

MODELS

00100030360

Main
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VEHICLES FOR GENERAL EXPORT

(Except BRAZIL, TAIWAN, HONG KONG, SOUTH AFRICA and CHINA)

<Short wheelbase>

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Model code		Engine model	Transmission model	Fuel supply system
V66W	MNDFL/R	4M40 Intercooler Turbo (2,835 ml)	V5M31 <5M/T>	Diesel fuel injection
	MNXFL/R			
	MNXFQL			
	MRXFQL		V4A51 <4A/T>	
V63W	MNDVL	6G72-SOHC (2,972 ml)	V5M31 <5M/T>	MPI
	MNXVL			
	MRXVL/R		V4A51 <4A/T>	
	MNXVQL		V5M31 <5M/T>	
	MRXVQL		V4A51 <4A/T>	
V65W	MNDVL	6G74-SOHC (3,496 ml)	V5MT1 <5M/T>	
	MNXVL		V5M31 <5M/T>	
	MYXVL		V5A51 <5A/T>	
	MNXVQL		V5M31 <5M/T>	
	MYXVQL		V5A51 <5A/T>	

<Long wheelbase>

Model code		Engine model	Transmission model	Fuel supply system
V76W	LNDFL/R	4M40 Intercooler Turbo (2,835 ml)	V5M31 <5M/T>	Diesel fuel injection
	LNHFL/R			
	LNHFL/R			
	LRXFL/R		V4A51 <4A/T>	
	LNDFQL		V5M31 <5M/T>	
	LNHFQL/R			
	LNXFQL			
	LRXFQL/R		V4A51 <4A/T>	
V73W	LNDVL/R	6G72-SOHC (2,972 ml)	V5MT1 <5M/T>	MPI
	LNHVL/R		V5M31 <5M/T>	
	LNHVL/R			
	LRXVL/R		V4A51 <4A/T>	
	LNDVQL		V5M31 <5M/T>	

Model code		Engine model	Transmission model	Fuel supply system
V73W	LNHVQL/R	6G72-SOHC (2,972 ml)	V5M31 <5M/T>	MPI
	LRHVQL/R		V4A51 <4A/T>	
	LN XVQL		V5M31 <5M/T>	
	LR XVQL/R		V4A51 <4A/T>	
V75W	LNDVL	6G74-SOHC (3,496 ml)	V5M31 <5M/T>	
	LN XVL/R			
	LYXVL/R		V5A51 <5A/T>	
	LN XVQL		V5M31 <5M/T>	
	LYXVQL		V5A51 <5A/T>	

(BRAZIL)**<Short wheelbase>**

Model code		Engine model	Transmission model	Fuel supply system
V63W	MNXVQL1B	6G72-SOHC (2,972 ml)	V5M31 <5M/T>	MPI
V65W	MYXVQL1B	6G74-SOHC (3,496 ml)	V5A51 <5A/T>	

<Long wheelbase>

Model code		Engine model	Transmission model	Fuel supply system
V76W	LN XFQL1B	4M40 Intercooler Turbo (2,835 ml)	V5M31 <5M/T>	Diesel fuel injection
	LR XFQL1B		V4A51 <4A/T>	
V73W	LR XVQL1B	6G72-SOHC (2,972 ml)	V4A51 <4A/T>	MPI
V75W	LYXVQL1B	6G74-SOHC (3,496 ml)	V5A51 <5A/T>	

(TAIWAN)**<Long wheelbase>**

Model code		Engine model	Transmission model	Fuel supply system
V75W	LYXVQL1Q	6G74-SOHC (3,496 ml)	V5A51 <5A/T>	MPI

(HONG KONG)**<Short wheelbase>**

Model code		Engine model	Transmission model	Fuel supply system
V65W	MYXCQR1D	6G74 GDI (3,496 ml)	V5A51 <5A/T>	GDI

<Long wheelbase>

Model code		Engine model	Transmission model	Fuel supply system
V75W	LYXCQR1D	6G74 GDI (3,496 ml)	V5A51 <5A/T>	GDI

