

1. Basic Diagnostic Procedure

A: BASIC PROCEDURES

1. GENERAL DESCRIPTION

The most important purpose of diagnostics is to quickly determine which part is malfunctioning, to save time and labor.

2. IDENTIFICATION OF TROUBLE SYMPTOM

Determine what the problem is based on the symptom.

3. PROBABLE CAUSE OF TROUBLE

Look at the wiring diagram and check the system's circuit. Then check the switch, relay, fuse, ground, etc.

4. LOCATION AND REPAIR OF TROUBLE

- 1) Using the diagnostics, narrow down the causes.
- 2) If necessary, use a voltmeter, ohmmeter, etc.
- 3) Before replacing certain component parts (switch, relay, etc.), check the power supply, ground, for open wiring harness, poor connectors, etc. If no problem is encountered, check the component parts.

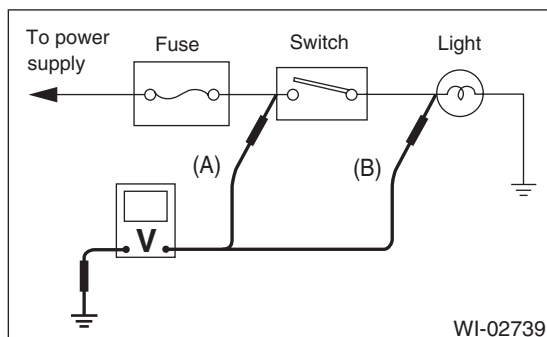
5. SYSTEM OPERATION CHECK

After repairing, ensure that the system operates properly.

B: BASIC INSPECTION

1. VOLTAGE MEASUREMENT

- 1) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal and the positive lead to the connector or component terminal.
- 2) Contact the positive lead of the voltmeter on connector (A). The voltmeter will indicate a voltage.
- 3) Shift the positive lead to connector (B). The voltmeter will indicate no voltage.



- 4) With the test set-up held as it is, turn the switch to ON. The voltmeter will indicate a voltage and, at the same time, the light will illuminate.

- 5) The circuit is in good order. If a problem such as a light failing to illuminate occurs, use the procedures outlined above to track down the malfunction.

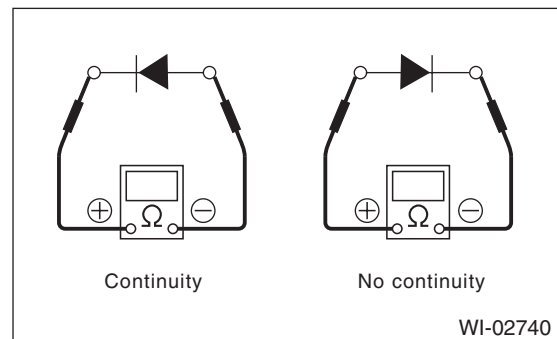
2. CIRCUIT CONTINUITY CHECKS

- 1) Disconnect the battery terminal or connector so there is no voltage between the check points. Contact the two leads of an ohmmeter to each of the check points.

If the circuit has diodes, reverse the two leads and check again.

- 2) Use an ohmmeter to check for diode continuity. When contacting the negative lead to the diode positive side and the positive lead to the negative side, there should be continuity.

When contacting the two leads in reverse, there should be no continuity.



- 3) The symbol "○ — ○" indicates that continuity exists between two points or terminals. For example, when a switch position is at "3", continuity exists among terminals 1, 3 and 6, as shown in the table below.

Terminal Switch Position	1	2	3	4	5	6
OFF						
1	○ — ○				○ — ○	
2	○ — ○			○ — ○		○ — ○
3	○ — ○		○ — ○			○ — ○
4	○ — ○	○ — ○				○ — ○

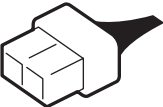
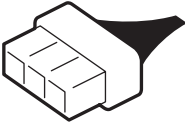
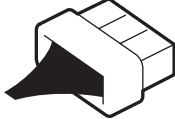
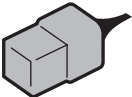
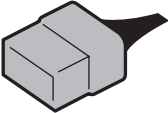
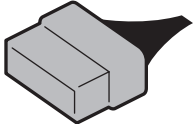
WI-02741

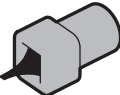
Basic Diagnostic Procedure

WIRING SYSTEM

E: CONNECTOR SYMBOL IN WIRING HARNESS

A number of connector symbols are used in each wiring diagram to easily identify the wiring harness connectors.

Standard type: Female		
Pole: From 1 to 8	Pole: From 9 to 20	Pole: More than 21
		
		
Standard type: Male		
		
		

Water proof type: Female		
Pole: From 1 to 8	Pole: From 9 to 20	Pole: More than 21
		
		
Water proof type: Male		
		
		

