
GENERAL

CONTENTS

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MODELS

00100030353

<Short wheelbase models>

Model code		Engine model	Transmission model	Fuel supply system
V64W	MNDFL6	4D56 Intercooler Turbo (2477 ml)	V5MT1 (5M/T)	Diesel fuel injection
	MNHFL6		V5M31 (5M/T)	
	MNHFR6			
	MNXFL6			
	MNXFR6			
V68W	MNDFL6	4M41 Intercooler Turbo (3200 ml)	V5M31 (5M/T)	Electronically-controlled high-pressure distribution type
	MNHFL6			
	MYHFL6		V5A51 (5A/T)	
	MNXFL6		V5M31 (5M/T)	
	MNXFR6			
	MYXFL6		V5A51 (5A/T)	
	MYXFR6			
V65W	MNHCL6	6G74-DOHC-GDI (3497 ml)	V5M31 (5M/T)	GDI
	MNHCR6			
	MYHCL6		V5A51 (5A/T)	
	MYHCR6			
	MNXCL6		V5M31 (5M/T)	
	MNXCR6			
	MYXCL6		V5A51 (5A/T)	
	MYXCR6			

<Long wheelbase models>

Model code		Engine model	Transmission model	Fuel supply system
V74W	LNDFL6	4D56 Intercooler Turbo (2477 mℓ)	V5MT1 (5M/T)	Diesel fuel injection
	LNHFL6		V5M31 (5M/T)	
	LNXFL6			
V78W	LNDFL6	4M41 Intercooler Turbo (3200 mℓ)	V5M31 (5M/T)	Electronically-controlled high-pressure distribution type
	LNHFL6			
	LNHFR6			
	LYHFL6		V5A51 (5A/T)	
	LYHFR6			
	LNXFL6		V5M31 (5M/T)	
	LNXFR6			
	LYXFL6		V5A51 (5A/T)	
	LYXFR6			
V75W	LNHCL6	6G74-DOHC-GDI (3497 mℓ)	V5M31 (5M/T)	GDI
	LNHCR6			
	LYHCL6		V5A51 (5A/T)	
	LYHCR6			
	LNXCL6		V5M31 (5M/T)	
	LNXCR6			
	LYXCL6		V5A51 (5A/T)	
	LYXCR6			

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	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. • 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

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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)

