

# SPORTAGE

## Electrical Troubleshooting Manual

### FOREWORD

This manual is intended for use by service technicians of authorized Kia dealers to help them provide efficient and correct service and maintenance on Kia vehicles.






To ensure customer satisfaction with Kia products, proper service and maintenance by Kia technicians is essential. Consequently, it is important that service personnel fully understand the contents of this manual, which should be kept in a handy place for quick and easy reference.

All the contents of this manual, including photographs, drawings, and specifications, are the latest available at the time of printing. As modifications affecting service occur, dealers will be provided technical service bulletins or supplementary volumes. This manual should be kept carefully up-to-date upon receipt of the new information.

Kia Motors Corporation reserves the right to make changes in design or to make additions to or improvements in its products without imposing any obligations upon itself to install them on its products previously manufactured.

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# HOW TO USE THIS MANUAL

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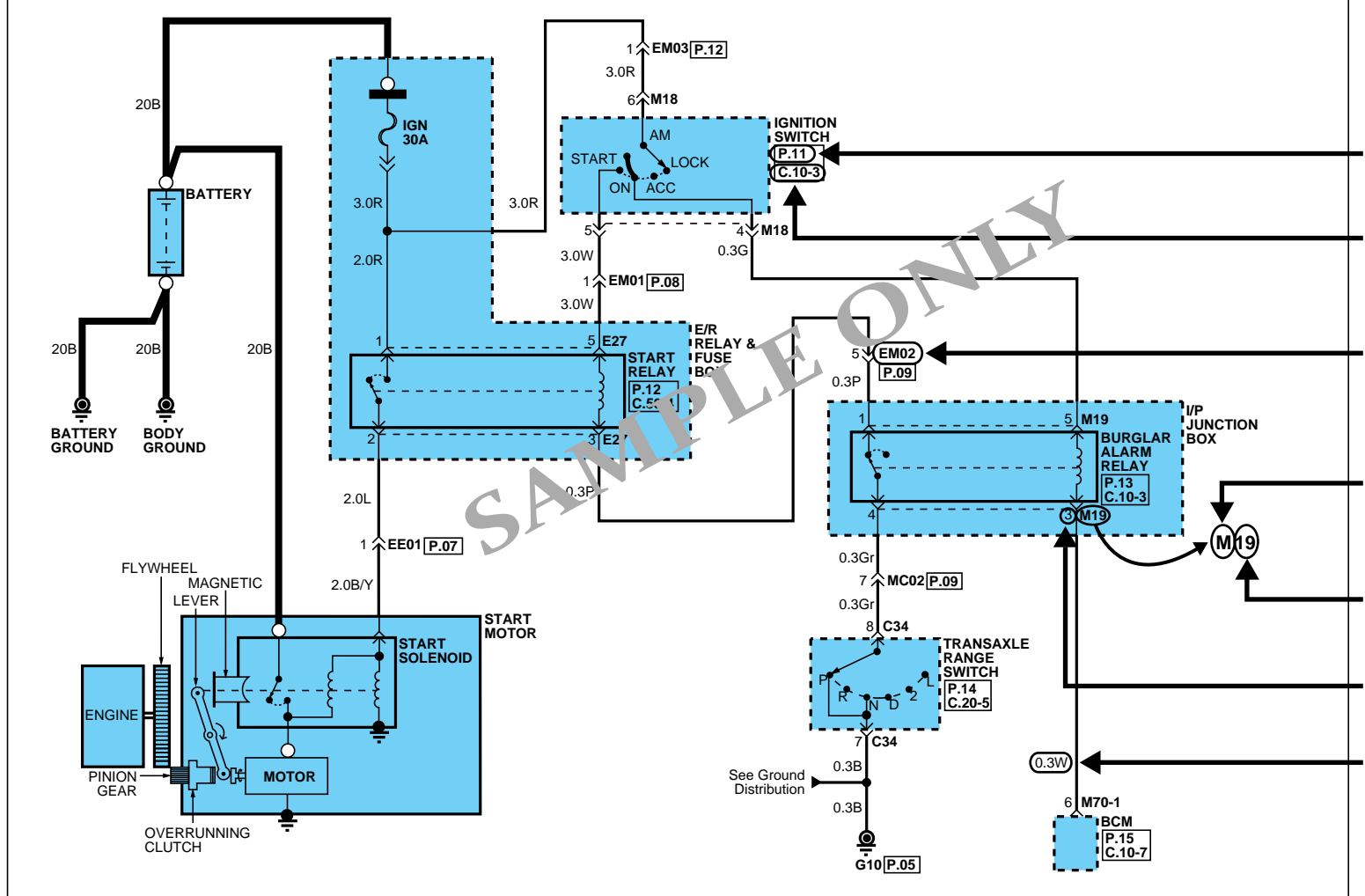


Introduction (1)

GI-1

STARTING SYSTEM ← ① System Name / System Code →

Starting System (1) SD360-1



- ⑤ Picture Number for Component Locations
- ② Page for Connector Views
- ③ Distinguish Harness From Harness Connection Connector
- ⑦ Harness Classification
- ⑧ Connector Classification Number
- ④ Connector Terminal Number
- ⑥ Wire Color

E2RG360A

# INTRODUCTION

## Introduction (2)

GI-2

### ① System Name / System Code

- Each page is consisted of circuits by system. This schematic diagram includes the path of electricity flow, connection condition for each switch, and the function of other relevant circuits at once. It is applicable to real service work.
- It is very important to understand relevant circuits exactly before troubleshooting diagnosis.
- Circuits by system depends upon part number and are indicated on schematic diagram index.

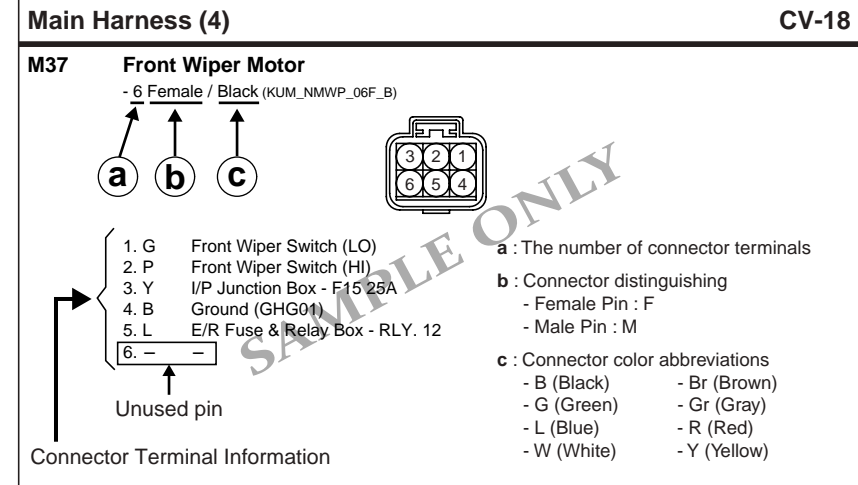
### ② Connector Views (Components)

- This section shows followings.
  - Figure of the front view of the connector (harness side, not component side)
  - Color of the connector
  - Number of the terminal
  - Color of the wiring
  - Function of the terminal
- Each terminal on the connector is numbered in accordance with ④ Connector View And Numbering Order.
- Not connected terminal is marked with a dash (-).

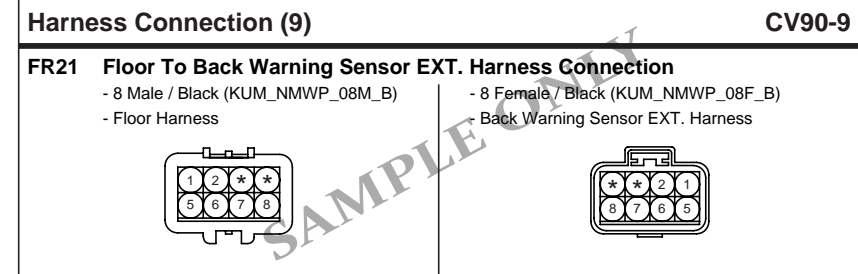
### ③ Connector Views (Harness Connection)

- When connecting the harness with connector between harnesses, it shows female and male connectors.
- Each terminal on the connector is numbered in accordance with ④ Connector View And Numbering Order.
- Not connected terminal is marked with a dash (\*).

### MAIN HARNESS



### HARNESS CONNECTION



# INTRODUCTION

## Introduction (3)

GI-3

### ④ Connector View And Numbering Order

Female	Male	Remarks
<p>Locking point</p> <p>Housing</p> <p>Pin</p>	<p>Locking point</p> <p>Pin</p> <p>Housing</p>	<p>It is not the shape of the connector housing, but the connector pin that distinguishes between male or female connectors.</p> <p>When numbering female and male connectors, refer to the numbering order in the following table.</p> <p>Some connectors may not follow this method of numbering order. For individual detailed numbering, refer to the CONNECTOR VIEWS.</p>
		<p>Numbered in order from upper right to lower left.</p> <p>Numbered in order from upper left to lower right</p>

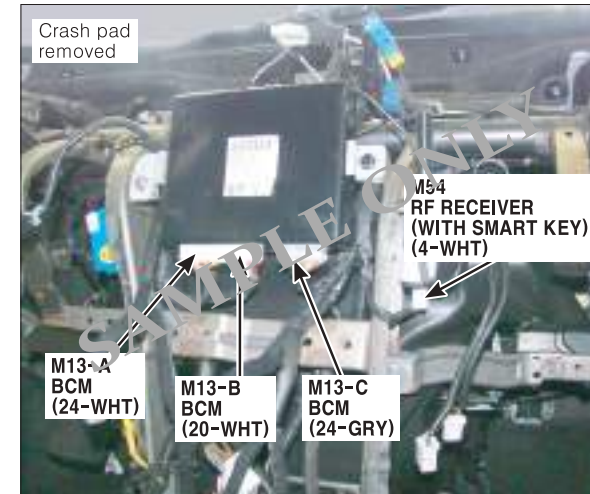
### NOTE

UNLESS OTHERWISE STATED, ALL CONNECTOR VIEWS ARE FROM THE TERMINAL SIDE OF THE CONNECTOR.

### ⑤ Component Locations

- To find the components easily, a component locations diagram is indicated with "PHOTO NO" on the lower portion of the component name.
- To make it easy to distinguish connectors, the connector in the picture is indicated being installed in the vehicle.

### 71. Center of Dash Panel



# INTRODUCTION

## Introduction (4)

GI-4

### ⑥ Wire Color Abbreviations

The following abbreviations are used to identify wire colors in the circuit schematics.

Symbol	Color of wire	Symbol	Color of wire
<b>B</b>	Black	<b>O</b>	Orange
<b>Br</b>	Brown	<b>P</b>	Pink
<b>G</b>	Green	<b>R</b>	Red
<b>Gr</b>	Gray	<b>W</b>	White
<b>L</b>	Blue	<b>Y</b>	Yellow
<b>Lg</b>	Light Green	<b>Pp</b>	Purple
<b>T</b>	Tan	<b>LI</b>	Light Blue

\* **(Y)/(B)**: Black stripe with yellow ground (2 colors)

↑                      ↑  
the color of      the color of  
background      stripe

### ⑦ Harness Classification

Electrical wiring connectors are classified according to the wiring parts in the Harness Layouts.

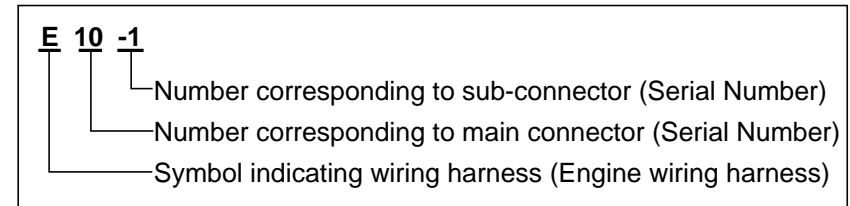
Symbol	Harness name	Location
<b>C</b>	Control, TCU EXT. Harness	Engine Compartment
<b>D</b>	Door Harness	Door
<b>E</b>	Battery Harness	Engine Room
<b>F</b>	4WD, Floor Harness	Floor
<b>M</b>	Main Harness	Center Console Passenger Compartment
<b>R</b>	Tail Gate, Rear Bumper Harness Roof Harness	Roof, Bumper
<b>S</b>	Seat Harness	Seat

\* It depends on vehicles, it is necessary to check the harness name symbol on the harness layouts for detailed symbol.

### ⑧ Connector Identification

A connector identification symbol consists of a wiring harness location classification symbol corresponding to a wiring harness location and number corresponding to the connector. These connector locations can be found in the HARNESS LAYOUTS.

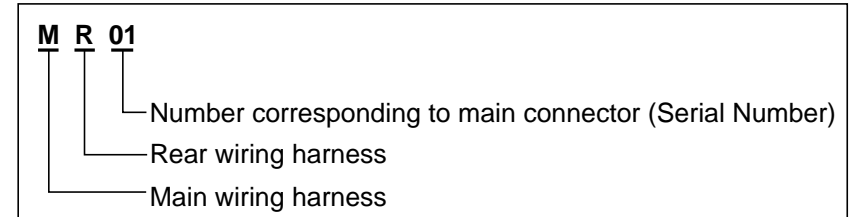
For example:



#### NOTE

**Connectors which connect each wiring harness are represented by the following symbols.**

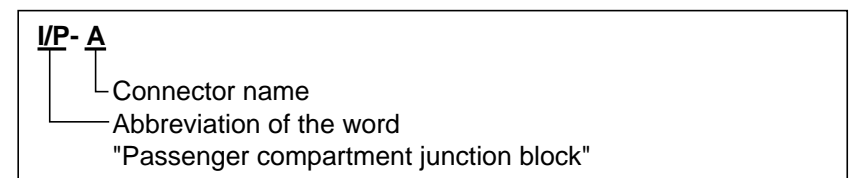
For example:



#### JUNCTION BLOCK IDENTIFICATION

A junction block identification symbol consists of a wiring harness location classification symbol corresponding to a wiring harness location and number corresponding to the connector in the junction block.

For example:





Symbols (1)

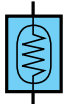
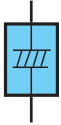

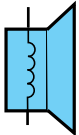

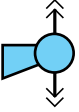

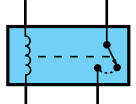

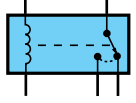

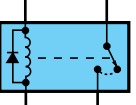
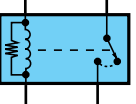
Section	Symbol	Meaning	Section	Symbol	Meaning	Section	Symbol	Meaning	Section	Symbol	Meaning
C O M P O N E N T		A solid line means the entire component is shown.	C O N N E C T O R		Shows the name of each connector on the component location index for reference.	S H I E L D W I R E		This represents RFI (Radio Frequency Interference) Shielding around a wire. The shielding is always connected to ground.	L A M P		Double filament
		A broken line indicates only part of the component is shown.			Indicates the number of corresponding terminal. (Only relevant terminal on the corresponding schematic diagram).			Single filament			
		This means the connector connects directly to the component.	W I R E		A wavy line means the wire is broken but is to be continued.	J O I N T C O N N E C T O R		This is a connector showing the joining wires.	D I O D E		Diode
		This indicates the connector connects to a lead (pigtail), wired directly to the component.			Wire insulation is yellow with a red strip.			Led diode			
		This indicates a screw terminal on the component.	S P L I C E S		Current path is continued on the same page or another page. The arrow shows the direction of current flow. You should look for the "A" in the marked position.	S L O W B L O W		Power supplied at all times. Name Capacity	T R		NPN
		This ground symbol (dot and 3 lines overlapping the component) means the housing of the component is attached to a metal part of the vehicle.			A wire connects to another circuit. The wire is shown again on that circuit which the arrow is pointing.			PNP			
		This ground symbol (dot and 3 lines overlapping the component) means the housing of the component is attached to a metal part of the vehicle.	G R O U N D		Wire choices for options or different models are labeled and shown with a "choice" bracket like this.	F U S E		This means power is supplied with the ignition on position. This means the short bar connects to other fuses. Identification Current rating	G E N E R A L C O M P O N E N T S Y M B O L		These switches move together: a dashed line shows a mechanical connection between them.
		The name of the component appears next to its upper right corner.			Splices are numbered and shown as a dot with circle. The exact location and connection of these splices may vary among vehicles.			NOT IN ON DASH FUSE BOX FUSE 10 10A			Switch (1 contact point)
	Shows the number of pictures for component location.			This symbol means the end of the wire is attached to a metal part of the vehicle.			Control battery power at all times			Heater	



# SYMBOLS

## Symbols (2)

GI-7

Section	Symbol	Meaning	Section	Symbol	Meaning
GENERAL COMPONENTS SYMBOL		Sensor	GENERAL COMPONENTS SYMBOL		Condenser
		Sender			Speaker
		Injector			Horn, Buzzer, Siren, Chime Bell
		Solenoid	RELAY		Normally open contact
		Motor			This is a relay shown with no current flowing through its coil. When a current flows through coil, contact will toggle.
		Battery			Diode interior relay
				Resistance interior relay	

## Troubleshooting Instructions (1)

GI-8

## TROUBLESHOOTING INSTRUCTIONS

## TROUBLESHOOTING PROCEDURES

The following five-step troubleshooting procedure is recommended.

**1. Verify the customer's complaints**

Turn on all the components in the problem circuit to check the accuracy of the customer's complaints. Note the symptoms. Do not begin disassembly or testing until you have narrowed down the probable causes.

**2. Read and analyze the schematic diagram**

Locate the schematic for the problem circuit. Determine how the circuit is supposed to work by tracing the current paths from the power source through the system components to ground. If you do not understand how the circuit should work, read the circuit operation text. Also check other circuits that share with the problem circuit. The name of circuits that share the same fuse, ground, or switch, for example, are referred to on each diagram. Try to operate any shared circuits you did not check in step 1. If the shared circuit works, the shared wiring is okay, and the cause must be within the wiring used only by the problem circuit.

If several circuits fail at the same time, the fuse or ground is a likely cause.

**3. Inspect the circuit/ component with the problem isolated**

Make a circuit test to check the diagnosis you made in step 2. Remember that a logical, simple procedure is the key to efficient troubleshooting. Narrow down the probable causes using the troubleshooting hints and system diagnosis charts. Test for the most likely cause of failure first. Try to make tests at points that are easily accessible.

**4. Repair the problem**

Once the problem is found, make the necessary repairs.

**5. Make sure the circuit works**

Repeat the system check to be sure you have repaired the problem. If the problem was a blown fuse, be sure to test all of the circuits on that fuse.

## TROUBLESHOOTING EQUIPMENT

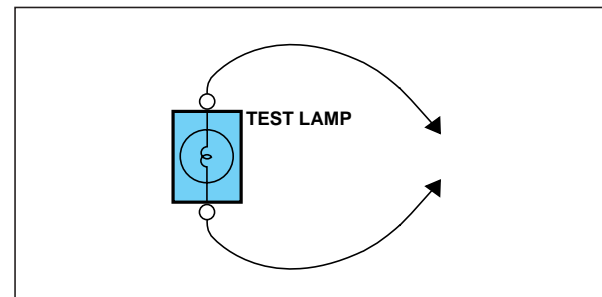
**VOLTMETER AND TEST LAMP**

Use a test lamp or a voltmeter on circuits without solidstate units and use a test lamp to check for voltage. A test lamp is made up of a 12-volt light bulb with a pair of leads attached. After grounding one lead, touch the other lead to various points along the circuit where voltage should be present. When the bulb goes on, there is voltage at the point being tested.

**CAUTION**

**A number of circuits include solid-state modules, such as the Engine Control Module(ECM), used with computer command control injection. Voltage in these circuits should be tested only with a 10-megaohm or higher impedance digital multimeter. Never use a test lamp on circuits that contain solid state modules. Damage to the modules may result.**

A voltmeter can be used in place of a test lamp. While a test lamp shows whether the voltage is present or not, a voltmeter indicates how much voltage is present.

**SELF-POWERED TEST LAMP AND OHMMETER**

Use a self-powered test lamp or an ohmmeter to check for continuity. The ohmmeter shows how much resistance there is between two points along a circuit. Low resistance means good continuity.

## TROUBLESHOOTING INSTRUCTIONS

### Troubleshooting Instructions (2)

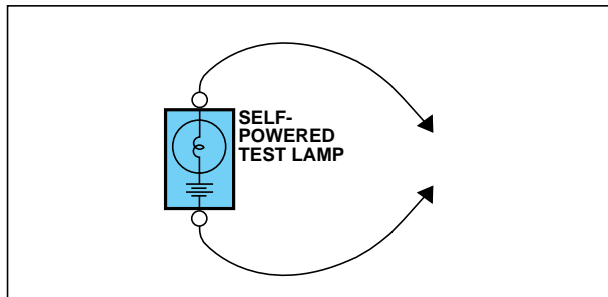
GI-9

#### CAUTION

**Never use a self-powered test lamp on circuits that contain solid state modules. Damage to these modules may result.**

An ohmmeter can be used in place of a self-powered test lamp. The ohmmeter shows how much resistance there is between two points along a circuit. Low resistance means good continuity.

Circuits which include any solid-state devices should be tested only with a 10-megaohm or higher impedance digital multimeter. When measuring resistance with a digital multimeter, the battery negative terminal should be disconnected. Otherwise, there may be incorrect readings. Diodes and solid-state devices in a circuit can make an ohmmeter give a false reading. To find out if a component is affecting a measurement, take one reading, reverse the leads and take a second reading. If different the solid-state device is affecting the measurement.



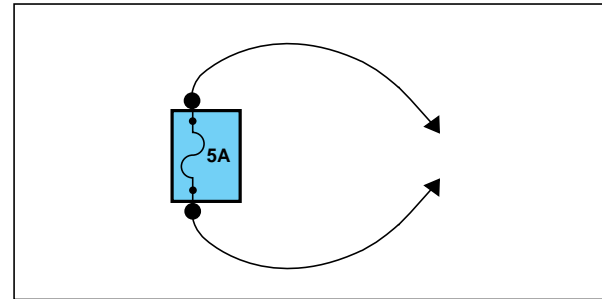
#### JUMPER WIRE WITH FUSE

Use a jumper wire with a fuse to by-pass an open circuit.

A jumper wire is made up of an in-line fuse holder connected to a set of test leads. This tool is available with small clamp connectors providing adaption to most connectors without damage.

#### CAUTION

**Do not use a fuse with a higher rating than the specified fuse that protects the circuit being tested. Do not use this tool in any situation to substitute an input or output at the solid-state control module, such as ECM, TCM, etc.**



#### SHORT FINDER

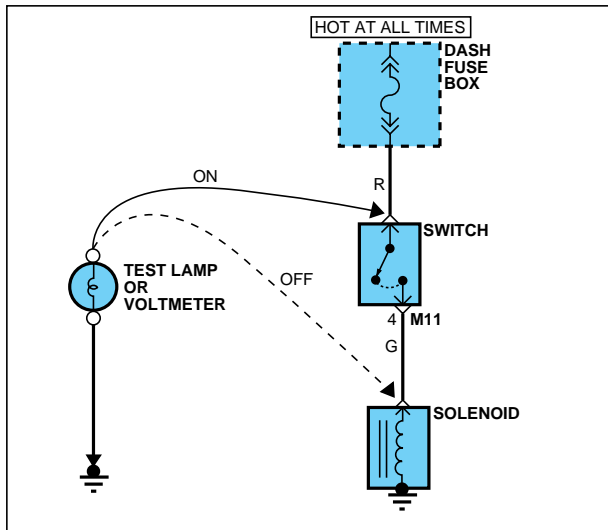
A short finder is available to locate a short to ground. The short finder creates a pulsing magnetic field in the shorted circuit and shows you the location of the short through body trim or sheet metal.

#### TROUBLESHOOTING TEST

##### 1. TESTING FOR VOLTAGE

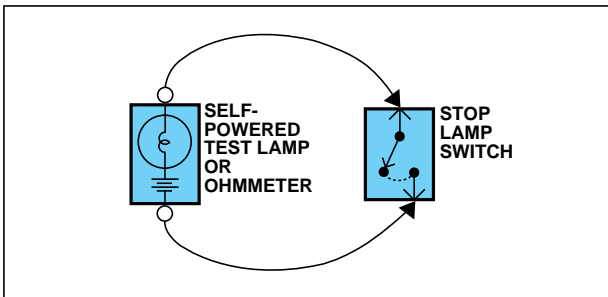
This test measures voltage in a circuit. When testing for voltage at a connector, you do not have to separate the two halves of the connector. Instead, probe the connector from the back(backprobe). Always check both sides of the connector because dirt and corrosion between its contact surfaces can cause electrical problems.

- A. Connect one lead of a test lamp or voltmeter to a ground. If you are using a voltmeter, be sure it is the voltmeter's negative test lead you have connected to ground.
- B. Connect the other lead of the test lamp or voltmeter to a selected test point(connector or terminal).
- C. If the test lamp glows, there is voltage present. If you are using a voltmeter, note the voltage reading. A loss of more than 1 volt from specification indicates a problem.



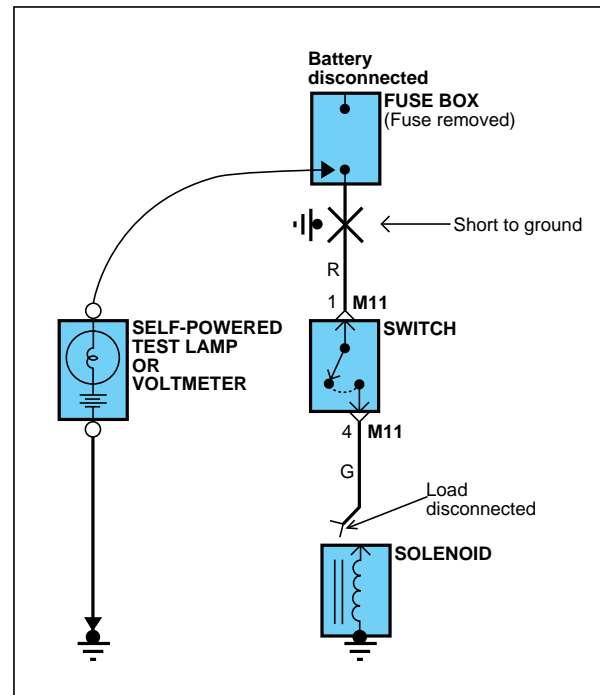
2. TESTING FOR CONTINUITY

- A. Disconnect the battery negative terminal.
- B. Connect one lead of a self-powered test lamp or ohmmeter to one end of the part of the circuit you wish to test. If you are using an ohmmeter, hold the leads together and adjust the ohmmeter to read zero ohms.
- C. Connect the other lead to the other end.
- D. If the self-power test lamp glows, there is continuity. If you are using an ohmmeter, low or zero resistance means good continuity.



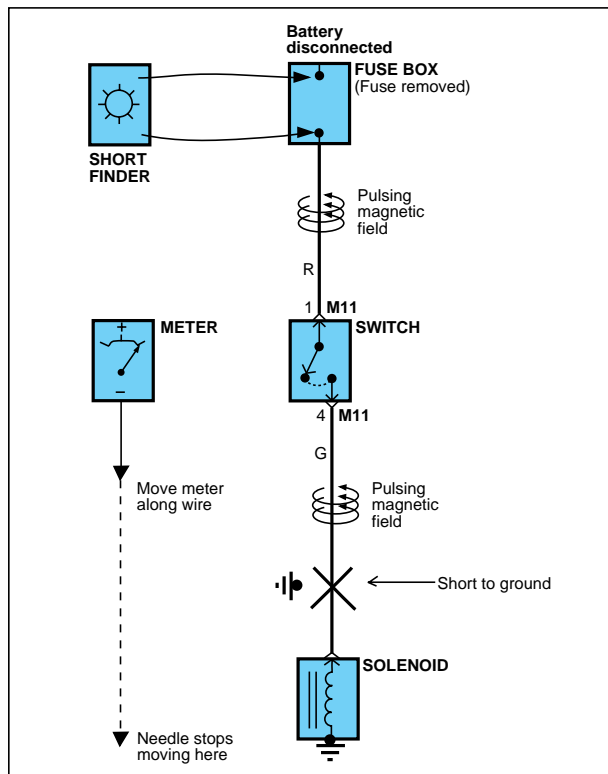
3. TESTING FOR SHORT TO GROUND

- A. Disconnect the battery negative terminal.
- B. Connect one lead of a self-powered test lamp or an ohmmeter to the fuse terminal on the load side.
- C. Connect the other lead to a ground.
- D. Beginning near the fuse block move the harness from side to side. Continue this procedure (about six inches apart) while watching the self-powered test lamp or ohmmeter.
- E. When the self-powered test lamp glows, or ohmmeter registers, there is a short to a ground in the wiring near that point.



**4. TESTING FOR A SHORT WITH A SHORT FINDER**

- A. Remove the blown fuse. Leave the battery connected.
- B. Connect the short finder across the fuse terminals.
- C. Close all switches in series in the circuit that is being testing.
- D. Turn on the short circuit locator. It sends pulses of current to the short.  
This creates a pulsing magnetic field around the wiring between the fuse box and the short.
- E. Beginning at the fuse box, slowly move the short finder along the circuit wiring. The meter will show current pulses through sheet metal and body trim. As long as the meter is between the fuse and the short, the needle will move with each current pulse. Once the meter is moved past the point of the short, the needle will stop moving. Check around this area to locate the cause of the short circuit.



**Wiring Repair (1)**

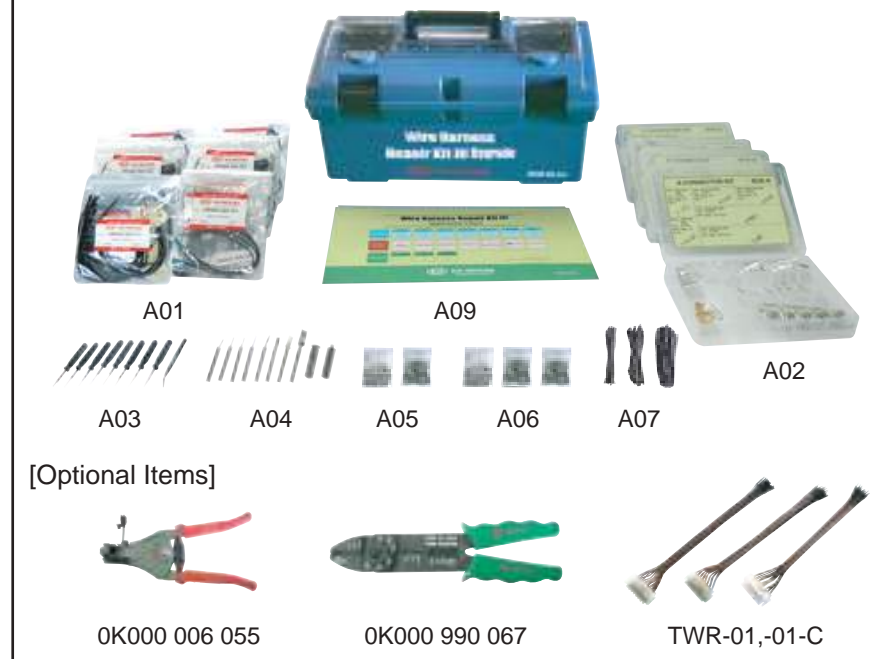
**\* REFERENCE SERVICE TOOLS**

Tool Number	Tool Name
0K000 009 AA0	Wire Harness Repair Kit III Upgrade
0K000 009 A01	Connector Assembly Set (See Part Index)
0K000 009 A02	Terminal & Seal Set (See Part Index)
0K000 009 A03	Remover Tool Set
0K000 009 A04	Tension Gauge Set
0K000 009 A05	Splice Terminal Set
0K000 009 A06	In-line Solder Connector
0K000 009 A07	Shrink Tube Set
0K000 009 XXX	Inner Box Set (Box A~ )
0K000 006 055	Auto Stripper
0K000 990 067	Multi Purpose Crimper
TWR-01, -01-C	T-Connector
0K000 009 A08	Carrying Case
0K000 009 A09	Application Chart
0K000 009 A10	User's Guide

\* For more details, refer to the User's Guide & Application Chart of the Wire Harness Repair Kit.

**\* Wire Harness Repair Kit III Upgrade**

**[Standard Kit (0K000 009 AA0)]**



**\* Break Out Box Pro (0K2A1 200 DIG)**



1. Use

1-1. Exchange of Connectors

A. Diagnosis

- a) Diagnose the vehicle with GDS(G-scan) or Hi-Scan Pro.
- b) Identify the defective sensor or actuator after diagnosis.
- c) Check the connector of sensor or actuator
- d) Make a decision to exchange connector or terminal after verifying the connector.

※ You can exchange CONNECTOR ASSEMBLY in following situation,

- ▶ Locking part of connector is damaged
- ▶ Damaged housing
- ▶ Difficult situation to exchange only terminal

※ Wire Harness Repair Kit III Upgrade is designated to exchange mainly connector ass’y in order to avoid the second damage caused from unskilled work.

B. Exchange process

- a) Find the position of connector in Wire Harness Repair Kit III Upgrade through the “Application Chart”.

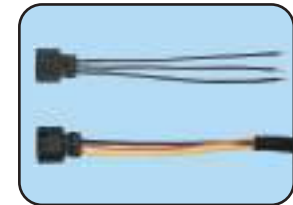
Ex)

Connector Ass’y		Terminal & Seal		Sensor / Actuator	Carnival				Sorento		Sportge
Ass’y P/No.	Box No.	Terminal & Seal P/No.	Box No.		2.5G	3.5G	3.5G (USA)	2.4G	2.5D	3.5G	2.0G
0K000 003 026	E	0K000 003 TS04	C	ISC Solenoid Valve	●	●				●	
*0K000 003 020	C	-	-		●			●		●	
0K000 003 009	B	0K000 003 TS18	G	Inhibitor Switch	●	●					
*0K000 003 023	D	-	-	Injector #1/2/3/4						●	

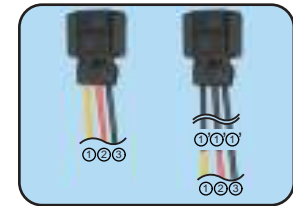
- b) Check the BOX-No. and identify the Part No. in the inner box.
- c) Identify the actual connector in the inner box and compare the shape of connector with damaged one.

- d) Check the parts and tool for exchanging.
  - ▶ Multi Purpose Crimper
  - ▶ Shrink Tube
  - ▶ In-line Solder Connector
  - ▶ Heater Gun

- e) Compare the terminal sequence of damaged connector with new connector Ass’y.



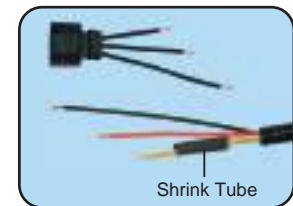
⚠ Caution  
Wire color of connectors are in black, therefore match the wire sequence with damaged connector when connecting.



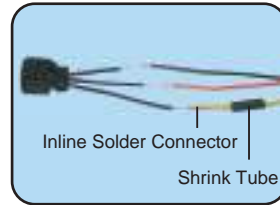
- f) Cut off and strip the faulty wire in proper length.



- g) Cut off the shrink tube in enough length and insert it into the wire.



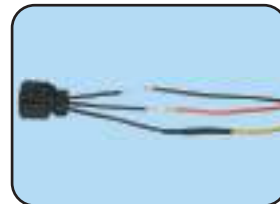
h) Insert the in-line solder connector into the wire.



i) Insert the wire from the new connector into the solder connector and crimp the solder connector with Multi Purpose Crimper tightly for connecting.

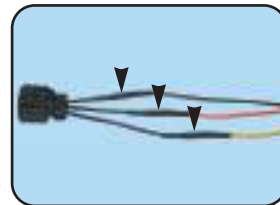


j) Move the shrink tube on the in-line solder connector crimped.  
k) Constrict the shrink tube by Heater Gun.



**⚠ Caution**

**Connect the wires in different position like the picture in order to avoid short.**



**C. DIAGNOSIS**

- a) Insert the new connector into the sensor till you hear a locking sound.
- b) Diagnose the vehicle with GDS(G-scan) or Hi-Scan Pro.

**1-2. Exchange of Terminals**

**A. Diagnosis**

- a) Diagnose the vehicle with GDS(G-scan) or Hi-Scan Pro.
- b) Identify the defective sensor or actuator after diagnosis.
- c) Check and identify the faulty terminal in connector.
- d) Remove the faulty terminal with removal tool.

**B. Exchange process**

- a) Cut off the faulty terminal from the wire using the wire cutting part of the crimping tool.



- b) Identify the new terminal in Wire Harness Repair Kit III Upgrade using the "Application Chart".

Ex)

Connector Ass'y		Terminal & Seal		Sensor / Actuator	Carnival				Sorento		Sportg	
Ass'y P/No.	Box No.	Terminal & Seal P/No.	Box No.		2.5G	2.9D	3.5G (USA)	3.5G	2.4G	2.5D	3.5G	2.0G
0K000 003 026	E	0K000 003 TS04	C	ISC Solenoid Valve								
*0K000 003 020	C	-	-									
0K000 003 009	B	0K000 003 TS18	G	Inhibitor Switch								
*0K000 003 023	D	-	-	Injector #1/2/3/4								

- c) After checking the inner box no, identify the position of the new terminal in the inner box.
- d) Compare the shape of terminal and seal with faulty terminal and seal.
- e) Strip the wire in proper length.





f) Insert the seal into the wire.



g) Crimp the terminal and seal using the Multi purpose Crimper.



h) Pull out the wire from the harness in order to avoid tension.



i) Insert the terminal into the connector till you hear a locking sound.

j) Insert the holder.

k) Measure the tension with tension gauge.

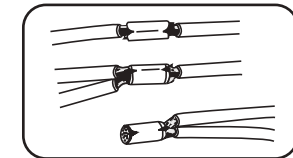


**C. DIAGNOSIS**

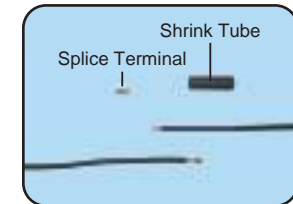
- a) Insert the new connector into the sensor till you hear a locking sound.
- b) Diagnose the vehicle with GDS(G-scan) or Hi-Scan Pro.

**1-3. Use of Splice Terminal**

- Use for crimping terminal which combine with two or more wire.



a) Strip each end of the wires with crimping tool.



b) Cut off the shrink tube in enough length and insert it into the wire.

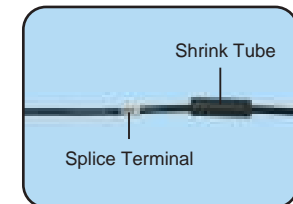


c) Crimp terminal which combine with two wires.



d) Move the shrink tube on the connecting area.

e) Constrict the shrink tube by heater gun.



**⚠ Caution**

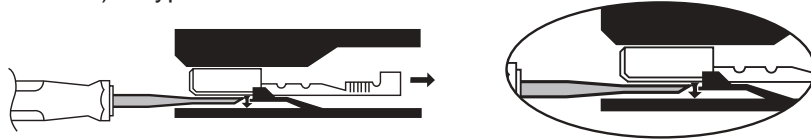
**Make sure to disconnect the battery negative (-) cable before rework on electrical system.**

**2. Removal Tool**

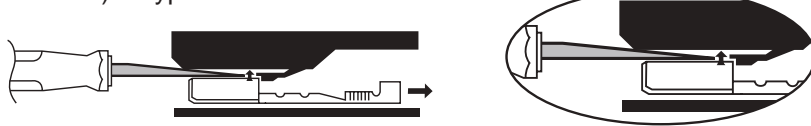
**2-1. Terminal Locking Type**

**A. Single Lock Type**

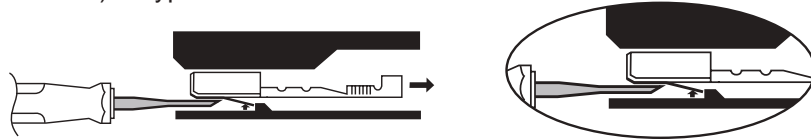
a) A Type



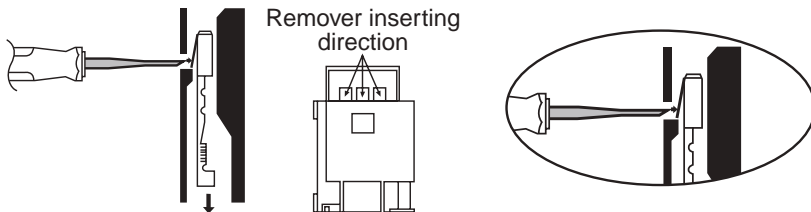
b) B Type



c) C Type



d) D Type



**B. Double Lock Type**



**3. Tension Gauge**

**3-1. Uses**

Used for measuring the tension of a female terminal.

**3-2. Check point before using**

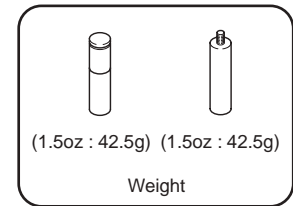
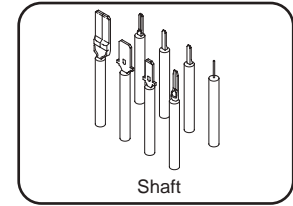
- a) Select the shaft with the male terminal that is the correct mate for the female terminal being checked.
- b) Select the weight according to the size of the terminal.
  - Terminal for usual signal (tinned or galvanized terminal) : Measurement of combining two (#85g)
  - Terminal for major terminal (#gold coating terminal)

**3-3. Measurement**

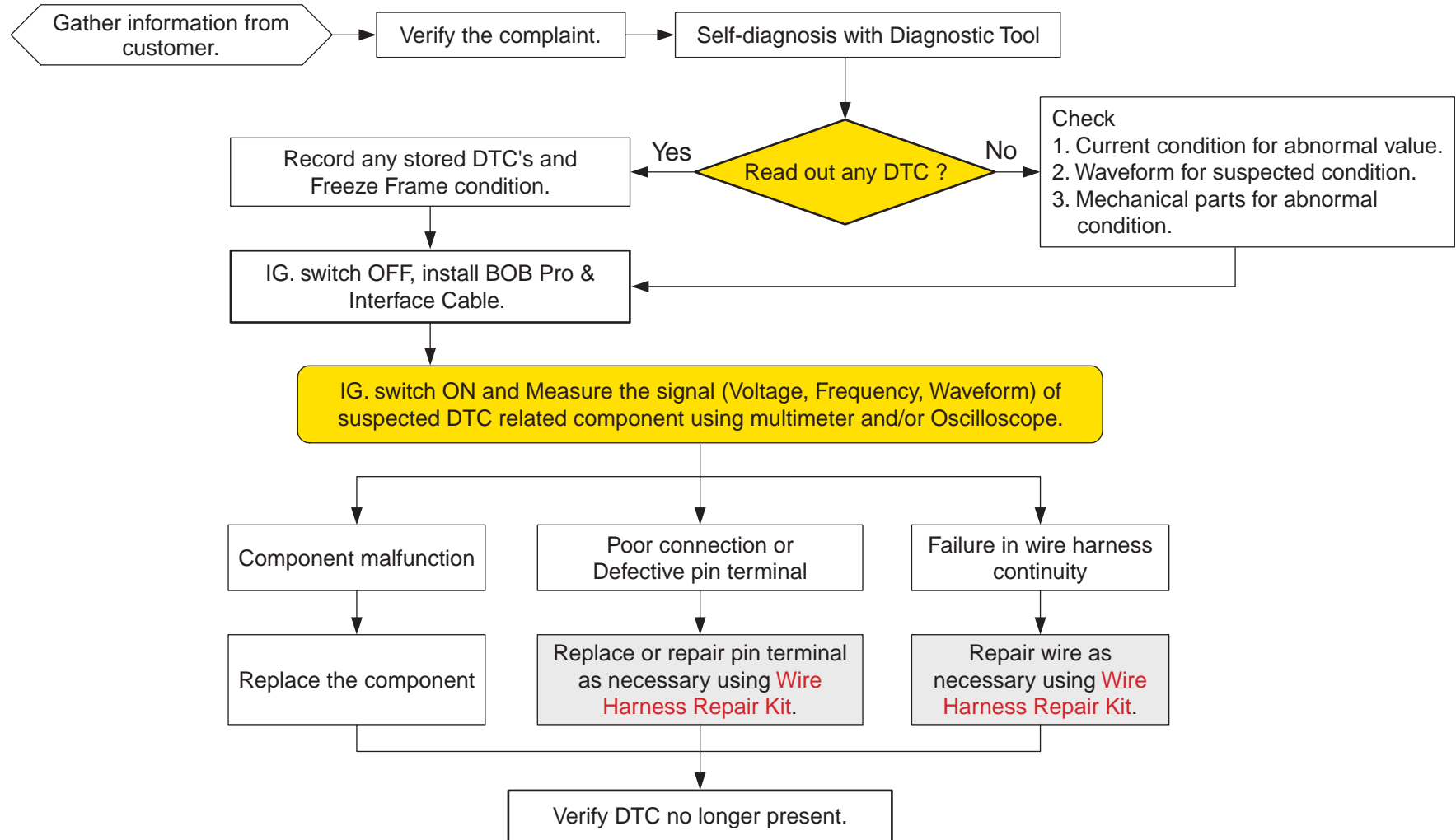
- a) Insert the shaft into the female terminal being checked.
- b) Combine the proper weight in accordance with paragraph 3-2.
- c) Suspend weights from the female connector as shown in the illustration.

**3-4. Inspection Results**

Female Terminal Retains Tension Gauge	OK
Tension Gauge Falls Off	Pin Tension Insufficient - Terminal Requires Replacement



Troubleshooting Guide With BOB Pro





# SCHEMATIC DIAGRAMS

[GSL] G4KD/G4KE : THETA II 2.0L/2.4L  
[DSL] D4HA : R 2.0L

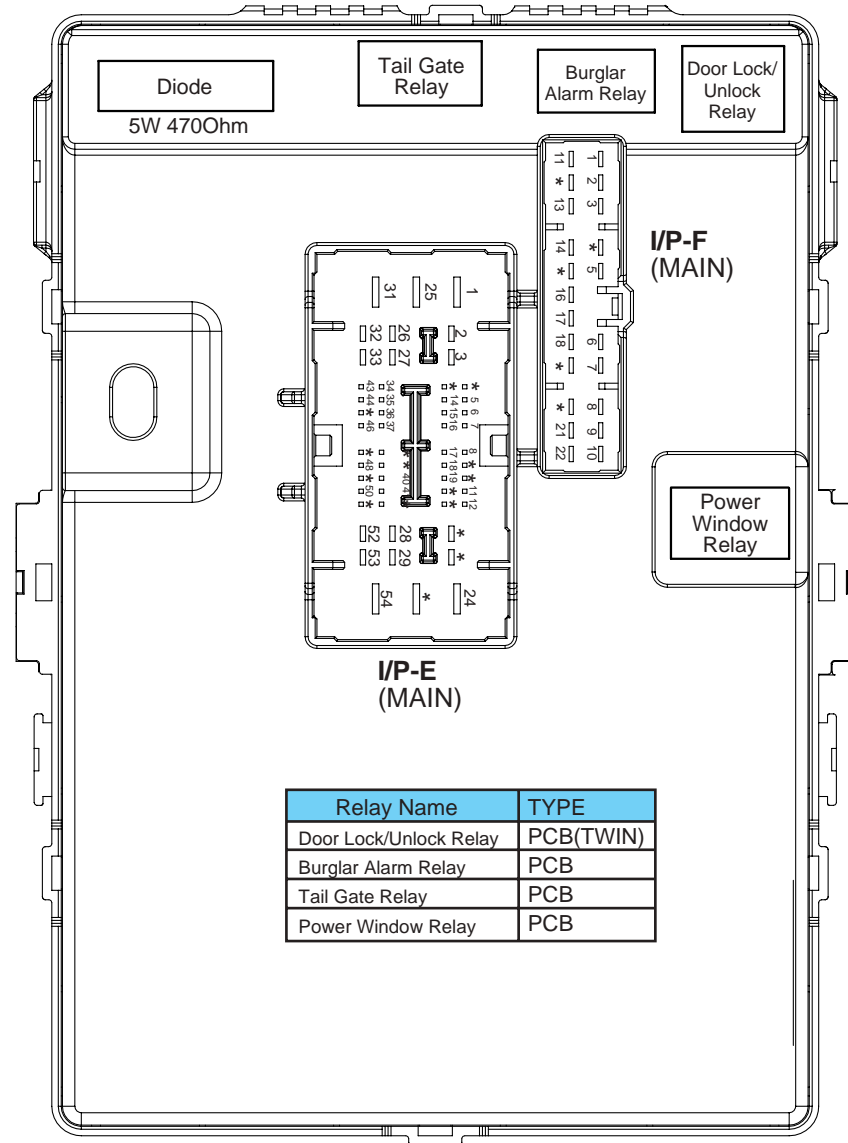
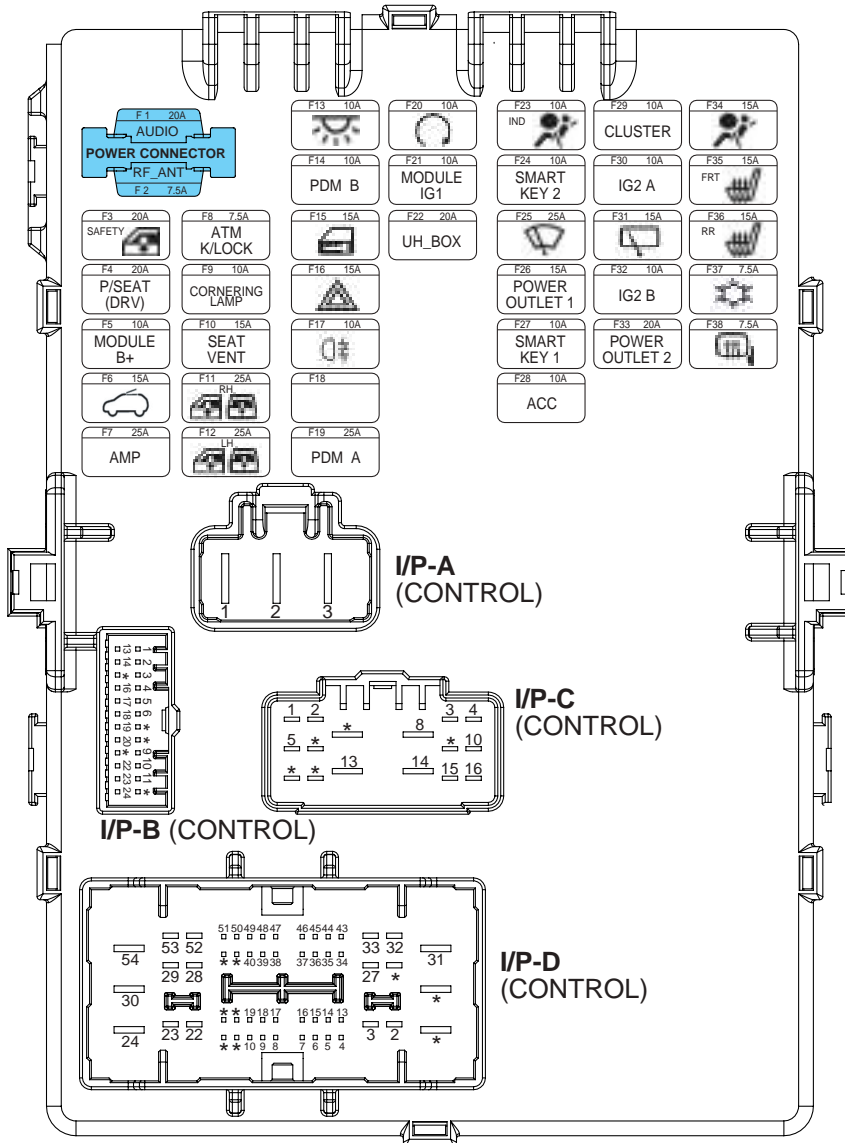
Adjustable Seat Warmer System.....	SD885-1	Illuminations.....	SD941-1
Anti-Lock Brake System (ABS).....	SD587-1	Immobilizer System.....	SD954-1
Audio.....	SD961-1	Indicators & Gauges.....	SD940-1
Automatic Transaxle Control System (G4KD/G4KE: THETA II 2.0L/2.4L).....	SD450-1	Intelligent Power Switch (IPS) System.....	SD952-3
Automatic Transaxle Control System (D4HA : R 2.0L).....	SD450-3	Keyless Entry & Burglar Alarm System.....	SD814-1
Back-Up Lamps.....	SD926-1	MFI Control System (G4KD//G4KE: THETA II 2.0L/2.4L).....	SD313-1
Blower & A/C Control System (Auto).....	SD971-1	MFI Control System (D4HA : R 2.0L).....	SD313-9
Blower & A/C Control System (Manual).....	SD971-5	Motor Driven Power Steering (MDPS) System.....	SD563-1
Body Control Module (BCM) System.....	SD952-1	Outside Mirror Folding.....	SD878-1
Charging System.....	SD373-1	Passenger Compartment Fuse Details.....	SD120-1
Climate Seat Control.....	SD886-1	Power Distribution.....	SD110-1
Clock & Cigarette Lighter (Power Outlet) System.....	SD945-1	Power Door Locks.....	SD813-1
Cooling System.....	SD253-1	Power Outside Mirror.....	SD876-1
Courtesy & Tail Gate Lamps.....	SD929-1	Power Windows.....	SD824-1
Data Link Details.....	SD200-1	Rear Parking Assist System.....	SD957-1
Driver Power Seat.....	SD880-1	Rear Wiper & Washer.....	SD982-1
Electro Chromic Mirror.....	SD851-1	Seat Warmer.....	SD889-1
Electronic Stability Program (ESP) System.....	SD588-1	Shift & Key Lock System.....	SD452-1
Front Fog & Rear Fog Lamps.....	SD924-1	Smart Key Module System.....	SD954-3
Front Wiper & Washer.....	SD981-1	Starting System.....	SD360-1
Fuel Filter Heating System (D4HA : R 2.0L).....	SD361-1	Stop Lamps.....	SD927-1
Fuse & Relay Information.....	SD100-1	Sunroof.....	SD816-1
Glass & Mirror Defogger.....	SD879-1	Supplemental Restraint System (SRS).....	SD569-1
Ground Distribution.....	SD130-1	Tail Gate Opener.....	SD812-1
Head Lamp Leveling Device.....	SD922-1	Tail, Parking & License Lamps.....	SD928-1
Head Lamps.....	SD921-1	Transfer Case Control System (TCCS).....	SD527-1
Horn.....	SD968-1	Turn & Hazard Lamps.....	SD925-1
		Vehicle Speed System.....	SD436-1



Fuse & Relay Information (1)

SD100-1

I/P JUNCTION BOX



Relay Name	TYPE
Door Lock/Unlock Relay	PCB(TWIN)
Burglar Alarm Relay	PCB
Tail Gate Relay	PCB
Power Window Relay	PCB

