CONTROL MODULE PIN-OUT INFORMATION

Front Electronic Module

▽	Pin	Description and Characteristic
I	CR1-04	RAIN SENSING MODULE SIGNAL: PULSED SIGNAL
O	CR1-06	RAIN SENSING MODULE POWER SUPPLY: B+
PG	CR1-26	POWER GROUND: GROUND
SG	CR9-12	LOGIC GROUND: GROUND
B+	CR10-01	SWITCHED SYSTEM POWER SUPPLY: B+
PG	CR10-11	POWER GROUND: GROUND
PG	CR10-13	POWER GROUND: GROUND
PG	CR10-14	POWER GROUND: GROUND
PG	CR85-02	POWER GROUND: GROUND
O	CR85-04	WINDSHIELD WASHER PUMP DRIVE: TO ACTIVATE, FEM SWITCHES CIRCUIT TO GROUND
SG	CR85-08	WIPE / WASH SWITCHES SIGNAL GROUND: GROUND
I	CR85-09	MOMENTARY WIPE SWITCH SIGNAL: VARIABLE RESISTANCE
I	CR85-10	WASH / WIPE SWITCH SIGNAL: VARIABLE RESISTANCE
I	CR85-13	INTERMITTENT WIPE SWITCH SIGNAL: VARIABLE RESISTANCE
I	CR85-16	WIPER MASTER SWITCH SIGNAL: VARIABLE RESISTANCE
O	EC36-01	WIPER ON / OFF RELAY ACTIVATE: TO ACTIVATE, FEM SWITCHES CIRCUIT TO GROUND
I	EC36-03	WIPERS PARKED SIGNAL: GROUND = PARKED
I	EC36-06	WASHER FLUID LEVEL SIGNAL: GROUND WHEN ACTIVATED
PG	EC36-10	RAIN SENSING MODULE POWER GROUND: GROUND
O	EC36-16	POWER WASH RELAY ACTIVATE: TO ACTIVATE, FEM SWITCHES CIRCUIT TO GROUND
O	EC36-17	WIPER FAST / SLOW RELAY ACTIVATE: TO ACTIVATE, FEM SWITCHES CIRCUIT TO GROUND

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

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

I	Input	PG	Power Ground	C	CAN Network	D	Serial and Encoded Data
O	Output	SS	Sensor / Signal Supply V	S	SCP Network	V	Voltage (DC)
B+	Battery Voltage	SG	Sensor / Signal Ground	D2	D2B Network	PWM	Pulse Width Modulated

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

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

Fig. 13.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
FRONT ELECTRONIC MODULE	CR1	26-WAY / BLACK	CABIN / LH 'A' POST
	CR9	12-WAY / BLACK	
	CR10	17-WAY / BLACK	
	CR85	20-WAY / BLACK	
	EC36	22-WAY / BLACK	
FRONT POWER DISTRIBUTION FUSE BOX	EC4	4-WAY / BLACK	ENGINE COMPARTMENT / RH FRONT
	EC5	4-WAY / BLACK	
	EC19	8-WAY / BLACK	
	EC22	4-WAY / BLACK	
	EC26	8-WAY / BLACK	
	EC28	12-WAY / BLACK	
	EC32	4-WAY / BLACK	
	EC35	8-WAY / BLACK	
	EC40	9-WAY / BLACK	
	EC41	10-WAY / BLACK	
POWER WASH PUMP	EC24	2-WAY / BLACK	ENGINE COMPARTMENT / ADJACENT TO WASHER FLUID RESERVOIR
POWER WASH RELAY	–	–	FRONT POWER DISTRIBUTION FUSE BOX – R11
RAIN SENSING MODULE	RF6	3-WAY / BLACK	CABIN / WINDSHIELD CENTER
WASHER FLUID LEVEL SWITCH	EC25	2-WAY / BLACK	ENGINE COMPARTMENT / WASHER FLUID RESERVOIR
WINDSHIELD WASHER PUMP	EC51	2-WAY / BLACK	ENGINE COMPARTMENT / ADJACENT TO WASHER FLUID RESERVOIR
WIPE / WASH COLUMN SWITCH	IP40	6-WAY / BLACK	STEERING COLUMN
WIPER FAST / SLOW RELAY	–	–	FRONT POWER DISTRIBUTION FUSE BOX – R8
WIPER MOTOR	EC27	4-WAY / BLACK	ENGINE COMPARTMENT BULKHEAD
WIPER ON / OFF RELAY	–	–	FRONT POWER DISTRIBUTION FUSE BOX – R4