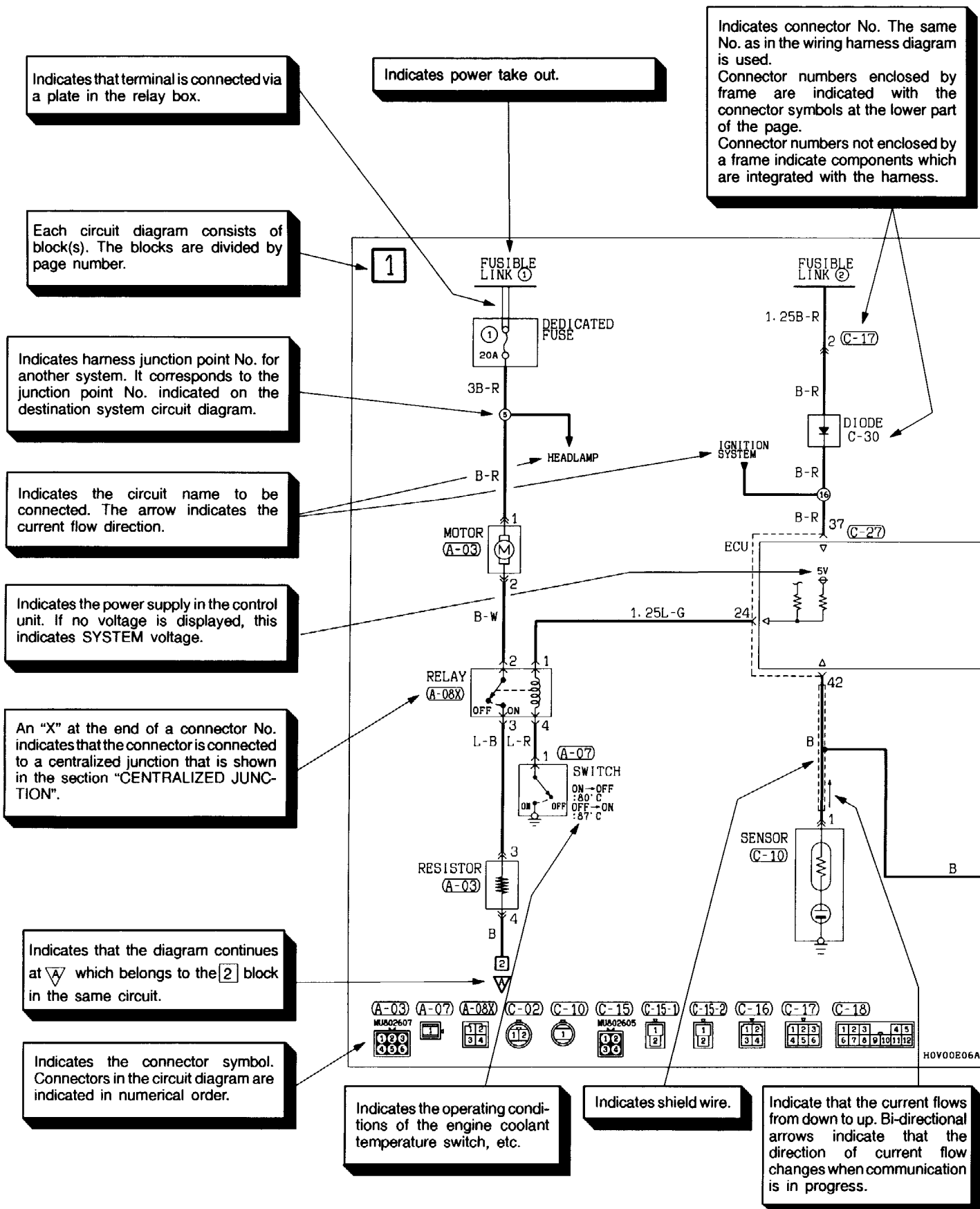
Windshield washer motor

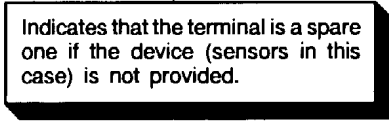
Indicates the device to which the connector is to be connected.

HOW TO READ CIRCUIT DIAGRAMS

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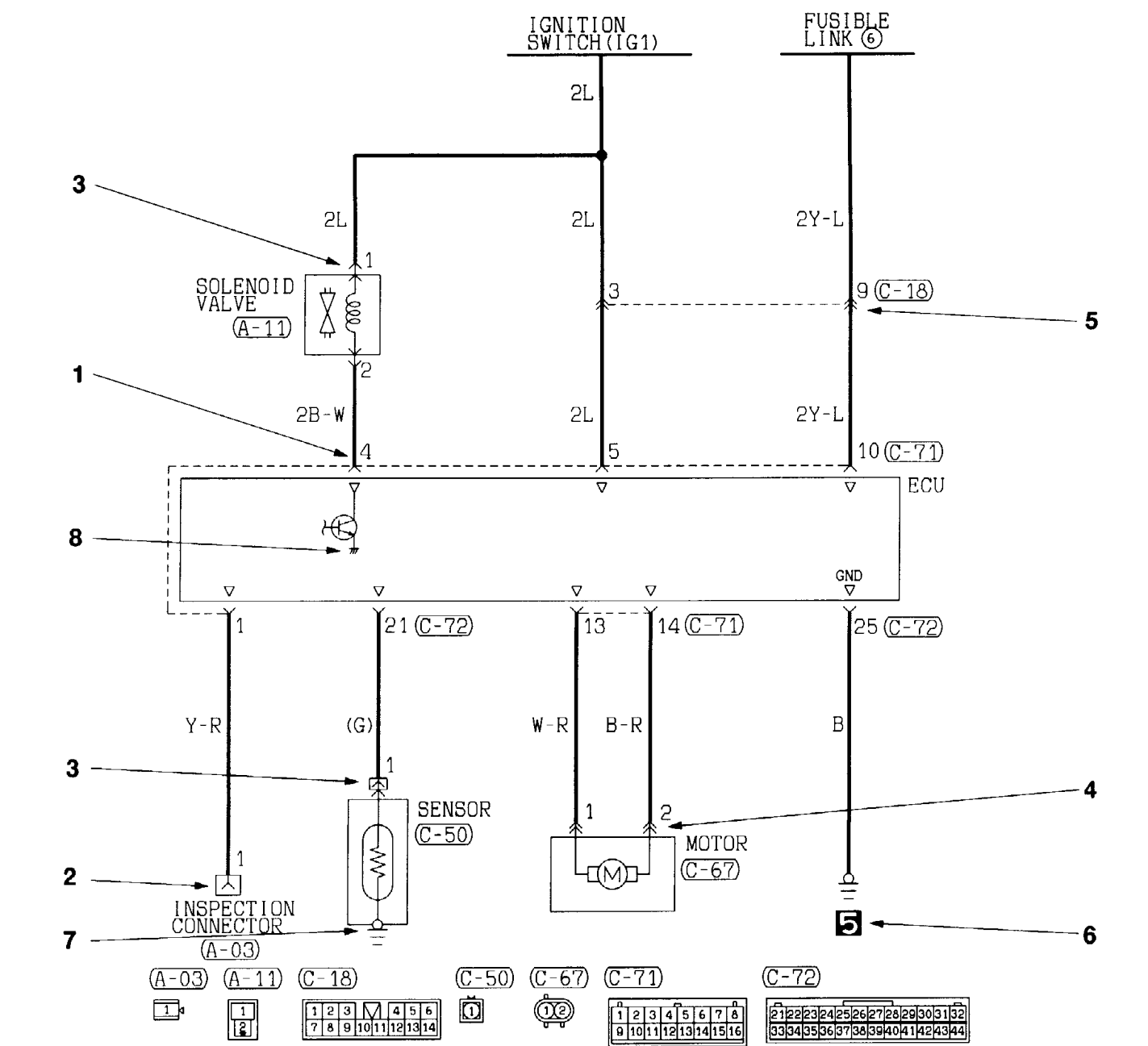
The circuit of each system from fuse (or fusible link) to earth is shown. The power supply is shown at the top and the earth at the bottom to facilitate understanding of the current flow.

