
HOW TO READ THE WIRING DIAGRAMS

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COMPOSITION AND CONTENTS OF WIRING DIAGRAMS

- (1) This manual consists of wiring harness diagrams, installation locations of individual parts, circuits diagrams and index.
- (2) In each section, all specifications are listed, including optional specifications. Accordingly, some specifications may not be applicable for individual vehicles.

Section	Basic contents
Wiring harness configuration diagrams	Connector locations and harness wiring configurations on actual vehicles are illustrated.
Single part installation position	Locations are shown for each point of relays, electronic control units, sensors, solenoids, solenoid valves, diodes, inspection connectors, spare connectors, fusible links, fuses, etc. In the part's lists, parts are listed in alphabetical order.
Circuit diagrams	<p>Circuits from power supply to earth are shown completely, classified according to system. There is a main division into power circuits, and circuits classified by system. The circuits classified by system also include operation and troubleshooting hints.</p> <ul style="list-style-type: none">● Junction block The entire circuit for the junction block is described, because only the part of the junction block needed is normally shown in each circuit diagram.● Joint connectors The internal circuits for all joint connectors are described, because only the part needed is shown in each circuit diagram.● Power supply circuits Circuits from the battery to fusible link, dedicated fuses, ignition switch, general purpose fuses, etc.● Circuits classified by system For each system, the circuits are shown from fuse to earth, excluding the power supply sections.● Operation The standard operation of each system is briefly described, following the route of current flow.● Troubleshooting hints This is a brief explanation of the inspection points that serve as hints when troubleshooting. Explanations of the circuits controlled by the electronic control unit are omitted. Refer to the related publications as required.
Index	All components used are listed by connector number and component name.

HOW TO READ CONFIGURATION DIAGRAMS

The wiring harness diagrams clearly show the connector locations and harness routings at each site on actual vehicles.

Denotes connector No.
The same connector No. is used throughout the circuit diagrams to facilitate connector location searches.
The first alphabetical symbol indicates the location site of the connector and a number that follows is the unique number. Numbers are assigned to parts in clockwise order on the diagram.

Example: A-12

Number specific to connector (serial number)

Connector location site symbol

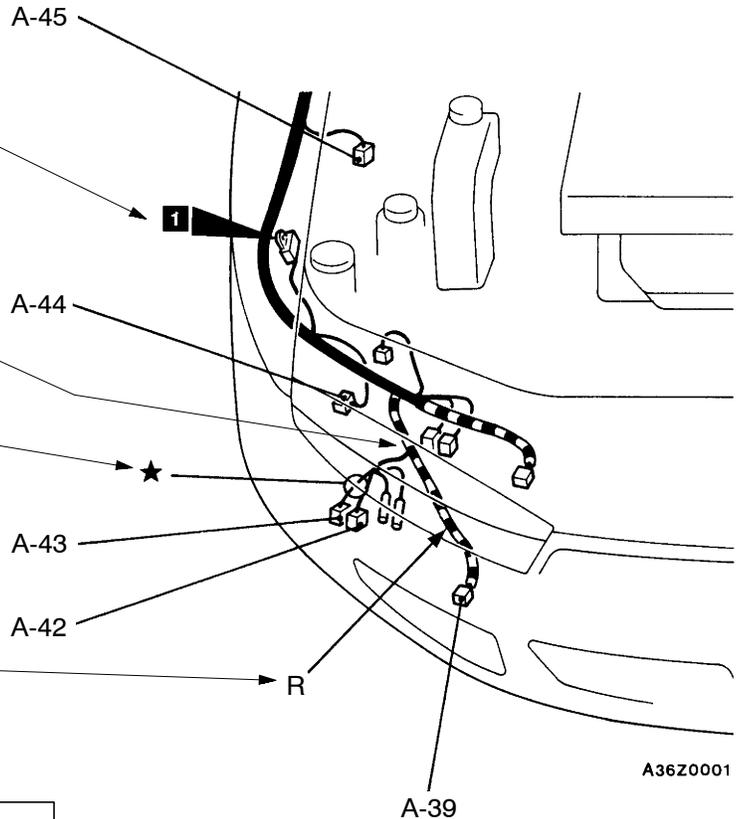
- | | |
|-------------------------------------|------------------------|
| A: Engine compartment | D: Floor and roof |
| B: Engine and transmission assembly | E: Door |
| C: Dash panel | F: Luggage compartment |