HARNESS IN-LINE CONNECTORS

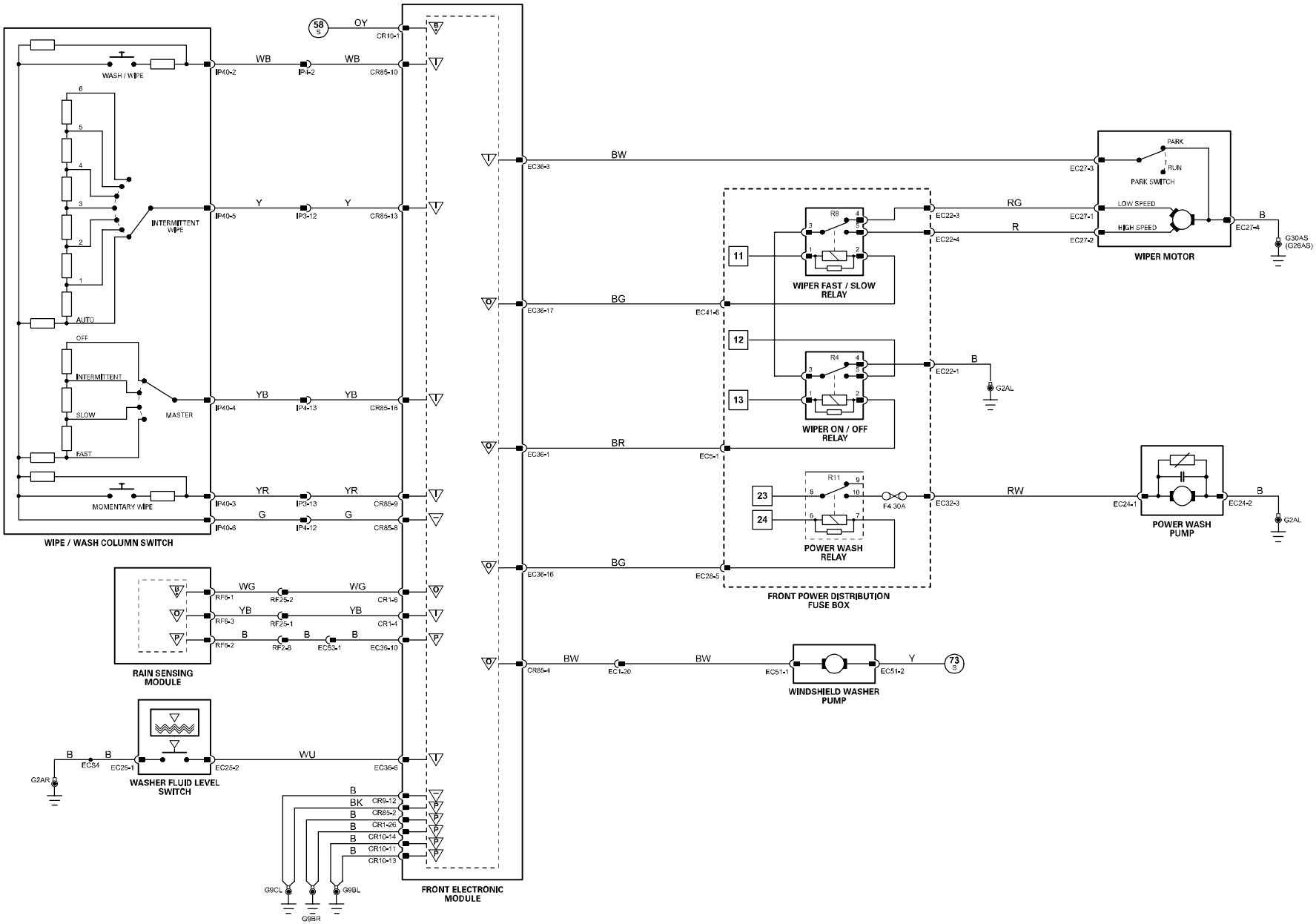
Connector	Connector Description	Location
EC1	22-WAY / BLACK / ENGINE COMPARTMENT HARNESS TO CABIN HARNESS	CABIN / RH 'A' POST
EC53	10-WAY / BLACK / ENGINE COMPARTMENT HARNESS TO CABIN HARNESS	CABIN / ABOVE LH FOOTWELL
IP3	14-WAY / GREY / CABIN HARNESS TO INSTRUMENT PANEL HARNESS	CABIN / BEHIND LH SIDE INSTRUMENT PANEL END PLATE
IP4	14-WAY / GREEN / CABIN HARNESS TO INSTRUMENT PANEL HARNESS	CABIN / BEHIND LH SIDE INSTRUMENT PANEL END PLATE
RF2	16-WAY / BLUE / CABIN HARNESS TO ROOF HARNESS	CABIN / RH 'D' POST
RF25	8-WAY / BLACK / CABIN HARNESS TO ROOF HARNESS	CABIN / UPPER LH 'A' POST

GROUNDS

Ground	Location
G2	ENGINE COMPARTMENT / BELOW FRONT POWER DISTRIBUTION FUSE BOX
G9	CABIN / UPPER LH A POST
G26	ENGINE COMPARTMENT / RH SIDE / REARWARD OF SUSPENSION TOWER
G30	ENGINE COMPARTMENT / LH SIDE / REARWARD OF SUSPENSION TOWER

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

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



1 → 6 Fig. 01.1 7 → 63 Fig. 01.2	64 → 95 Fig. 01.3 1 → 15 Fig. 01.4	16 → 52 Fig. 01.5 53 → 77 Fig. 01.6	78 → 105 Fig. 01.7 106 → 143 Fig. 01.8	Input Output	Battery Voltage Power Ground	Sensor/Signal Supply V Sensor/Signal Ground	ACP CAN	SCP Serial and Encoded Data	VARIANT: All Vehicles VIN RANGE: All DATE OF ISSUE: April 2003