(SOUTH AFRICA)**<Short wheelbase>**

Model code		Engine model	Transmission model	Fuel supply system
V68W	MNXFR6S	4M41-DOHC Intercooler Turbo (3,200 ml)	V5M31 <5M/T>	Electronically-controlled high-pressure distribution type
V63W	MNXVR6S	6G72-SOHC (2,972 ml)		
V65W	MNXVR6S	6G74-SOHC (3,496 ml)		
	MYXVR6S		V5A51 <5A/T>	MPI

<Long wheelbase>

Model code		Engine model	Transmission model	Fuel supply system
V78W	LNXFR6S	4M41-DOHC Intercooler Turbo (3,200 ml)	V5M31 <5M/T>	Electronically-controlled high-pressure distribution type
	LYXFR6S		V5A51 <5A/T>	
V75W	LNXVR6S	6G74-SOHC (3,496 ml)	V5M31 <5M/T>	MPI
	LYXVR6S		V5A51 <5A/T>	

(CHINA)**<Long wheelbase>**

Model code		Engine model	Transmission model	Fuel supply system
V73W	LNHVQL1C	6G72-SOHC (2,972 ml)	V5M31 <5M/T>	MPI
	LRHVQL1C		V4A51 <4A/T>	
	LNXVQL1C		V5M31 <5M/T>	
	LRXVQL1C		V4A51 <4A/T>	

VEHICLES FOR GCC**<Short wheelbase>**

Model code		Engine model	Transmission model	Fuel supply system
V63W	MNDVLW	6G72-SOHC (2,972 ml)	V5MT1 <5M/T>	MPI
	MRDVLW		V4A51 <4A/T>	
	MNXVLW		V5M31 <5M/T>	
	MRXVLW		V4A51 <4A/T>	
V65W	MNDVLW	6G74-SOHC (3,496 ml)	V5MT1 <5M/T>	MPI
	MNXVLW		V5M31 <5M/T>	
	MYXVLW		V5A51 <5A/T>	

<Long wheelbase>

Model code		Engine model	Transmission model	Fuel supply system
V73W	LNDVLW	6G72-SOHC (2,972 ml)	V5MT1 <5M/T>	MPI
	LRDVLW		V4A51 <4A/T>	
	LNHVLW		V5M31 <5M/T>	
	LRHVLW		V4A51 <4A/T>	
	LNXLW		V5M31 <5M/T>	
	LRXLW		V4A51 <4A/T>	
V75W	LNDVLW	6G74-SOHC (3,496 ml)	V5MT1 <5M/T>	
	LNXLW		V5M31 <5M/T>	
	LYXLW		V5A51 <5A/T>	

VEHICLES FOR AUSTRALIA

<Long wheelbase>

Model code		Engine model	Transmission model	Fuel supply system
V76W	LNDFR8	4M40 Intercooler Turbo (2,835 ml)	V5M31 <5M/T>	Diesel fuel injection
	LNHFR8			
	LNFR8			
V75W	LNDVR8	6G74-SOHC (3,496 ml)	V5M31 <5M/T>	MPI
	LNHVR8			
	LYHVR8		V5A51 <5A/T>	
	LNVR8		V5M31 <5M/T>	
	LYVR8		V5A51 <5A/T>	

COMPOSITION AND CONTENTS OF WIRING DIAGRAMS

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- (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.

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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

B: Engine and transmission

C: Transmission

D: Dash panel

E: Floor console

F: Front floor and roof

G: Rear floor and under floor

H: Door

I: Back door

Denotes earth point.

Same earth number is used throughout circuit diagrams to facilitate search of earth point. Refer to GROUP 2 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. (If not specified, it is black.)

R: Red
Y: Yellow

A-45

A-44

A-43

A-42

R

A-39

A36Z0001

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
Y: Yellow
L: Blue
G: Green
R: Red

BR: Brown
V: Violet
O: Orange
GR: Gray
None: Milk white

A-39 (2-B)
A-40 (1)
A-41 (1)
A-42 (2-B)

