

Maintenance Manual of Tojoy Sedan

Circuit Overhaul Manual

Preface

This Maintenance Manual of Tojoy Sedan has been prepared to help the technical service personnel to know and become familiar with JAC sedans so that they can repair and maintain the cars in a fast and reasonable way. This Manual is composed of the engine volume, the chassis volume, the electrical appliance & structure volume of vehicle body, and circuit overhaul volume.

The circuit overhaul volume provides the detailed circuit schematic diagrams and wire harness diagrams for complete Tojoy sedan. It also includes the descriptions and the illustrations for the positions of the electrical components and sensors on the complete vehicle, which are helpful for the service personnel to find out the circuit fault of the car quickly.

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Introduction

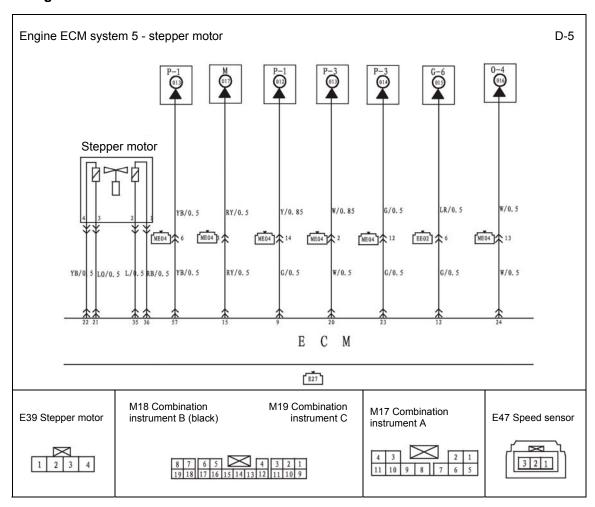
This Manual covers the following four main tools to detect and eliminate the circuit fault.

- Circuit diagram
- Component position index
- Component position diagram
- Wire harness layout diagram

The shapes of the lead wire connectors are included in the circuit diagrams.

Circuit Diagram

The description of each system starts with its circuit diagrams. The circuit diagrams depict all the working paths of each component, such as the power supply and the negative ground of the electrical loads, the positions of the lead wire connectors as well as the relevant fuses, switches and so on constituting the circuit. To diagnose and eliminate the fault, it is essential to fully understand the circuit diagrams first.





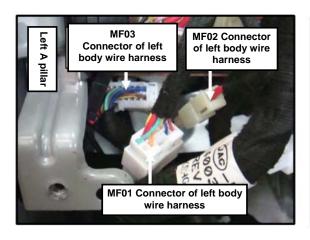
Component Position Index

To position the component shown in a schematic diagram on the vehicle, refer to the component position index following the schematic diagram. The component position index lists the main components and ground as well as the reference pages for the diagrams indicating their specific positions.

ABS		N-3
Component Position Index		
Component Code	Component Name	
E04	ABS module	
F04	Left rear wheel speed sensor	
F10	Right rear wheel speed sensor	
E05	Left front wheel speed sensor	
E06	Right front wheel speed sensor	
F02	Left rear combination light	

Component Position Diagram

On a component position diagram, it is easy to find the mounting positions of the fittings, the lead wire connectors, etc. shown in a component position index.

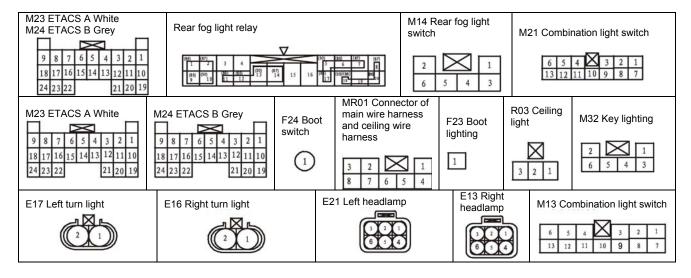






Lead Wire Connector Shape

This section shows the shape of each lead wire connector shown in the circuit diagrams, and provides the diagrams indicating the specific position for each lead wire on the connector, as determined by its color and terminal. The lead wire connector shape diagram helps to find the position to be inspected. The way to read the shape diagram is as follows: when the lead wire connector is not detached, the direction from the wire harness side of the female lead wire connector to the male lead wire connector shall face the front; when the lead wire connector is detached, the component side or the male lead wire connector shall face the front. If the wirings on a lead wire connector are used by multiple systems, it indicates that this connector is the common lead wire connector.





Lead Wire Connector Shape Diagram and Terminal No. Sequence

1. Lead Wire Connector Shape Diagram

		Socket	Plug	Description
	Actual Diagram		Locking point	The sockets and the plugs are differentiated by the terminals rather than the
		Protecting Terminal sleeve	Terminal Protecting sleeve	openings of the protective
ĺ		_		sleeves.
	Diagram in This Manual	3 2 1	1 2 3	To number the connectors,
	J	6 5 4	4 5 6	refer to the table below.

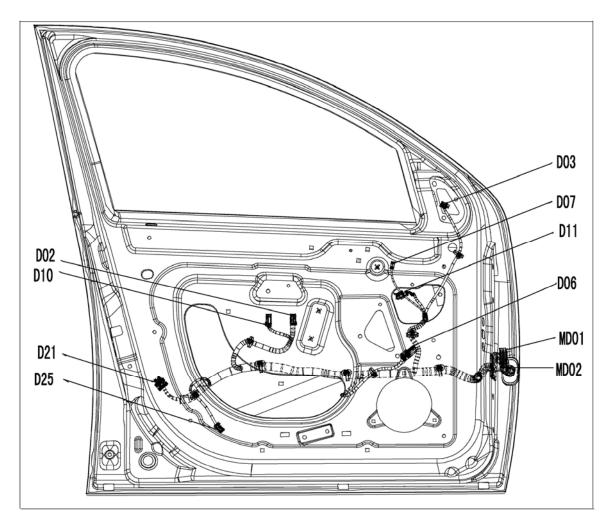
2. Terminal No. Sequence

	Numbering Sequence	Description
Socket	3 2 1 6 5 4	Number from the upper right to the lower left
Plug	1 2 3 4 5 6	Number from the upper left to the lower right



Wire Harness Layout

The wire harness layout diagrams depict the mounting and fixing positions of the main wire harnesses and the lead wire connectors as well as the routes of the main harnesses. These diagrams make the circuit service easier.

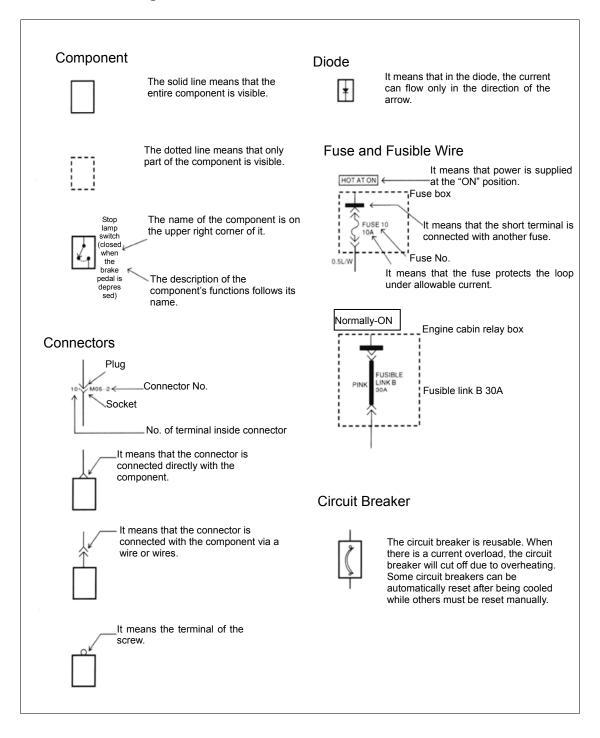




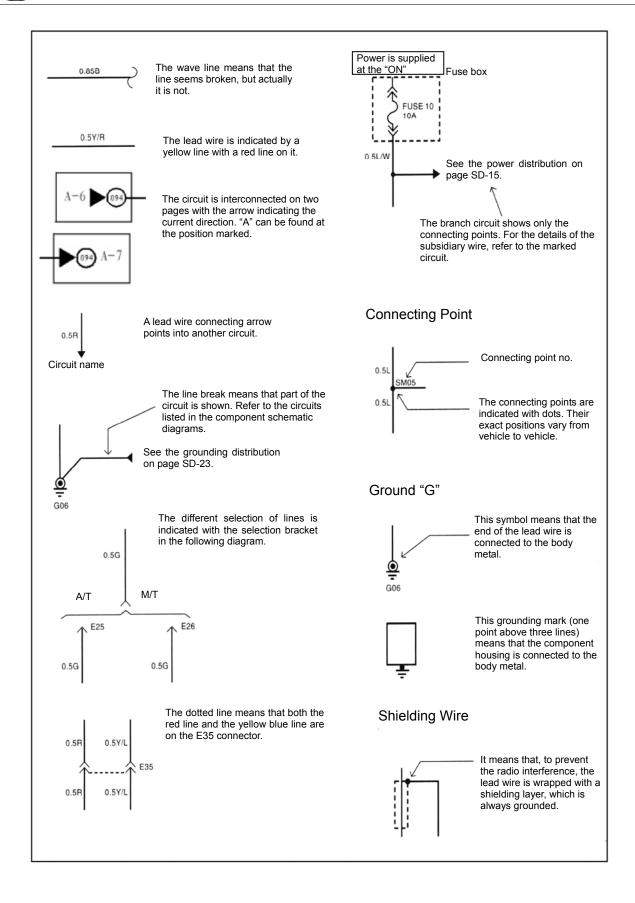
Expression

In this Manual, the following electrical expressions, electrical symbols and abbreviations are used.

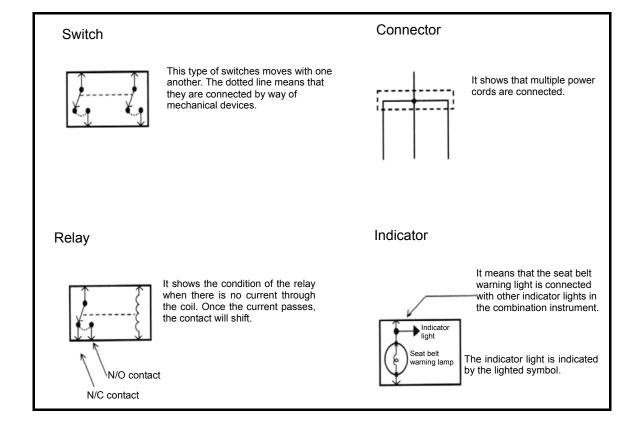
Expression on Circuit Diagram













Electrical Symbol on Circuit Diagram

Electrical Symbol	Symbol Description		Symbol Description
Battery	 Produce electricity by chemical action. Supply electricity directly to the circuit. 	Electric heating	Produce heat from electricity.
Wire harness ground point	Connect the wire harness to the body ground point and direct the current to the battery negative pole to form a circuit. If the rated current is exceeded, the fusible wire will blow and the current will be shut off immediately.	Cigarette lighter	 Produce heat from electricity. It can also be used as on-board power supply. Distribute power to externally-connected electric appliances with compliant rated voltage.
device	Warning: When the fuse protector is	Vehicle power	
Fuse link	replaced, the rated current shall not be exceeded. Fuse link Slow-blow device	Horn	Produce a sound by way of electricity.
Lighting	When the current flows through the filament, the light will be emitted with heat produced.	Loudspeaker	
Resistor	It is mainly used in a serial circuit to protect electrical parts within limited rated voltage.	Switch	Open or close a circuit to allow or block the current flow.
Motor	Convert electric energy into mechanical energy.	Diode	Allow current to flow in only one direction.
Pump	Draw and discharge gas or liquid by motor action.	Light-emitting diode (LED)	 Emit light when current passes. Unlike ordinary bulbs, LED produces no heat when emitting light.



Electrical Symbol	Symbol Description	Electrical Symbol	Symbol Description
Sensor	Its resistance value varies with the		Cool the engine.
- //	temperature.		
(Thermistor		Fan	
type)			
Sensor	Its resistance value varies with the		(A) • (B)
- *** -	component position.	•	
1 1		Circuit	The above diagram represents that
(Slide		interconnection	circuit C-D is interconnected with
resistor type)			circuit A-B.
i selete: type)	Produce magnetic force through the coil to)	555
	engage the relay contacts so that current		
UFF OX	passes.		
N/O relay	No current passing through coil		Current passing through coil
Two relay	No current		With current
	Produce magnetic force through coil to eng	gage	
OX OX	relay contact so that current passes.		
06.4	No current passing through coil		Current passing through coil
N/C relay	With current		No current
		·	



Description of Lead Wire Color

Wire Color	Code	Wire Color	Code
Black	В	Orange	0
Blue	L	Pink	Р
Brown	Br	Red	R
Green	G	Violet	V
Grey	Gr	Yellow	Υ
Light green	Lg	White	W

Wire Harness Identification Mark

The wire harnesses are classified into the following types in accordance with the positions of the lead wires:

The circuits of complete vehicle are differentiated with following paging codes by system function:

Connector Code
М
Α
F
L
E
F
D
D
R
R
F
R

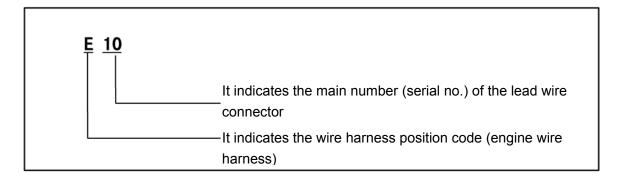
System Function	Paging Code
Power distribution system	Α
Starting and charging system	В
Window elevating and horn part	К
Engine ECM system	D
Reversing radar	E
ACC system	F
Lighting	G
BCM system	Н
Power rear-view mirror	I
Sunroof system	J
Combined switch and wiper	К
Airbag	L
Diagnostic system	M
ABS	N
Air conditioning system	0
Instrument system	Р
Anti-theft system	Q



Lead Wire Connector Identification Code

A lead wire connector identification code consists of a wire harness position identification code and a lead wire connector identification code. For the position of the lead wire connector, refer to the wire harness layout diagrams.

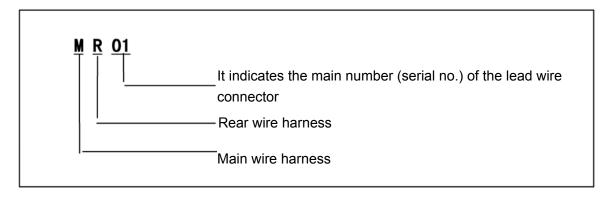
Example:



Attention

A lead wire connector between wire harnesses is indicated with a code as below.

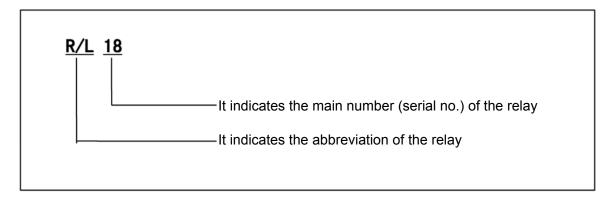
Example:



Relay Identification

A relay identification code consists of the abbreviation and the main number (serial no.) of the relay.

Example:





Fault Detection Guide

Fault Detection Procedure

The detection involves the following five phases.

1. Verify Customer's Complaint

To properly repair a faulty circuit, inspect its components first and maintain a record. No disassembly is allowed until the cause of the fault has been ascertained.

2. Read and Analyze Circuit Diagram

Analyze the entire circuit of the faulty component, ranging from the power supply to the ground, in accordance with the circuit diagram of the component, before determining the operation method. If the operation method cannot be determined, refer to reference books on how the circuit works. Inspect other circuits common with the faulty circuit too. For example, refer to the circuit diagrams to inspect the common circuits of the components such as the fuses and the ground. Inspect the common circuits not covered in the first phase too. If the common circuits work normally, the fault lies in the faulty circuit itself. If all the circuits work abnormally, the fault may lie in the fuses or the ground.

3. Inspect Circuit and Component

Use a tester for the second-phase detection. An effective fault diagnosis must be a logic and simple process. Determine the cause of the fault using the fault diagnosis procedure or the fault diagnosis table. In addition, detection shall start from the most possible cause and the position that is the easiest to detect.

4. Repair Fault

Find out the fault and make necessary repairs.

5. Confirm Working of Circuit

After the repairs have been completed, inspect the circuit again to confirm that the fault has been eliminated. If the fault lies in a blown fuse, inspect all the circuits that use this fuse.

Fault Diagnosis Devices

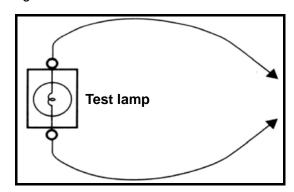
Voltmeter and Test Lamp

Use a test lamp or a voltmeter to inspect the condition of the circuit and use a test lamp to check whether a voltage exists across the circuit. A test lamp includes a pair of lead wires and a 12V bulb. During the inspection, ground one lead wire and connect the other to a certain point to be measured. If the lamp lights, it indicates that this point is supplied with power.

Attention

To measure the voltage of an electronic control module, such as the voltage across the circuit of the ECM (engine control module) used by an electronically controlled fuel injection engine, do use a digital voltmeter with a resistance of 10M or higher. If a test lamp is used to inspect the circuit of the module, the internal circuit may be damaged. Therefore, never use a test lamp to inspect an electronic circuit.

The voltmeter and the test lamp are used in basically the same way. The difference is that the test lamp can only inspect whether power is supplied while the voltmeter can also display the voltage.



Self-powered Test Lamp and Ohmmeter

Use a self-powered test lamp or an ohmmeter to



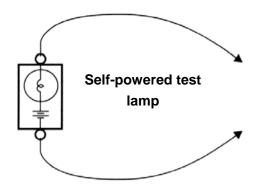
inspect the continuity of a circuit. A self-powered test lamp consists of a bulb, a battery and two lead wires. When the two wires are connected, the bulb lights. Before the inspection, disconnect the battery negative wire and pull out the fuses of the circuit.

Attention:

If a self-powered test lamp is used to inspect the circuit of a module, the internal circuit may be damaged. Therefore, never use a self-powered test lamp to inspect an electronic circuit.

The ohmmeter and the self-powered test lamp are used in basically the same way. But the ohmmeter can also display the resistance. A low resistance indicates good continuity.

Semiconductor elements shall be inspected by a digital multimeter with a resistance of 10M or more. When using a digital multimeter to measure the resistance, disconnect the battery negative wire, or a wrong reading will result. When an ohmmeter is used to measure the resistance, the diodes or the semiconductor elements in a circuit may affect the measured value. To inspect whether a component affects the measured value, take one value first and then reverse the polarity to take another value. If the values obtained from the two measurements differ, it indicates that the semiconductor elements affect the measured value.



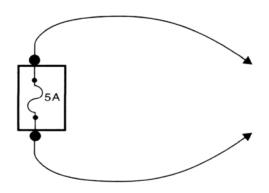
Fused Jumper

Use jumpers to inspect an open loop circuit.

A jumper is an inspection tool in series with the tested lead wire. It can be used with most lead wire connectors without damaging them.

Caution

To protect the circuit to be inspected, do not use a fused jumper with a capacity greater than the rated capacity of the circuit. Furthermore, do not use jumpers in place of the output or input signals if ECM, TCM and other control modules are connected.



Short-circuit Detector

With a short-circuit detector, the position of the short circuit can be found. When a short-circuit detector is used to inspect the shorted circuit, a pulse magnetic force will be produced so that the short circuited position can be found.

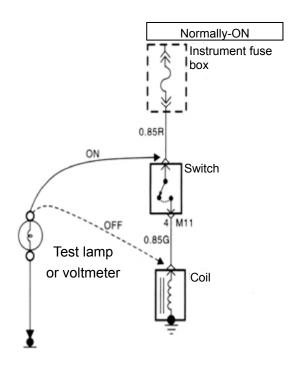
Fault Detection

1. Voltage Detection

This involves detecting whether there is voltage across a certain point. When a terminal of the lead wire connector is detected, it is permissible to test from the back of the connector rather than disassembling the wire connection.

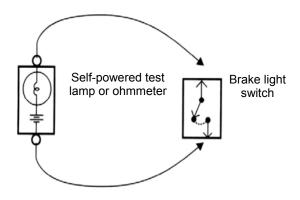
- ① To use a test lamp or a voltmeter to measure the voltage, connect the negative pole of the tester with the negative pole of the battery first.
- ② Then connect the other lead wire of the test lamp or the voltmeter to the position to be detected.
- ③ If a test lamp is used and it lights, it indicates that the detected position is supplied with power. If a voltmeter is used and it displays a value over 1V lower than the specified value, it indicates that the circuit is faulty.





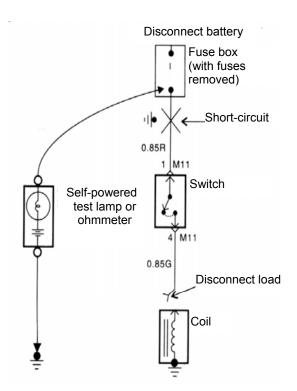
2. Power-on Test

- ① Disconnect the negative pole of the battery.
- ② Connect one lead wire of a self-powered test lamp or an ohmmeter to the position to be inspected. To use an ohmmeter, first short connect its two lead wires and then zero it with a zero setter.
- ③ Connect the other lead wire of the tester with the other terminal of the load to be inspected.
- ④ If the self-powered test lamp lights, it indicates continuity. If an ohmmeter is used and it displays a resistance that is very low or nearing 0, it indicates good continuity.



3. Short-circuit Test

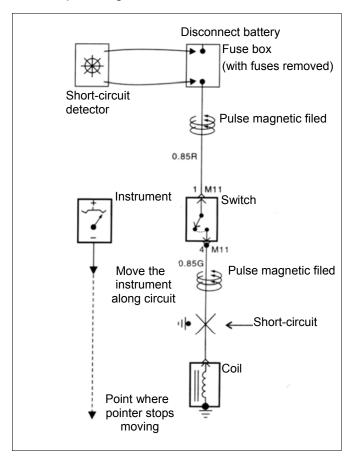
- ① Disconnect the negative pole of the battery.
- ② Connect one lead wire of a self-powered test lamp or an ohmmeter with one terminal of the fuse.
- ③ Ground the other lead wire of the self-powered test lamp or the ohmmeter.
- ④ Inspect the wire harnesses one by one, starting from the harness closest to the fuse box. Repeat this procedure until there is a distance of about 15cm from the self-powered test lamp or the ohmmeter.
- ⑤ If the self-powered test lamp lights or the ohmmeter has an indication, it shows that the circuit from this position to the ground is shorted.





4. Detect with Short-circuit Detector

- ① Pull out the blown fuse and disconnect the negative pole of the battery.
- ② Connect the short-circuit detector with the fuse terminal.
- 3 Turn on the switch to inspect the circuit.
- When the short-circuit detector moves to the position of the short circuit, a pulse magnetic force will be produced between the fuse and this position.
- Move the short-circuit detector slowly along the lead wire from the fuse box. As long as the detector is between the fuse and the short circuit, its pointer will move as the pulse current changes. Once the detector passes the position of the short circuit, its pointer will stop moving.