⊗ USE THE DESIGNATED FUSE AND RELAY ONLY

## FUSE & RELAY INFORMATION

### Fuse & Relay Information (2)

SD100-2

#### Circuit (I/P Junction Box)

No.	(A)	Symbol	Fuse Name	Circuit Protected	No.	(A)	Symbol	Fuse Name	Circuit Protected
F1	20A	AUDIO	AUDIO POWER CONNECTOR	Audio, F13 10A (Room Lamp)	F20	10A		START	Burglar Alarm Relay, Smart Key Control Module E/R Fuse & Relay Box (RLY. 4 - Start Relay, RLY. 11 - ATM P/N Relay)
F2	7.5A	RF_ANT	RF_ANT POWER CONNECTOR	RF RECEIVER	F21	10A	MODULE IG1	MODULE IG1	Stop Lamp Switch (G4KD/G4KE) EPS Control Module, ATM Shift Lever ILL. 4WD ECM, Head Lamp Leveling Device Switch Head Lamp Leveling Device Actuator LH/RH IPS Control Module (ON/START Input)
F3	20A	SAFETY	SAFETY P/WDW	Driver Safety Power Window Module	F22	20A	UH_BOX	UH_BOX	E/R Fuse & Relay Box (FUSE - F23, F24, F25)
F4	20A	P/SEAT (DRV)	P/SEAT (DRV)	Driver Seat Manual Switch	F23	10A	IND	A/BAG IND	Instrument Cluster (IND.)
F5	10A	MODULE B+	MODULE B+	Multipurpose Check Connector, Driver CCS Switch Data Link Connector, Rear Parking Assist Buzzer Power Outside Mirror Switch	F24	10A	SMART KEY 2	SMART KEY 2	Smart Key Control Module
F6	15A		SUNROOF	Sunroof Motor, Sunroof Control Module	F25	25A		WIPER FRT	Front Wiper Motor, Multifunction Switch (Wiper) E/R Fuse & Relay Box (RLY. 12 - Front Wiper (LO) RLY. 13 - Wiper (Rain Sensor) Relay)
F7	25A	AMP	AMP	AMP	F26	15A	POWER OUTLET 1	POWER OUTLET 1	Front Power Outlet RH
F8	7.5A	ATM K/LOCK	ATM K/LOCK	ATM Shift Lever, Key Solenoid	F27	10A	SMART KEY 1	SMART KEY 1	Smart Key Control Module, BCM
F9	10A	CORNERING LAMP	CORNERING LAMP	-	F28	10A	ACC	ACC	Digital Clock, Audio, Amp, Power Outside Mirror Switch Sunroof Control Module
F10	15A	SEAT VENT	SEAT VENT	Driver CCS Cushion Warmer	F29	10A	CLUSTER	CLUSTER	Instrument Cluster (IND.), Alternator, Telltale Lamp BCM, Digital Clock, A/C Control Module Driver/Passenger Seat Warmer Switch Driver CCS Control Module
F11	25A		P/WDW RH	Power Window Main Switch Rear Power Window Switch RH Passenger Power Window Switch (LHD)	F30	10A	IG2 A	IG2 A	Smart Key Control Module, BCM, IPS Control Module
F12	25A		P/WDW LH	Power Window Main Switch Rear Power Window Switch LH Passenger Power Window Switch (RHD)	F31	15A		WIPER RR	ICM Relay Box (Rear Wiper Relay) Rear Wiper Motor, Multifunction Switch (Wiper)
F13	10A		ROOM LP	BCM, A/C Control Module, Digital Clock Instrument Cluster (IND.), Luggage Lamp Ignition Key ILL. & Door Warning Switch Room Lamp, Driver/Passenger Vanity Lamp Overhead Console (Map Lamp Switch)	F32	10A	IG2 B	IG2 B	A/C Control Module, Cluster Ionizer, Rain Sensor Sunroof Motor, Electro Chromic Mirror Diesel Box (RLY.2,3 - PTC Heater Relay #2,#3) E/R Fuse & Relay Box (RLY. 1 - Blower Relay)
F14	10A	PDM B	PDM B	Smart Key Control Module, Fob Holder Start/Stop Button Switch	F33	20A	POWER OUTLET 2	POWER OUTLET 2	Front Power Outlet LH, Rear Power Outlet Front Cigarette Lighter LH
F15	15A		DR LOCK	Door Lock/Unlock Relay, Tail Gate Relay ICM Relay Box (Dead Lock Relay)	F34	15A		AIR BAG	SRS Control Module
F16	15A		HAZARD	BCM	F35	15A	FRT	S/HEATER FRT	Driver/Passenger Seat Warmer Switch
F17	10A		FOG LP RR	ICM Relay Box (Rear Fog Lamp Relay)	F36	15A	RR	S/HEATER RR	Rear Seat Warmer Switch LH/RH
F18	-	-	-	-	F37	7.5A		A/CON	A/C Control Module (Auto)
F19	25A	PDM A	PDM A	Smart Key Control Module	F38	7.5A		HTD MIRR	Driver/Passenger Power Outside Mirror A/C Control Module

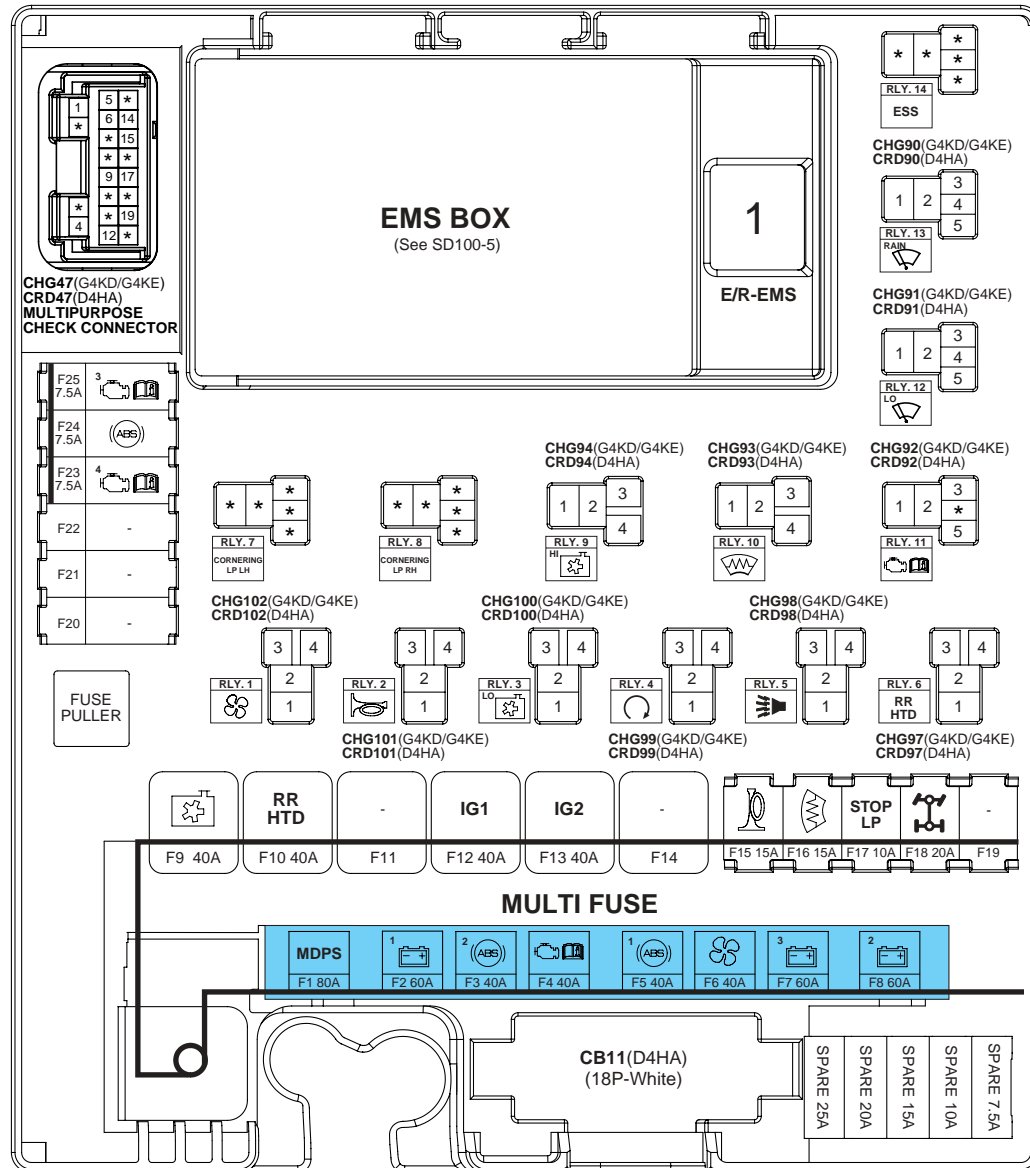
**✘ USE THE DESIGNATED FUSE AND RELAY ONLY**

# FUSE & RELAY INFORMATION

## Fuse & Relay Information (3)

SD100-3

### E/R FUSE & RELAY BOX



Relay No.	Symbol	Relay Name	Type
RLY. 1		Blower Relay	Plug Micro (4P)
RLY. 2		Horn Relay	Plug Micro (4P)
RLY. 3		Cooling Fan (Low) Relay	Plug Micro (4P)
RLY. 4		Start Relay	Plug Micro (4P)
RLY. 5		Burglar Alarm Horn Relay	Plug Micro (4P)
RLY. 6	<b>RR HTD</b>	Rear Defogger Relay	Plug Micro (4P)
RLY. 7	<b>CORNERING LP LH</b>	-	-
RLY. 8	<b>CORNERING LP RH</b>	-	-
RLY. 9		Cooling Fan (High) Relay	Plug Micro (4P)
RLY. 10		Front Wiper Deicer Relay	Plug Micro (4P)
RLY. 11		ATM P/N Relay	Plug Micro (5P)
RLY. 12		Wiper (Low) Relay	Plug Micro (5P)
RLY. 13		Wiper (Rain Sensor) Relay	Plug Micro (5P)
RLY. 14	<b>ESS</b>	-	-

**※ USE THE DESIGNATED FUSE AND RELAY ONLY**

















## FUSE & RELAY INFORMATION

### Fuse & Relay Information (4)

SD100-4

#### Circuit (E/R Fuse & Relay Box)

Fuse No.	(A)	Symbol	Fuse Name	Circuit Protected	
MULTI FUSE	F1	80A	<b>MDPS</b>	MDPS	EPS Control Module
	F2	60A	<sup>1</sup> 	B+1	I/P Junction Box (Fuse - F15/F16/F17/F19, IPS Control Module - IPS 4/IPS 5/IPS 6/IPS 7)
	F3	40A	<sup>2</sup> 	ABS 2	ESP Control Module, ABS Control Module
	F4	40A		EMS	EMS Box (Fuse - F1/F2/F3/F6)
	F5	40A	<sup>1</sup> 	ABS 1	ESP Control Module, ABS Control Module
	F6	40A		BLOWER	RLY. 1 (Blower Relay)
	F7	60A	<sup>3</sup> 	B+3	I/P Junction Box (Fuse - F3/F4/F8/F9/F10/F13/F14, Power Connector - F1/F2)
	F8	60A	<sup>2</sup> 	B+2	I/P Junction Box (Power Window Relay, Fuse - F5/F6/F7, IPS Control Module - IPS 0/IPS 1/IPS 2/IPS 3/IPS 8)
FUSE	F9	40A		COOLING FAN	RLY. 3 (Cooling Fan (Low) Relay), RLY. 9 (Cooling Fan (High) Relay)
	F10	40A	<b>RR HTD</b>	REAR HEATED	RLY. 6 (Rear Defogger Relay)
	F11	-	-	-	-
	F12	40A	<b>IG1</b>	IG1	W/O Smart Key - Ignition Switch/ With Smart Key - PDM Relay Box (IGN1 Relay)
	F13	40A	<b>IG2</b>	IG2	RLY. 4 (Start Relay), W/O Smart Key - Ignition Switch/ With Smart Key - PDM Relay Box (IGN2 Relay)
	F14	-	-	-	-
	F15	15A		HORN	RLY. 2 (Horn Relay), RLY. 5 (Burglar Alarm Relay)
	F16	15A		DEICER	RLY. 10 (Front Wiper Deicer Relay)
	F17	10A	<b>STOP LP</b>	STOP LP	Stop Lamp Switch, ICM Relay Box (DBC Relay), Smart Key Control Module
	F18	20A		4WD	4WD ECM
	F19~F22	-	-	-	-
	F23	7.5A	<sup>4</sup> 	ECU 2	RLY. 11 (ATM P/N Relay), G4KD/G4KE - PCM, Multifunction Switch, D4HA - ECM, Mass Air Flow Sensor
	F24	7.5A		ABS	ESP Control Module, ABS Control Module, ICM Relay Box (DBC Relay), Multi Switch, Steering Angle Sensor D4HA : Glow Relay Unit, Fuel Filter Warning Sensor, Diesel Box (RLY. 4 - Fuel Filter Heater Relay)
	F25	7.5A	<sup>3</sup> 	TCU 2	TCM (D4HA), Transaxle Range Switch

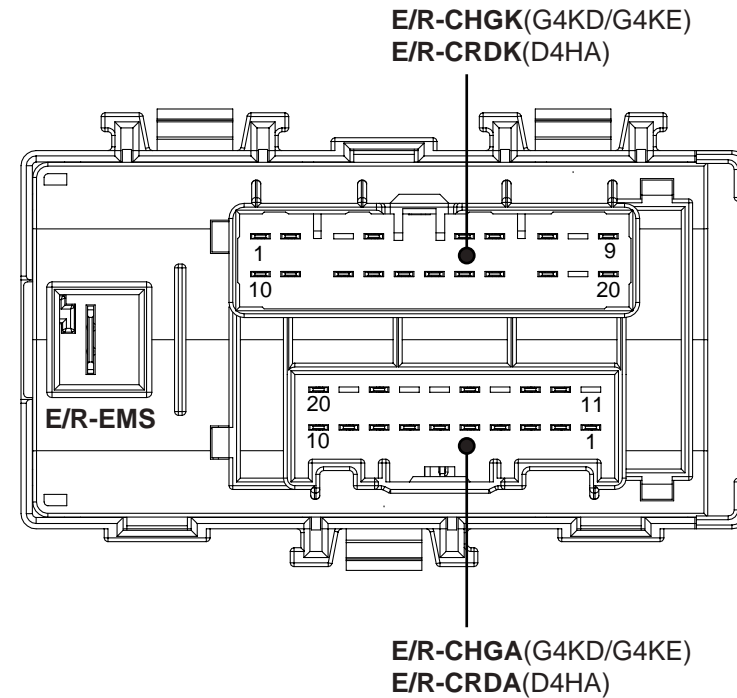
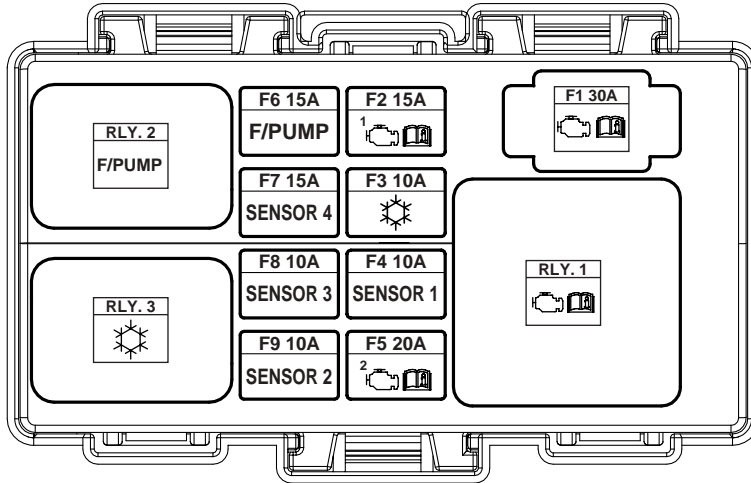
**※ USE THE DESIGNATED FUSE AND RELAY ONLY**

# FUSE & RELAY INFORMATION

## Fuse & Relay Information (5)

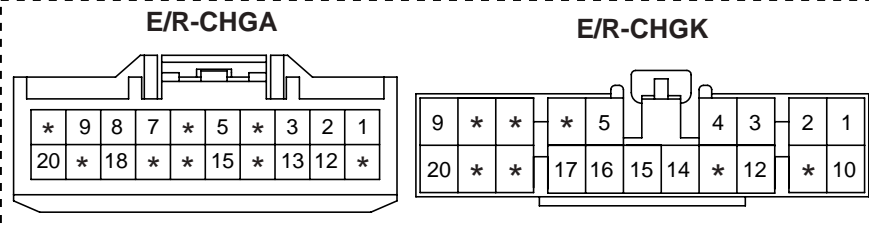
SD100-5

### EMS BOX

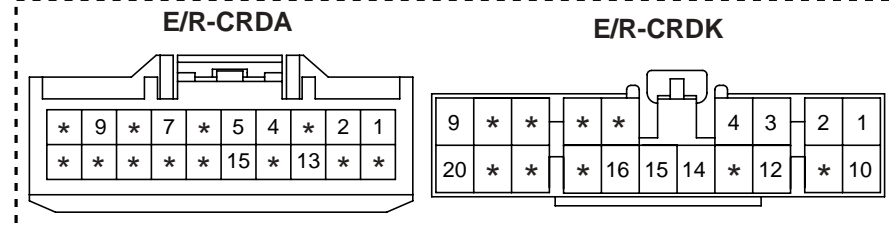


Relay No.	Symbol	Relay Name	Type
RLY. 1		Engine Control Relay	Plug Mini
RLY. 2	<b>F/PUMP</b>	Fuel Pump Relay	Plug Micro
RLY. 3		A/C Relay	Plug Micro

### G4KD/G4KE



### D4HA







※ USE THE DESIGNATED FUSE AND RELAY ONLY

## FUSE & RELAY INFORMATION





### Fuse & Relay Information (6)

SD100-6

#### Circuit (EMS Box) - G4KD/G4KE : THETA II 2.0L/2.4L

Fuse No.	(A)	Symbol	Fuse Name	Circuit Protected
F1	30A		ECU	RLY. 1 (Engine Control Relay)
F2	15A		TCU 1	PCM
F3	10A		A/CON	RLY. 3 (A/C Relay)
F4	10A	<b>SENSOR 1</b>	SENSOR 1	Immobilizer Module, Crankshaft Position Sensor, Camshaft Position Sensor #1/2, Oil Control Valve #1/2 Canister Purge Control Solenoid Valve, Variable Intake Manifold Valve
F5	20A		ECU 1	Ignition Coil #1/2/3/4, Condenser
F6	15A	<b>F/PUMP</b>	FUEL PUMP	RLY. 2 (Fuel Pump Relay)
F7	15A	<b>SENSOR 4</b>	SENSOR 4	RLY. 2 (Fuel Pump Relay), PCM, Oxygen Sensor Up/Down E/R Fuse & Relay Box (RLY. 3 - Cooling Fan (Low) Relay, RLY. 9 - Cooling Fan (High) Relay)
F8	10A	<b>SENSOR 3</b>	SENSOR 3	RLY. 3 (A/C Relay), Injector #1/2/3/4
F9	10A	<b>SENSOR 2</b>	SENSOR 2	-

#### Circuit (EMS Box) - D4HA : R 2.0L

Fuse No.	(A)	Symbol	Fuse Name	Circuit Protected
F1	30A		ECU	RLY. 1 (Engine Control Relay)
F2	15A		TCU 1	TCM
F3	10A		A/CON	RLY. 3 (A/C Relay)
F4	10A	<b>SENSOR 1</b>	SENSOR 1	EGR Cooling Bypass Solenoid Valve, Diesel Box (RLY. 1 - PTC Heater Relay #1), Electrical VGT Actuator E/R Fuse & Relay Box (RLY. 3 - Cooling Fan (Low) Relay, RLY. 9 - Cooling Fan (High) Relay), Oil Level Sensor
F5	20A		ECU 1	ECM
F6	15A	<b>F/PUMP</b>	FUEL PUMP	RLY. 2 (Fuel Pump Relay)
F7	15A	<b>SENSOR 4</b>	SENSOR 4	Immobilizer Module, Rail Pressure Regulator Valve, Fuel Pressure Regulator Valve, RLY. 2 (Fuel Pump Relay)
F8	10A	<b>SENSOR 3</b>	SENSOR 3	RLY. 3 (A/C Relay), Crankshaft Position Sensor, Lambda Sensor
F9	10A	<b>SENSOR 2</b>	SENSOR 2	Stop Lamp Switch

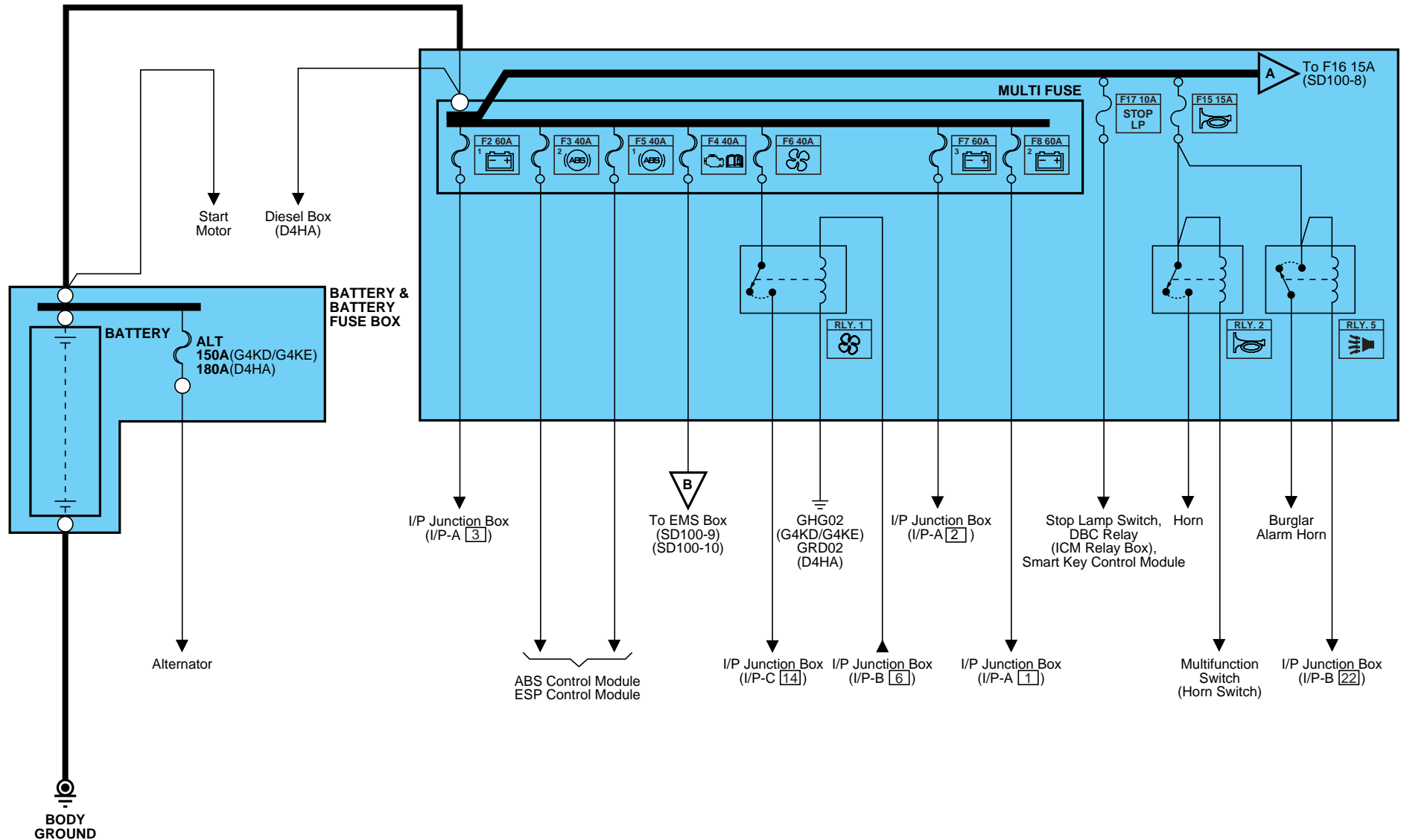
**※ USE THE DESIGNATED FUSE AND RELAY ONLY**

# FUSE & RELAY INFORMATION

## Fuse & Relay Information (7)

SD100-7

### E/R Fuse & Relay Box

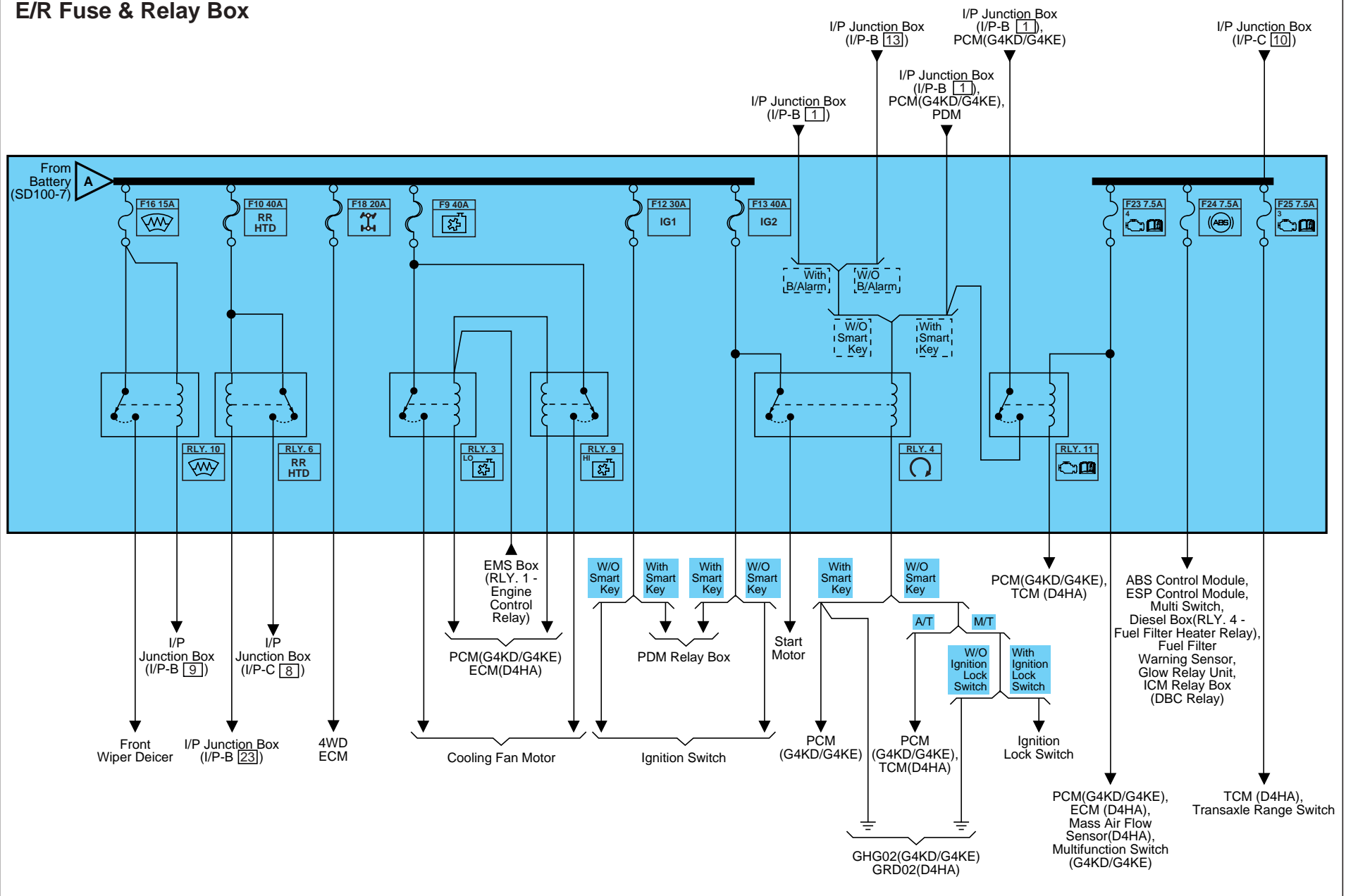


# FUSE & RELAY INFORMATION

## Fuse & Relay Information (8)

SD100-8

### E/R Fuse & Relay Box

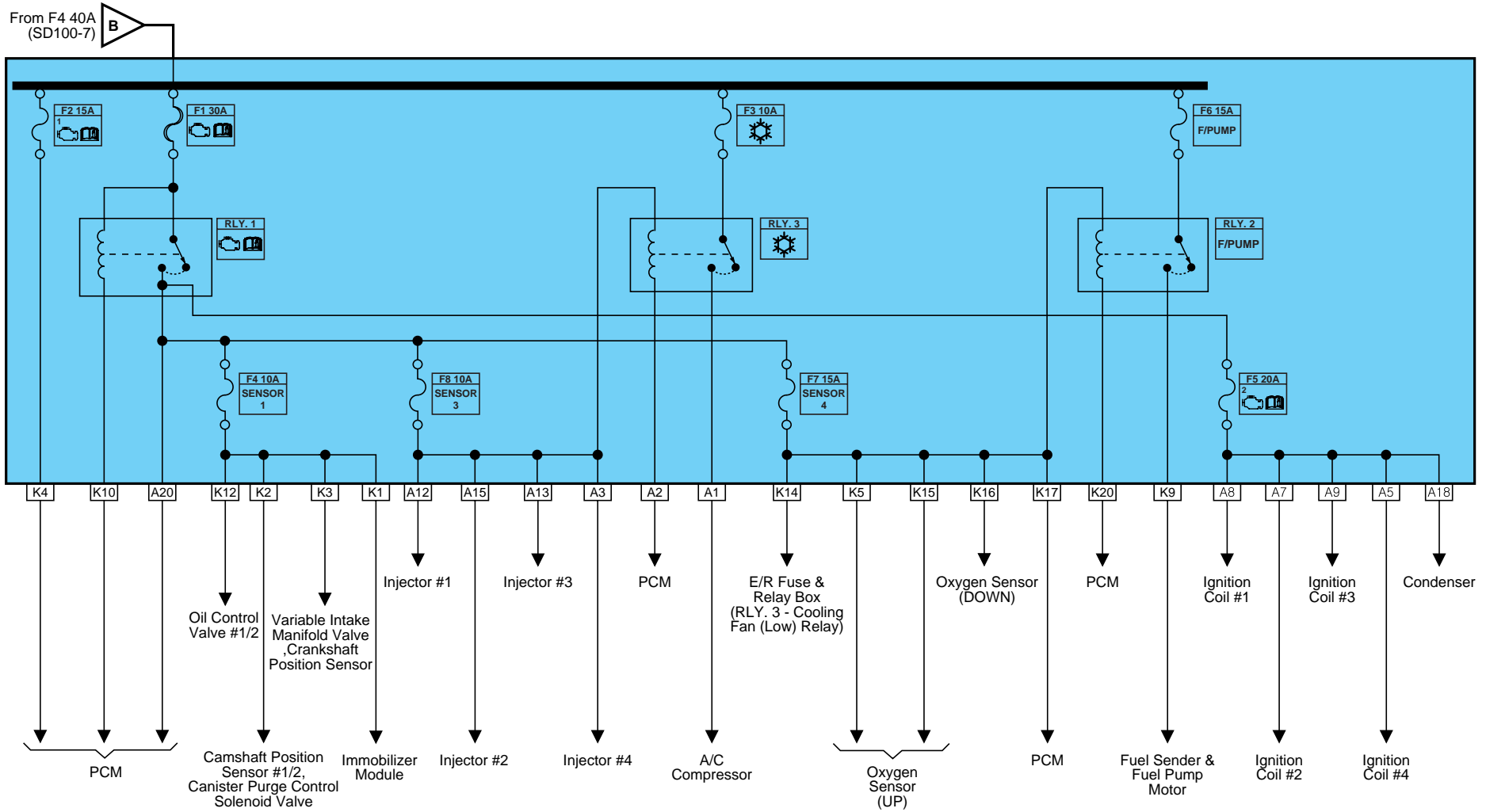


# FUSE & RELAY INFORMATION

## Fuse & Relay Information (9)

SD100-9

### EMS Box (G4KD/G4KE : THETA II 2.0L/2.4L)

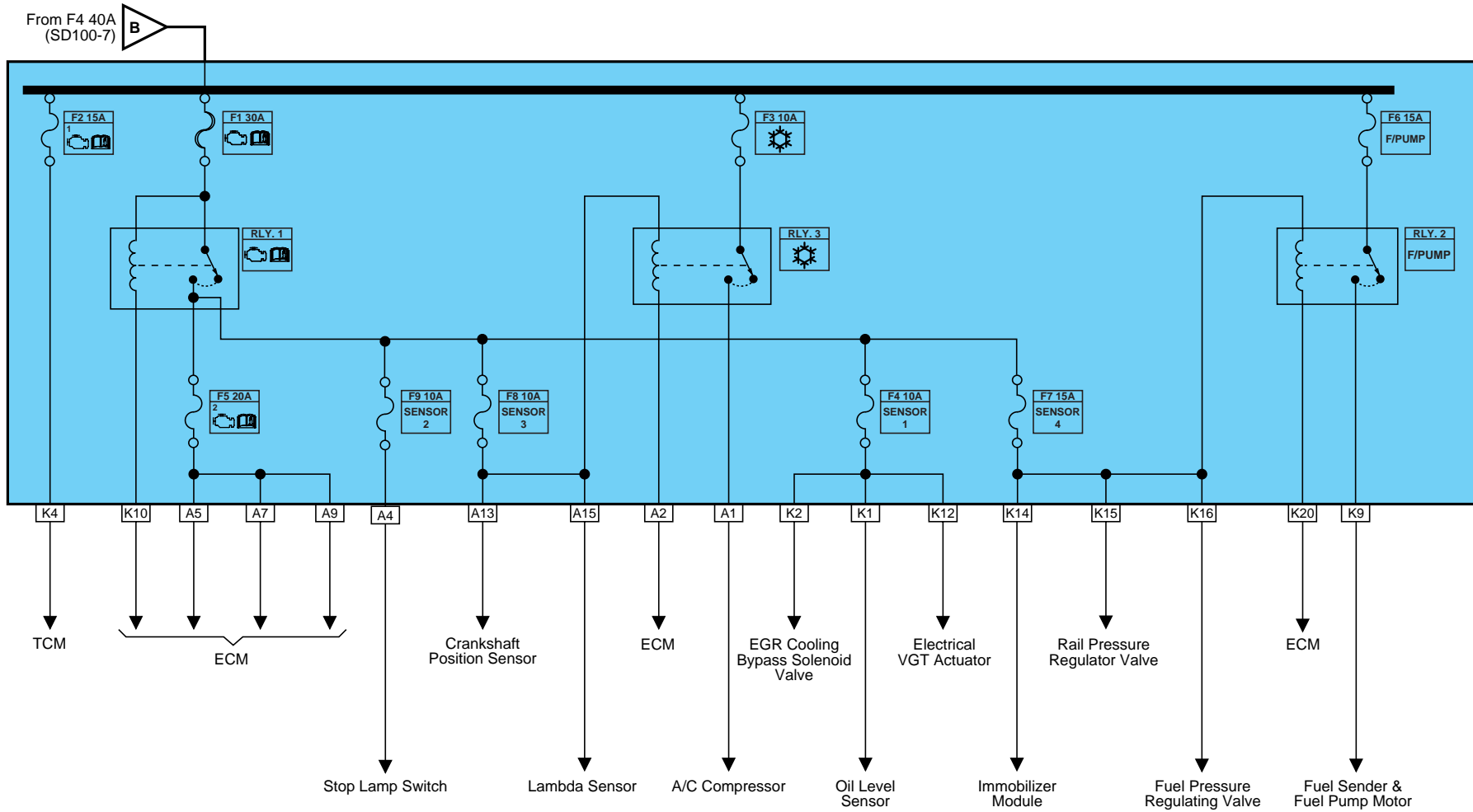


# FUSE & RELAY INFORMATION

## Fuse & Relay Information (10)

SD100-10

### EMS Box (D4HA : R 2.0L)



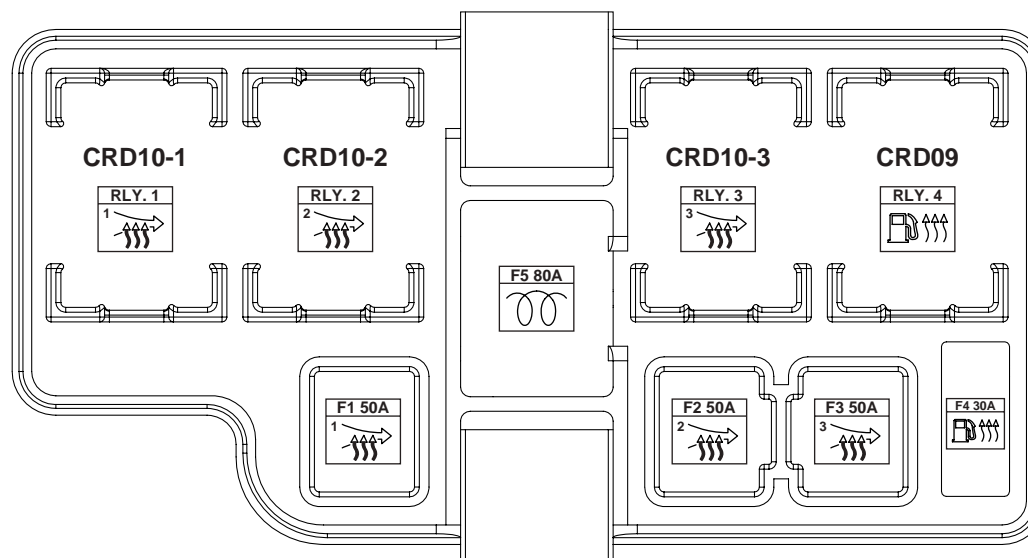
# FUSE & RELAY INFORMATION

## Fuse & Relay Information (11)

SD100-11

### DIESEL BOX (D4HA : R 2.0L)

#### - Layout



#### - Circuit

##### FUSE

Fuse No.	(A)	Fuse Symbol	Circuit Protected
F1	50A		PTC Heater Relay #1
F2	50A		PTC Heater Relay #2
F3	50A		PTC Heater Relay #3
F4	30A		Fuel Filter Heater Relay
F5	80A		Glow Relay Unit

##### RELAY

Relay No.	Relay Symbol	Relay Type
RLY.1		Micro Plug
RLY.2		Micro Plug
RLY.3		Micro Plug
RLY.4		Micro Plug
-	-	-

※ USE THE DESIGNATED FUSE AND RELAY ONLY



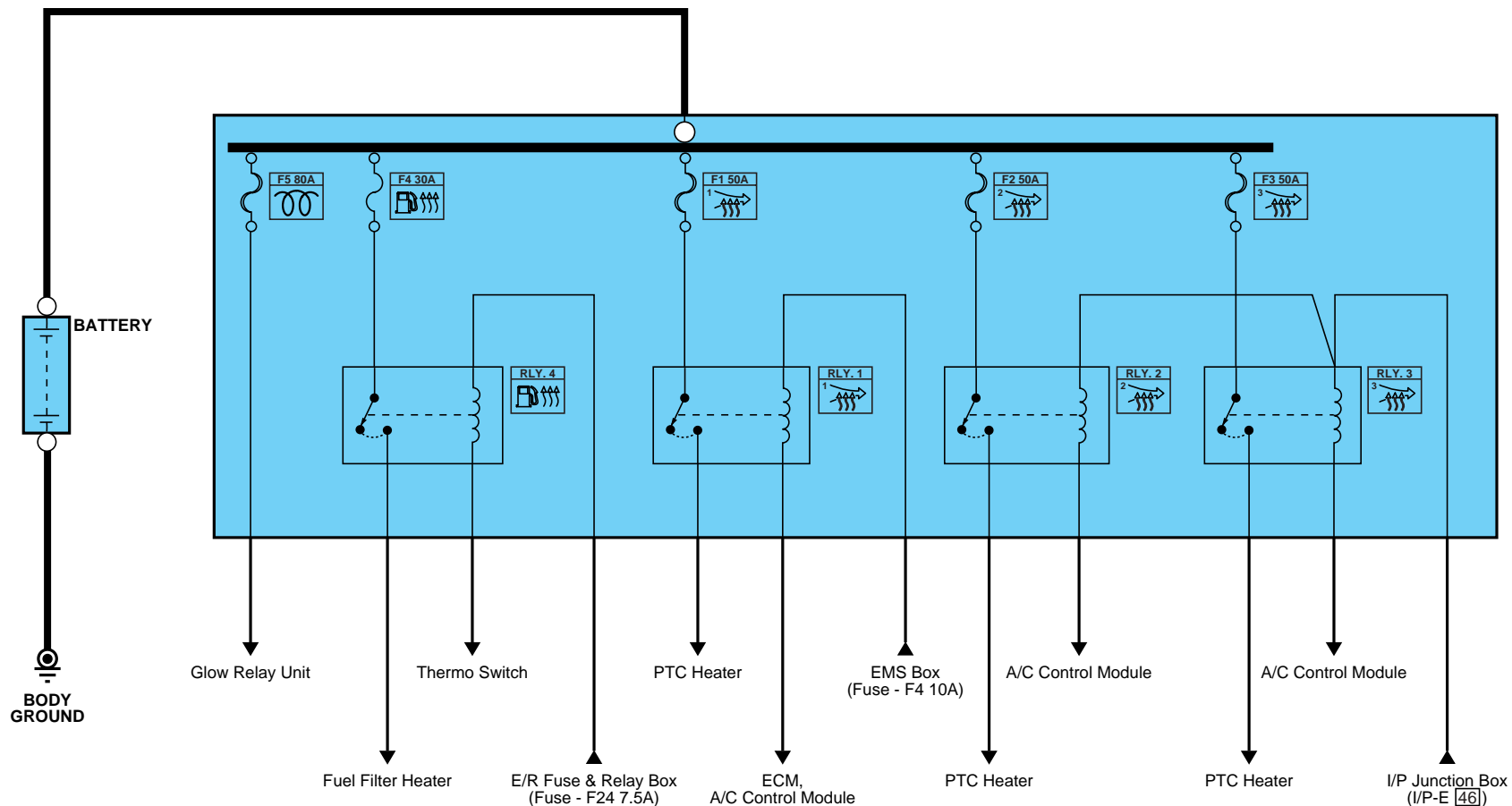
# FUSE & RELAY INFORMATION

## Fuse & Relay Information (12)

SD100-12

### Diesel Box (D4HA : R 2.0L)

#### - Circuit Diagram

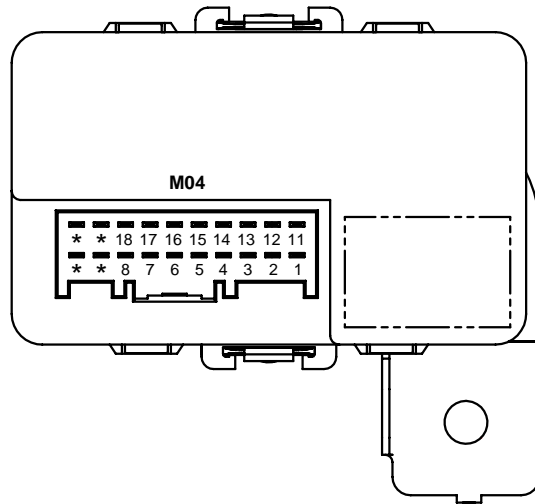


# FUSE & RELAY INFORMATION

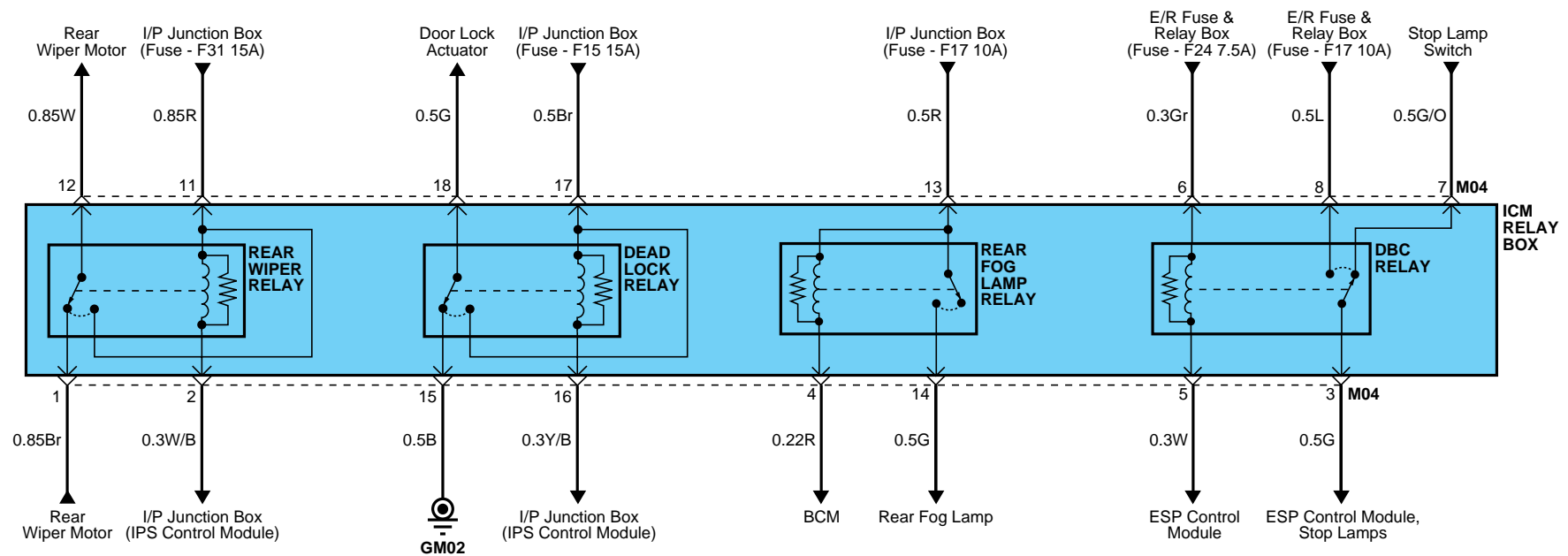
## Fuse & Relay Information (13)

SD100-13

### ICM Relay Box - Layout



### - Circuit Diagram



**FUSE & RELAY INFORMATION**

Fuse & Relay Information (14)

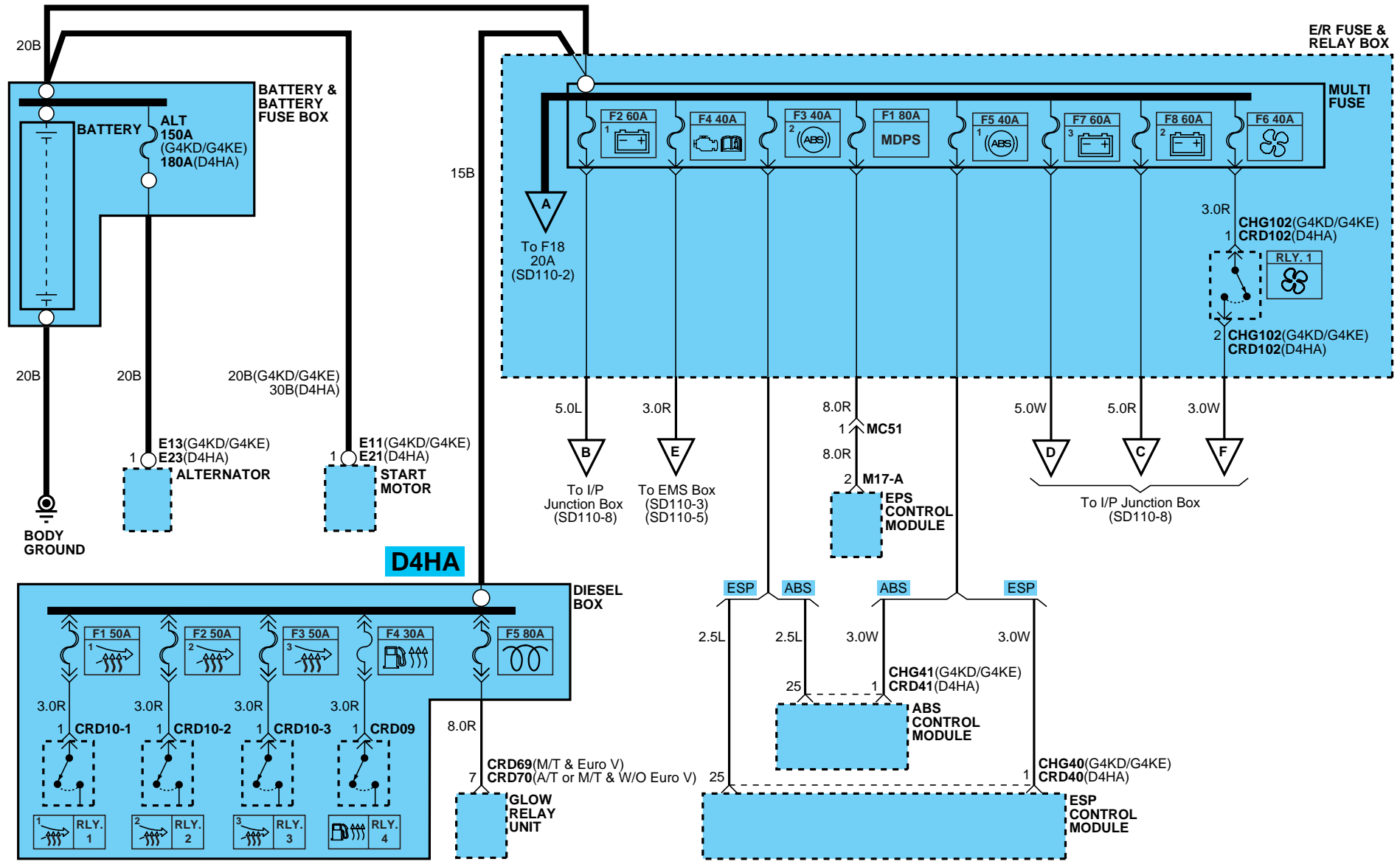
**SD100-14**

**MEMO**

Power Distribution (1)

