAD) / 2-WAY MODU / BLACK

CA81 (FLY LEAD) / 2-WAY MODU / BLACK

FC31 (FLY LEAD) / 2-WAY MODU / BLACK

CA82 (FLY LEAD) / 2-WAY MODU / BLACK

IC5 / 2-WAY ANTENNA / BLACK

RT63 / 8-WAY PHONE / BLACK

BT44 / 6-WAY YAZAKI / WHITE

RT62 / 25-WAY D TYPE / BLACK

Type / Color Connector THROUGH-PANEL (48 MICRO / 6) / BLACK ABOVE FUEL TANK / FUEL TANK TRIM BT4 CA77 2-WAY MULTILOCK 070 / YELLOW DRIVER'S 'A' POST / 'A' POST PANEL PASSENGER'S 'A' POST / 'A' POST PANEL 2-WAY MULTILOCK 070 / YELLOW CA78 LH 'BC' POST / 'BC' POST PANEL CA79 2-WAY MULTILOCK 070 / YELLOW 2-WAY MULTILOCK 070 / YELLOW RH 'BC' POST / 'BC' POST PANEL CA80 IC2 8-WAY MULTILOCK 070 / WHITE ABOVE FUEL TANK / FUEL TANK TRIM 8-WAY MULTILOCK 070 / WHITE PASSENGER'S UNDERSCUTTLE IC7 IC22 18-WAY MULTILOCK 070 / WHITE **RH REAR SEAT / UNDER** LH HEELBOARD / HEELBOARD COVER IC23 4-WAY MULTILOCK 040 / BLACK PARCEL SHELF / UNDER RT61 12-WAY MULTILOCK 040 / BLACK PARCEL SHELF / UNDER BT66 10-WAY YAZAKI / BLACK

GROUNDS

Ground	Location / Type
BTG18R	REAR TRUNK GROUND STUD
CAG91	PARCEL SHELF GROUND SCREW
CEG2	RADIO GROUND STUD
ICG24	RADIO GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

Location / Access PARCEL SHELF

CENTER CONSOLE

BOOF CONSOLE DOOR CASING

DOOR CASING DOOR CASING

DOOR CASING **RH REAR FENDER / TRUNK TRIM** TRUNK, RH SIDE / TRUNK TRIM CENTER CONSOLE

HEADLINER, REAR PARCEL SHELF / TRUNK TRIM

FASCIA, LH SIDE PARCEL SHELF, LH SIDE FASCIA, LH SIDE PARCEL SHELF, RH SIDE

RADIO CASSETTE

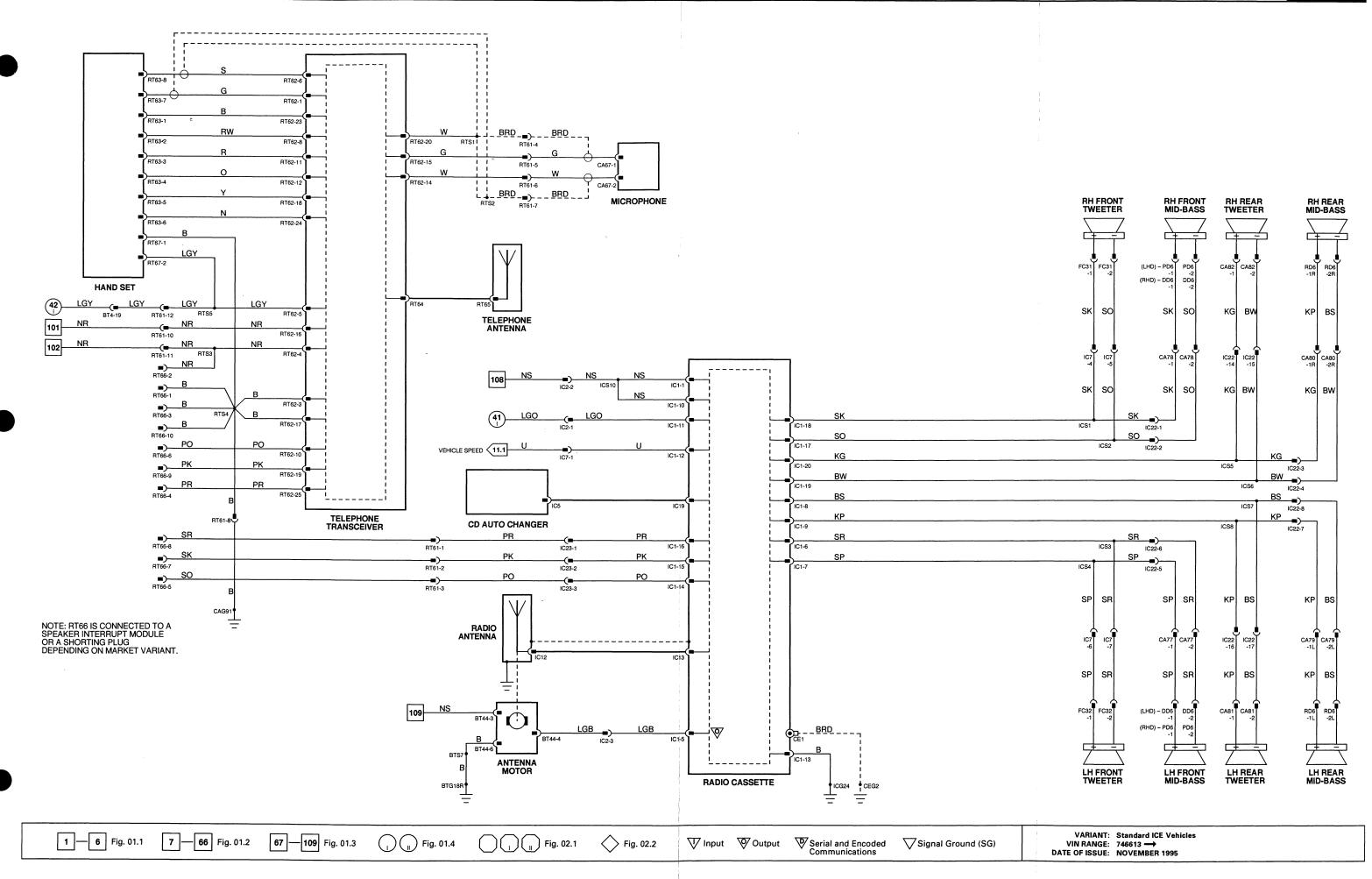
\bigtriangledown	Pin	Description	Active	Inactive
0	IC1-5	ANTENNA UP	B+	GROUND

The following symbols are used to represent values for Control Module Pin Out data:

i input

- O Output
- SG Signal Ground
- D Serial and encoded communications
- B+ Battery voltage
- V Voltage (DC)
- Hz Frequency
- KHz Frequency x 1000 MS Milliseconds MV Millivolts

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.