Denotes earth point.
Same earth number is used throughout circuit diagrams to facilitate search of earth point. Refer to SINGLE PART INSTALLATION POSITION - EARTH MOUNTING LOCATIONS for details of earth points.

Denotes a section covered by a corrugated tube.

The mark ★ shows the standard mounting position of wiring harness.

Denotes the colour of corrugated tube or vinyl tube. (If not specified, it is black.)
R: Red
Y: Yellow



The number of connector pins and the connector colour (except milk white)* are shown for ease of retrieval.

Example: (2-B)

Connector colour (milk white if no colour is indicated)
Number of connector pins

*: Typical connector colours

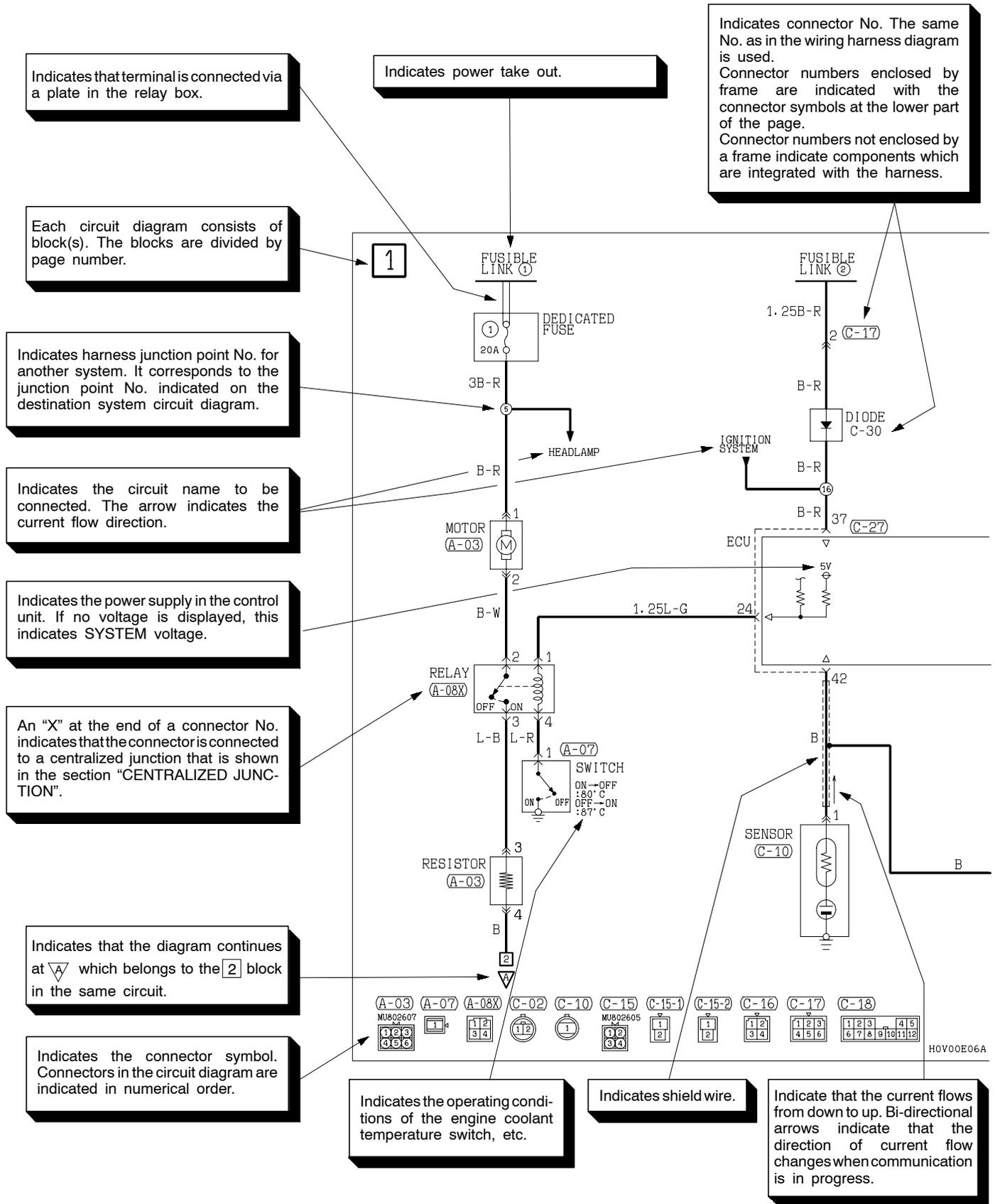
B: Black	BR: Brown
Y: Yellow	V: Violet
L: Blue	O: Orange
G: Green	GR: Gray
R: Red	None: Milk white

