

CONTROL MODULE PIN-OUT INFORMATION

General Electronic Module

Pin	Description and Characteristic
PG	CA86-05 POWER GROUND
I	IP5-04 INTERMITTENT WIPE INTERVAL: 1 = 0.5t- 4 kΩ; 2 = 4t- 14 kΩ; 3 = 14t- 24 kΩ; 4 = 24t- 34 kΩ; 5 = 34t- 43 kΩ; 6 = 43t- 57 kΩ
S	IP5-18 SCP -
S	IP5-19 SCP +
O	IP5-21 WINDSHIELD WIPER RELAY DRIVE: TO ACTIVATE, CIRCUIT SWITCHED TO GROUND
SG	IP6-01 LOGIC GROUND: GROUND
I	IP6-04 INTERMITTENT WIPE: B+ WHEN SELECTED
I	IP6-05 FRONT WASHER SWITCH: WASHER ON = GROUND; WASHER OFF = B+
B+	JB172-01 BATTERY POWER SUPPLY (LOCKING): B+
I	JB172-02 WIPER MOTOR PARK SWITCH: PARKED = GROUND; NOT PARKED = B+
B+	JB172-05 BATTERY POWER SUPPLY (TURN SIGNALS): B+
O	JB172-23 POWER WASH PUMP RELAY DRIVE: TO ACTIVATE, GEM SWITCHES CIRCUIT TO GROUND

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

Fig. 13.1

COMPONENTS

Component	Connector(s)	Connector Description	Location
GENERAL ELECTRONIC MODULE	CA86 CA87 IP5 IP6 JB172	23-WAY / GREY 23-WAY / GREEN 23-WAY / BROWN 23-WAY / NATURAL 23-WAY / BLUE	BEHIND INSTRUMENT PANEL / RH SIDE
PASSENGER JUNCTION FUSE BOX	-	-	PASSENGER COMPARTMENT, FRONT BULKHEAD / LH SIDE
POWER DISTRIBUTION FUSE BOX	-	-	ENGINE COMPARTMENT
POWERWASH PUMP	JB65	2-WAY / GREY	BEHIND RH FRONT WHEEL ARCH LINER
POWERWASH PUMP RELAY	-	-	POWER DISTRIBUTION FUSE BOX - R8
WINDSHIELD WASHER PUMP	JB109	-	ENGINE COMPARTMENT / RH FRONT
WINDSHIELD WIPER MOTOR RELAY	-	-	POWER DISTRIBUTION FUSE BOX - R4
WIPER MOTOR - FRONT	JB63	-	BASE OF WINDSHIELD / LH SIDE
WIPER SWITCH ASSEMBLY	IP16	10-WAY / GREY	STEERING COLUMN

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
JB3	14-WAY / BLUE / JUNCTION BOX HARNESS TO INSTRUMENT PANEL HARNESS	BELOW INSTRUMENT PANEL / LH SIDE
JB129	22-WAY / GREY / JUNCTION BOX HARNESS TO INSTRUMENT PANEL HARNESS	BELOW INSTRUMENT PANEL / LH SIDE
JB130	22-WAY / GREEN / JUNCTION BOX HARNESS TO INSTRUMENT PANEL HARNESS	BELOW INSTRUMENT PANEL / LH SIDE

GROUNDS

Ground	Harness	Location
G4	CA	LOWER RH 'A' POST
G5	IP	UPPER RH 'A' POST
G10	JB	ENGINE COMPARTMENT / BEHIND RH HEADLAMP
G14	JB	ENGINE COMPARTMENT / BEHIND POWER DISTRIBUTION FUSE BOX
G36	IP	BEHIND INSTRUMENT PANEL / LH SIDE OF CROSS CAR BEAM
G37	IP	BEHIND INSTRUMENT PANEL / RH SIDE OF CROSS CAR BEAM

