

HOW TO USE THIS MANUAL

General Information

This manual provides information on electrical circuits installed on vehicles by dividing them into a circuit for each system.

The actual wiring of each system circuit is shown from the point where the power source is received from battery as far as each ground point. (All circuit diagrams are shown with switches in normal conditions (normally open or normally closed).)

When troubleshooting any problem, first understand the operation of circuit where the problem was detected (refer to "SYSTEM CIRCUITS"), the power source supplying power to that circuit (refer to "POWER SOURCE"), and the ground points (refer to "GROUND POINT").

When circuit operation is understood, begin troubleshooting of the problem circuit to isolate the cause. Use "FUSE AND RELAY" and "ELECTRICAL WIRING ROUTING" sections to find each part, wire harness, connectors and ground points of each system circuit.

Wiring related to each system is indicated in each system circuit by arrows. When overall connections are required, see the "OVERALL ELECTRICAL WIRING DIAGRAM" at the end of this manual.

CAUTION

- The information in this manual is about wire harnesses. Information about component and assembly parts is only for reference. Please refer to the relevant service manual.

Circuit Diagram Instruction

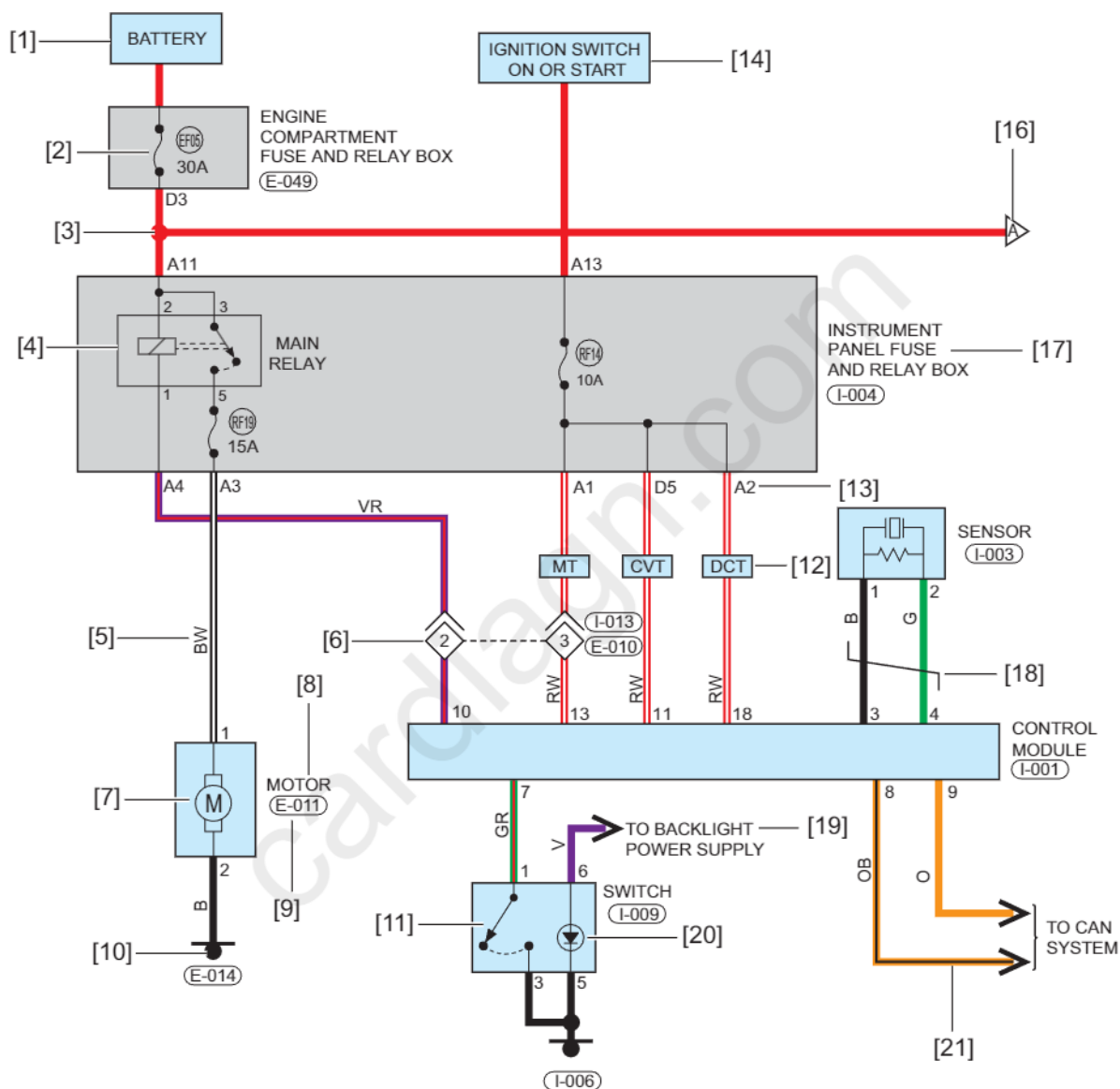
Circuit diagrams are provided to help technicians determining and detecting the vehicle malfunction effectively.