Contents for Circuit Diagram

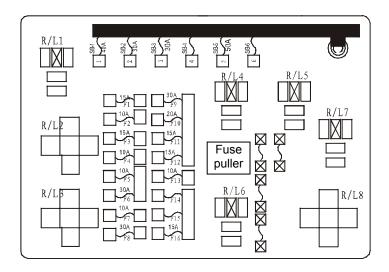
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Indoor Fuse Box	3
Starting and Charging System - B	6
ECM System of Engine - D	9
Front/Rear Oxygen Sensor	12
Ingnition Coil, Spray Nozzle	10
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Air Intake Pressure, Knock Senor, Carbon Canister Control Valve	12
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Reversing System - E	17
ACC Hi-fi - F	19
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Small Light	28
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Rear Fog Lamp	28
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Power Distribution System - 1 Outdoor Fuse Box

A-1

Outdoor electric box



R/L1	Relay of electric horn	F
R/L2	Relay of condenser fan 2#	F
R/L3	Starting relay	F

R/L4 Low beam relay
R/L5 High beam relay

R/L6 Relay of condenser fan 1#

R/L7 Relay of oil pump

R/L8 Main relay

S/B-1 ABS slow blow device S/B-2 ABS slow blow device

S/B-3 Main relay slow blow device

S/B-4 Vacant

S/B-5 Ignition switch slow blow device

S/B-6 Vacant

F1 Fuse of rear wiper motor

F2 Fuse of bass horn

F3 BCM

F4 Blower fuse

F5 Fuse of ABS and starting relay

F6 Starting relay

F7 Fuse of air conditioner, oil pump and fan relay

F8 Fuse of blower relay
F9 Fuse of Radiator fan
F10 Fuse of condenser fan

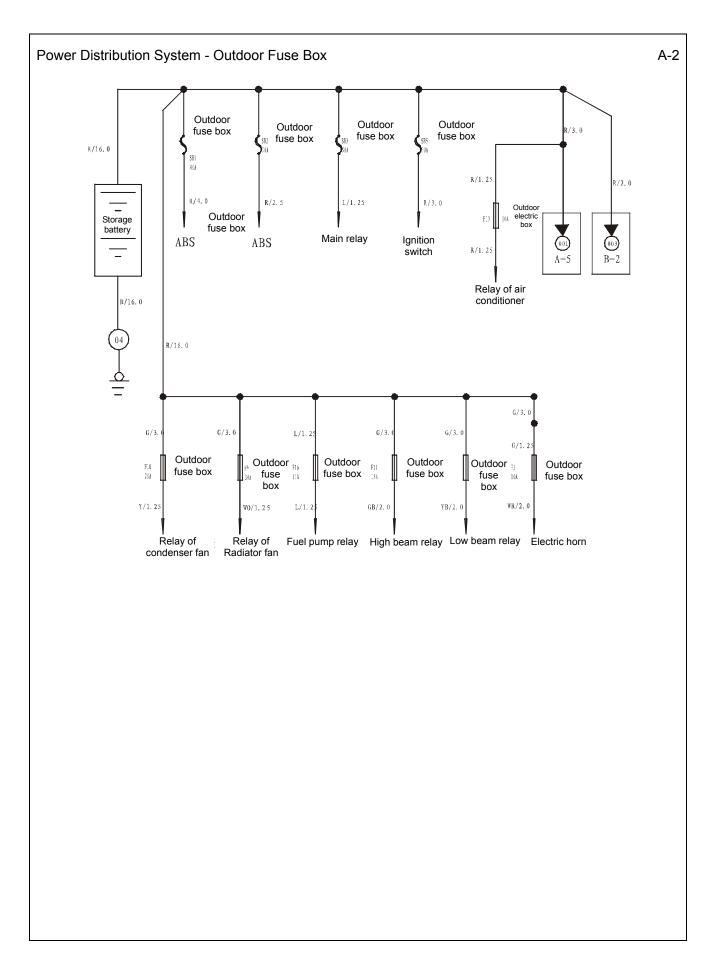
F11 High beam fuse

F12 Low beam fuse

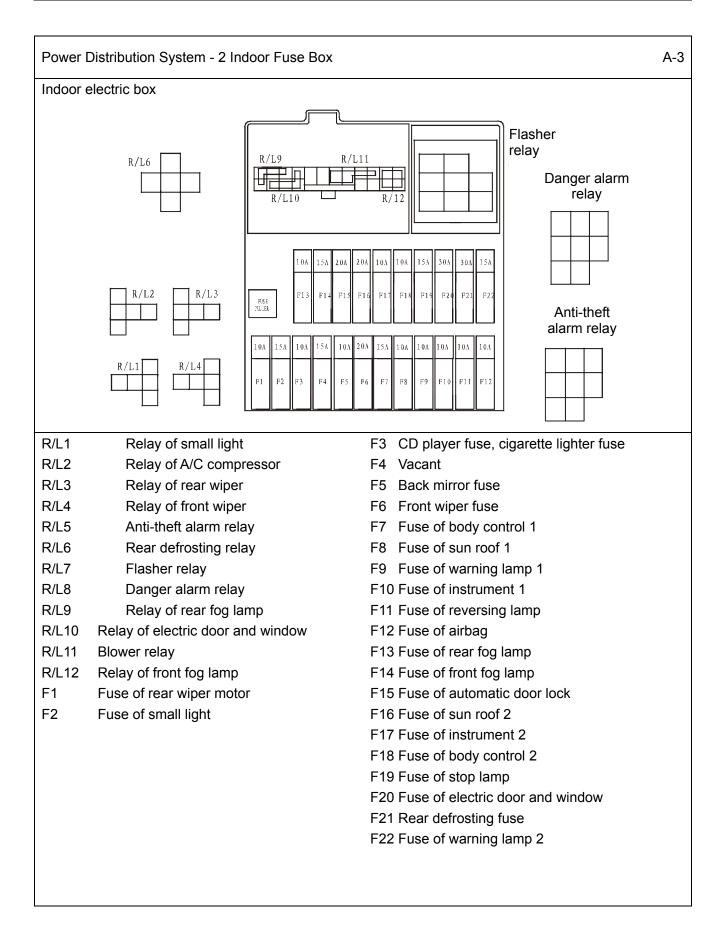
F13 Relay of air conditioner

F14 Vacant F15 Vacant F16 Oil pump

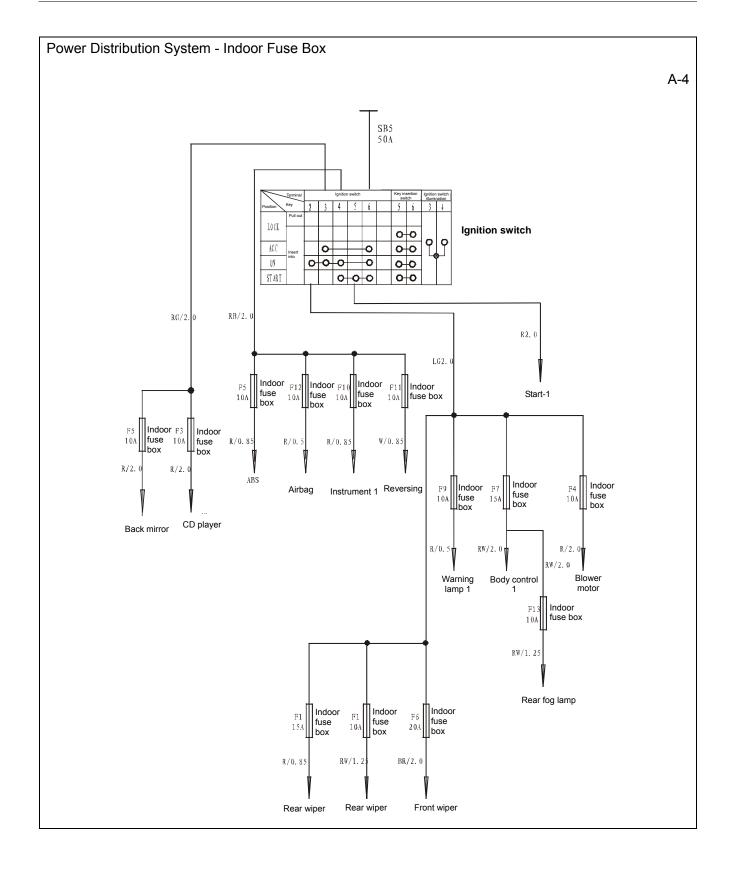




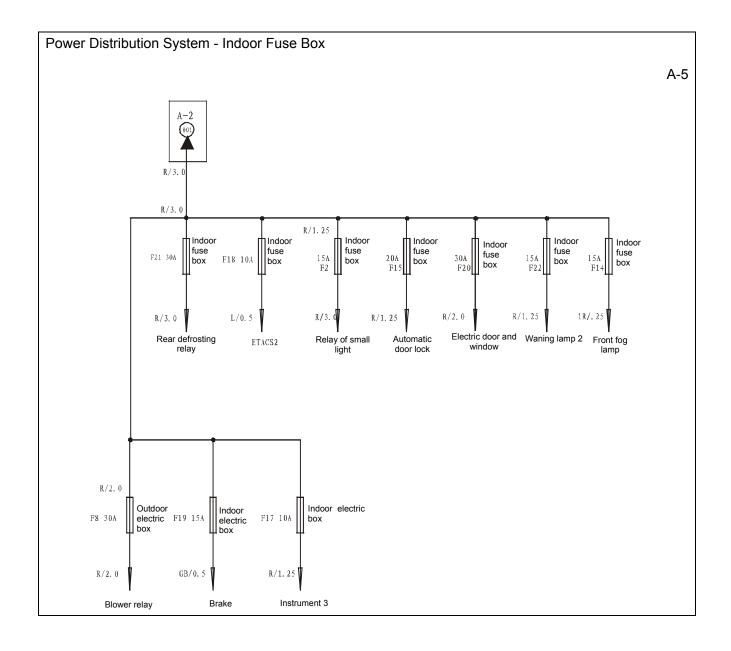




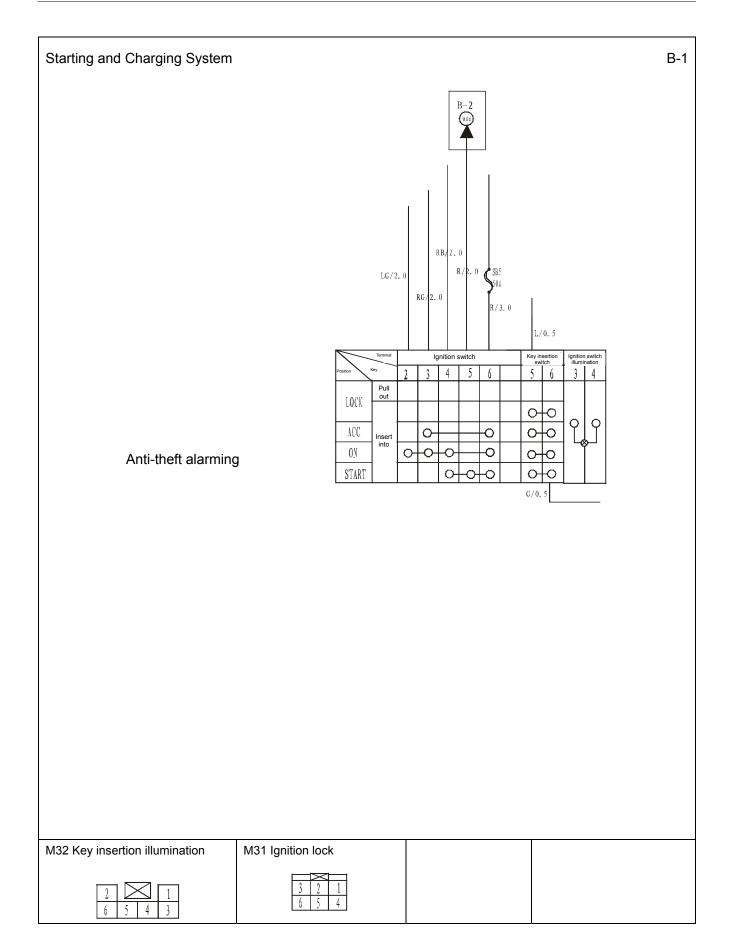




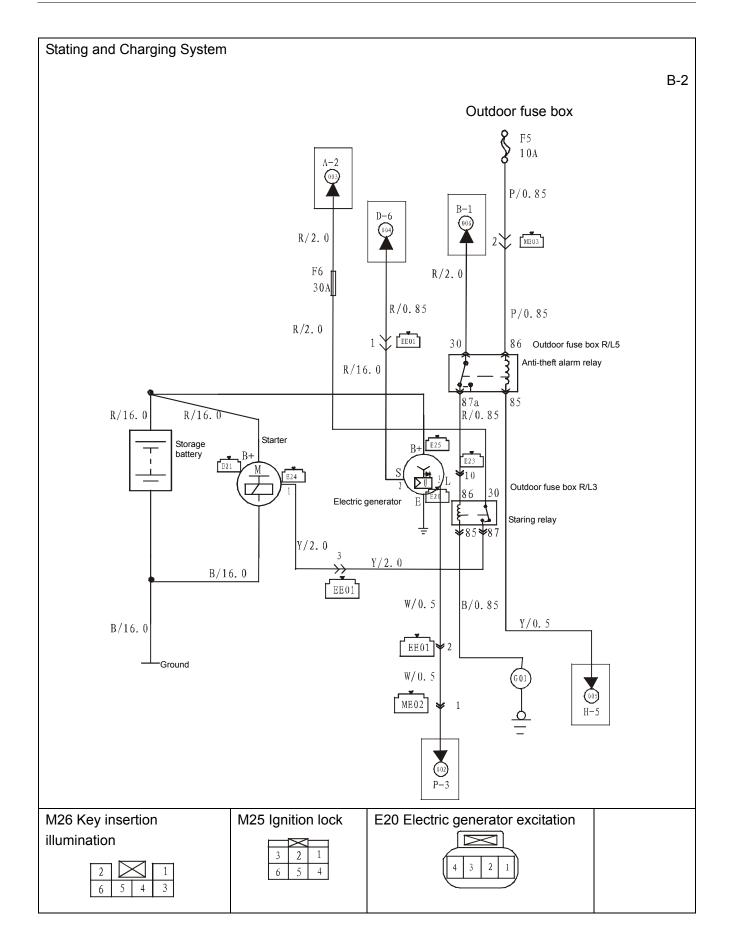








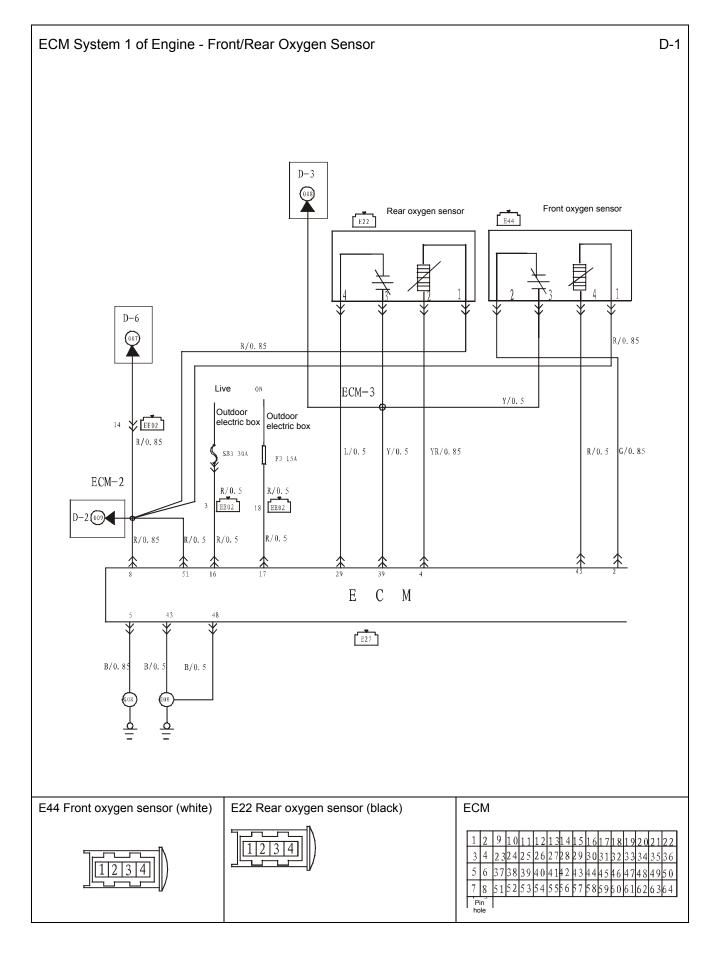




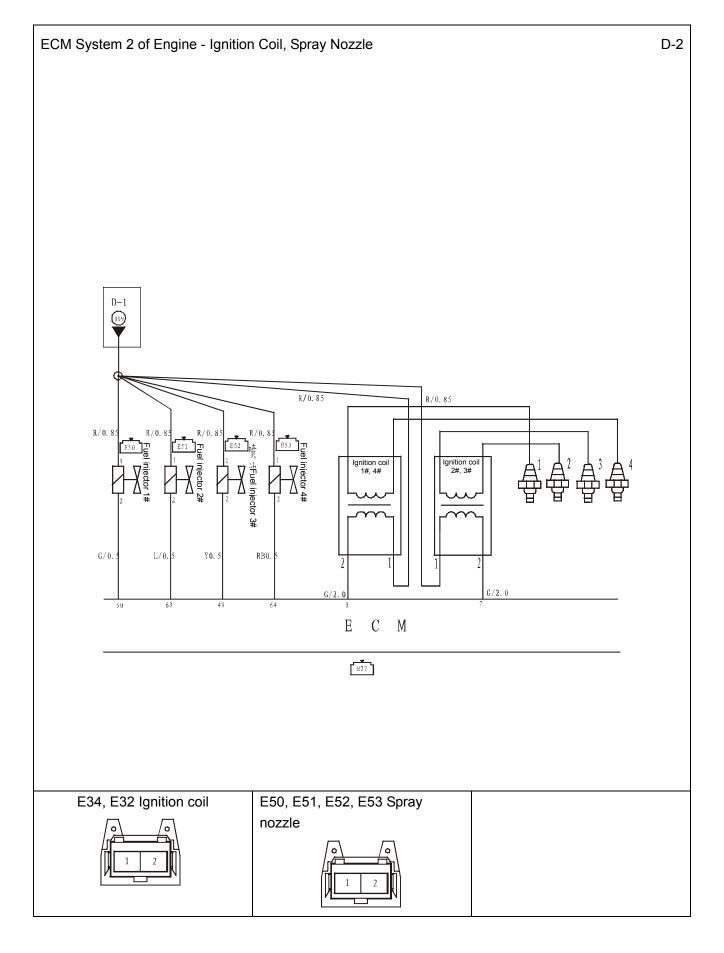


Starting and Charging System		B-3
Index of element position		
Element code	Element name	
M32	Key insertion illumination	
M31	Ignition lock	
M26	Key insertion illumination	
M25	Ignition lock	
Connector		
EE01		
EE02		
EE03		
Ground point		
01		