- | | |
|------------|-------------------------|
| A-39 (2-B) | Headlamp (LO: RH) |
| A-40 (1) | Horn (LO) |
| A-41 (1) | Horn (HI) |
| A-42 (2-B) | Windshield washer motor |

Indicates the device to which the connector is to be connected.

HOW TO READ CIRCUIT DIAGRAMS

The circuit of each system from fuse (or fusible link) to earth is shown. The power supply is shown at the top and the earth at the bottom to facilitate understanding of the current flow.



Indicates input/output to/from control unit (current flow direction).

Input Output Input/output

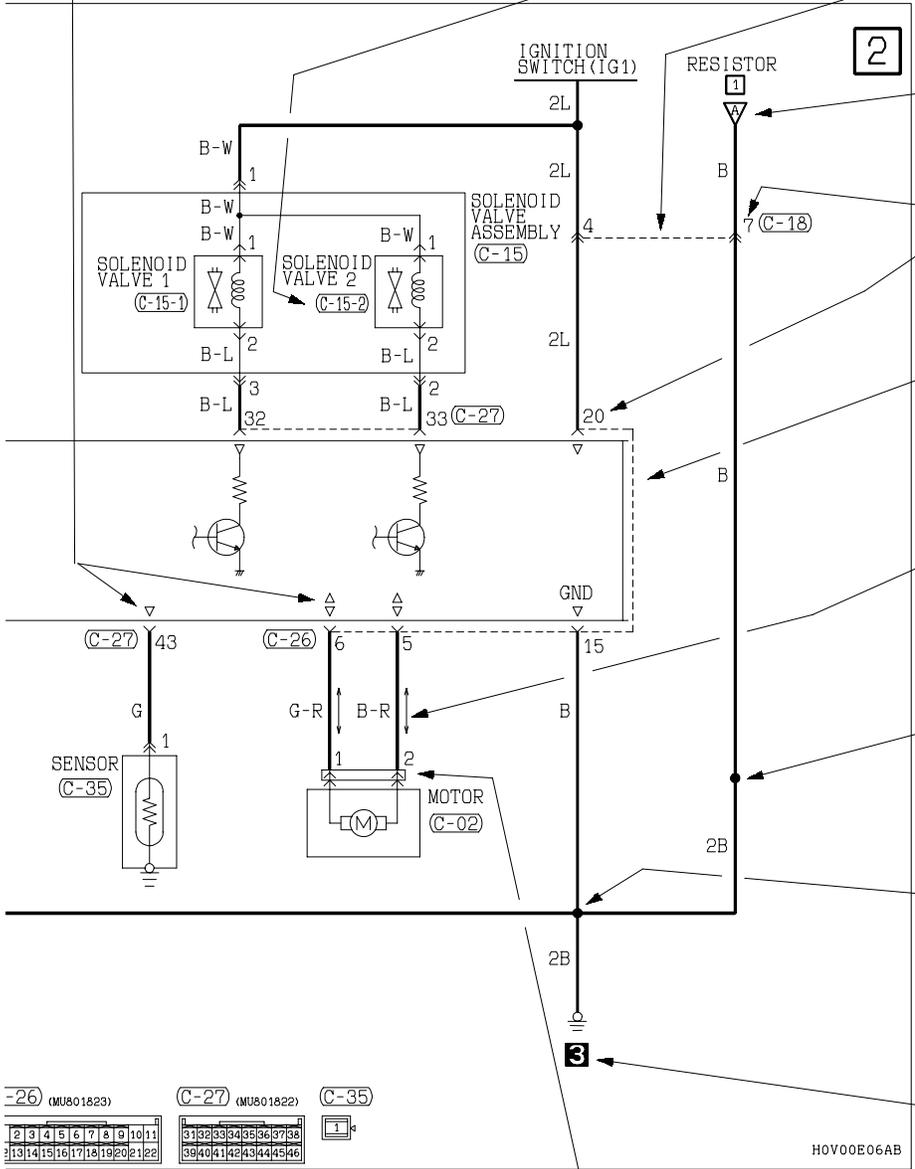
Indicates a wiring connector which is inside the equipment and which is not shown in the wiring harness configuration diagram.