Functions and features of circuit diagram:

- The power supply circuit is on the top of the page, while the ground circuit is at the bottom.
- Components (such as switches and fuses) are displayed on the circuit diagram in the form of simple icon.

EXAMPLE

[15] ——— w/o AVM



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* The circuit diagram shown here is an example only. It is different to the actual circuit shown in "SYSTEM CIRCUITS" section.

EXAMPLE

[22] — **Parts Location**

Connector Code	See Page	Connector Code	See Page	Connector Code	See Page
E-014	08-3	E-049	08-5	I-004	08-7
I-003	08-7	I-001	08-7	I-009	08-7
I-006	08-7	E-011	08-3		

[23] — **Fuse and Relay**

Fuse/Relay	See Page	Fuse and Relay Box
EF05	06-3	Engine Compartment Fuse and Relay Box
RF14	06-10	Instrument Panel Fuse and Relay Box
RF19	06-10	Instrument Panel Fuse and Relay Box
Main Relay	06-10	Instrument Panel Fuse and Relay Box

[24] — **Location of Junction Connector**

Connector Code	See Page	Connector Code	See Page	Connector Code	See Page
I-013, E-010	08-7, 08-3				

[25] — **Form of Connector**

Connector Code	See Page	Connector Code	See Page	Connector Code	See Page
E-014	12-2	E-049	12-4	I-004	12-6
I-003	12-6	I-001	12-6	I-009	12-6
I-006	12-6	E-011	12-2	I-013, E-010	12-6

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The following is a list of the symbols defined in circuit diagram.

No.	Definition	Description
[1]	Battery	It indicates the power supply from battery positive to electrical equipment.
[2]	Fuse	This symbol indicates a fuse; "EF05" indicates the fuse number; "30A" indicates the rated amperage of this fuse.
[3]	Splice Point	The solid circle indicates that each intersecting wire is interconnected.
[4]	Relay	This symbol indicates a relay; "MAIN RELAY" indicates the relay name; "1", "2", "3" and "5", or "85", "86", "87" and "30" indicate the terminal numbers of relay.
[5]	Color	It indicates the color of this wire. The color codes are as follows: B = Black; W = White; R = Red; G = Green; L = Blue; Y = Yellow; Br = Brown; O = Orange; Gr = Gray; P = Pink; V = Violet; Lg = Light Green. For example: "BrR" indicates that the main color is brown in wire color, and the second color is red.
[6]	Connector	It indicates the junction connectors. "Λ" is female connector, and "I-013" is applicable number; "◇" is male connector, and "E-010" is applicable number. The number "2" and "3" inside male connector indicates terminal number. "----" indicates different terminals come from the same junction connectors.
[7]	Motor	This symbol indicates a motor.
[8]	Component Name	It indicates the name of component.