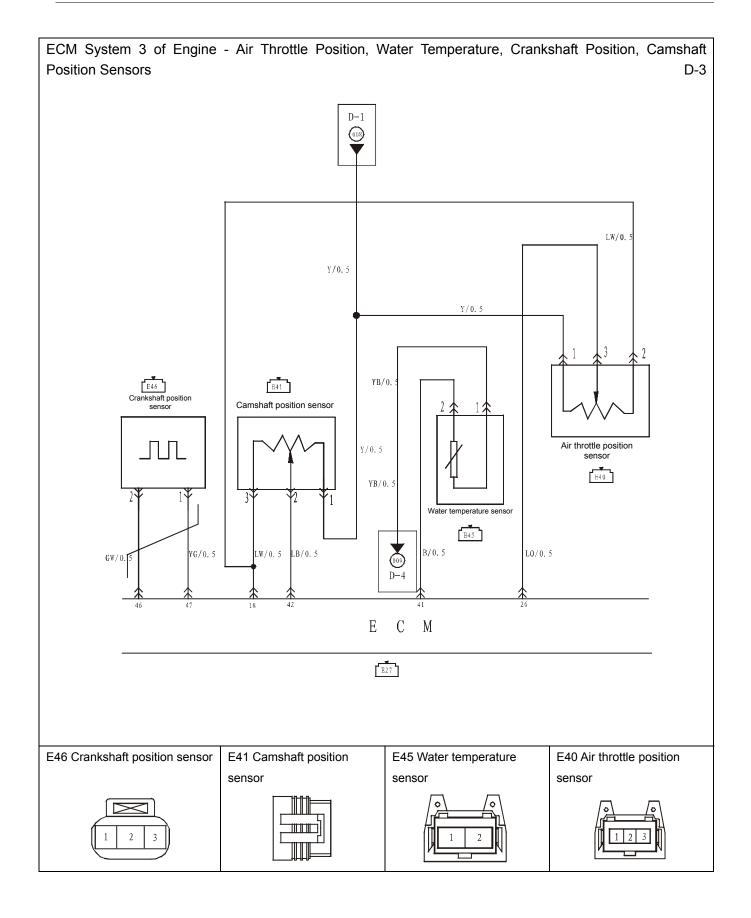




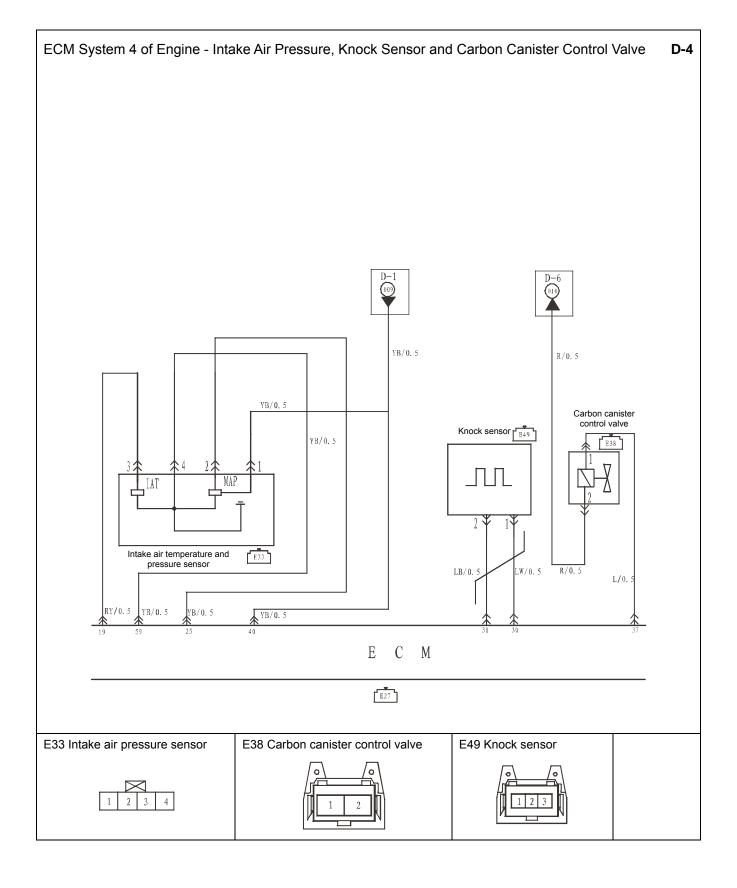




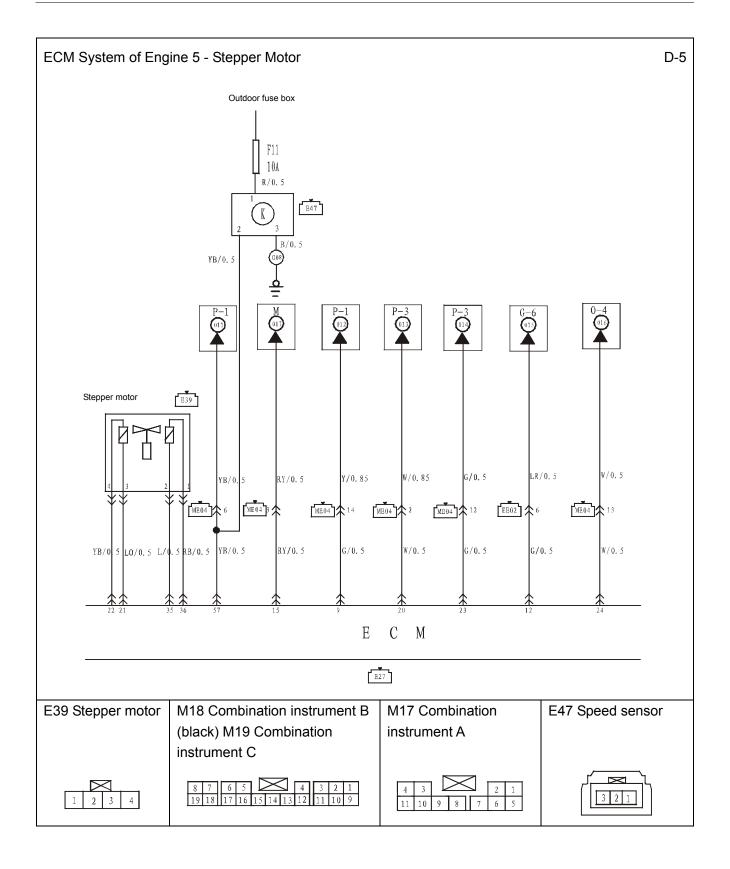




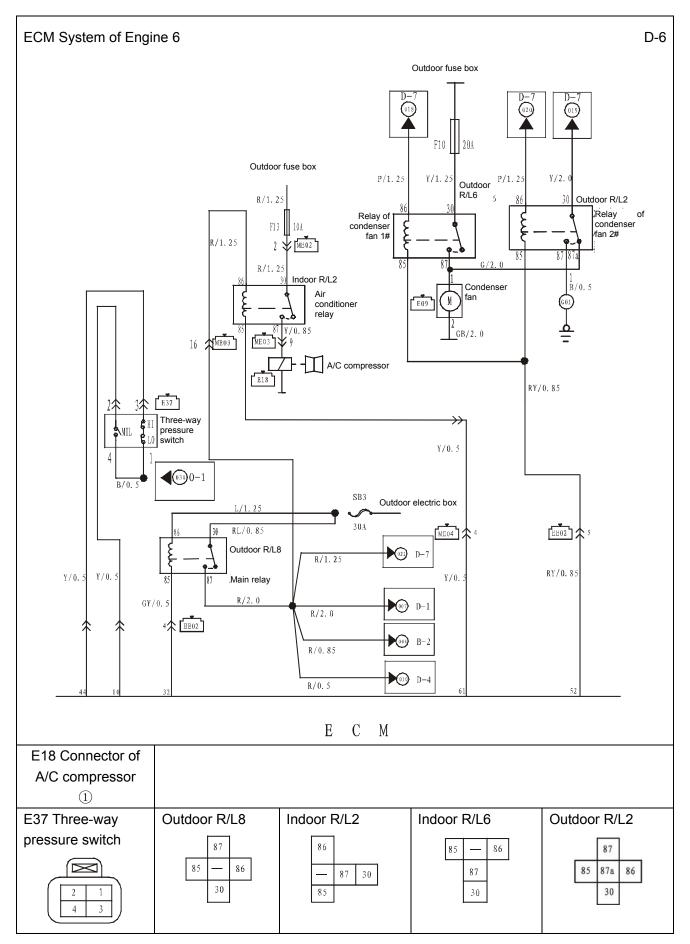




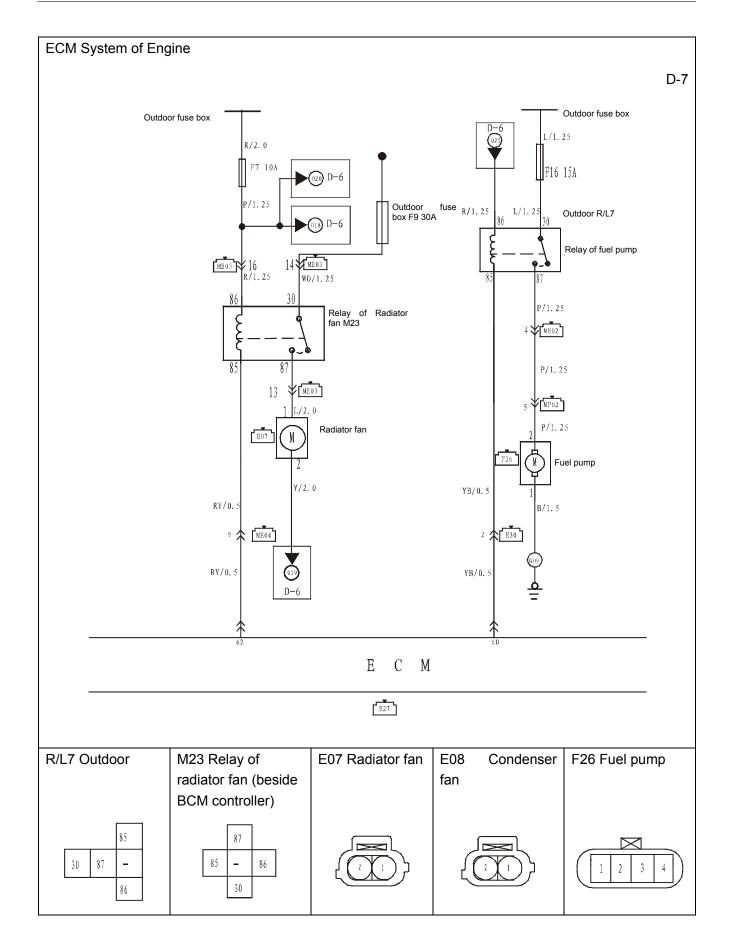








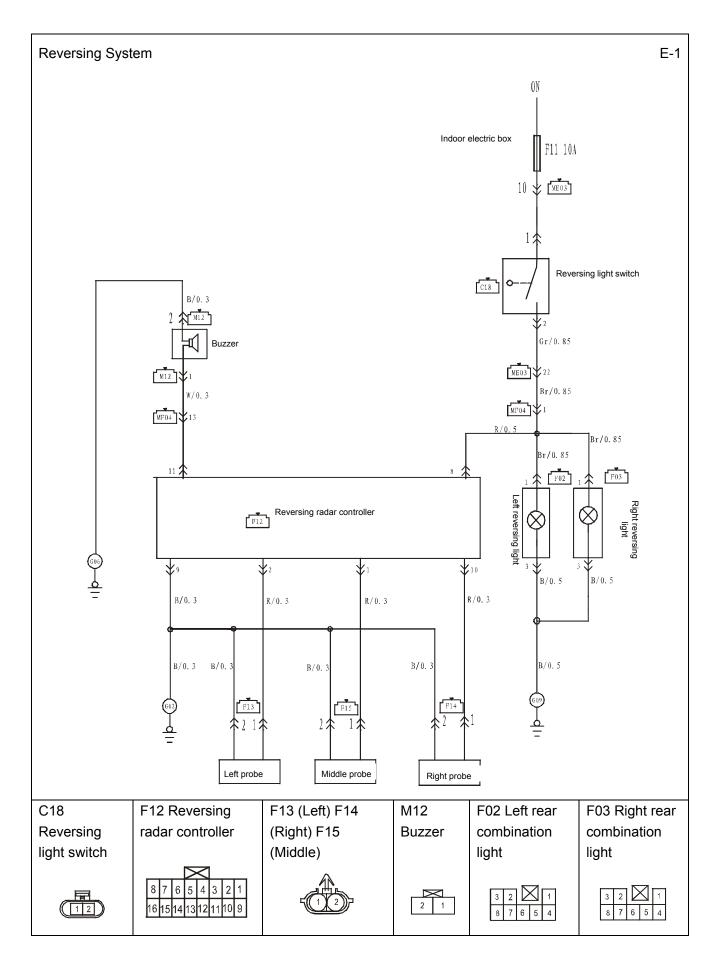






ECM System of Engine		D-8
Index of element position		
Element code	Element name	
E44	Front oxygen sensor	
E22	Rear oxygen sensor	
E27	ECM	
E34, E32	Ignition coil	
E50, E51, E52, E53	Spray nozzle	
E46	Crankshaft position sensor	
E41	Camshaft position sensor	
E45	Water temperature sensor	
E40	Air throttle position sensor	
E33	Intake air pressure sensor	
E38	Carbon canister control valve	
E49	Knock sensor	
E39	Steeper motor	
M18	Combination instrument B	
M19	Combination instrument C	
M17	Combination instrument A	
M17	Speed sensor	
E37	Three-way pressure switch	
E07	Radiator fan	
E08	Condenser fan	
F26	Fuel pump	
Connector		
EE02		
ME02		
ME03		
Ground point		
08		
01		
09		

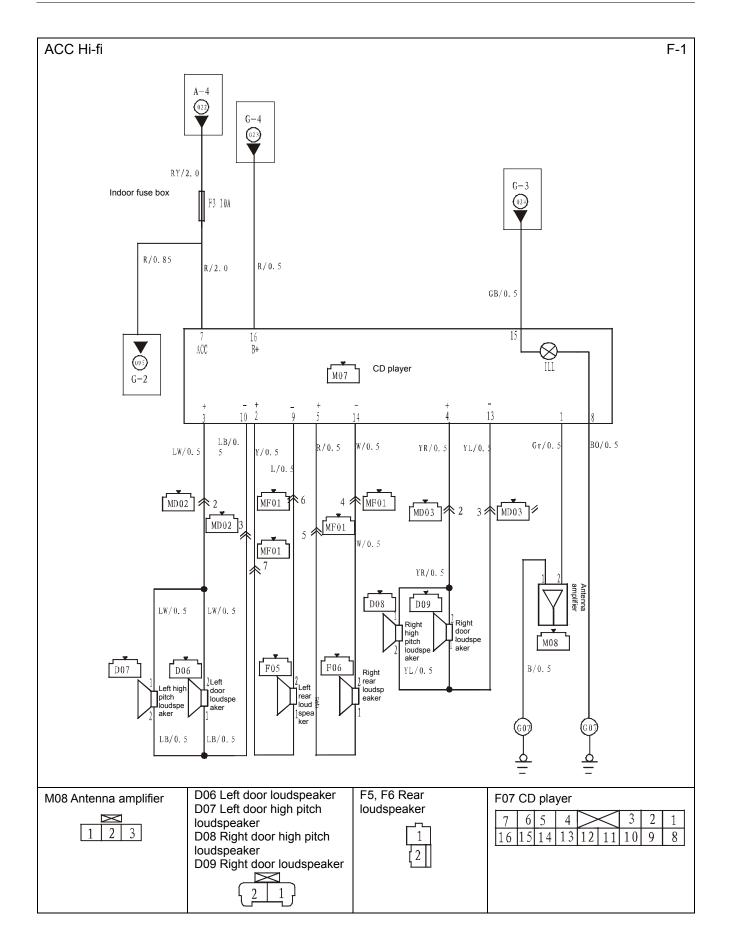






ersing System		E-
ex of element position		
Element code	Element name	
C18	Reversing light switch	
F12	Reversing radar controller	
F13, F14, F15	Reversing radar sensor	
M21	Buzzer lock	
F02	Left rear combination light	
F03	Right rear combination light	
Connector		
MF04		
ME03		
Ground point		
09		
02		

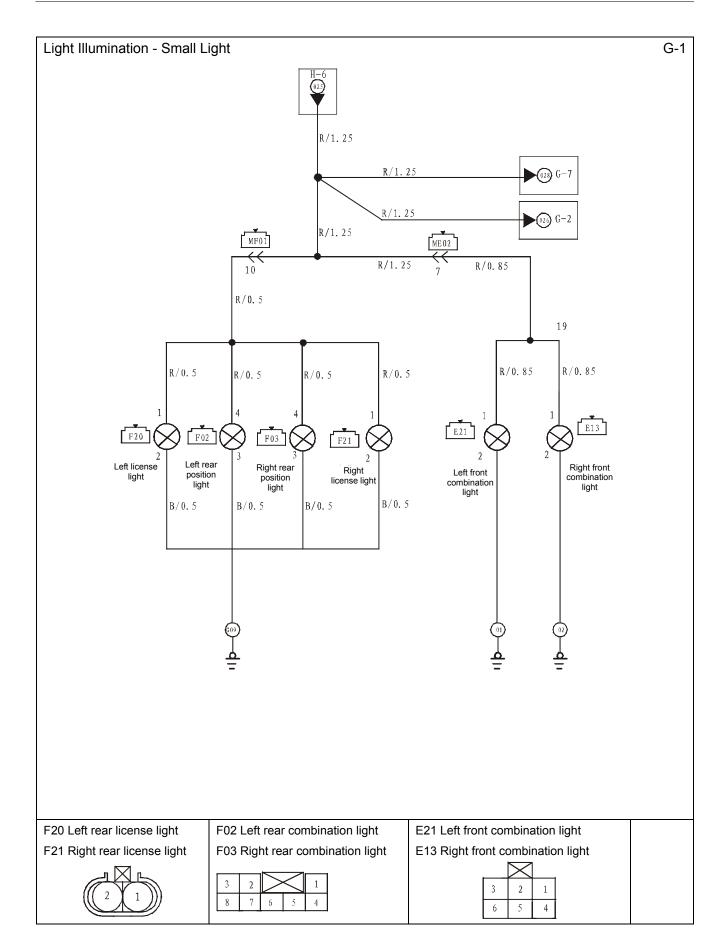




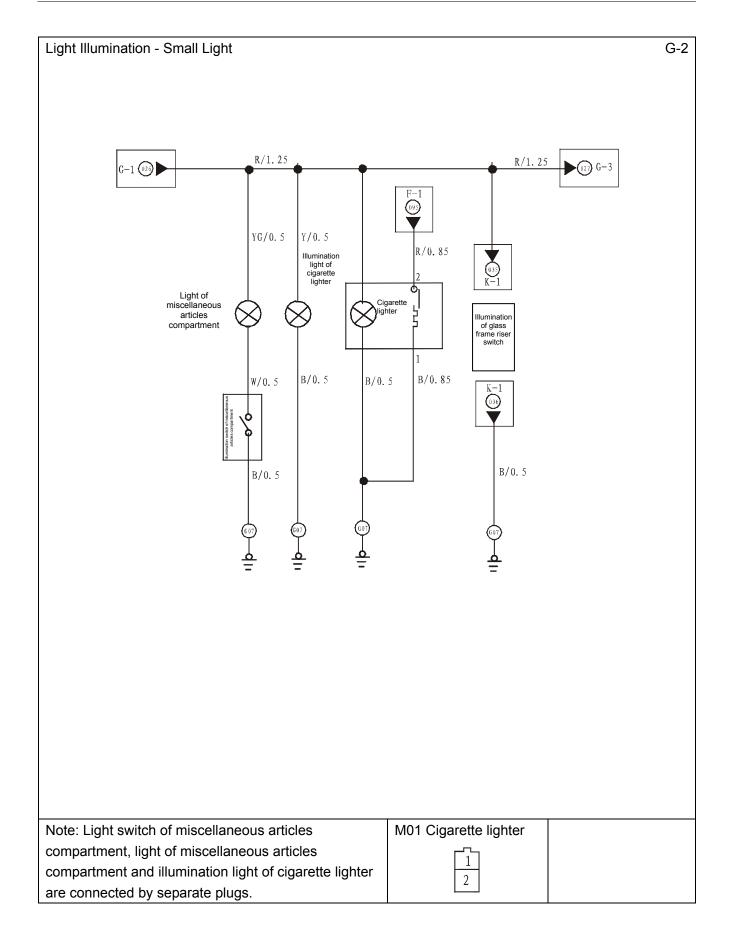


C Hi-fi		F
lex of element position		
Element code	Element name	
M08	Antenna amplifier	
D6	Left door loudspeaker	
D7	Left door high pitch loudspeaker	
D8	Right door high pitch loudspeaker	
D9	Right door loudspeaker	
F05	Left rear loudspeaker	
F06	Right rear loudspeaker	
M28	CD player	
Connector		
MF01		
MD02		
MD03		
Ground point		
07		