WI-02756

Power Supply Circuit

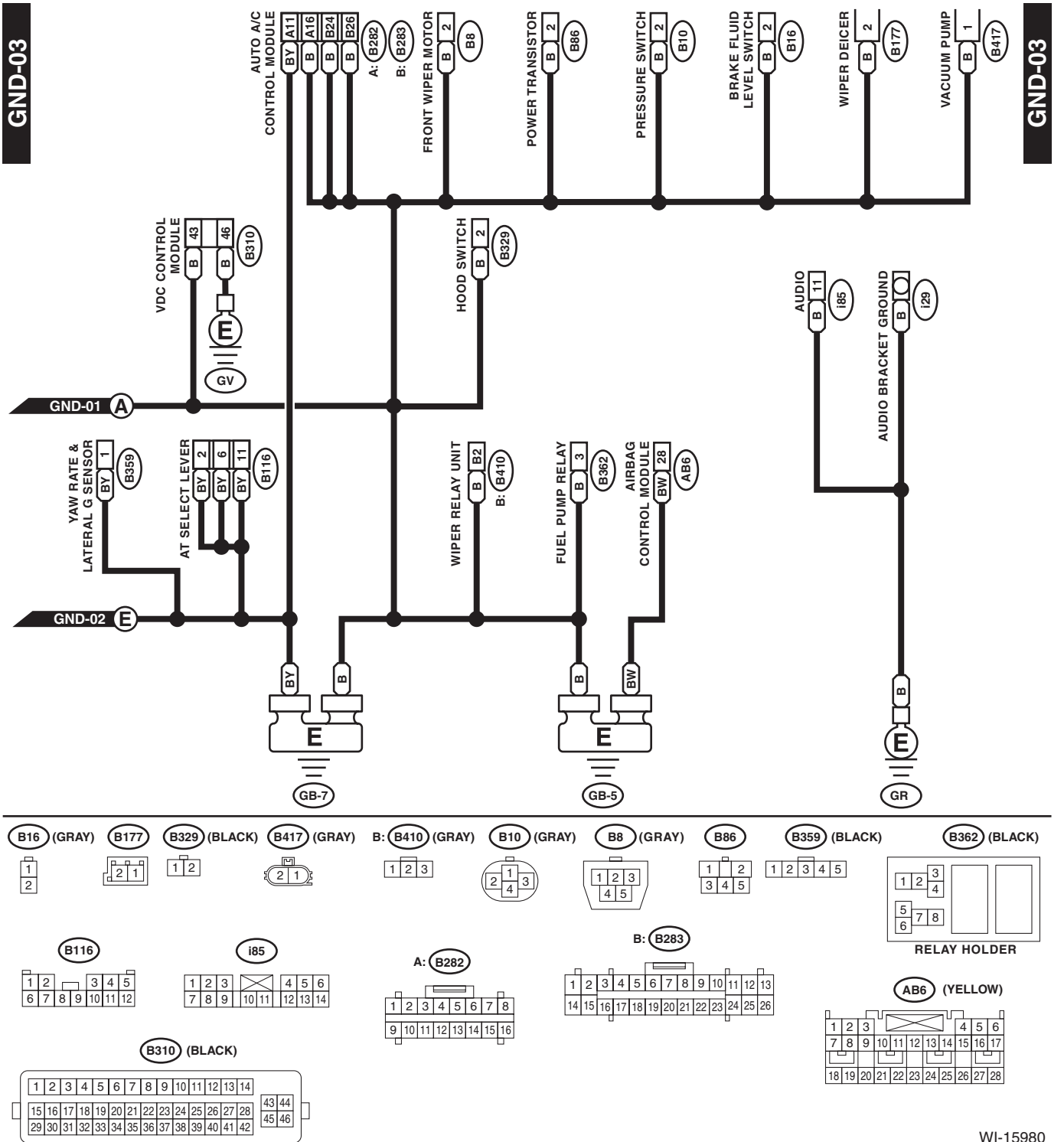
WIRING SYSTEM

No.	Load
MB-1	Fail safe relay
MB-2	VDC control module
MB-3	Accessory relay 2
MB-5	Mirror heater relay
	Rear defogger
MB-6	Body integrated unit
MB-12	Headlight beam leveler RH
MB-13	Headlight beam leveler LH
MB-14	Combination switch (lighting)
MB-15	Combination meter
MB-16	Headlight RH
MB-17	Headlight LH
MB-18	Daytime running light control module
	Body integrated unit
MB-19	Horn
MB-20	Horn
MB-21	Body integrated unit
	Remote engine start control module
	Horn switch
MB-22	Main relay
MB-23	Main relay 2
	Main relay
MB-24	Electronic throttle control relay
MB-25	Fuel pump relay
MB-26	TCM
MB-27	ECM
	Data link connector
MB-28	Key warning switch
	Key illumination
	Turn signal and hazard unit
	Body integrated unit
MB-29	Spot map light
	Vanity mirror light LH
	Vanity mirror light RH
	Puddle light LH
	Puddle light RH
	Foot light (Driver's seat)
	Foot light (Passenger's seat)
	Home link
	Body integrated unit
	Room light
MB-30	Power window circuit breaker
MB-31	F/B fuse No. 16
	Headlight beam leveler switch
MB-32	Parking switch
MB-33	Blower motor relay
MB-34	Vacuum pump relay
FB-1	Trailer connector
FB-3	Stop light switch

No.	Load
FB-4	Mirror heater relay
	Wiper deicer relay
FB-5	Seat heater relay
FB-6	Body integrated unit
FB-8	Rear A/C relay
FB-9	Front fog light relay
FB-10	MFD
	Impact sensor
	Audio
	Keyless entry control module
	Second-row seat foot light RH
	TV monitor
	Navigation module
	Front step light LH
	Front step light RH
	Rear Entertainment
	Rear step light RH
	XM radio
FB-11	Second-row seat foot light LH
	Luggage room light
	Rear gate light
	Rear step light LH
FB-13	Navigation module
FB-17	TPM control module
	Warning box LH
	Warning box RH
	Rear view camera module
FB-18	Combination meter
	Auto A/C control module
FB-19	Body integrated unit
	Remote control mirror switch
FB-20	Push switch
	Accessory relay 2
	Seat heater relay
FB-21	Shade mirror
	Rear accessory power supply socket (Third-row seat)
FB-23	Rear accessory power supply socket (Luggage room)
	Rear wiper motor
FB-24	Rear washer motor
	Body integrated unit
FB-25	MFD
	Audio
	TV monitor
	Navigation module
	Rear view camera module
	AUX switching unit
FB-25	Rear entertainment