18.2

COMPONENTS

Component

CD AUTO CHANGER HANDSET

MICROPHONE MID-BASS - LH FRONT

MID-BASS - I H REAR MID-BASS - RH FRONT

MID-BASS - RH REAR POWER AMPLIFIER

RADIO ANTENNA RADIO ANTENNA MOTOR RADIO CASSETTE

SUBWOOFFR

TELEPHONE ANTENNA TELEPHONE TRANSCEIVER

TWEETER - LH FRONT, PREMIUM ICE TWEETER - LH REAR, PREMIUM ICE TWEETER - RH FRONT, PREMIUM ICE TWEETER - RH REAR, PREMIUM ICE

HARNESS-TO-HARNESS CONNECTORS

Locat	tion /	Access

Connector / Type / Color

RT67 / 2-WAY MULTILOCK 040 / BLUE CA67 / 2-WAY MULTILOCK 040 / BLUE

IC30 / 12-WAY MULTILOCK 070 / WHITE IC31 / 18-WAY MULTILOCK 070 / WHITE

RT65 / ANTENNA CONNECTOR / BLACK

RT62 / 25-WAY D TYPE / BLACK RT64 / ANTENNA CONNECTOR / BLACK

MB1-L (FLY LEAD) / 2-WAY MODU / BLACK

MB1-R (FLY LEAD) / 2-WAY MODU / BLACK

BT44 / 6-WAY YAZAKI / WHITE IC1 / 20-WAY MULTILOCK 070 / WHITE

IC34 / 6-WAY DIN /SLATE

IC12 / 2-WAY ANTENNA CONNECTOR / BLACK

IC13 / 2-WAY ANTENNA CONNECTOR / WHITE IC19 / CD AUTOCHANGER CONNECTOR

DD6 (LHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK PD6 (RHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

DD6 (RHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK PD6 (LHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

RD6-L (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

RD6-R (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

IC32 (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK IC33 (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

CA102 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

CA101 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

IC5 / 2-WAY ANTENNA / BLACK

RT63 / 8-WAY PHONE / BLACK

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CA77	2-WAY MULTILOCK 070 / YELLOW	DRIVER'S 'A' POST / 'A' POST PANEL
CA78	2-WAY MULTILOCK 070 / YELLOW	PASSENGER'S 'A' POST / 'A' POST PANEL
CA79	2-WAY MULTILOCK 070 / YELLOW	LH 'BC' POST / 'BC' POST PANEL
CA80	2-WAY MULTILOCK 070 / YELLOW	RH 'BC' POST / 'BC' POST PANEL
IC2	8-WAY MULTILOCK 070 / WHITE	ABOVE FUEL TANK / FUEL TANK TRIM
IC7	8-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE
IC22	18-WAY MULTILOCK 070 / WHITE	RH REAR SEAT / UNDER
IC23	4-WAY MULTILOCK 040 / BLACK	LH HEELBOARD / HEELBOARD COVER
RT61	12-WAY MULTILOCK 040 / BLACK	PARCEL SHELF / UNDER
RT66	10-WAY YAZAKI / BLACK	PARCEL SHELF / UNDER

GROUNDS

Ground	Location / Type
BTG18R	REAR TRUNK GROUND STUD
CAG91	PARCEL SHELF GROUND SCREW
CEG2	RADIO GROUND STUD
ICG16L	FRONT TRUNK GROUND STUD
ICG16R	FRONT TRUNK GROUND STUD
ICG24	RADIO GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

PARCEL SHELF CENTER CONSOLE

Location / Access

ROOF CONSOLE DOOR CASING

DOOR CASING DOOR CASING

DOOR CASING PARCEL SHELF / TRUNK TRIM

RH REAR FENDER / TRUNK TRIM TRUNK, RH SIDE / TRUNK TRIM CENTER CONSOLE

PARCEL SHELF / TRUNK TRIM

HEADLINER, REAR PARCEL SHELF / TRUNK TRIM

FASCIA, LH SIDE PARCEL SHELF, LH SIDE FASCIA, RH SIDE PARCEL SHELF, RH SIDE

POWER AMPLIFIER

\bigtriangledown	Pin	Description	Active	Inactive
1	IC30-1	RH REAR CHANNEL LOW LEVEL INPUT	0 - 30 MV	0 MV
1	IC30-2	RH FRONT CHANNEL LOW LEVEL INPUT	0 - 30 MV	0 MV
SG	IC30-3	SIGNAL GROUND	GROUND	GROUND
1	IC30-6	LH REAR CHANNEL LOW LEVEL INPUT	0 – 30 MV	0 MV
I.	IC30-7	LH FRONT CHANNEL LOW LEVEL INPUT	0 - 30 MV	0 MV
RADIO CASSETTE				

\bigtriangledown	Pin	Description	Active	Inactive
0	IC1-5	ANTENNA UP / AMPLIFIER ON SIGNAL	B+	GROUND
о	IC34-1	RH FRONT CHANNEL LOW LEVEL OUTPUT	0 – 30 MV	0 MV
о	IC34-2	LH FRONT CHANNEL LOW LEVEL OUTPUT	0 - 30 MV	0 MV
SG	IC34-3	SIGNAL GROUND	GROUND	GROUND
0	IC34-4	LH REAR CHANNEL LOW LEVEL OUTPUT	0 - 30 MV	0 MV
0	IC34-5	RH REAR CHANNEL LOW LEVEL OUTPUT	0 - 30 MV	0 MV

The following symbols are used to represent values for Control Module Pin Out data:

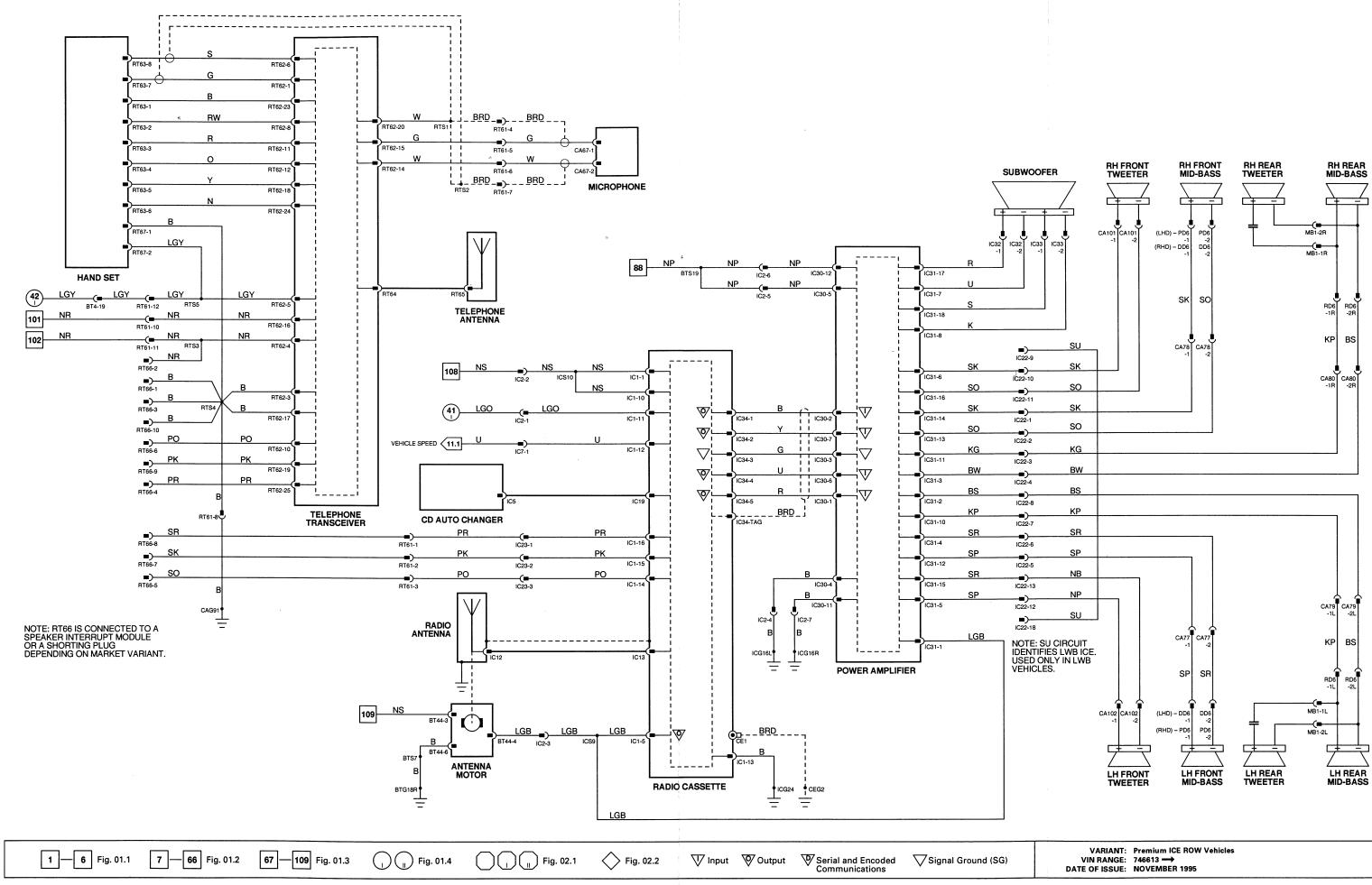
l Input

- O Output
- SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.



VARIANT:	Premium ICE ROW Vehicles
VIN RANGE:	746613 🛶
DATE OF ISSUE:	NOVEMBER 1995

Fig. 18.3

COMPONENTS

Component

CD AUTO CHANGER HANDSET

MICROPHONE MID-BASS – LH FRONT

MID-BASS – LH REAR MID-BASS – RH FRONT

MID-BASS – RH REAR POWER AMPLIFIER

RADIO ANTENNA RADIO ANTENNA MOTOR RADIO CASSETTE

SUBWOOFER

TELEPHONE ANTENNA TELEPHONE TRANSCEIVER

TWEETER – LH FRONT, PREMIUM ICE TWEETER – LH REAR, PREMIUM ICE TWEETER – RH FRONT, PREMIUM ICE TWEETER – RH REAR, PREMIUM ICE

HARNESS-TO-HARNESS CONNECTORS

Location / Access

ABOVE FUEL TANK / FUEL TANK TRIM

PASSENGER'S 'A' POST / 'A' POST PANEL

DRIVER'S 'A' POST / 'A' POST PANEL

ABOVE FUEL TANK / FUEL TANK TRIM

LH HEELBOARD / HEELBOARD COVER

LH 'BC' POST / 'BC' POST PANEL RH 'BC' POST / 'BC' POST PANEL

PASSENGER'S UNDERSCUTTLE

RH REAR SEAT / UNDER

PARCEL SHELF / UNDER

Connector / Type / Color

RT67 / 2-WAY MULTILOCK 040 / BLUE

CA67 / 2-WAY MULTILOCK 040 / BLUE

IC30 / 12-WAY MULTILOCK 070 / WHITE IC31 / 18-WAY MULTILOCK 070 / WHITE

IC1 / 20-WAY MULTILOCK 070 / WHITE

RT65 / ANTENNA CONNECTOR / BLACK

RT62 / 25-WAY D TYPE / BLACK RT64 / ANTENNA CONNECTOR / BLACK

MB1-L (FLY LEAD) / 2-WAY MODU / BLACK

MB1-R (FLY LEAD) / 2-WAY MODU / BLACK

BT44 / 6-WAY YAZAKI / WHITE

IC34 / 6-WAY DIN /SLATE

IC12 / 2-WAY ANTENNA CONNECTOR / BLACK

IC13 / 2-WAY ANTENNA CONNECTOR / WHITE IC19 / CD AUTOCHANGER CONNECTOR

DD6 (LHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

PD6 (RHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

DD6 (RHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK PD6 (LHD) (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