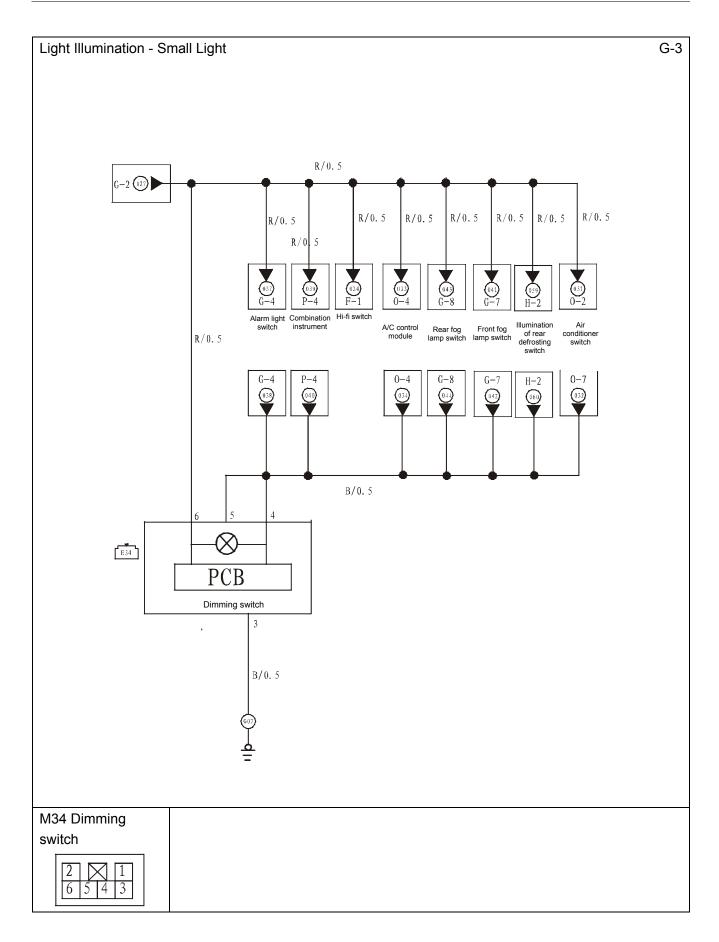




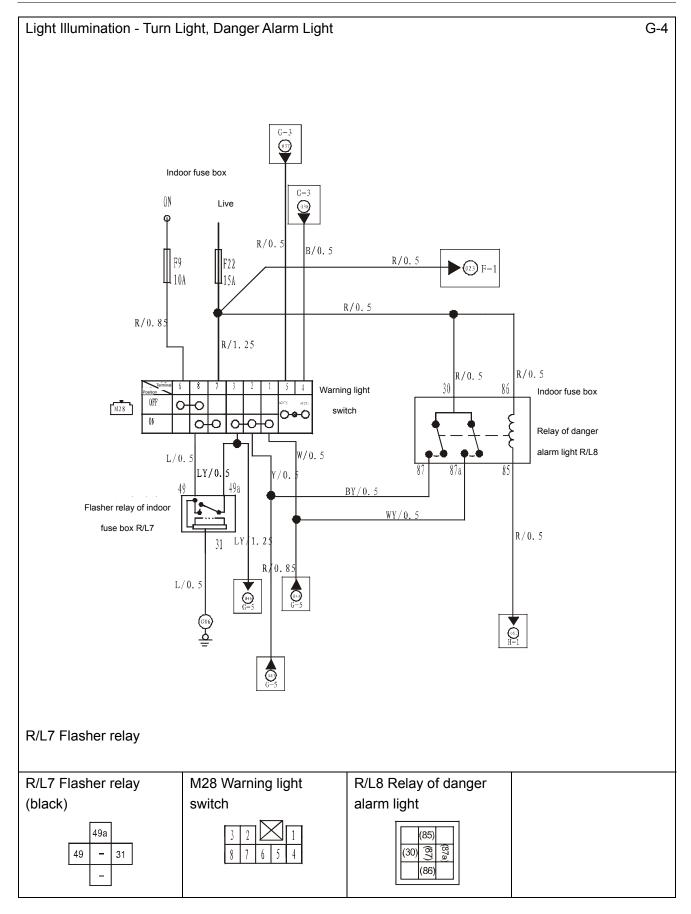




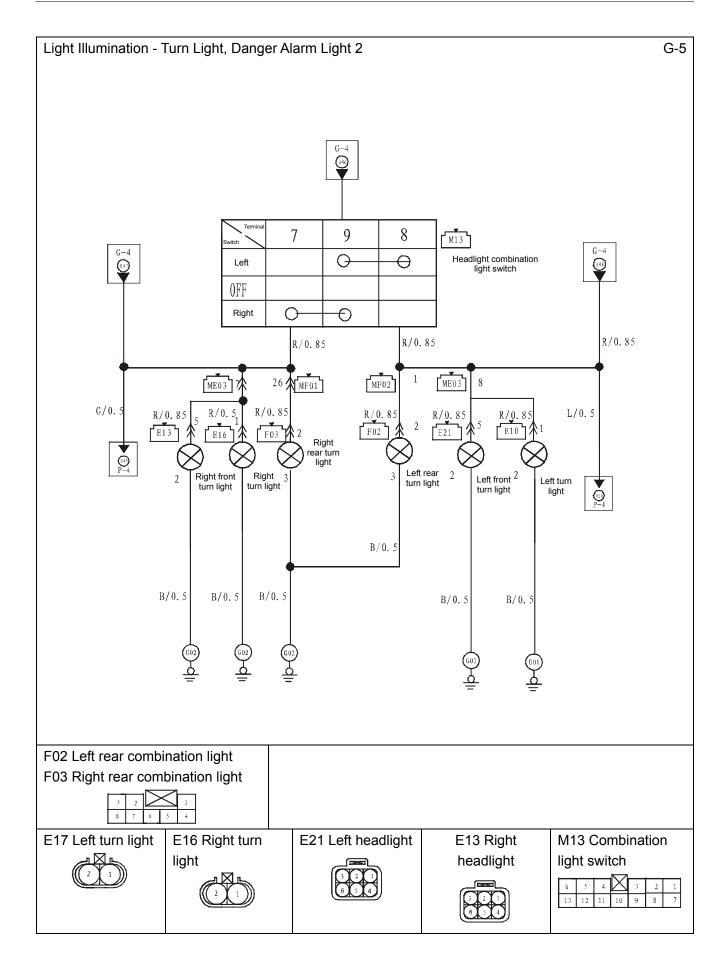




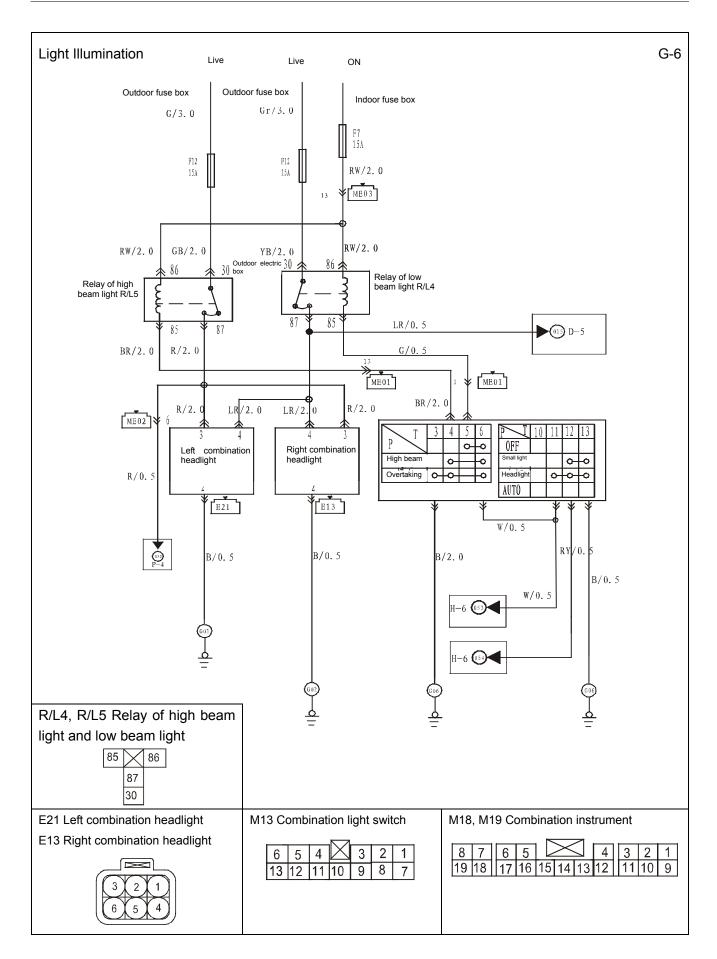




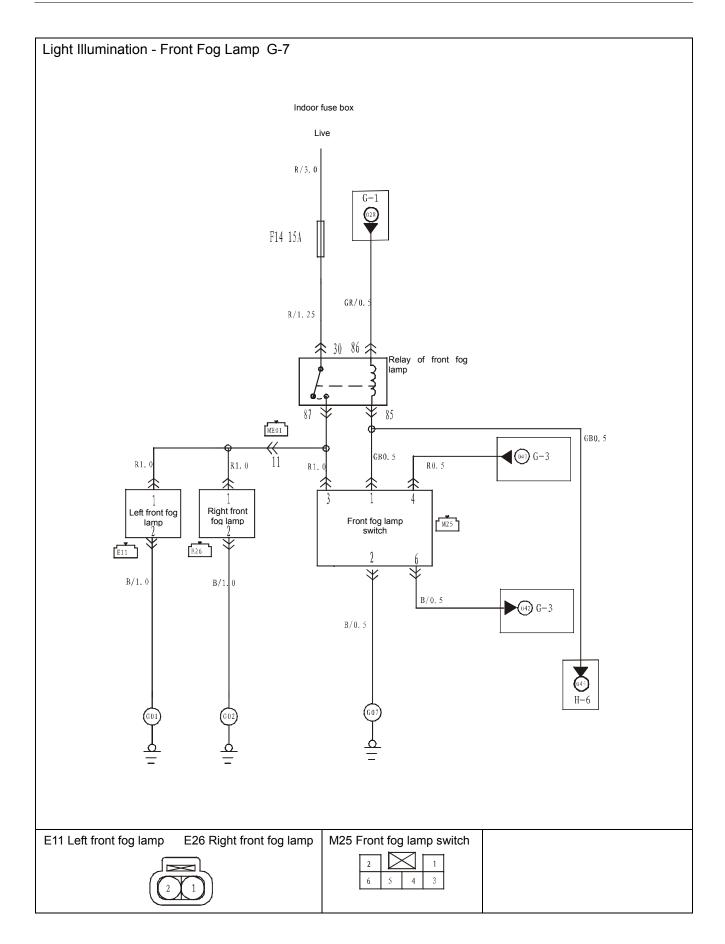




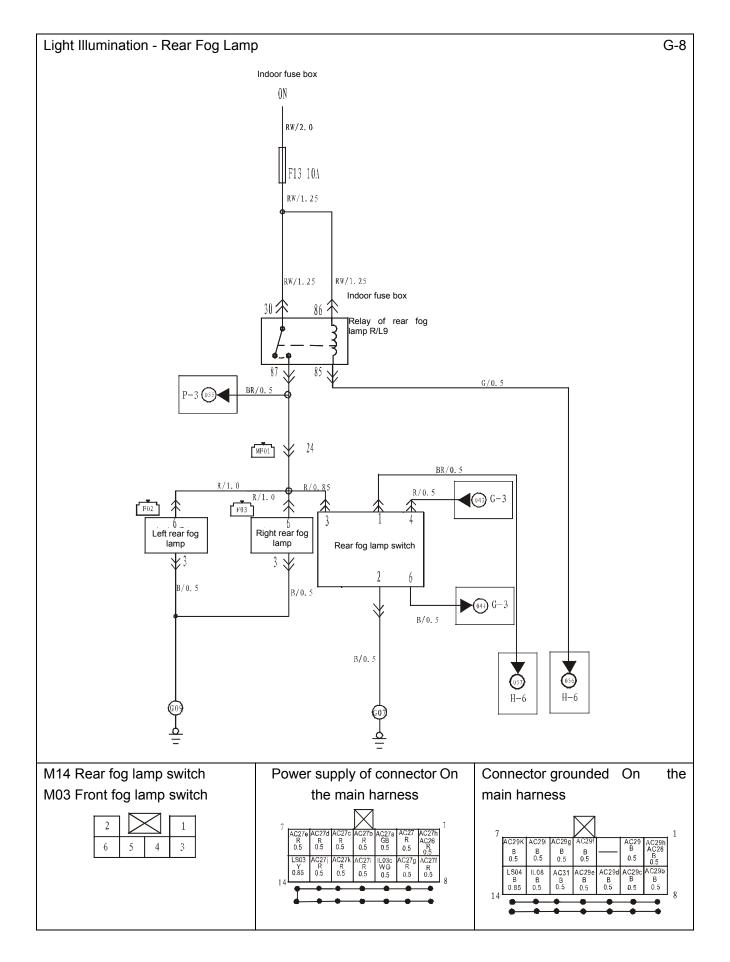








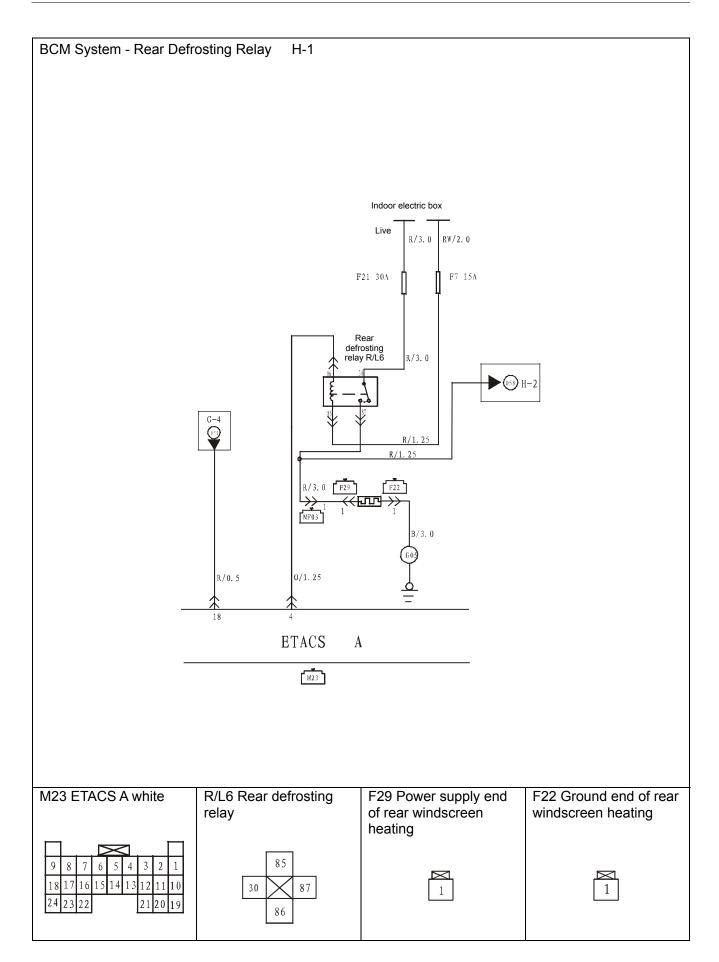




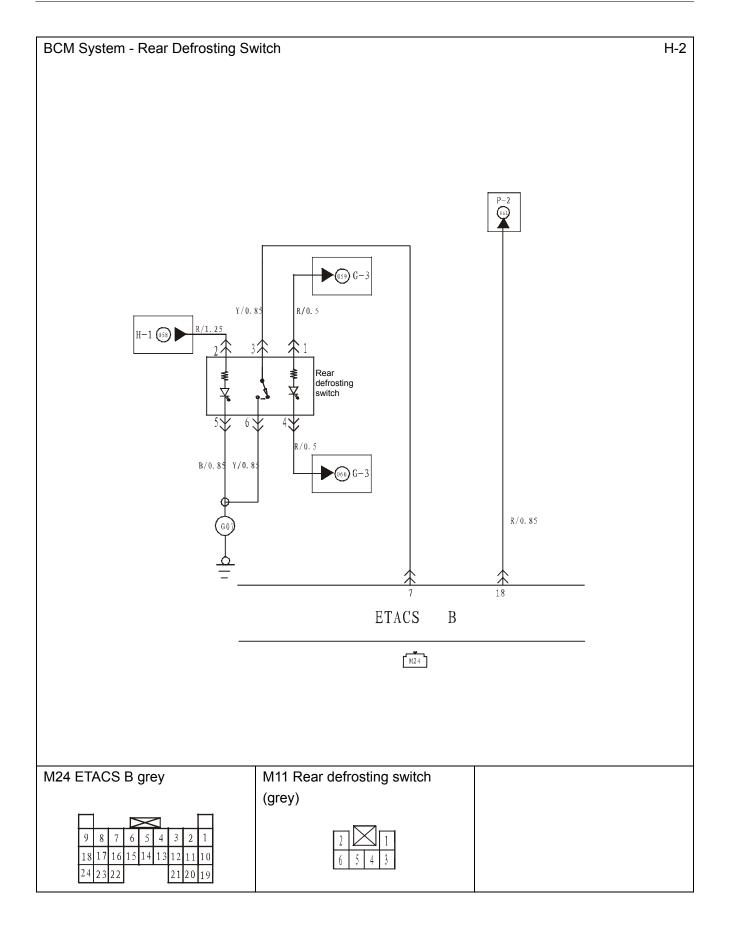


ex of element position		
Element code	Element name	
F20	Left rear license light	
F21	Right rear license light	
F02	Left rear combination light	
F03	Right rear combination light	
E21	Left front combination light	
E13	Right front combination light	
M01	Cigarette lighter	
M34	Dimming switch	
M28	Warning light switch	
E17	Left turn light	
E16	Right turn light	
M13	Combination light switch	
M18, M19	Combination instrument	
E11	Left front fog lamp	
E26	Right front fog lamp	
E25	Front fog lamp switch	
M14	Rear fog lamp switch	
Connector		
MF01		
MF02		
ME03		
ME01		
ME02		
Ground point		
09		
02		
01		
07		
06		

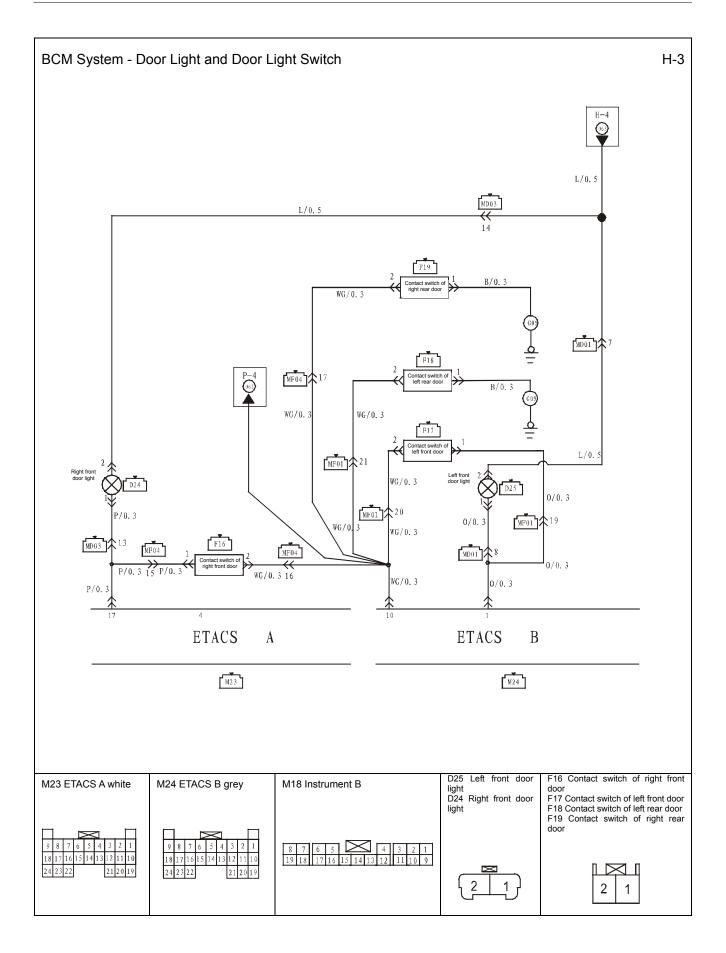




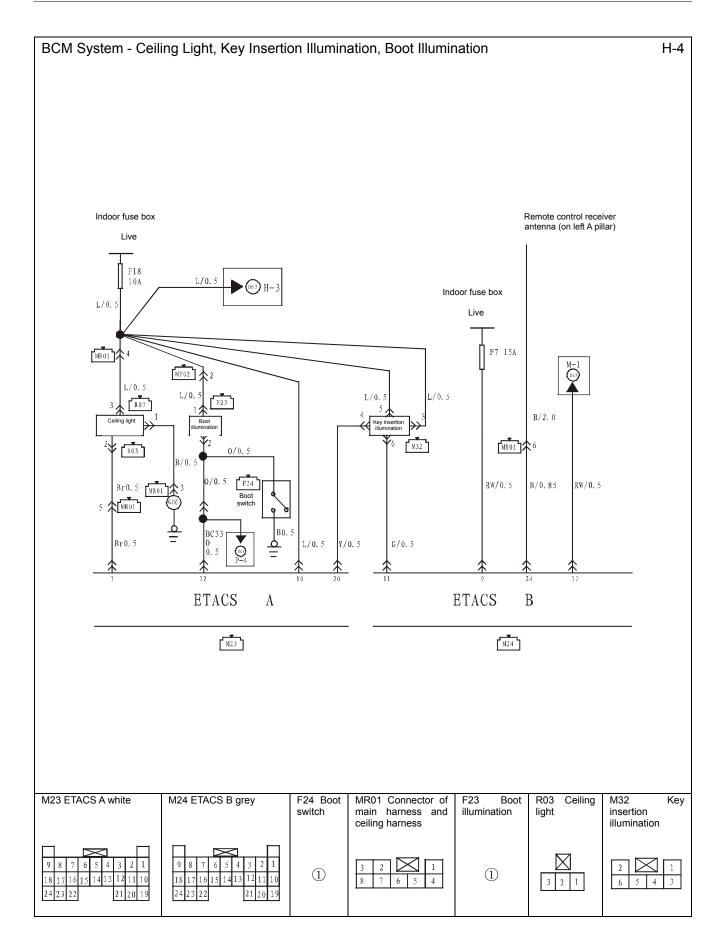








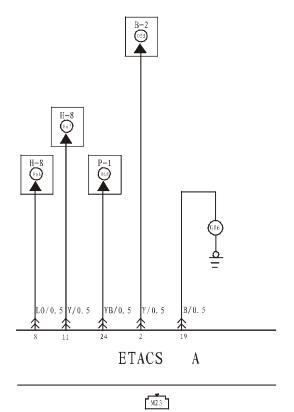


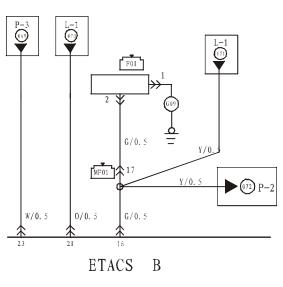




BCM System - Anti-theft Relay, Mortise Lock of Safety Belt

H-5

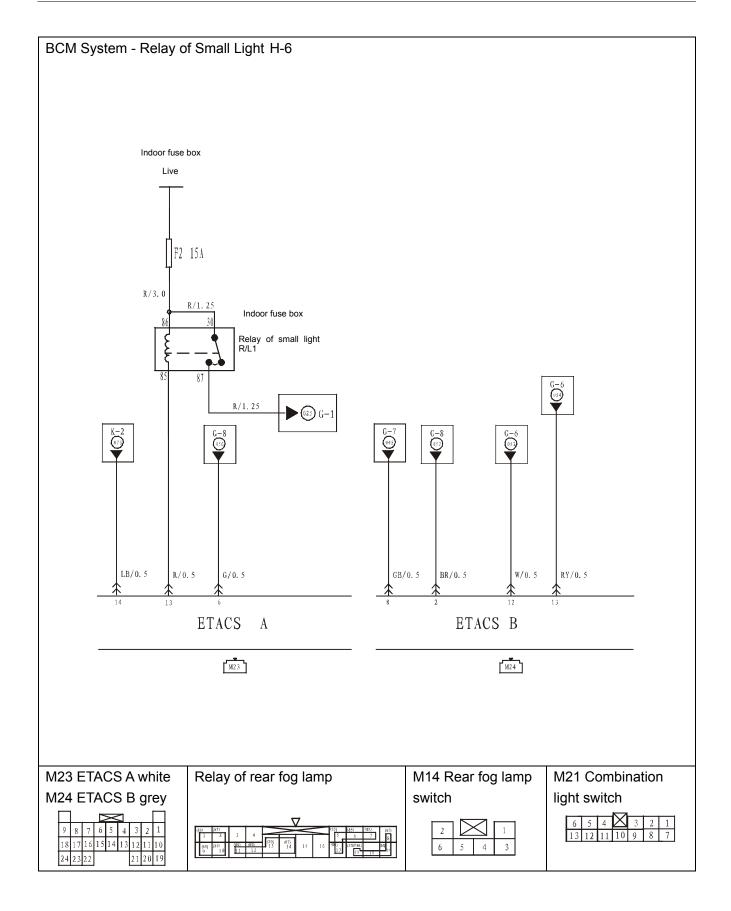




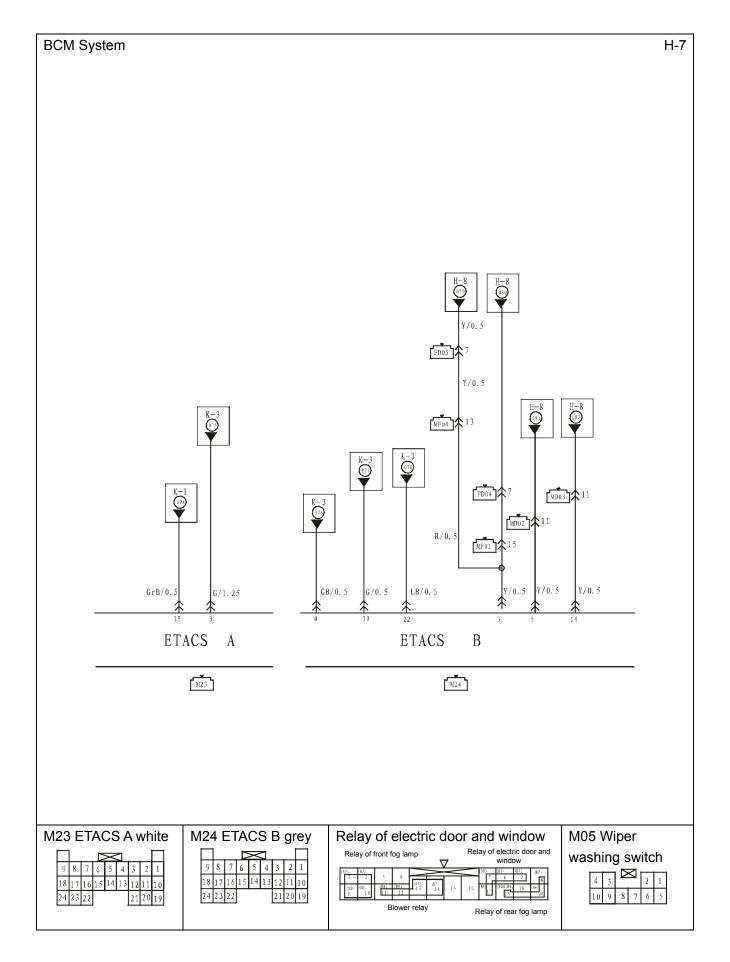
M24

M23 ETACS A white	M24 ETACS B grey	F01 Lock of	A01 Airbag ECU
		safety belt	
9 8 7 6 5 4 3 2 1 18 17 16 15 14 13 12 11 10 24 23 22 21 20 19	9 8 7 6 5 4 3 2 1 18 17 16 15 14 13 12 11 10 24 23 22 21 20 19	2 1	1234567891011231415101181320222245 202222308132334536378894044244444444444444

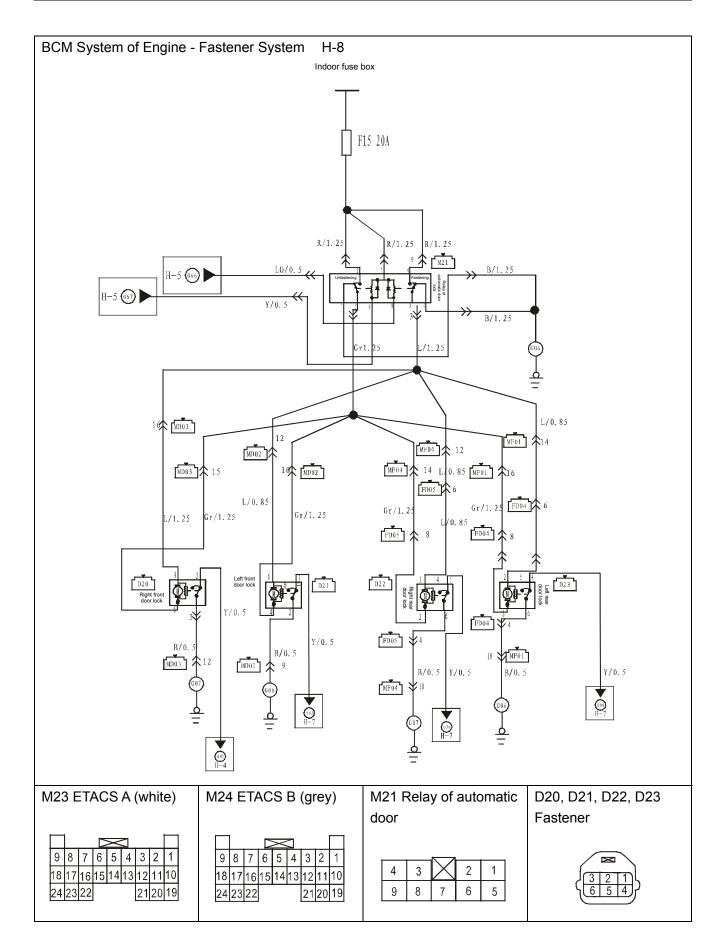








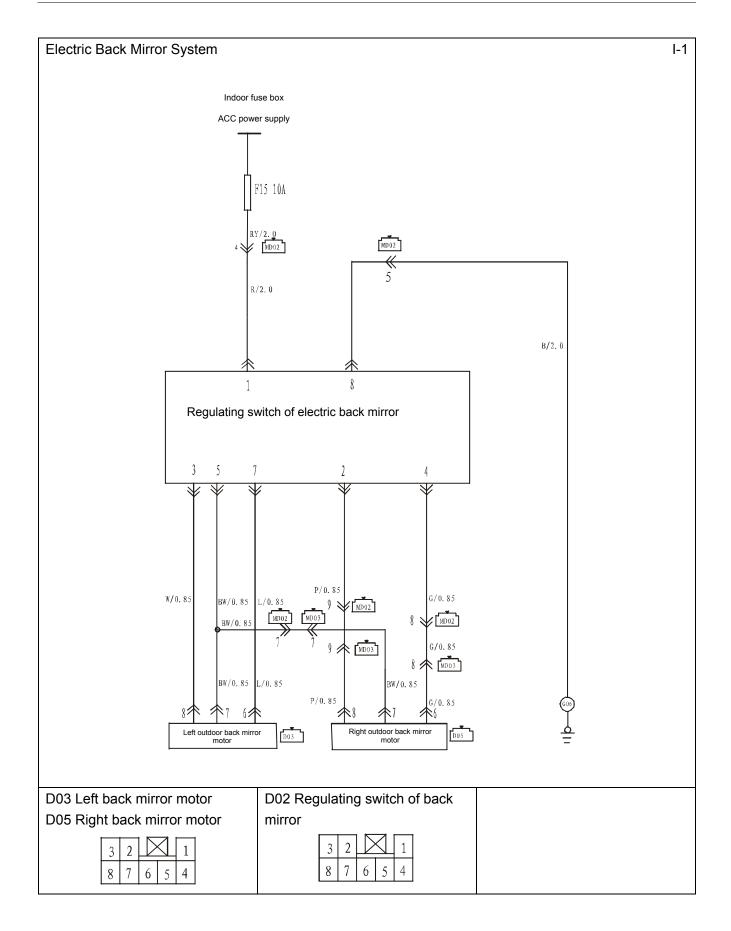






element position		
Element code	Element name	
M23	ETACS A (white)	
F29	Power supply end of rear windscreen heating	
F22	Ground end of rear windscreen heating	
M24	ETACS B (grey)	
M11	Rear defrosting switch (yellow)	
M18	Instrument B	
D25	Left front door light	
D24	Right front door light	
F16	Contact switch of right front door	
F17	Contact switch of left front door	
F18	Contact switch of left rear door	
F19	Contact switch of right rear door	
F24	Boot switch	
F23	Boot illumination	
R03	Ceiling light	
M32	Key insertion illumination	
F01	Lock of safety belt	
A01	Airbag ECU	
M14	Rear fog lamp switch	
M21	Combination light switch	
M05	Wiper washing switch	
M21	Lock of safety belt	
D21, D22, D23, D24	Fastener	
Connector		
MF01		
MF02		
ME03		
ME01		
ME02		
Ground point		
09		
02		
01		
07		
06		