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

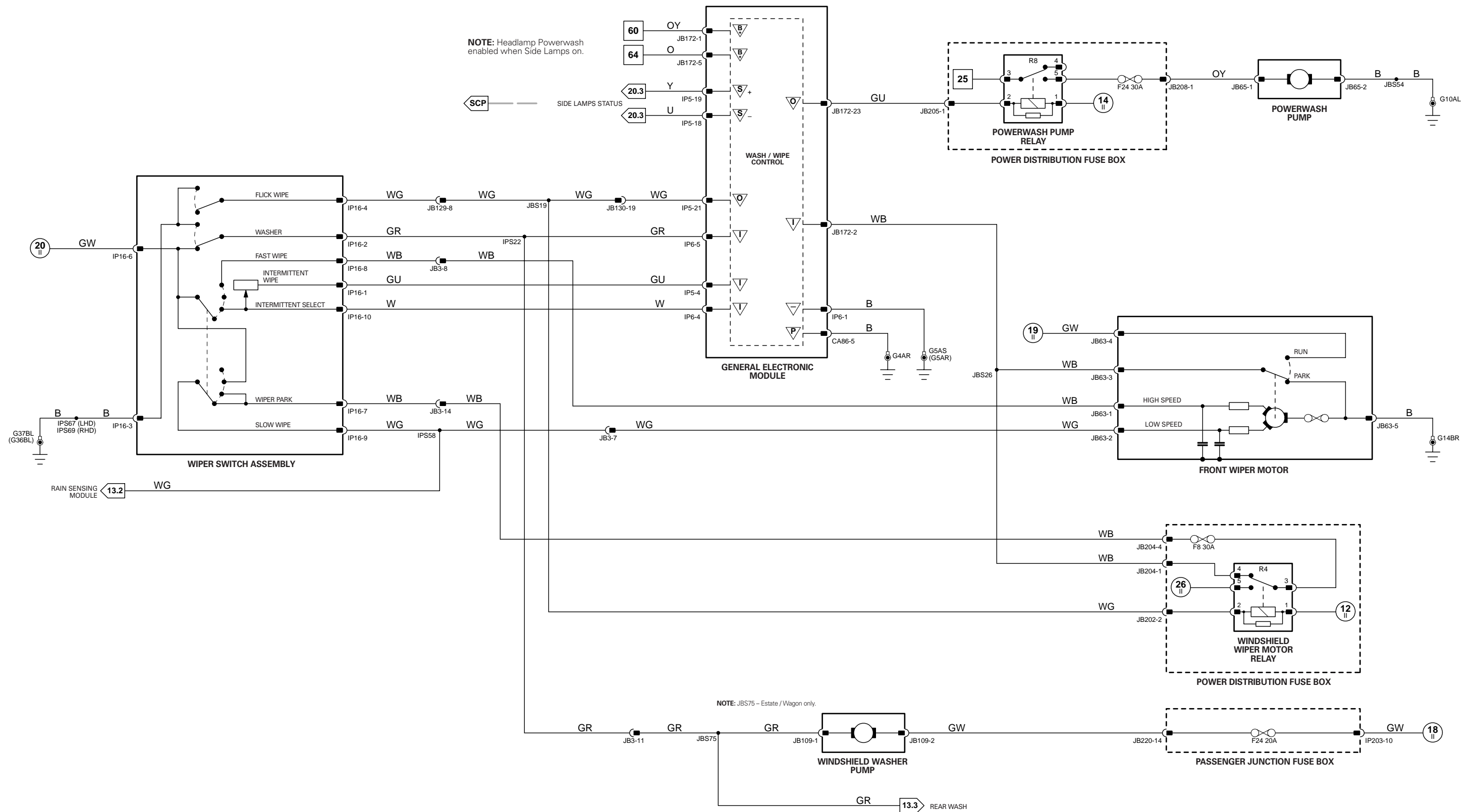
The following abbreviations are used to represent values for Control Module Pin-Out data

I	Input	PG	Power Ground	C	CAN Network	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.

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.



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S	IP5-18 SCP -
S	IP5-19 SCP +
O	IP5-21 WINDSHIELD WIPER RELAY DRIVE: TO ACTIVATE, CIRCUIT SWITCHED TO GROUND
SG	IP6-01 LOGIC GROUND: GROUND
I	IP6-04 INTERMITTENT WIPE: B+ WHEN SELECTED
I	IP6-05 FRONT WASHER SWITCH: WASHER ON = GROUND; WASHER OFF = B+
B+	JB172-01 BATTERY POWER SUPPLY (LOCKING): B+
I	JB172-02 WIPER MOTOR PARK SWITCH: PARKED = GROUND; NOT PARKED = B+
B+	JB172-05 BATTERY POWER SUPPLY (TURN SIGNALS): B+
O	JB172-23 POWER WASH PUMP RELAY DRIVE: TO ACTIVATE, GEM SWITCHES CIRCUIT TO GROUND

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

Fig. 13.2

COMPONENTS

Component	Connector(s)	Connector Description	Location
GENERAL ELECTRONIC MODULE	CA86 CA87 IP5 IP6 JB172	23-WAY / GREY 23-WAY / GREEN 23-WAY / BROWN 23-WAY / NATURAL 23-WAY / BLUE	BEHIND INSTRUMENT PANEL / RH SIDE
PASSENGER JUNCTION FUSE BOX	-	-	PASSENGER COMPARTMENT, FRONT BULKHEAD / LH SIDE
POWER DISTRIBUTION FUSE BOX	-	-	ENGINE COMPARTMENT
POWERWASH PUMP	JB65	2-WAY / GREY	BEHIND RH FRONT WHEEL ARCH LINER
POWERWASH PUMP RELAY	-	-	POWER DISTRIBUTION FUSE BOX - R8
RAIN SENSING MODULE	CA6	12-WAY / BLACK	BEHIND INSTRUMENT PANEL / LH SIDE
RAIN SENSOR	RC15	3-WAY / BLACK	BEHIND REAR VIEW MIRROR
WINDSHIELD WASHER PUMP	JB109	-	ENGINE COMPARTMENT / RH FRONT
WINDSHIELD WIPER MOTOR RELAY	-	-	POWER DISTRIBUTION FUSE BOX - R4
WIPER MOTOR - FRONT	JB63	-	BASE OF WINDSHIELD / LH SIDE
WIPER SWITCH ASSEMBLY	IP16	10-WAY / GREY	STEERING COLUMN