SD110-1

**G4KD/G4KE : THETA II 2.0L/2.4L**  
**D4HA : R 2.0L**



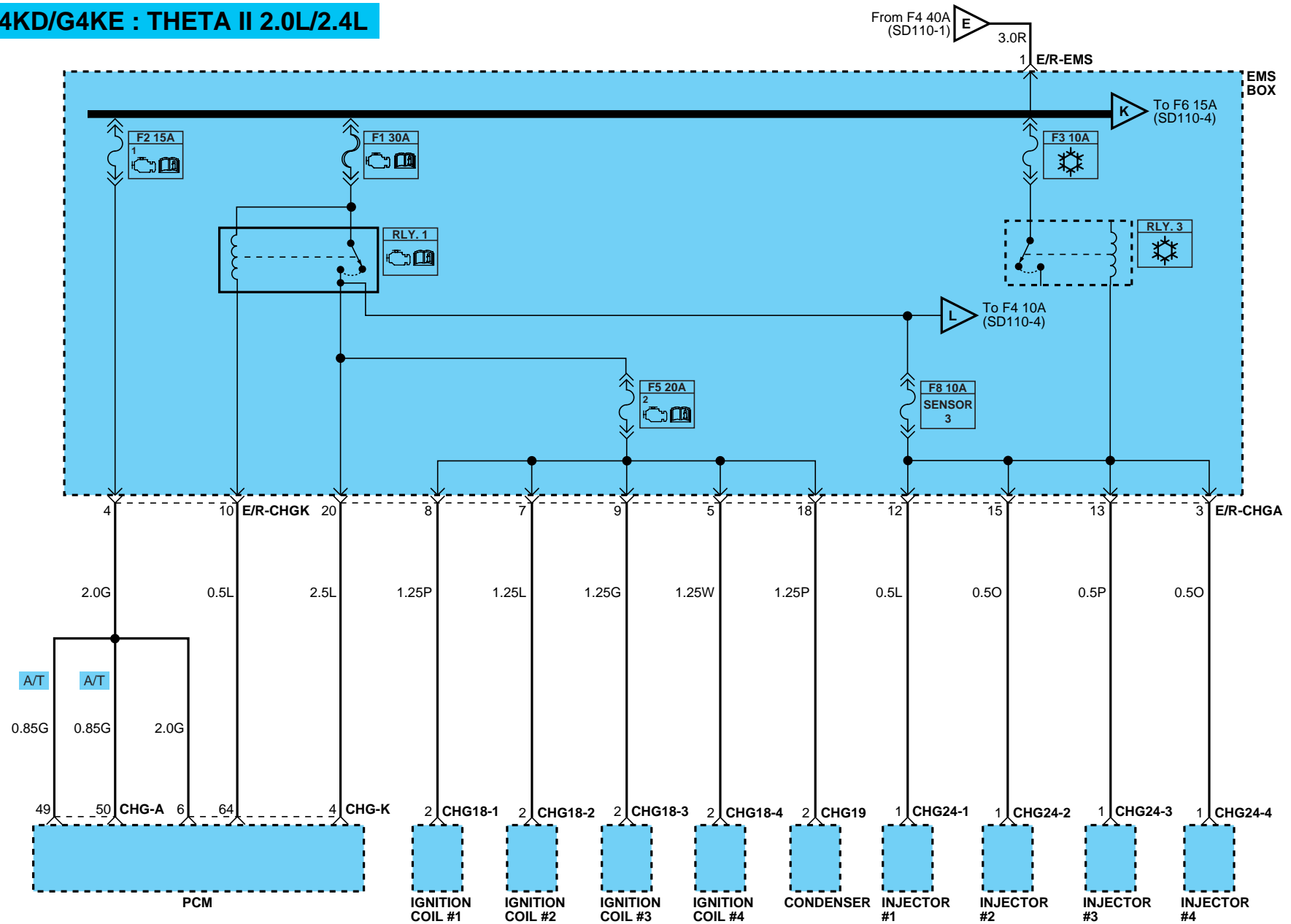


# POWER DISTRIBUTION

## Power Distribution (3)

SD110-3

### G4KD/G4KE : THETA II 2.0L/2.4L

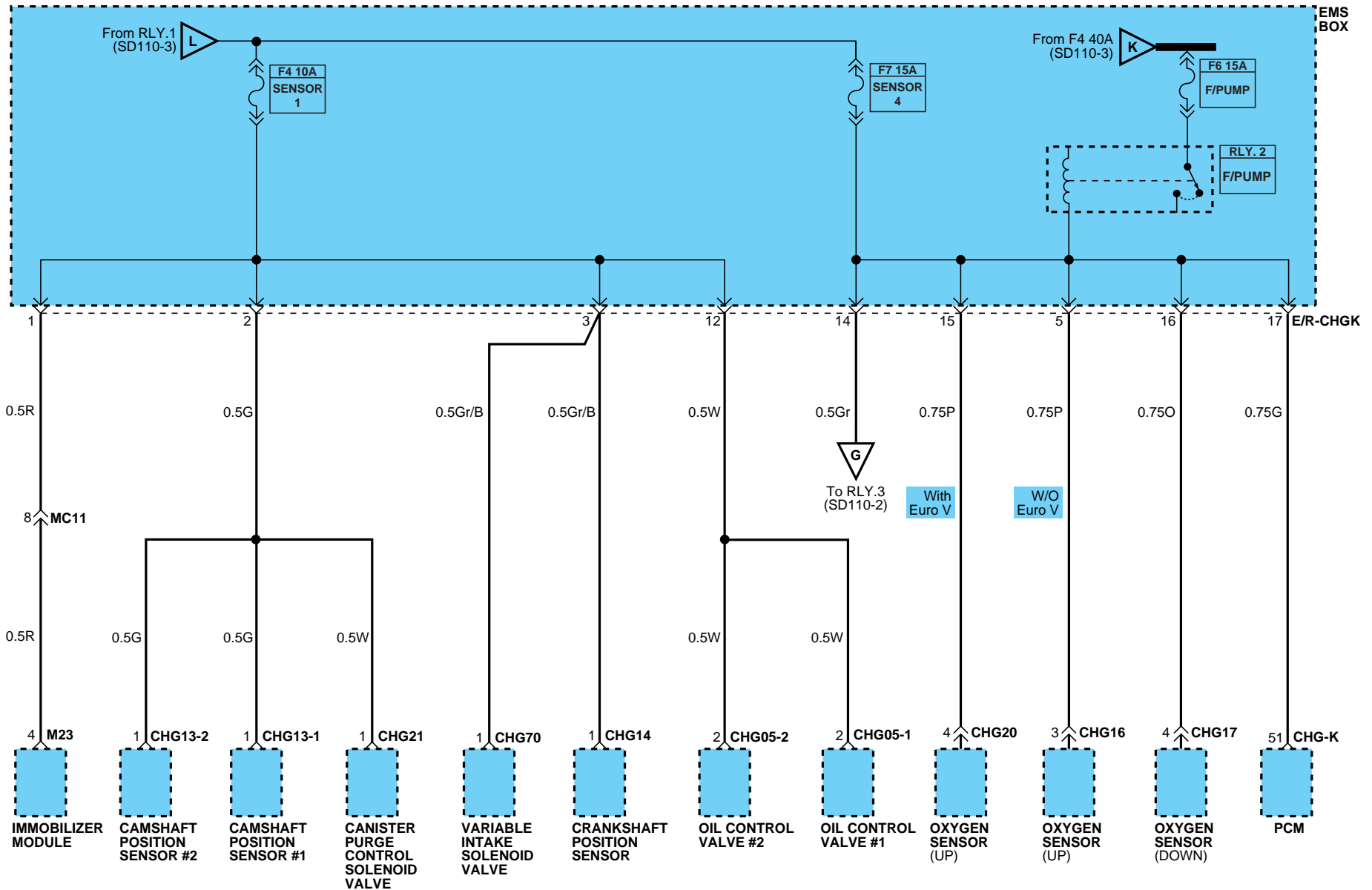


# POWER DISTRIBUTION

## Power Distribution (4)

SD110-4

### G4KD/G4KE : THETA II 2.0L/2.4L

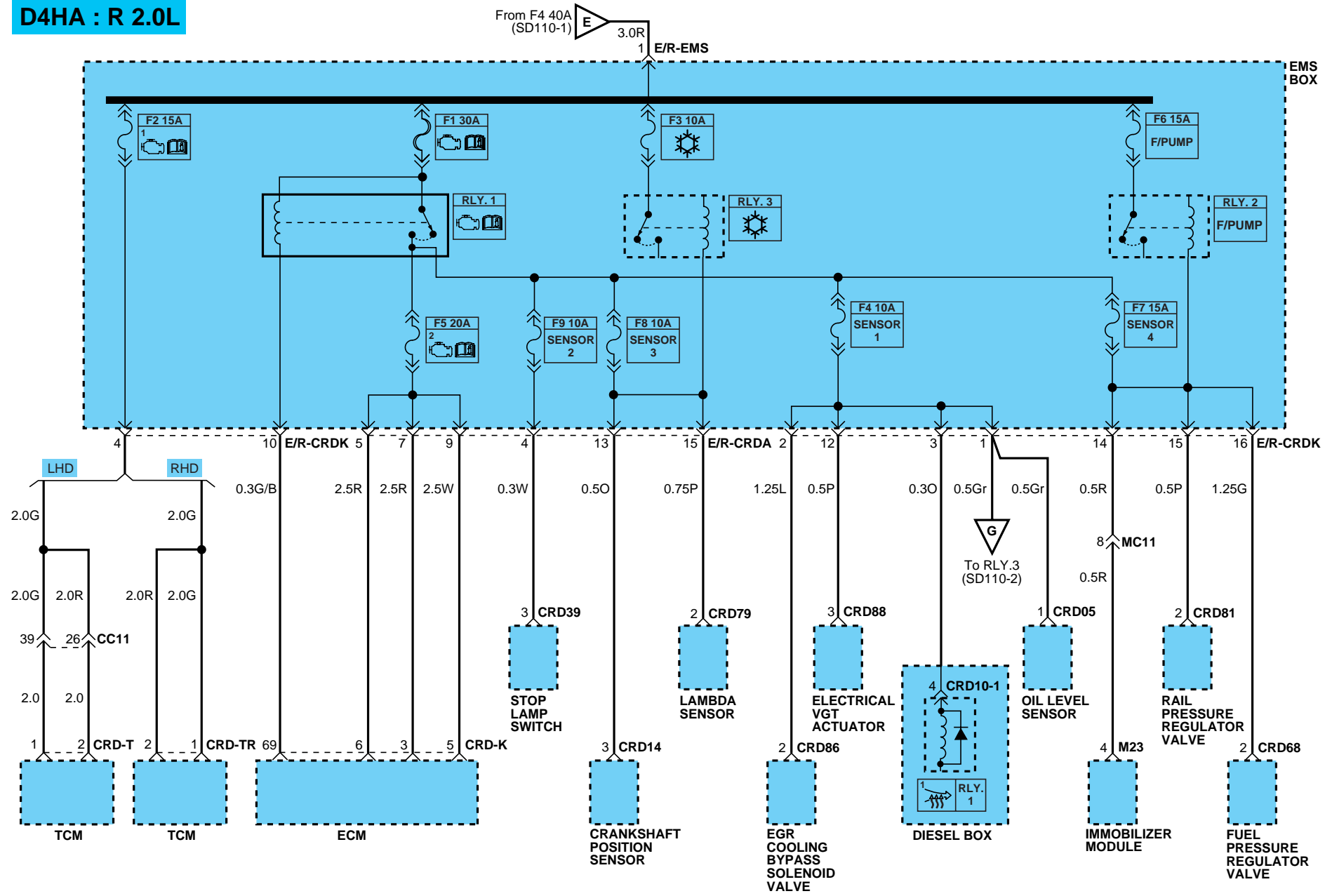


# POWER DISTRIBUTION

## Power Distribution (5)

SD110-5

**D4HA : R 2.0L**

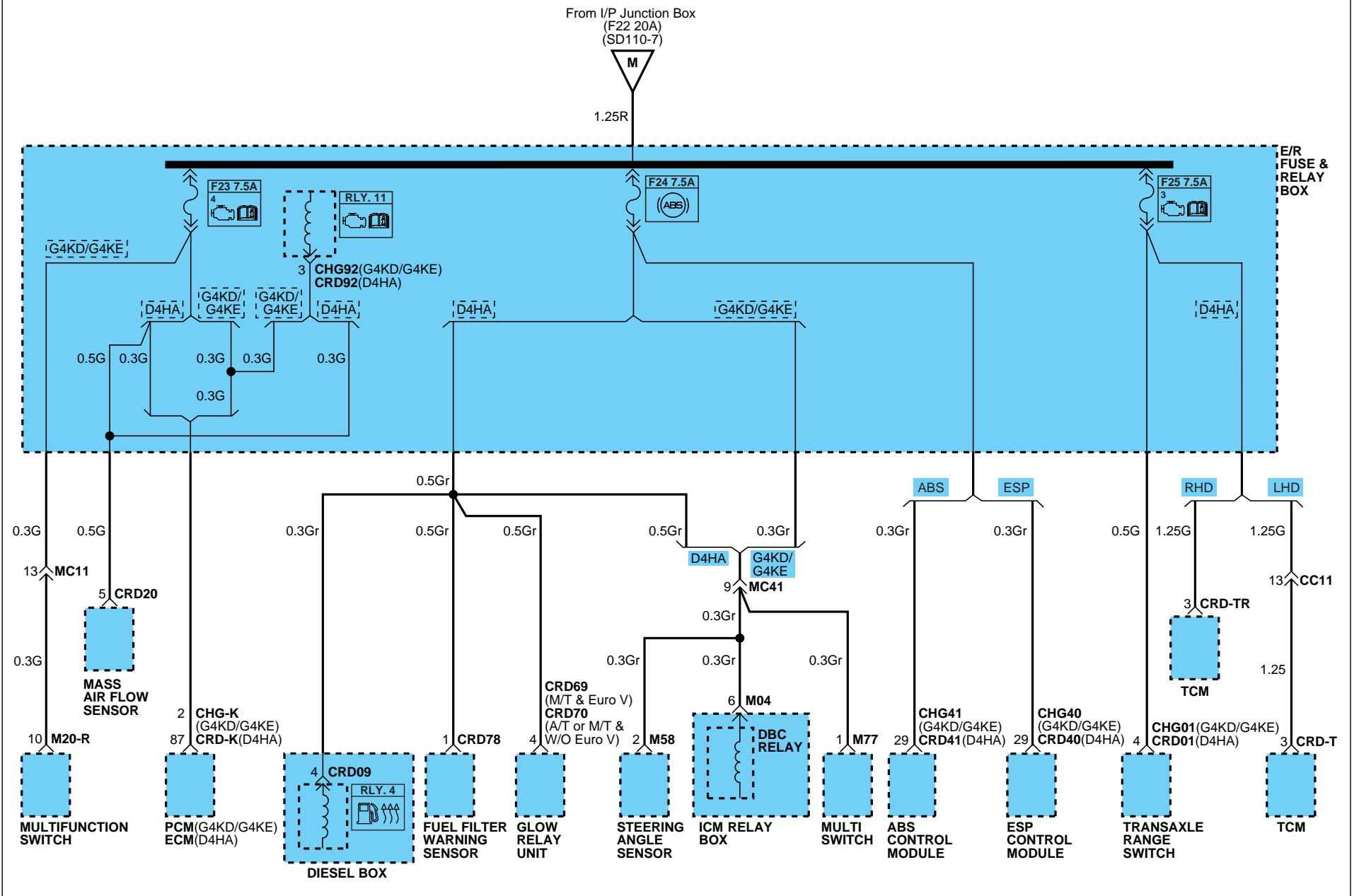




# POWER DISTRIBUTION

## Power Distribution (6)

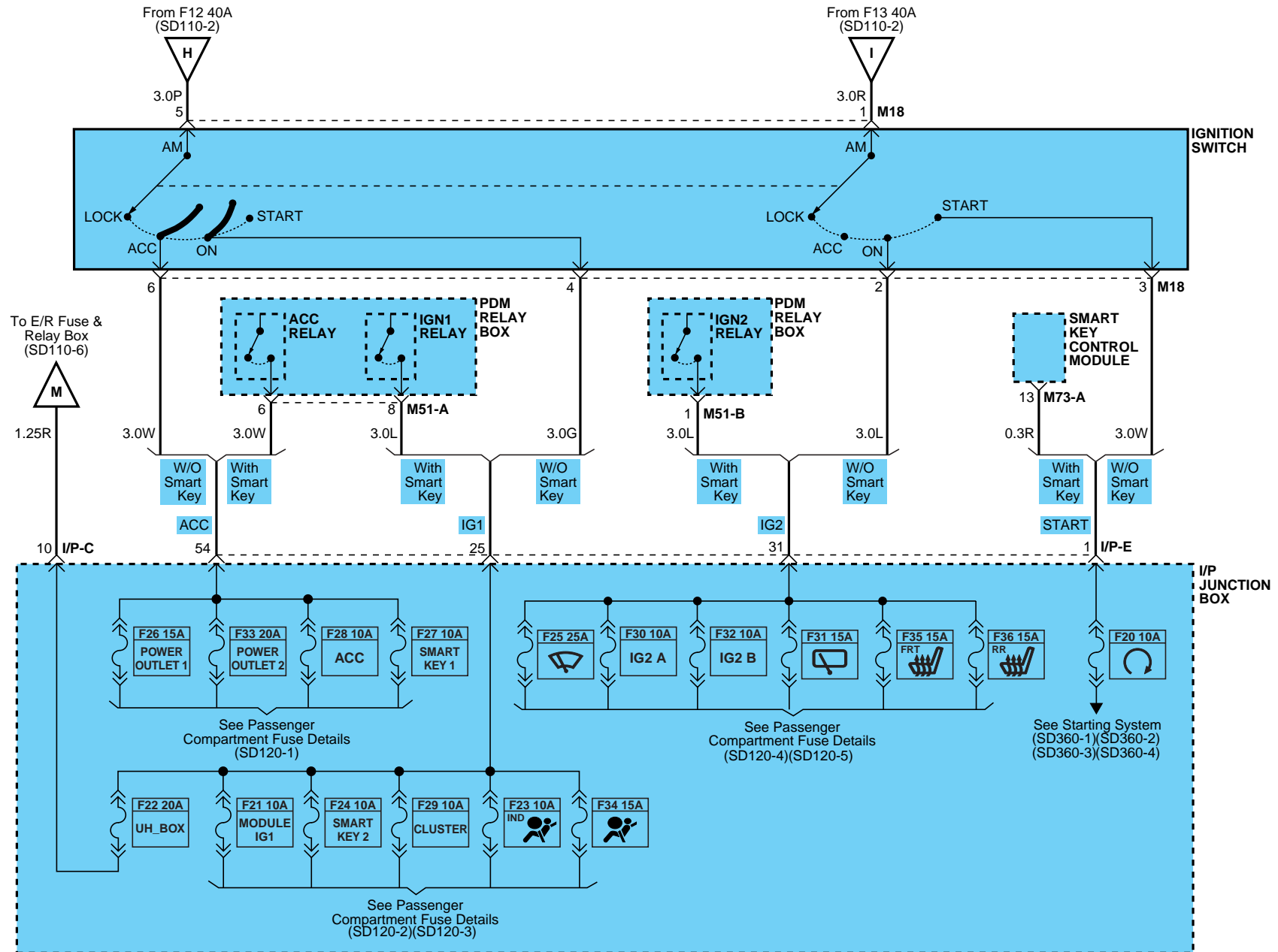
SD110-6



# POWER DISTRIBUTION

## Power Distribution (7)

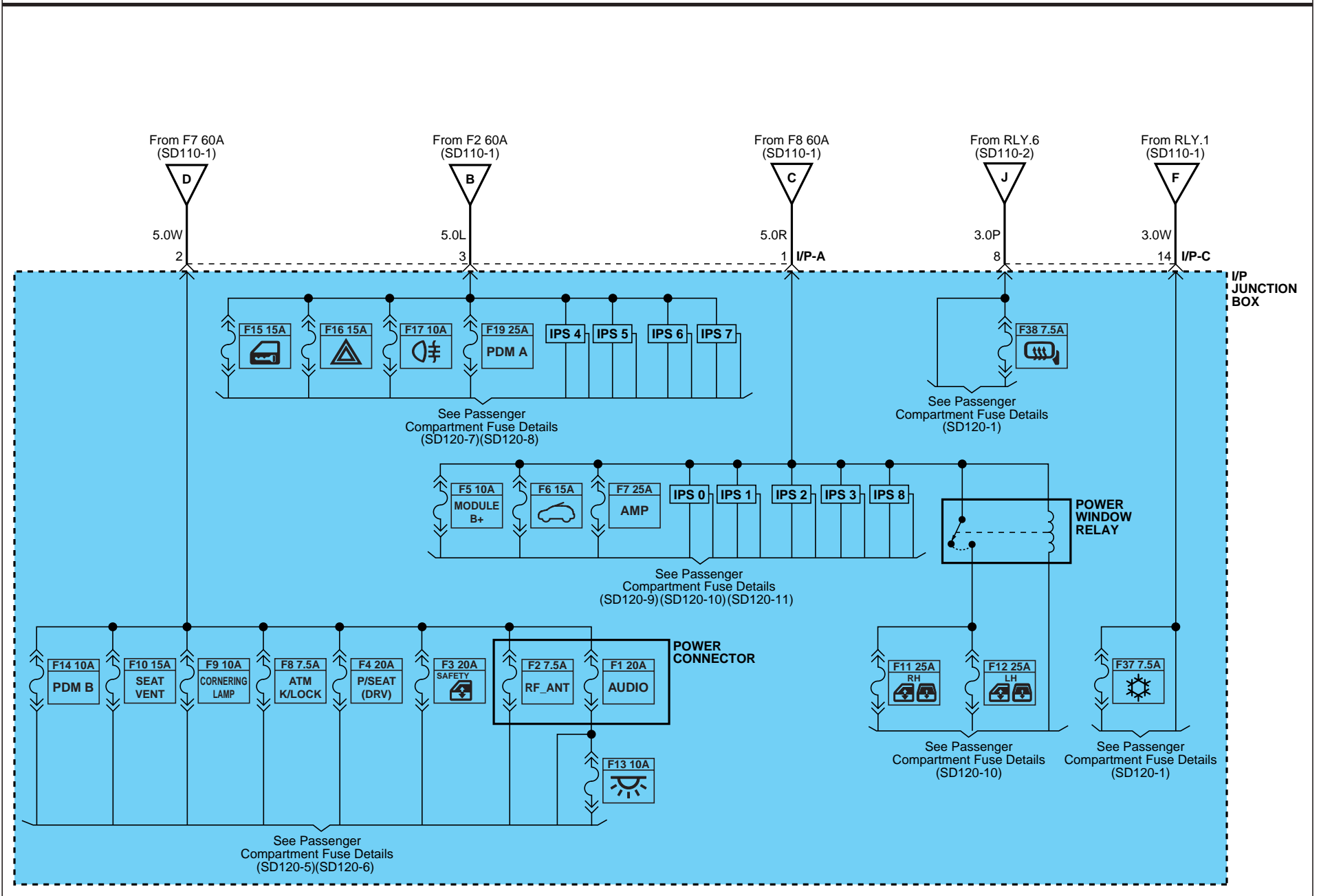
SD110-7



# POWER DISTRIBUTION

## Power Distribution (8)

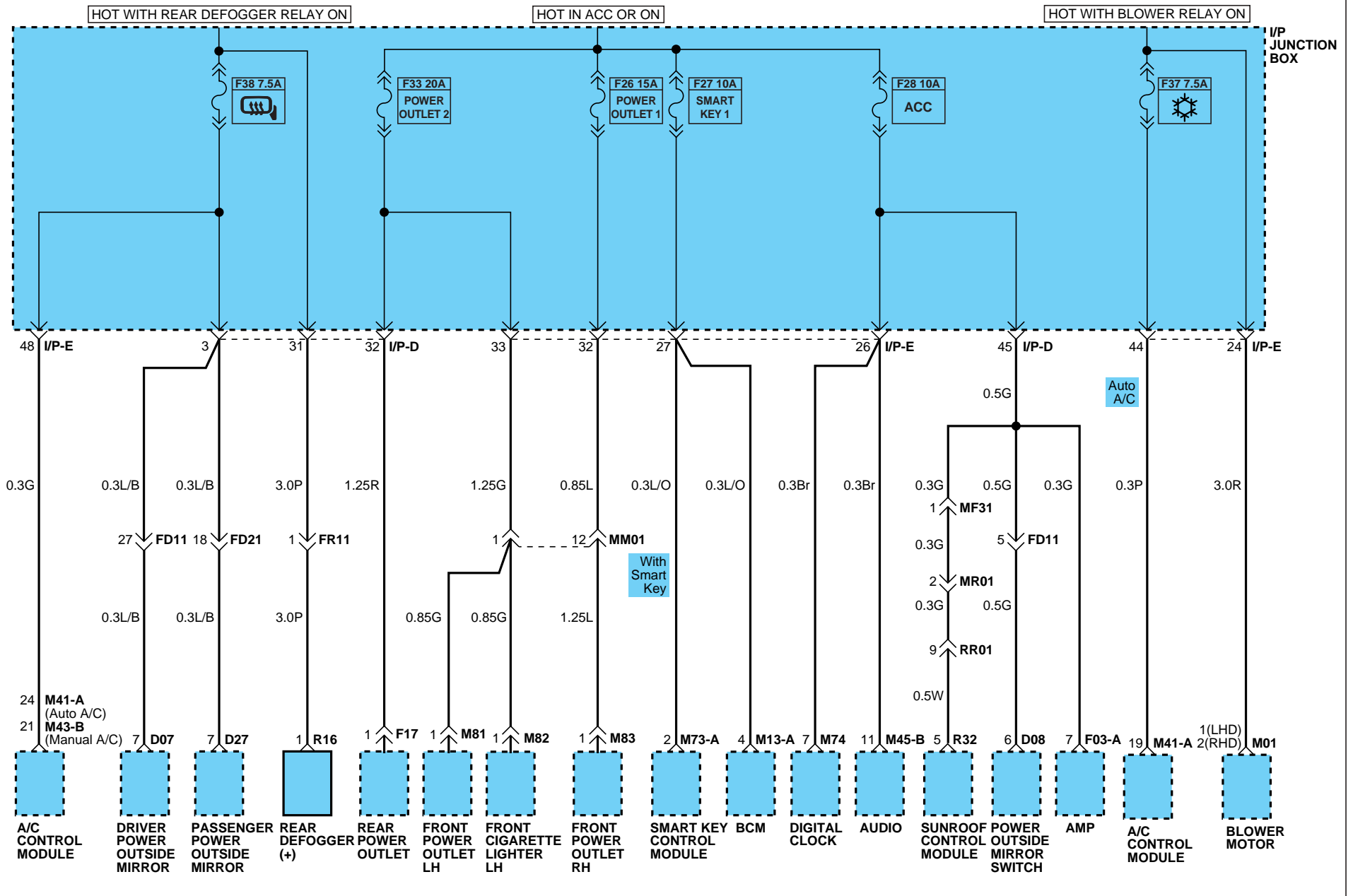
SD110-8



PASSENGER COMPARTMENT FUSE DETAILS EFEB15E2

Passenger Compartment Fuse Details (1)

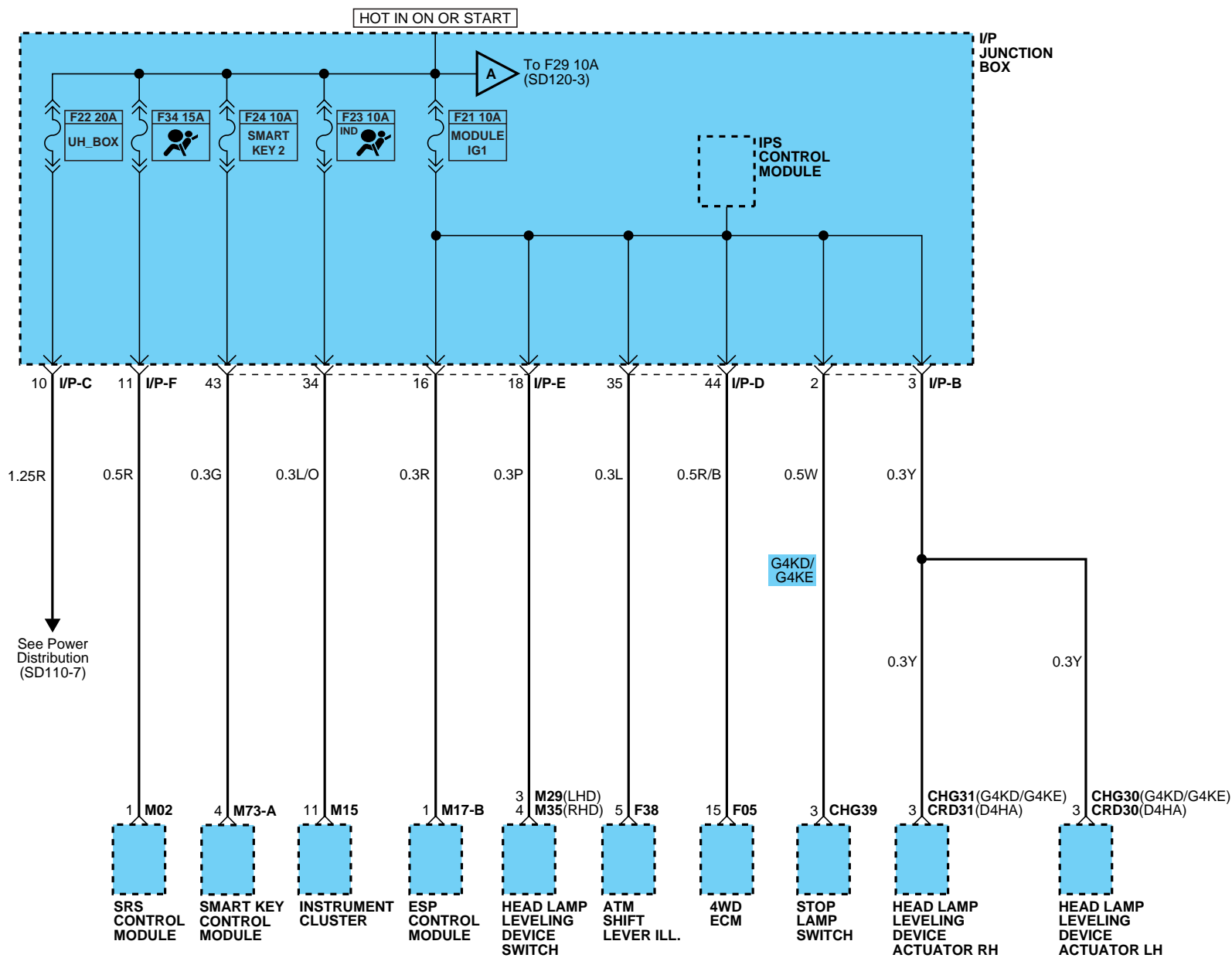
SD120-1



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (2)

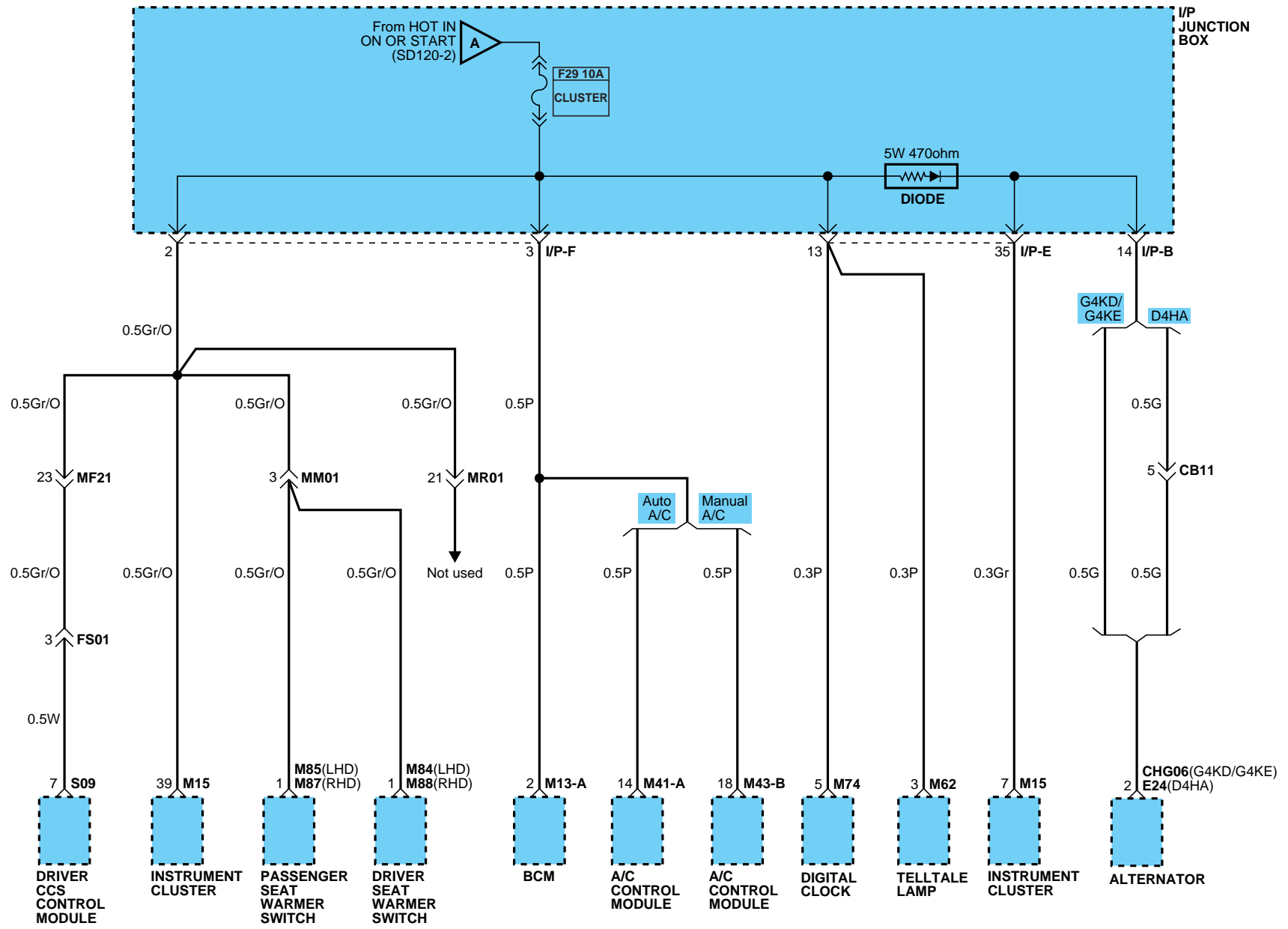
SD120-2



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (3)

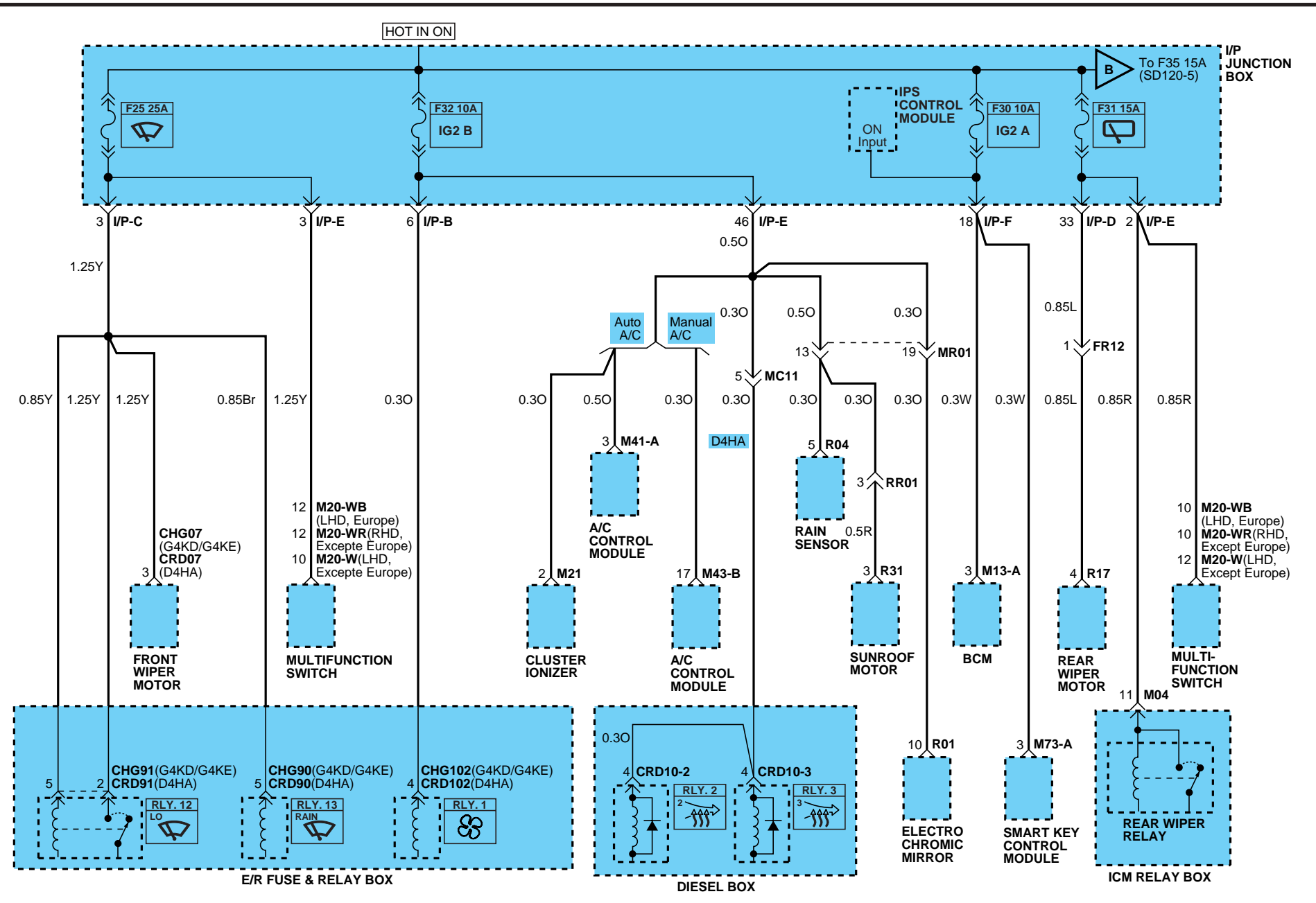
SD120-3



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (4)

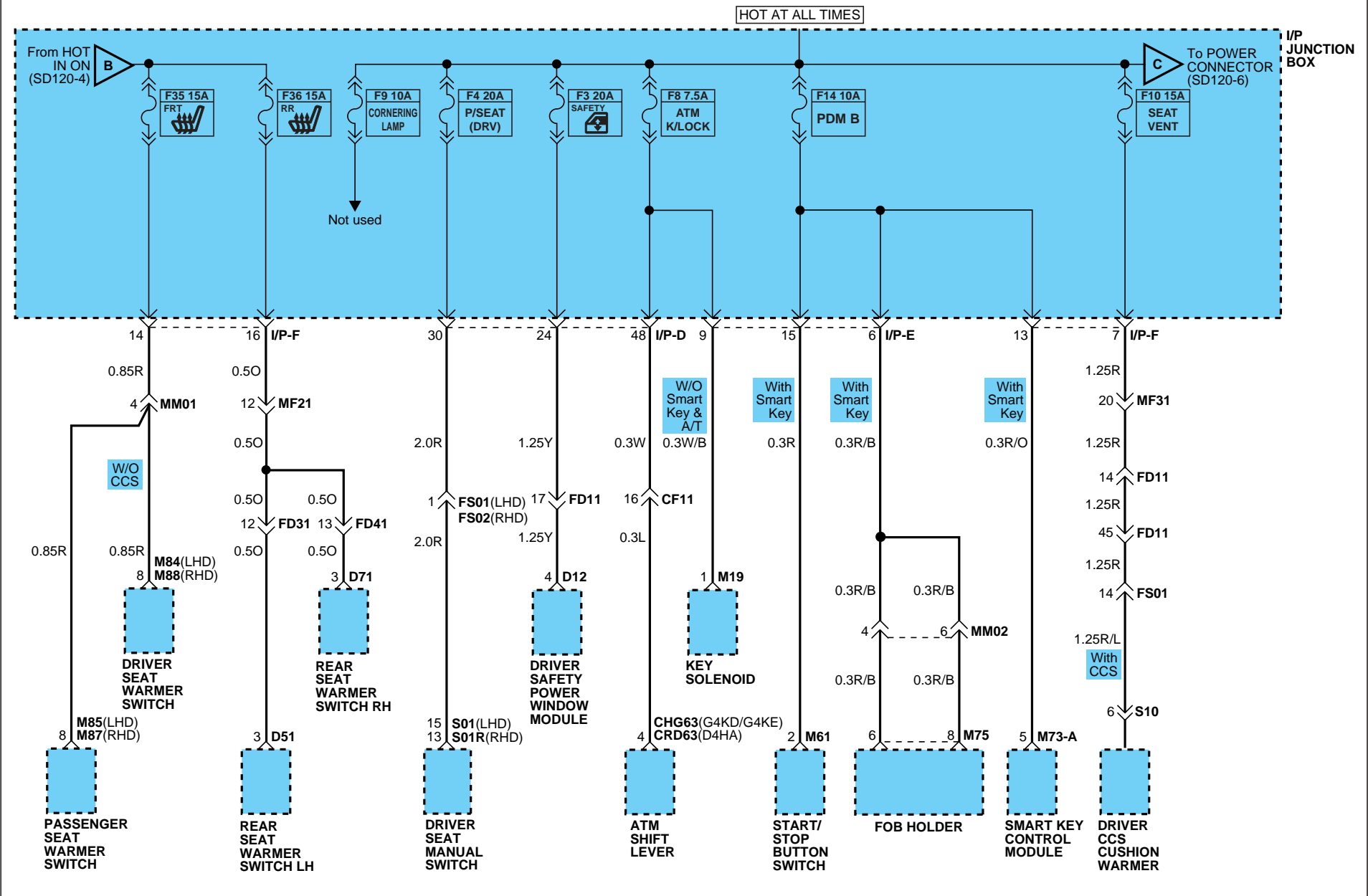
SD120-4



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (5)

SD120-5

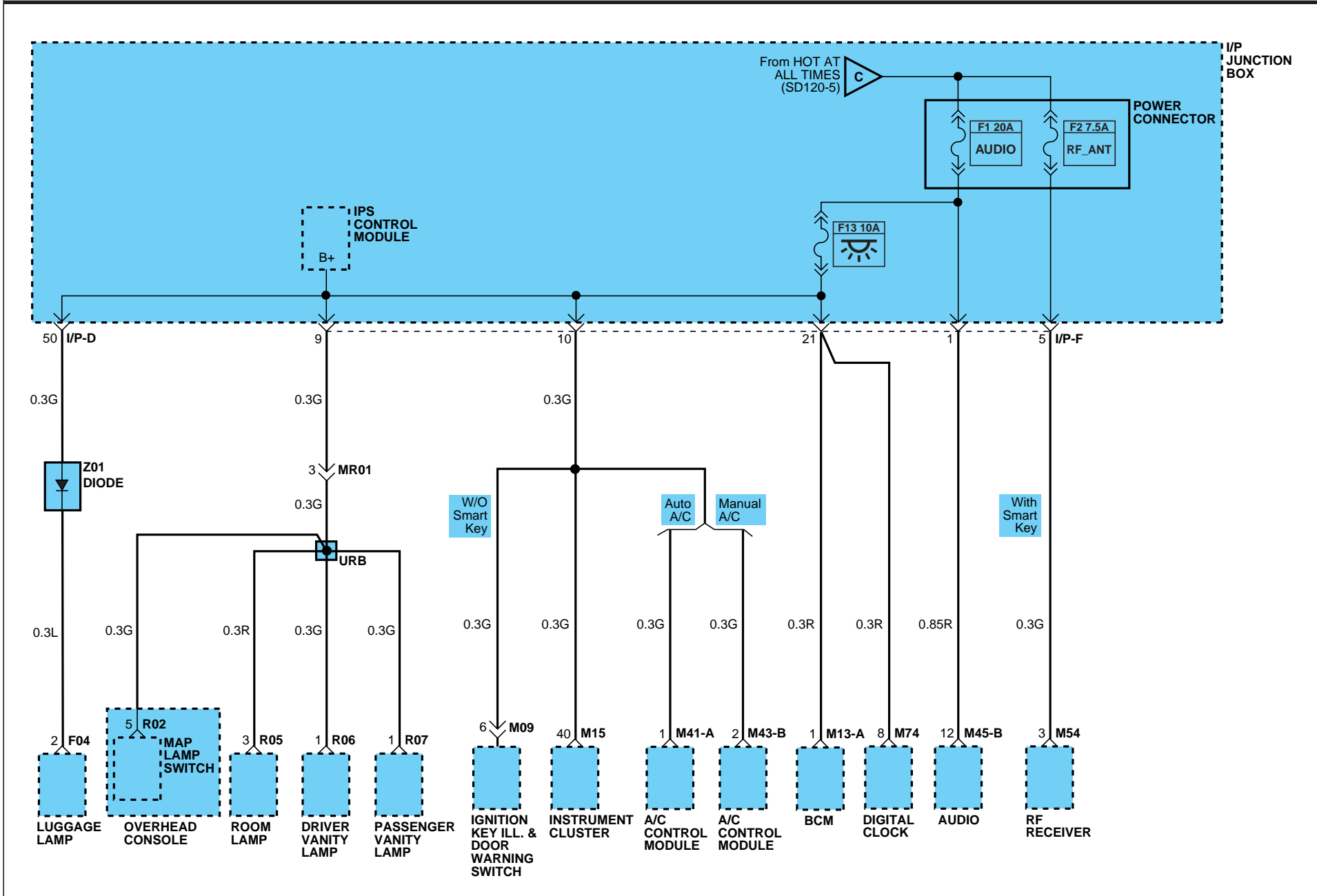




# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (6)

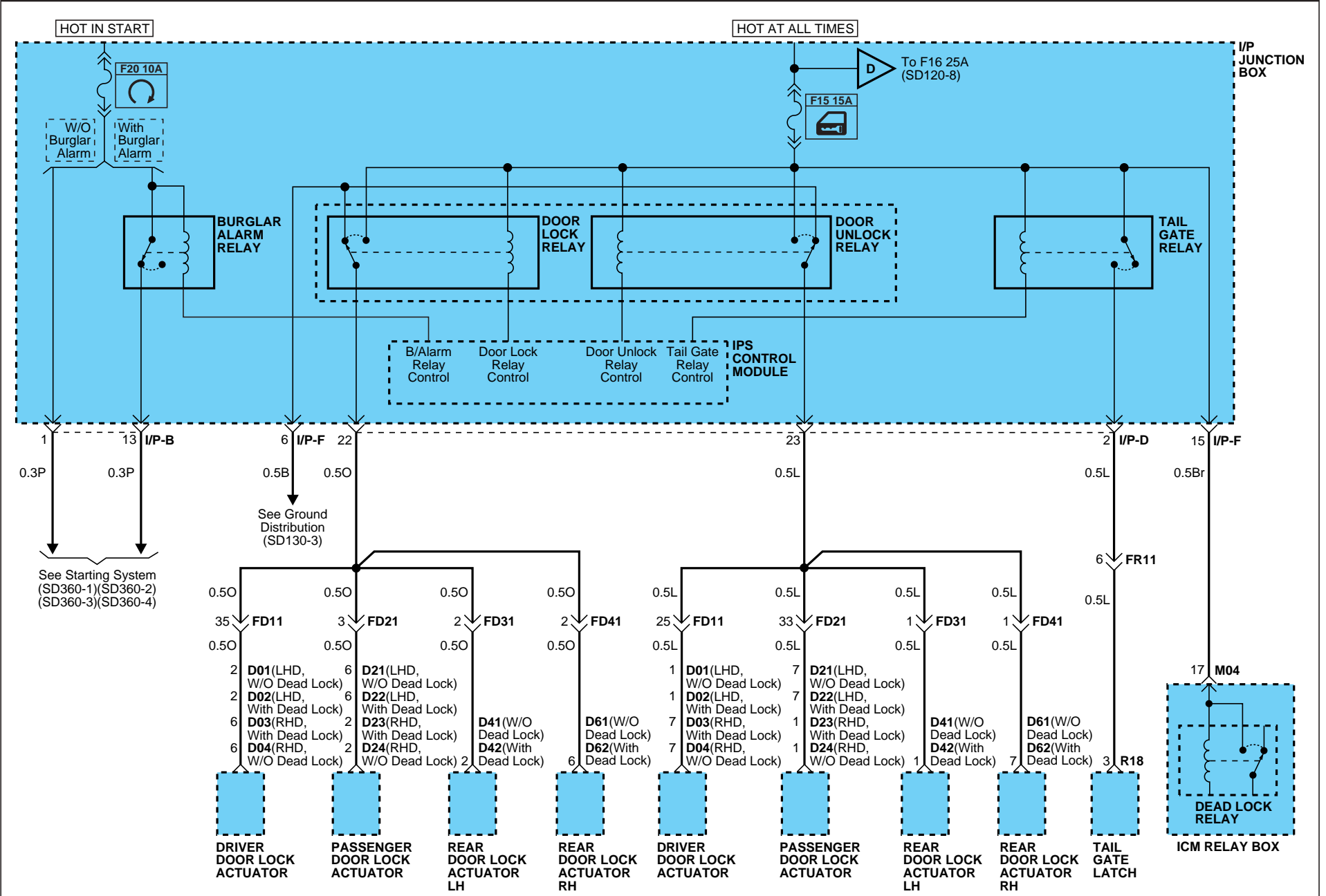
SD120-6



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (7)

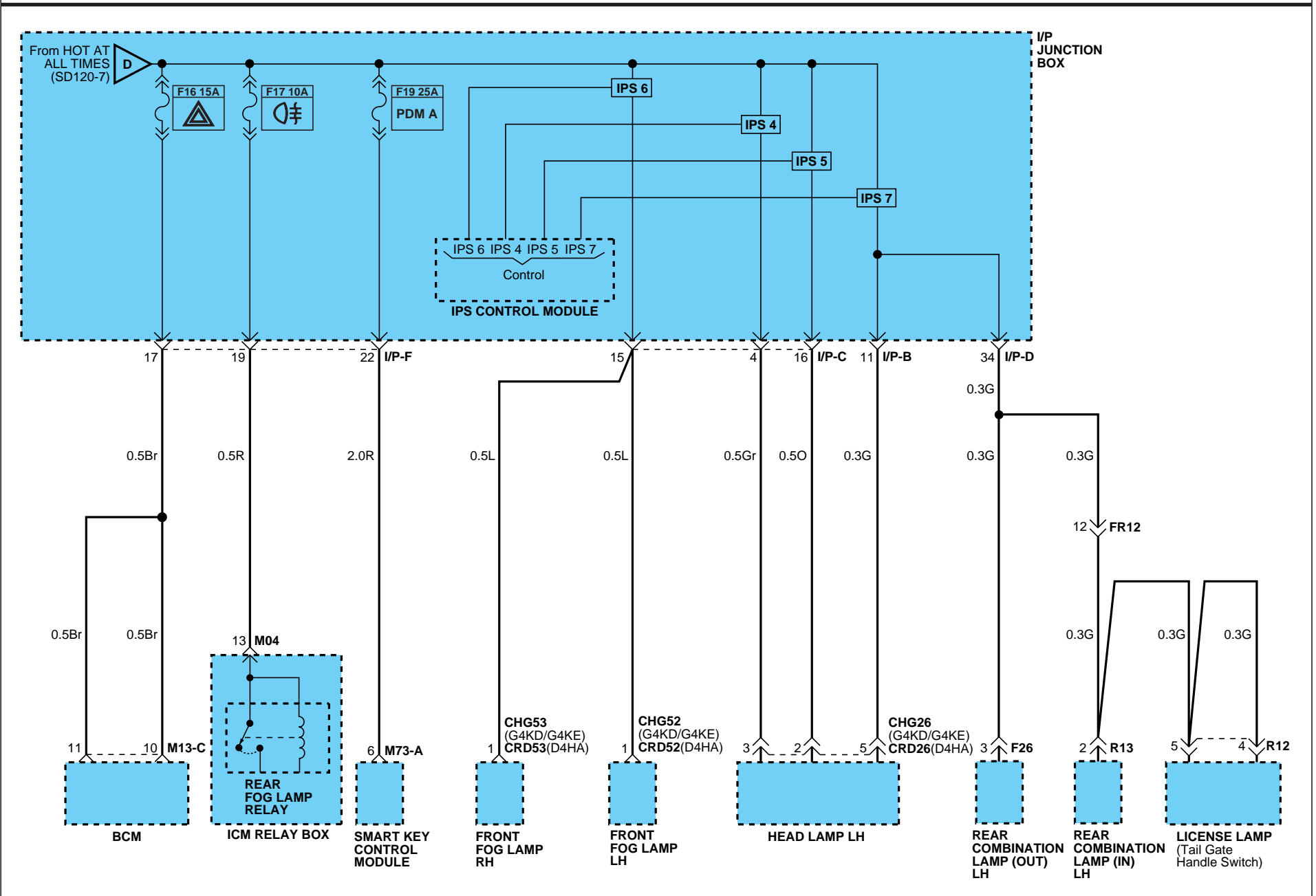
SD120-7



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (8)

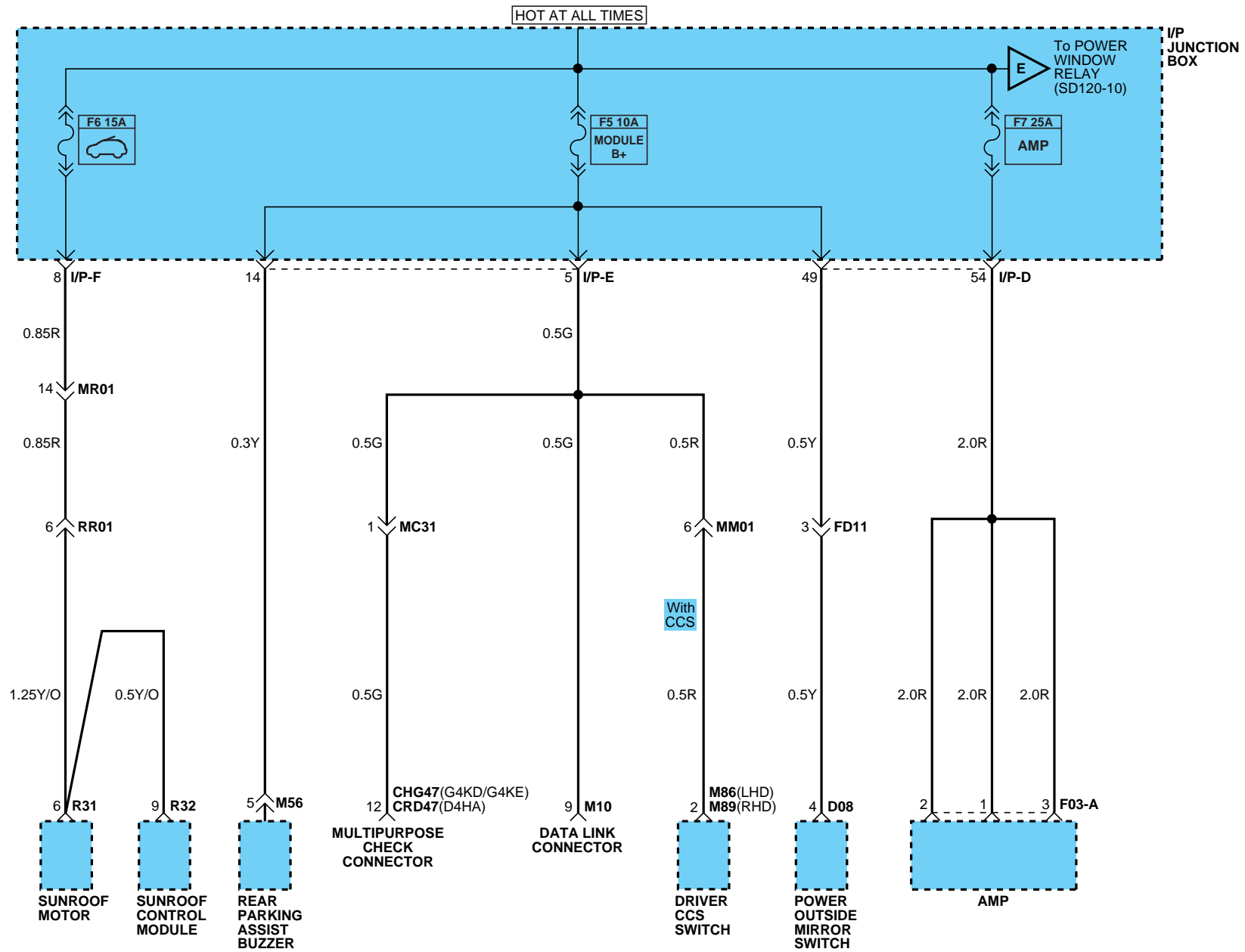
SD120-8



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (9)

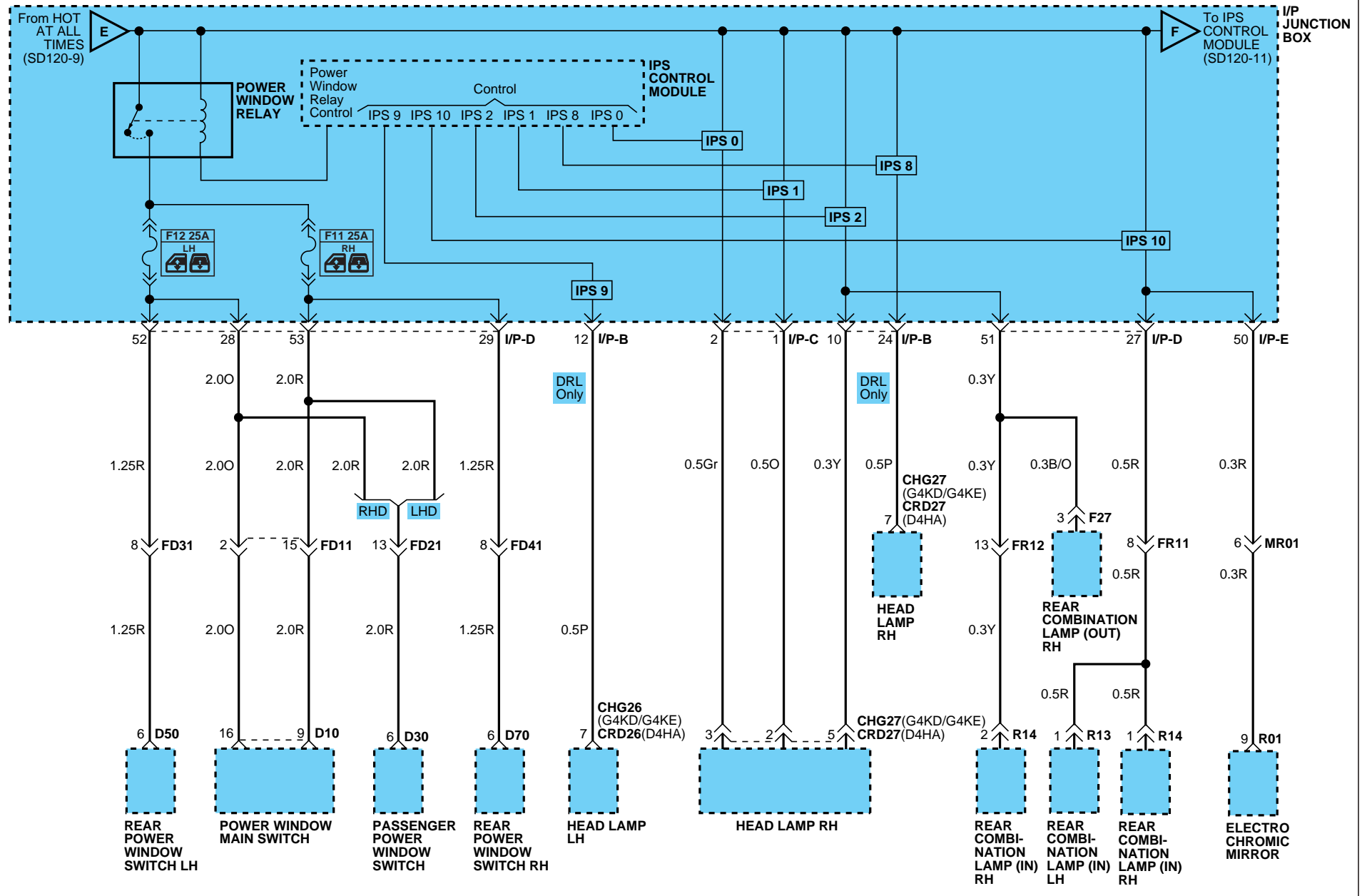
SD120-9



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (10)