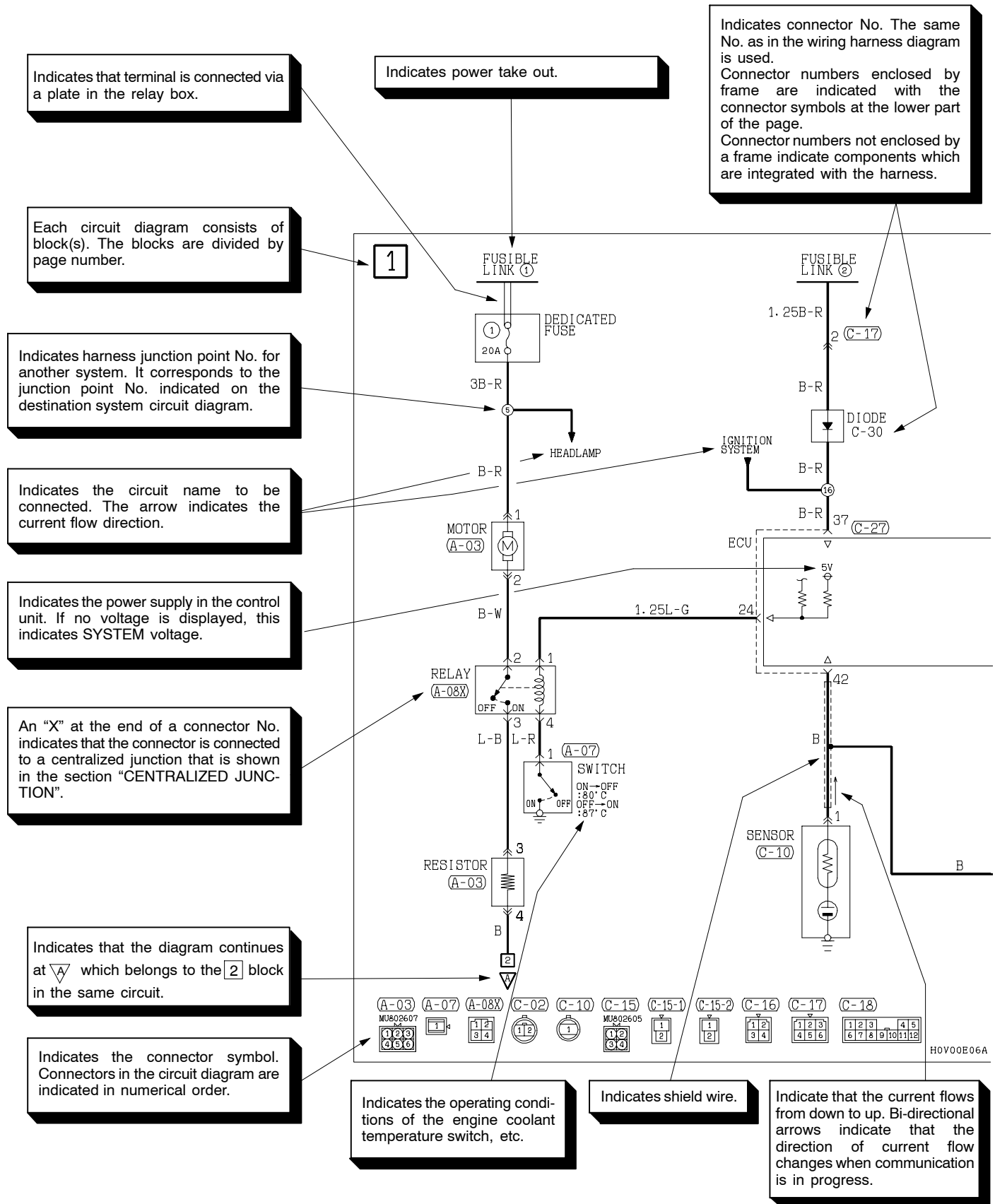
Headlamp (LO: RH)
Horn (LO)
Horn (HI)
Windshield washer motor

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

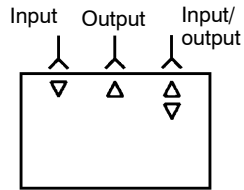
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HOW TO READ CIRCUIT DIAGRAMS

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.