RD6-L (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

RD6-R (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

IC32 (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

IC33 (FLY LEAD) / 2-WAY GROTE AND HARTMAN / BLACK

CA102 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

CA101 (FLY LEAD) / 2-WAY MULTILOCK 040 / BLACK

IC5 / 2-WAY ANTENNA / BLACK

RT63 / 8-WAY PHONE / BLACK

Connector Type / Color THROUGH-PANEL (48 MICRO / 6) / BLACK BT4 2-WAY MULTILOCK 070 / YELLOW CA77 CA78 2-WAY MULTILOCK 070 / YELLOW CA79 2-WAY MULTILOCK 070 / YELLOW CA80 2-WAY MULTILOCK 070 / YELLOW 8-WAY MULTILOCK 070 / WHITE IC2 8-WAY MULTILOCK 070 / WHITE IC7 IC22 18-WAY MULTILOCK 070 / WHITE 4-WAY MULTILOCK 040 / BLACK IC23 RT61 12-WAY MULTILOCK 040 / BLACK

GROUNDS

Ground	Location / Type
BTG18R	REAR TRUNK GROUND STUD
CAG91	PARCEL SHELF GROUND SCREW
CEG2	RADIO GROUND STUD
ICG16L	FRONT TRUNK GROUND STUD
ICG16R	FRONT TRUNK GROUND STUD
ICG24	RADIO GROUND STUD

CONTROL MODULE PIN OUT INFORMATION (FOLD OUT PAGE)

Location / Access PARCEL SHELF CENTER CONSOLE

ROOF CONSOLE DOOR CASING

DOOR CASING

DOOR CASING PARCEL SHELF / TRUNK TRIM

RH REAR FENDER / TRUNK TRIM TRUNK, RH SIDE / TRUNK TRIM CENTER CONSOLE

PARCEL SHELF / TRUNK TRIM

HEADLINER, REAR PARCEL SHELF / TRUNK TRIM

FASCIA, LH SIDE PARCEL SHELF, LH SIDE FASCIA, RH SIDE PARCEL SHELF, RH SIDE

POWER AMPLIFIER

\bigtriangledown	Pin	Description	Active	Inactive
1	IC30-1	RH REAR CHANNEL LOW LEVEL INPUT	0 - 30 MV	0 MV
1	IC30-2	RH FRONT CHANNEL LOW LEVEL INPUT	0 - 30 MV	0 MV
SG	IC30-3	SIGNAL GROUND	GROUND	GROUND
1	IC30-6	LH REAR CHANNEL LOW LEVEL INPUT	0 - 30 MV	0 MV
I	IC30-7	LH FRONT CHANNEL LOW LEVEL INPUT	0 - 30 MV	0 MV
RADIO CASSETTE				
\bigtriangledown	Pin	Description	Active	Inactive

ο	IC1-5	ANTENNA UP / AMPLIFIER ON SIGNAL	B+	GROUND
о	IC34-1	RH FRONT CHANNEL LOW LEVEL OUTPUT	0 - 30 MV	0 MV
0	IC34-2	LH FRONT CHANNEL LOW LEVEL OUTPUT	0 - 30 MV	0 MV
SG	IC34-3	SIGNAL GROUND	GROUND	GROUND
0	IC34-4	LH REAR CHANNEL LOW LEVEL OUTPUT	0 - 30 MV	0 MV
0	IC34-5	RH REAR CHANNEL LOW LEVEL OUTPUT	0 - 30 MV	0 MV

The following symbols are used to represent values for Control Module Pin Out data:

ě,

l input

O Output

SG Signal Ground

D Serial and encoded communications

B+Battery voltageVVoltage (DC)HzFrequencyKHzFrequency x 1000MSMillisecondsMVMillivolts

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.