Example C-15-2

Indicates a connector which is inside the equipment, numbered in order starting from 1.

Indicates the connector number shown in the wiring harness configuration diagram.

A broken line indicates that these connectors are the same intermediate connectors.



Indicates that the diagram comes from [1] which belongs to the [1] block in the same circuit.

Indicates terminal No.

In case two or more connectors are connected to the same device, markings indicating the same connectors are connected by a broken line.

Indicates current flow downward or upward as controlled by the control unit.

Indicates harness junction where wire diameter or colour changes.

Indicates intersections at which the lead wire are not connected.

Indicates intersections at which the lead wires are connected.

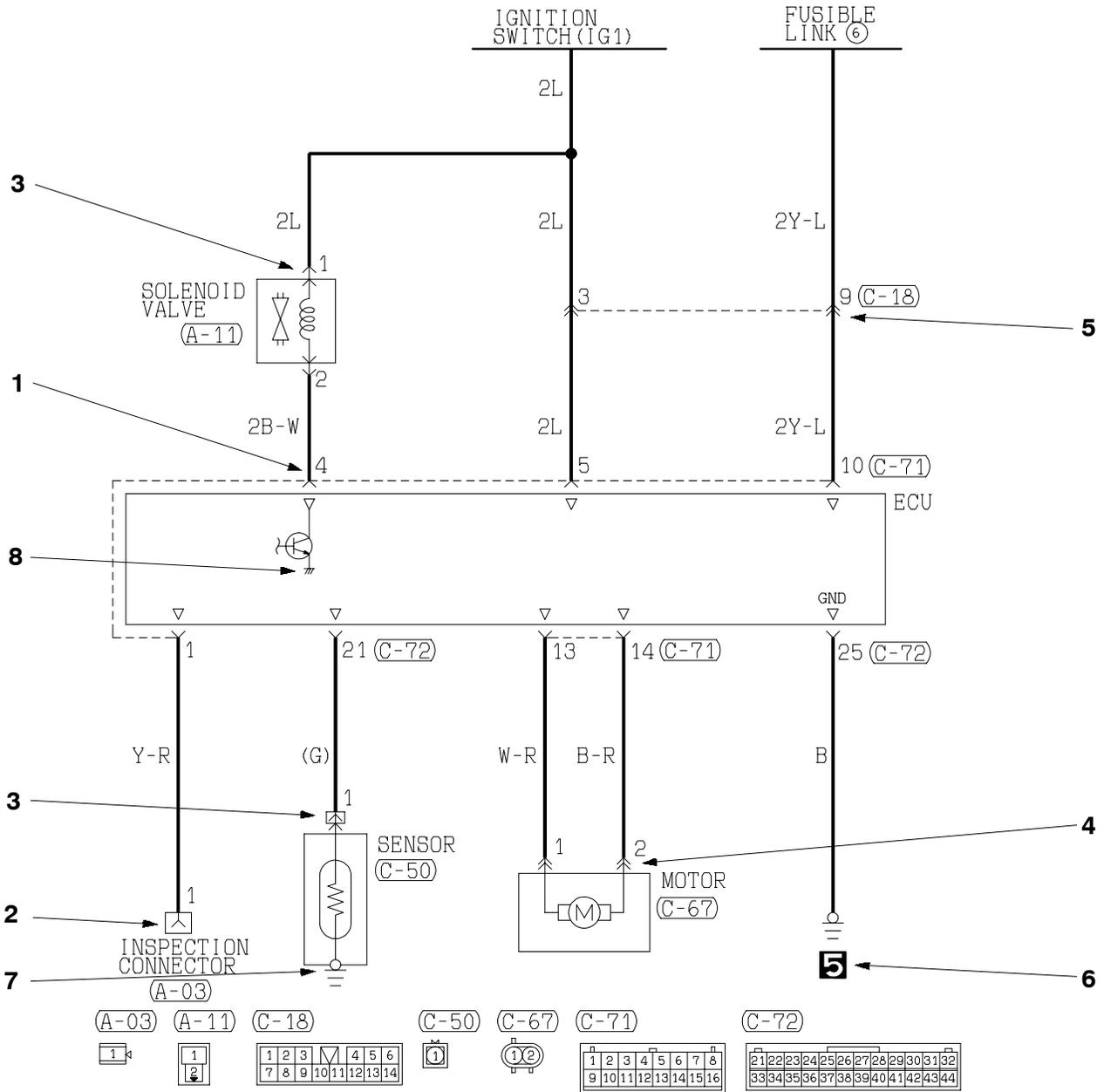
Indicates representative vehicle body earth point. (Same No. as that of earth point in wiring harness diagram and installation locations of individual parts.)

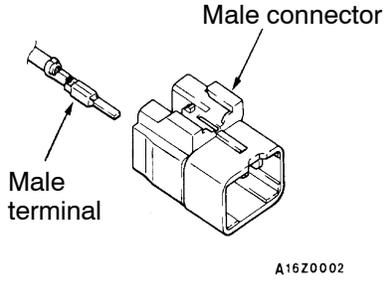
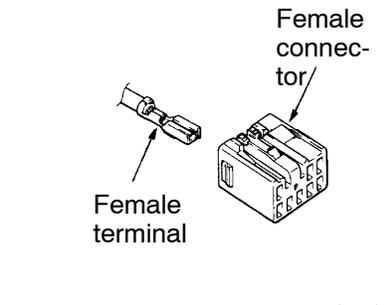
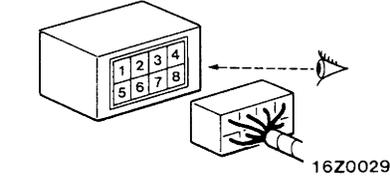
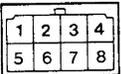
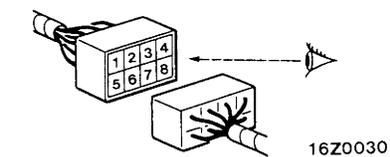
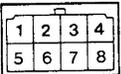
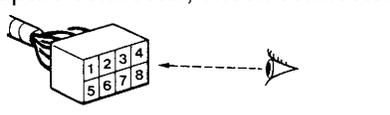
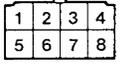
C-26 (MU801823)											C-27 (MU801822)											C-35										
2	3	4	5	6	7	8	9	10	11		31	32	33	34	35	36	37	38			1											
13	14	15	16	17	18	19	20	21	22		39	40	41	42	43	44	45	46														