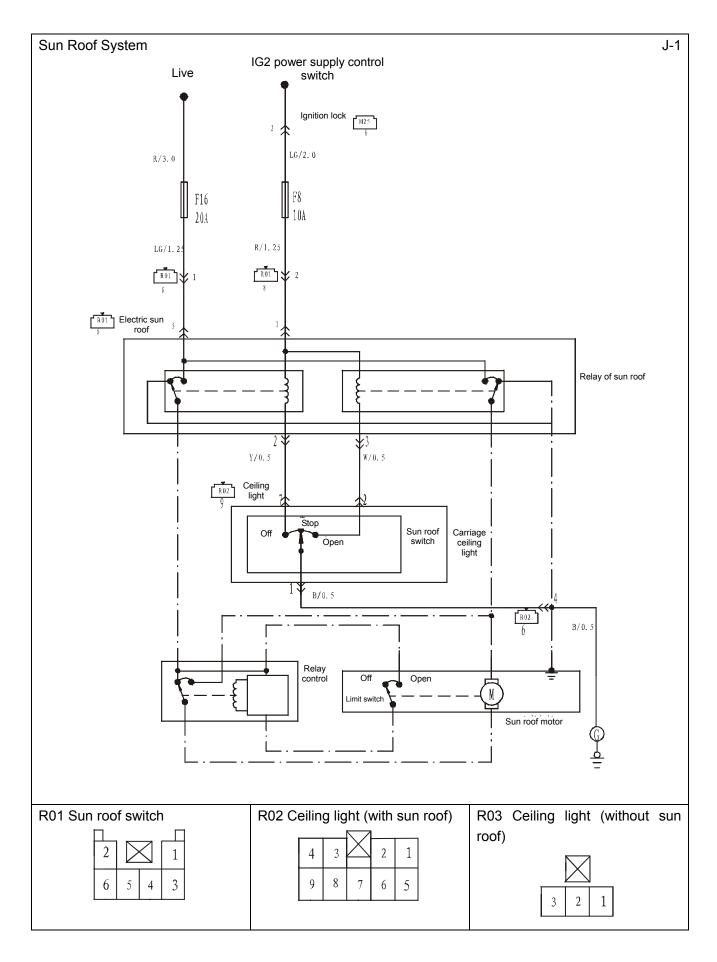






Electric Back Mirror System		I-
ndex of element position		
Element code	Element name	
D3	Left back mirror motor	
D5	Right back mirror motor	
D2	Regulating switch of back mirror	
Connector		
MD02		
MD03		
Ground point		
06		

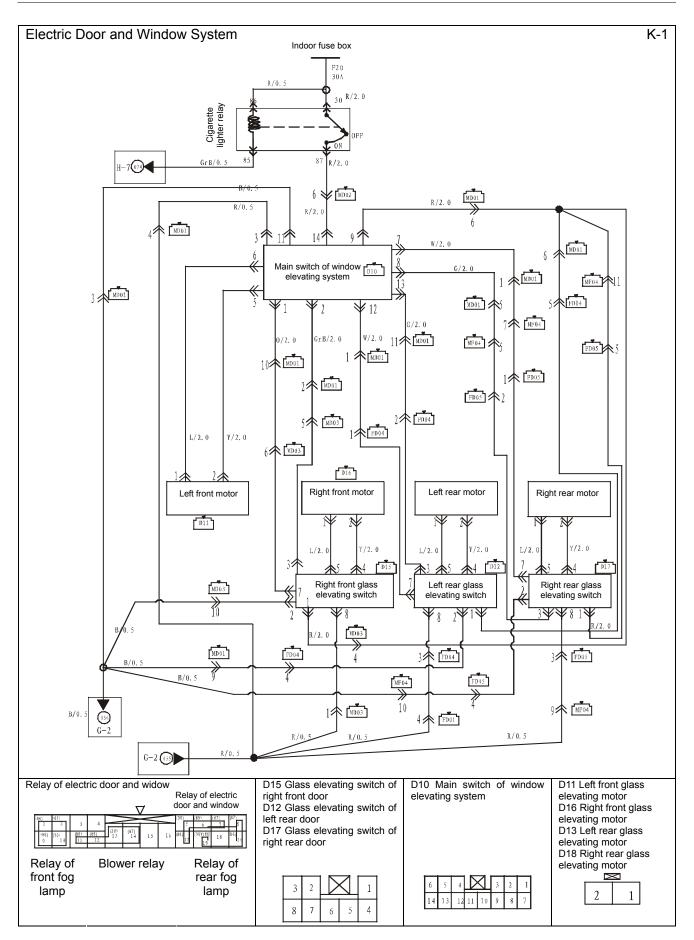




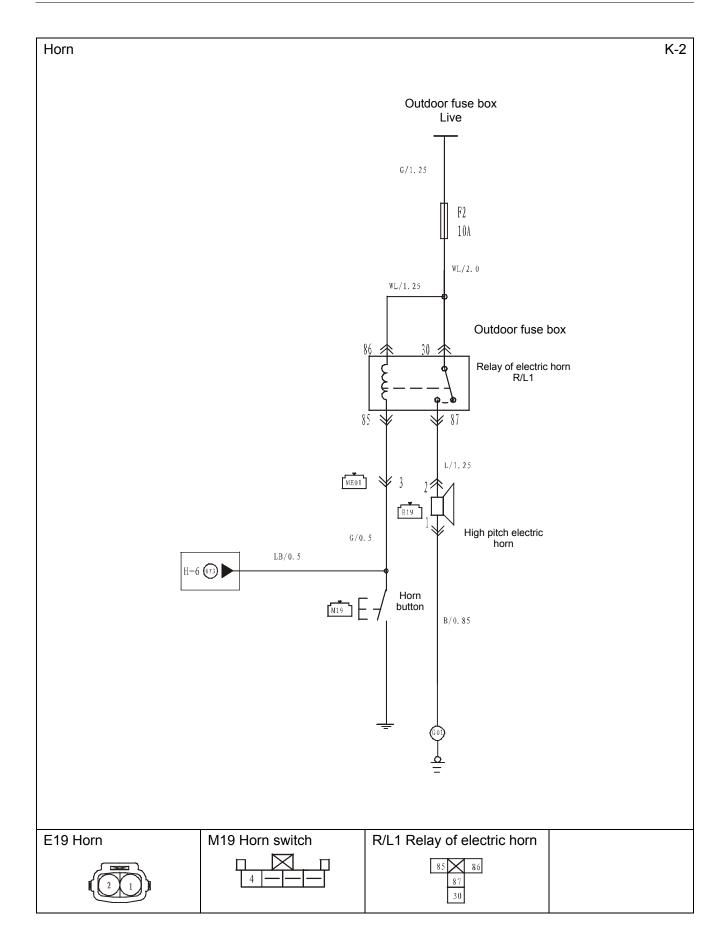


Sun Roof System		J-2
Index of element position		
Element code R01 R02 R03	Element name Sun roof switch Ceiling light (with sun roof) Ceiling light (without sun roof)	
Ground point G		

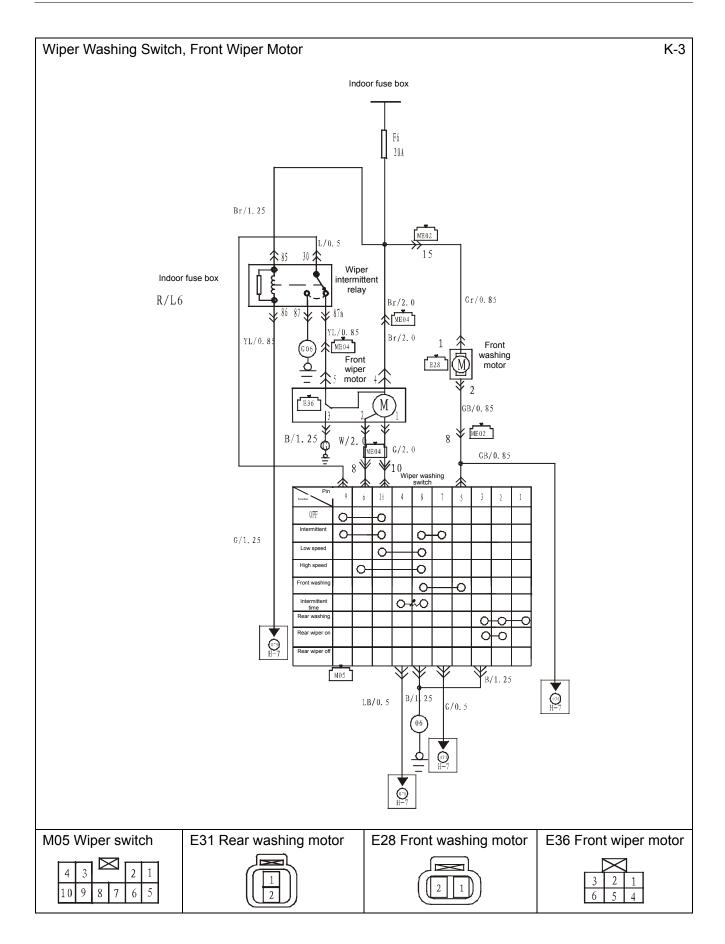




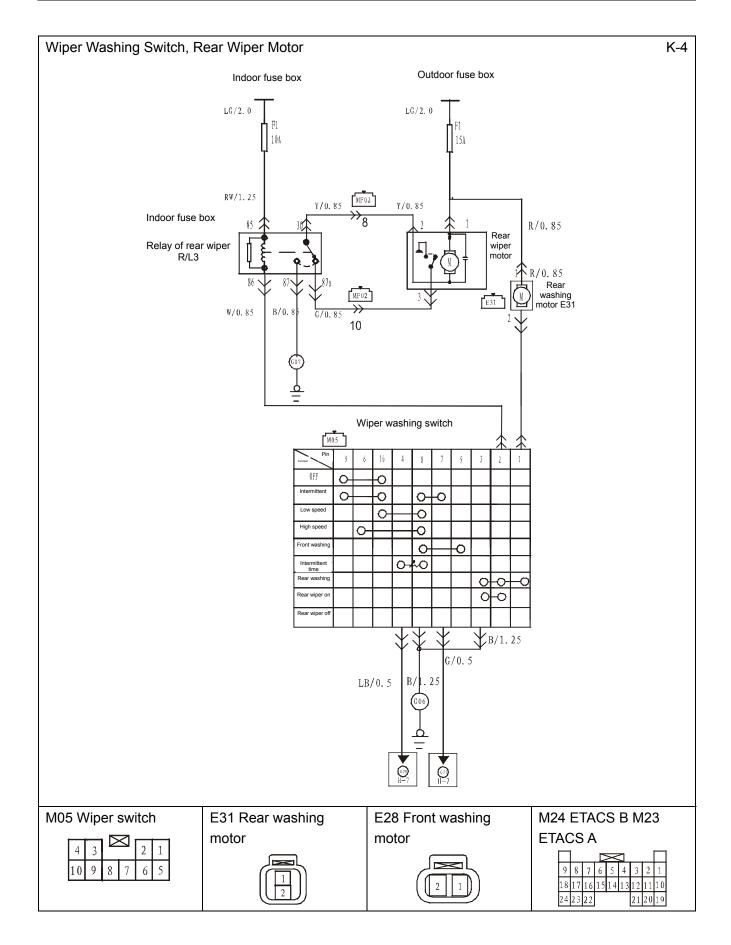








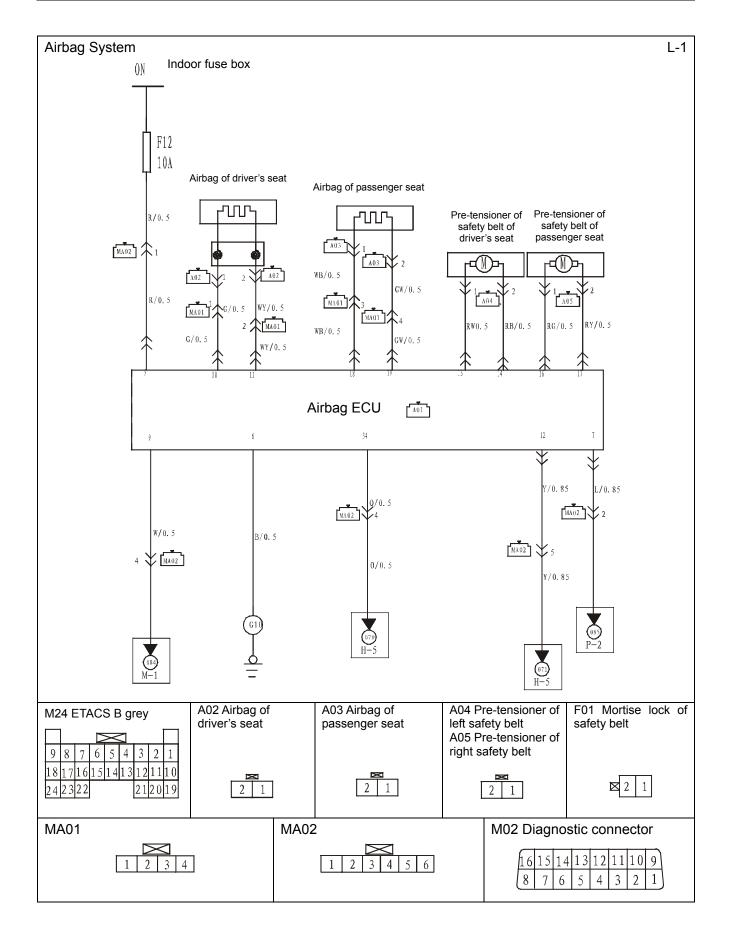






	orn, Wiper Washing switch and Wiper Motor K-5
dex of element position	
Element code	Element name
D10	Main switch of window elevating system
M19	Horn switch
E31	Rear washing motor
E28	Front washing motor
M05	Wiper motor
E19	Horn
D15	Glass elevating switch of right front door
D12	Glass elevating switch of left rear door
D17	Glass elevating switch of right rear door
D11	Glass elevating switch of left front door
D16	Glass elevating switch of right front door
D13	Glass elevating switch of left rear door
D18	Glass elevating switch of right rear door
E36	Front wiper motor
R/L1	Relay of electric horn
M24	ETACS B
M23	ETACS A
Connector	
MD01	
MD02	
MD03	
FD04	
FD05	
MF04	
ME01	
ME02	
MF02	
ME01	
Ground point	
G01	
G07	
G06	

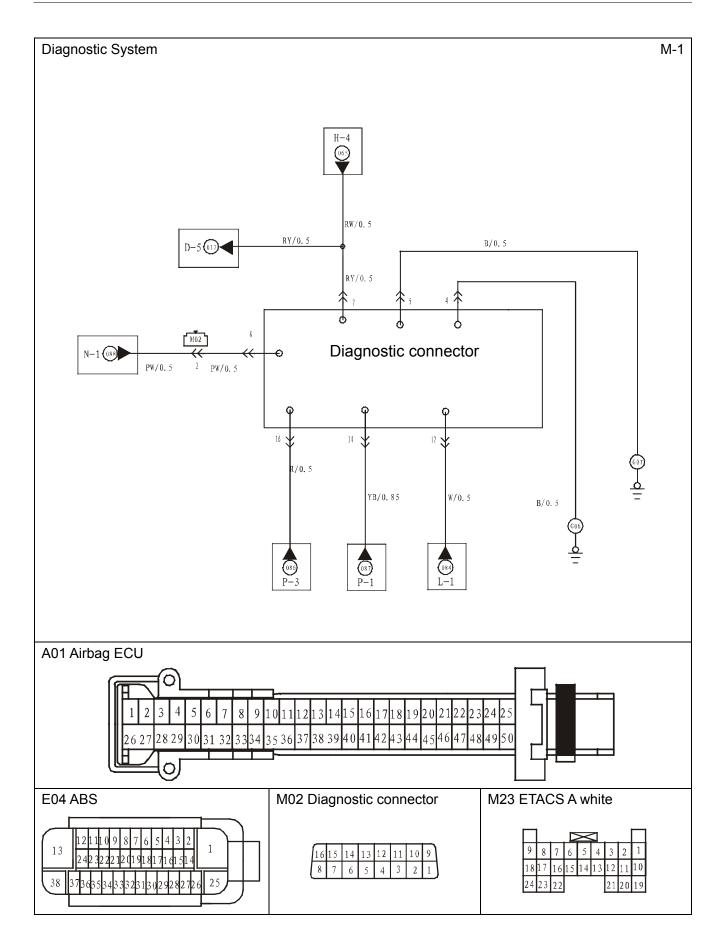






Element code M24	Element name ETACS B grey Airbag of driver's seat
M24	ETACS B grey
A 0.0	Airhag of driver's seat
A02	Albag of diver 3 seat
A03	Airbag of passenger seat
A04	Pre-tensioner of left safety belt
A05	Pre-tensioner of right safety belt
F01	Mortise lock of safety belt
M02	Diagnostic connector
Connector	
MA01	
MA02	
Ground point	
10	

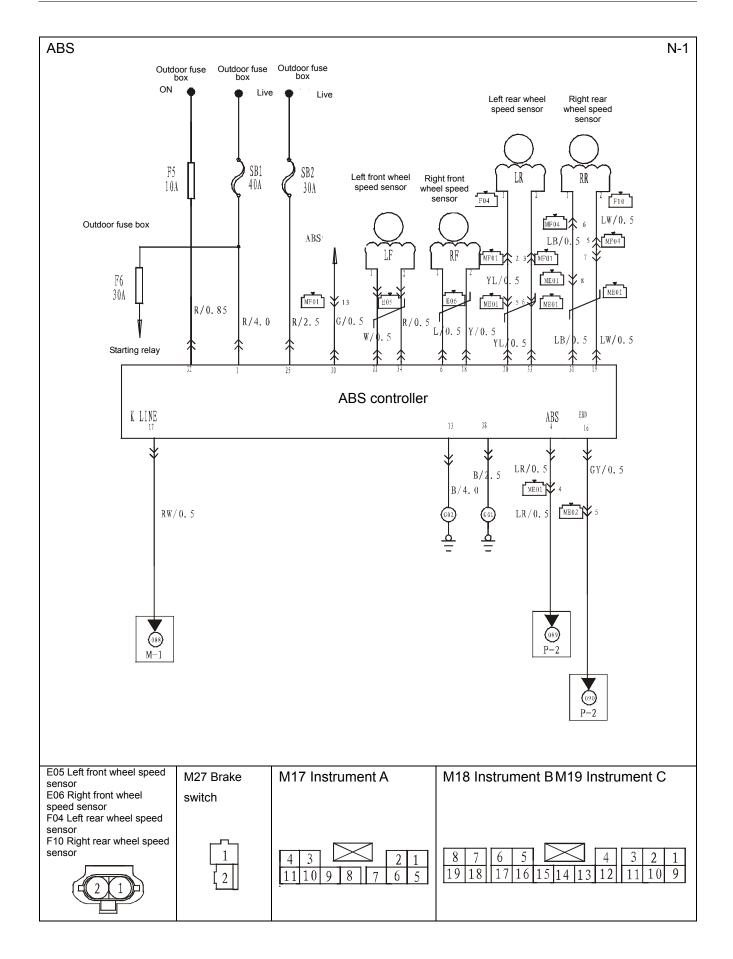




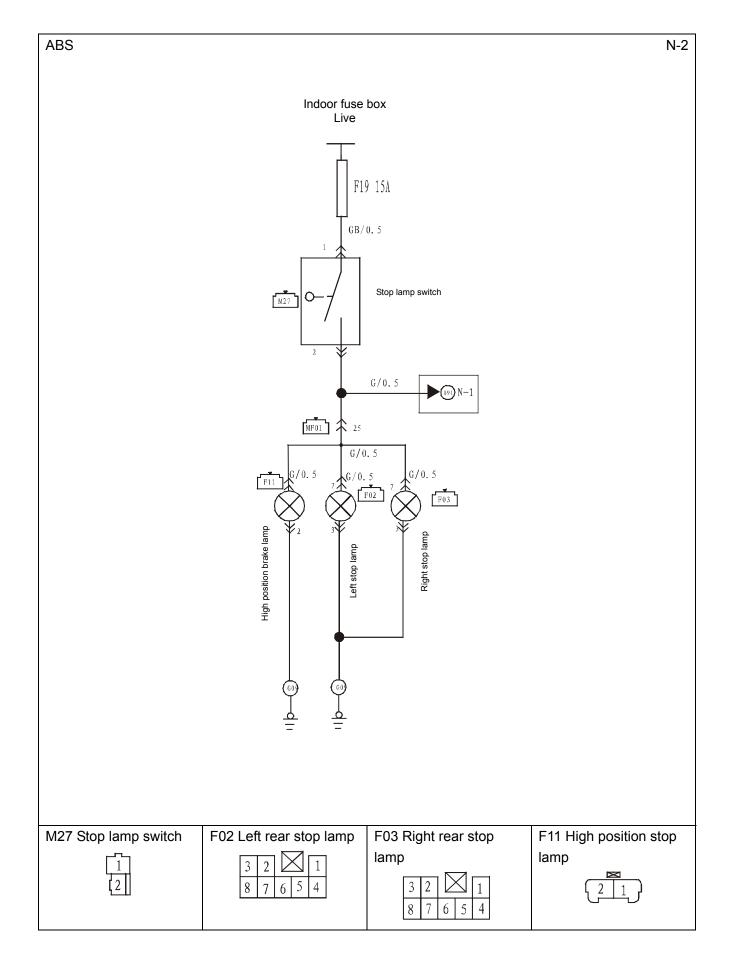


Diagnostic System		M-2
Index of element position		
Element code M02	Element name Diagnostic connector	
Ground point G06 G07		





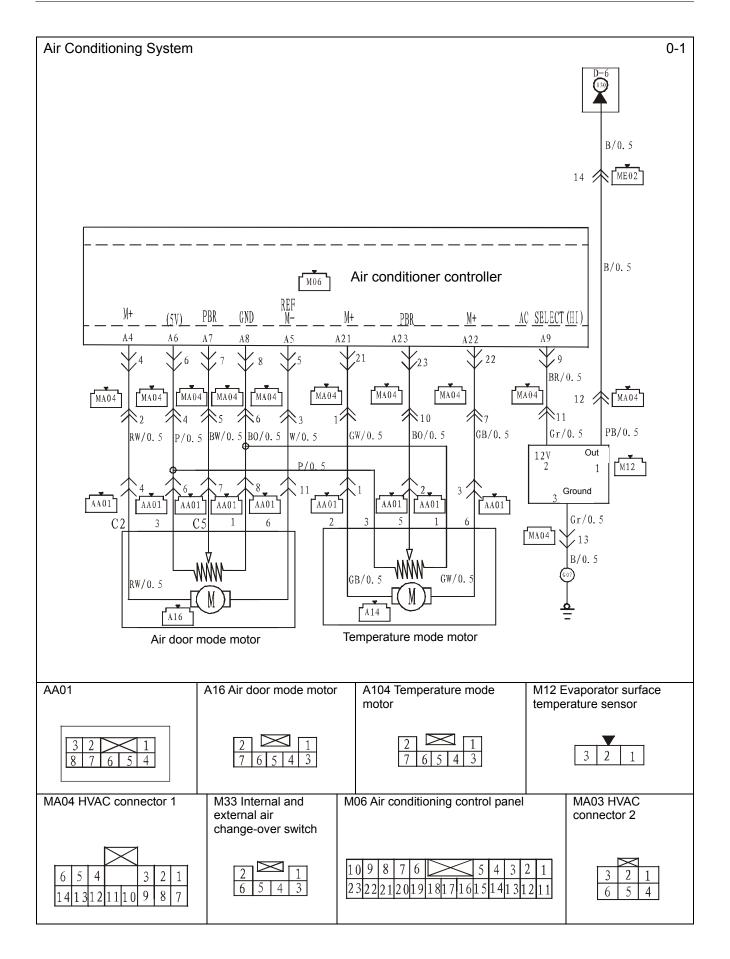




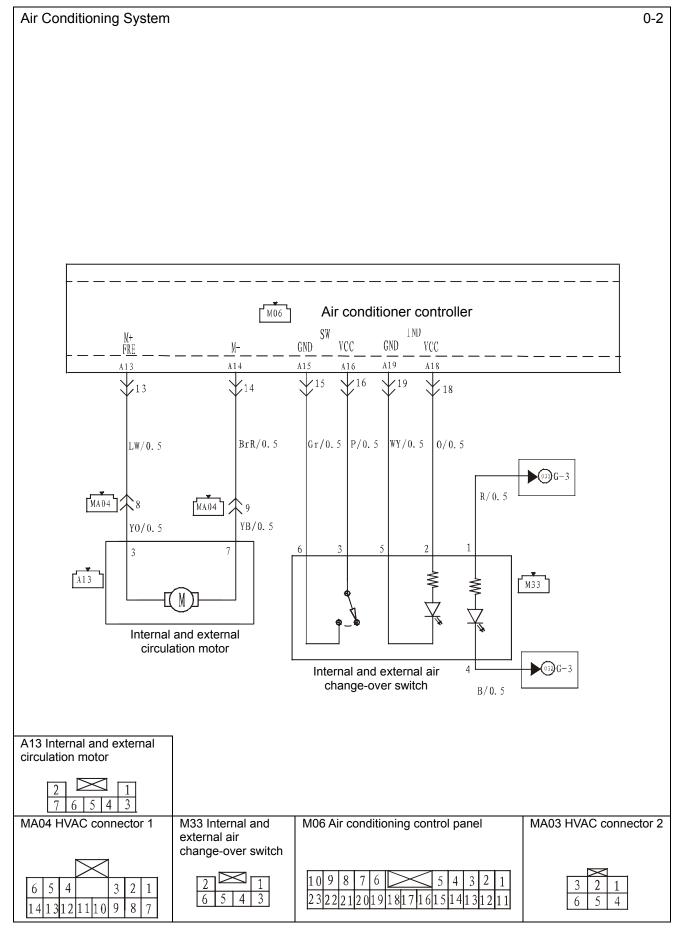


ABS		N-3
Index of element position		
Element code	Element name	
E04	ABS module	
F04	Left rear wheel speed sensor	
F10	Right rear wheel speed sensor	
E05	Left front wheel speed sensor	
E06	Right front wheel speed sensor	
F02	Left rear combination light	
F03	Right rear combination light	
F11	High position stop lamp	
M27	Stop lamp switch	
Connector		
MF01		
ME01		
ME02		
MF04		
Ground point		
G01		
G02		
G09		