Ground Circuit

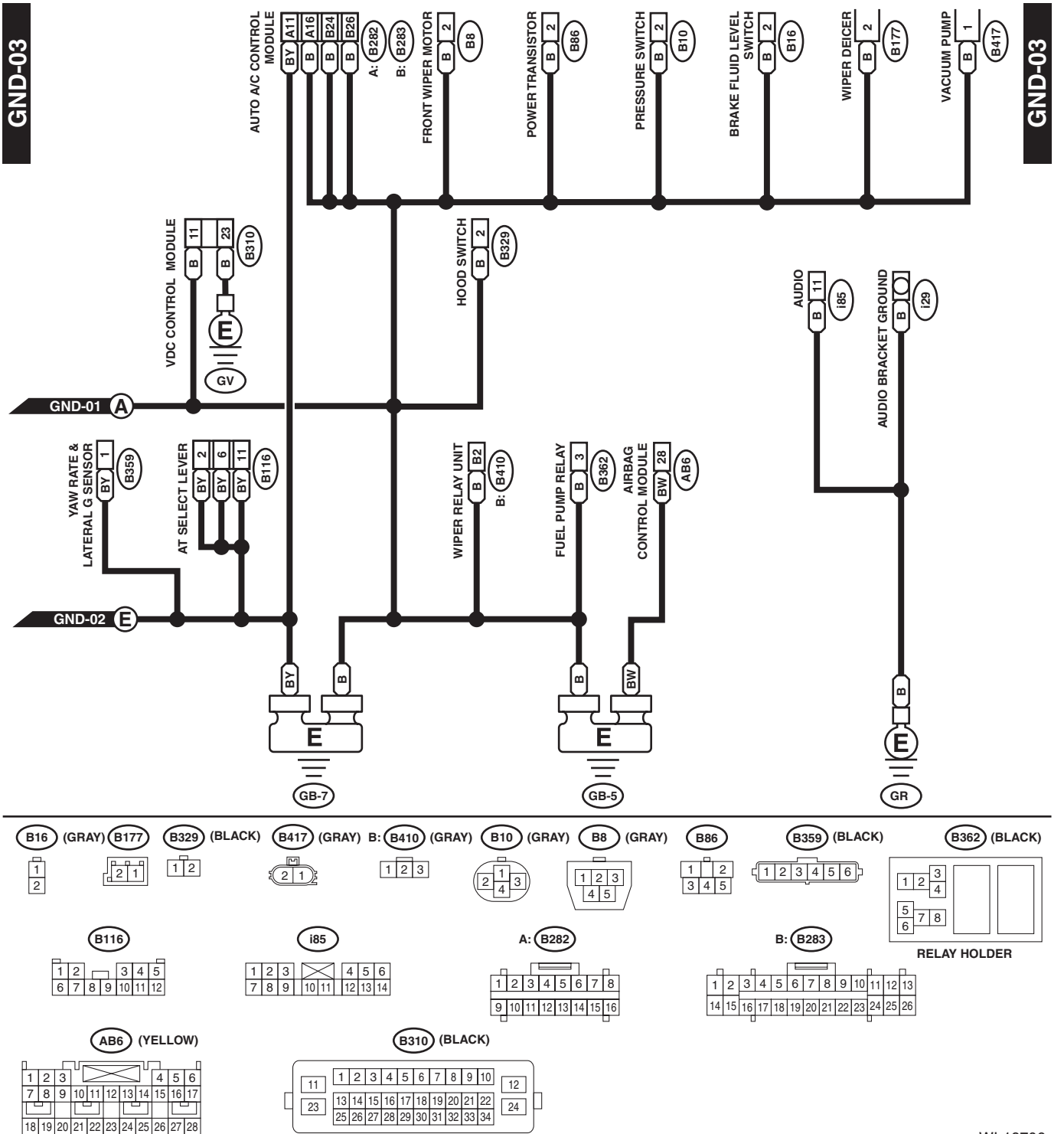
WIRING SYSTEM



WI-15980

Ground Circuit

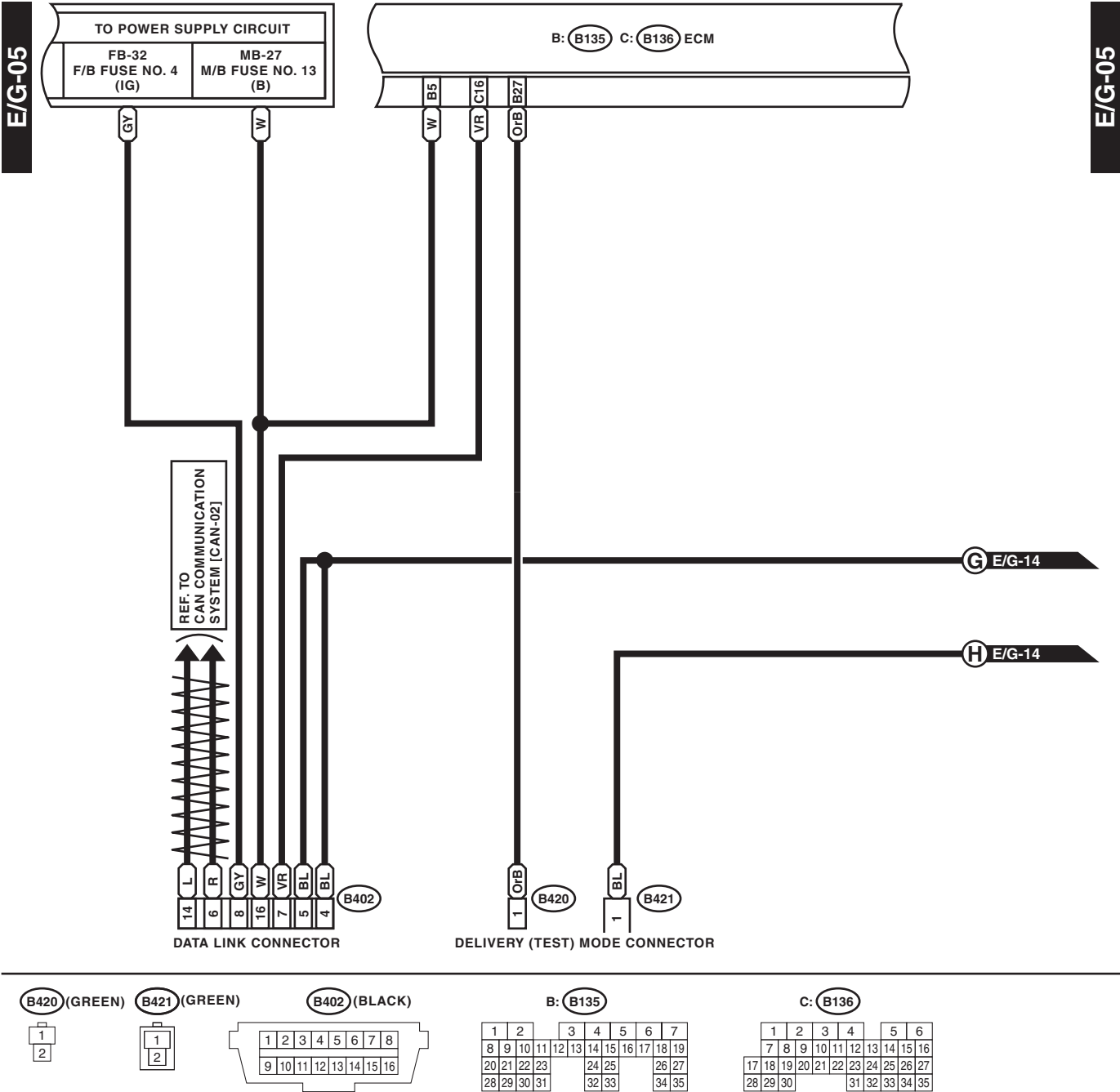
WIRING SYSTEM



WI-19706

Engine Electrical System