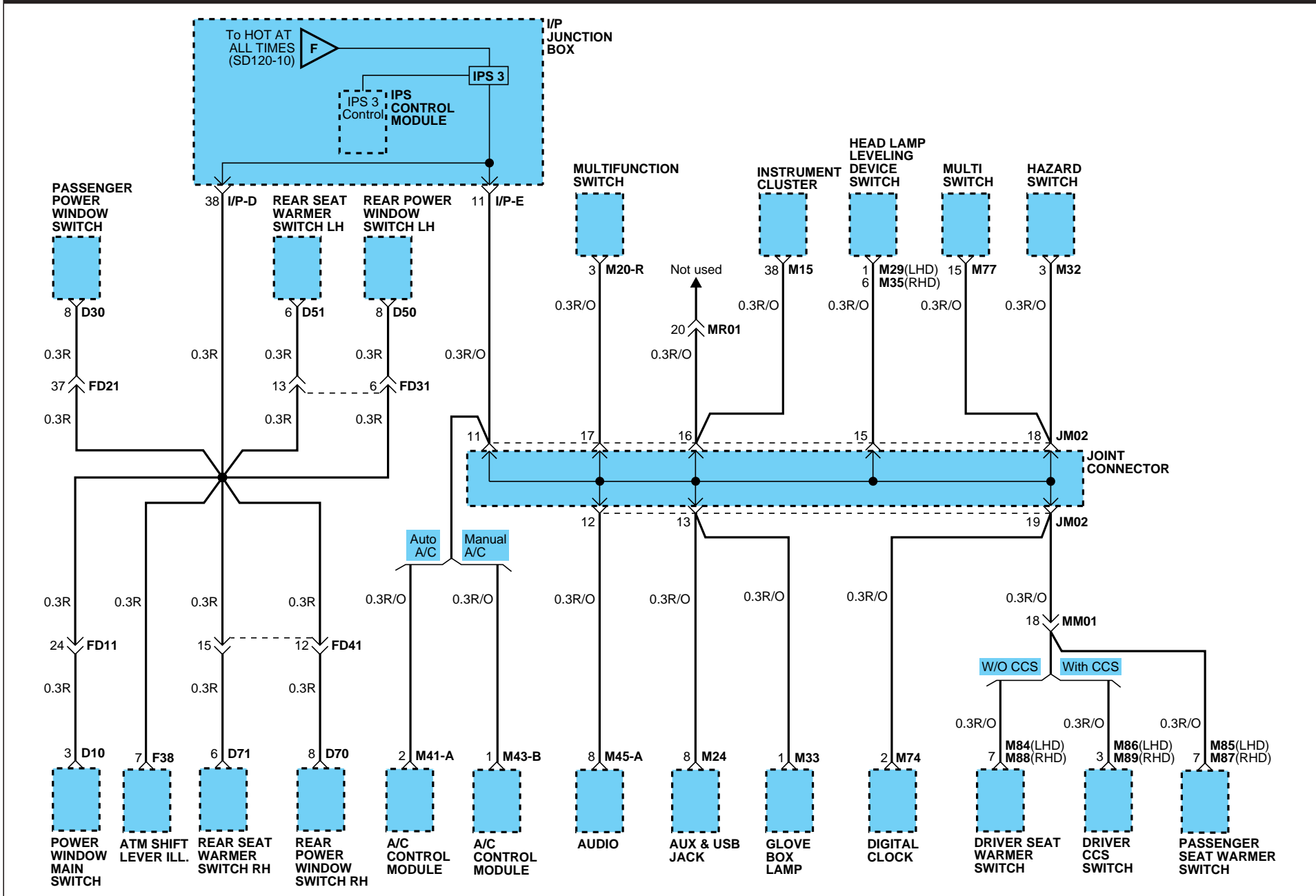
SD120-10



# PASSENGER COMPARTMENT FUSE DETAILS

## Passenger Compartment Fuse Details (11)

SD120-11



**PASSENGER COMPARTMENT FUSE DETAILS**

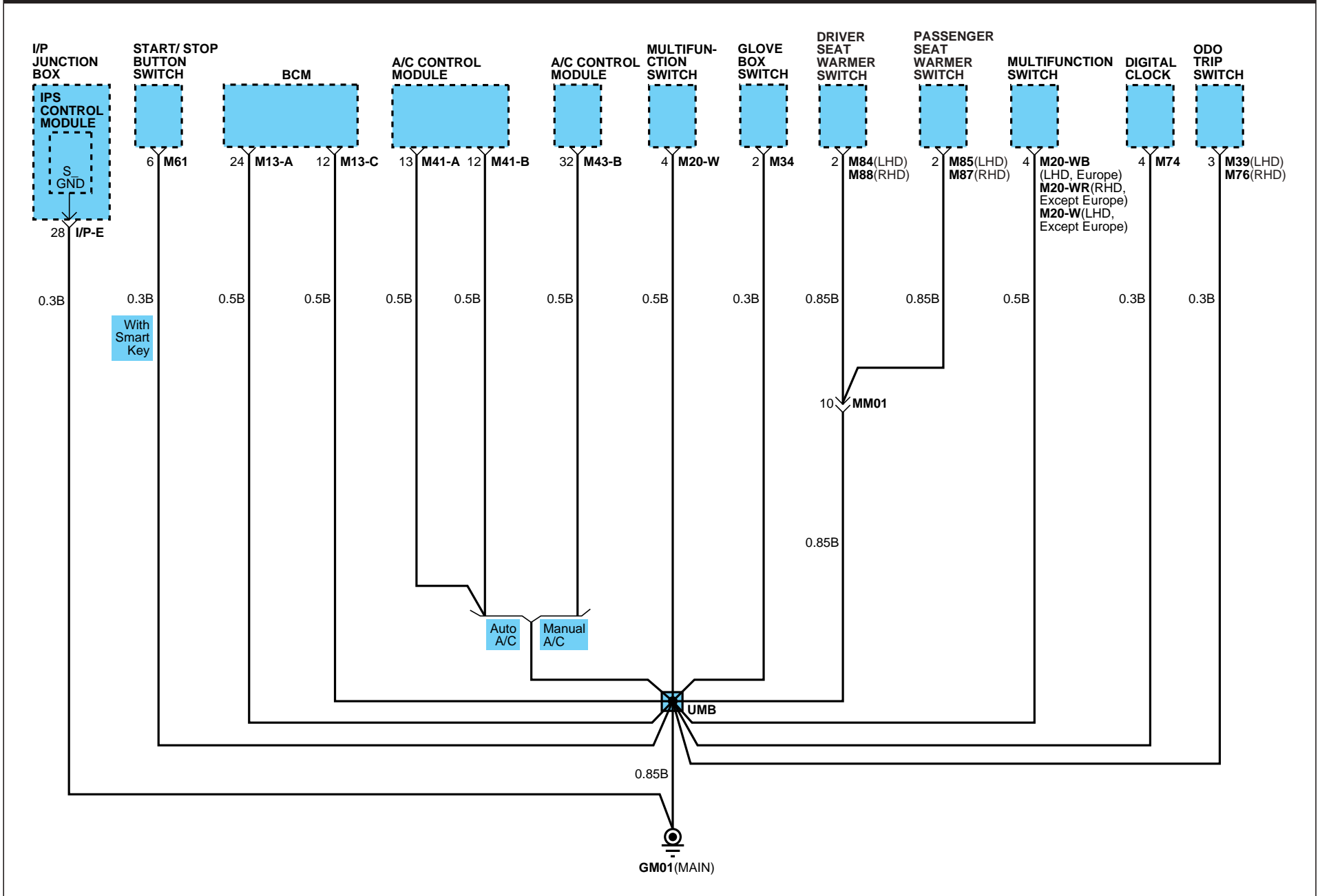
Passenger Compartment Fuse Details (12)

**SD120-12**

**MEMO**

Ground Distribution (1)

SD130-1

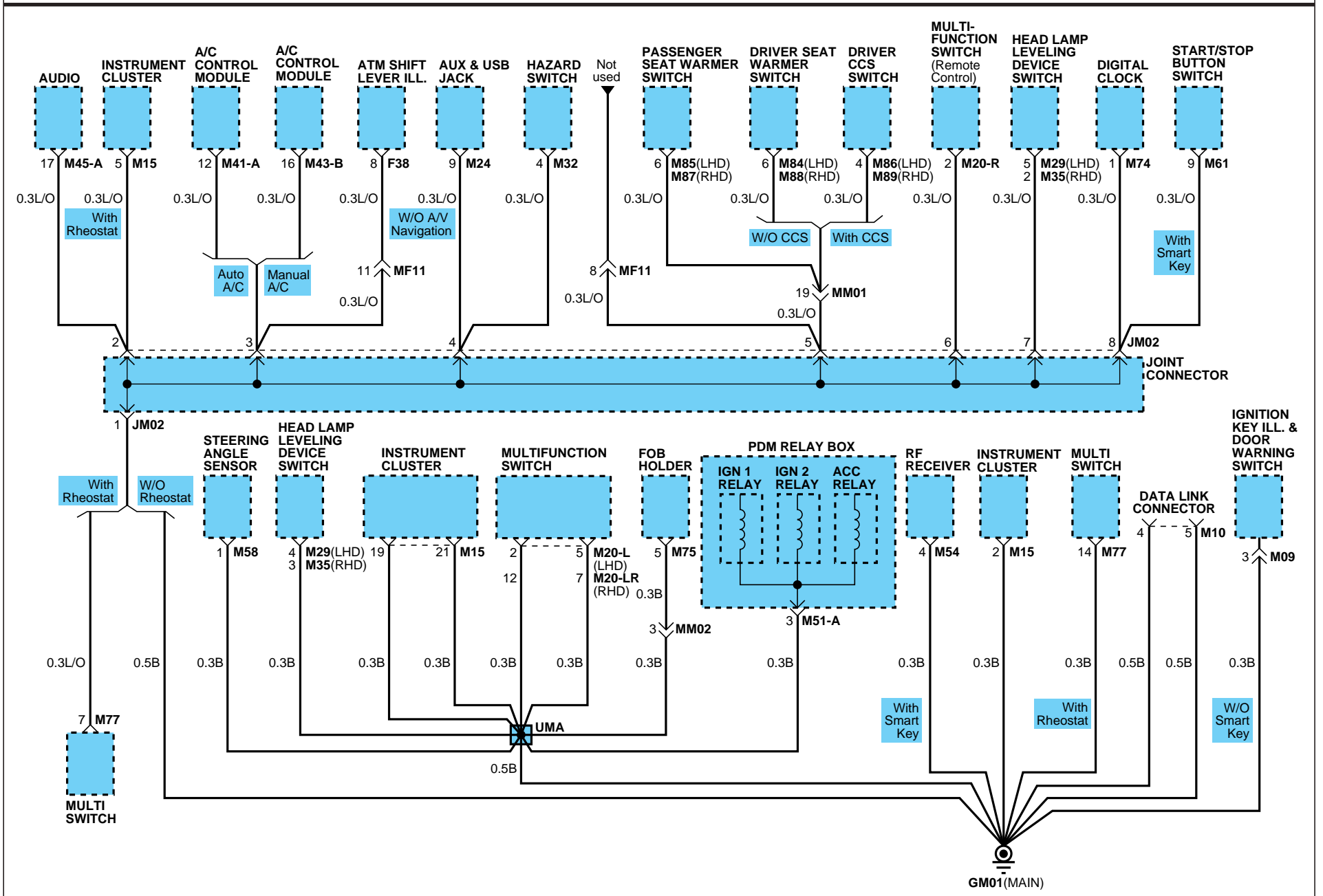




# GROUND DISTRIBUTION

## Ground Distribution (2)

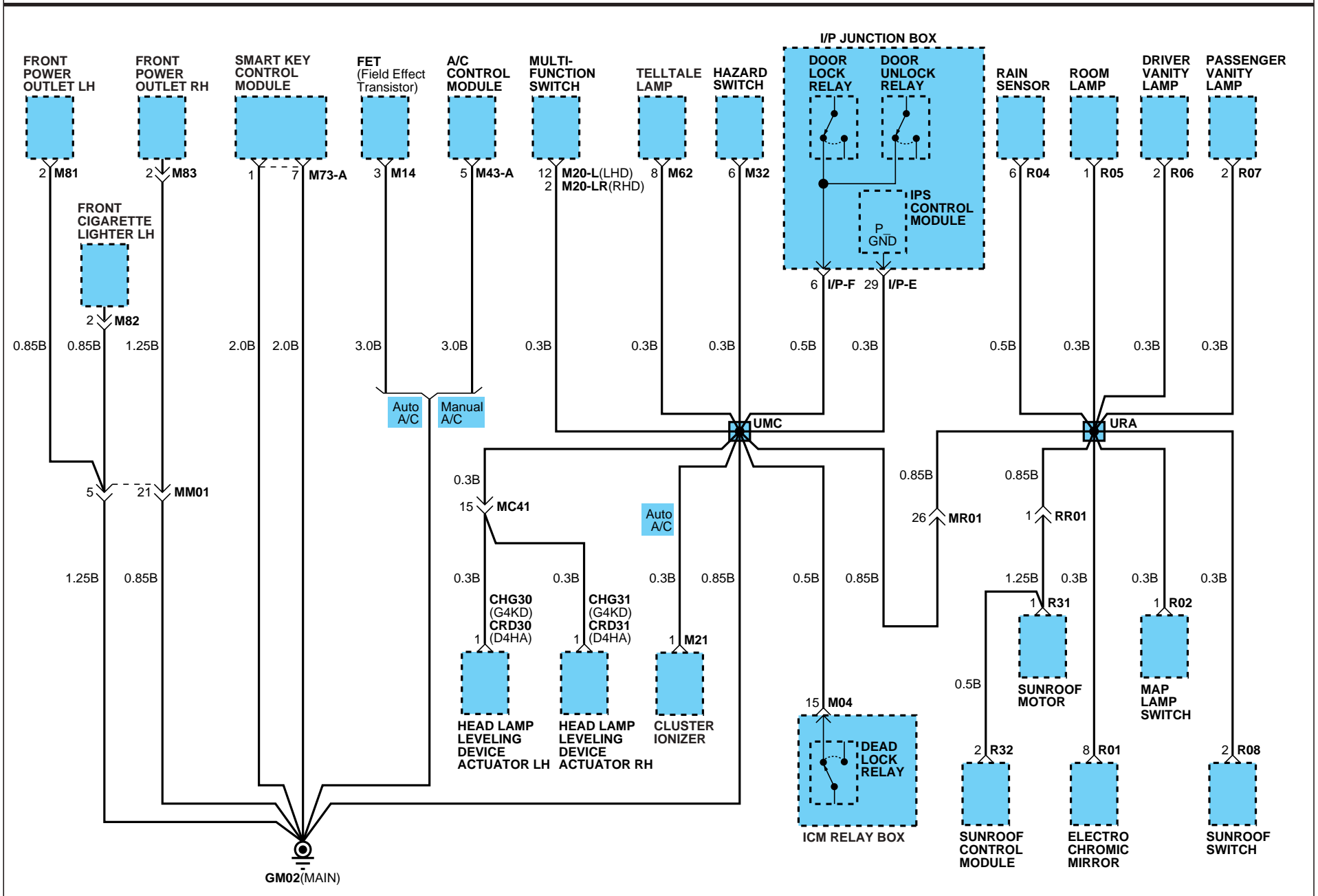
SD130-2



# GROUND DISTRIBUTION

## Ground Distribution (3)

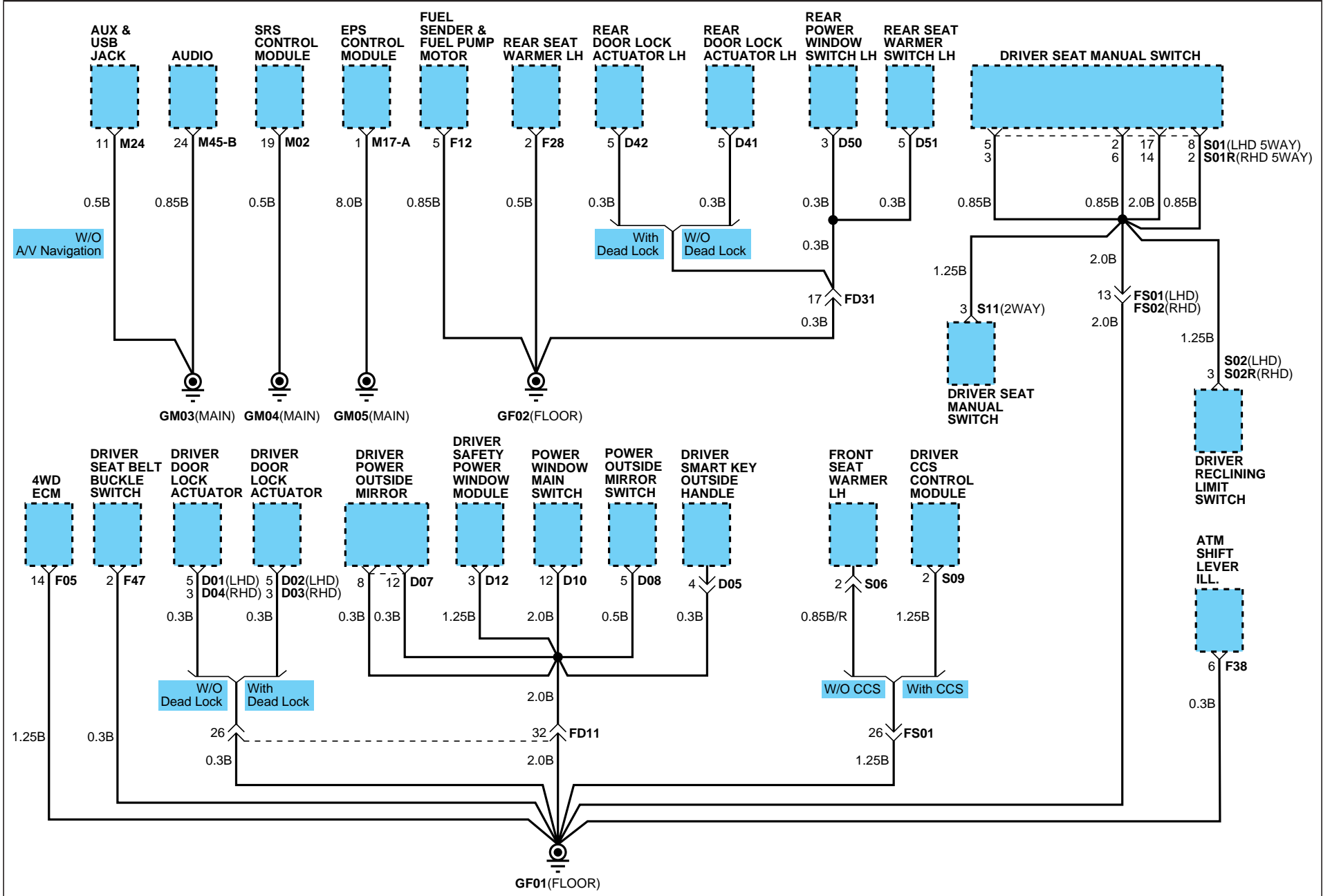
SD130-3



# GROUND DISTRIBUTION

## Ground Distribution (4)

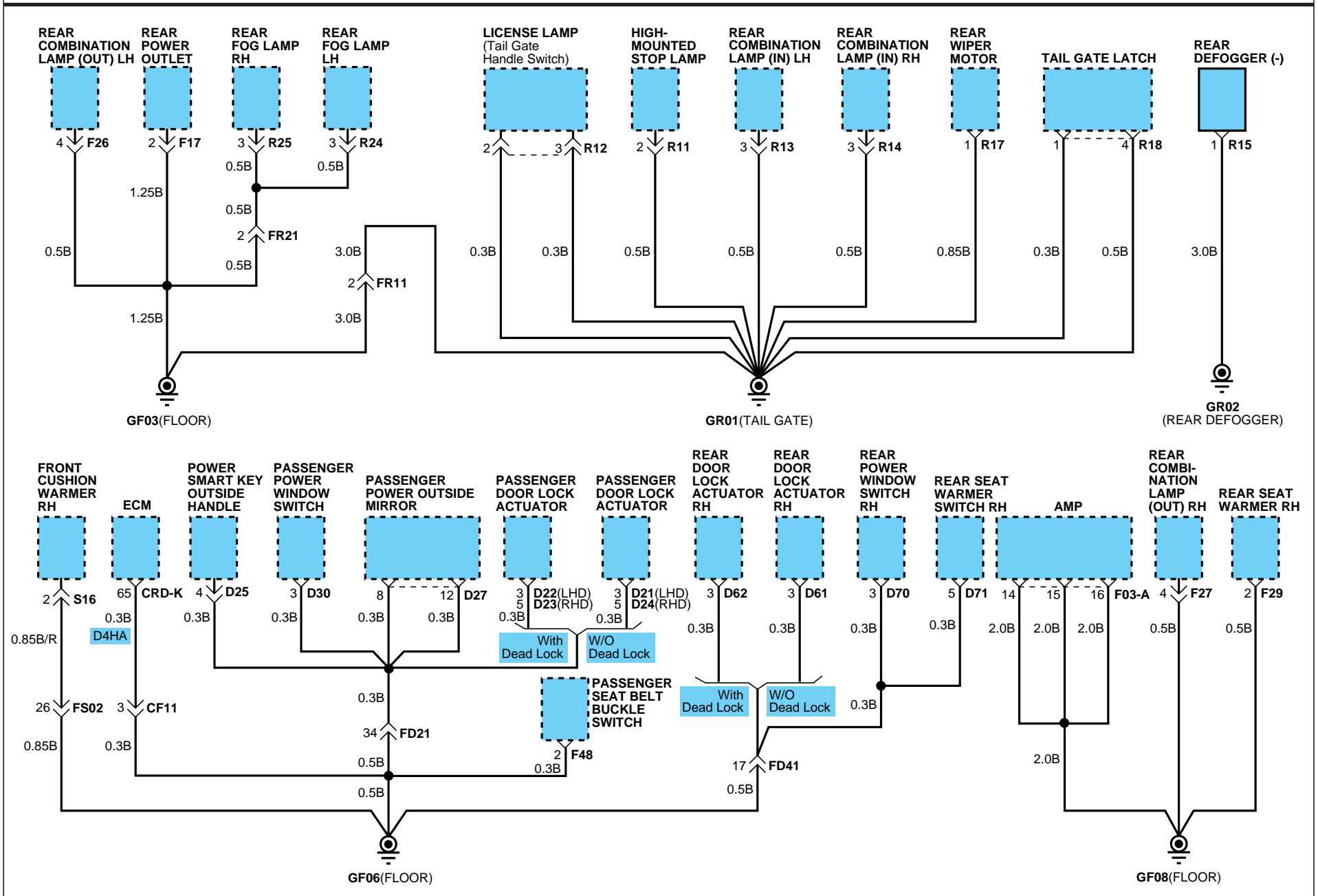
SD130-4



# GROUND DISTRIBUTION

## Ground Distribution (5)

SD130-5

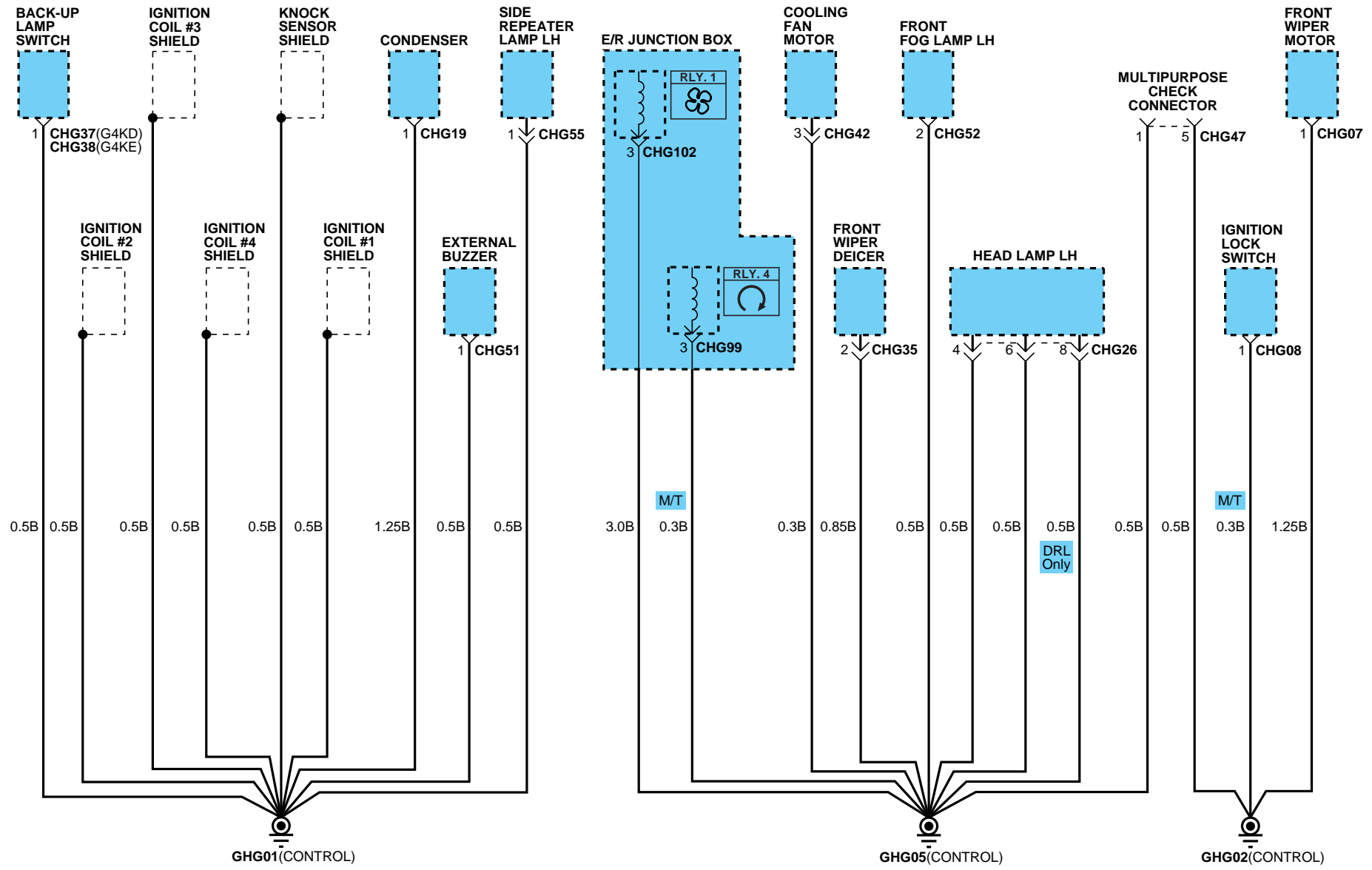


# GROUND DISTRIBUTION

## Ground Distribution (6)

SD130-6

### G4KD/G4KE : THETA II 2.0L/2.4L

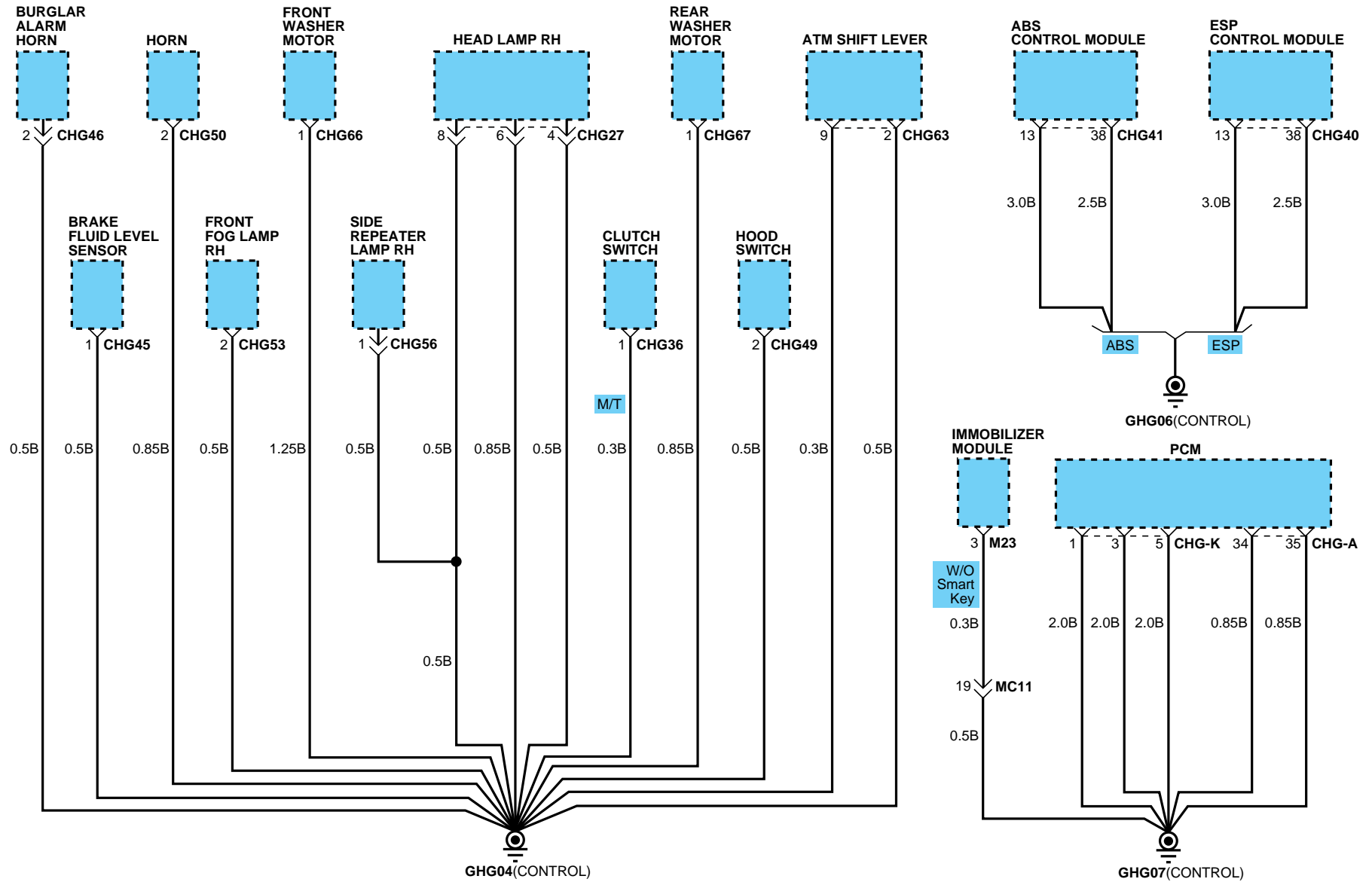


# GROUND DISTRIBUTION

## Ground Distribution (7)

SD130-7

### G4KD/G4KE : THETA II 2.0L/2.4L

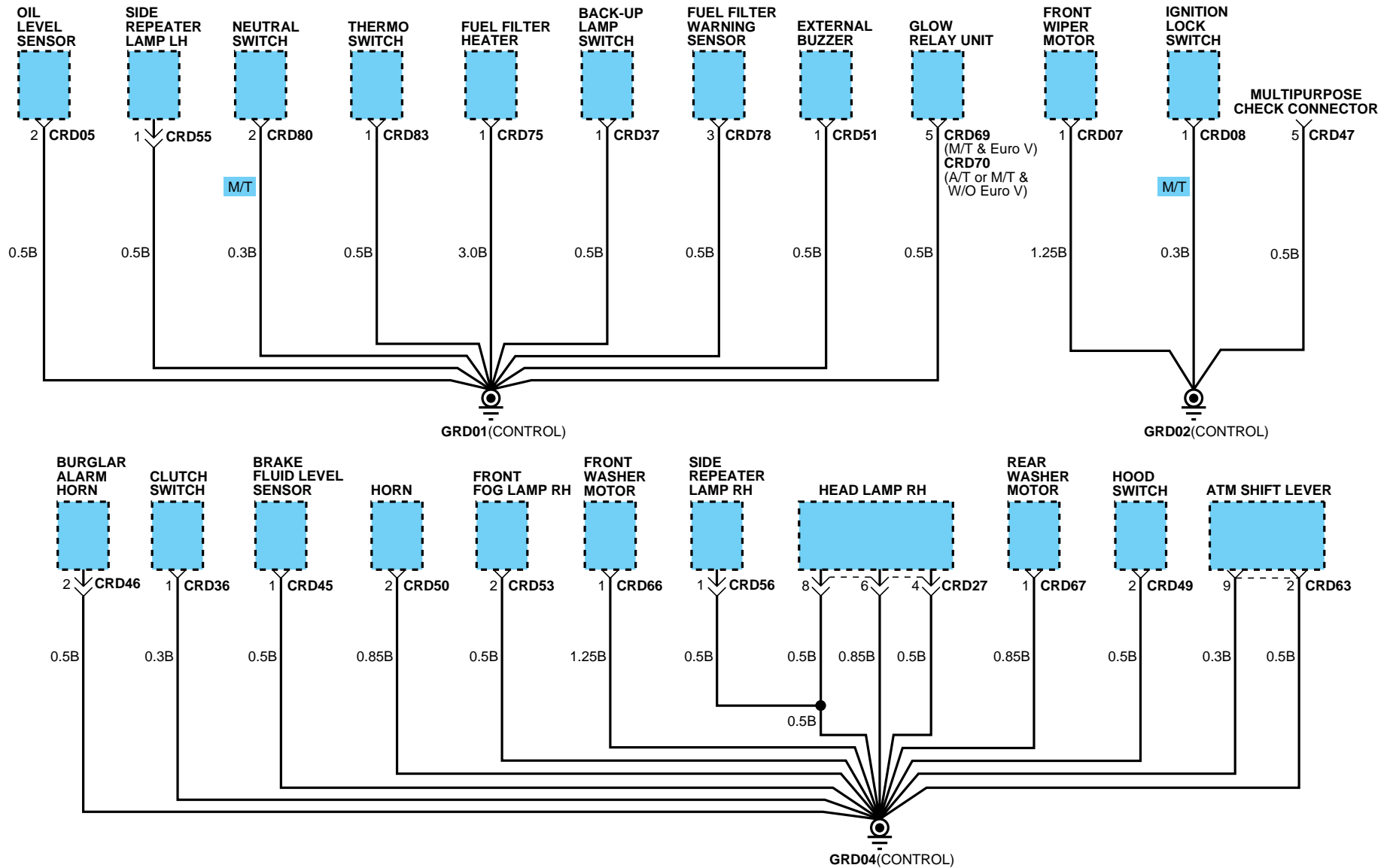


# GROUND DISTRIBUTION

## Ground Distribution (8)

SD130-8

**D4HA : R 2.0L**

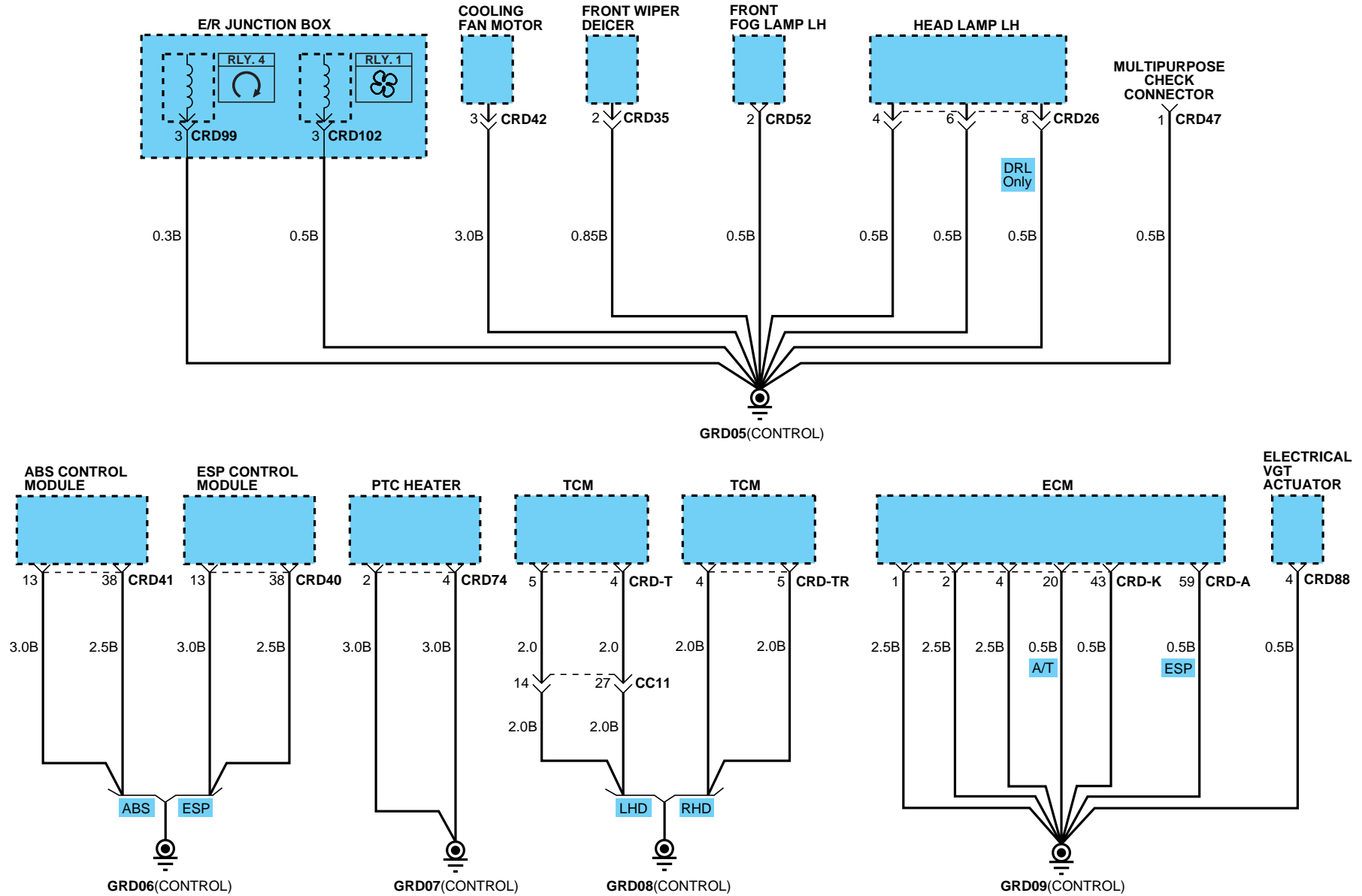


# GROUND DISTRIBUTION

## Ground Distribution (9)

SD130-9

### D4HA : R 2.0L





**GROUND DISTRIBUTION**

Ground Distribution (10)

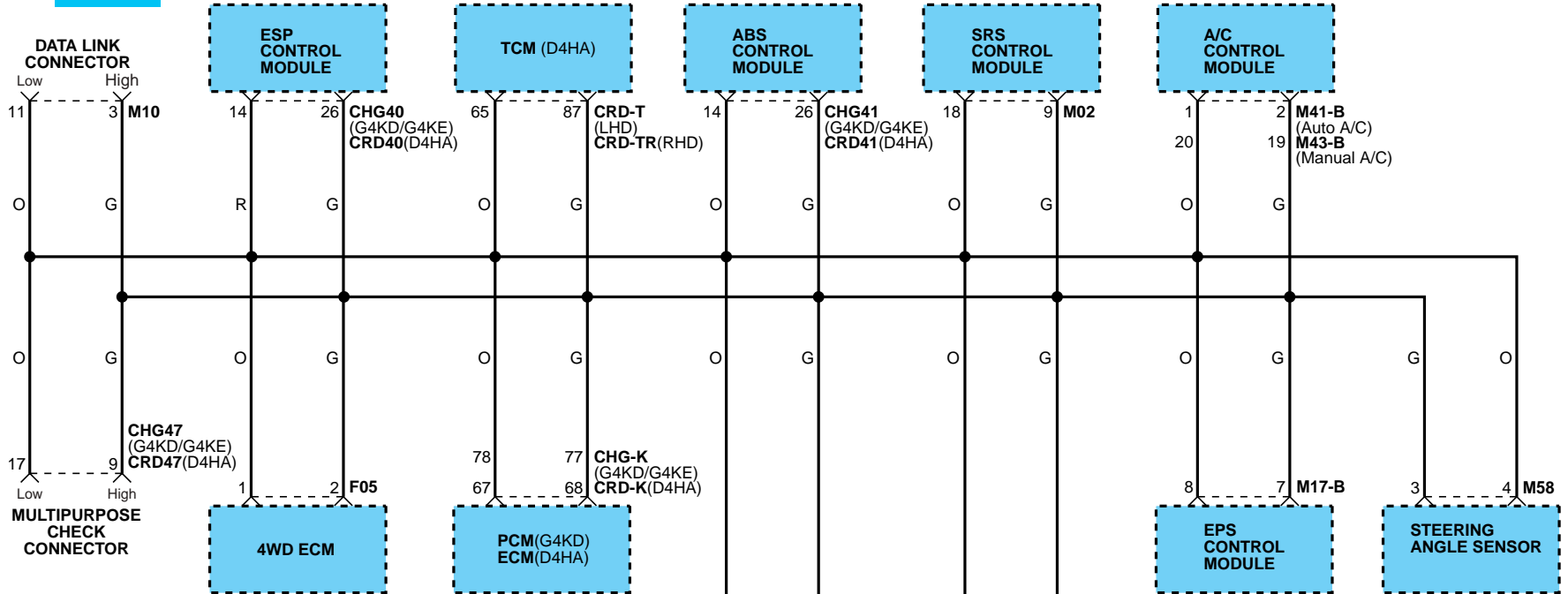
**SD130-10**

**MEMO**

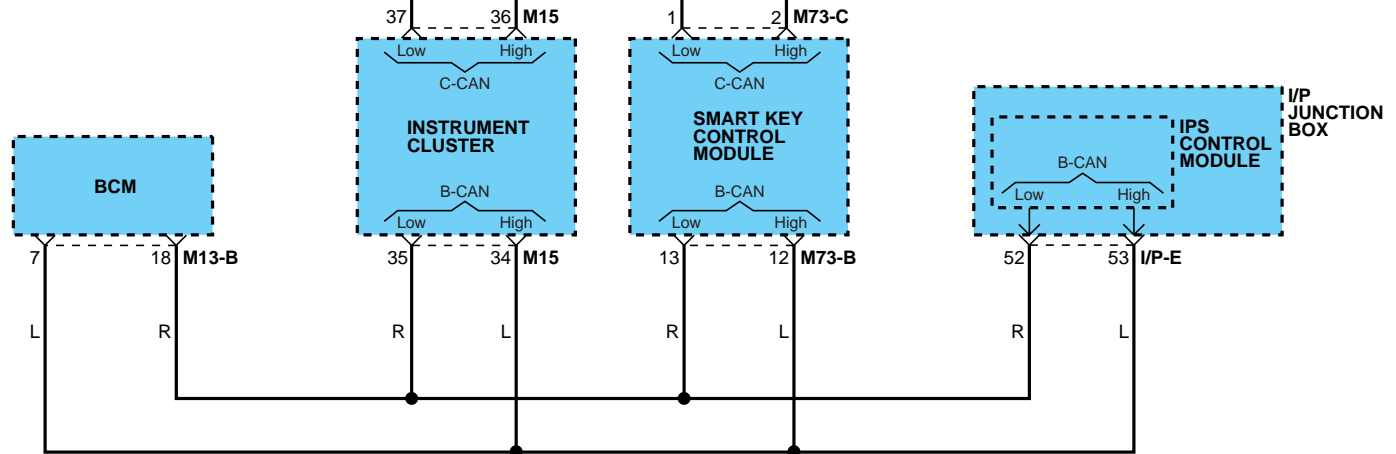
Data Link Details (1)

SD200-1

**C-CAN**



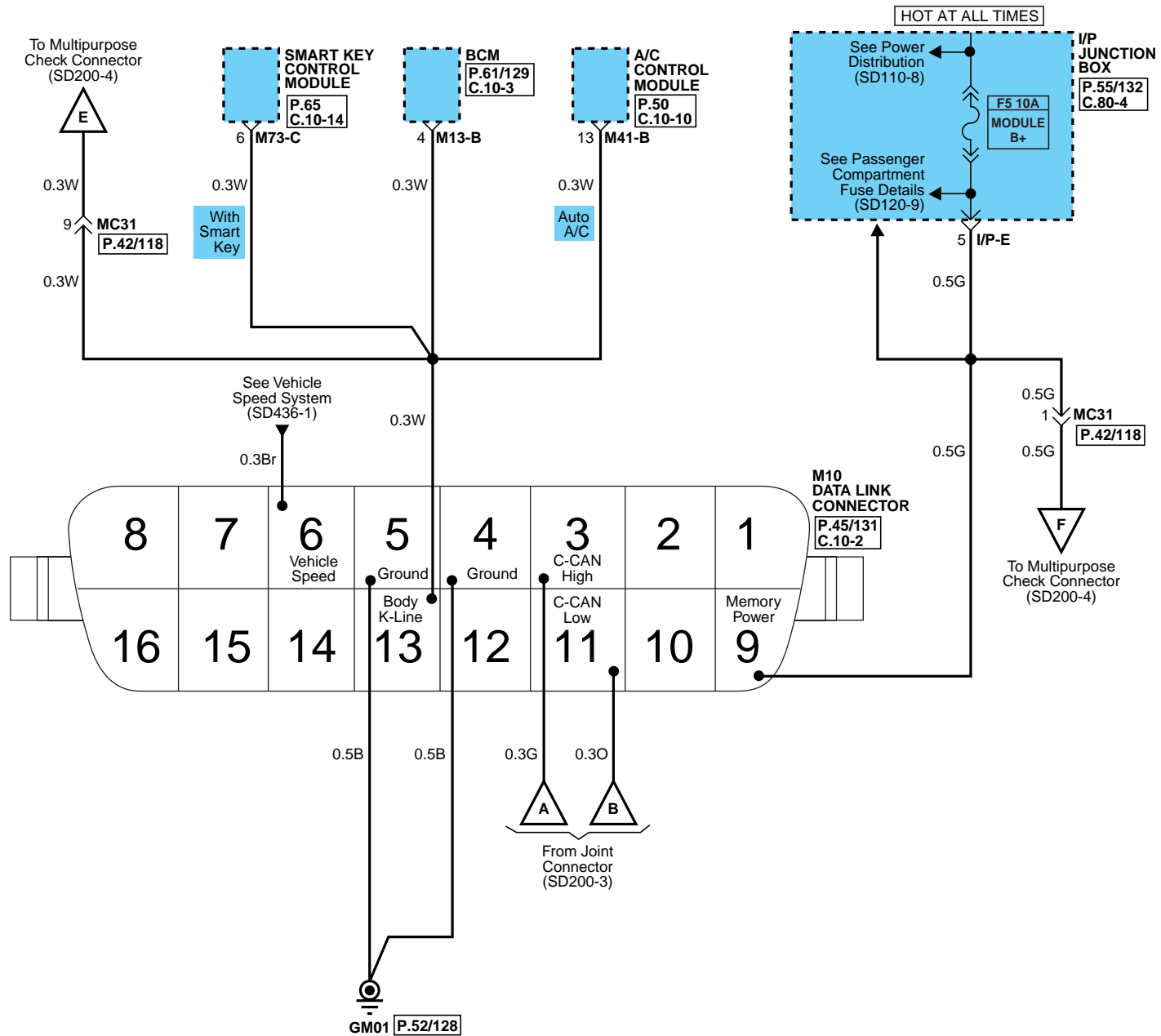
**B-CAN**



# DATA LINK DETAILS

## Data Link Details (2)

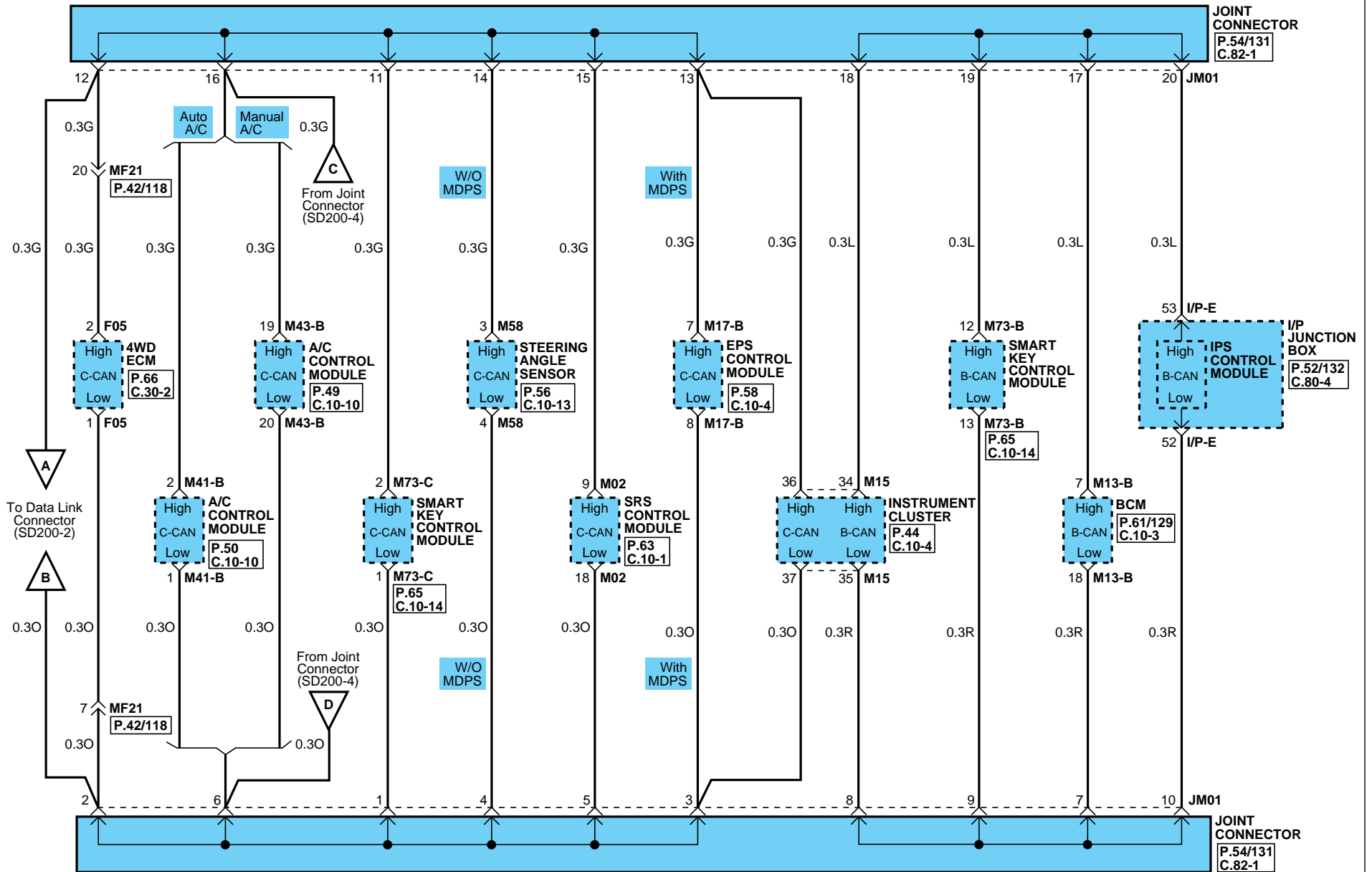
SD200-2



# DATA LINK DETAILS

## Data Link Details (3)

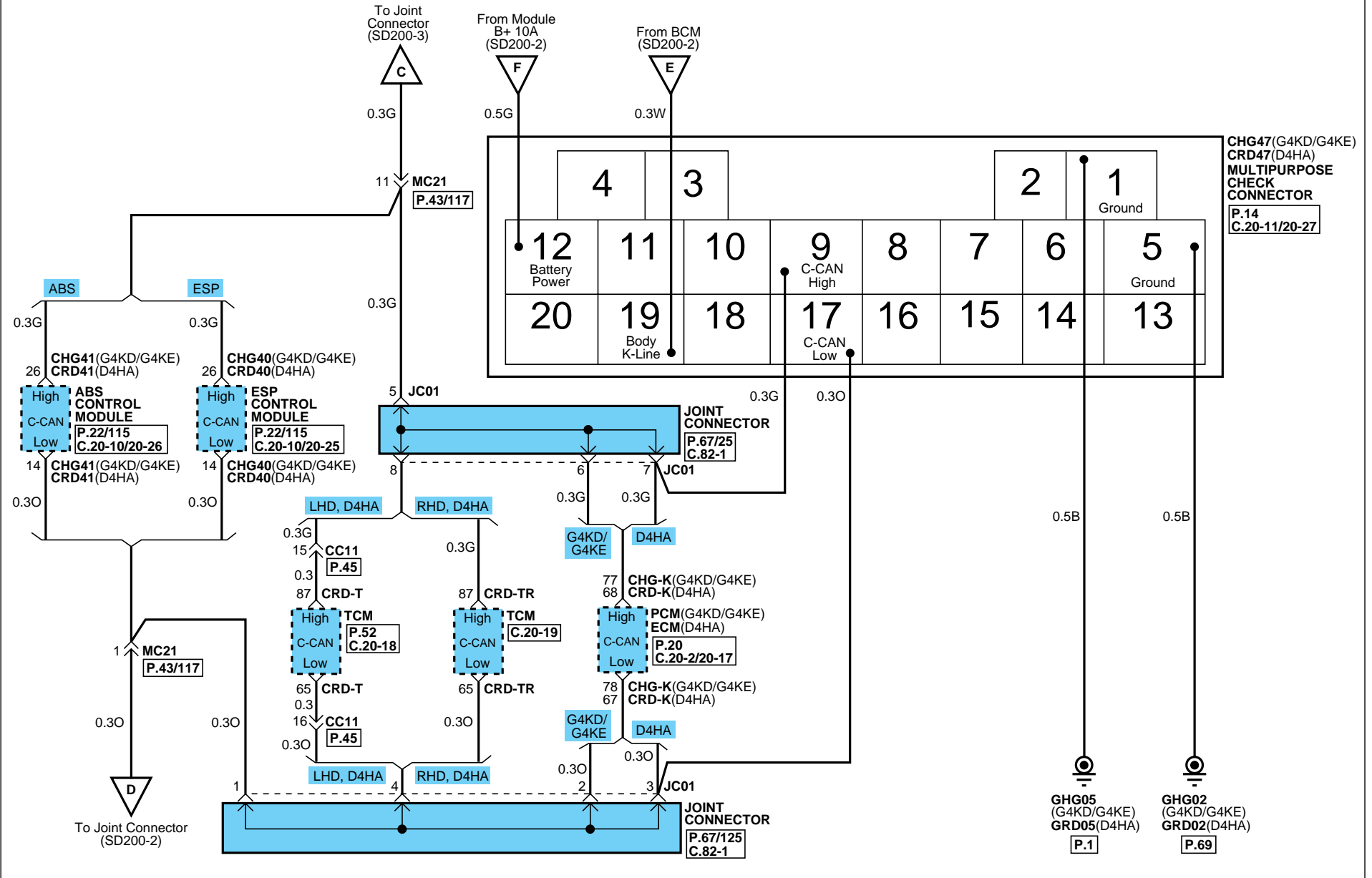
SD200-3



# DATA LINK DETAILS

## Data Link Details (4)

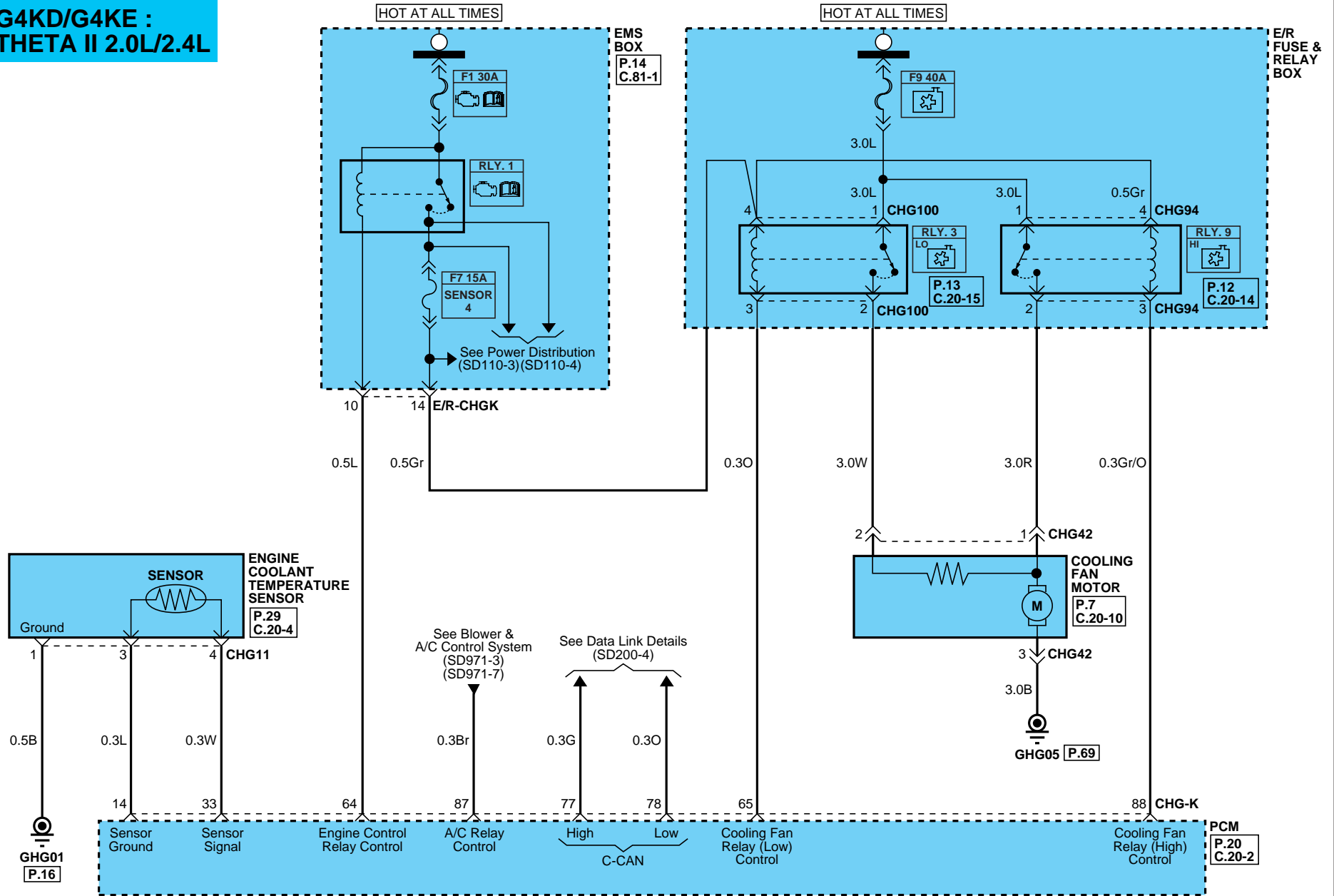
SD200-4



Cooling System (1)