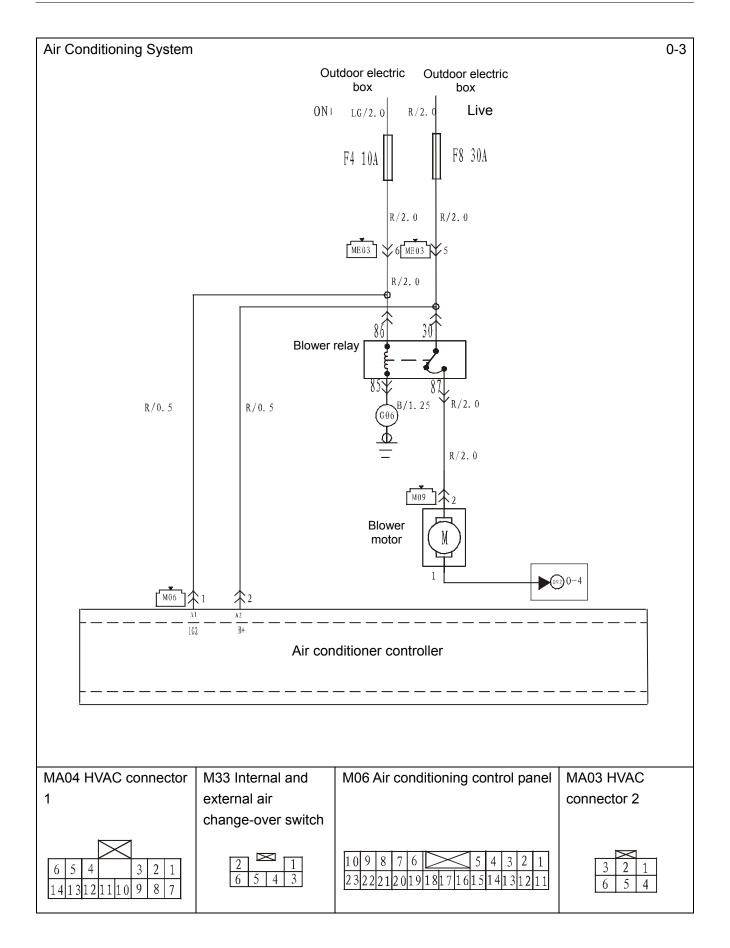




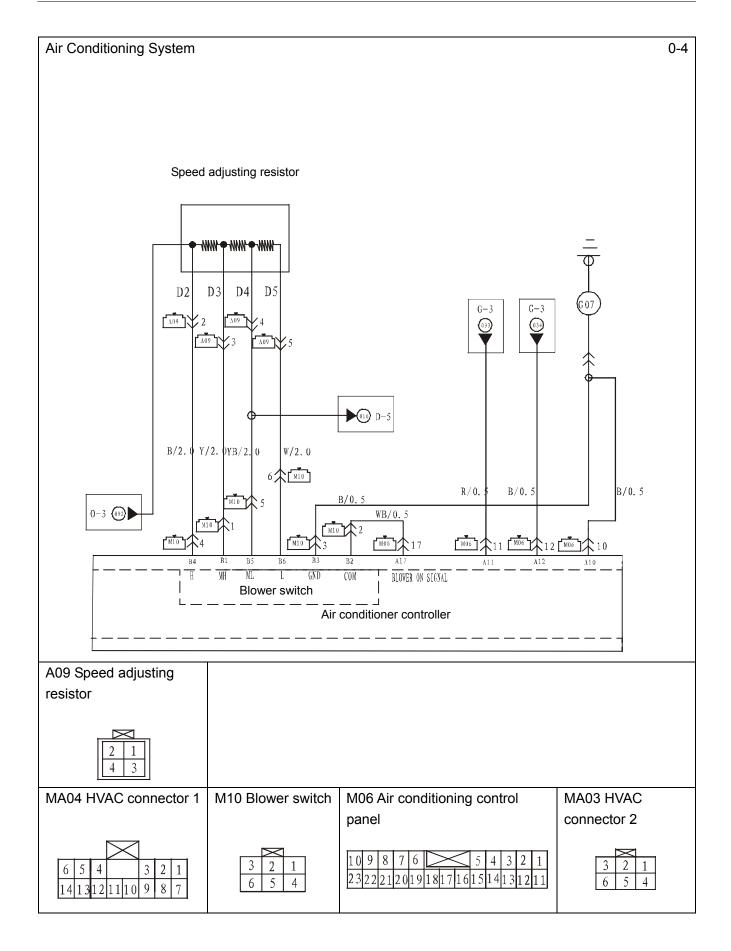








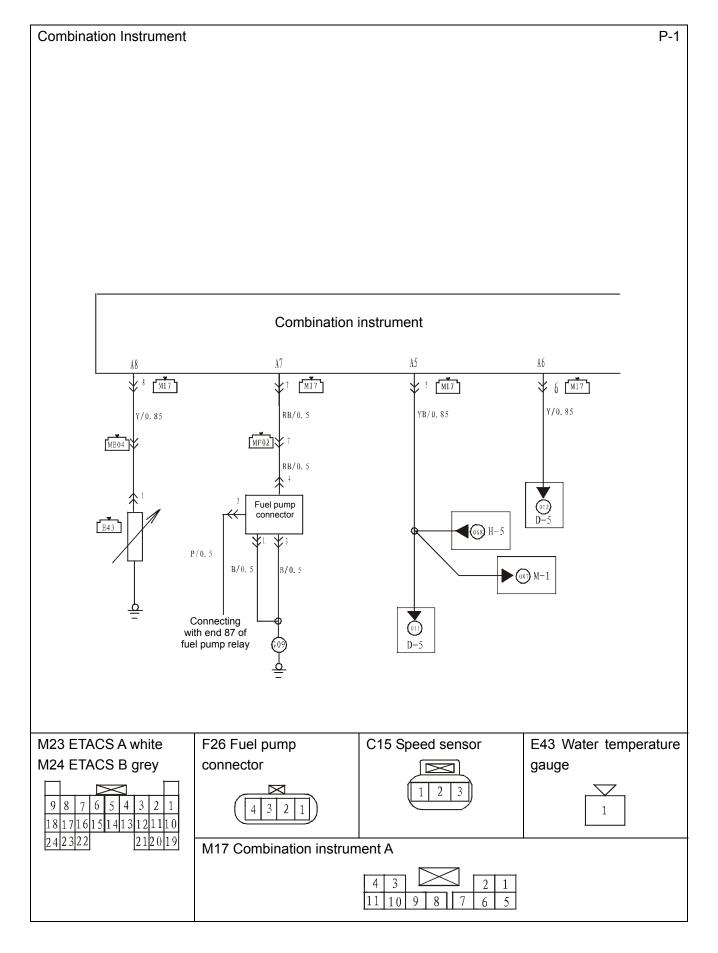




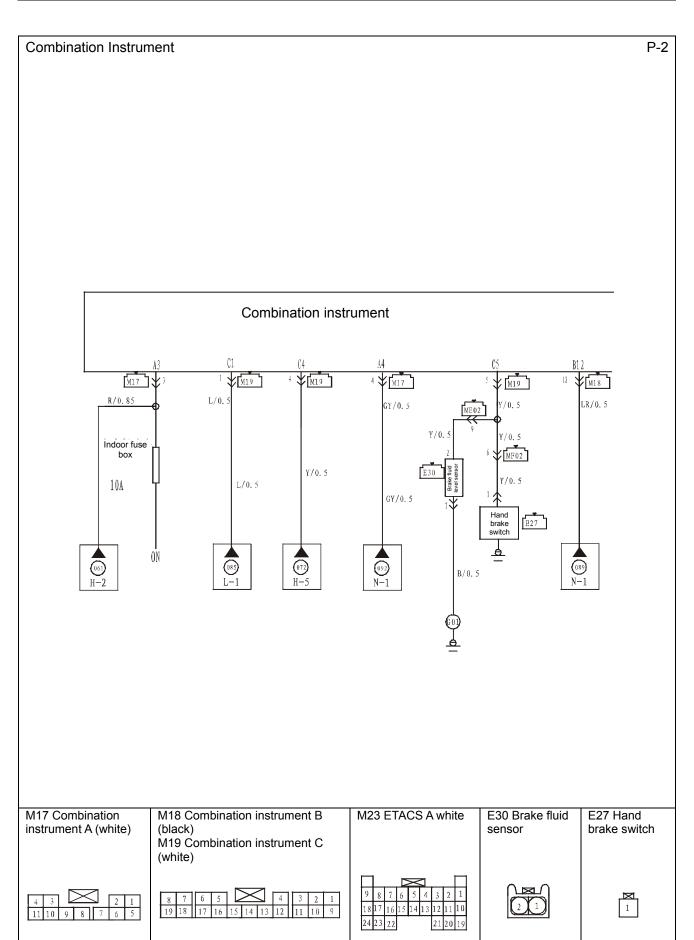


x of element position Element code		
Element code		
	Element name	
M06	Air conditioning panel	
A16	Air door mode motor	
A14	Temperature mode motor	
M12	Evaporator surface temperature sensor	
M33	Internal and external air change-over switch	
A13	Internal and external air circulation motor	
M10	Blower switch	
A09	Speed adjusting resistor	
Connector		
MA03		
MA04		
AA01		
Ground point G07		

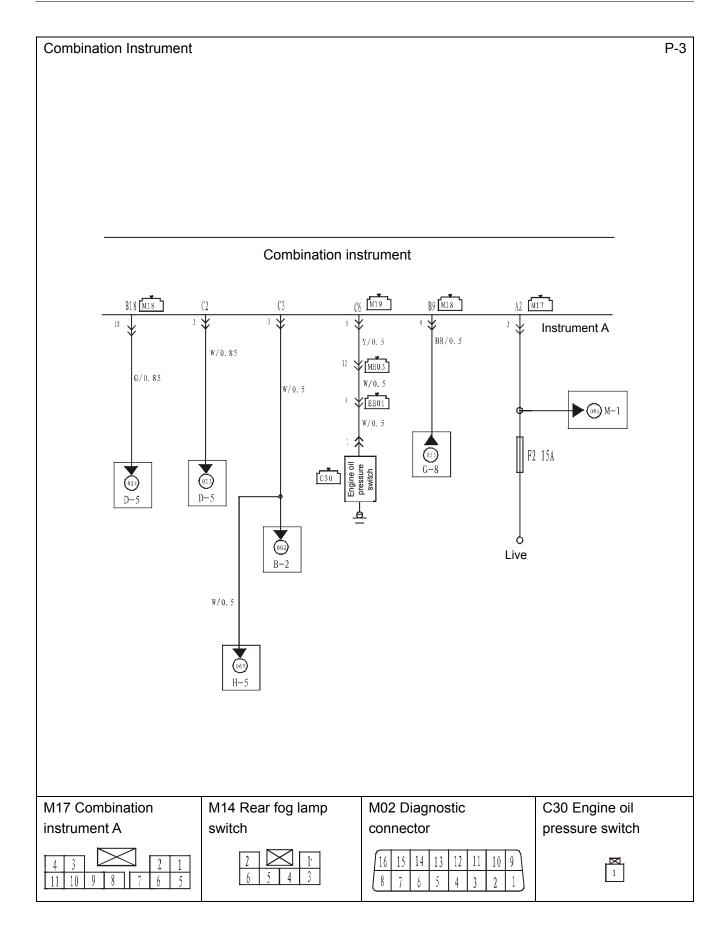




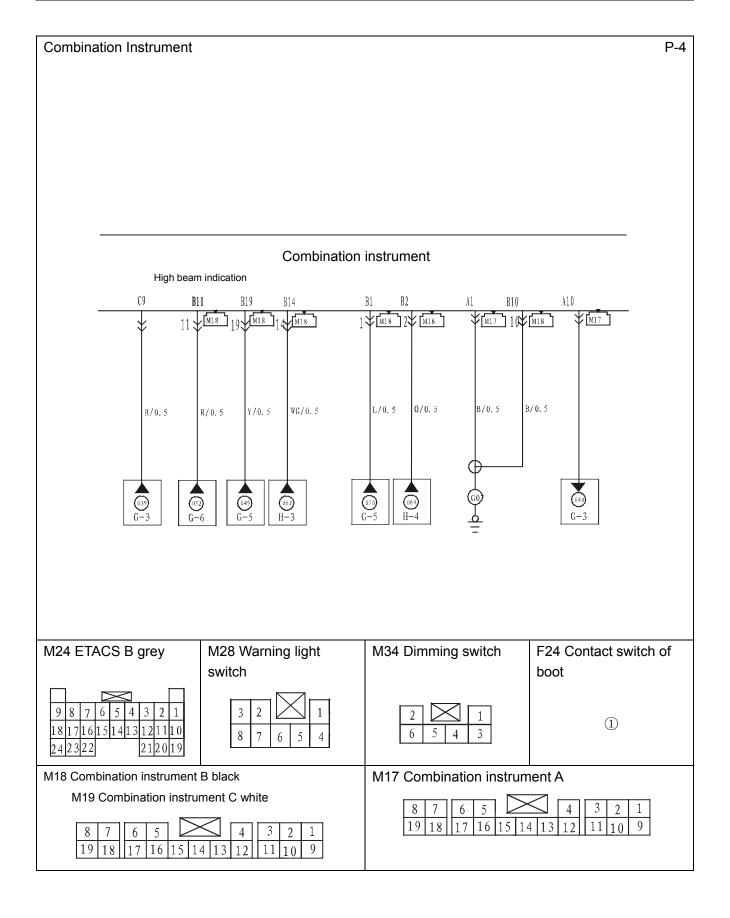














mbination Instrument		Р
ex of element position		
Element code	Element name	
E30	Brake fluid level sensor	
E27	Hand brake switch	
C15	Wheel speed sensor	
F26	Fuel pump connector	
M17	Combination instrument A (white)	
M18	Combination instrument B (black)	
M19	Combination instrument C (white)	
C30	Engine oil pressure sensor	
E43	Water temperature gauge	
M34	Dimming switch	
Connector		
ME04		
ME02		
MF02		
ME03		
EE01		
Ground point		
G09		
G01		
G07		



Contents for Component Position

Main Wire Harness	1
Engine Compartment Wire Harness I	6
Engine Compartment Wire Harness II	7
Controller Wire Harness	12
Right Chassis Wire Harness	15
Left Chassis Wire Harness	17
Left Front Door Wire Harness	21
Right Front Door Wire Harness	22
Left Rear Door Wire Harness	24
Right Rear Door Wire Harness	25
Ceiling Wire Harness	26
Ground Wire Harness	27
Airbag Wire Harness	29
Air Conditioner Wire Harness	30

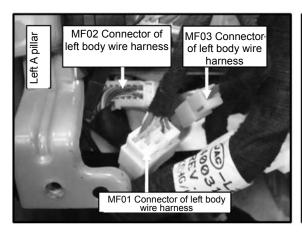


Main Wire Harness

Main wire harness (1)



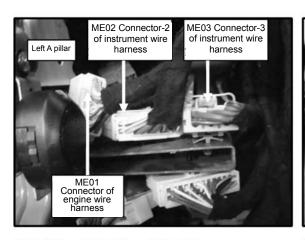
M02



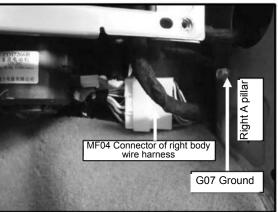


MF01 MF02 MF03

ME04



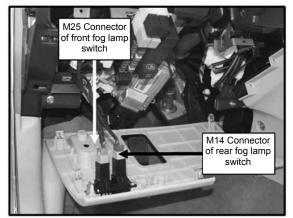
ME01 ME02 ME03



MF04 G07

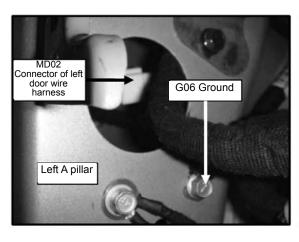


Main wire harness (2)

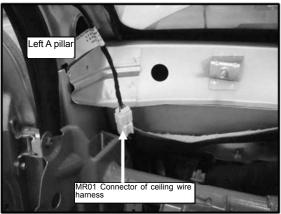




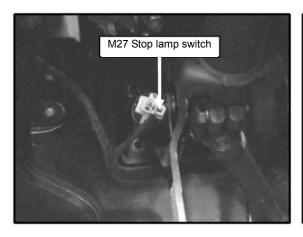
M25 M14



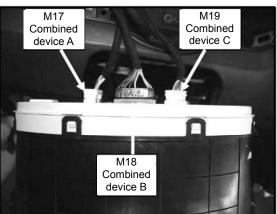
M12



MD02 G06



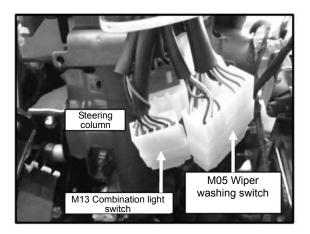
MR01



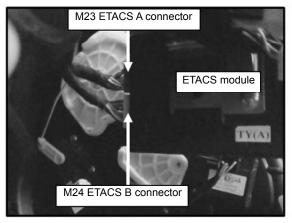
M27 M17 M18 M19

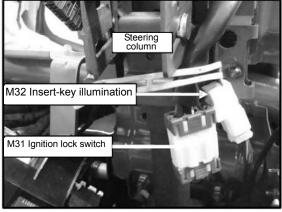


Main wire harness (3)



M05 M13

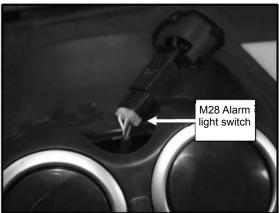




M23 M24



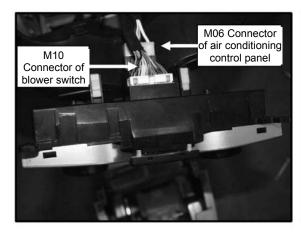
M32 M31

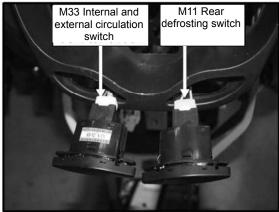


M07 M28



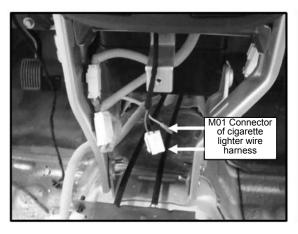
Main wire harness (4)

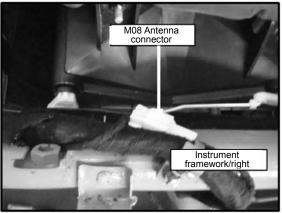




M06 M10

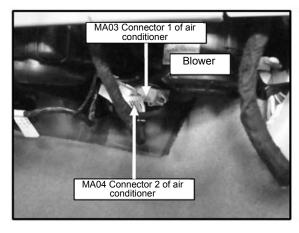
M33 M11





M01

M08



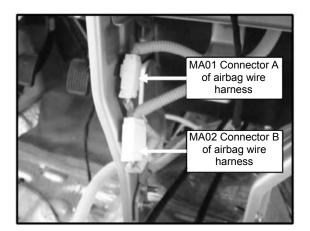


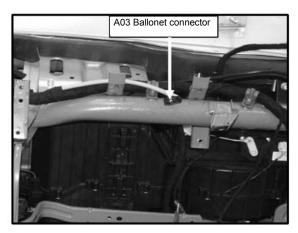
MA03 MA04

MD03



Main wire harness (5)



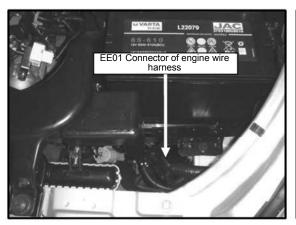


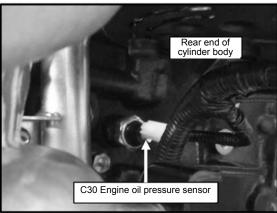
MA02 MA01 A03



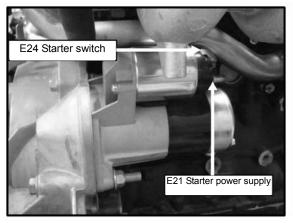
Engine Compartment Wire Harness I

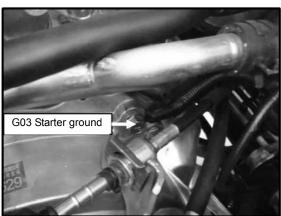
Engine compartment wire harness I (1)



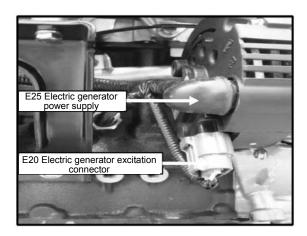


EE01 C30





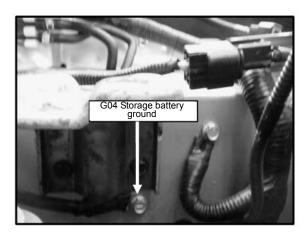
E24 E21 G03



E25 E20



Engine compartment wire harness I (2)

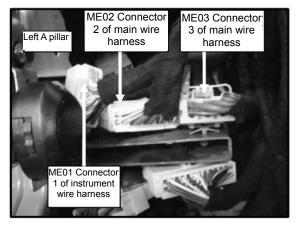


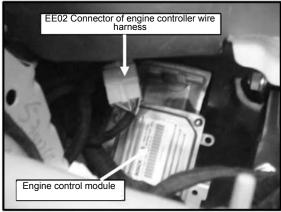
G04



Engine Compartment Wire Harness II

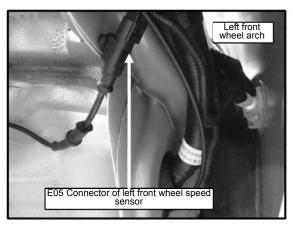
Engine compartment wire harness II (1)

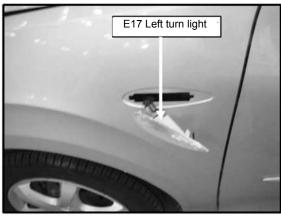




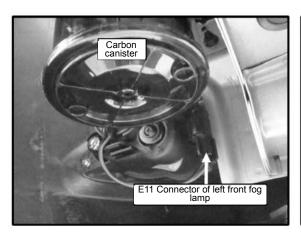
ME01 ME02 ME03

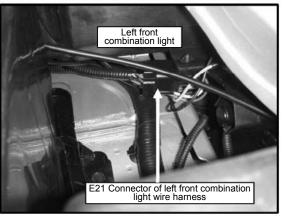
EE02





E05 E17



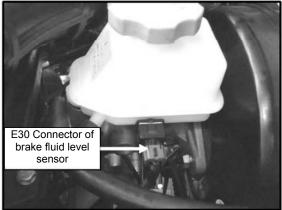


E11 E21



Engine compartment wire harness II (2)