WIRING SYSTEM

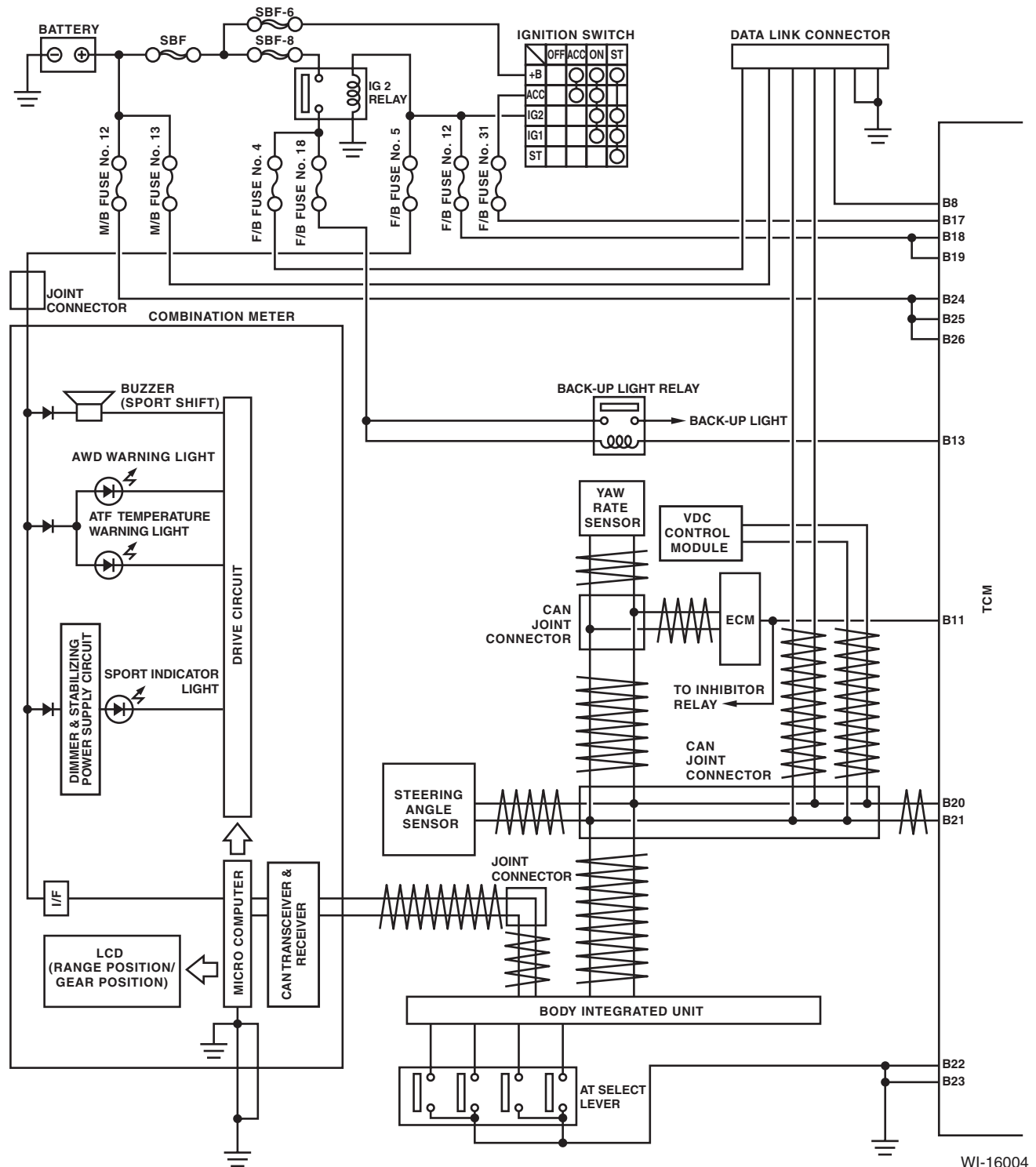


WI-15994

AT Control System

WIRING SYSTEM

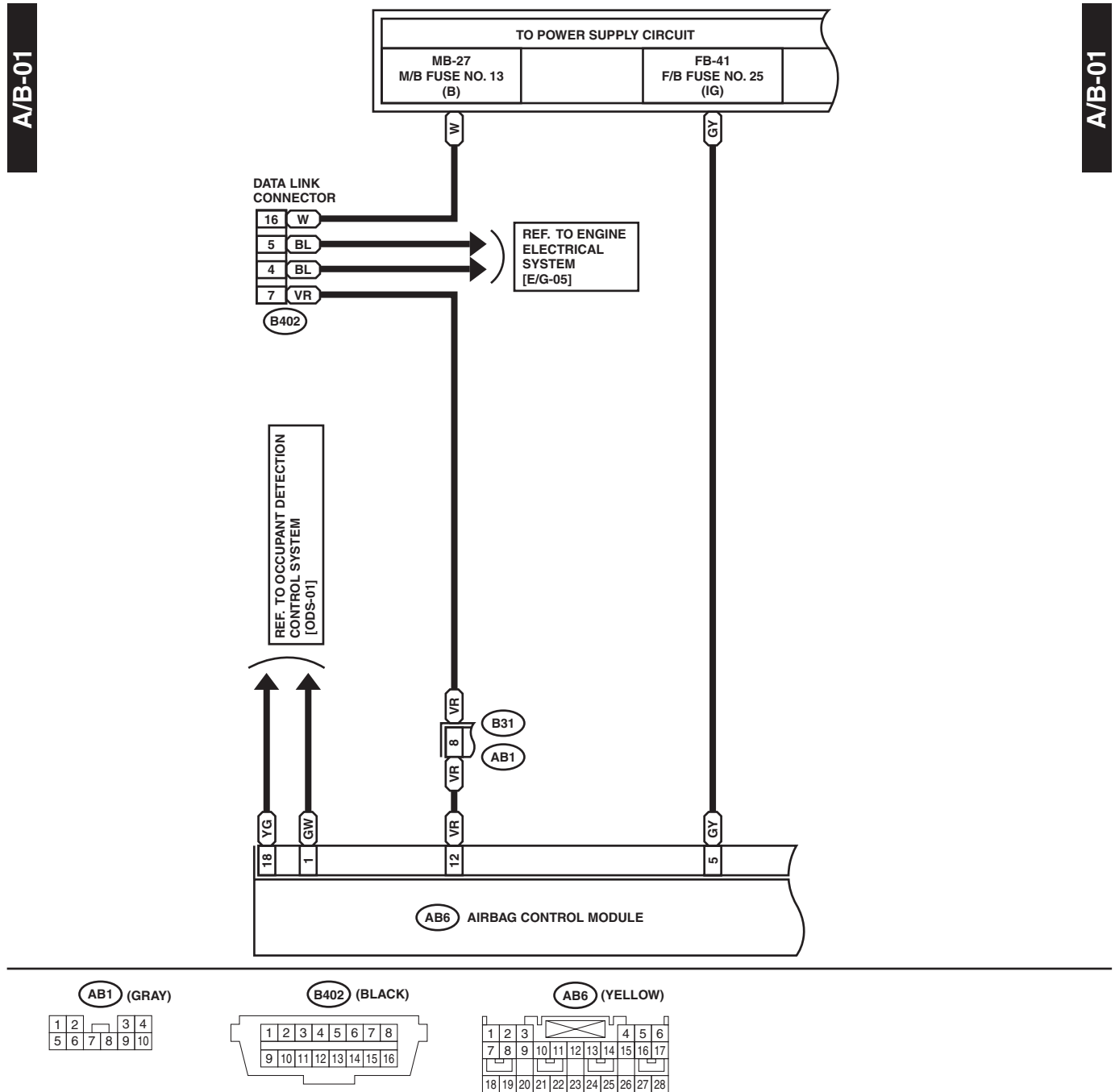
- VDC control module identification number W3