No.	Definition	Description
[9]	Connector Code	"E-011" indicates the connector code of this component, and letter "E" indicates the wire harness code in which the connector is located. The connector codes are as follows: E = Front Bumper Wire Harness; E = Engine Wire Harness; I = Instrument Panel Wire Harness; B = Body Wire Harness; B = Rear Bumper Wire Harness; B = DCT Transmission Wiring Harness; F = Front Left Door Wire Harness; H = Front Right Door Wire Harness; L = Rear Left Door Wire Harness; R = Rear Right Door Wire Harness; T = Back Door Wire Harness; P = Battery Wire Harness; N = Ground Wire Harness; K = A/C System Wire Harness.
[10]	Ground Point	It indicates ground connection.
[11]	Switch	This symbol indicates a switch.
[12]	Vehicle Model	"CVT" indicates it is for CVT model; "MT" indicates it is for MT model; "DCT" indicates it is for DCT model.
[13]	Terminal No.	It indicates the terminal number in the connector of this component.
[14]	Ignition Switch	It indicates the power supply from ignition switch to electrical equipment.
[15]	Functions Description	The "w/" indicates the "with"; and the "w/o" indicates the "without".
[16]	Connected to	It indicates that the wire harness is connected to the circuit diagram on next page. The letter "A" is connected with "A" in the circuit diagram on next page.
[17]	Fuse and Relay Box Name	It indicates the name of fuse and relay box.
[18]	Twisted-pair	It indicates that the two wires are twisted.
[19]	Backlight Power Supply	It indicates the illumination power supply output from backlight adjustment switch.
[20]	LED	It is used for indicators, warning lights or illuminations in switches or instrument cluster.
[21]	CAN	It indicates CAN wire in the electrical schematics. It is connected to CAN system.
[22]	Parts Location	It indicates the reference pages showing parts locations and positions of ground points on vehicle. Example: Connector "E-014" is on page 08-3 of this manual.
[23]	Fuse and Relay	It indicates the reference page showing fuse/relay location in circuit diagram.

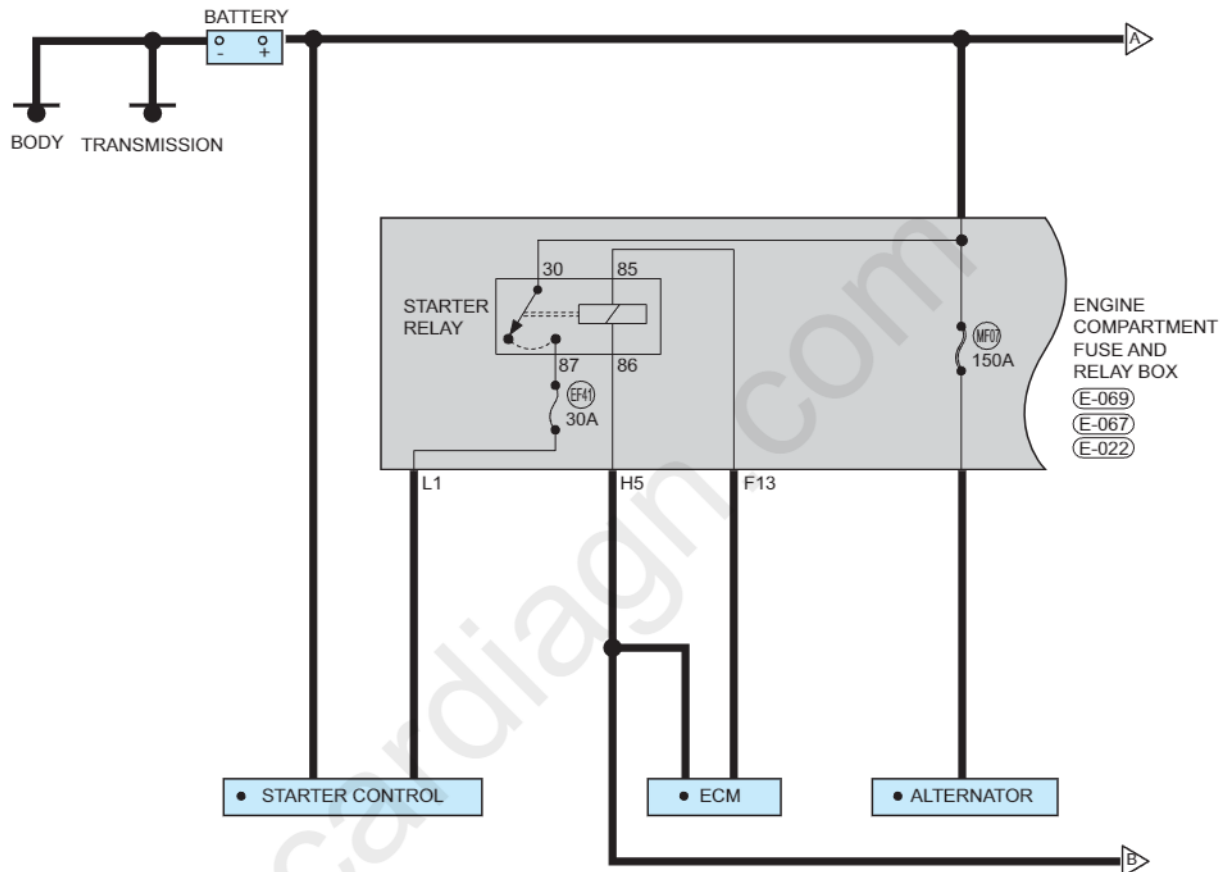
No.	Definition	Description
[24]	Location of Junction Connector	It indicates the reference page showing locations of junction connectors in system circuit. Example: Connector "I-013" and connector "E-010" is a pair of junction connectors. Connector "I-013" is on page 08-7 of this manual; and connector "E-010" is on page 08-3 of this manual.
[25]	Form of Connector	It indicates the reference page showing forms of connectors in system circuit.