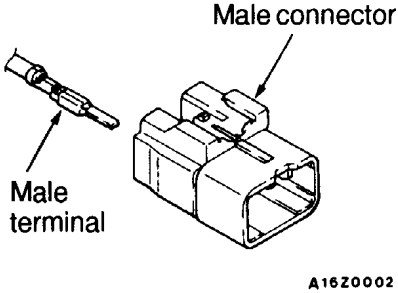
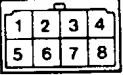
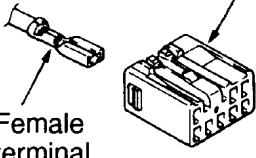
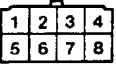
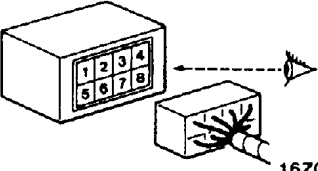
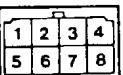
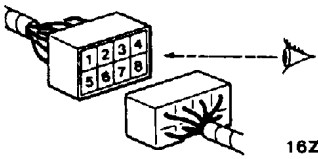
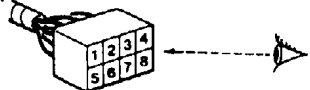


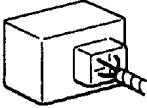
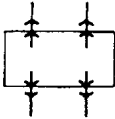
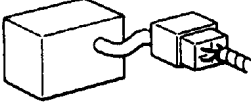
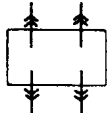
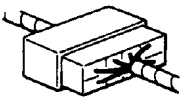
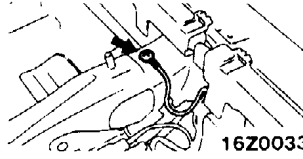
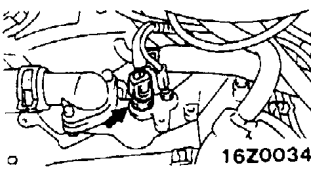
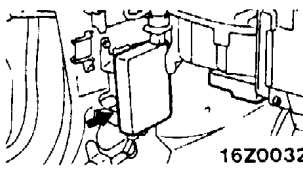


MARKINGS FOR CONNECTOR EARTHING

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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 	 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 		
		Spare connector, check connector 		

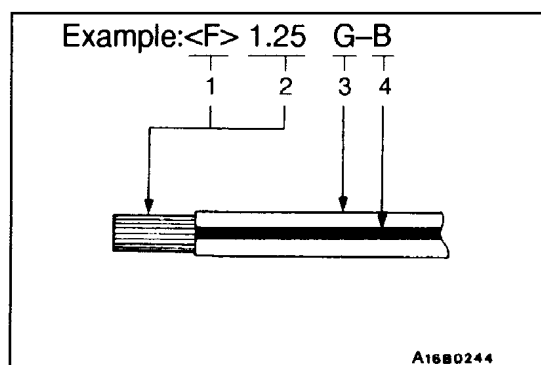
Item	No.	Connector/Earthing	Symbol	Contents
Connector connection marking	3	Direct connection type  16Z0026	 16Z0023	A connection between a device and connector on the harness side is either by direct insertion in the device (direct connection type) or by connection with a harness connector on the device 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

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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 SEPARAT- ER	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
			SPORT 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		