WI-16004

12. Airbag System

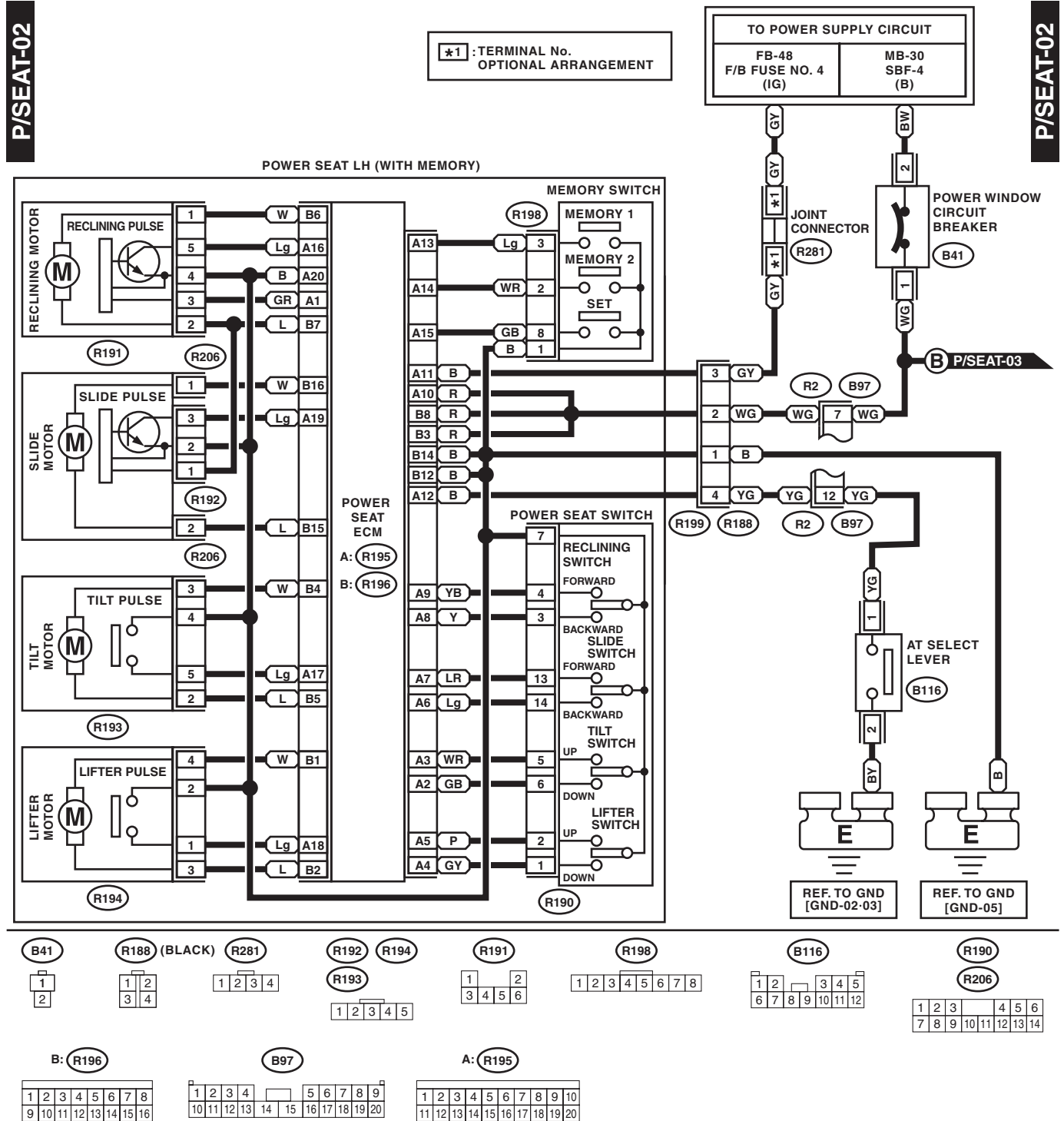
A: WIRING DIAGRAM



Power Seat System

WIRING SYSTEM

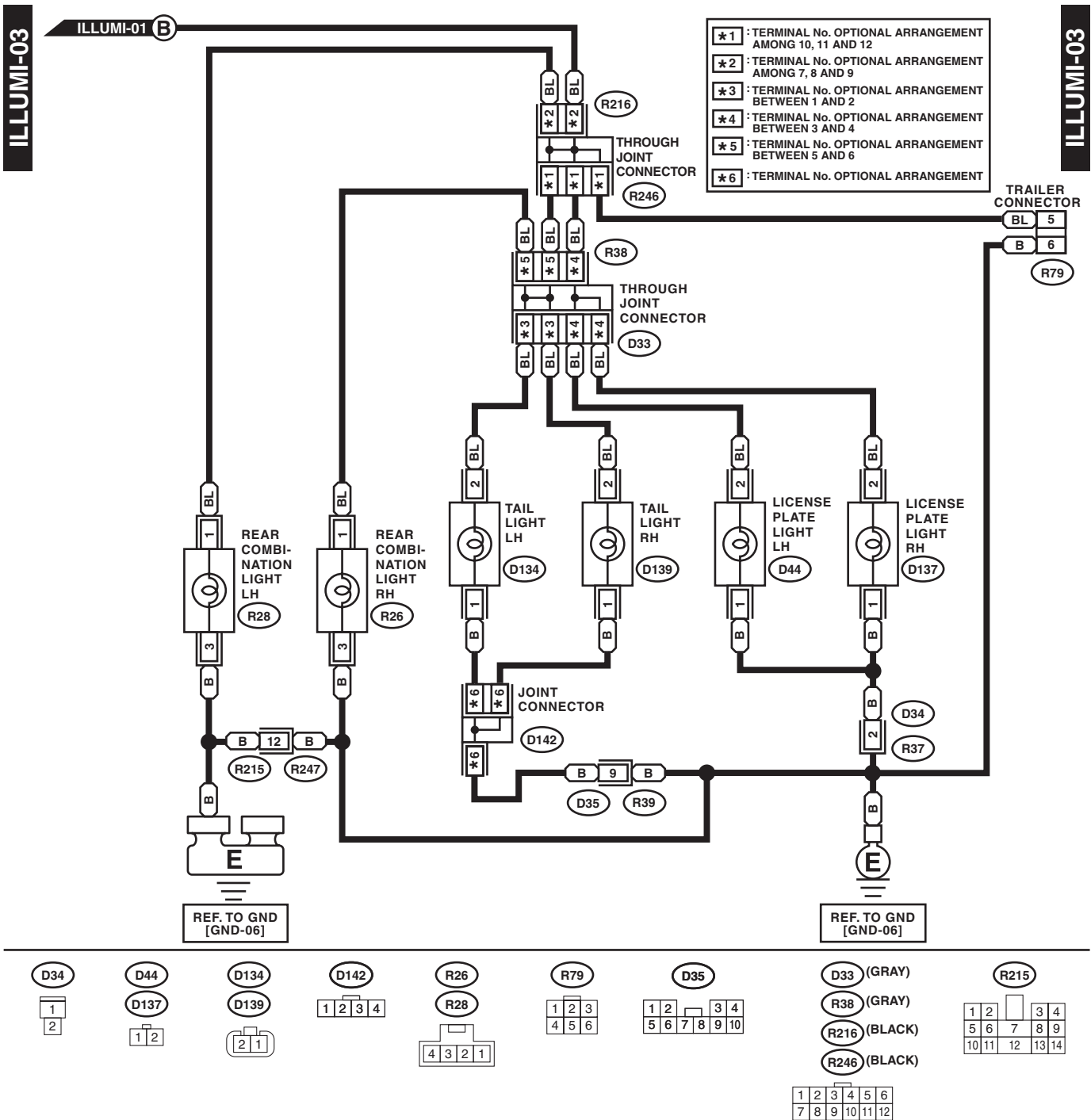
2. DRIVER'S SEAT (WITH MEMORY)