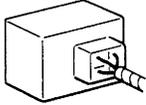
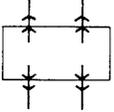
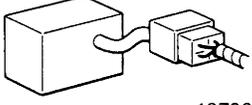
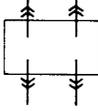
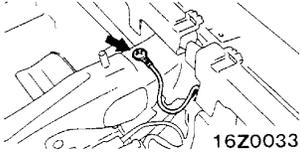
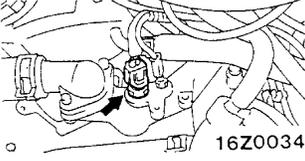
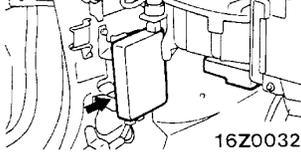
HOV00E06AB

Indicates that the terminal is a spare one if the device (sensors in this case) is not provided.

MARKINGS FOR CONNECTOR EARTHING



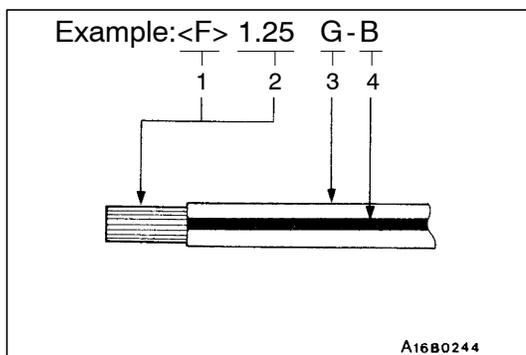
Item	No.	Connector/Earthing	Symbol	Contents
Connector and terminal marking	1		<p>Male terminal</p>  16Z0021	The male and female terminals are indicated as shown. The connector with male terminal(s) is called as male connector and indicated by double connector contour lines, while the connector with female terminal(s) is called as female connector and indicated by single connector contour line.
	-		<p>Female terminal</p>  16Z0022	
Connector symbol marking	2	<p>Device</p> 	 16Z0016	The symbol indicates the vehicle connector as viewed from the illustrated direction. At the connection with a device, the connector symbol on the device side is shown, and for an intermediate connector, a male connector symbol is shown. For spare connectors and check connectors, no device is connected, and so the harness-side connector symbol is shown for these connectors. The details for the diagnosis connector differ from the above description. For details, refer to the "MUT-II operation instructions".
	<p>Intermediate connector</p> 	 16Z0016		
	<p>Spare connector, check connector</p> 	 16Z0017		

Item	No.	Connector/Earthing	Symbol	Contents
Connector connection marking	3	Direct connection type  16Z0026	 16Z0023	A connection between a device and connector on the harness side is either by direct insertion in the device (direct connection type) or by connection with a harness connector on the device side furnished (harness connection type). The two types are indicated as illustrated.
	4	Harness connection type  16Z0027	 16Z0024	
	5	Intermediate connector  16Z0028	 16Z0025	
Earth markings	6	Body earth  16Z0033	 16Z0018	Earth is either by body earth, device earth or control unit interior earth. These are indicated as illustrated.
	7	Device earth  16Z0034	 16Z0019	
	8	Earth in control unit  16Z0032	 16Z0020	

WIRE COLOUR CODES

Wire colours are identified by the follow colour codes.

Code	Wire colour	Code	Wire colour
B	Black	P	Pink
BR	Brown	R	Red
G	Green	SB	Sky blue
GR	Gray	SI	Silver
L	Blue	V	Violet
LG	Light green	W	White
O	Orange	Y	Yellow



If a cable has two colours, the first of the two colour code characters indicates the basic colour (colour of the cable coating) and the second indicates the marking colour.

No.	Meaning
1	<F>:Flexible wire
	<T>:Twisted wire
2	Wire size(mm ²)*
3	Basic colour (colour of the cable coating)
4	Marking colour

NOTE

- *: No code indicates 0.5 mm².
Cable colour code in parentheses indicates 0.3 mm².

ABBREVIATION SYMBOLS

The abbreviation symbols used in wiring diagrams are defined below.