SD253-1

**G4KD/G4KE :  
THETA II 2.0L/2.4L**

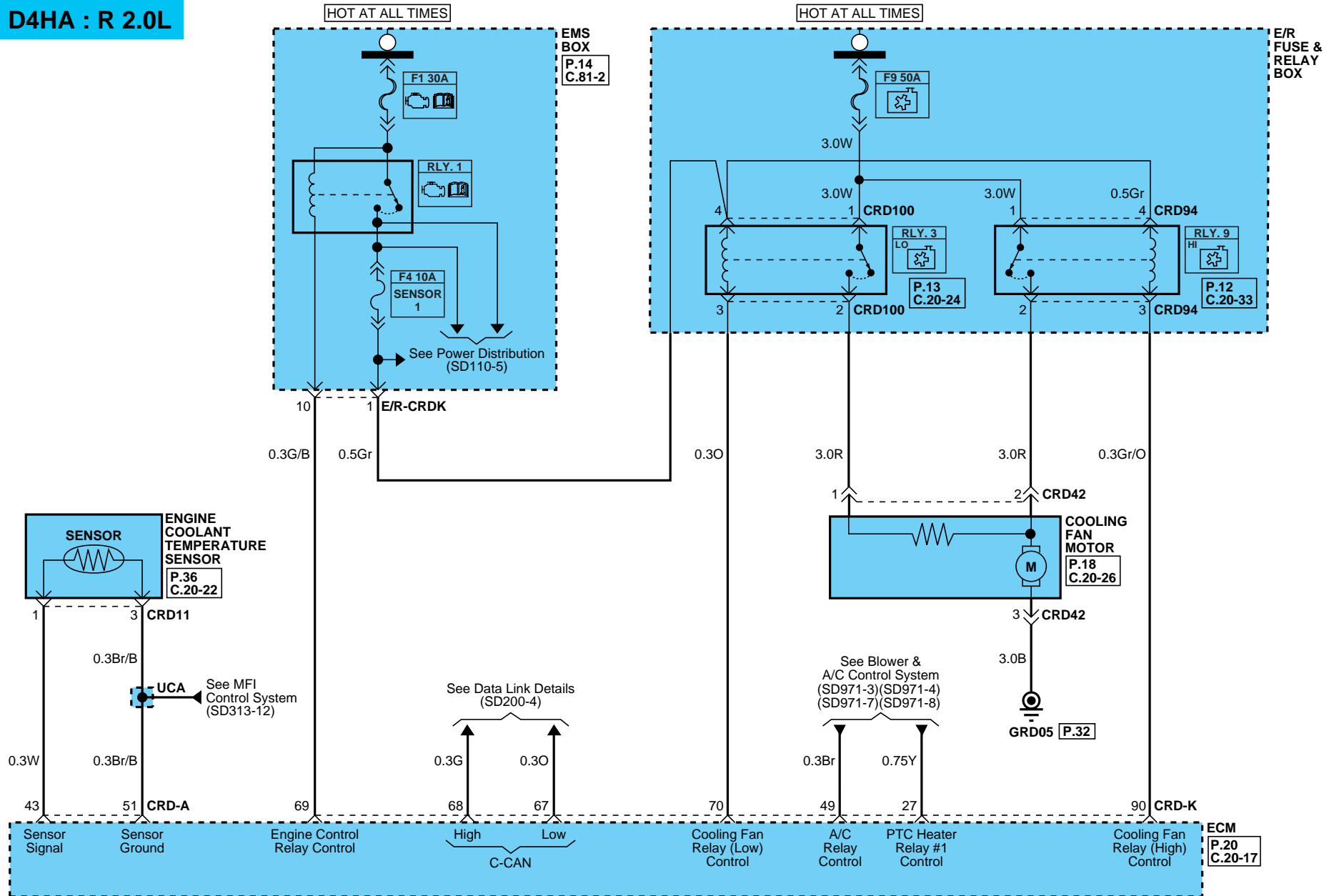


# COOLING SYSTEM

## Cooling System (2)

SD253-2

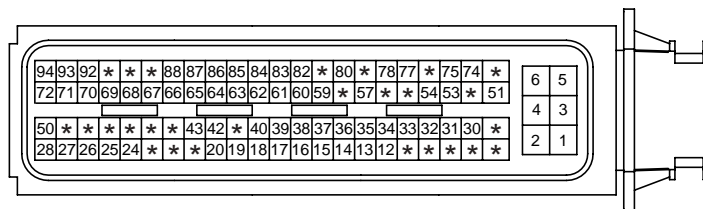
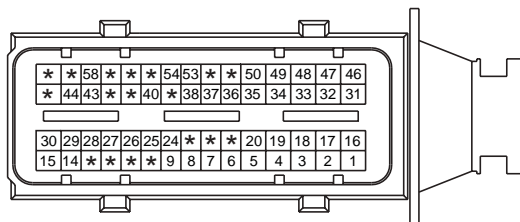
D4HA : R 2.0L



MFI Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (1)

SD313-1

PCM Terminal Information



CHG-A

PIN	COLOR	DESCRIPTION	PIN	COLOR	DESCRIPTION
1	G	Ignition Coil #4 Control (With Smart Key)	31	B	Ignition Coil #1 Control (With Smart Key)
		Ignition Coil #1 Control (W/O Smart Key)			Ignition Coil #4 Control (W/O Smart Key)
2	B	Ignition Coil Shield Ground	32	G	[A/T] SS-B
3	L	[A/T] LP_VFS	33	P	[A/T] SS-A
4	G/B	[A/T] EC_VFS	34	B	[A/T] Ground
5	W	[A/T] 35R_VFS	35	B	[A/T] Ground
6	B/O	[A/T] Input Speed Supply	36	P	[A/T] Down Shift
7	G/O	[A/T] Output Speed Supply	37	Gr	[A/T] Up Shift
8	W	[A/T] Input Speed Signal	38	W	[A/T] Select Switch
9	L	[A/T] Output Speed Signal	39	-	-
10	-	-	40	P	[A/T] Position Switch Code - S1
11	-	-	41	-	-
12	-	-	42	-	-
13	-	-	43	W	Clutch Switch
14	W	Alternator	44	L/B	Brake Test Switch
15	B	Cruise Control Switch Ground	45	-	-
16	W	Ignition Coil #2 Control (With Smart Key)	46	R	Ignition Coil #3 Control (With Smart Key)
		Ignition Coil #3 Control (W/O Smart Key)			Ignition Coil #2 Control (W/O Smart Key)
17	Br	[A/T] UD_VFS	47	Gr	[A/T] Solenoid Power 1
18	P	[A/T] 26_VFS	48	O	[A/T] Solenoid Power 2
19	G	[A/T] Shift Lock Solenoid	49	G	[A/T] Memory Power
20	Y	[A/T] OD_VFS	50	Y	[A/T] Memory Power
21	-	-	51	-	-
22	-	-	52	-	-
23	-	-	53	Br	[A/T] Oil Temp. Sensor (-)
24	W	[A/T] Start Relay	54	R	[A/T] Oil Temp. Sensor (+)
25	R	[A/T] Position Switch Code - S2	55	-	-
26	G	[A/T] Position Switch Code - S3	56	-	-
27	Br	[A/T] Position Switch Code - S4	57	-	-
28	P	Start Overrun	58	W	Power Steering Switch
29	G/B	Brake Light Switch	59	-	-
30	O	Cruise Control Switch Signal	60	-	-

CHG-K

PIN	COLOR	DESCRIPTION	PIN	COLOR	DESCRIPTION	PIN	COLOR	DESCRIPTION
1	B	Ground	33	W	ECT Signal	65	O	Cooling Fan Relay Control (Low)
2	G	ON/START Input	34	B	Knock Sensor Ground	66	L	CVVT. 1 Signal
3	B	Ground	35	L/O	APS. 2 Signal	67	G	PCSV Control
4	L	Engine Control Relay 'ON' Input	36	L	APS. 2 Supply	68	Y/B	CVVT. 2 Signal
5	B	Ground	37	W	CMPS #2 Ground	69	Br/O	IMMO. IND.
6	G	Memory Power	38	P	O2 Sensor (Up) Signal	70	G	Fuel Pump Relay Control
7	-	-	39	G	CKPS Ground	71	W	ETC DC Motor 1
8	-	-	40	P	Vehicle Speed Input	72	R	ETC DC Motor 2
9	-	-	41	-	-	73	-	-
10	-	-	42	P	Linear Lambda Sensor (VRC)	74	B	MAP Sensor Ground
11	-	-	43	W/B	APT Supply	75	L	IMMO. Data Line
12	R	Knock Sensor Signal	44	-	-	76	-	-
13	Br	APS. 2 Ground	45	-	-	77	G	C-CAN High
14	L	ECT Ground	46	-	-	78	O	C-CAN Low
15	Y	CMPS #2 Signal	47	-	-	79	-	-
16	B	O2 Sensor (Up) Ground	48	-	-	80	P	TPS. 1 Signal
17	P	CKPS Signal	49	-	-	81	-	-
18	W	Linear Lambda Sensor (VIP)	50	W	VIS Valve Control	82	O	APS. 1 Signal
19	R	Linear Lambda Sensor (VN)	51	G	Engine Control Relay 'ON' Input	83	P	CMPS #1 Ground
20	L	Linear Lambda Sensor (VG)	52	-	-	84	W	O2 Sensor (Down) Signal
21	-	-	53	G	IAT Sensor	85	P	O2 Sensor (Down) Ground
22	-	-	54	Gr	APT Signal	86	W	Engine Speed Signal
23	-	-	55	-	-	87	Br	A/CON Relay Control
24	W	Start Overrun (GND)	56	-	-	88	Gr/O	Cooling Fan Relay Control (High)
25	Br	Injector #1 Control	57	G	APT Ground	89	-	-
26	L	Injector #3 Control	58	-	-	90	-	-
27	G	Injector #4 Control	59	B	TPS Ground	91	-	-
28	Gr	Injector #2 Control	60	Gr	APS. 1 Supply	92	Y/B	Engine Check IND.
29	-	-	61	Y	APS. 1 Ground	93	O	O2 Sensor (Up) Heater
30	L	MAP Sensor Supply	62	W	CMPS #1 Signal	94	Y	O2 Sensor (Down) Heater
31	P	MAF/MAP Sensor Signal	63	Y	TPS Supply			
32	L	TPS. 2 Signal	64	L	Engine Control Relay Control			

※ [A/T] : See Automatic Transaxle Control System (SD450)

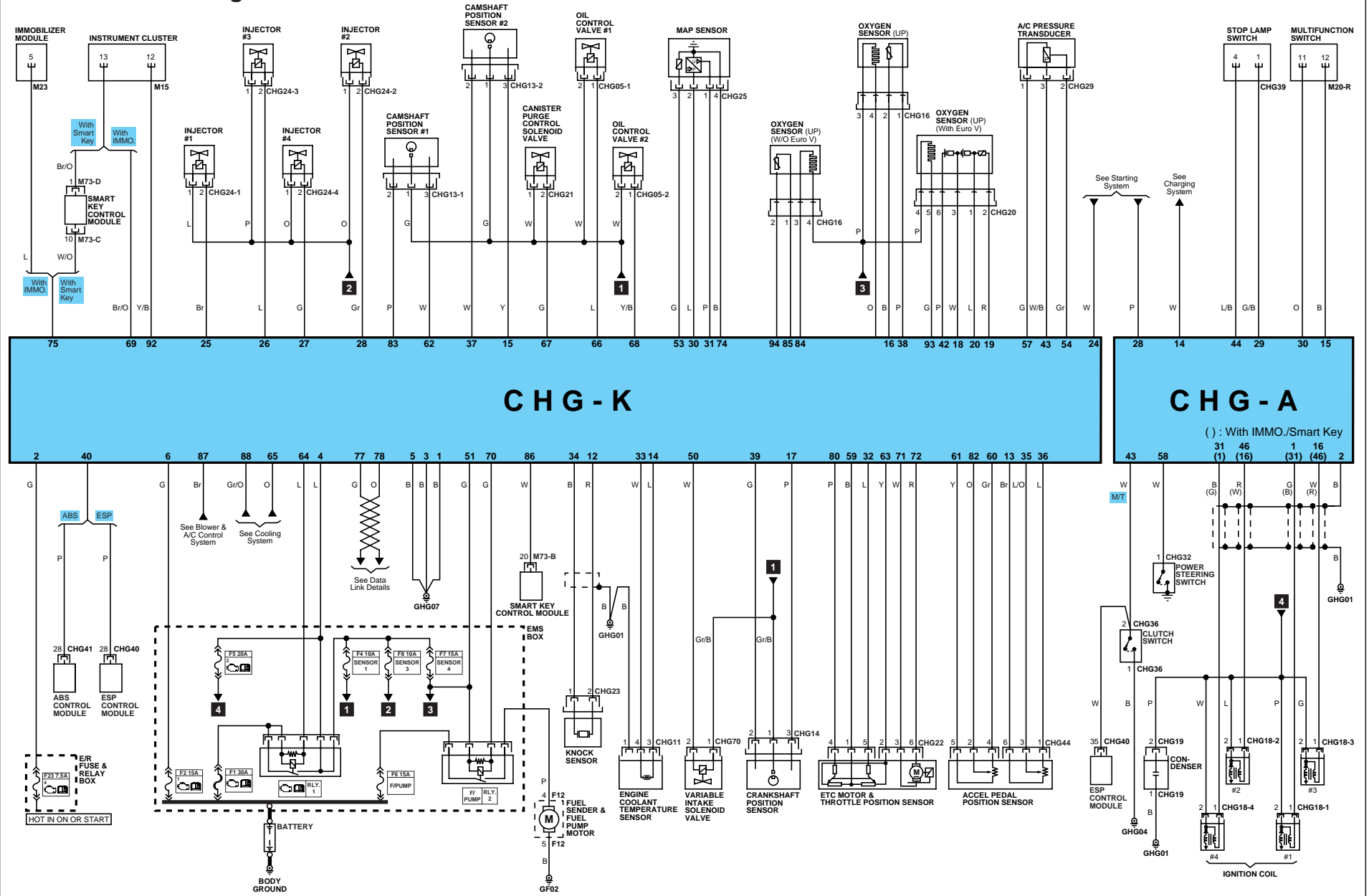


# MFI CONTROL SYSTEM

## MFI Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (2)

SD313-2

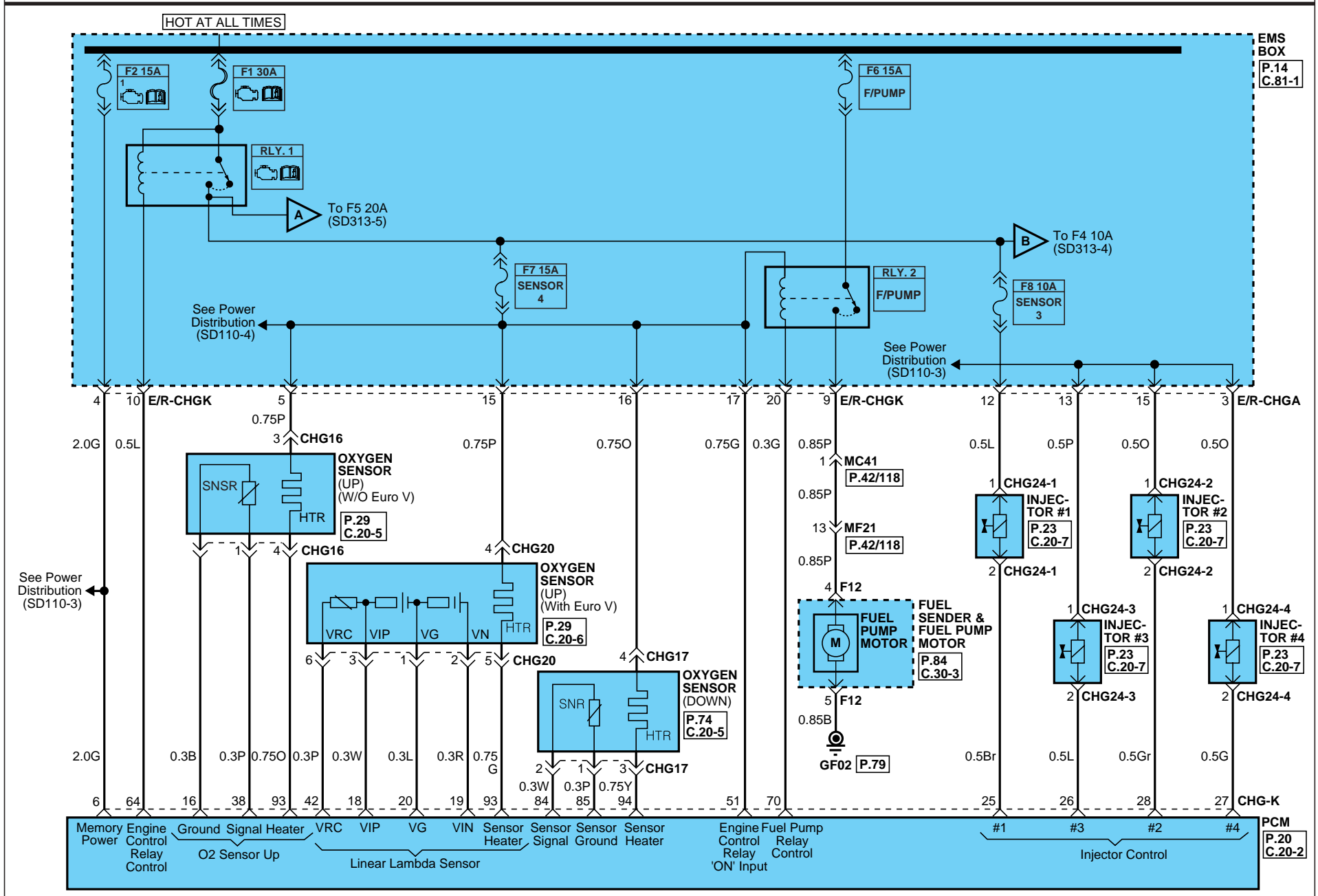
### PCM Full Circuit Diagrams



# MFI CONTROL SYSTEM

## MFI Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (3)

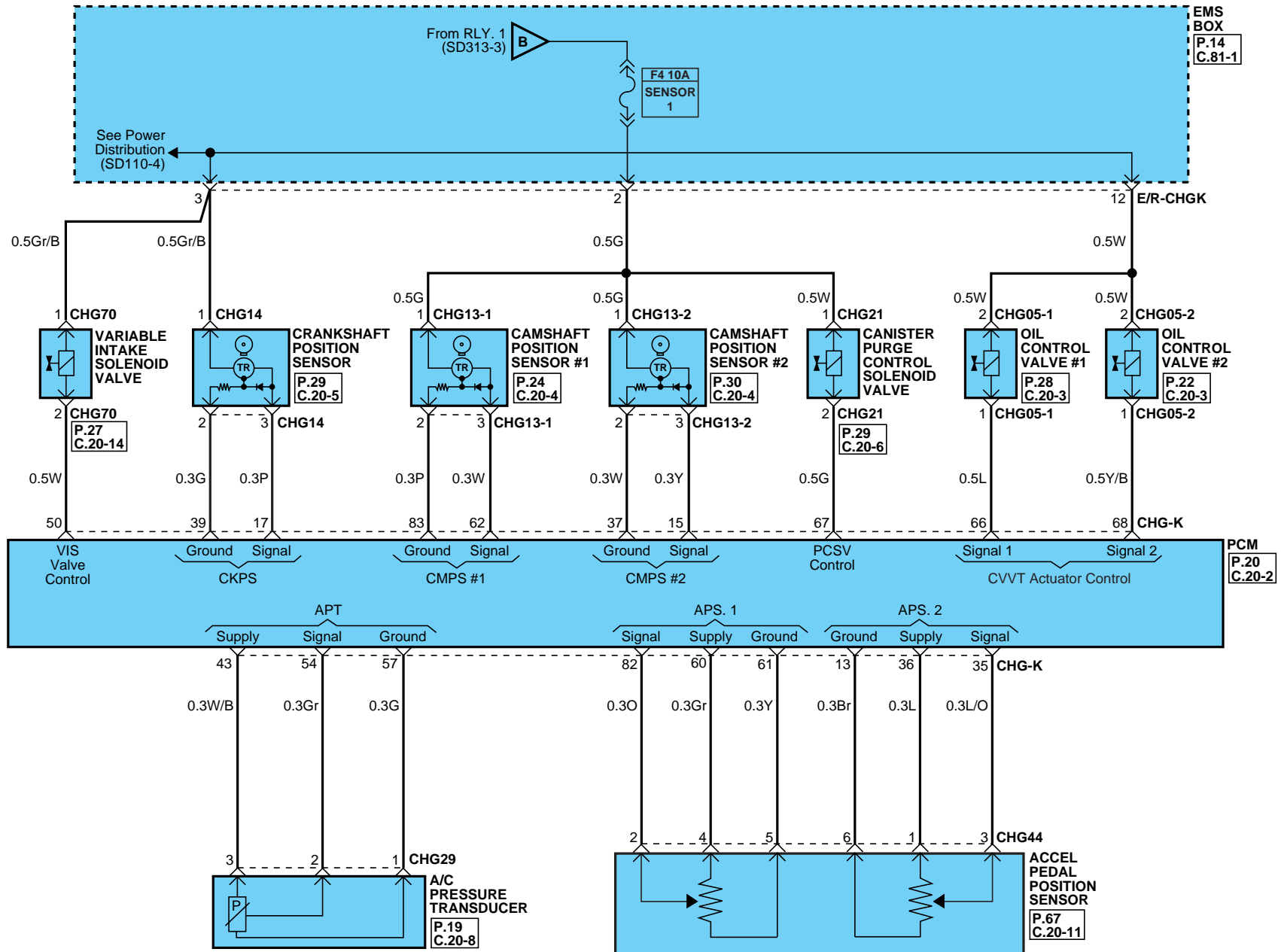
SD313-3



# MFI CONTROL SYSTEM

## MFI Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (4)

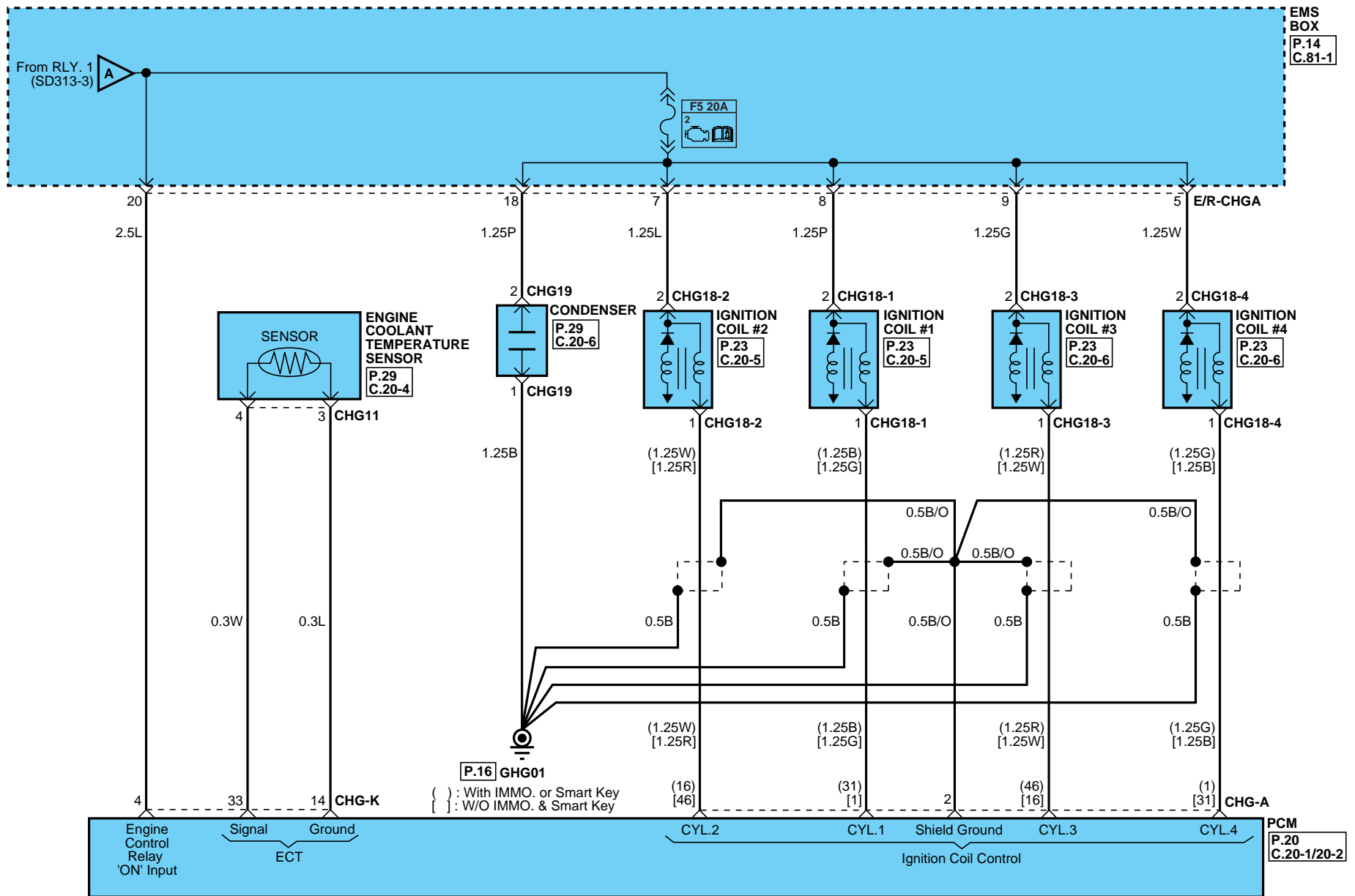
SD313-4



# MFI CONTROL SYSTEM

## MFI Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (5)

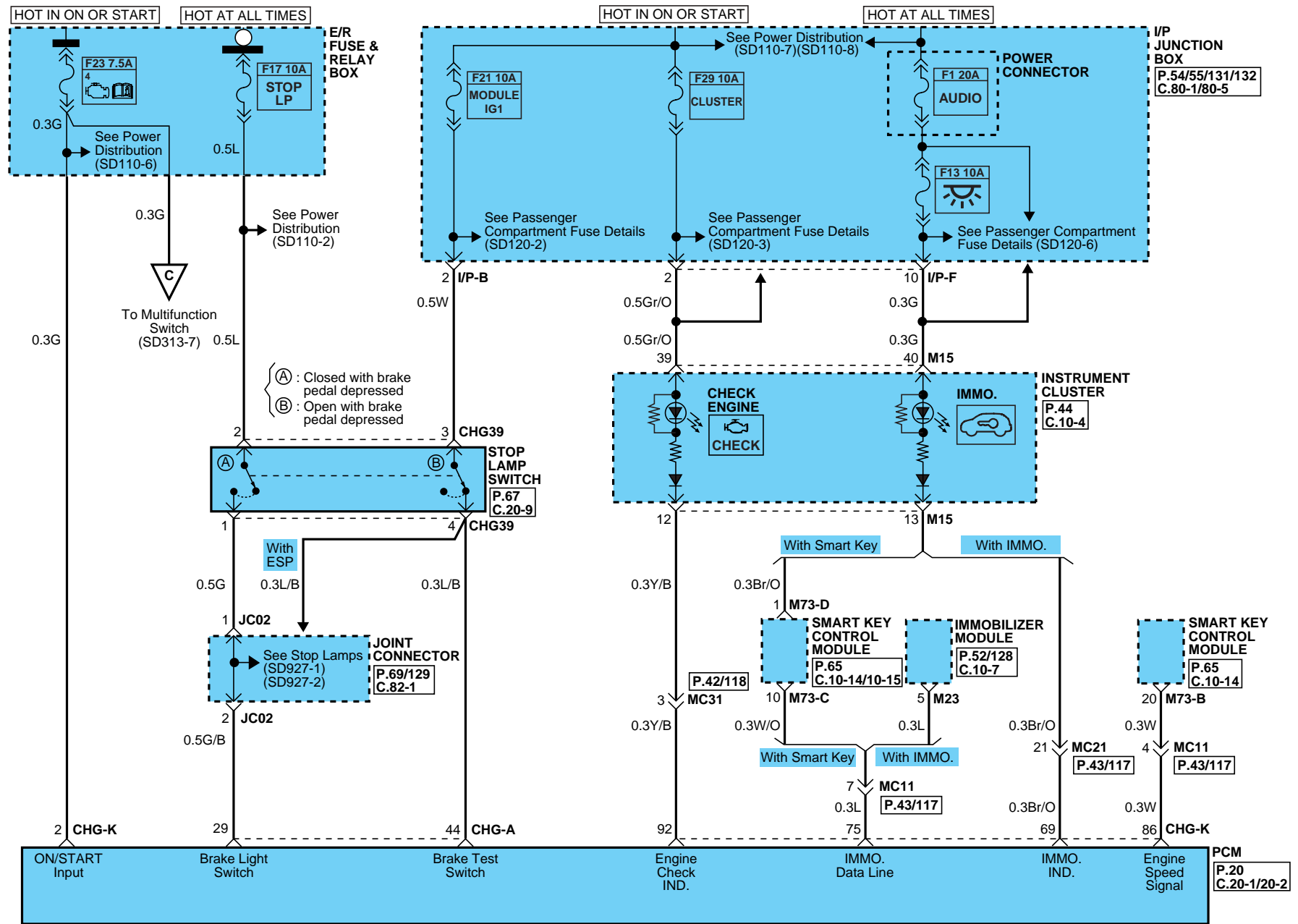
SD313-5



# MFI CONTROL SYSTEM

## MFI Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (6)

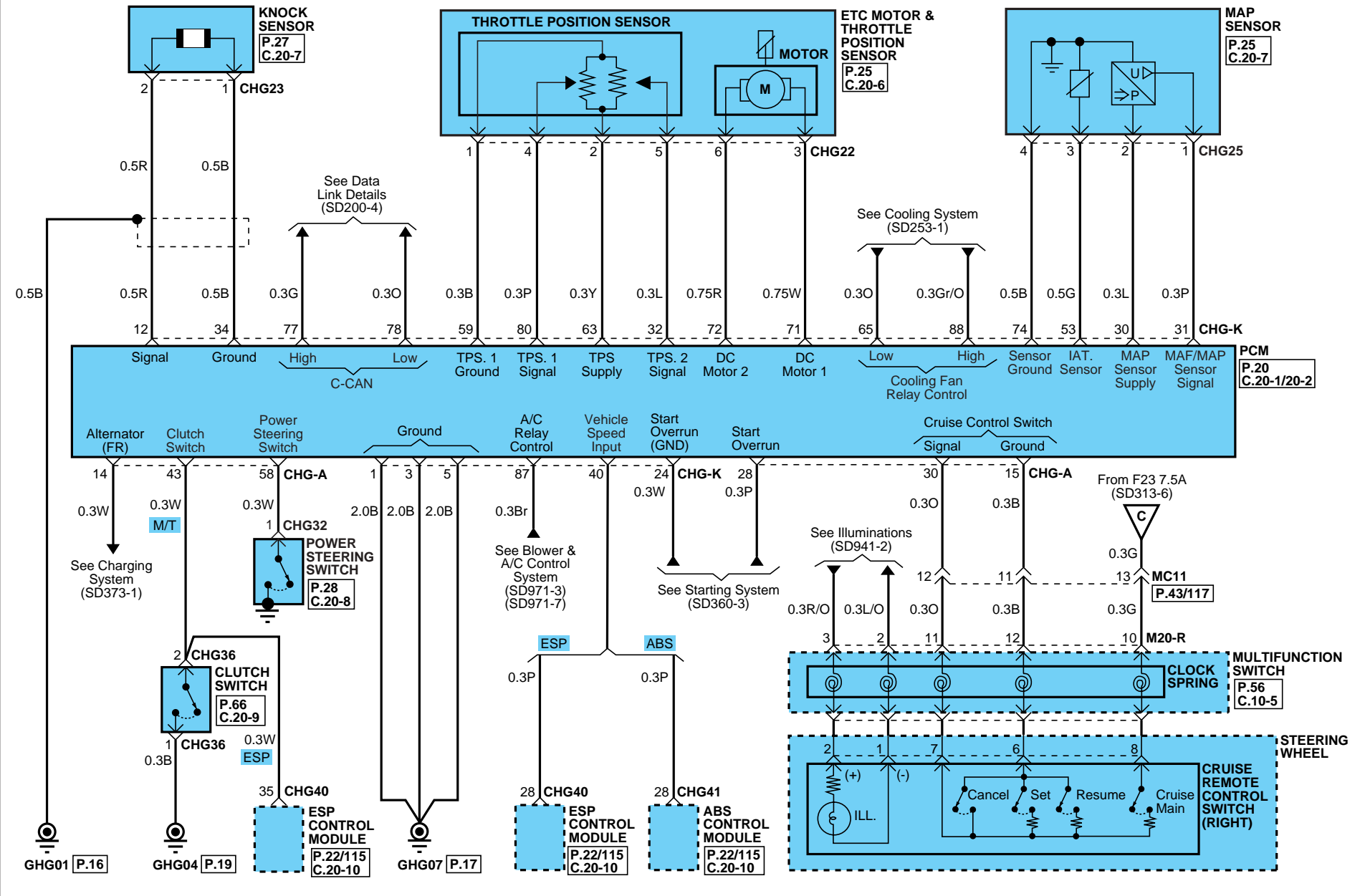
SD313-6



# MFI CONTROL SYSTEM

## MFI Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (7)

SD313-7



## MFI CONTROL SYSTEM

MFI Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (8)

SD313-8

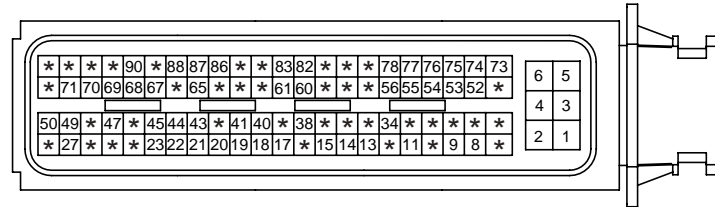
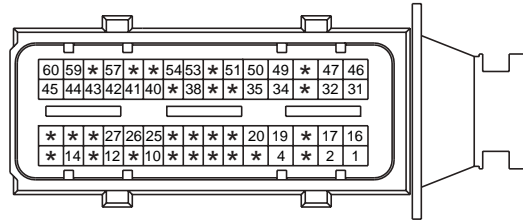
MEMO

# MFI CONTROL SYSTEM

## MFI Control System (D4HA : R 2.0L) (1)

SD313-9

### ECM Terminal Information



#### CRD-A

PIN	COLOR	DESCRIPTION	PIN	COLOR	DESCRIPTION
1	L	Injector #3 Control (With Smart Key)	31	Br	Injector #1 Control (With Smart Key)
		Injector #2 Control (W/O Smart Key)			Injector #4 Control (W/O Smart Key)
2	B	Injector #2 Control (With Smart Key)	32	Y	Injector #4 Control (With Smart Key)
		Injector #3 Control (W/O Smart Key)			Injector #1 Control (W/O Smart Key)
3	-	-	33	-	-
4	O	ACV Motor (-)	34	O	EGR Motor (-)
5	-	-	35	Y	VSA Motor (-)
6	-	-	36	-	-
7	-	-	37	-	-
8	-	-	38	Br	CMPS Ground
9	-	-	39	-	-
10	R	VSA/EGR/ACV Feedback Supply	40	O	RPS Signal
11	-	-	41	G	ACV Feedback Signal
12	G	RPS Ground	42	Gr	FTS Signal
13	-	-	43	W	ECTS Signal
14	Br	EGR Cooling Bypass	44	G	CMPS Signal
15	-	-	45	O	Rail Pressure Control
16	R	Injector #3 Control (With Smart Key)	46	W	Injector #1 Control (With Smart Key)
		Injector #2 Control (W/O Smart Key)			Injector #4 Control (W/O Smart Key)
17	P	Injector #2 Control (With Smart Key)	47	G	Injector #4 Control (With Smart Key)
		Injector #3 Control (W/O Smart Key)			Injector #1 Control (W/O Smart Key)
18	-	-	48	-	-
19	G	ACV Motor (+)	49	G	EGR Motor (+)
20	O	Electric VGT PWM IN	50	B	VSA Motor (+)
21	-	-	51	Br/B	Sensor Ground
22	-	-	52	-	-
23	-	-	53	B	APT/DPF/Cruise Switch Ground
24	-	-	54	L	VSA/EGR/ACV Feedback Ground
25	Gr	RPS Sensor Supply	55	-	-
26	Gr	VSA Feedback Signal	56	-	-
27	G	EGR Feedback Signal	57	Gr	APT Signal
28	-	-	58	-	-
29	-	-	59	B	Automatic Recognition (ESP/FTCS)
30	-	-	60	L	Fuel Pressure Control

#### CRD-K

PIN	COLOR	DESCRIPTION	PIN	COLOR	DESCRIPTION	PIN	COLOR	DESCRIPTION
1	B	Ground	33	-	-	65	B	Automatic Recognition (2WD/4WD)
2	B	Ground	34	P	DPS Signal	66	-	-
3	R	Engine Control Relay 'ON' Input	35	-	-	67	O	C-CAN Low
4	B	Ground	36	-	-	68	G	C-CAN High
5	W	Engine Control Relay 'ON' Input	37	-	-	69	G/B	Engine Control Relay Control
6	R	Engine Control Relay 'ON' Input	38	B	IMMO. Ground	70	O	Cooling Fan Relay (Low) Control
7	-	-	39	-	-	71	G	Fuel Pump Relay Control
8	W	APS. 2 Ground	40	W	CKPS Signal	72	-	-
9	L	EGTS Signal	41	Br	Vehicle Speed Signal	73	G	Lambda Sensor Heater
10	-	-	42	-	-	74	L/B	APS. 1 Ground
11	Y	BPS Signal	43	B	DPF Auto Detection	75	P	Intake Temperature Sensor Signal
12	-	-	44	W	Clutch Switch (M/T)	76	Gr	Air Temp. Signal
13	Br	APS. 1 Supply	45	G/B	Brake Main Switch Signal	77	L	Lambda Sensor Current Pump
14	G	Cruise Control Switch Supply	46	-	-	78	Y	Lambda Sensor Nernst Voltage
15	Br	APS. 2 Supply	47	Br/O	IMMO. IND.	79	-	-
16	-	-	48	-	-	80	-	-
17	L/B	APT Supply	49	Br	A/C Relay Control	81	-	-
18	L	AFS Signal	50	Y/B	Engine Check IND.	82	L	IMMO. Data Line
19	G	Glow Time Feedback Signal	51	-	-	83	Y	Neutral Switch (M/T)
20	B	Automatic Recognition (A/T & M/T)	52	O	Cruise Control Switch Signal	84	-	-
21	L/B	Redundant Brake Switch Signal	53	Gr	APS. 1 Signal	85	-	-
22	G/O	Electric VGT Feedback Signal	54	P/B	APS. 2 Signal	86	W	LIN Communication Oil Level
23	Br	AFS Reference Frequency	55	O	Lambda Sensor Current Adjust	87	G	ON/START Input
24	-	-	56	B	Lambda Sensor Virtual Ground	88	P	Water In Fuel Sensor
25	-	-	57	-	-	89	-	-
26	-	-	58	-	-	90	Gr/O	Cooling Fan Relay (High) Control
27	Y	PTC Heater Relay #1 Control	59	-	-	91	-	-
28	-	-	60	W	Engine Speed Signal	92	-	-
29	-	-	61	O	Glow Plug Output Signal	93	-	-
30	-	-	62	-	-	94	-	-
31	-	-	63	-	-			
32	-	-	64	-	-			

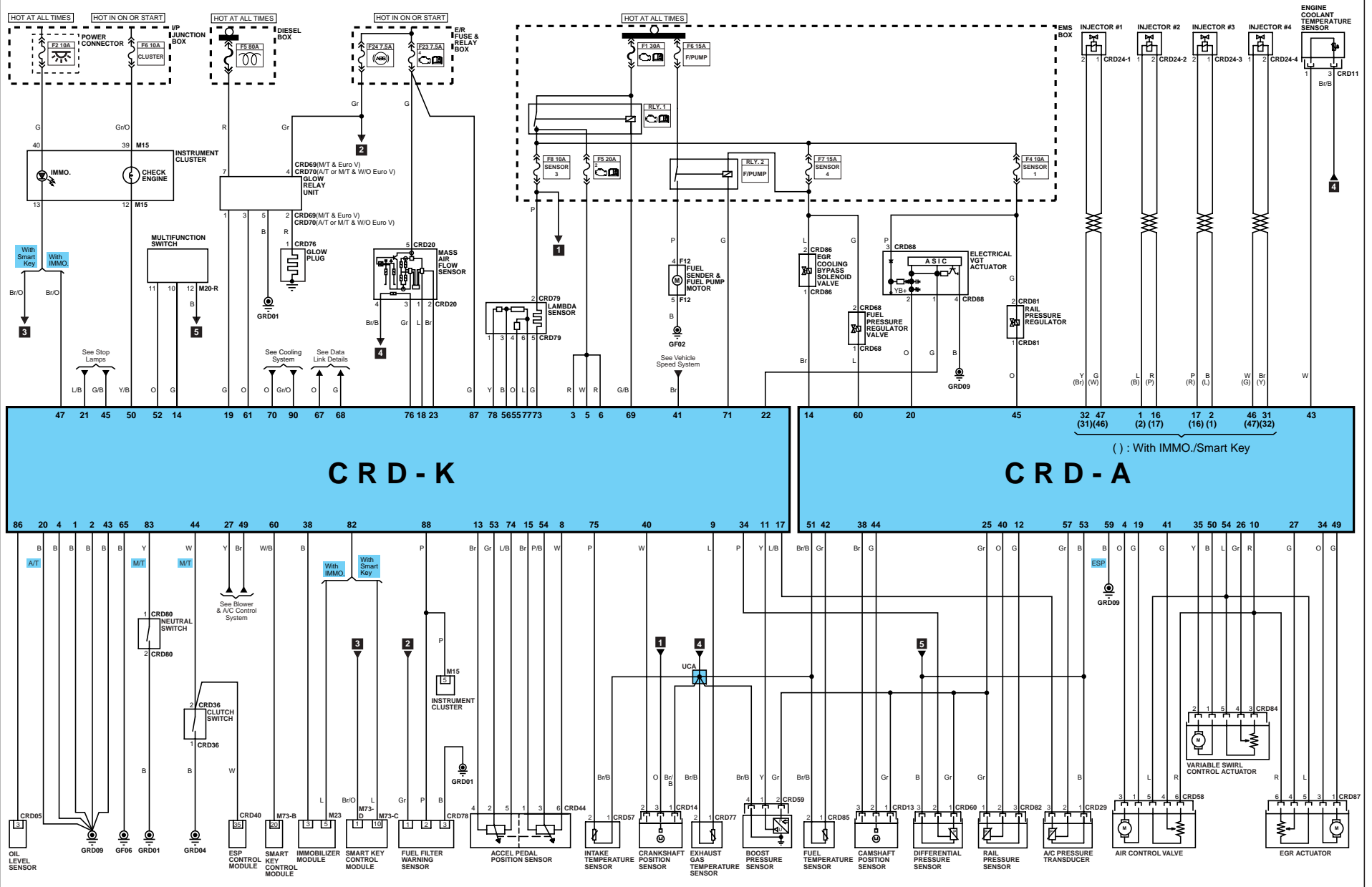


# MFI CONTROL SYSTEM

## MFI Control System (D4HA : R 2.0L) (2)

SD313-10

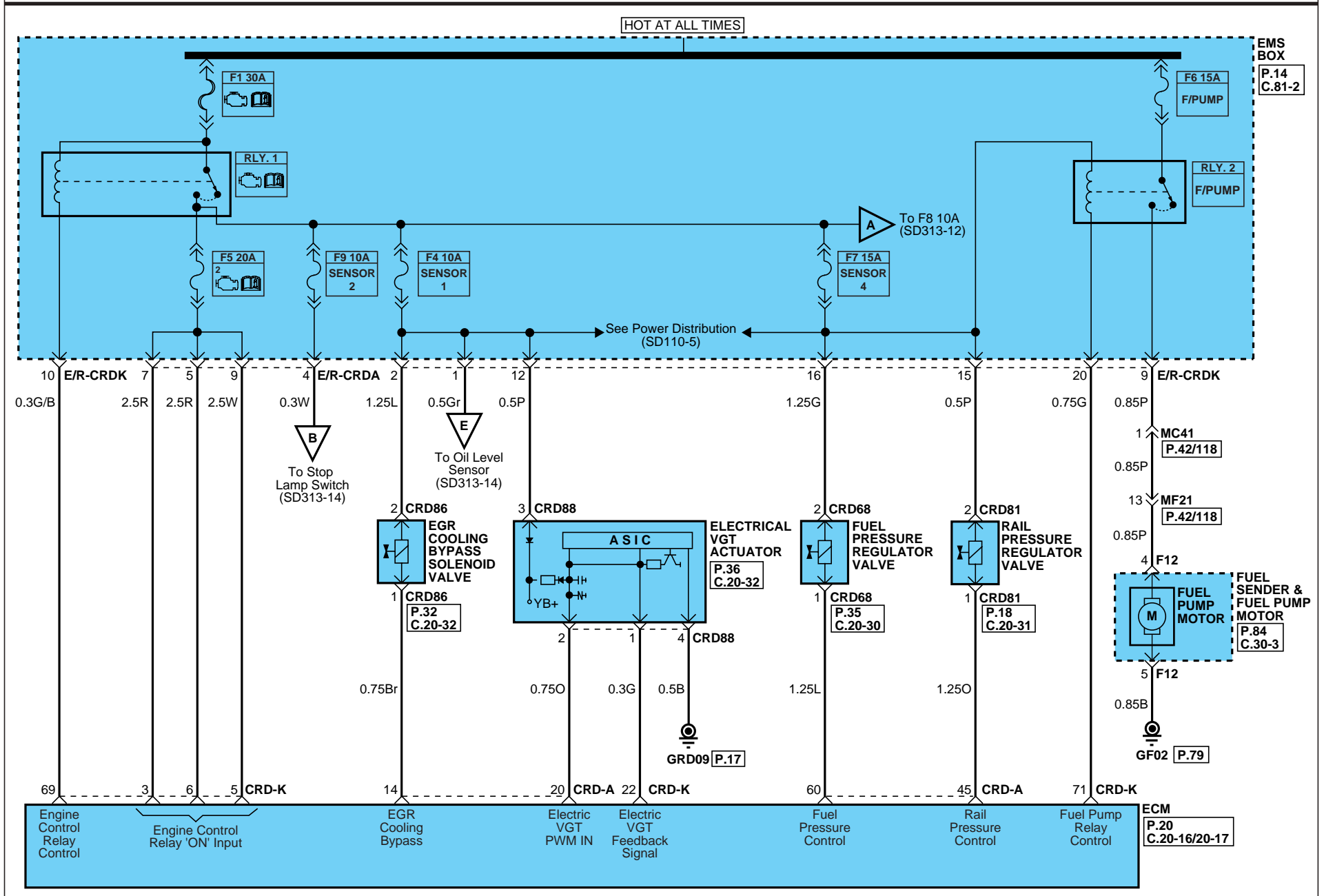
### ECM Full Circuit Diagrams



# MFI CONTROL SYSTEM

## MFI Control System (D4HA : R 2.0L) (3)

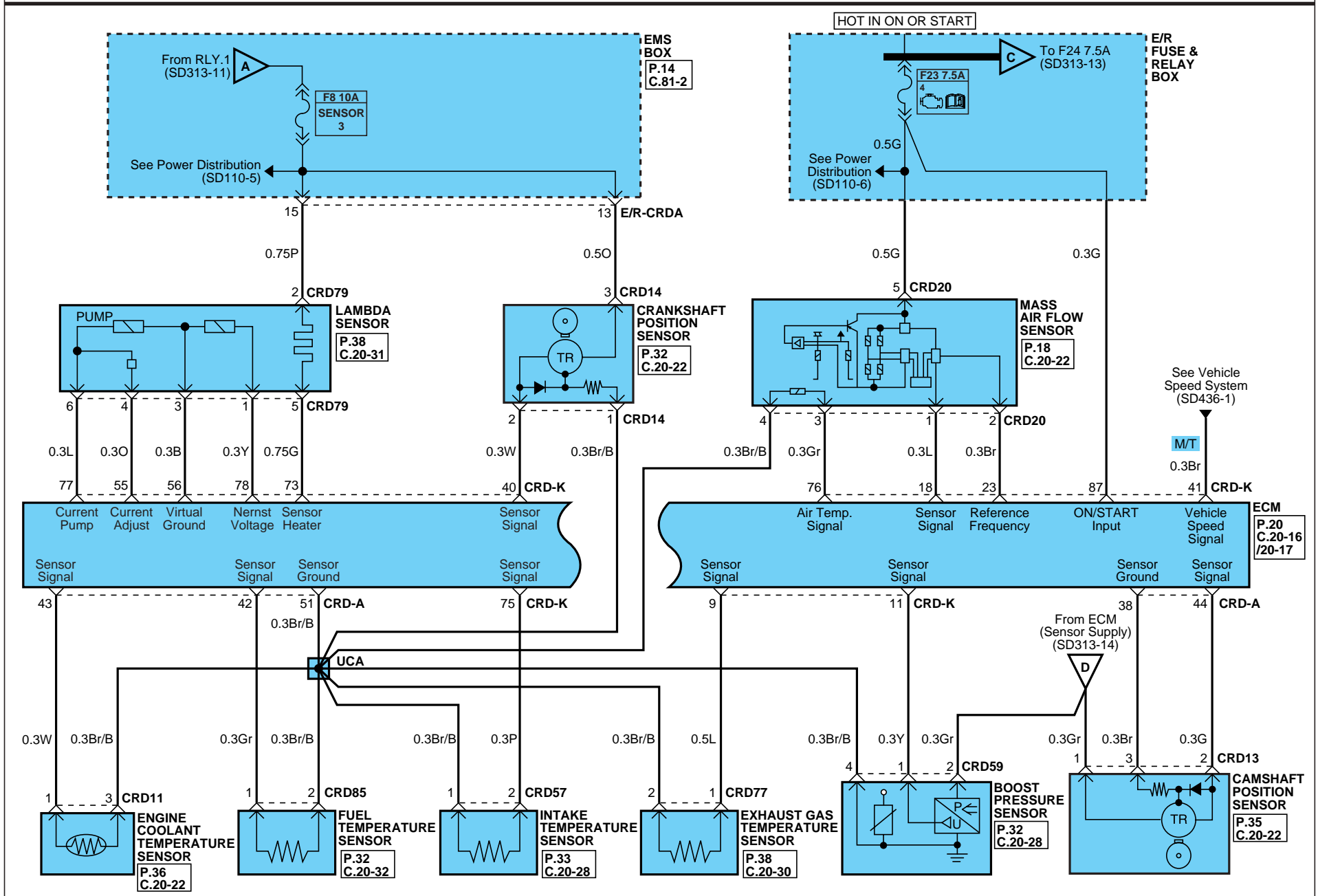
SD313-11



# MFI CONTROL SYSTEM

## MFI Control System (D4HA : R 2.0L) (4)

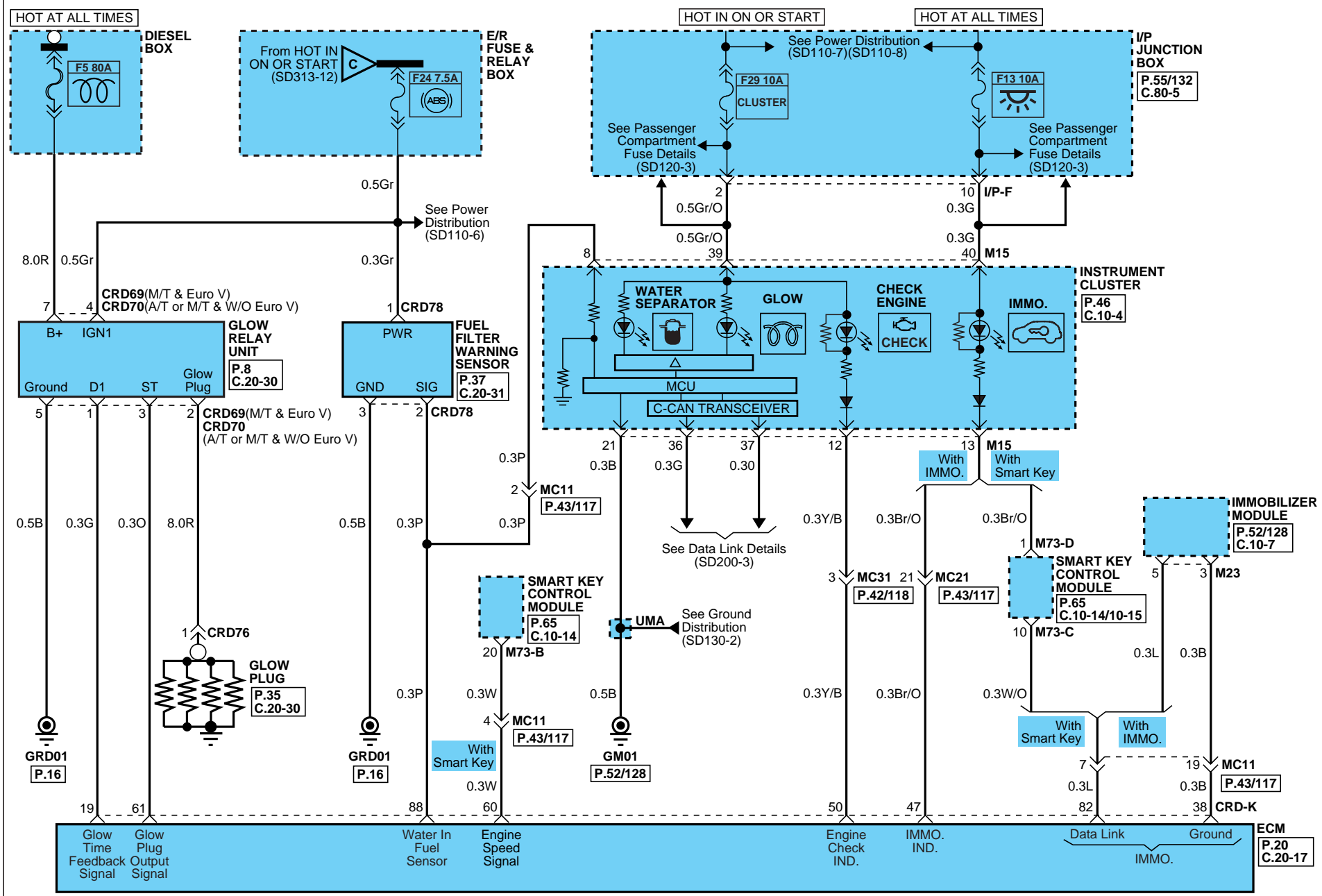
SD313-12



MFI CONTROL SYSTEM

MFI Control System (D4HA : R 2.0L) (5)