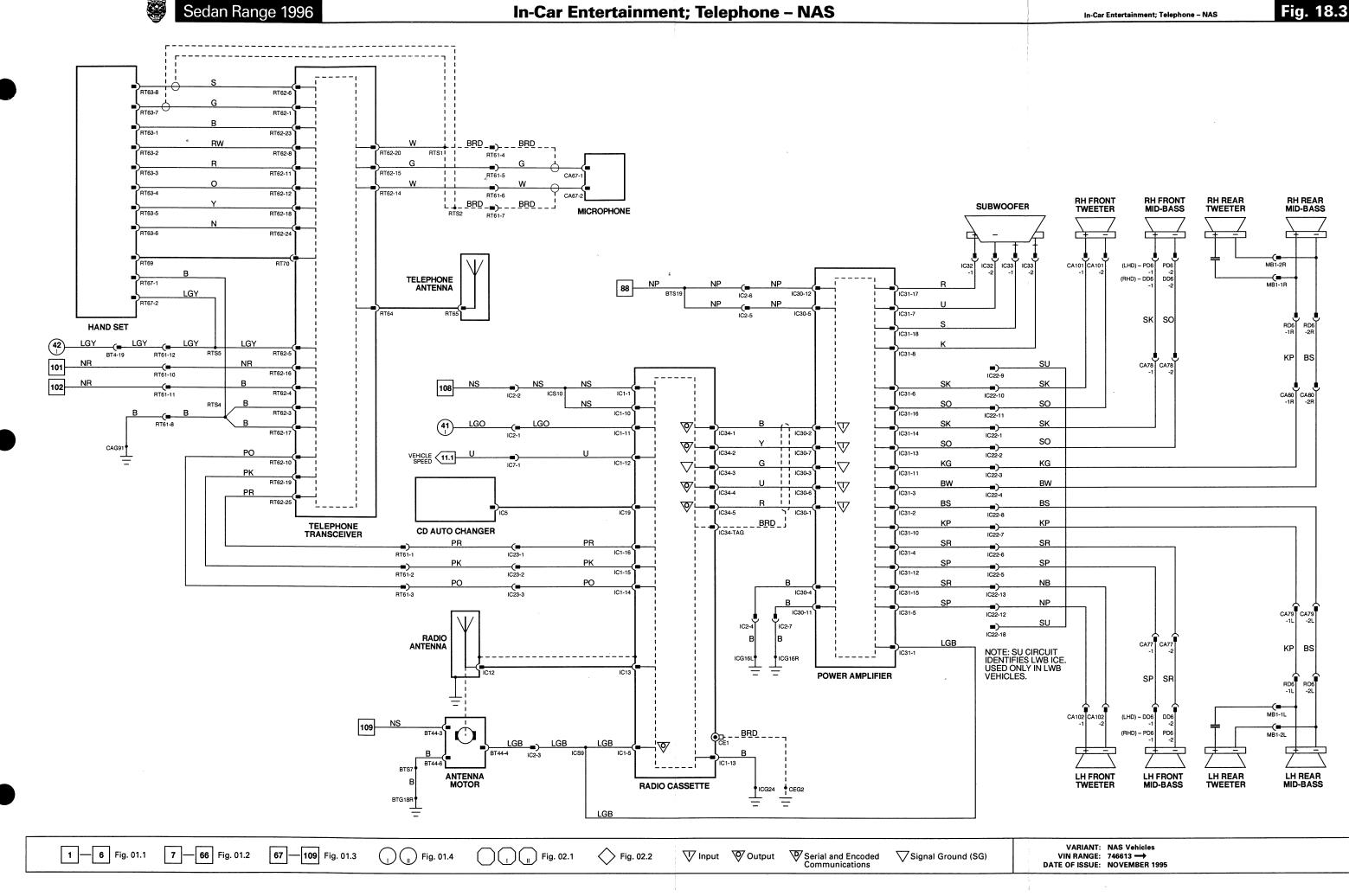


Fig. 18.3

Component

AIR BAG DIAGNOSTIC MONITOR

AIR BAG - DRIVER SIDE AIR BAG - PASSENGER SIDE IMPACT SENSOR - LH IMPACT SENSOR - RH SAFING SENSOR

Connector / Type / Color

AB1 / 12-WAY FORD CARD / SLATE AB2 / 12-WAY FORD CARD / BLACK AB6 (FLY LEAD) / 3-WAY EPC / YELLOW AB8 (FLY LEAD) / 3-WAY EPC / YELLOW CL1 / 4-WAY FORD CARD / NATURAL CR1 / 4-WAY FORD CARD / NATURAL AB3 / 8-WAY FORD NAAO / NATURAL

Location / Access PASSENGER'S UNDERSCUTTLE

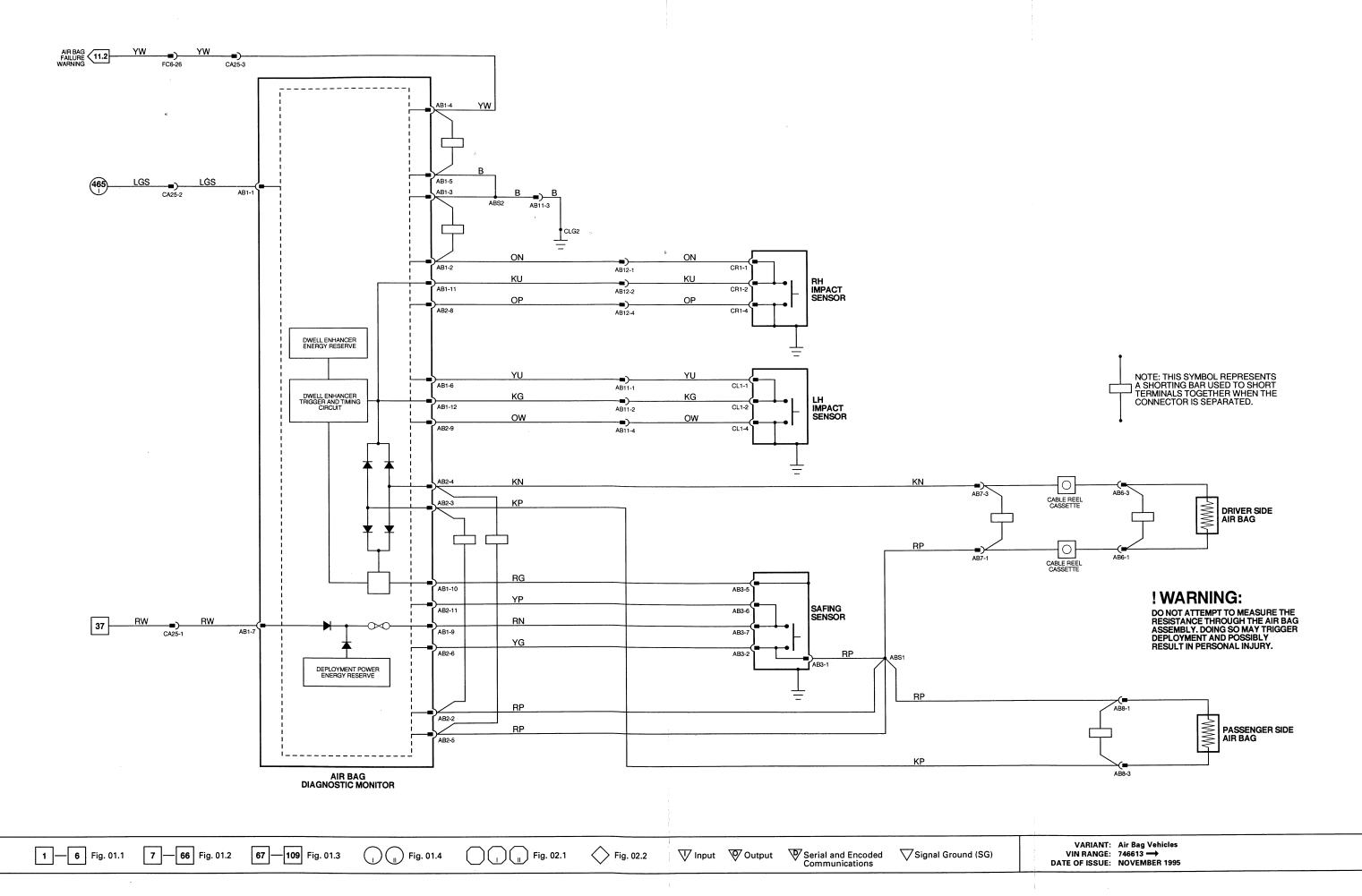
STEERING WHEEL PASSENGER'S FASCIA BEHIND LH HEADLAMP BEHIND RH HEADLAMP RH 'A' POST / 'A' POST TRIM

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access	
AB7	3-WAY CARDELL / BLACK	COLUMN SWITCHGEAR / BEHIND	
AB11	4-WAY CARDELL / NATURAL	RH "A" POST / "A" POST PANEL	
AB12	4-WAY CARDELL / NATURAL	LH "A" POST / "A" POST PANEL	
CA25	3-WAY MULTILOCK 070 / YELLOW	RH 'A' POST, ECM / 'A' POST PANEL	
FC6	THROUGH-PANEL (48 MICRO / 6) / BLACK	RH FASCIA END PANEL / OUTER AIR VENT	