1. Abbreviation symbols used for system name

Abbreviation symbols	Meaning	Abbreviation symbols	Meaning
A/C	Air conditioner	EGR	Exhaust gas recirculation
ABS	Anti-skid braking system	ETACS	Electronic time alarm control system
ACD	Active center differential	SRS	Supplemental restraint system
AYC	Active yaw control		

2. Abbreviation symbols used for combination meters

Abbreviation symbols	Meaning	Abbreviation symbols	Meaning
ABS	Anti-skid braking system warning lamp	SNOW	Active center differential mode indicator lamp
BEAM	High beam indicator lamp	SPEED	Speedmeter
BRAKE	Brake warning lamp	SRS	Supplemental restraint system warning lamp
CHECK ENGINE	Check engine warning lamp	TARMAC	Active center differential mode indicator lamp
CHG	Charging warning lamp	T/GA	Engine coolant temperature gauge
DOOR	Door-ajar warning lamp	TACHO	Tachometer
F/GA	Fuel gauge	TAIL	Tail, position and licence plate indicator lamp
FRONT FOG	Front fog indicator lamp		
FUEL	Low fuel warning lamp	TRIP	Tripmeter
GRAVEL	Active center differential mode indicator lamp	TURN (LH)	Turn signal indicator lamp (LH)
ODO	Odometer	TURN (RH)	Turn signal indicator lamp (RH)
OIL	Oil pressure warning lamp	WATER SPRAY	Intercooler water spray indicator lamp
REAR FOG	Rear fog indicator lamp		

3. Abbreviation symbols used for switched and relay

Name of switches and relays	Abbreviation symbols	Operation
Blower switch	LO	Blower operates at low speed
	ML	Blower operates at medium low speed
	MH	Blower operates at medium high speed
	HI	Blower operates at high speed

Name of switches and relays	Abbreviation symbols	Operation
Dimmer passing switch	LO	Low beams ON
	HI	High beams ON
	PASS	
Door lock actuator	LOCK	Door lock
	UNLOCK	Door unlock
Headlamp leveling switch	1	Low beam light axis drops by one step
	2	Low beam light axis drops by two step
	3	Low beam light axis drops by three step
	4	Low beam light axis drops by four step
Ignition switch	ACC	When turned to the ACC (ACCESSORY) or ON position, the power circuit will start
	IG1	Even when at the ST (START) position, the power circuit will start
	IG2	When at the ST (START) position, the power circuit will not start functioning
Intercooler water spray switch	MANUAL	Water is sprayed while the switch is being pressed
	AUTO	Water is sprayed automatically according to driving conditions
Lighting switch	TAIL	Position, tail, licence plate and illumination lamps ON
	HEAD	Headlamps ON
Others	OFF	Switched OFF
	ON	Switched ON
Power window switch	UP	Window closes
	DOWN	Window opens
	AUTO UP	Window is easily closed with one action
	AUTO DOWN	Window is easily opened with one action
	LOCK	Prevents all switches other than the main switch from operating the power windows
Remote controlled mirror switch	LH	L.H. mirror operates
	RH	R.H. mirror operates
Room lamp switch	DOOR	Room lamp ON when a door is open
Turn signal switch	LH	L.H. signal lamps ON
	RH	R.H. signal lamps ON

A-12 HOW TO READ THE WIRING DIAGRAMS - Abbreviation Symbols

Name of switches and relays	Abbreviation symbols	Operation
Windshield wiper switch	MIST	Wiper operates once
	INT	Wiper operates intermittently
	LO	Wiper operates at low speed
	HI	Wiper operates at high speed

4. Other abbreviation symbols

Abbreviation symbols	Meaning	Abbreviation symbols	Meaning
ECU	Electronic control unit	LCD	Liquid crystal display
GND	Earth	LH	Left hand
ILL	Illumination lamp	LHD	L.H. drive vehicles
IND	Indicator lamp	RH	Right hand
J/B	Junction block	RHD	R.H. drive vehicles
J/C	Joint connector		