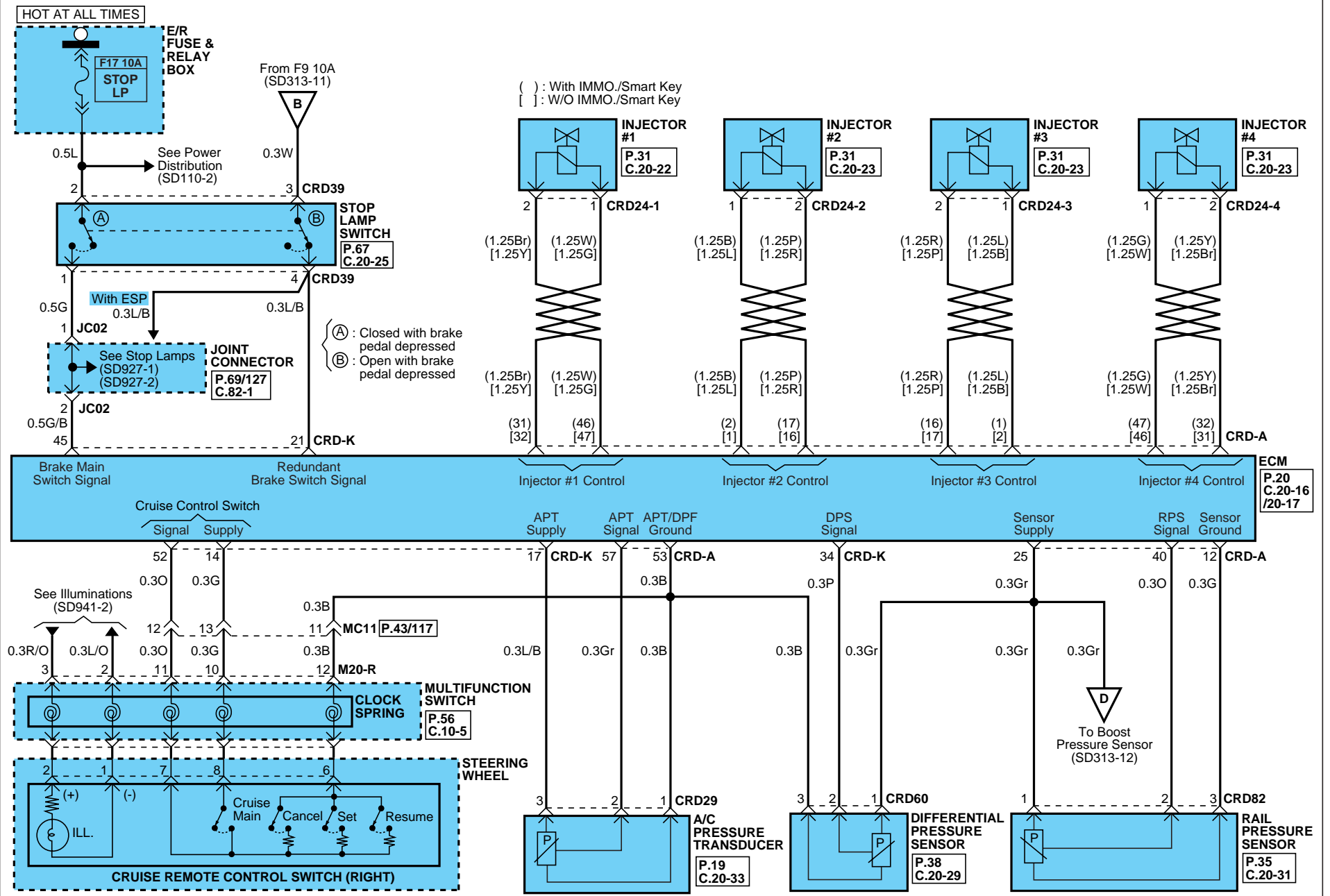
SD313-13



# MFI CONTROL SYSTEM

## MFI Control System (D4HA : R 2.0L) (6)

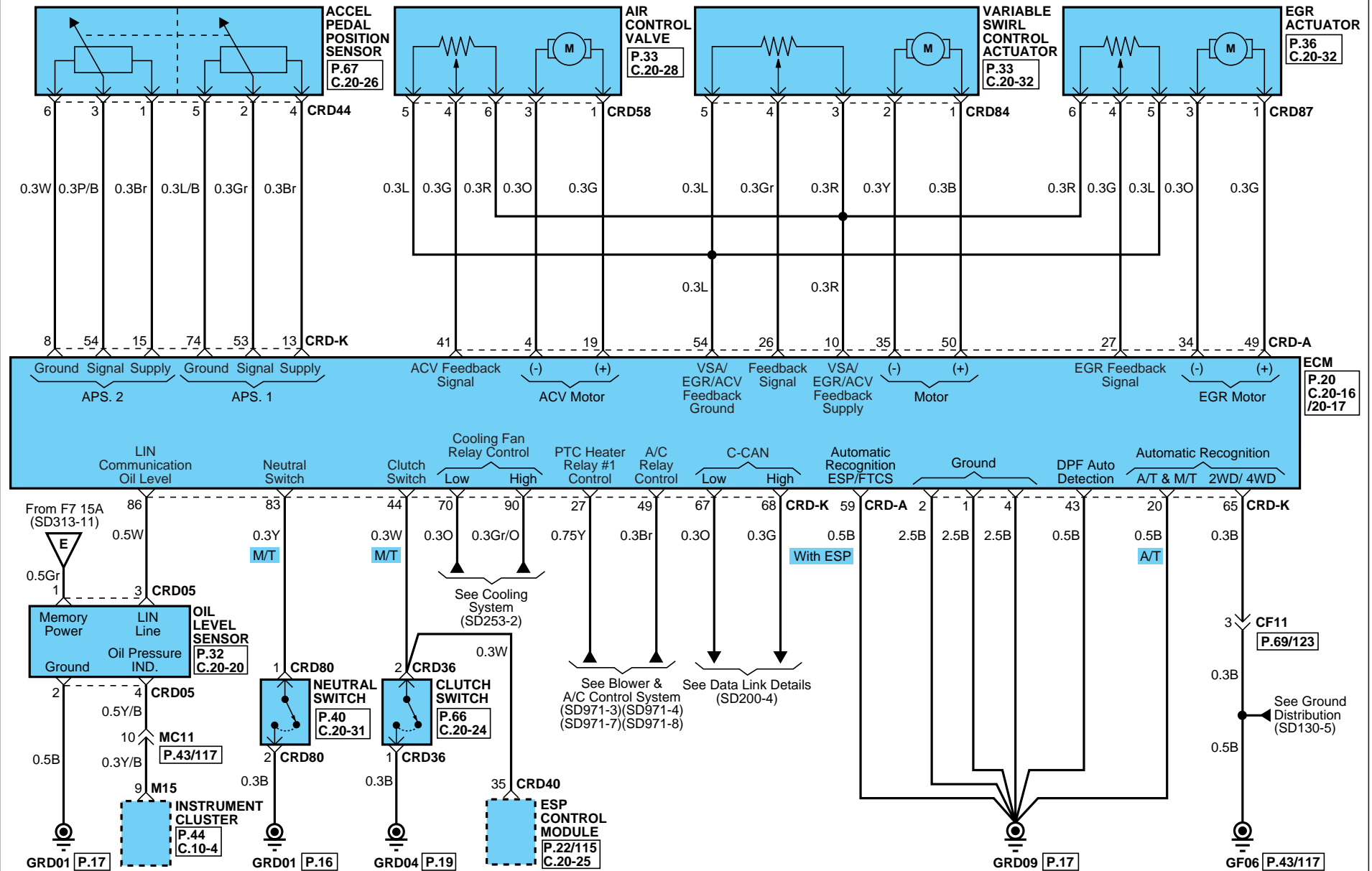
SD313-14



# MFI CONTROL SYSTEM

## MFI Control System (D4HA : R 2.0L) (7)

SD313-15



## MFI CONTROL SYSTEM

MFI Control System (D4HA : R 2.0L) (8)

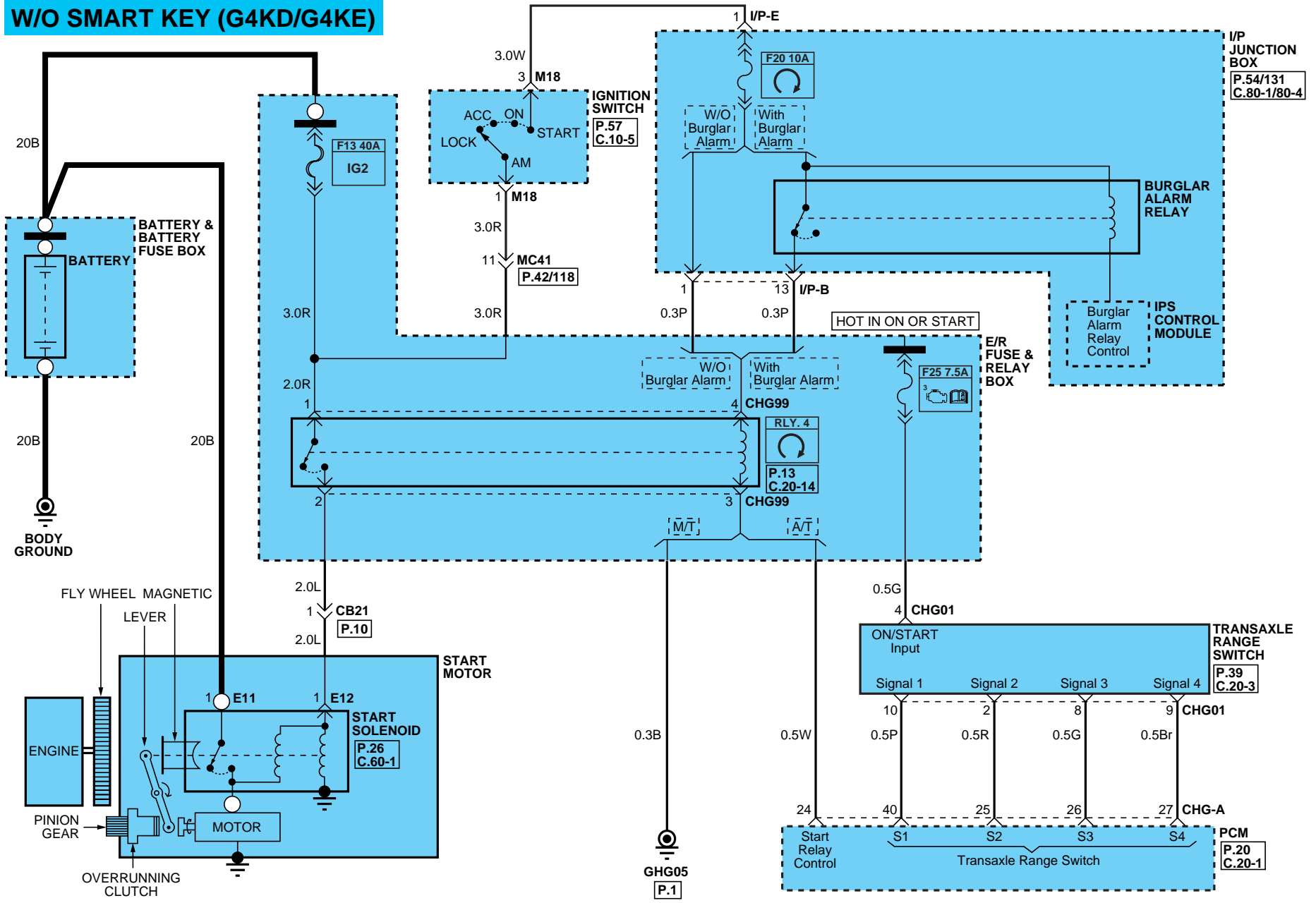
SD313-16

MEMO

Starting System (1)

SD360-1

W/O SMART KEY (G4KD/G4KE)

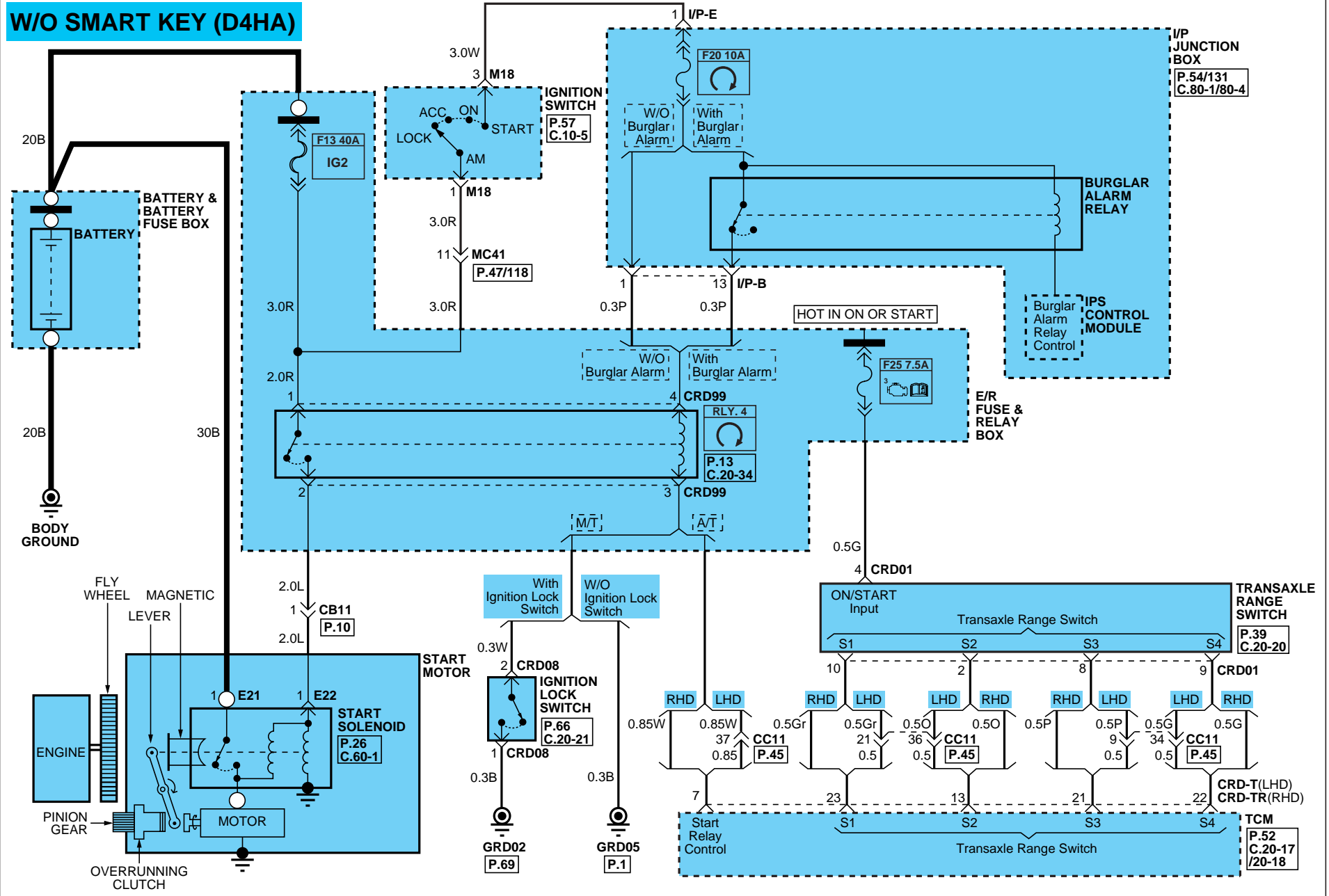




# STARTING SYSTEM

## Starting System (2)

SD360-2

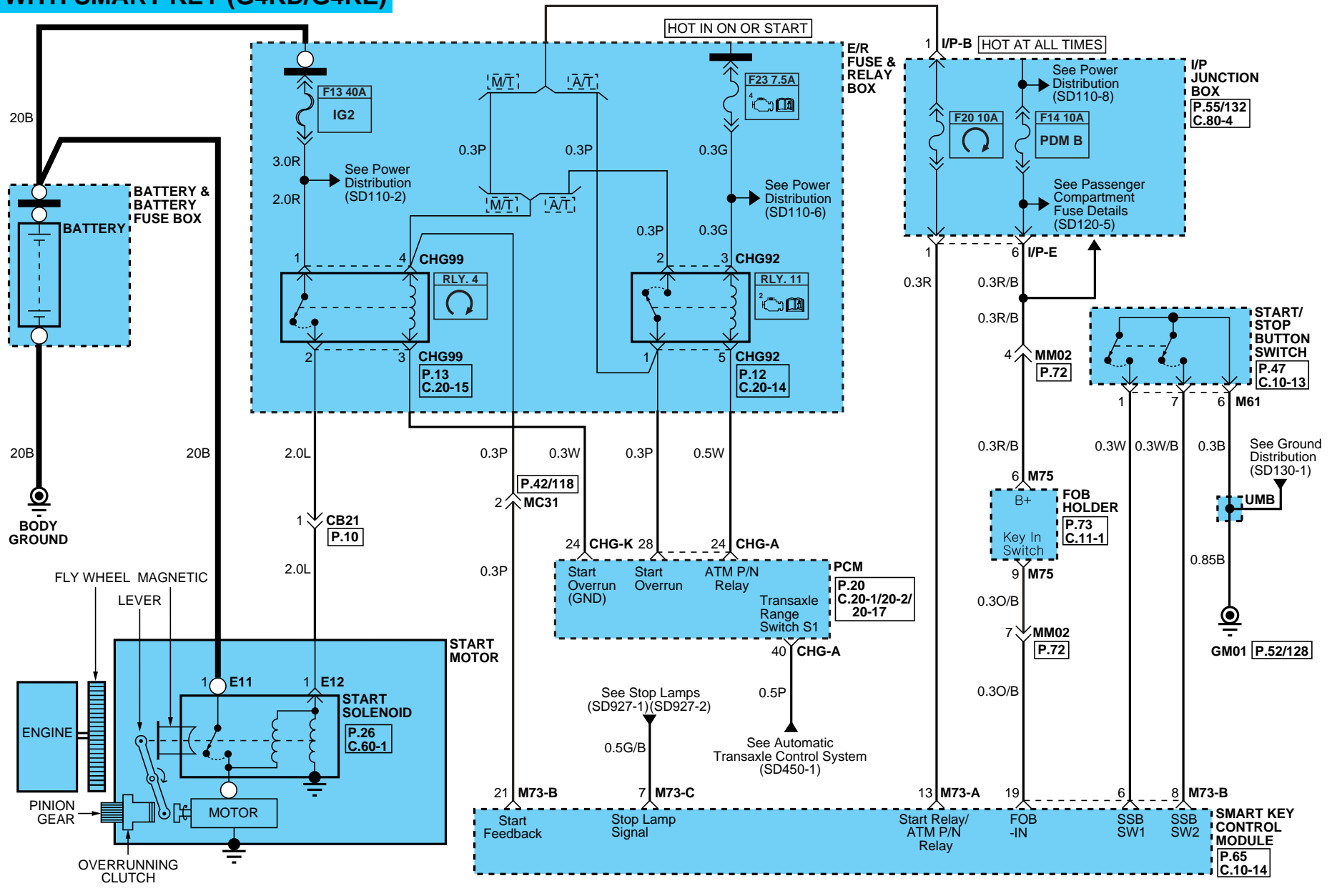


# STARTING SYSTEM

## Starting System (3)

SD360-3

### WITH SMART KEY (G4KD/G4KE)

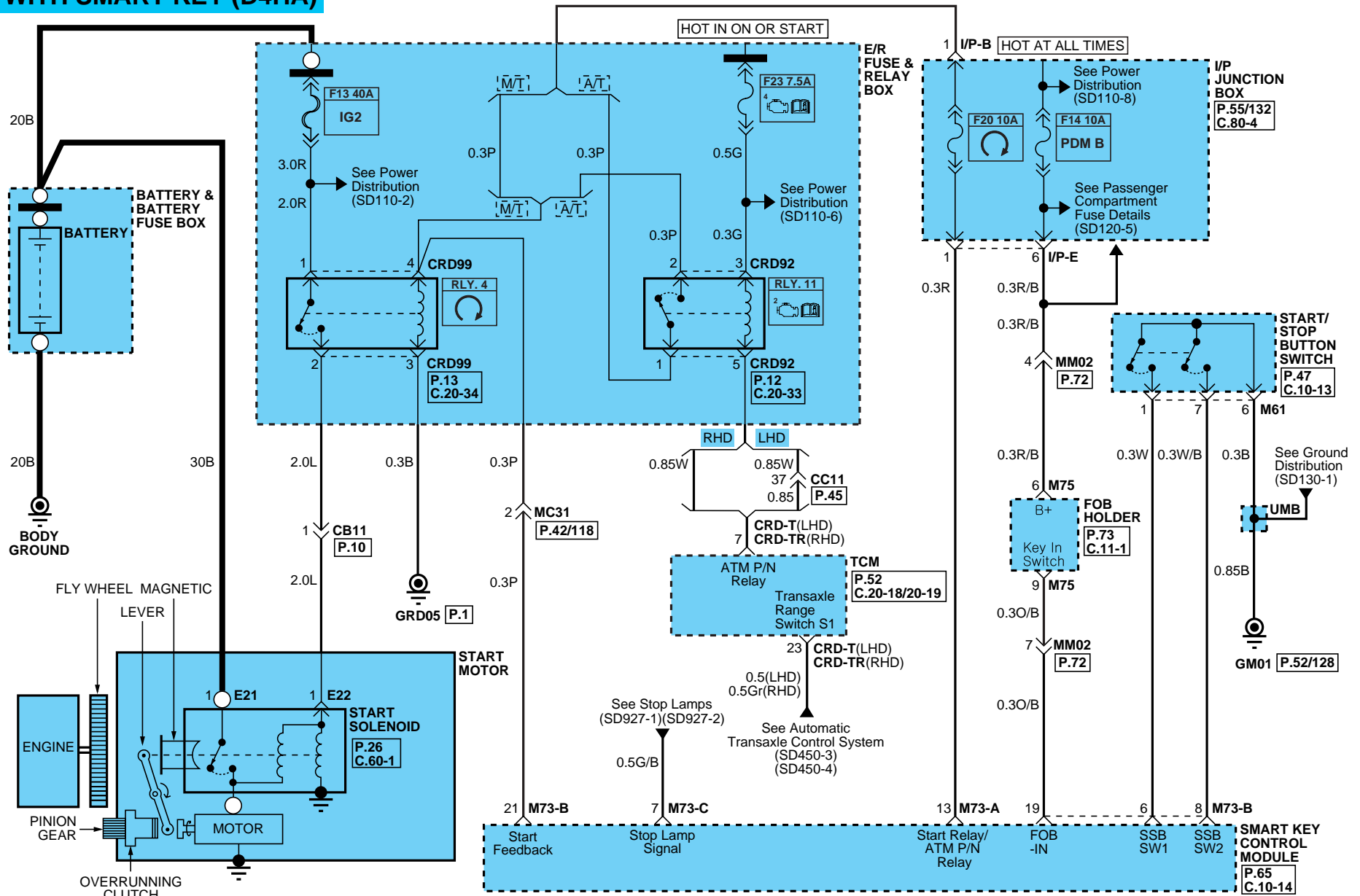


# STARTING SYSTEM

## Starting System (4)

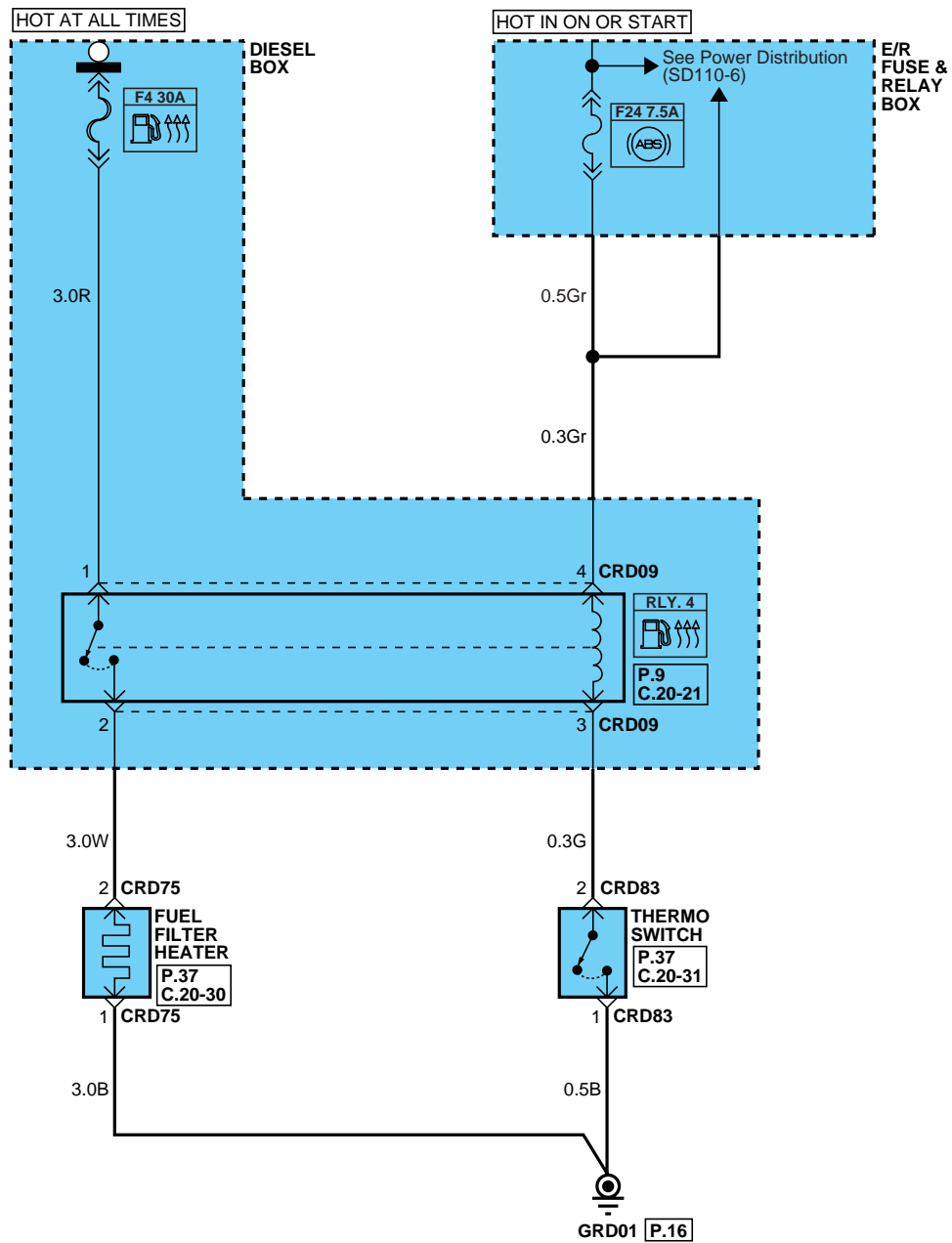
SD360-4

### WITH SMART KEY (D4HA)



Fuel Filter Heating System (D4HA : R 2.0L) (1)

SD361-1



## FUEL FILTER HEATING SYSTEM

Fuel Filter Heating System (D4HA : R 2.0L) (2)

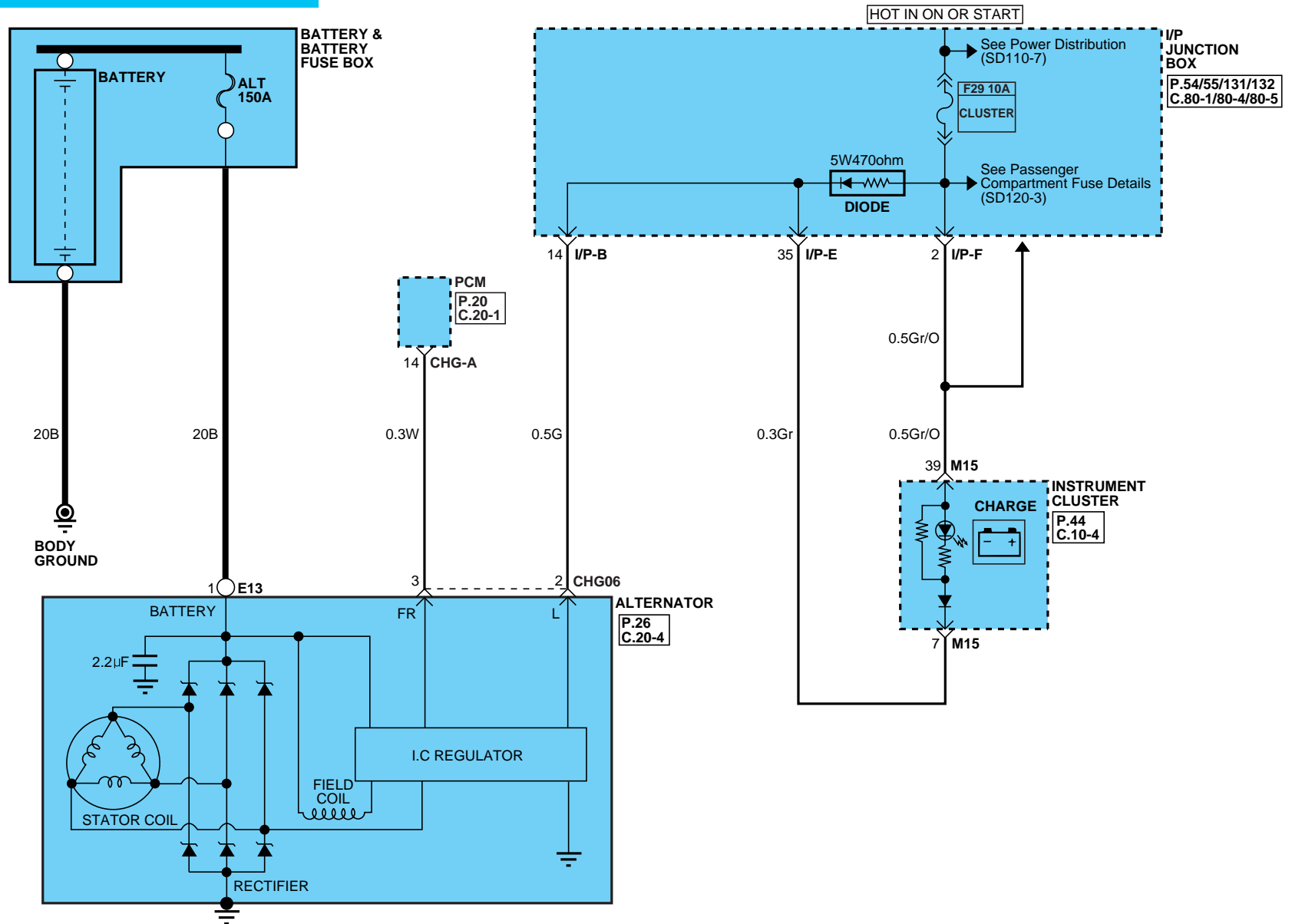
SD361-2

MEMO

Charging System (1)

SD373-1

G4KD/G4KE : THETA II 2.0L/2.4L

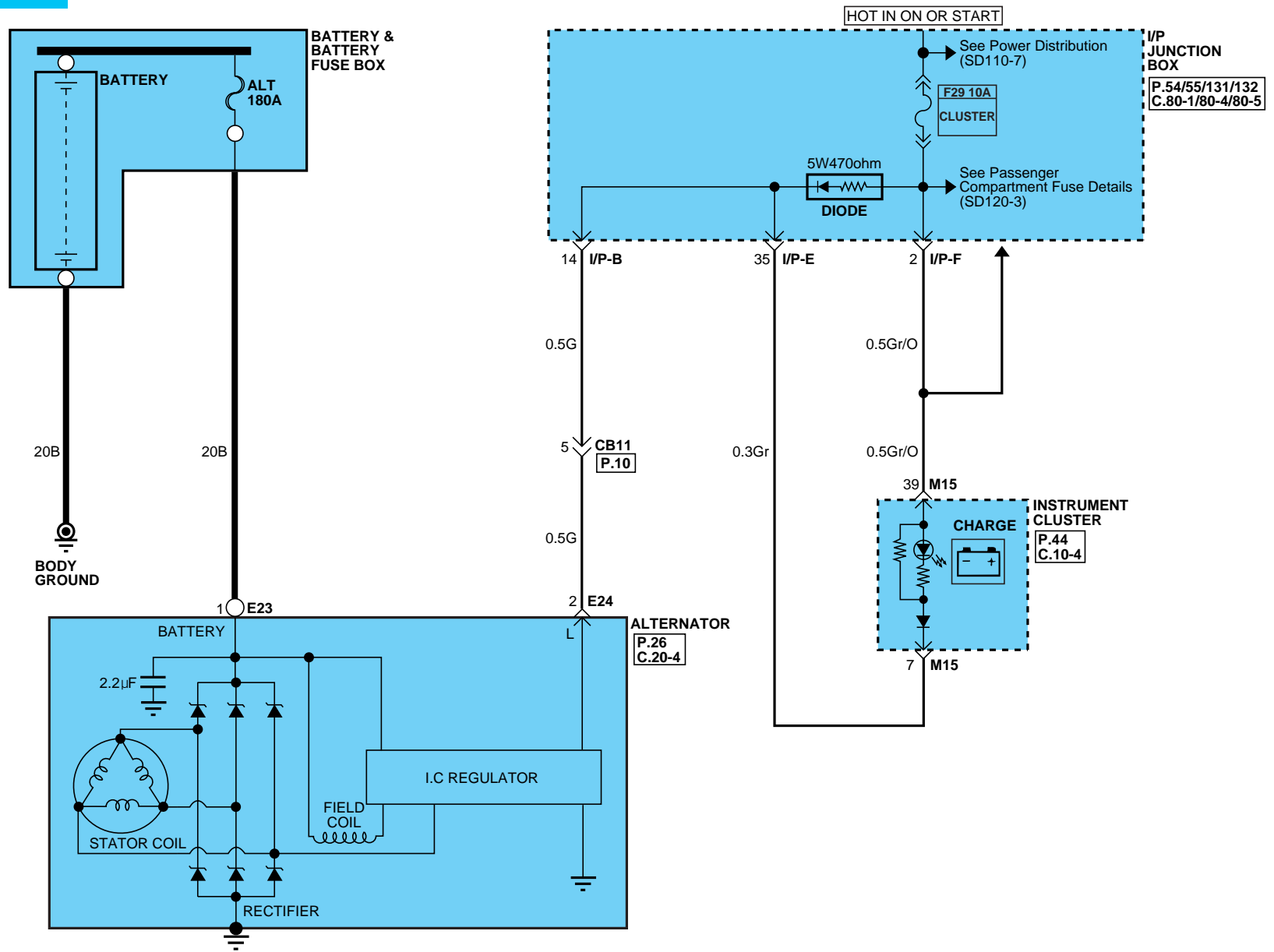


# CHARGING SYSTEM

## Charging System (2)

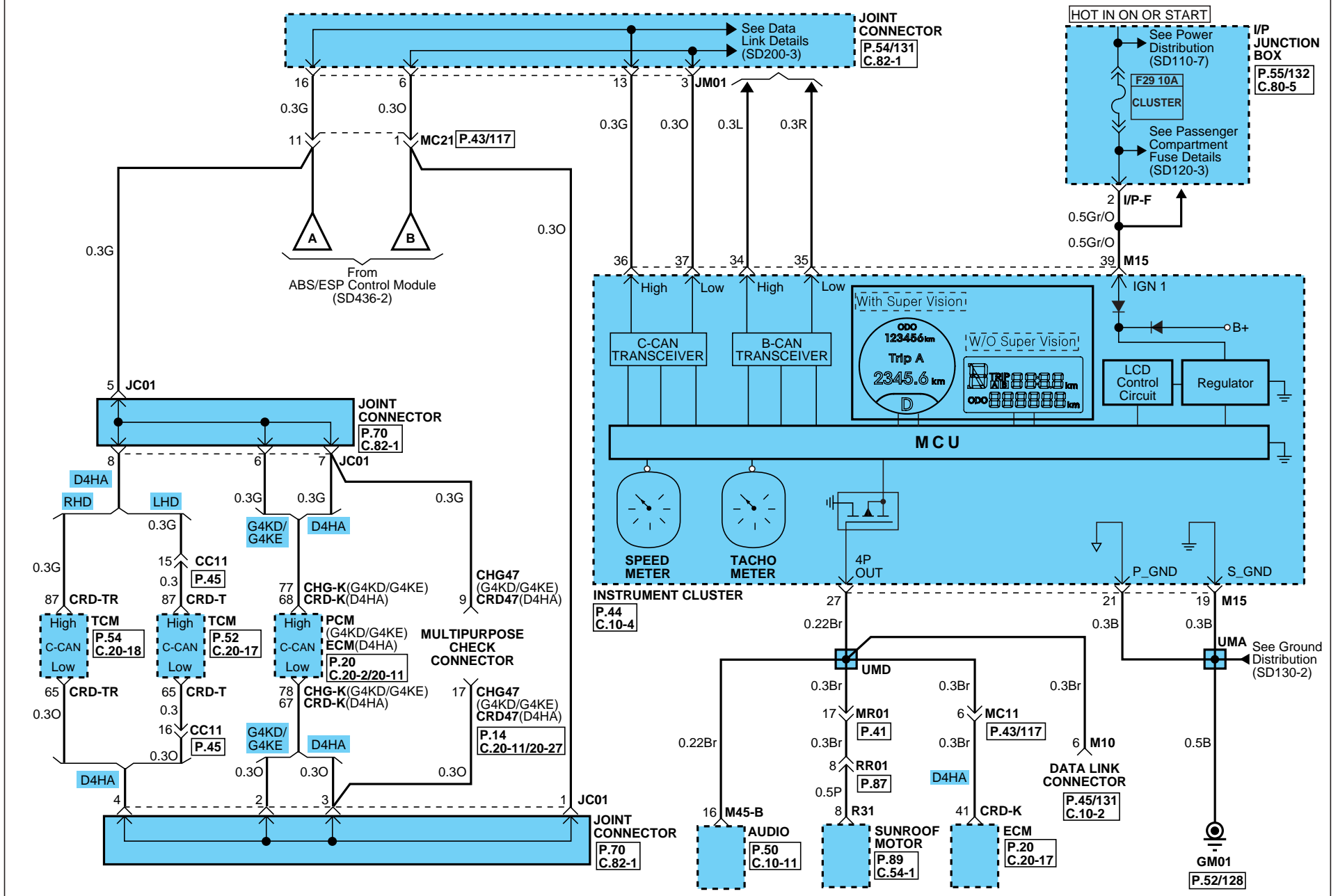
SD373-2

### D4HA : R 2.0L



Vehicle Speed System (1)

SD436-1



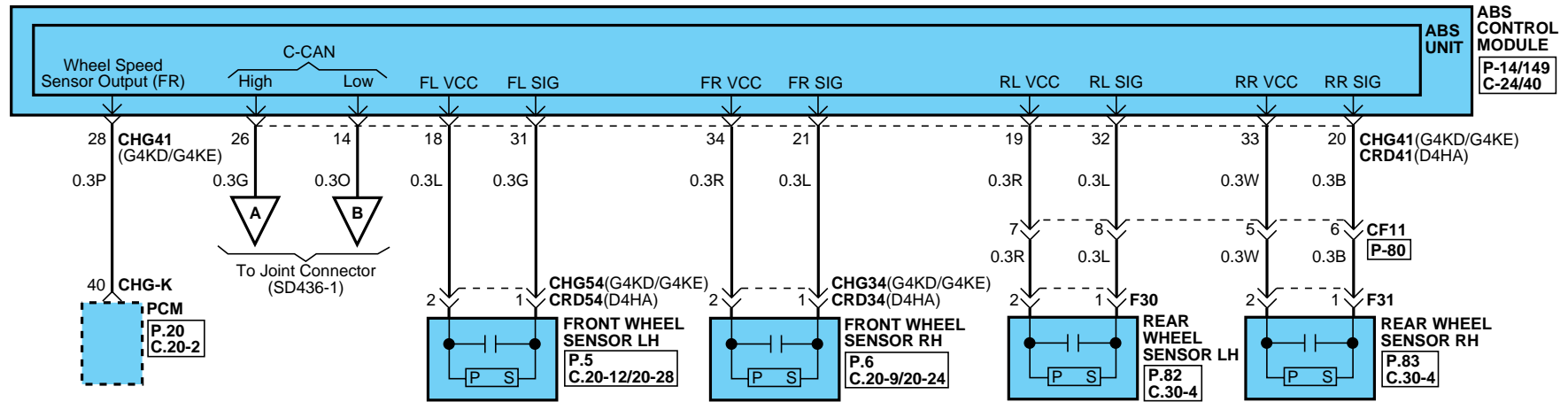


# VEHICLE SPEED SYSTEM

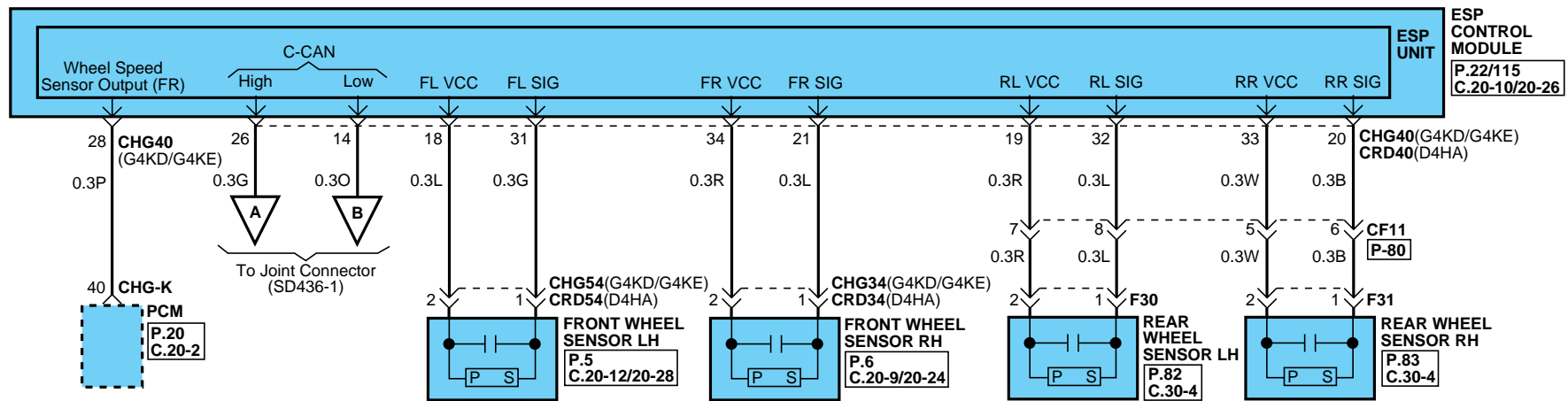
## Vehicle Speed System (2)