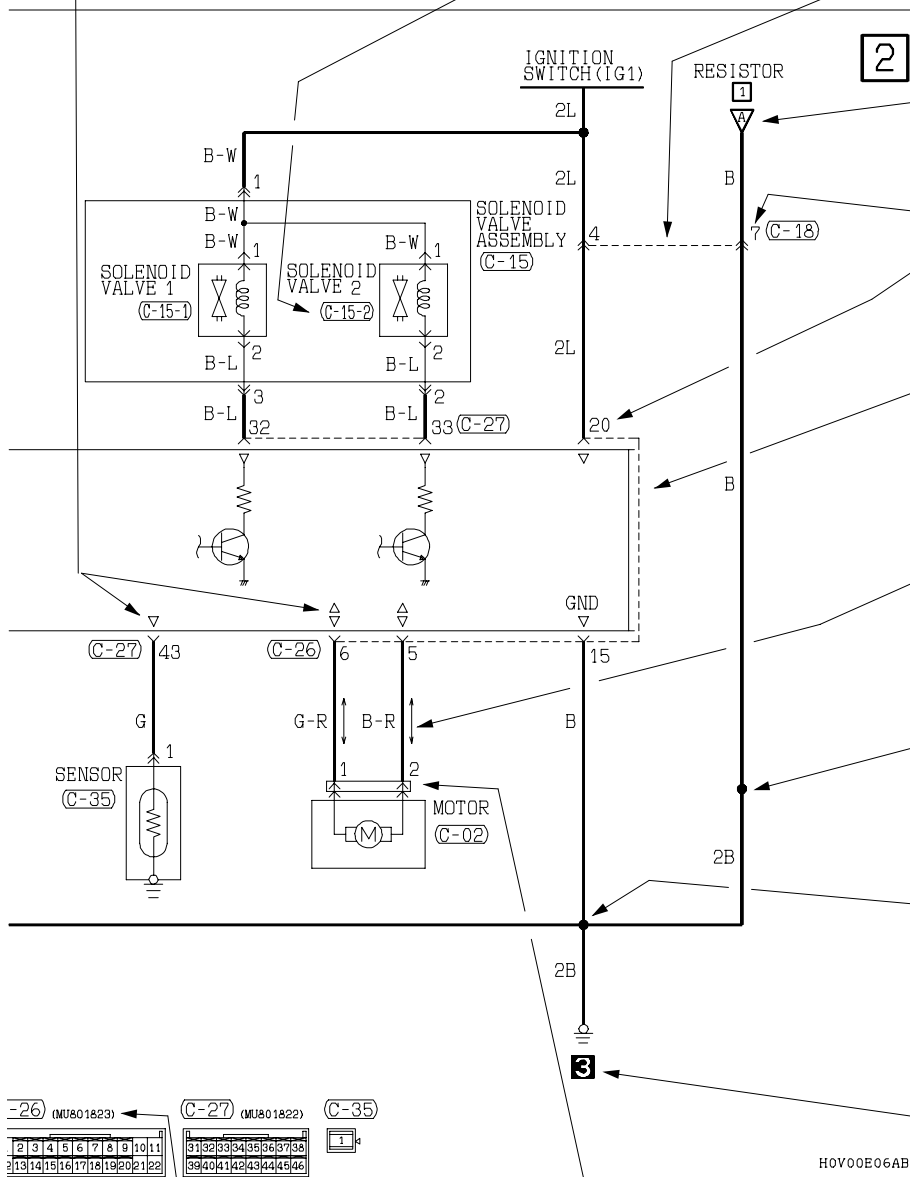


Indicates input/output to/from control unit (current flow direction).



Indicates a wiring connector which is inside the equipment and which is not 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 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 vehicle body earth point. (Same No. as that of earth point in wiring harness diagram and installation locations of individual parts.)