GROUNDS

Ground	Location / Type
CLG2	AIR BAG GROUND SCREW





Component

ACCESSORY CONNECTOR - CABIN

ACCESSORY CONNECTOR – TRUNK CARAVAN / TRAILER CONNECTOR CIGAR LIGHTER – FRONT

CIGAR LIGHTER - REAR

ELECTROCHROMIC REAR VIEW MIRROR FOLD-BACK MIRROR SWITCH FOLD-BACK MIRROR – DRIVER FOLD-BACK MIRROR – PASSENGER HORN SWITCHES HORN – LH

HORN – RH

FUSE BOX – LH ENGINE BAY

UNIVERSAL GARAGE DOOR OPENER (INTERIOR MAP LAMP CONSOLE)

RELAYS

Relay	Color / Stripe	Connector / Color	Location / Access
ACCESSORY RELAY	BLACK / VIOLET	BT7 / BLACK	TRUNK ELECTRICAL CARRIER
CIGAR LIGHTER RELAY	BLACK / BLUE	CA57 / BLUE	RH HEELBOARD
HORN RELAY (LH ENGINE BAY FUSE BOX)	BLUE	— / BLACK	LH ENGINE BAY FUSE BOX

Connector / Type / Color

BT19 / 2-WAY ECONOSEAL III HC / BLACK

CA71 / 3-WAY SERIES 250 / BLACK

BT12 / 3-WAY SERIES 250 / BLACK

CC9 / 2-WAY SERIES 250 / BLACK CC10 / LUCAR / BLACK

CC16 / 2-WAY SERIES 250 / BLACK

CA85 / 3-WAY MULTILOCK 070 / WHITE

SC9 / 2-WAY MULTILOCK 040 / BLACK

DD10 / (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

PD10 / (FLY LEAD) / 12-WAY MULTILOCK 040 / BLACK

CC17 / LUCAR / BLACK

LS43 / LUCAR / BLACK LS44 / LUCAR / BLACK

RS43 / LUCAR / BLACK RS44 / LUCAR / BLACK

RIBBON CONNECTOR

LS1 / 10-WAY UTA / BLACK LS37 / 10-WAY UTA / BLACK

FM1 / 7-WAY FORD / BLACK

Location / Access SWB: LH 'A' POST / 'A' POST TRIM LWB: RH HEELBOARD

TRUNK ELECTRICAL CARRIER

CENTER CONSOLE

CENTER CONSOLE

MIRROR ASSEMBLY

MIRBOR ASSEMBLY

BEHIND FRONT GRILLE

BEHIND FRONT GRILLE

ENGINE BAY, LH FRONT

STEERING WHEEL

ROOF CONSOLE

ROOF CONSOLE

BEHIND BATTERY / TRUNK FLOOR TRIM

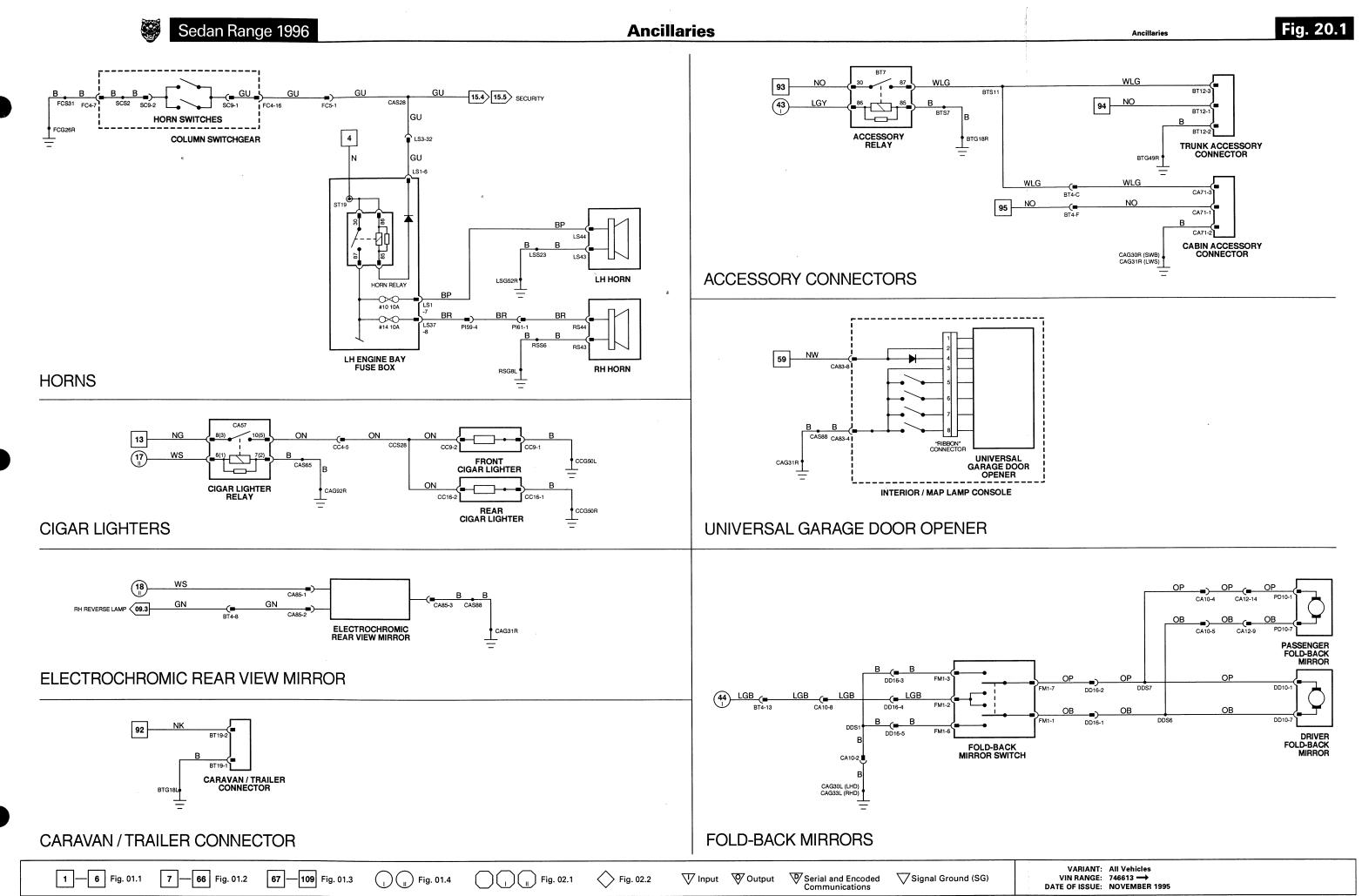
DRIVER'S DOOR SWITCH PACK / TOP ROLL, ARM REST