SD436-2

### With ABS

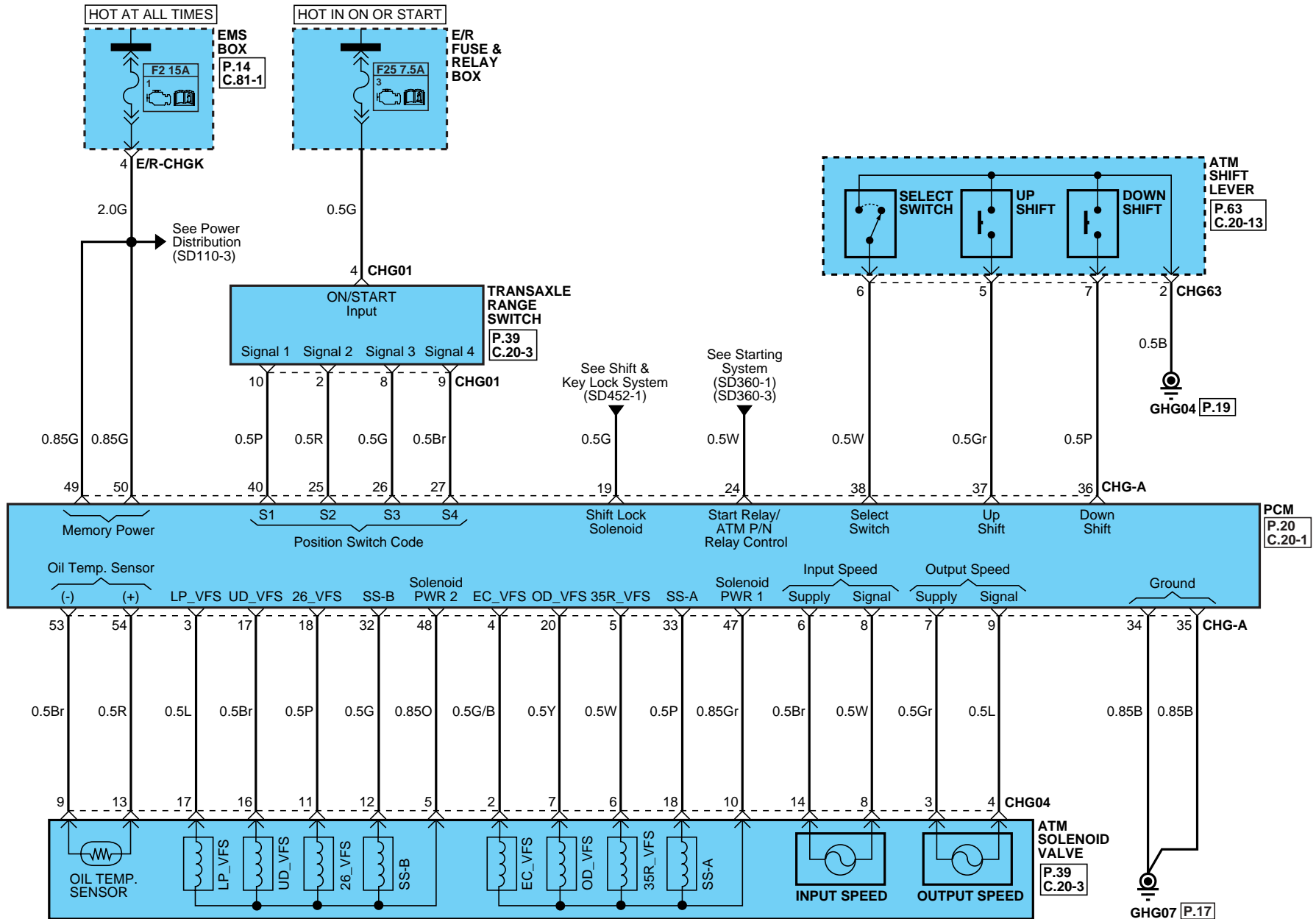


### With ESP



**Automatic Transaxle Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (1)**

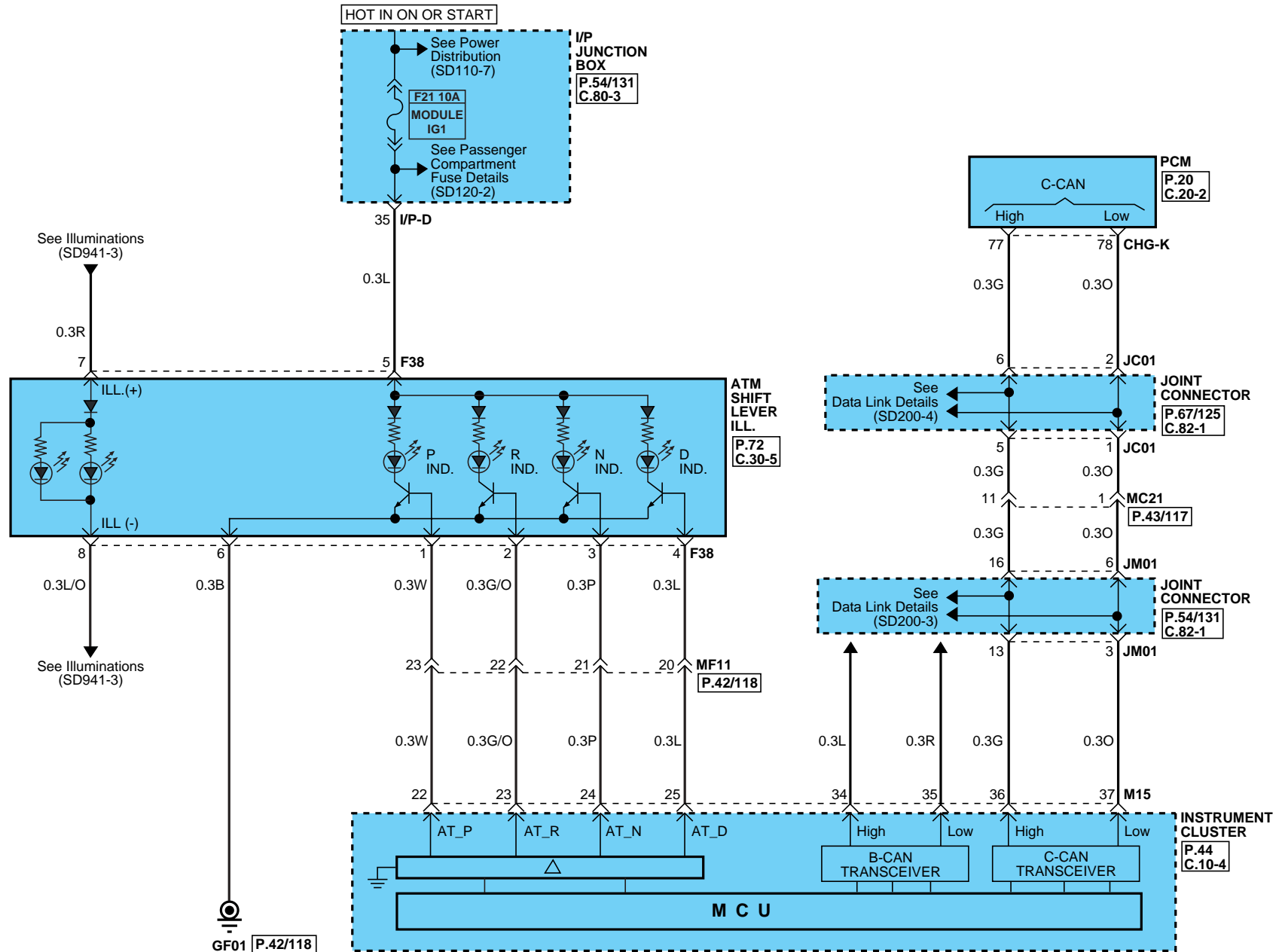
**SD450-1**



# AUTOMATIC TRANSAXLE CONTROL SYSTEM

## Automatic Transaxle Control System (G4KD/G4KE : THETA II 2.0L/2.4L) (2)

SD450-2

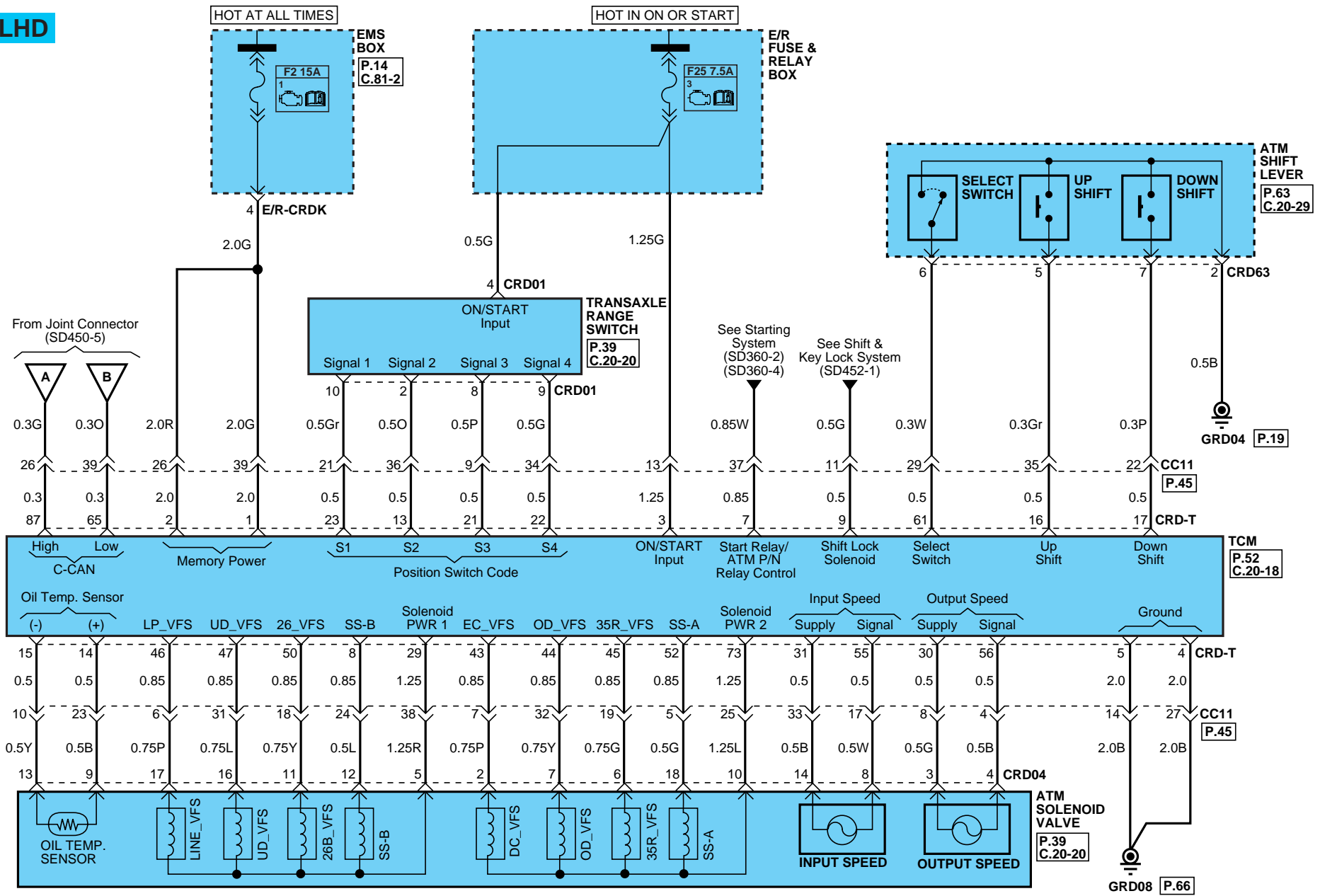


# AUTOMATIC TRANSAXLE CONTROL SYSTEM

## Automatic Transaxle Control System (D4HA : R 2.0L) (1)

SD450-3

**LHD**

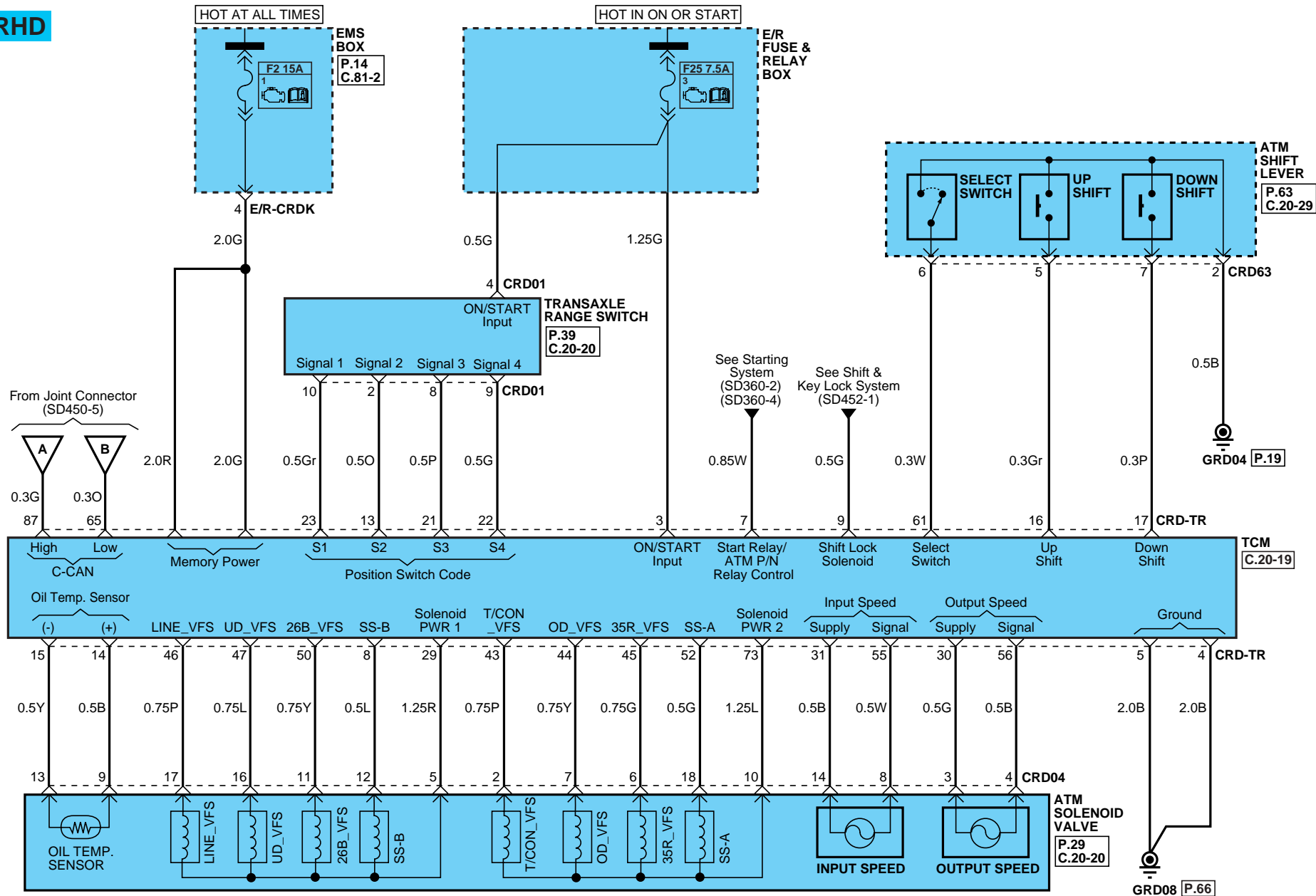


# AUTOMATIC TRANSAXLE CONTROL SYSTEM

## Automatic Transaxle Control System (D4HA : R 2.0L) (2)

SD450-4

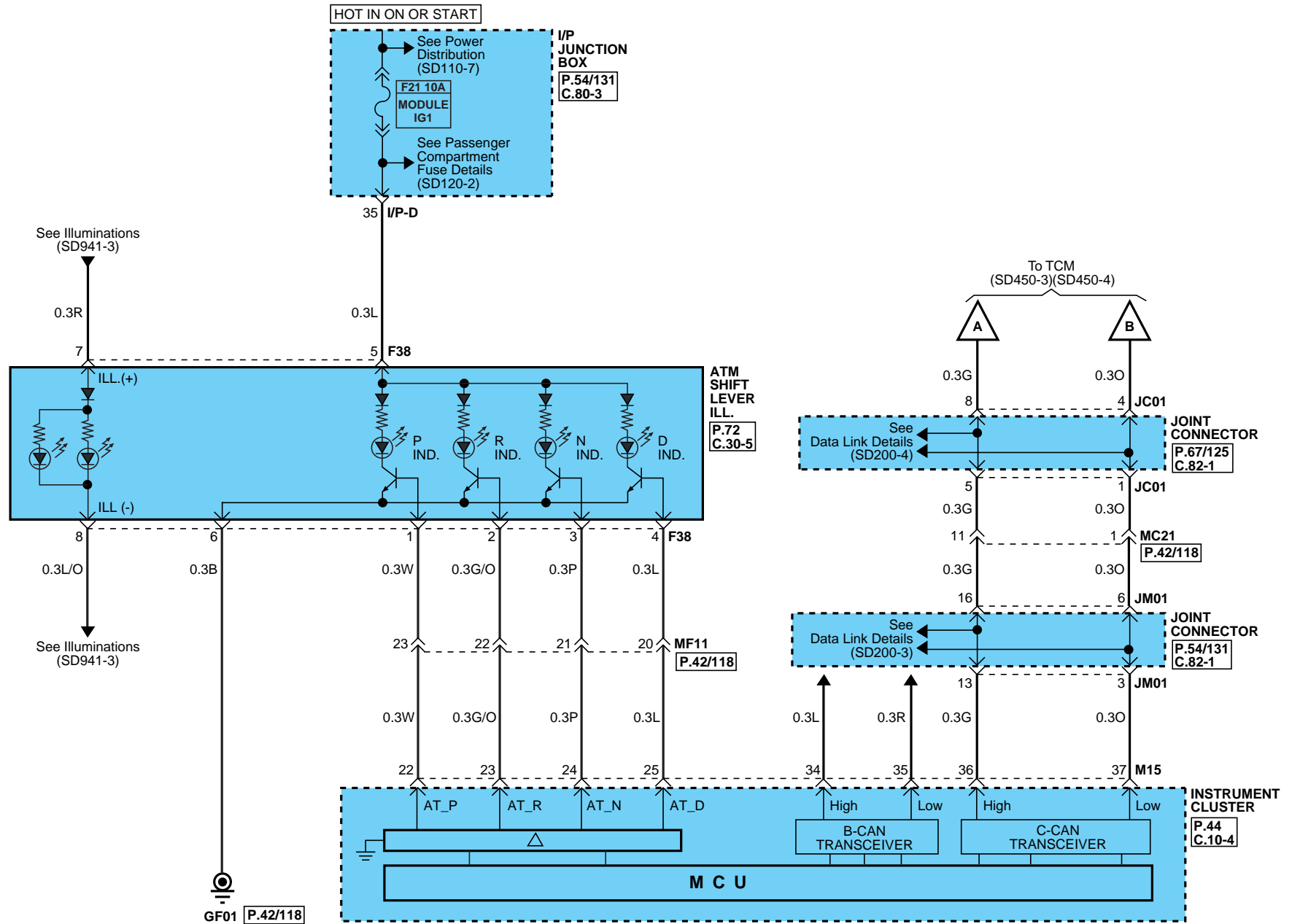
**RHD**



# AUTOMATIC TRANSAXLE CONTROL SYSTEM

## Automatic Transaxle Control System (D4HA : R 2.0L) (3)

SD450-5



## AUTOMATIC TRANSAXLE CONTROL SYSTEM

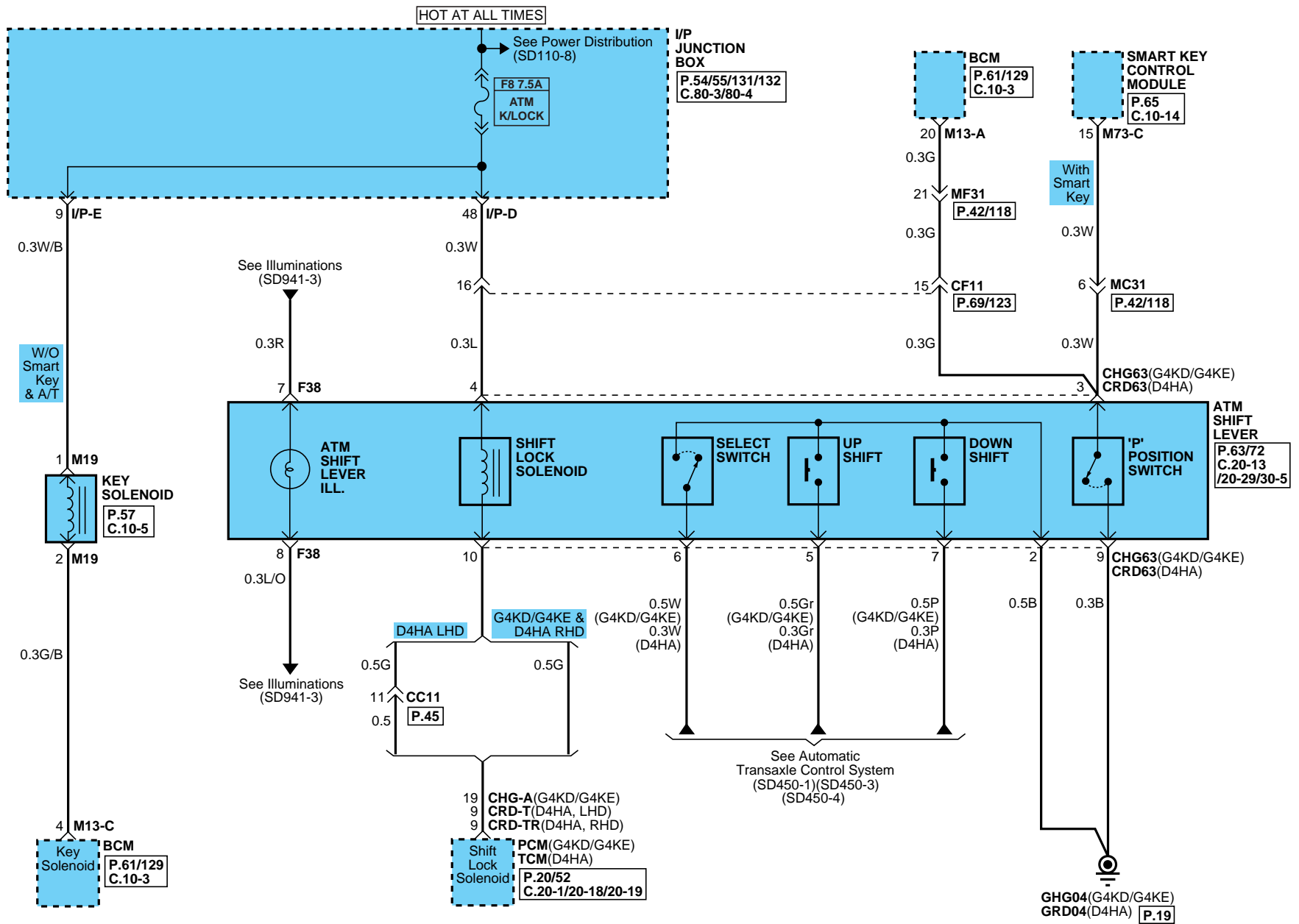
Automatic Transaxle Control System (D4HA : R 2.0L) (4)

SD450-6

MEMO

Shift & Key Lock System (1)

SD452-1





**SHIFT & KEY LOCK SYSTEM**

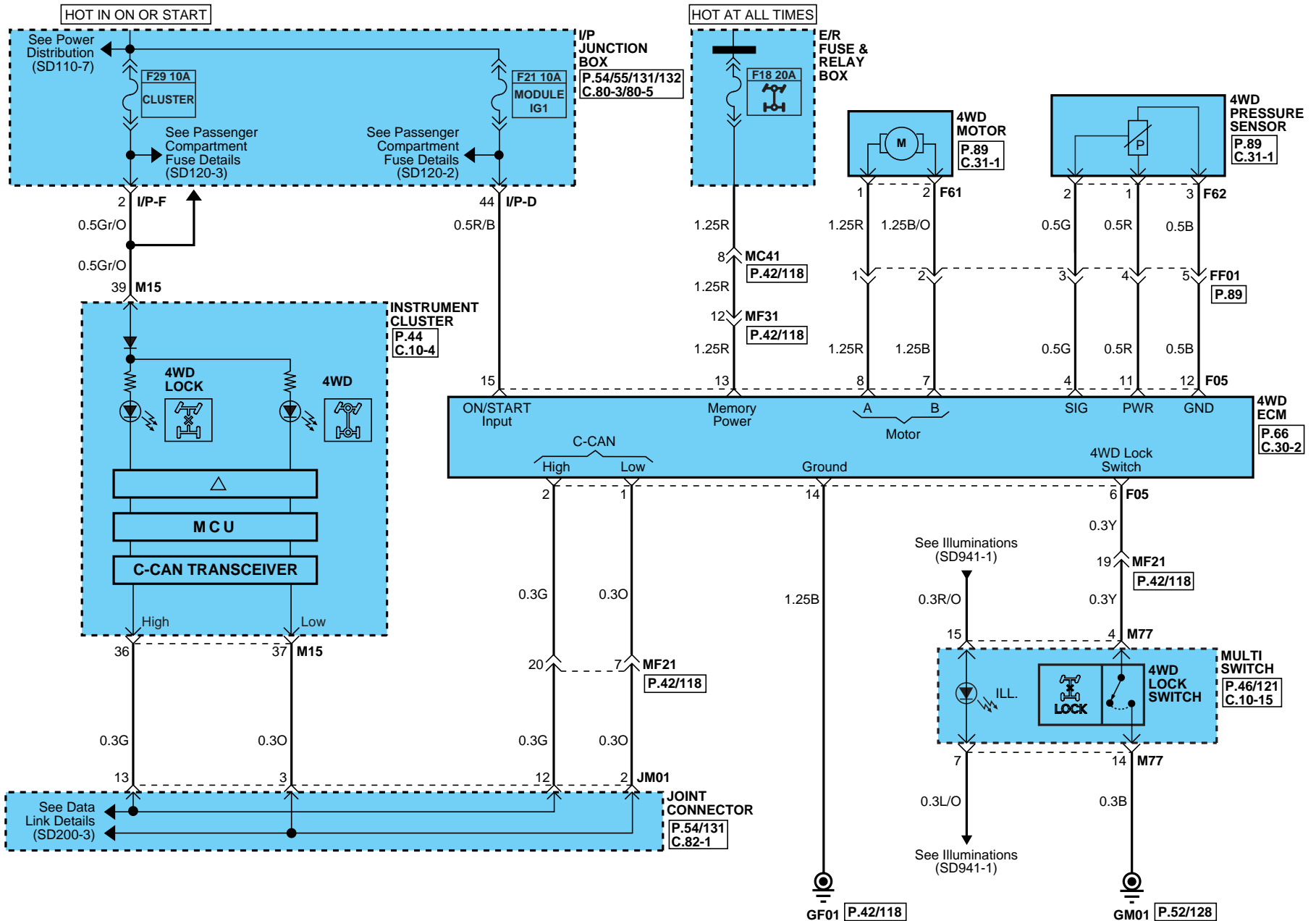
**Shift & Key Lock System (1)**

**SD452-2**

**MEMO**

Transfer Case Control System (TCCS) (1)

SD527-1



**TRANSFER CASE CONTROL SYSTEM (TCCS)**

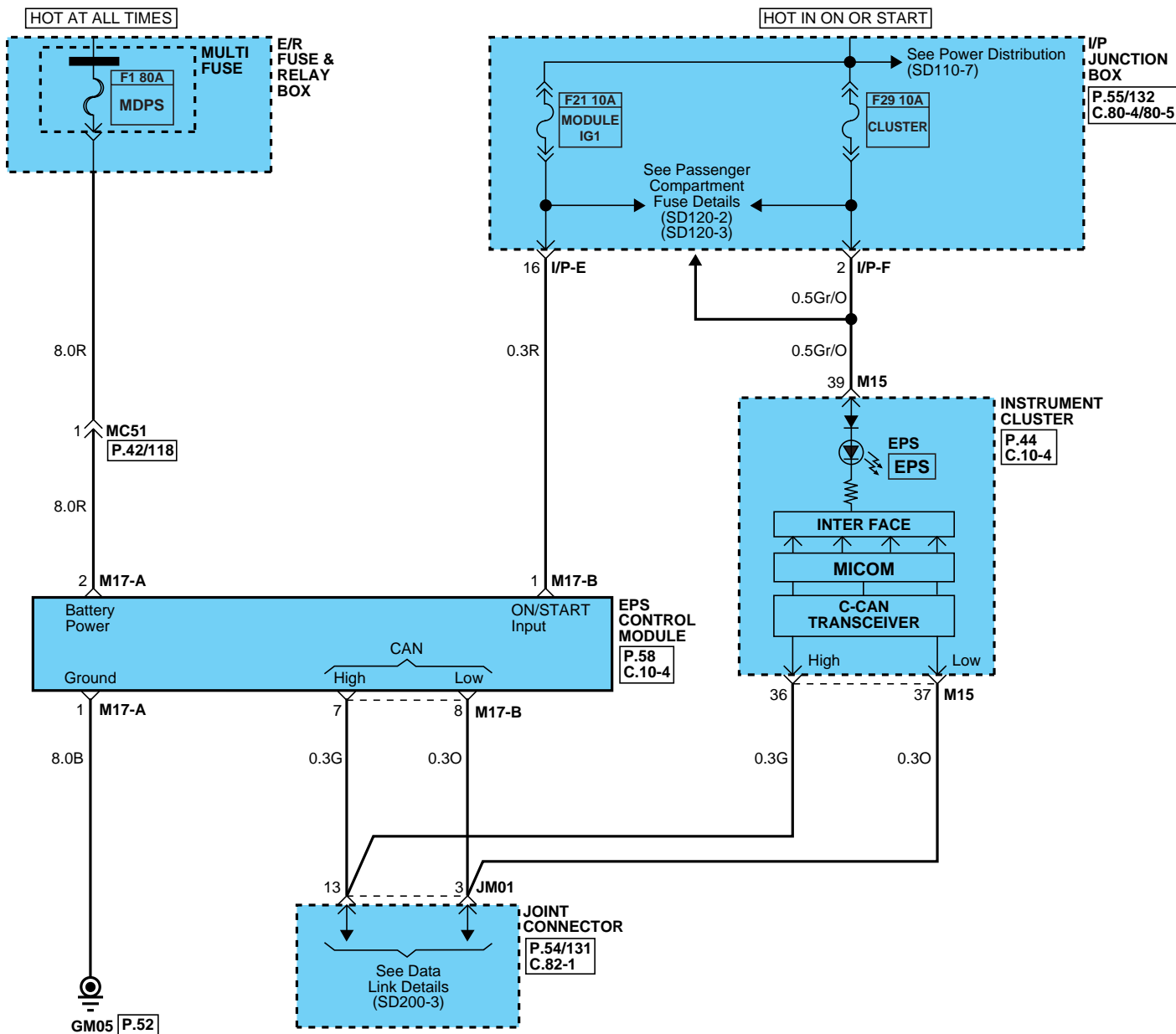
**Transfer Case Control System (TCCS) (2)**

**SD527-2**

**MEMO**

Motor Driven Power Steering (MDPS) System (1)

SD563-1



# MOTOR DRIVEN POWER STEERING (MDPS) SYSTEM

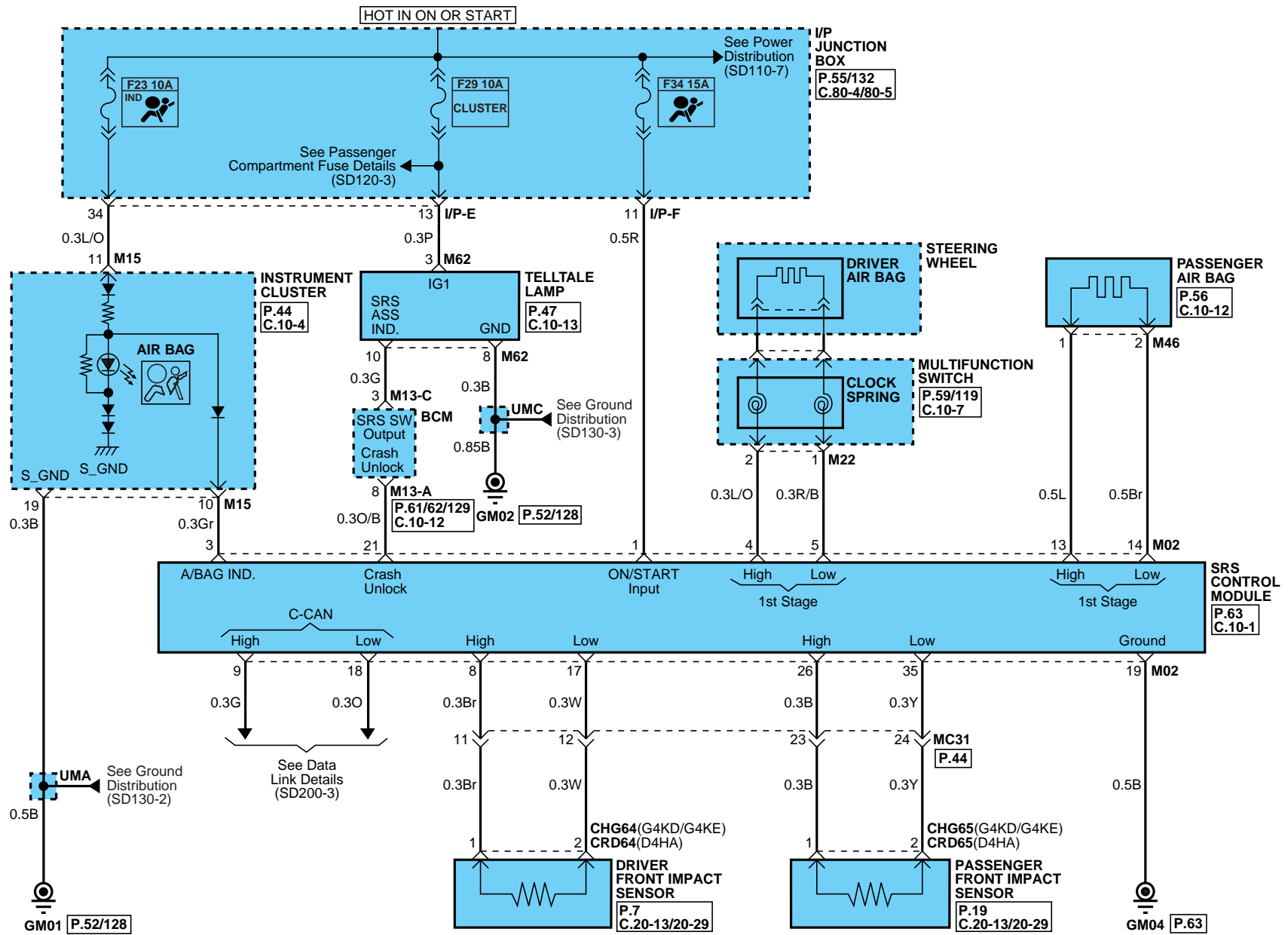
Motor Driven Power Steering (MDPS) System (2)

SD563-2

MEMO

Supplemental Restraint System (SRS) (1)

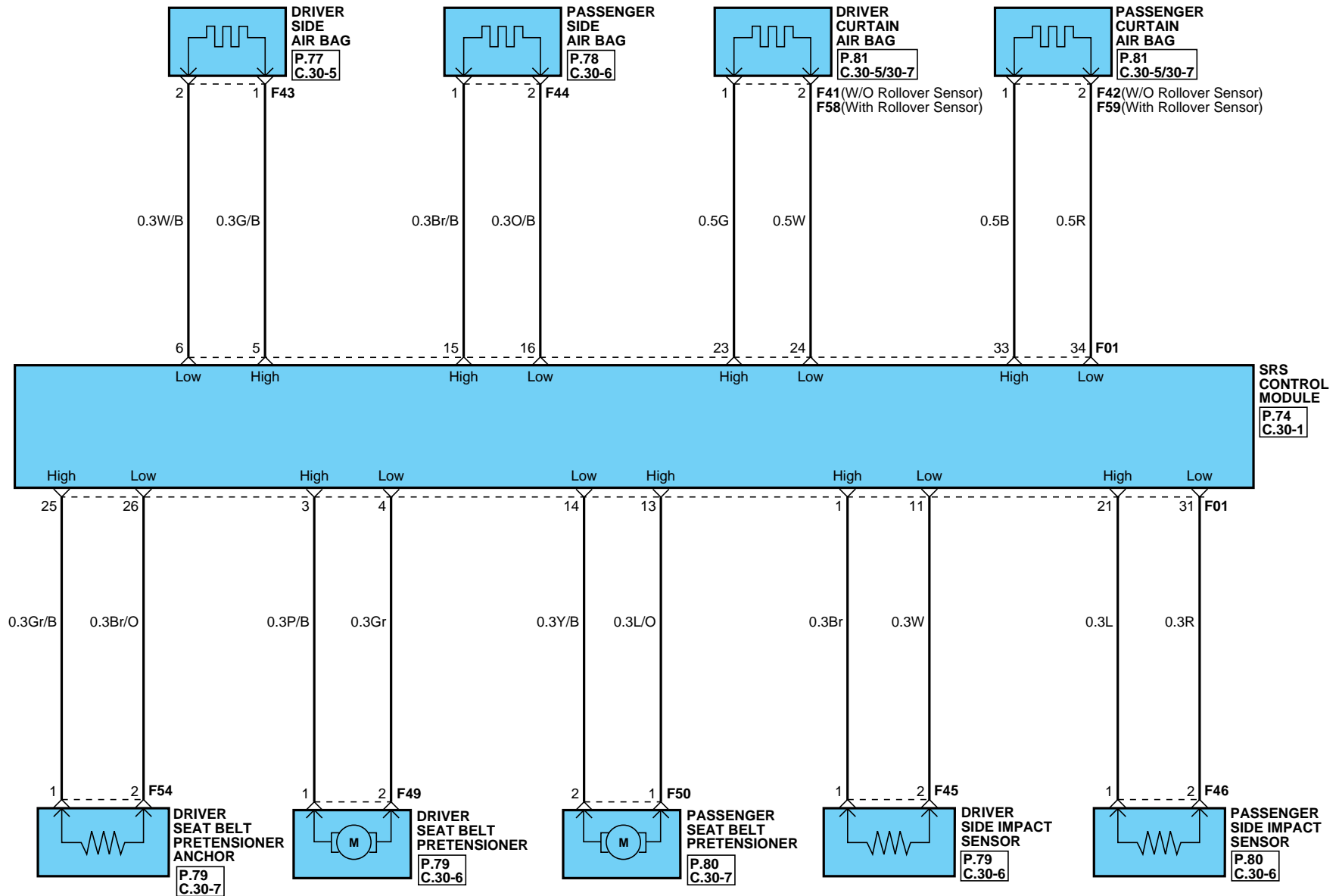
SD569-1



# SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

## Supplemental Restraint System (SRS) (2)

SD569-2

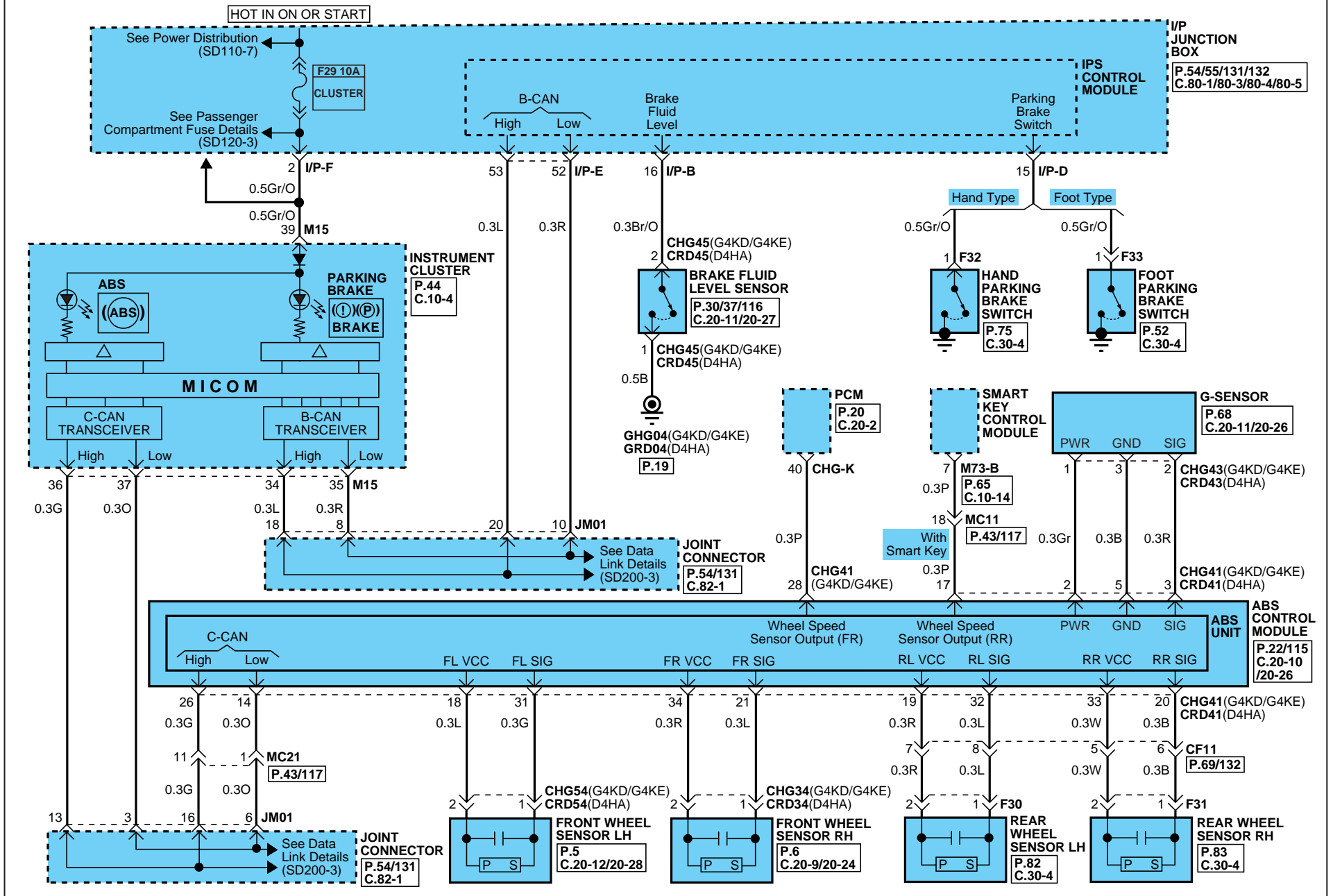


# ANTI-LOCK BRAKE SYSTEM (ABS)

E1A4D532

## Anti-lock Brake System (ABS) (1)

SD587-1

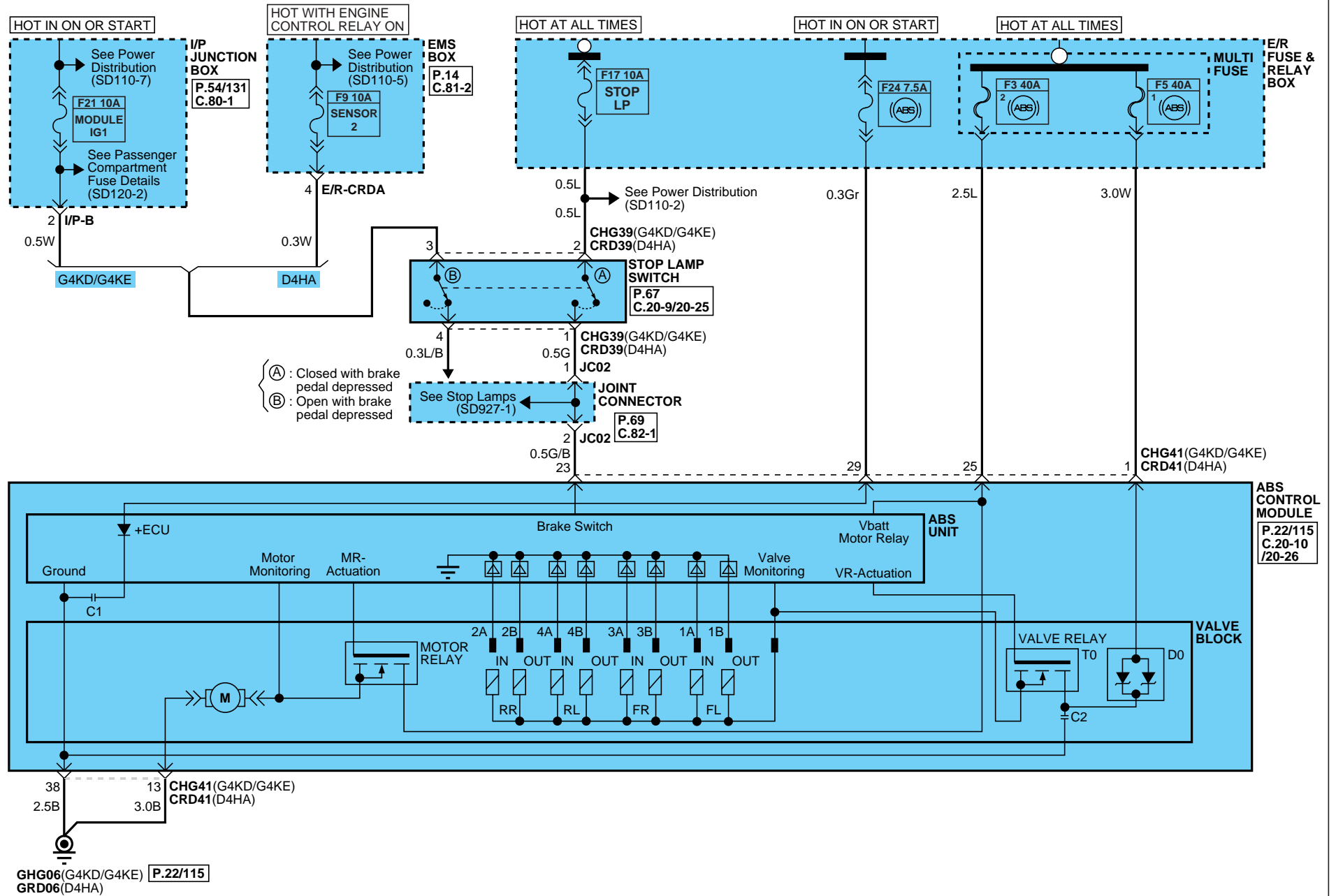




# ANTI-LOCK BRAKE SYSTEM (ABS)

## Anti-lock Brake System (ABS) (2)

SD587-2

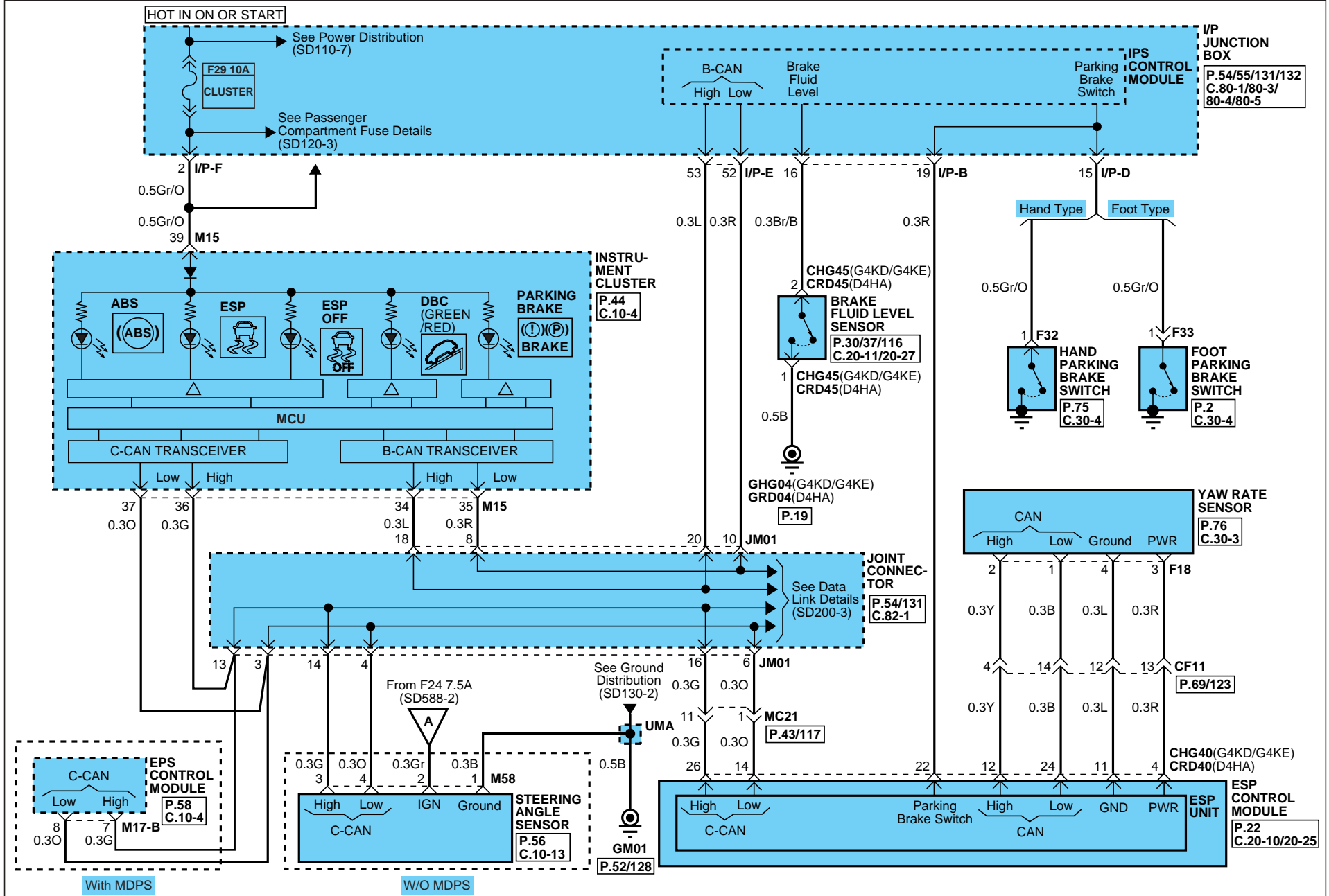


# ELECTRONIC STABILITY PROGRAM (ESP) SYSTEM

E36643D0

## Electronic Stability Program (ESP) System (1)

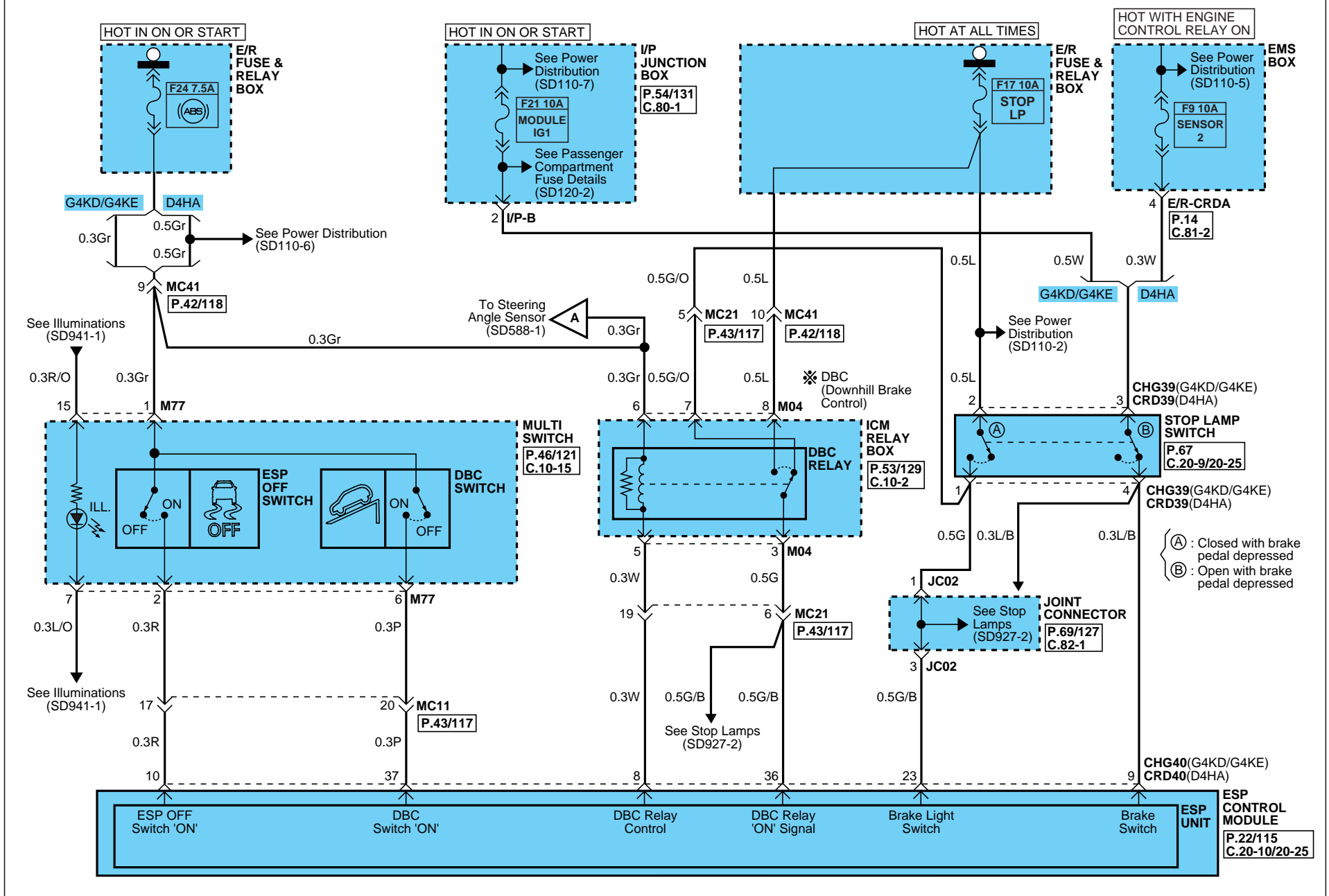
SD588-1



# ELECTRONIC STABILITY PROGRAM (ESP) SYSTEM

## Electronic Stability Program (ESP) System (2)

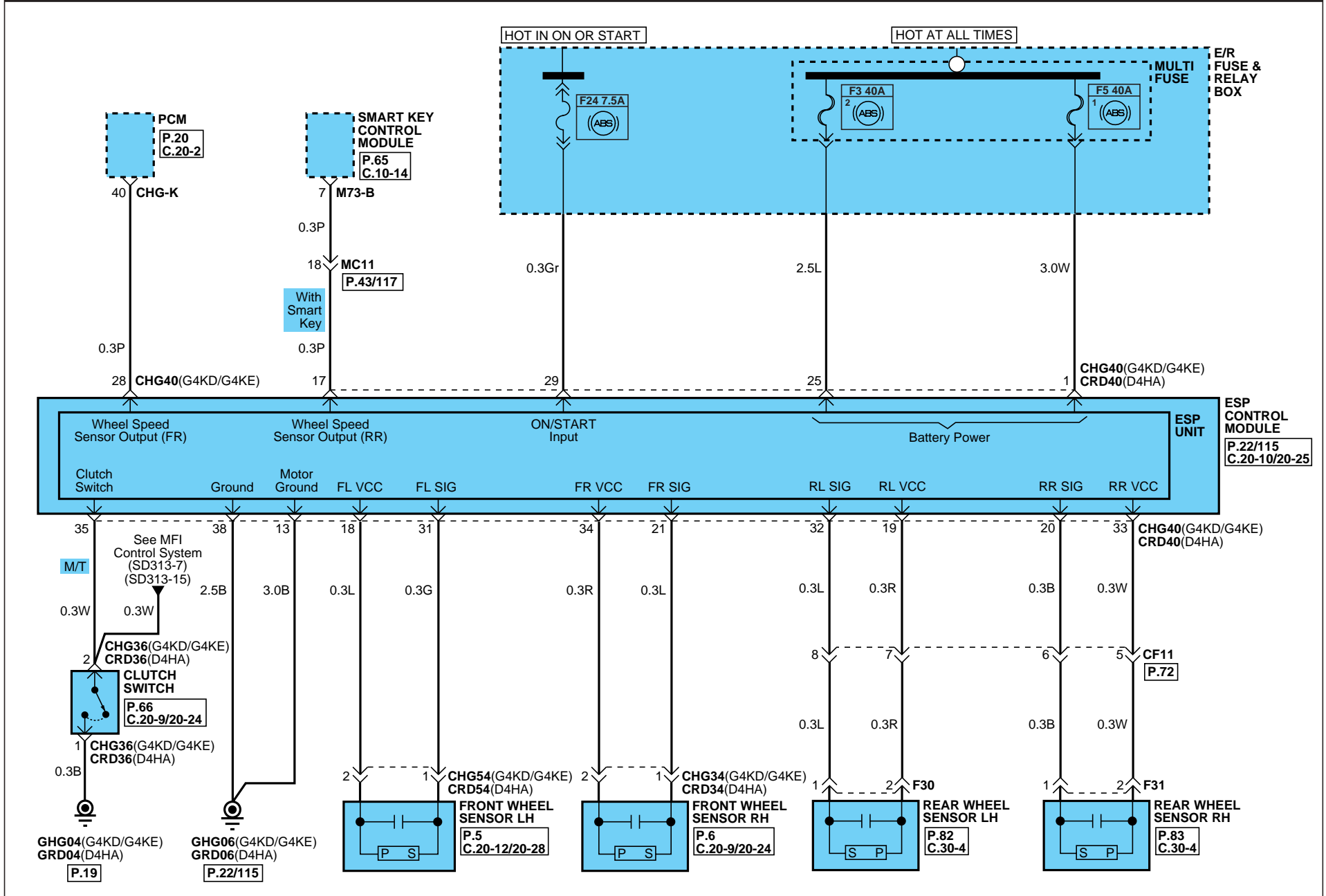
SD588-2



# ELECTRONIC STABILITY PROGRAM (ESP) SYSTEM

## Electronic Stability Program (ESP) System (3)

SD588-3



**ELECTRONIC STABILITY PROGRAM (ESP) SYSTEM**

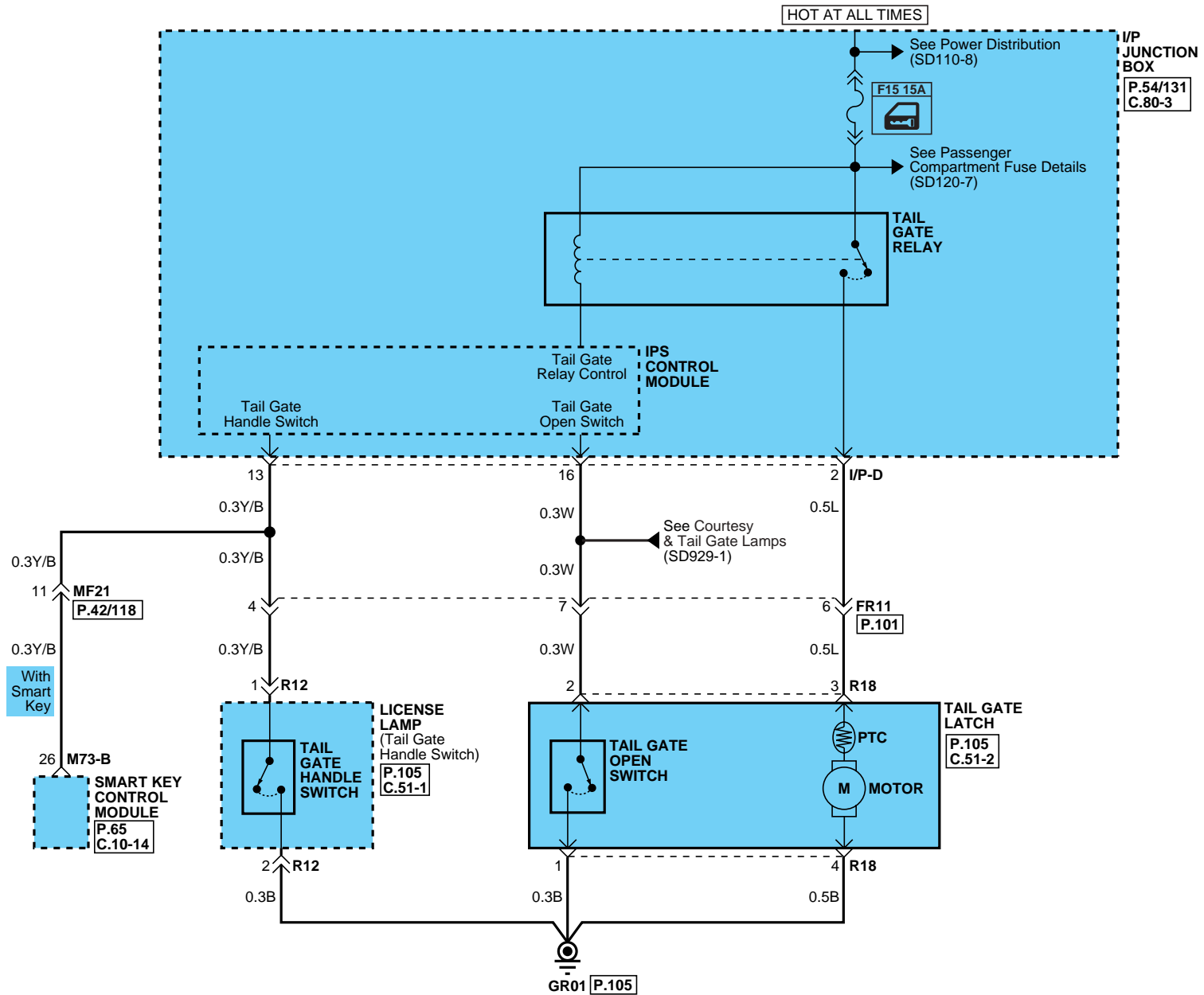
**Electronic Stability Program (ESP) System (4)**

**SD588-4**

**MEMO**

Tail Gate Opener (1)

SD812-1



**TAIL GATE OPENER**

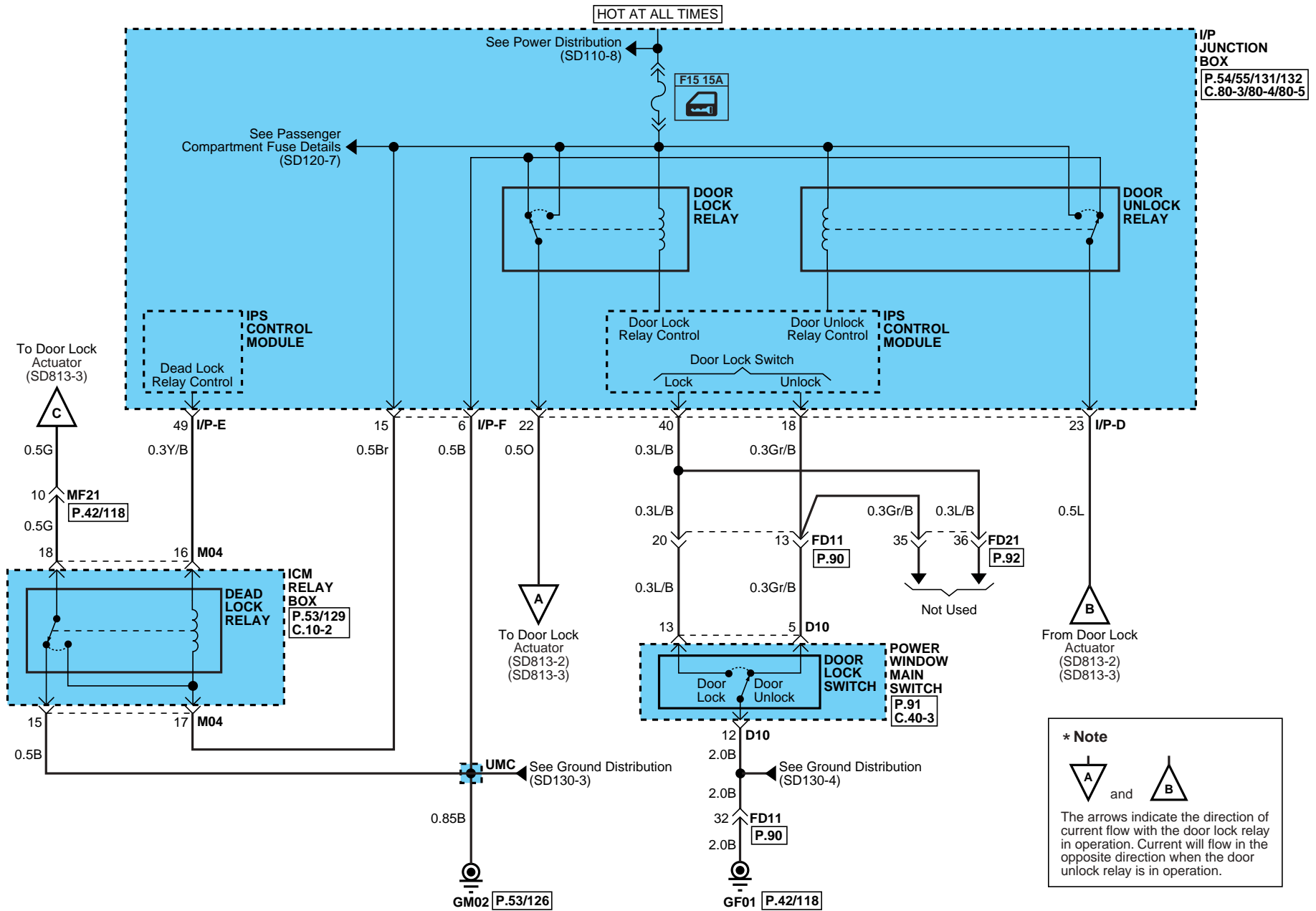
**Tail Gate Opener (2)**

**SD812-2**

**MEMO**

Power Door Locks (1)