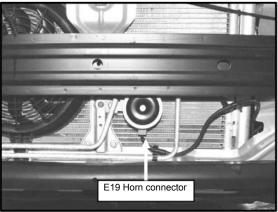




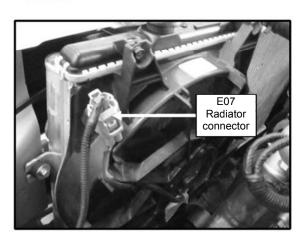
E04



E30



EE01

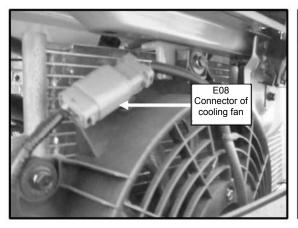


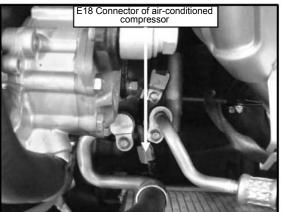
E19

E07

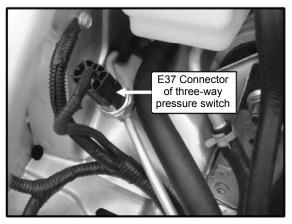


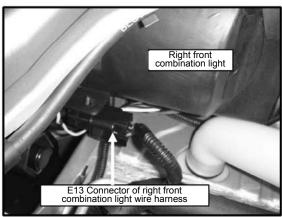
Engine compartment wire harness II (3)



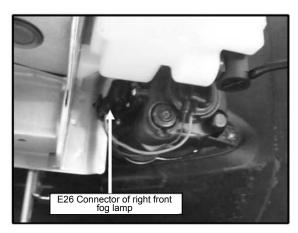


E08 E18





E37 E13

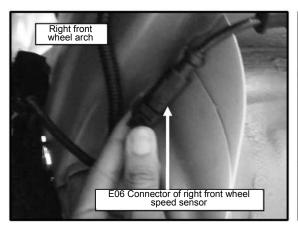


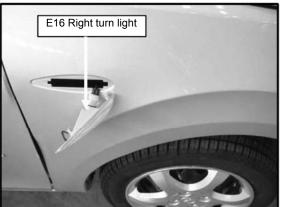


E26 E28

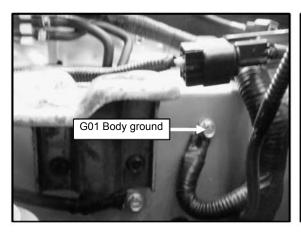


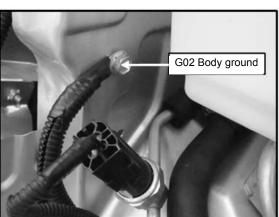
Engine compartment wire harness II (4)





E06 E16



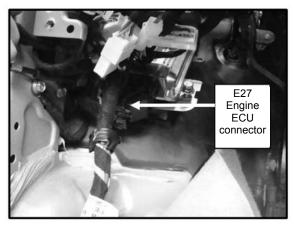


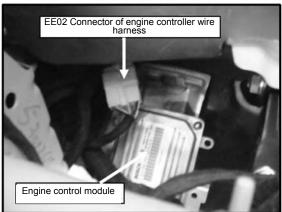
G01 G02



Controller Wire Harness

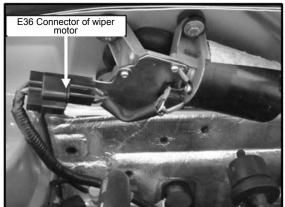
Controller wire harness (1)



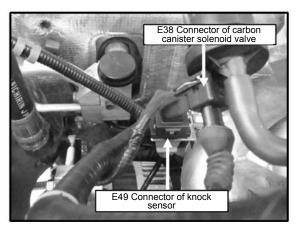


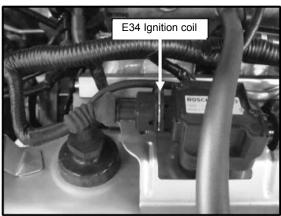
E27 EE02





ME04 E36

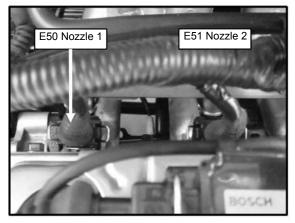


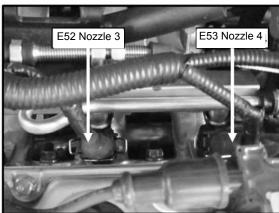


E38 E49 E34

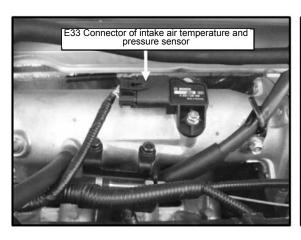


Controller wire harness (2)

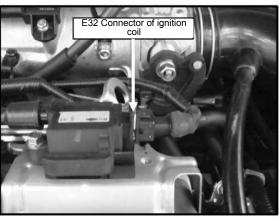




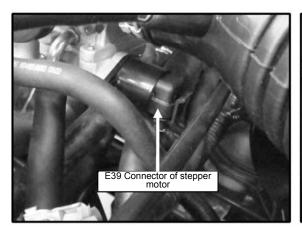
E50 E51

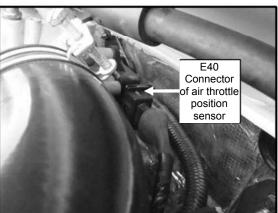


E52 E53



E33 E32

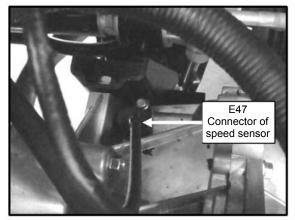


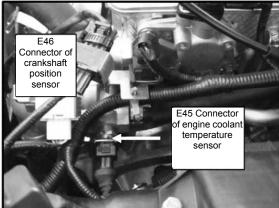


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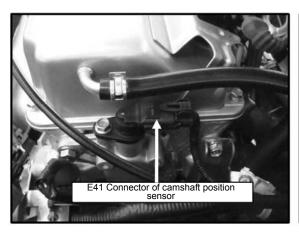


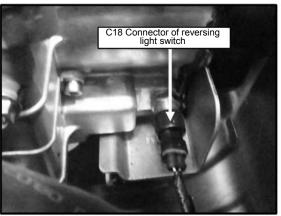
Controller wire harness (3)



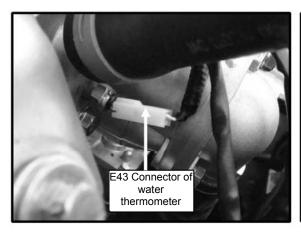


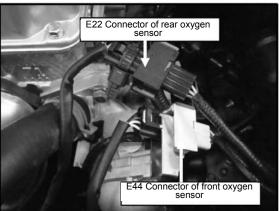
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E41 C18



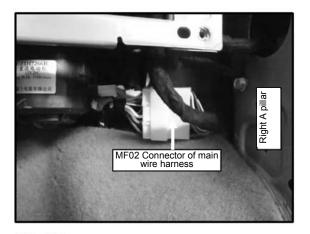


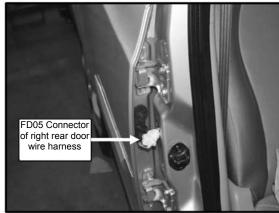
E43 E44 E22



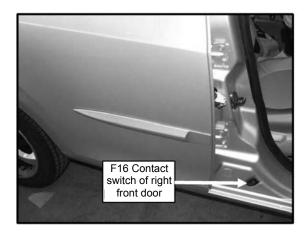
Right Chassis Wire Harness

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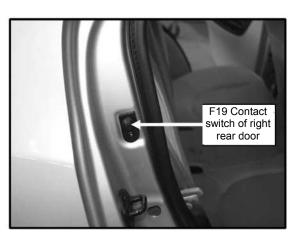




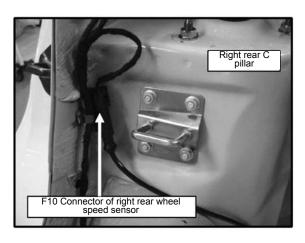
MF02



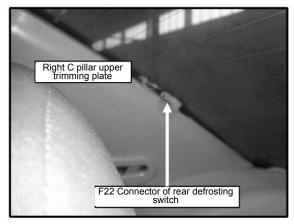
FD05



F16



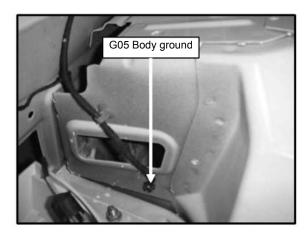
F19



F10 F22



Right chassis wire harness (2)

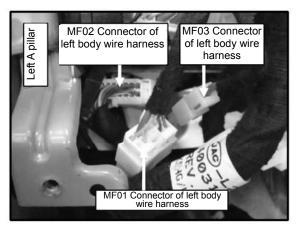


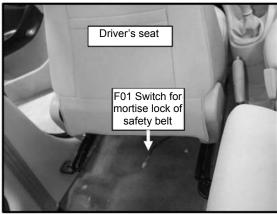
G05



Left Chassis Wire Harness

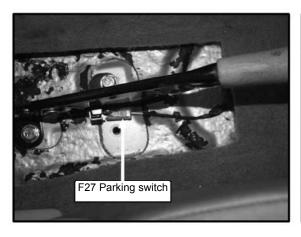
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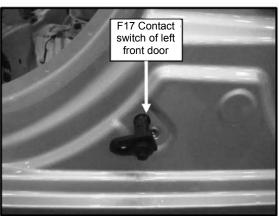




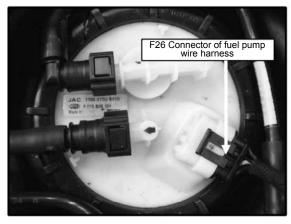
MF01 MF02 MF03

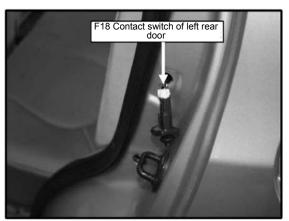
F01





F27 F17

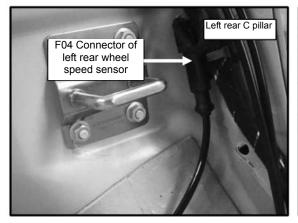


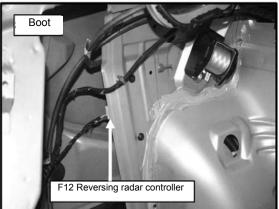


F26 F18

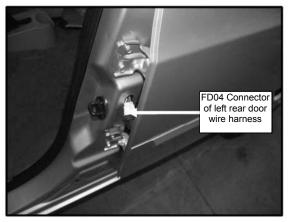


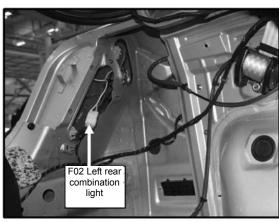
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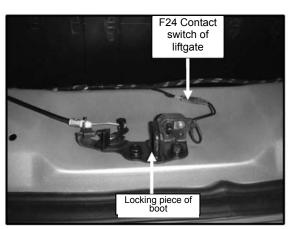


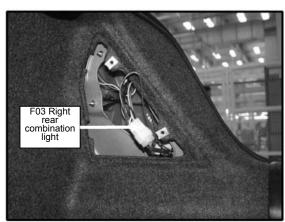
F04 F12





FD04 F02

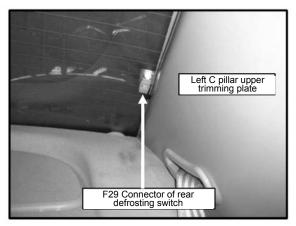




F24 F03

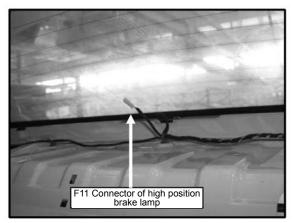


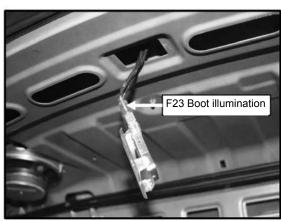
Left chassis wire harness (3)



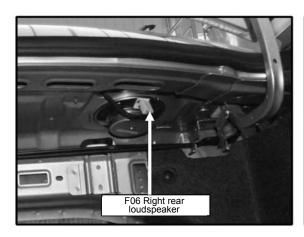


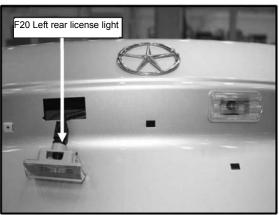
F29 F05





F11 F23



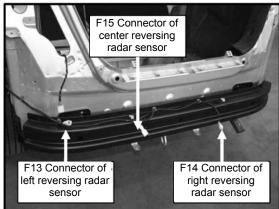


F06 F20



Left chassis wire harness (4)





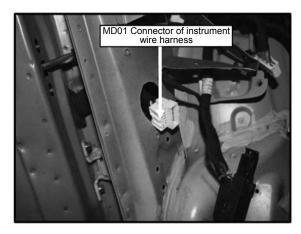
F21 F13 F14 F15



G09

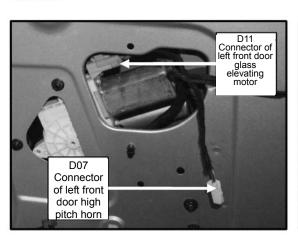


Left Front Door Wire Harness

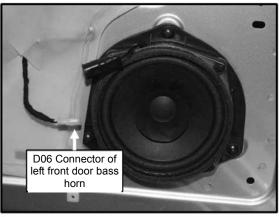




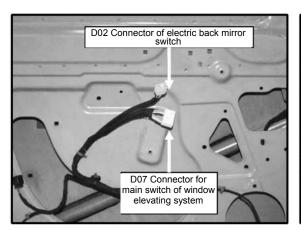
MD01



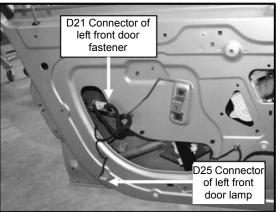
D03



D11 D07



D06



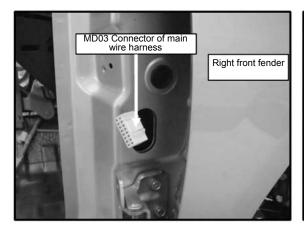
D07 D02

D25 D21



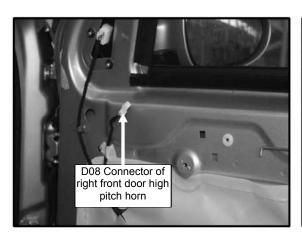
Right Front Door Wire Harness

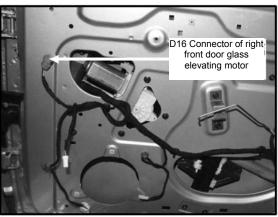
Right front door wire harness (1)



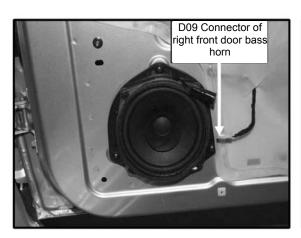


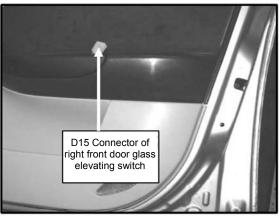
MD03 D05





D08 D16

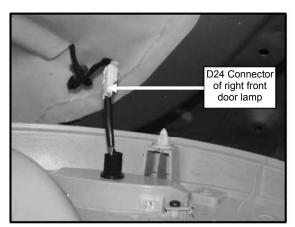


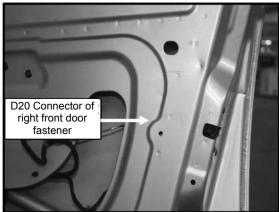


D09 D15



Right front door wire harness (2)

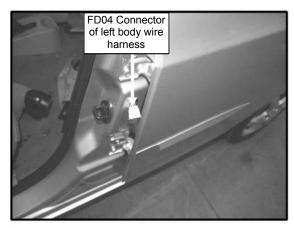




D24 D20

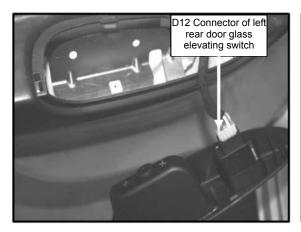


Left Rear Door Wire Harness





FD04 D13



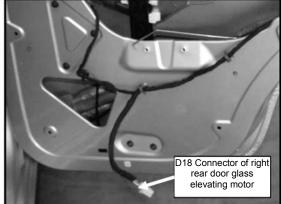


D12 D23



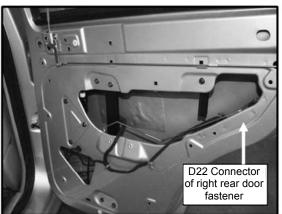
Right Rear Door Wire Harness





FD05 D18



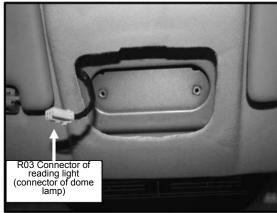


D17 D22



Ceiling Wire Harness



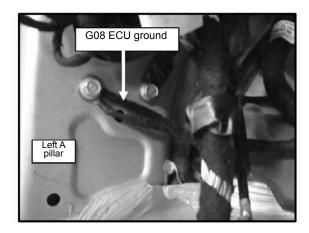


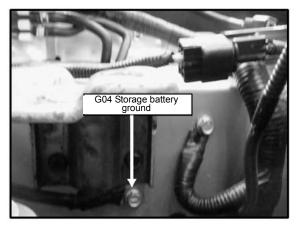
MR01 R03



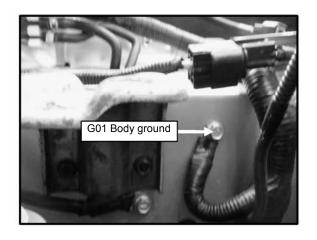
Ground Wire Harness

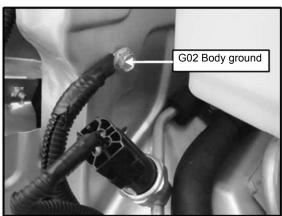
Ground wire harness (1)



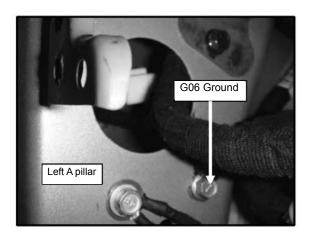


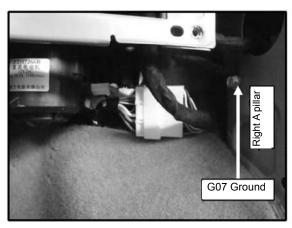
G08 G04





G01 G02

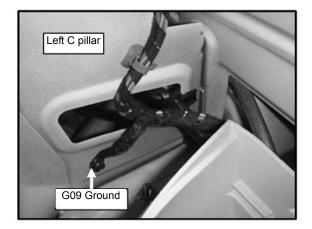


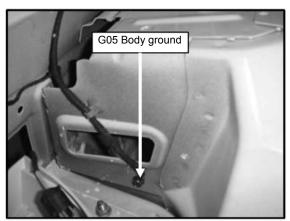


G06 G07

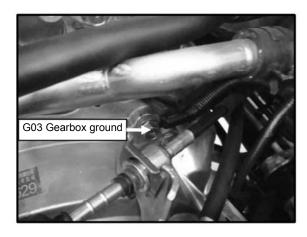


Ground wire harness (2)





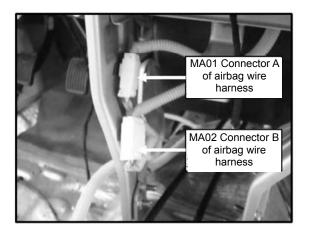
G09 G05

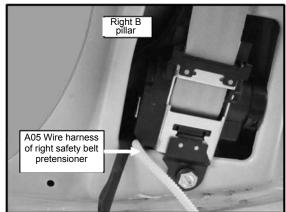


G03

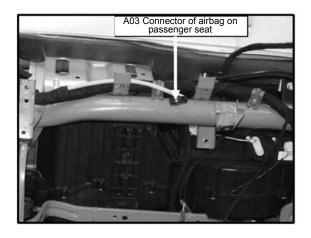


Airbag Wire Harness

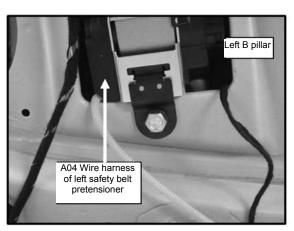




MA01 MA02



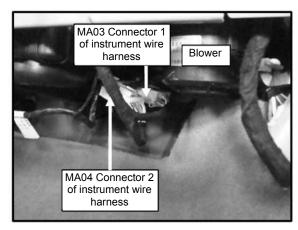
A05

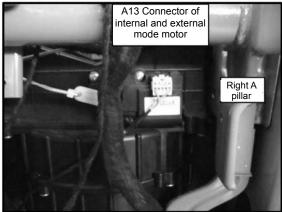


A03 A04

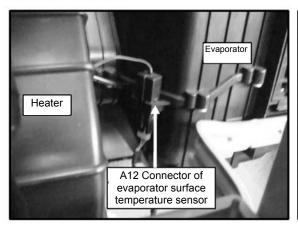


Air Conditioner Wire Harness

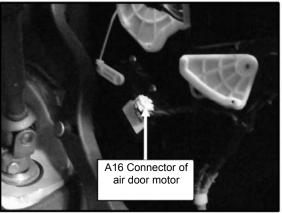




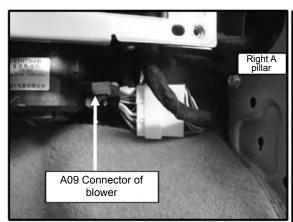
MA03 MA04

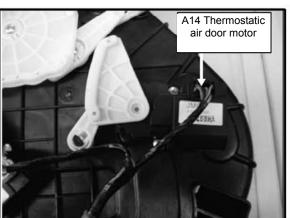


A13



A12 A16





A09 A14



Contents for Wire Harness Layout

Main Wire Harness	1
Engine Compartment Wire Harness I	3
Engine Compartment Wire Harness II	5
Controller Wire Harness	7
Right Chassis Wire Harness	9
Left Chassis Wire Harness	11
Left Front Door Wire Harness	13
Right Front Door Wire Harness	14
Left Rear Door Wire Harness	15
Right Rear Door Wire Harness	16
Ceiling Wire Harness	17
Airbag Wire Harness	18
Air Conditioner Wire Harness	19