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
CA1	22-WAY / NATURAL / INSTRUMENT PANEL HARNESS TO CABIN HARNESS	LH 'A' POST / 'A' POST TRIM
CA10	22-WAY / SLATE / CABIN HARNESS TO JUNCTION BOX HARNESS	LH 'A' POST / 'A' POST TRIM
CA40	16-WAY / GREY / CABIN HARNESS TO ROOF HARNESS	RH 'A' POST / WINDSHIELD PILLAR
CA230	16-WAY / BLUE / CABIN HARNESS TO INSTRUMENT PANEL HARNESS	LH LOWER 'A' POST / 'A' POST TRIM
JB3	14-WAY / BLUE / JUNCTION BOX HARNESS TO INSTRUMENT PANEL HARNESS	BELOW INSTRUMENT PANEL / LH SIDE
JB129	22-WAY / GREY / JUNCTION BOX HARNESS TO INSTRUMENT PANEL HARNESS	BELOW INSTRUMENT PANEL / LH SIDE
JB130	22-WAY / GREEN / JUNCTION BOX HARNESS TO INSTRUMENT PANEL HARNESS	BELOW INSTRUMENT PANEL / LH SIDE

GROUND

Ground	Harness	Location
G4	CA	LOWER RH 'A' POST
G5	IP	UPPER RH 'A' POST
G10	JB	ENGINE COMPARTMENT / BEHIND RH HEADLAMP
G14	JB	ENGINE COMPARTMENT / BEHIND POWER DISTRIBUTION FUSE BOX
G15	CA	LOWER LH 'A' POST
G36	IP	BEHIND INSTRUMENT PANEL / LH SIDE OF CROSS CAR BEAM
G37	IP	BEHIND INSTRUMENT PANEL / RH SIDE OF CROSS CAR BEAM

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

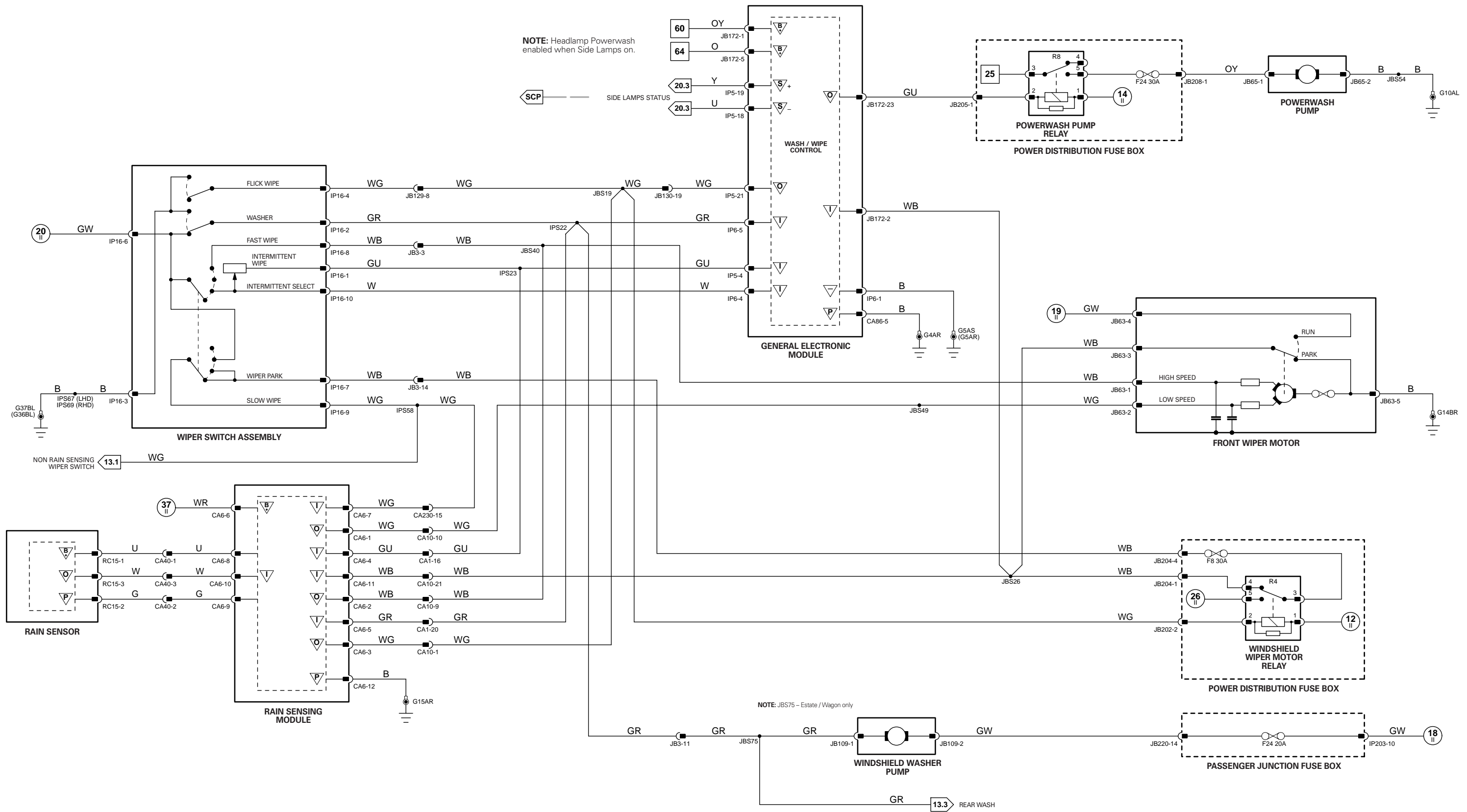
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B+	Battery Voltage	SG	Sensor / Signal Ground	D2	D2B Network	PWM	Pulse Width Modulated