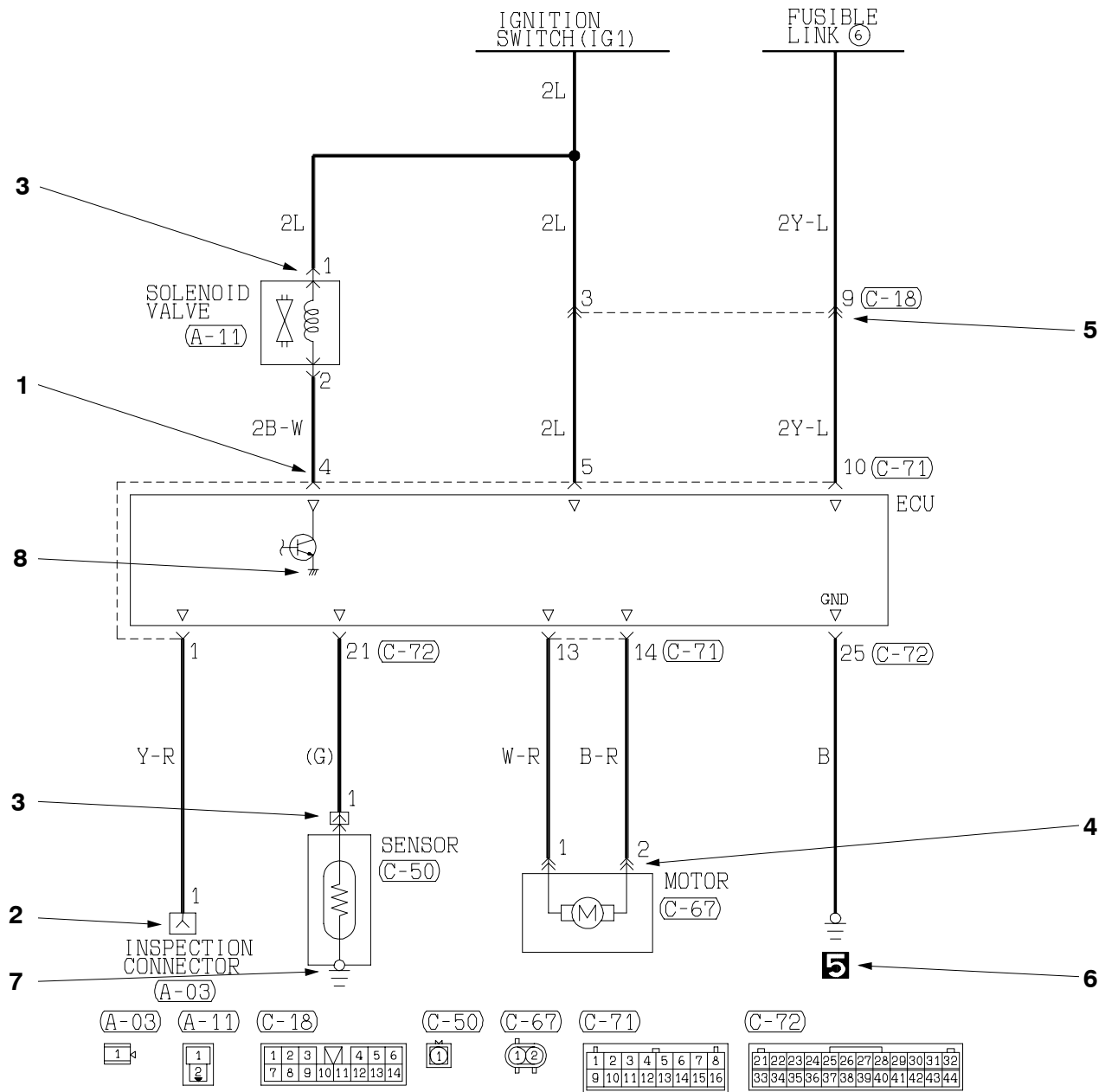
Indicates the number of a connector which is listed in the harness repair manual. Numbers in brackets () indicate the number of the connector which connects to the connector at this symbol location.

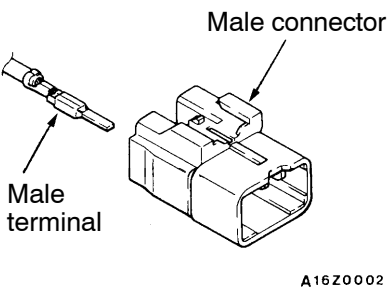

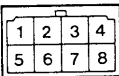
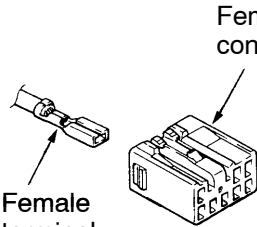