Main Wire Harness

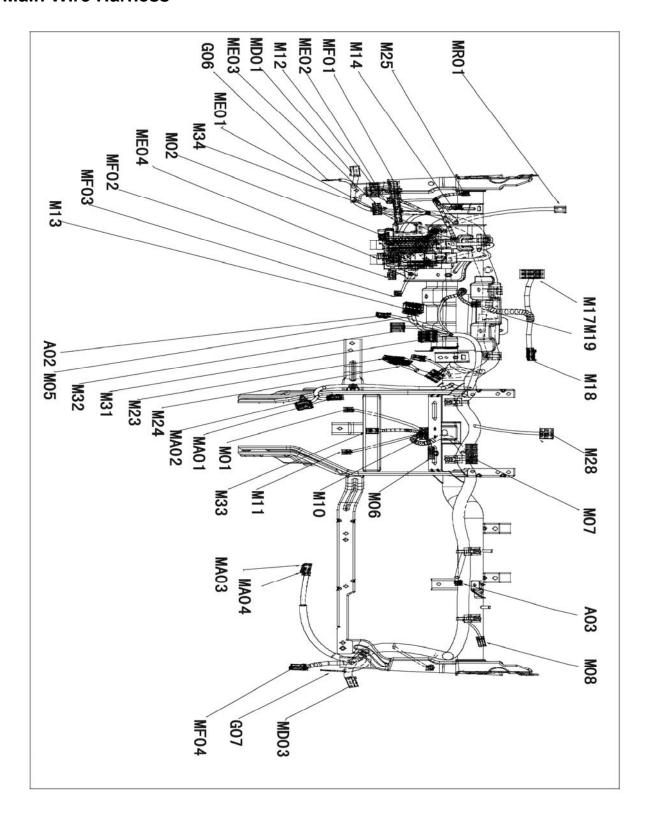




Illustration of Main Wire Harness

M01	Connector of cigarette lighter wire harness	M33	Internal and external circulation switch
M02	Diagnostic connector	M34	Dimmer switch
M05	Combined switch (washing)	A02	Connector for wire harness of airbag on
M06	Air conditioning control panel		drivers seat
M07	CD player	A03	Connector for wire harness of airbag on
M08	Antenna		passenger seat
M10	Blower switch	MA01	Connector A of airbag wire harness
M11	Rear defrosting switch	MA02	Connector B of airbag wire harness
M12	Buzzer	MA03	Connector 1 of air conditioner wire
M13	Combined switch (lamp)		harness
M14	Rear fog lamp switch	MA04	Connector 2 of air conditioner wire
M17	Combined device A		harness
M18	Combined device B (blue)	MD01	Connector of left front door wire harness
M19	Combined device C	MD02	Connector of left front door wire harness
M23	ETACS A	MD03	Connector of right front door wire harness
M24	ETACS B	ME01	Connector 01 of engine wire harness
M25	Front fog lamp switch	ME02	Connector 02 of engine wire harness
M28	Alarm light switch	ME03	Connector 03 of engine wire harness
M31	Ignition lock	ME04	Connector of engine controller wire
M32	Insert-key illumination		harness
		MF01	Connector of left body wire harness
		MF02	Connector of left body wire harness
		MF03	Connector of left body wire harness
		MR01	Connector of ceiling wire harness
		G06	Ground of main wire harness
		G07	Ground
1			



Engine Compartment Wire Harness I

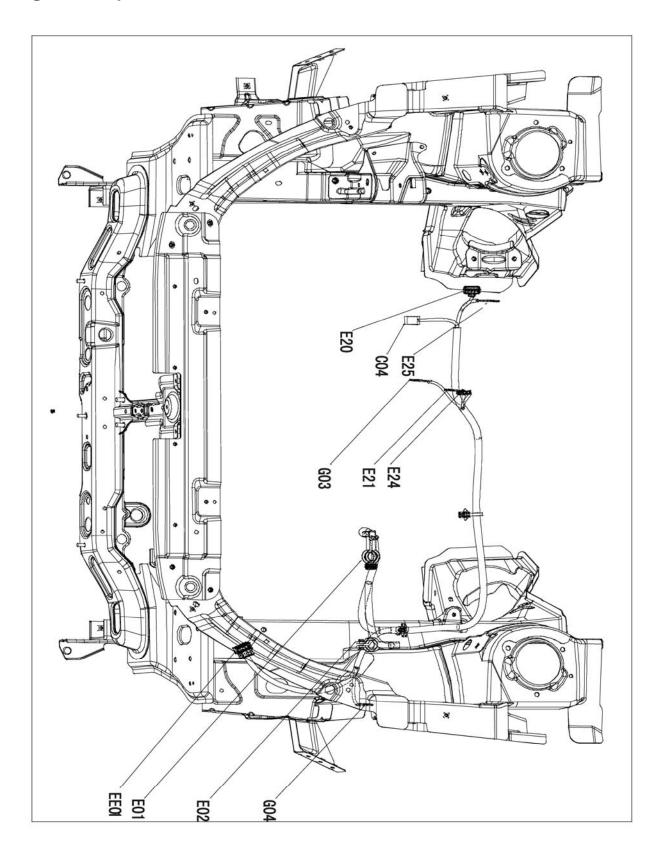




Illustration of Engine Compartment Wire Harness I

C04	Engine oil pressure sensor	E24	Starter switch
E01	Positive pole of storage battery	E25	Electric generator power supply
E02	Negative pole of storage battery	EE01	Connector of engine wire harness
E20	Engine excitation connector	G03	Starter ground
E21	Starter power supply	G04	Storage battery ground



Engine Compartment Wire Harness II

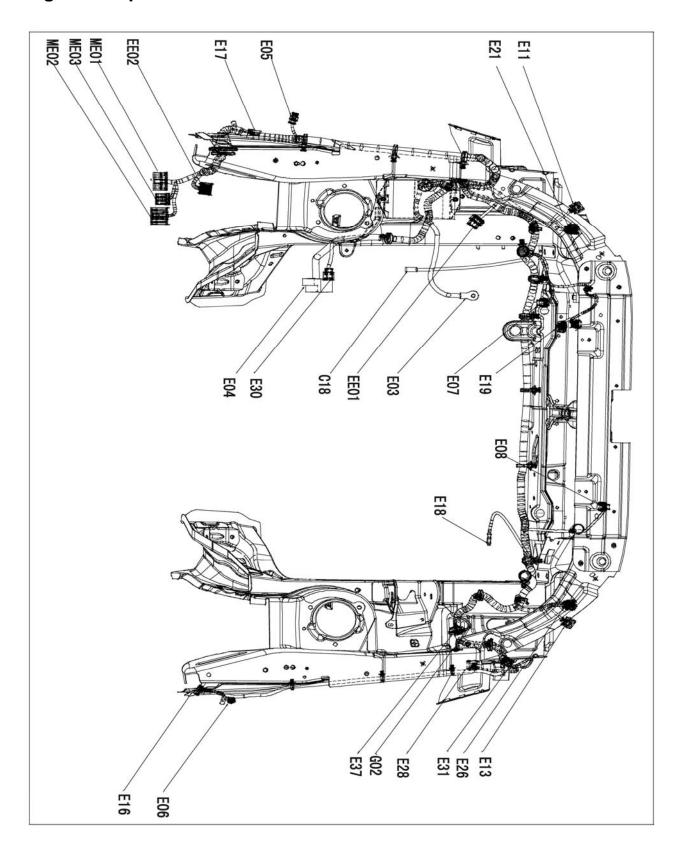




Illustration of Engine Compartment Wire Harness II

E03	Connector for the positive pole of power supply
E04	ABS ECU connector
E05	Connector of left front wheel speed sensor
E06	Connector of right front wheel speed sensor
E07	Connector of radiator fan
E11	Connector of left front fog lamp
E13	Right front combination light
E16	Right turn light
E17	Left turn light
E18	Connector of air-conditioned compressor
E19	Connector of high pitch horn
E21	Left front combination light
E26	Connector of right front fog lamp
E28	Connector of washing solution motor
E30	Brake fluid level sensor
E31	Connector of rear washing solution motor
E37	Connector of three-way pressure switch
EE01	Connector of engine wire harness
EE02	Connector of engine controller wire harness
ME01	Connector 01 of engine wire harness
ME02	Connector 02 of engine wire harness
ME03	Connector 03 of engine wire harness
G01	Body ground
G02	Body ground



Controller Wire Harness

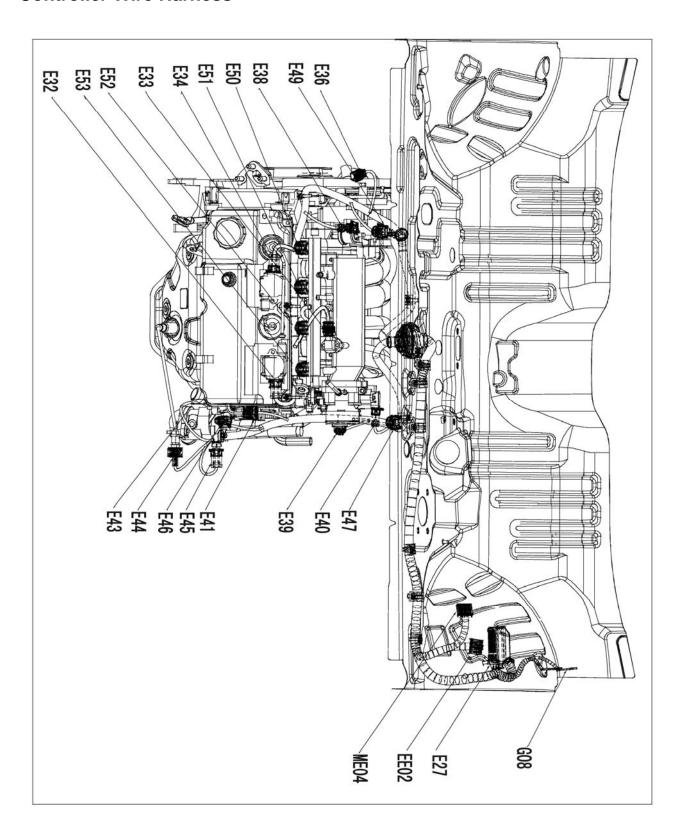




Illustration of Engine Controller Wire Harness

E22	Connector of rear oxygen sensor	E46	Connector of crankshaft position sensor
E27	Engine ECU connector	E47	Connector of speed sensor
E32	Ignition coil (Cylinder II, III)	E49	Connector of knock sensor
E33	Connector of intake air pressure and	E50	Nozzle 1
	temperature sensor	E51	Nozzle 2
E34	Ignition coil (Cylinder I, IV)	E52	Nozzle 3
E36	Connector of wiper motor	E53	Nozzle 4
E38	Carbon canister solenoid valve	EE02	Connector 01 of engine wire harness
E39	Connector of stepper motor	ME04	Connector 04 of instrument wire harness
E40	Connector of air throttle position sensor	G08	ECU ground
E41	Connector of camshaft position sensor		
E43	Connector of water thermometer		
E44	Connector of front oxygen sensor		



Right Chassis Wire Harness

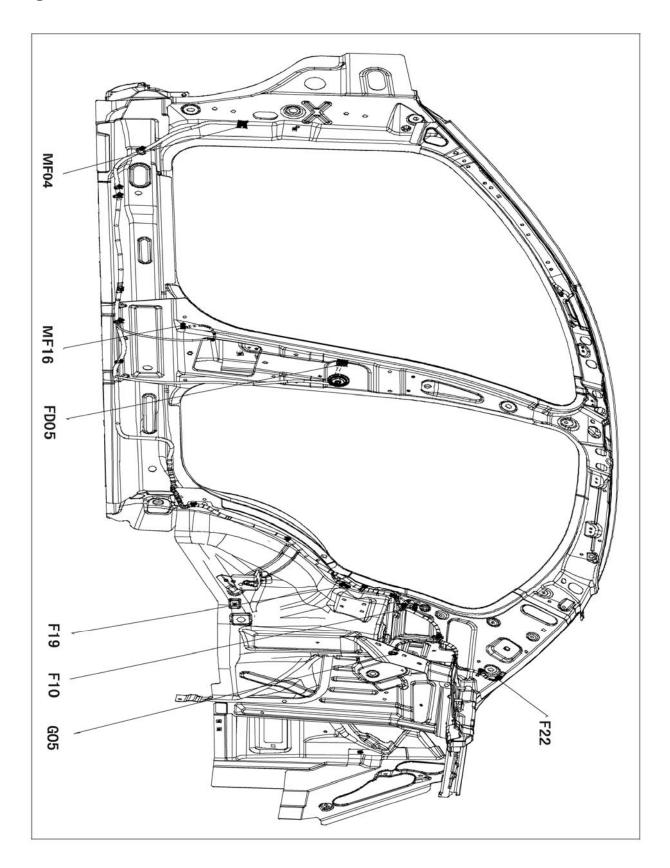




Illustration of Right Chassis Wire Harness

MF04	Connector of right body wire harness
FD05	Connector of right rear door wire harness
F10	Connector of right rear wheel speed sensor
F16	Contact switch of right front door
F19	Contact switch of right rear door
F22	Rear defrosting connector
G05	Body ground
1	



Left Chassis Wire Harness

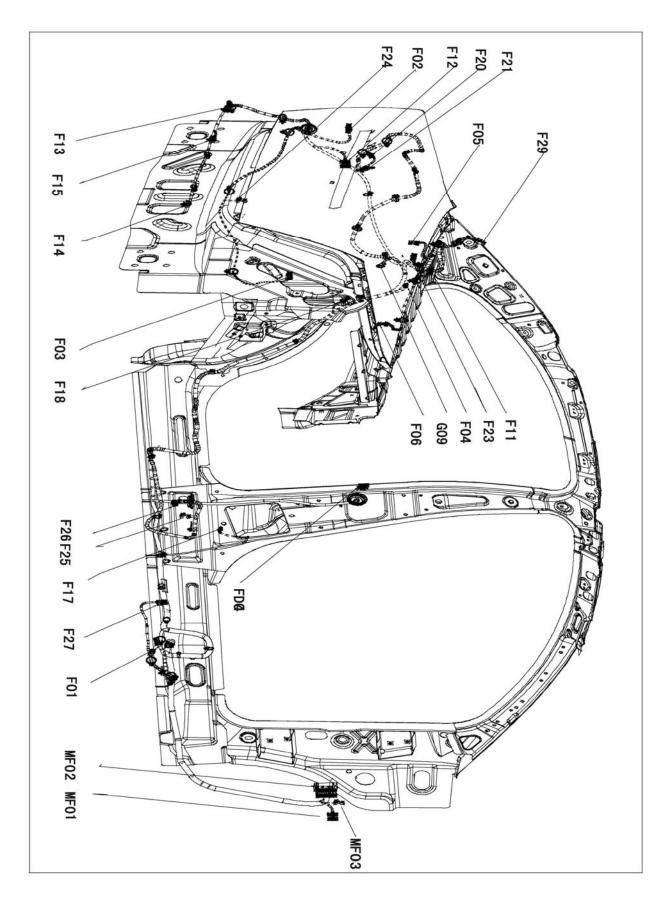




Illustration of Left Chassis Wire Harness

F01	Switch for mortise lock of safety belt	F20	Left license light
F02	Left rear combination light	F21	Right license light
F03	Right rear combination light	F23	Boot illumination
F04	Left rear wheel speed sensor	F24	Boot contact switch
F05	Left rear loudspeaker	F25	Fuel filter ground
F06	Right rear loudspeaker	F26	Fuel pump
F11	High position brake lamp	F27	Parking switch
F12	Reversing radar controller	F29	Rear defrosting connector
F13	Left reversing radar sensor	MF01	Connector 01 of left body wire harness
F14	Right reversing radar sensor	MF02	Connector 02 of left body wire harness
F15	Center reversing radar sensor	MF03	Connector 03 of left body wire harness
F17	Contact switch of left front door	FD04	Connector of left rear door wire harness
F18	Contact switch of left rear door	G09	Ground



Left Front Door Wire Harness

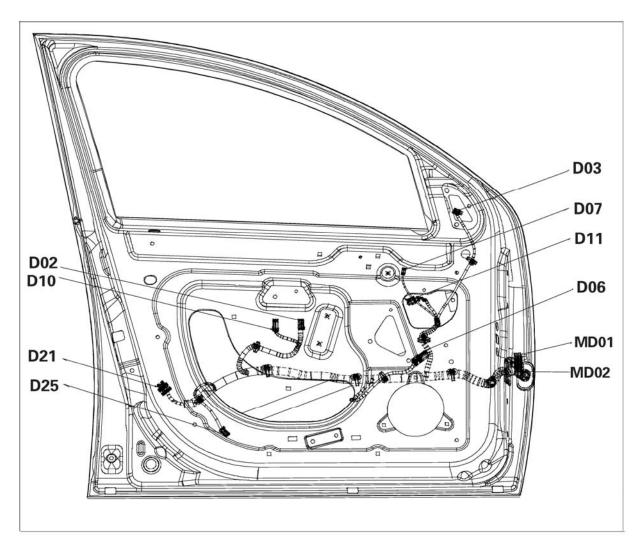


Illustration of Left Front Door Wire Harness

D02	Back mirror switch
D03	Connector of electric back mirror
D06	Connector of left front door bass horn
D07	Connector of left front door high pitch horn
D10	Main switch of window elevating system
D11	Connector of left front door glass elevating motor
D21	Connector of left front door fastener
D25	Connector of left front door lamp
MD01	Connector 01 of left front door wire harness
MD02	Connector 02 of left front door wire harness



Right Front Door Wire Harness

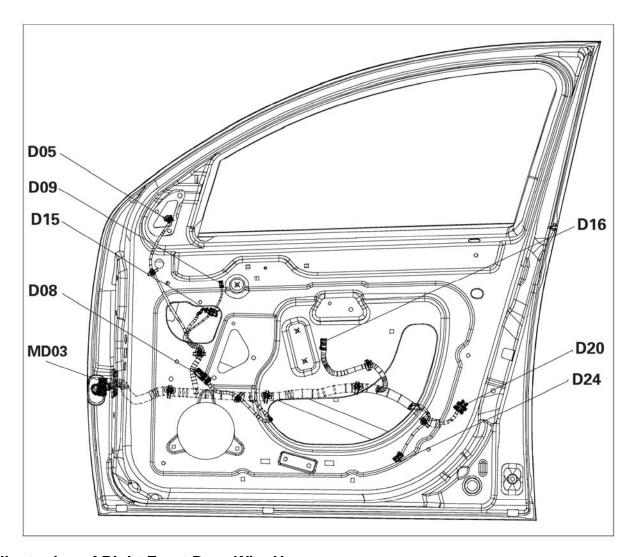


Illustration of Right Front Door Wire Harness

D05	Electric back mirror
D08	Connector of right front door bass horn
D09	Connector of right front door high pitch horn
D15	Connector of right front door glass elevating switch
D16	Connector of right front door glass elevating motor
D24	Connector of right front door lamp
D20	Connector of right front door fastener
MD03	Connector of instrument wire harness



Left Rear Door Wire Harness

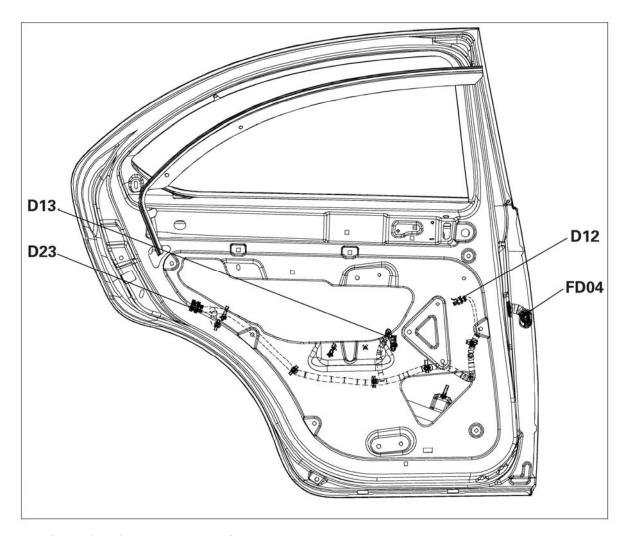


Illustration of Left Rear Door Wire Harness

D12 Connector of left rear door glass elevating switch
 D13 Connector of left rear door glass elevating motor

D23 Connector of left rear door fastener FD04 Connector of left body wire harness



Right Rear Door Wire Harness

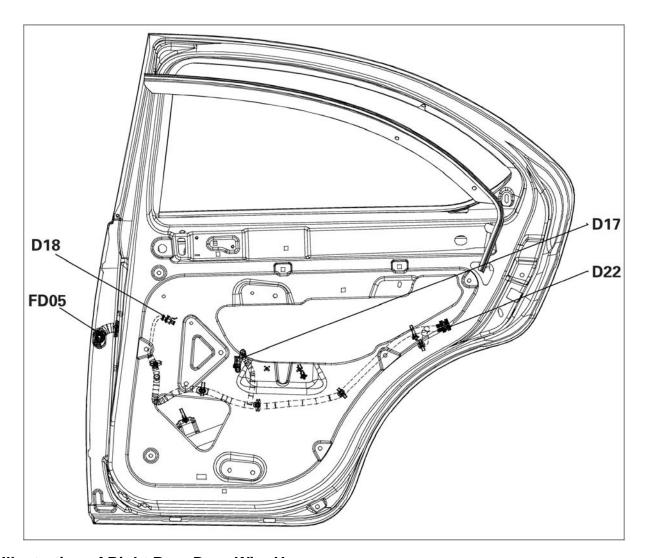


Illustration of Right Rear Door Wire Harness

D17 Connector of right rear door glass elevating switch
D18 Connector of right rear door glass elevating motor

D22 Connector of right rear door fastener FD05 Connector of right body wire harness



Ceiling Wire Harness

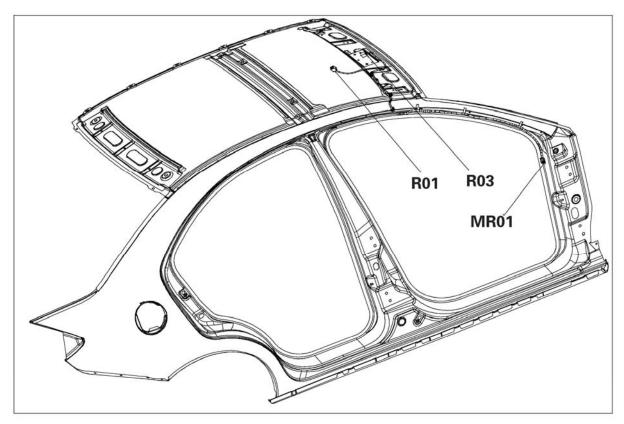


Illustration of Ceiling Wire Harness

R01 Connector of electric sun roof R03 Connector of dome lamp

MR01 Connector of main wire harness



Airbag Wire Harness

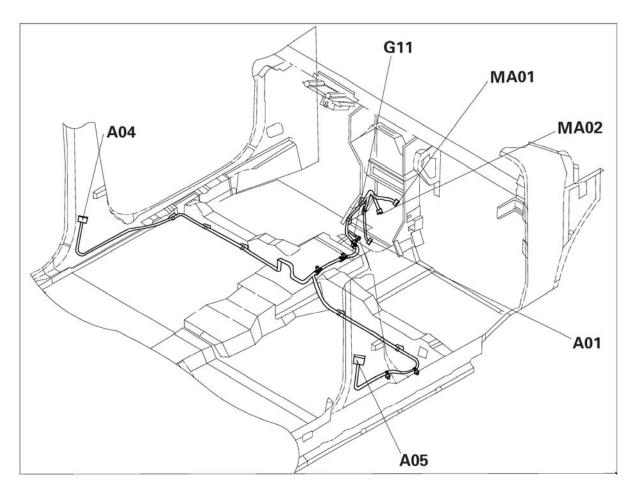


Illustration of Airbag Wire Harness

MA01 Connector 01 of instrument wire harness MA02 Connector 02 of instrument wire harness

A01 Airbag ECU

A04 Left safety belt pretensioner
A05 Right safety belt pretensioner

G11 Ground



Air Conditioner Wire Harness

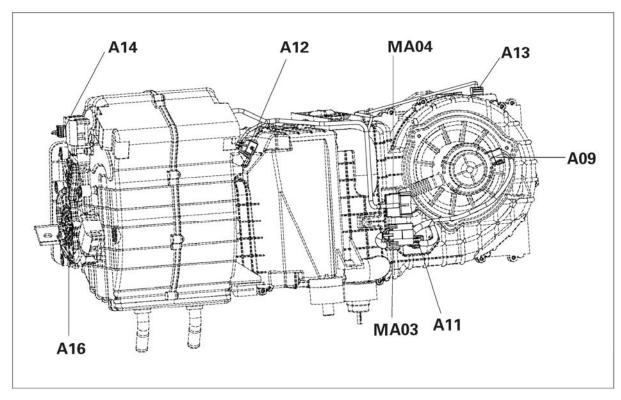


Illustration of Air Conditioner Wire Harness

mustrati	mustration of Air Conditioner wife framess		
A09	Connector of blower motor		
A11	Power amplifier		
A12	Connector of evaporator surface temperature sensor		
A13	Connector of internal and external mode motor		
A14	Connector of temperature mode motor		
A16	Connector of air door motor		
MA03	Connector 1 of instrument wire harness		
MA04	Connector 2 of instrument wire harness		