HARNESS-TO-HARNESS CONNECTORS

Connector	Type / Color	Location / Access
BT4	THROUGH-PANEL (48 MICRO / 6) / BLACK	ABOVE FUEL TANK / FUEL TANK TRIM
CA8	20-WAY MULTILOCK 040 / GREEN	DRIVER'S 'A' POST / 'A' POST TRIM
CA9	20-WAY MULTILOCK 040 / BLACK	DRIVER'S 'A' POST / 'A' POST TRIM
CA10	8-WAY MULTILOCK 070 / WHITE	DRIVER'S 'A' POST / 'A' POST TRIM
CA11	20-WAY MULTILOCK 040 / BLACK	PASSENGER'S UNDERSCUTTLE / ECM
CA12	15-WAY MULTILOCK 070 / WHITE	PASSENGER'S UNDERSCUTTLE / ECM
CA83	8-WAY MULTILOCK 040 / BLACK	ROOF CONSOLE
CC4	14-WAY MULTILOCK 070 / WHITE	CENTER CONSOLE / CENTER CONSOLE GLOVE BOX
DD16	6-WAY MULTILOCK 040 / BLACK	DRIVER'S DOOR / DOOR CASING
FC4	20-WAY MULTILOCK 040 / BLUE	DRIVER'S UNDERSCUTTLE
FC5	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH FASCIA END PANEL / OUTER AIR VENT
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK	LH 'A' POST / 'A' POST PANEL
P159	13-WAY ECONOSEAL III LC / BLACK	FORWARD OF LH ENGINE BAY FUSE BOX
PI61	13-WAY ECONOSEAL III LC / BLACK	REARWARD OF RH HEADLAMP

GROUNDS

Ground	Location / Type
BTG18L	REAR TRUNK GROUND STUD
BTG18R	REAR TRUNK GROUND STUD
BTG49R	REAR TRUNK GROUND STUD
CAG30L	LH 'A' POST GROUND SCREW
CAG30R	LH 'A' POST GROUND SCREW
CAG31R	PARCEL SHELF GROUND SCREW
CAG33L	RH HEELBOARD GROUND SCREW
CAG92R	RH HEELBOARD GROUND SCREW
CCG50L	CENTER CONSOLE GROUND
CCG50R	CENTER CONSOLE GROUND
FCG26R	LH CONSOLE GROUND STUD
RSG8L	RIGHT FORWARD GROUND STUD



VARIANT:	All Vehicles
VIN RANGE:	746613 👄
DATE OF ISSUE:	NOVEMBER 1995

Component

ABS / TRACTION CONTROL CONTROL MODULE (LHD) ABS / TRACTION CONTROL CONTROL MODULE (RHD) AIR CONDITIONING CONTROL MODULE

BODY PROCESSOR MODULE

COLUMN / MIRROR MOVEMENT CONTROL MODULE

DATA LINK CONNECTOR ENGINE CONTROL MODULE (AJ16)

ENGINE CONTROL MODULE (V12)

INSTRUMENT PACK

SEAT CONTROL MODULE – DRIVER (NAS VEHICLES)

SEAT CONTROL MODULE - DRIVER (ROW, MEMORY SEAT VEHICLES)

SEAT CONTROL MODULE – PASSENGER (NAS VEHICLES)

SEAT CONTROL MODULE - PASSENGER (ROW, MEMORY SEAT VEHICLES)

SECURITY AND LOCKING CONTROL MODULE

TRANSMISSION CONTROL MODULE (AJ16) TRANSMISSION CONTROL MODULE (V12)

HARNESS-TO-HARNESS CONNECTORS

Connector Type / Color

CA23	20-WAY MULTILOCK 040 / BLACK
ĊA28	20-WAY MULTILOCK 040 / BLACK
CC18	20-WAY MULTILOCK 040 / BLUE
CC3	20-WAY MULTILOCK 040 / BLACK
FC7	THROUGH-PANEL (48 MICRO / 6) / BLACK
LS3	THROUGH-PANEL (48 MICRO / 6) / BLACK
P159	13-WAY ECONOSEAL III LC / BLACK
RS3	THROUGH-PANEL (48 MICRO / 6) / BROWN

GROUNDS

Ground	Location / Type
CCG51L	CENTER CONSOLE GROUND STUD

Connector / Type / Color RS27 / 28-WAY FORD GTE / SLATE LS27 / 28-WAY FORD GTE / SLATE CC28 / 26-WAY MULTILOCK 47 / SLATE CC29 / 16-WAY MULTILOCK 47 / SLATE CC30 / 12-WAY MULTILOCK 47 / SLATE CC31 / 22-WAY MULTILOCK 47 / SLATE FC1 / 48-WAY PCB SIGNAL / YELLOW FC2 / 48-WAY PCB SIGNAL / BLACK FC3 / 6-WAY PCB SIGNAL / BLACK FC45 / 26-WAY MULTILOCK 47 / SLATE FC46 / 16-WAY MULTILOCK 47 / SLATE FC47 / 12-WAY MULTILOCK 47 / SLATE CC6 / 16-WAY OBD II / SLATE PI104 / 36-WAY ECONOSEAL III / BLACK PI105 / 36-WAY ECONOSEAL III / RED PI44 / 28-WAY MULTILOCK 040 / SLATE PI45 / 16-WAY MULTILOCK 040 / SLATE PI46 / 22-WAY MULTILOCK 040 / SLATE PI47 / 34-WAY MULTILOCK 040 / SLATE FC9 / 24-WAY IDC / BLACK FC10 / 48-WAY IDC / BLACK CA105 / 22-WAY MULTILOCK 47 / BLUE CA106 / 12-WAY MULTILOCK 47 / BLUE SM1-D / 12-WAY MULTILOCK 47 / BLUE SM6-D / 22-WAY MULTILOCK 47 / WHITE PL1 / 22-WAY MULTILOCK 47 / BLUE PL2 / 12-WAY MULTILOCK 47 / BLUE SM1-D / 12-WAY MULTILOCK 47 / BLUE SM6-D / 16-WAY MULTILOCK 040 / BLACK CA107 / 22-WAY MULTILOCK 47 / BLUE CA108 / 12-WAY MULTILOCK 47 / BLUE SM1-P / 12-WAY MULTILOCK 47 / BLUE SM6-P / 22-WAY MULTILOCK 47 / WHITE PL1 / 22-WAY MULTILOCK 47 / BLUE PL2 / 12-WAY MULTILOCK 47 / BLUE SM1-P / 12-WAY MULTILOCK 47 / WHITE SM6-P / 22-WAY MULTILOCK 47 / WHITE CA18 / 12-WAY MULTILOCK 47 / SLATE CA19 / 22-WAY MULTILOCK 47 / SLATE CA20 / 16-WAY MULTILOCK 47 / SLATE CA21 / 26-WAY MULTILOCK 47 / SLATE CC7 / 55-WAY BOSCH / BLACK CC48 / 55-WAY AMP 55 / BLACK