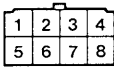
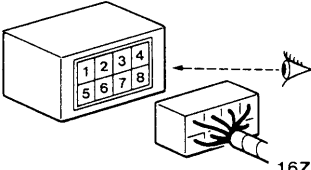
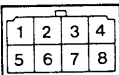
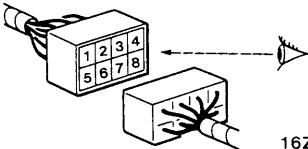
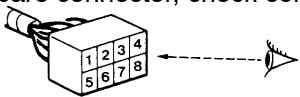
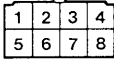
Indicates that the terminal is a spare one if the device (sensors in this case) is not provided.

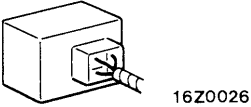
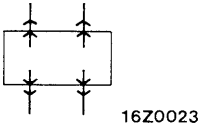
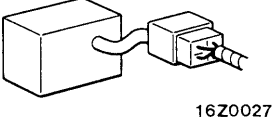
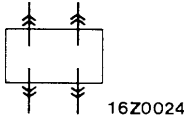
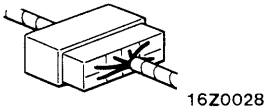
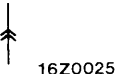
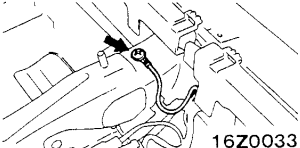
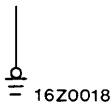
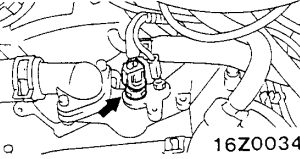
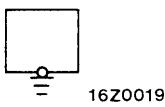
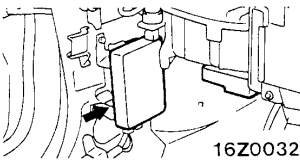
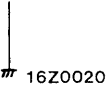
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MARKINGS FOR CONNECTOR EARTHING

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Item	No.	Connector/Earthing	Symbol	Contents
Connector and terminal marking	1		Male terminal  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.
			Male connector  16Z0016	
	–		Female terminal  16Z0022	
			Female connector  16Z0017	
Connector symbol marking	2	Device  16Z0029	 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”.
		Intermediate connector  16Z0030		
		Spare connector, check connector  16Z0031	 16Z0017	

Item	No.	Connector/Earthing	Symbol	Contents
Connector connection marking	3	Direct connection type 		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 		
	5	Intermediate connector 		
Earth markings	6	Body earth 		Earth is either by body earth, device earth or control unit interior earth. These are indicated as illustrated.
	7	Device earth 		
	8	Earth in control unit 		

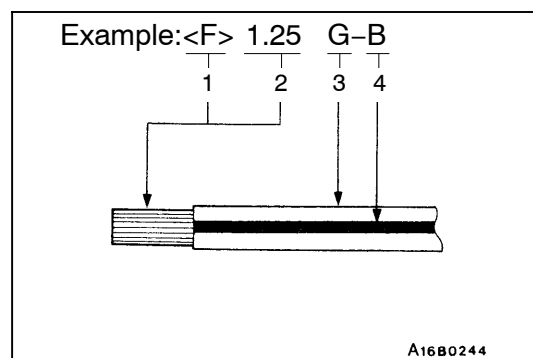
WIRE COLOUR CODES

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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

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The abbreviation symbols used in wiring diagrams are defined below.

1. Abbreviation symbols used for system name

Abbreviation symbol	Meaning	Abbreviation symbol	Meaning
2WD	Rear wheel-drive vehicles	ETACS	Electronic time and alarm control system
4WD	4 wheel-drive vehicles	GDI	Gasoline direct injection
A/C	Air conditioner	HBB	Hydraulic brake booster
A/T	Automatic transmission	INVECS-II	Intelligent and innovative vehicles electronic control system
ABS	Anti-skid braking system	M/T	Manual transmission
EBD	Electrical brake force distribution	PTC	Positive temperature coefficient
EGR	Exhaust gas recirculation	SRS	Supplemental restraint system