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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.

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CONTROL MODULE PIN-OUT INFORMATION

General Electronic Module

Pin	Description and Characteristic
PG	CA86-05 POWER GROUND
I	IP5-02 REAR WASHER SWITCH: WASHER ON = GROUND; WASHER OFF = B+
I	IP5-03 ESTATE (WAGON): REAR WIPER SWITCH: B+ WHEN SELECTED
O	IP5-17 REAR WIPER MOTOR RELAY DRIVE: TO ACTIVATE, GEM SWITCH CIRCUIT TO GROUND
S	IP5-18 SCP -
S	IP5-19 SCP +
SG	IP6-01 LOGIC GROUND: GROUND
I	IP6-05 FRONT WASHER SWITCH: WASHER ON = GROUND; WASHER OFF = B+
I	IP6-12 REAR WIPER MOTOR PARK SWITCH: PARKED = GROUND; NOT PARKED = B+
B+	JB172-01 BATTERY POWER SUPPLY (LOCKING): B+
B+	JB172-05 BATTERY POWER SUPPLY (TURN SIGNALS): B+

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Fig. 13.3

COMPONENTS

Component	Connector(s)	Connector Description	Location
GENERAL ELECTRONIC MODULE	CA86 CA87 IP5 IP6 JB172	23-WAY / GREY 23-WAY / GREEN 23-WAY / BROWN 23-WAY / NATURAL 23-WAY / BLUE	BEHIND INSTRUMENT PANEL / RH SIDE
PASSENGER JUNCTION FUSE BOX	-	-	PASSENGER COMPARTMENT, FRONT BULKHEAD / LH SIDE
WINDSHIELD WASHER PUMP	JB109	-	ENGINE COMPARTMENT / RH FRONT
WIPER MOTOR - REAR	WT5	-	TAIL GATE
WIPER MOTOR RELAY - REAR	-	-	PASSENGER JUNCTION FUSE BOX - R3
WIPER SWITCH ASSEMBLY	IP16	10-WAY / GREY	STEERING COLUMN

HARNESS IN-LINE CONNECTORS

Connector	Connector Description	Location
CA1	22-WAY / NATURAL / INSTRUMENT PANEL HARNESS TO CABIN HARNESS	LH 'A' POST / 'A' POST TRIM
CA169	4-WAY / GREY / CABIN HARNESS TO INSTRUMENT PANEL HARNESS	LH LOWER A POST / A POST TRIM
WL3	3-WAY / BLACK / CABIN HARNESS TO TAIL GATE LINK LEAD	ROOF / CENTER REAR
WT3	3-WAY / BLACK / CABIN HARNESS TO TAIL GATE HARNESS	TAIL GATE

GROUNDINGS

Ground	Harness	Location
G1	CA	TRUNK / UNDER LH TAIL LAMP UNIT
G4	CA	LOWER RH 'A' POST
G5	IP	UPPER RH 'A' POST
G36	IP	BEHIND INSTRUMENT PANEL / LH SIDE OF CROSS CAR BEAM
G37	IP	BEHIND INSTRUMENT PANEL / RH SIDE OF CROSS CAR BEAM

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