> Location / Access DRIVER'S SEAT / UNDER PASSENGER'S SEAT / UNDER

PASSENGER'S UNDERSCUTTLE LH 'A' POST / 'A' POST PANEL FORWARD OF LH ENGINE BAY FUSE BOX RH 'A' POST / 'A' POST PANEL

CENTER CONSOLE / CENTER CONSOLE GLOVE BOX CENTER CONSOLE / CENTER CONSOLE GLOVE BOX Location / Access

ENGINE BAY / RH REAR ENGINE BAY / LH REAR A/C UNIT, RH SIDE / RH UNDERSCUTTLE

PASSENGER'S UNDERSCUTTLE

RH UNDERSCUTTLE

DRIVER'S 'A' POST RH 'A' POST / 'A' POST TRIM

RH 'A' POST / 'A' POST TRIM

INSTRUMENT PACK

DRIVER'S SEAT

DRIVER'S SEAT

PASSENGER'S SEAT

PASSENGER'S SEAT

TRUNK, LH FRONT / TRUNK TRIM

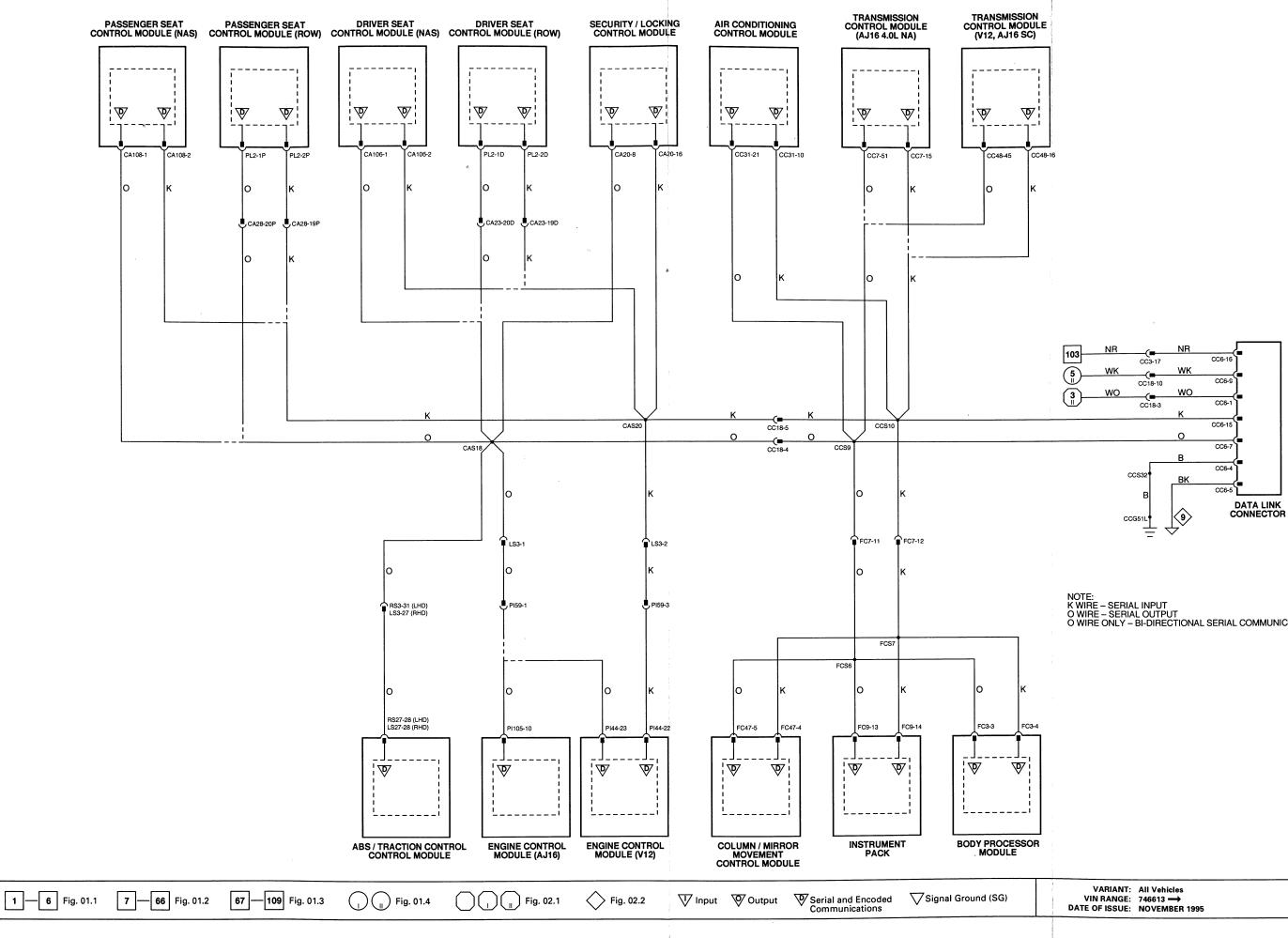
PASSENGER'S UNDERSCUTTLE PASSENGER'S UNDERSCUTTLE

6 ...

Serial Communication Data Link

Ś

Sedan Range 1996







K WIRE – SERIAL INPUT O WIRE – SERIAL OUTPUT O WIRE ONLY – BI-DIRECTIONAL SERIAL COMMUNICATION

VARIANT:	All Vehicles
VIN RANGE:	746613 →
DATE OF ISSUE:	NOVEMBER 199