2. Abbreviation symbols used for combination meters

Abbreviation symbol	Meaning	Abbreviation symbol	Meaning
2WD	2WD indicator lamp	HOLD	Hold mode indicator lamp
4WD	4WD indicator lamp	OIL	Oil pressure warning lamp
ABS	Anti-skid braking system warning lamp	O/GA	Oil pressure gauge
BEAM	High beam indicator lamp	R/D LOCK	Rear differential lock indicator lamp
BRAKE	Brake warning lamp	SPEED	Speedometer
CHECK ENGINE	Check engine warning lamp	SRS	Supplemental restraint system warning lamp
CHG	Charging warning lamp	TACHO	Tachometer
CRUISE	Auto-cruise control system indicator lamp	T/GA	Engine coolant temperature gauge
DOOR	Door-ajar warning lamp	TURN (LH)	Turn signal indicator lamp (L.H.)
F/GA	Fuel gauge	TURN (RH)	Turn signal indicator lamp (R.H.)
FUEL	Low fuel warning lamp	VOLT	Voltage meter
GDI ECO	GDI ECO indicator lamp	WATER SEPARATOR	Fuel filter warning lamp
GLOW	Diesel preheat indicator lamp		

3. Abbreviation symbols used for switches and relays

Name of switches and relays		Abbreviation symbols	Operation
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
Windshield wiper switch or rear wiper switch		LO	Wiper operate at low speed
		HI	Wiper operate at high speed
		INT	Wiper operate intermittently
		WA	Washer fluid is sprayed.
Variable intermittent wiper control switch		SLOW	Pause time for intermittent operation lengthen
		FAST	Pause time for intermittent operation shorten
Sunroof switch		OPEN	Sunroof slides to open
		UP	Sunroof tilts up
		CLOSE/DOWN	Sunroof tilts down or slides to close
Shift switch assembly		AUTO MODE	Shift changes occur automatically in D range
		SPORTS MODE	Manual shift changes between 1st and 4th are possible
		DOWN	Downshifting occurs one gear at a time
		UP	Upshifting occurs one gear at a time
Dimmer passing switch		LO	Low beams ON
		HI	High beams ON
Turn signal switch		LH	L.H. turn signal lamps ON
		RH	R.H. turn signal lamps ON
Door lock actuator		LOCK	Door lock
		UNLOCK	Door unlock
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.
Power seat switch	Front height	UP	Front part of seat cushion is tilted up
		DOWN	Front part of seat cushion is tilted down
	Rear height	UP	Rear part of seat cushion is tilted up
		DOWN	Rear part of seat cushion is tilted down
	Slide	FR	Seat is moved forwards
		RR	Seat is moved backwards
	Reclining	FR	Seat back is stood upright
		RR	Seat back is leaned backward

Name of switches and relays	Abbreviation symbols	Operation
Heated seat switch	LO	Normal heating
	HI	Rapid heating
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
Lighting switch	TAIL	Position, tail, licence plate and illumination lamps ON
	HEAD	Headlamps ON
Remote controlled mirror switch	LH	L.H. mirror operates
	RH	R.H. mirror operates
Rear heater switch or rear cooler switch or rear A/C switch	LO	Rear blower operates at low speed
	ME	Rear blower operates at medium speed
	HI	Rear blower operates at high speed
Room lamp switch or personal lamp switch	DOOR	Room lamp or personal lamp ON when a door is open
Others	OFF	Switched on
	ON	Switched off

4. Other abbreviation symbols

Abbreviation symbol	Meaning	Abbreviation symbol	Meaning
2H	2-wheel drive	ISC	Idle speed control
4H	High-range 4-wheel drive	J/B	Junction block
4HLc	Direct high-range 4-wheel drive	J/C	Joint connector
4LLc	Direct low-range 4-wheel drive	LH	Left hand
AC	Alternating current	LHD	L.H. drive vehicles
DIESEL	Diesel-powered vehicles	PETROL	Petrol-powered vehicles
ECU	Electronic control unit	RH	Right hand
GND	Earth	RHD	R.H. drive vehicles
ILL	Illumination lamp	TDC	Top dead center
IND	Indicator lamp		