WI-16041

Clearance Light and Illumination Light System

WIRING SYSTEM



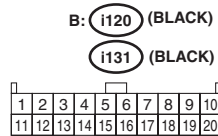
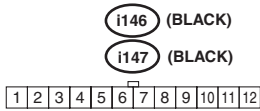
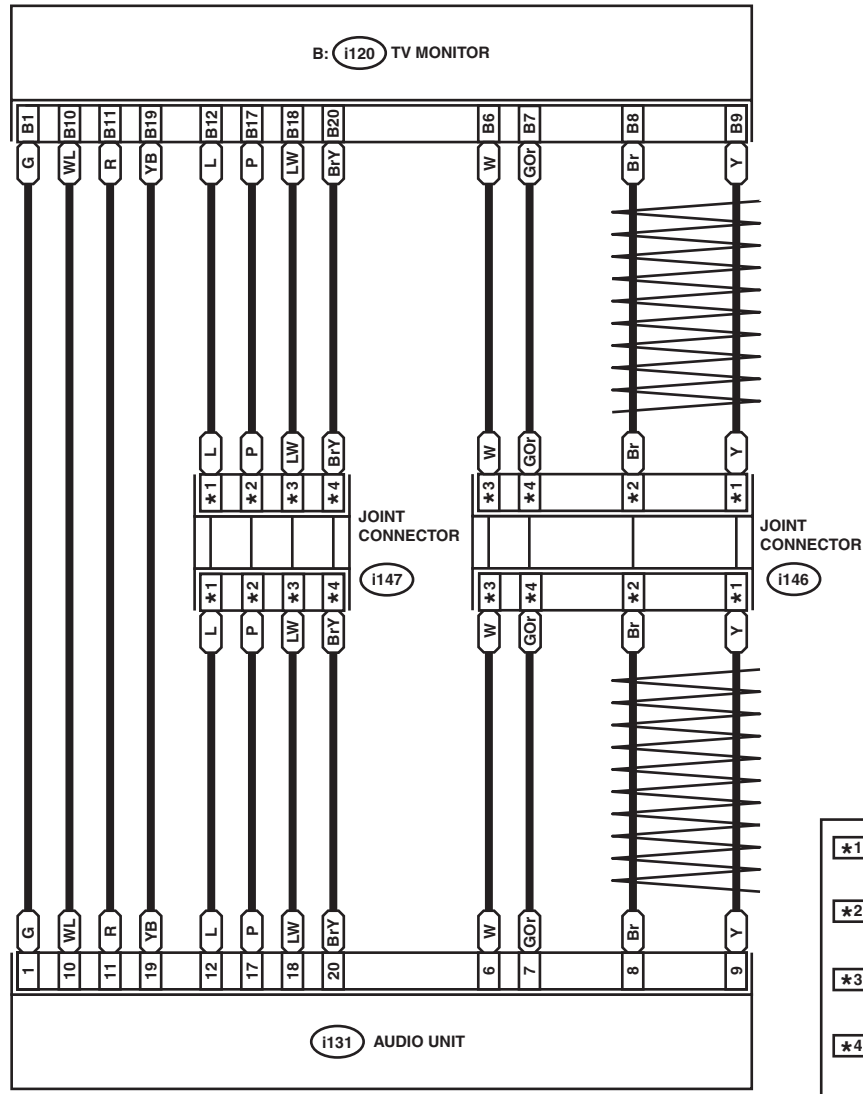
WI-16054