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Power Source Instruction

The "POWER SOURCE" section describes which parts each power source transmits current to. In power source circuit diagram, the conditions when battery power is supplied to each system are explained. Since all system circuit diagrams start from power source, power source distribution must be fully understood.

EXAMPLE



ET15020020

* The system shown here is an example only. It is different to the actual circuit shown in "POWER SOURCE" section.

Ground Point Instruction

The ground points circuit diagram shows connections from all major parts to respective ground points. When troubleshooting a faulty ground point, checking the system circuits which use a common ground may help you identify the problem ground quickly. The relationship between ground points can also be checked in this way.

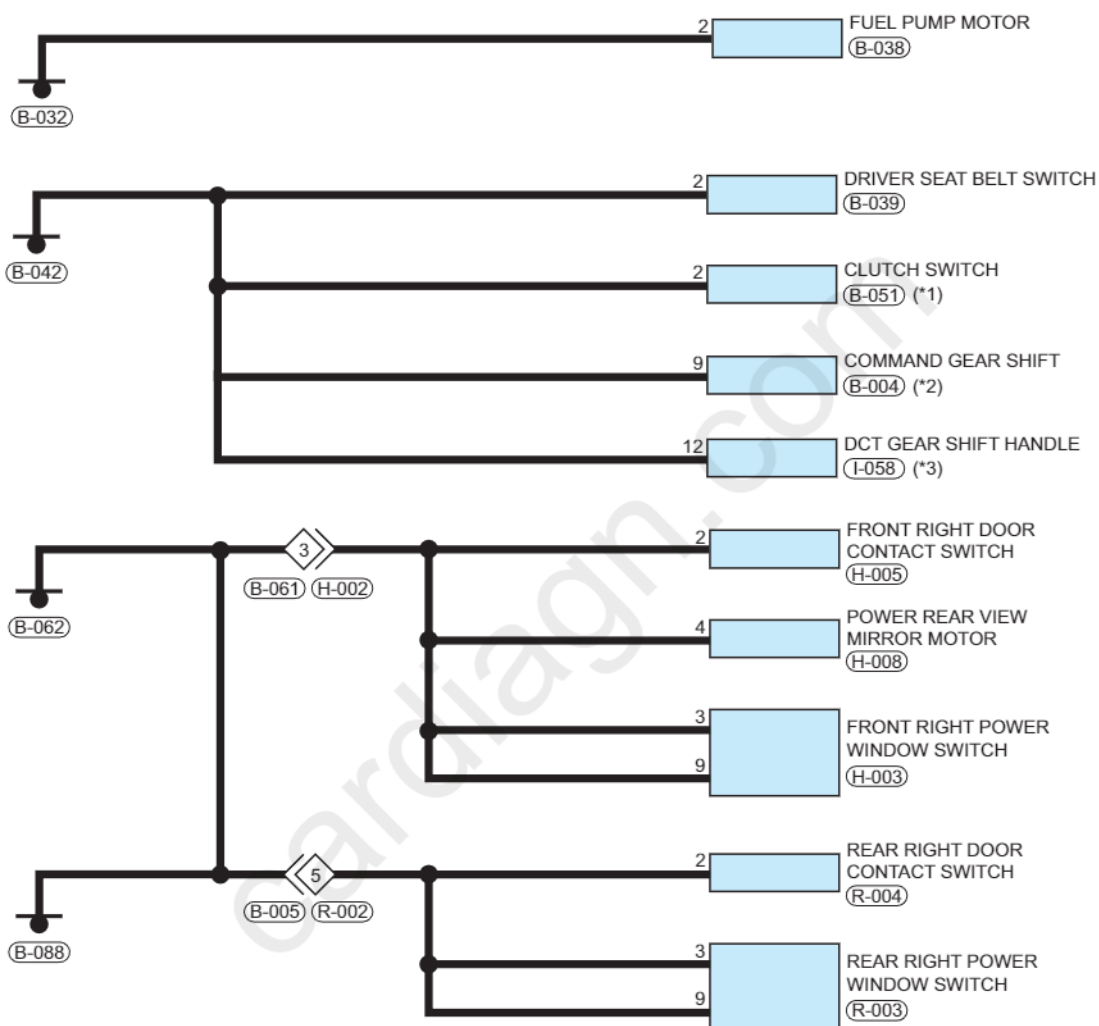
EXAMPLE

MT: *1

CVT: *2

DCT: *3

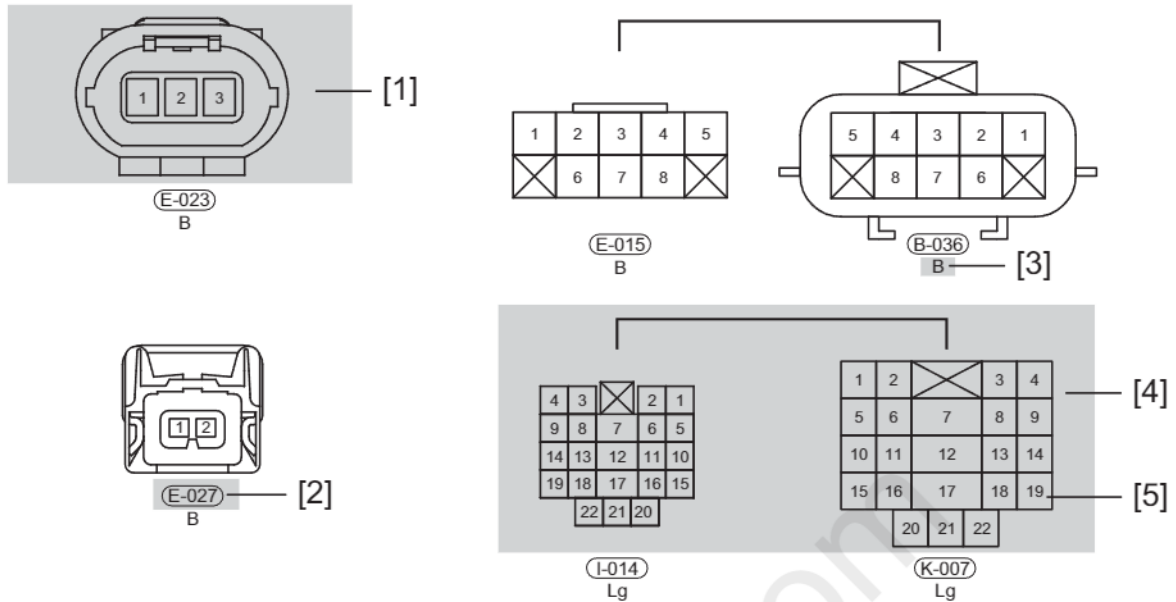
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ET15020030

* The system shown here is an example only. It is different to the actual circuit shown in "GROUND POINT" section.

Connector List Instruction



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No.	Definition	Description
[1]	Connector	It indicates connector to be connected to a part. (The numeral indicates the terminal number.)
[2]	Connector Code	It indicates the connector code.
[3]	Connector Color	It indicates the color of connector.
[4]	Junction Connector	It indicates the connector shapes to join wire harnesses. On Left: Male connector shape On Right: Female connector shape Numbers indicate terminal numbers.
[5]	Terminal No.	The numeral indicates the terminal number. The numbering system is different for female and male connectors. Example: Numbered in order from upper left to lower right Numbered in order from upper right to lower left Female Male

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