Navigation System

WIRING SYSTEM

NAVI-03

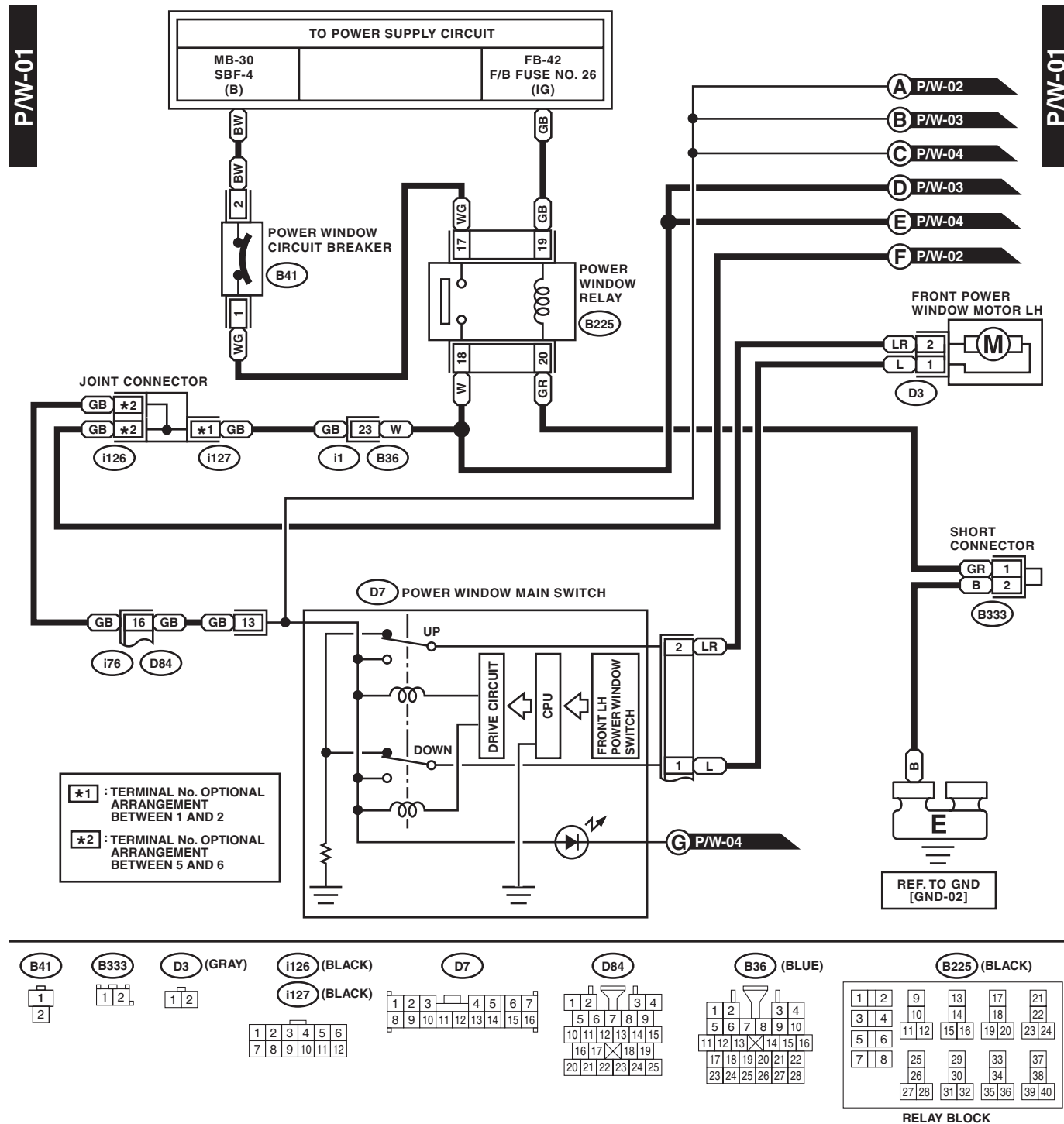
NAVI-03



WI-16076

44. Power Window System

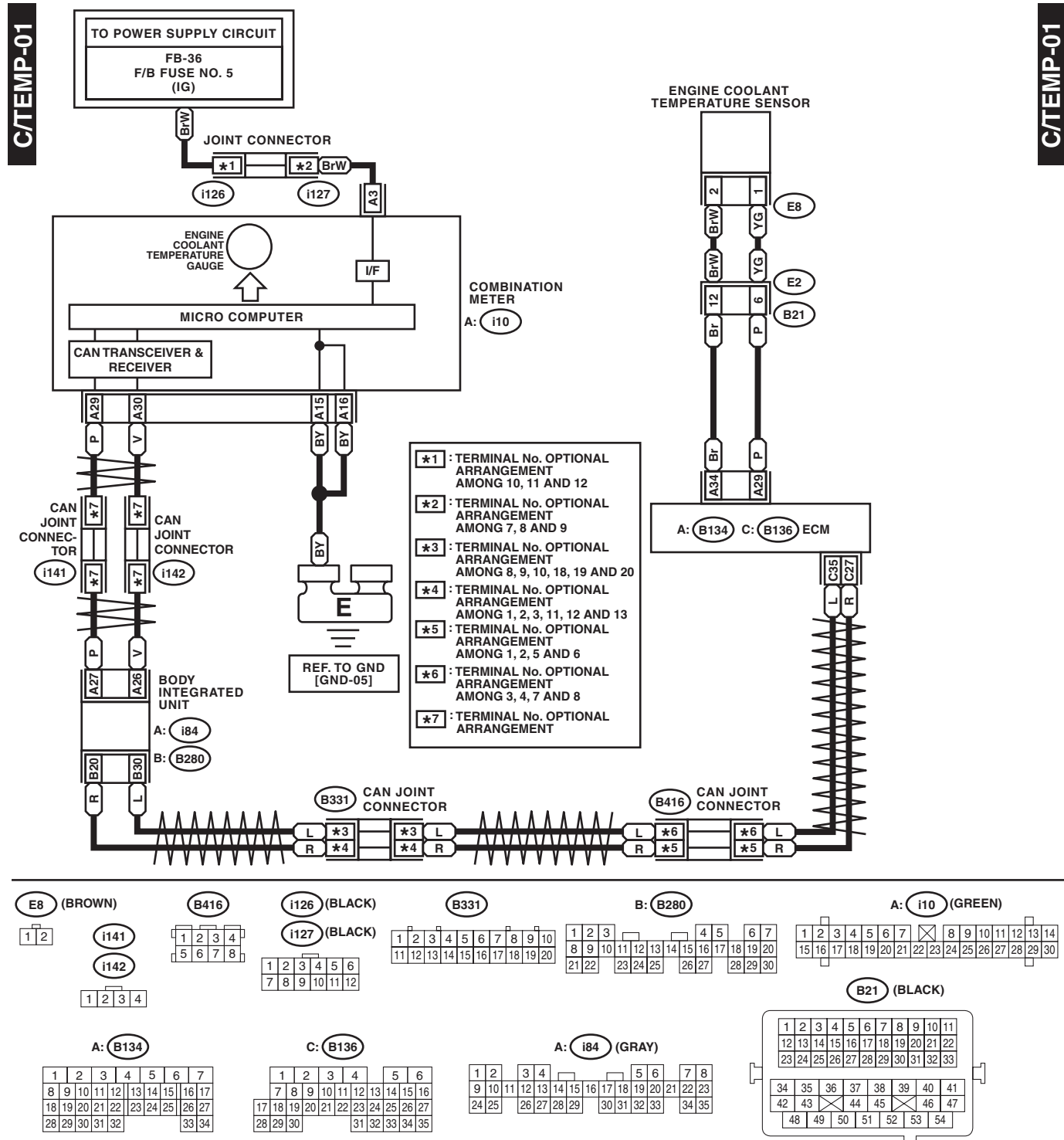
A: WIRING DIAGRAM



WI-16086

50. Coolant Temperature System

A: WIRING DIAGRAM

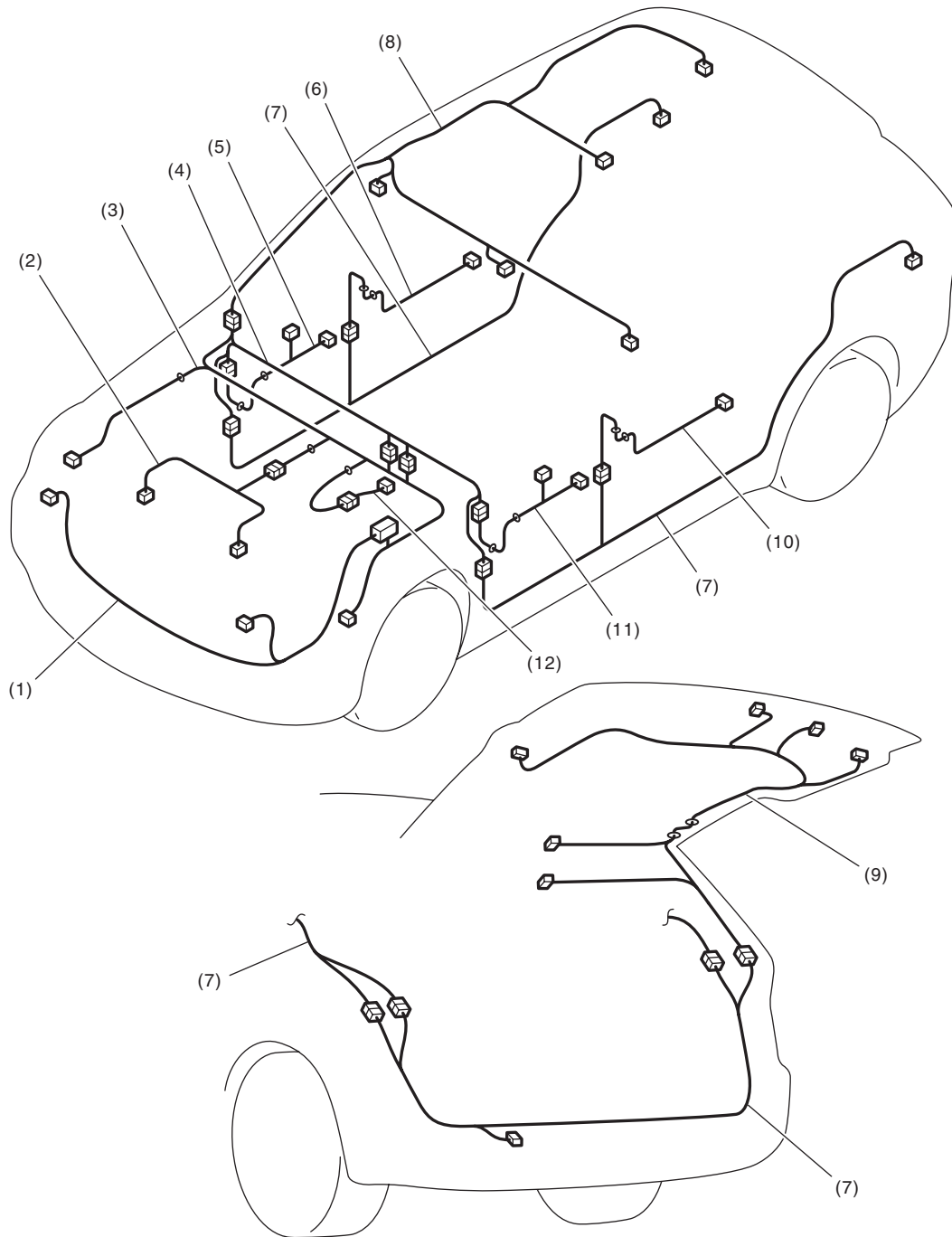


Harness Components Location

WIRING SYSTEM

57.Harness Components Location

A: LOCATION



WI-16110

- | | | |
|-------------------------------------|-------------------------|-------------------------|
| (1) Front wiring harness | (5) Front door cord RH | (9) Rear gate cord |
| (2) Engine wiring harness | (6) Rear door cord RH | (10) Rear door cord LH |
| (3) Bulkhead wiring harness | (7) Rear wiring harness | (11) Front door cord LH |
| (4) Instrument panel wiring harness | (8) Roof cord | (12) Transmission cord |

WIRING SYSTEM