SD813-1



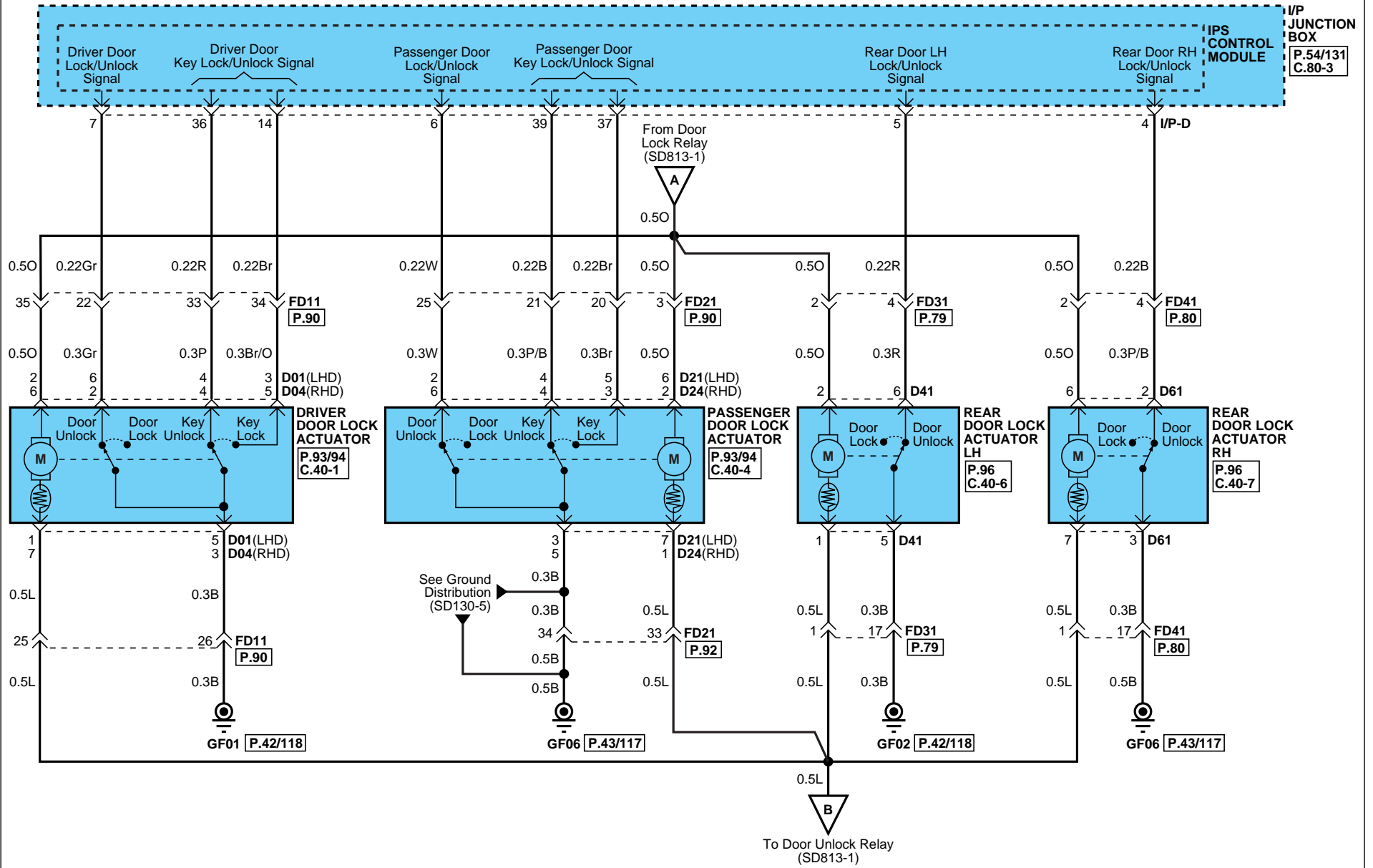


# POWER DOOR LOCKS

## Power Door Locks (2)

SD813-2

### W/O Dead Lock

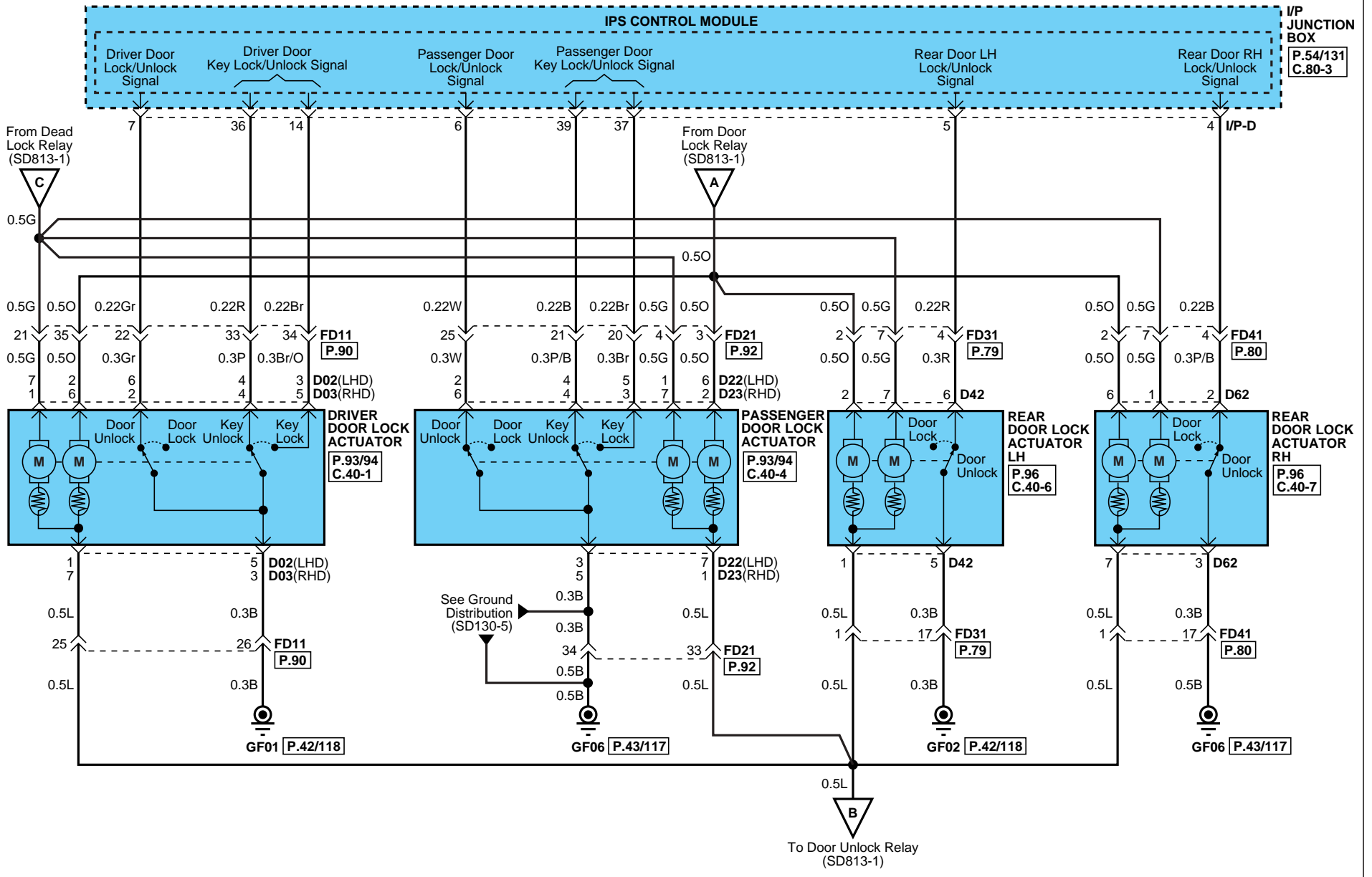


# POWER DOOR LOCKS

## Power Door Locks (3)

SD813-3

### With Dead Lock



## POWER DOOR LOCKS

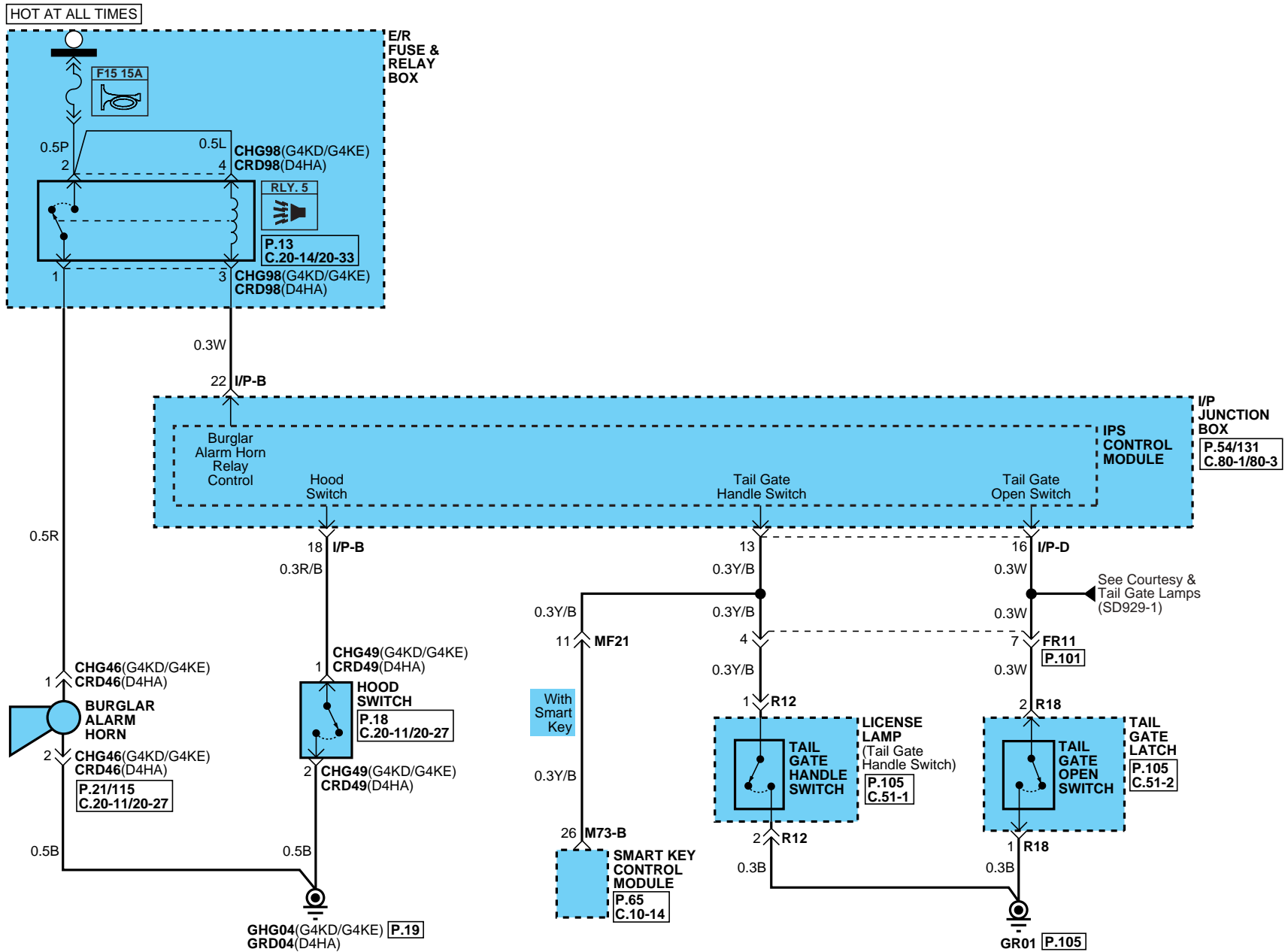
Power Door Locks (4)

SD813-4

MEMO

Keyless Entry & Burglar Alarm System (1)

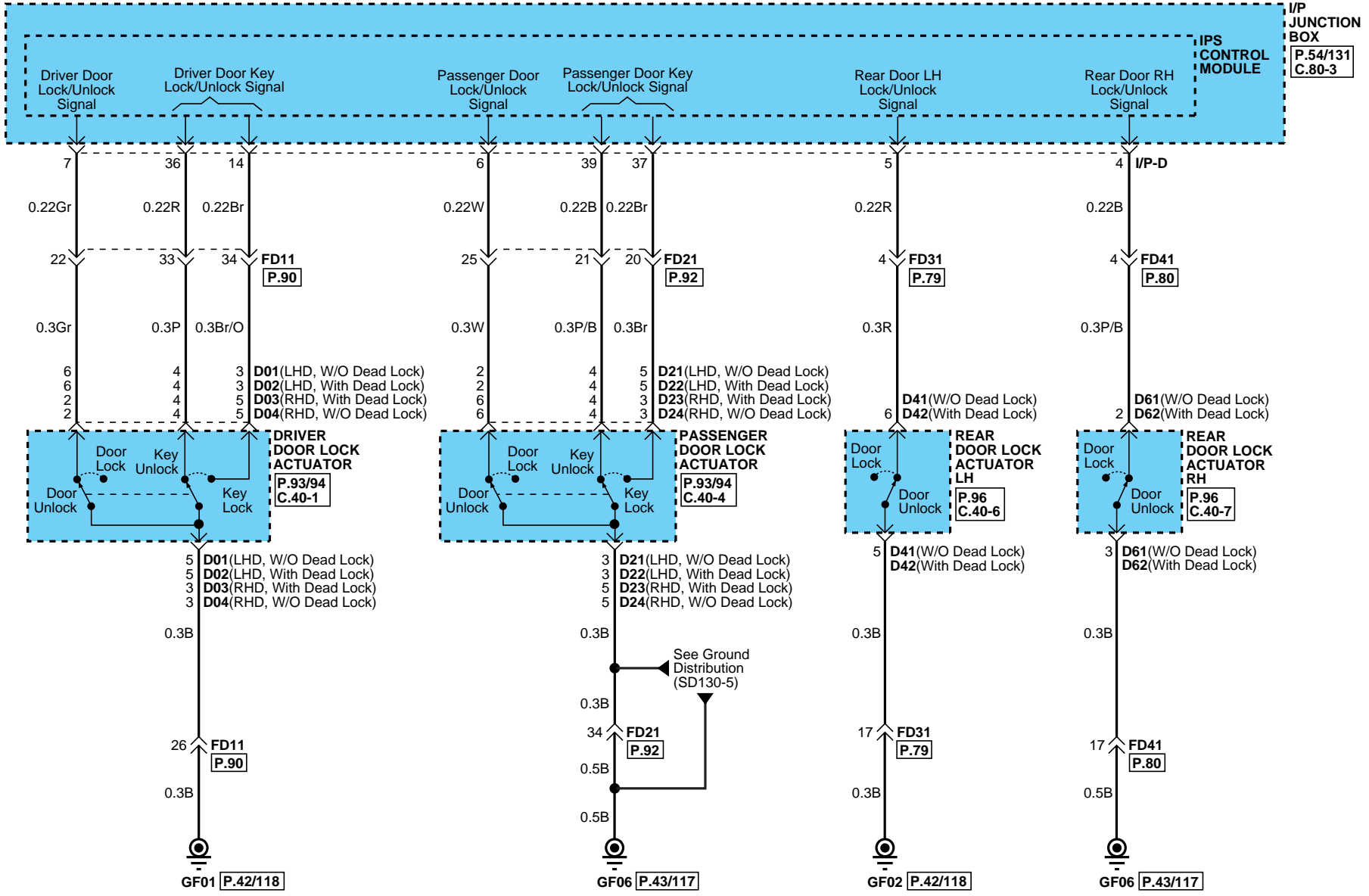
SD814-1



# KEYLESS ENTRY & BURGLAR ALARM SYSTEM

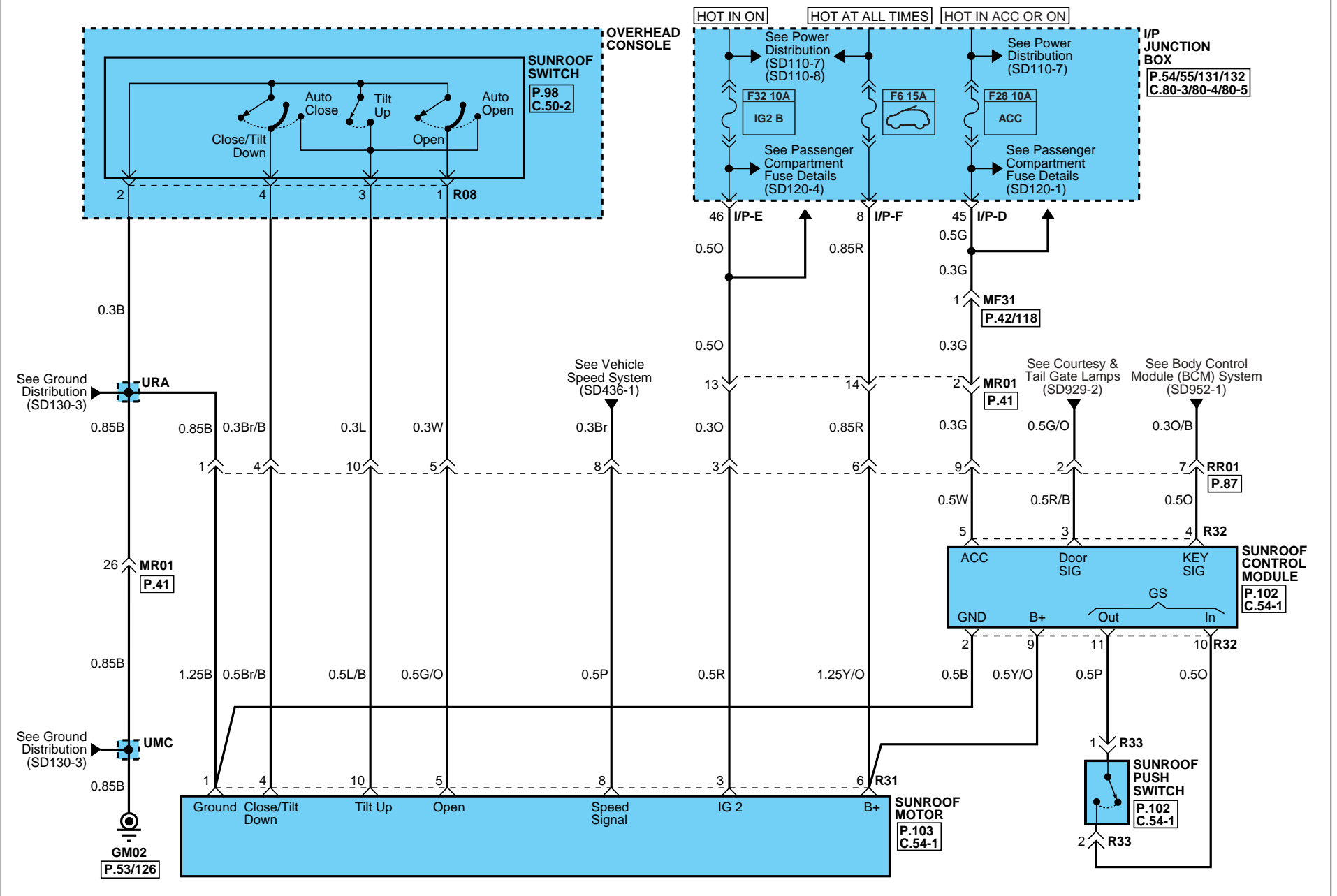
## Keyless Entry & Burglar Alarm System (2)

SD814-2



Sunroof (1)

SD816-1



**SUNROOF**

**Sunroof (2)**

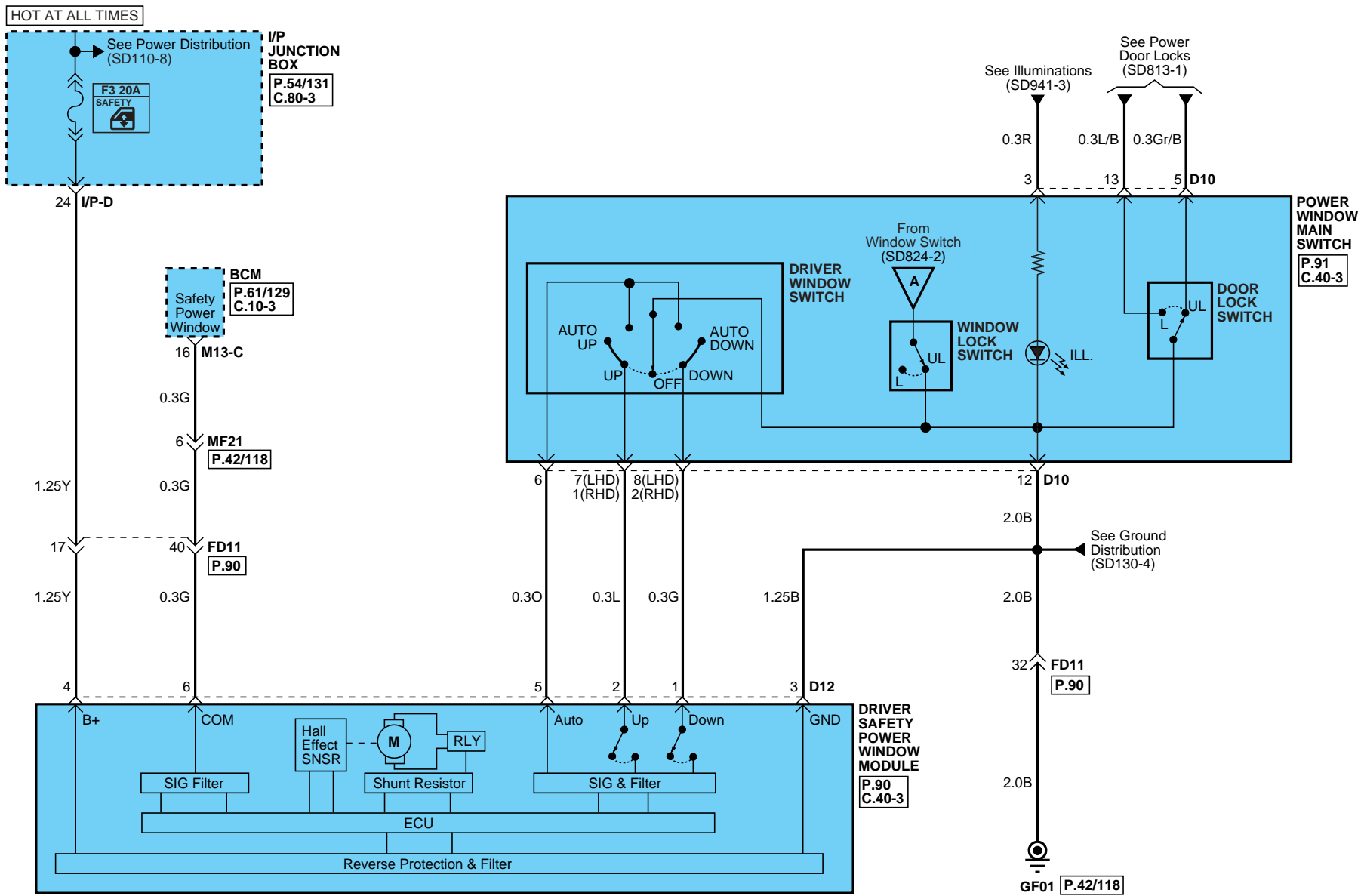
**SD816-2**

**MEMO**

Power Windows (1)

SD824-1

With DRIVER SAFETY (1/3)



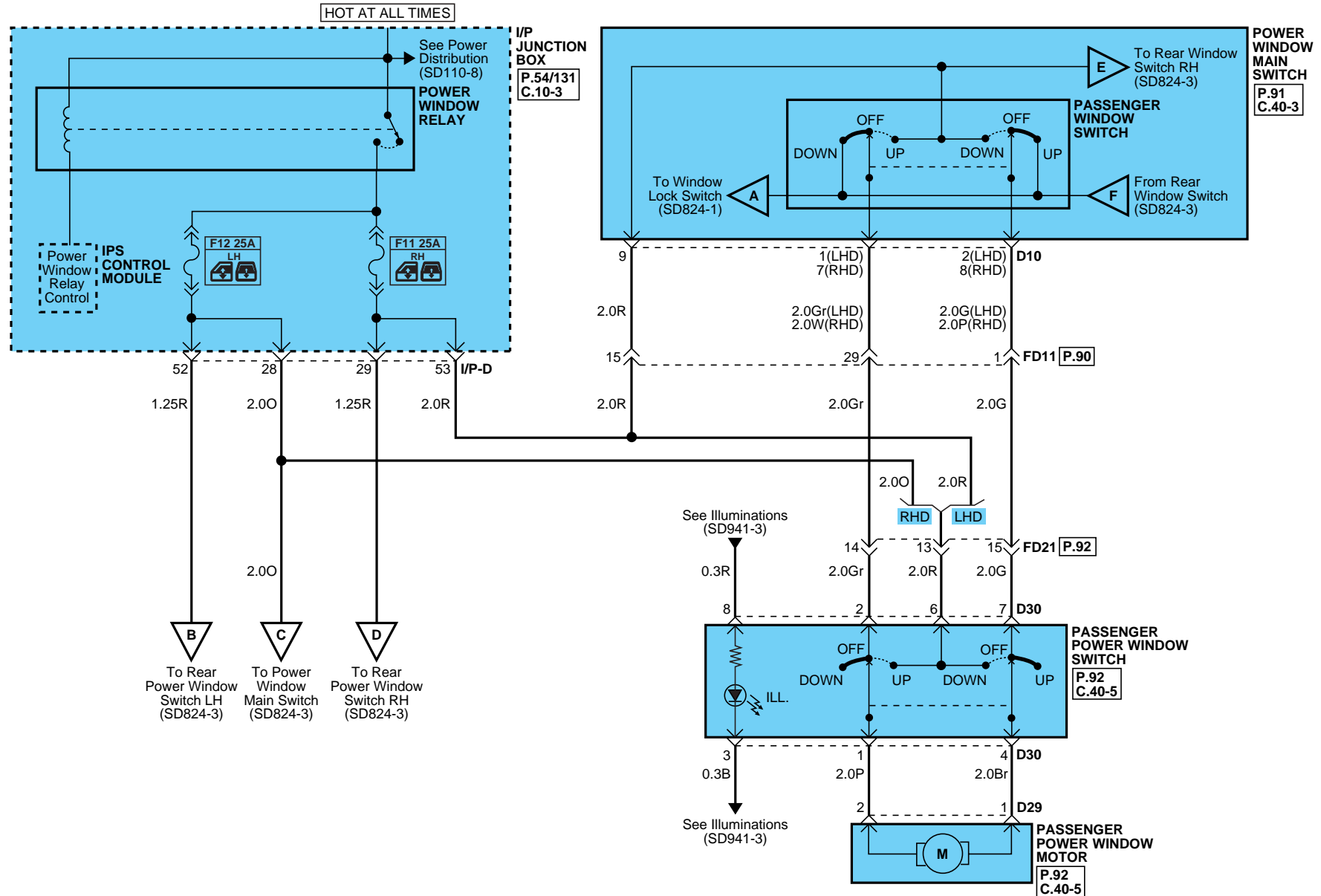


# POWER WINDOWS

## Power Windows (2)

SD824-2

### With DRIVER SAFETY (2/3)

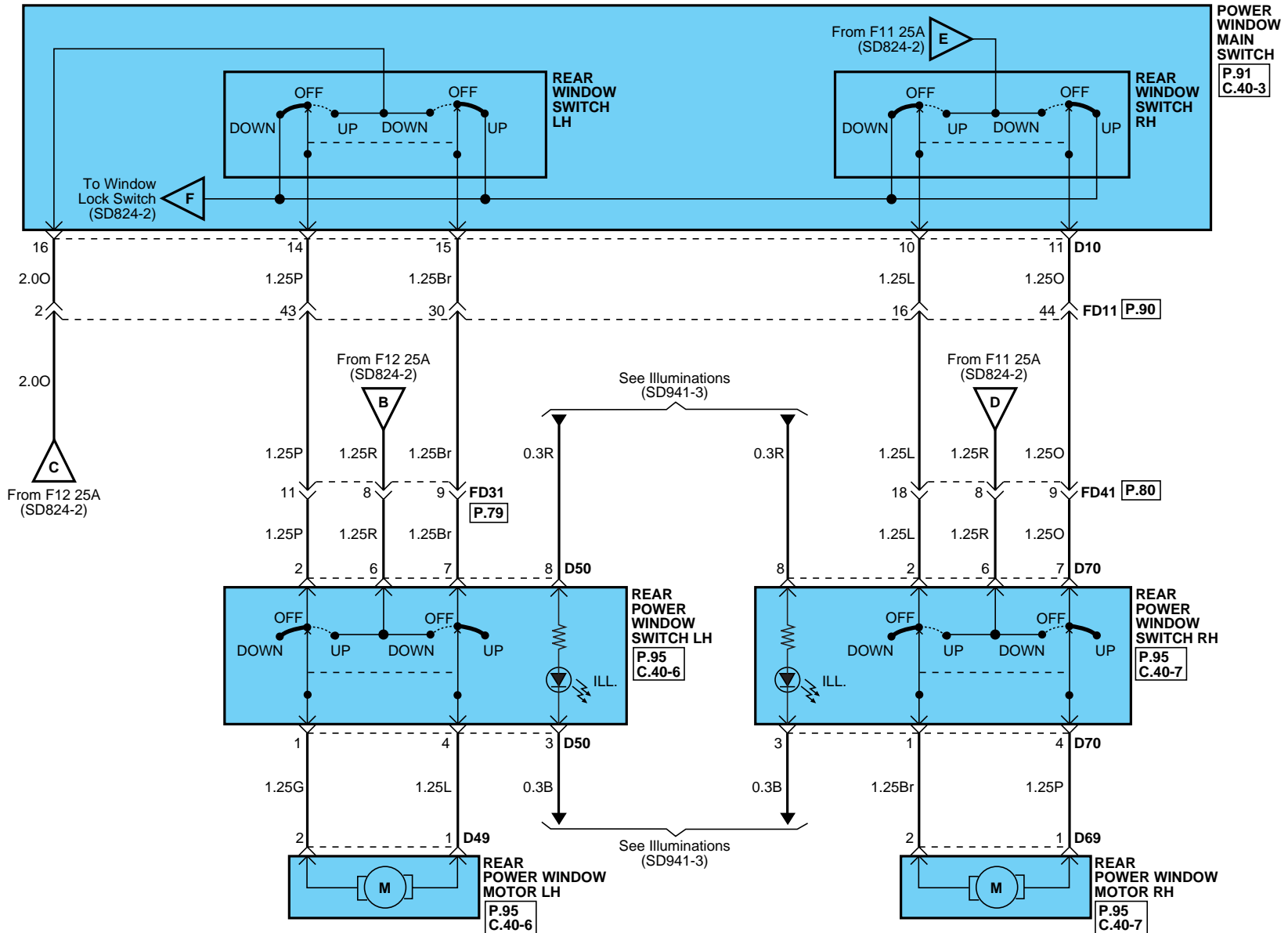


# POWER WINDOWS

## Power Windows (3)

SD824-3

### With DRIVER SAFETY (3/3)

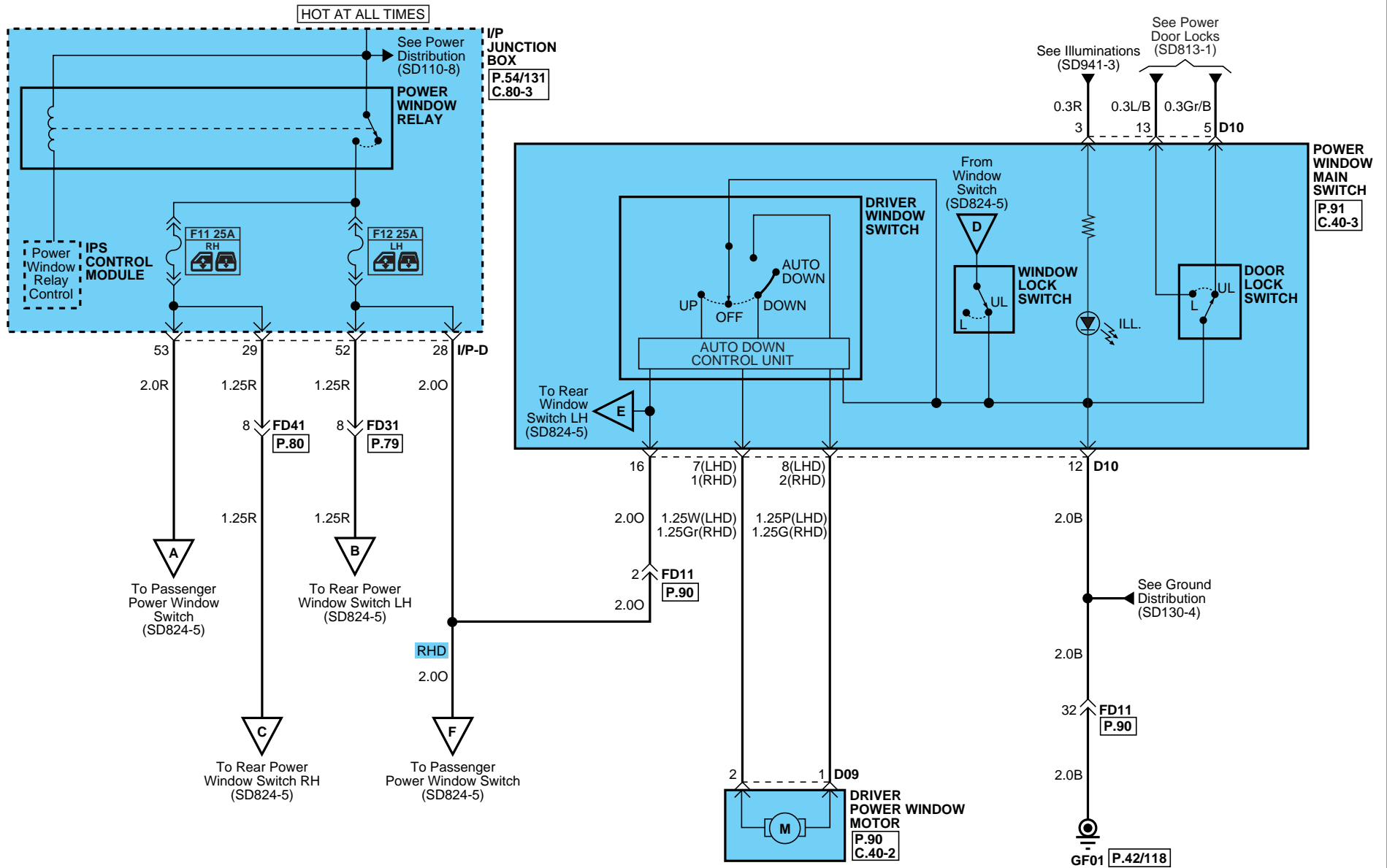


# POWER WINDOWS

## Power Windows (4)

SD824-4

### W/O SAFETY (1/2)

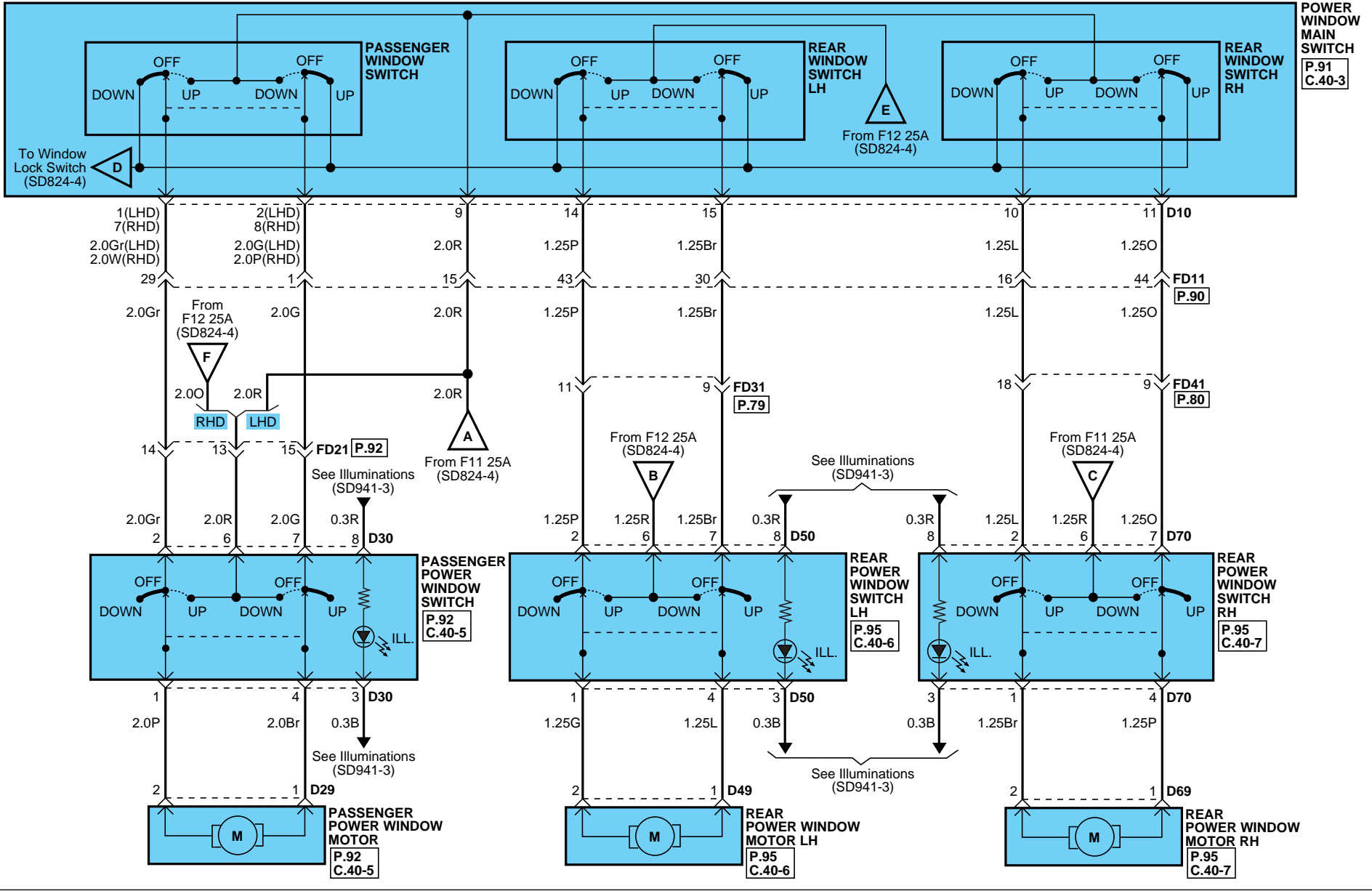


POWER WINDOWS

Power Windows (5)

SD824-5

W/O SAFETY (2/2)



**POWER WINDOWS**

Power Windows (6)

SD824-6

**MEMO**

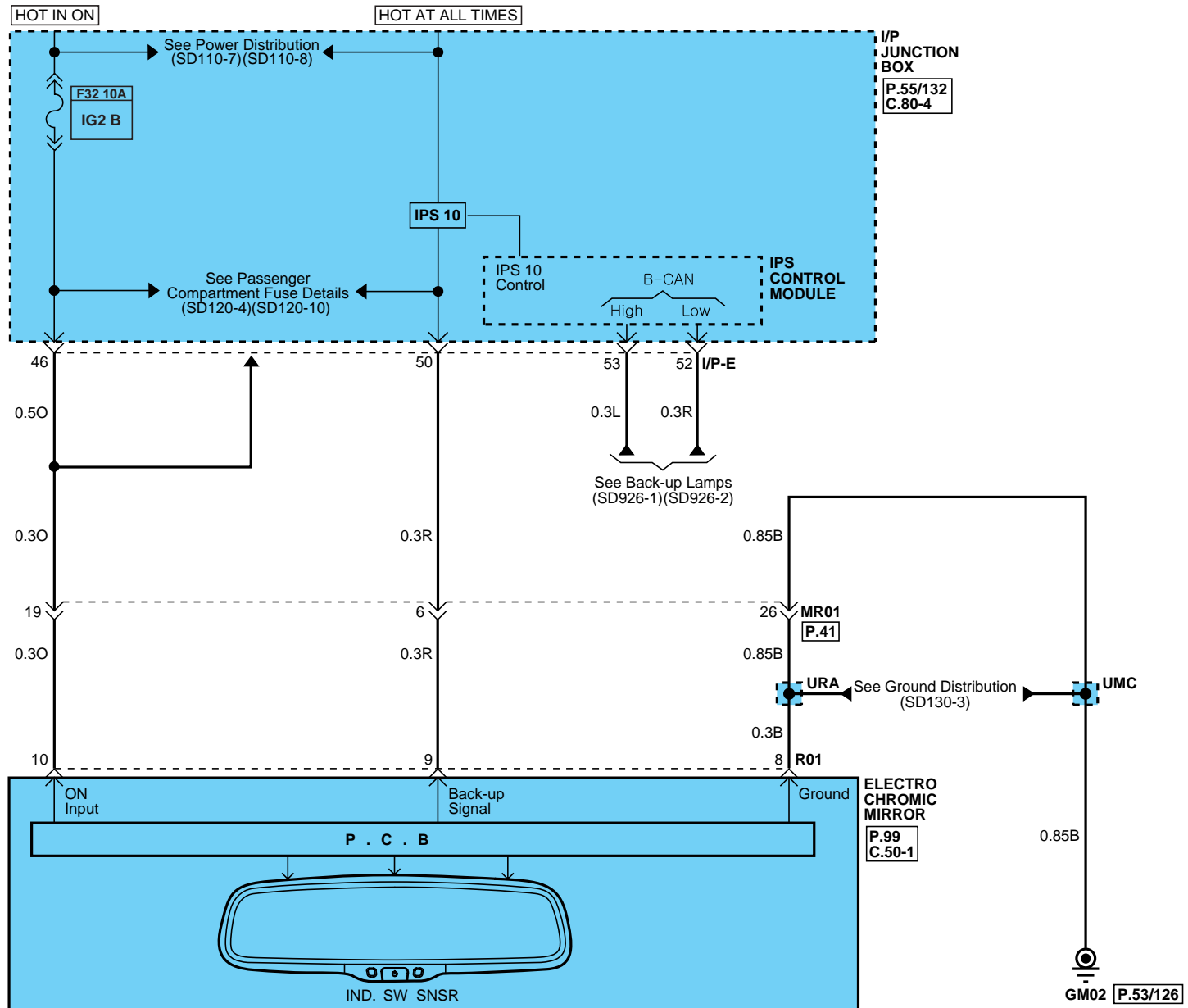
# ELECTRO CHROMIC MIRROR

ED570AC5

## Electro Chromic Mirror (1)

SD851-1

### ECM

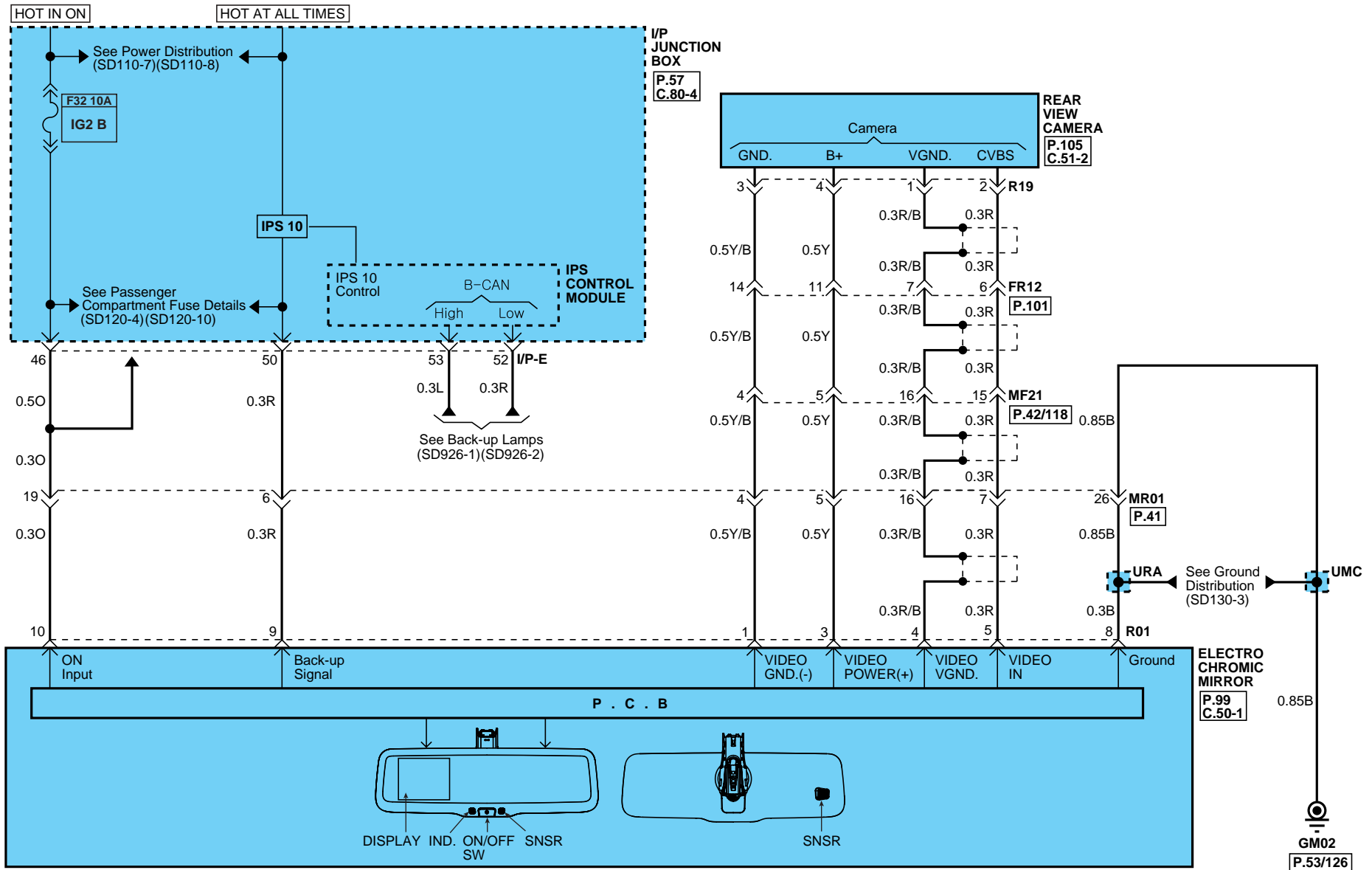


# ELECTRO CHROMIC MIRROR

## Electro Chromic Mirror (2)

SD851-2

### With REAR VIEW DISPLAY

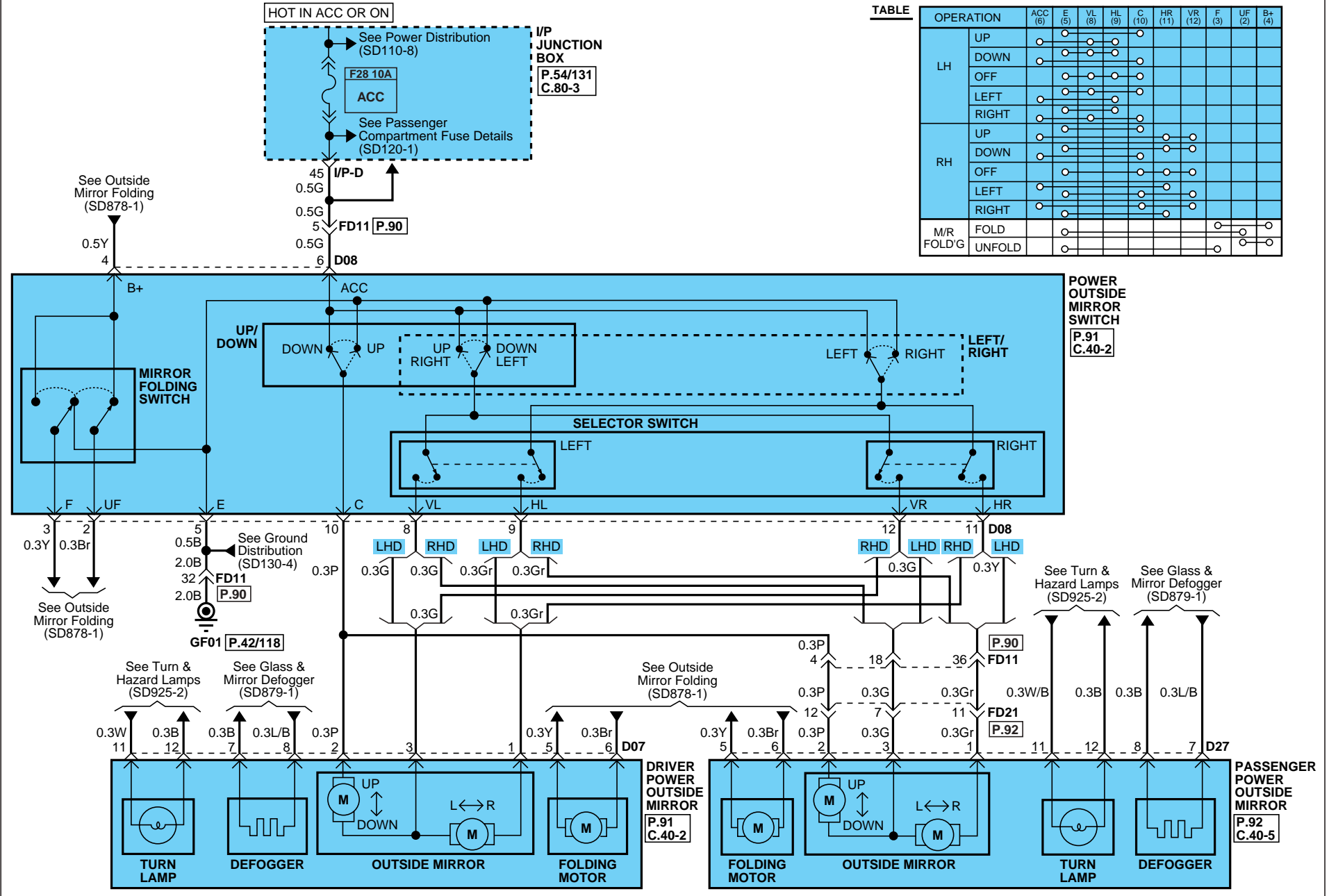


Power Outside Mirror (1)

SD876-1

TABLE

OPERATION	ACC (6)	E (5)	VL (8)	HL (9)	C (10)	HR (11)	VR (12)	F (3)	UF (2)	B+ (4)
LH	UP	○	○	○	○					
	DOWN	○	○	○	○					
	OFF	○	○	○	○					
	LEFT	○	○	○	○					
RH	UP	○	○	○	○	○	○			
	DOWN	○	○	○	○	○	○			
	OFF	○	○	○	○	○	○			
	LEFT	○	○	○	○	○	○			
M/R FOLD'G	FOLD	○						○	○	○
	UNFOLD	○							○	○





**POWER OUTSIDE MIRROR**

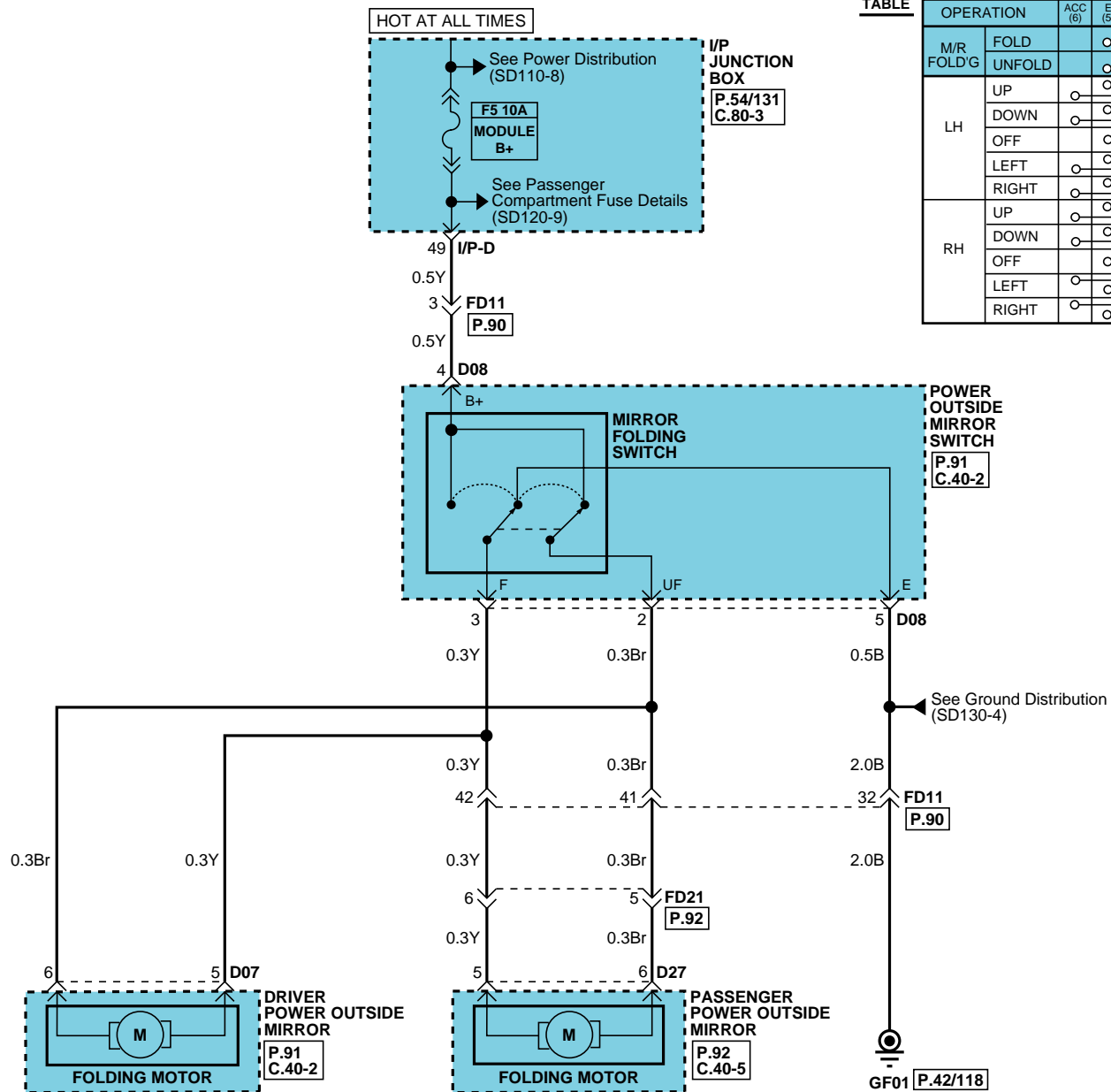
Power Outside Mirror (2)

**SD876-2**

**MEMO**

Outside Mirror Folding (1)

SD878-1



TABLE

OPERATION		ACC (6)	E (5)	VL (8)	HL (9)	C (10)	HR (11)	VR (12)	F (3)	UF (2)	B+ (4)
M/R FOLD'G	FOLD										
	UNFOLD										
LH	UP										
	DOWN										
	OFF										
	LEFT										
	RIGHT										
RH	UP										
	DOWN										
	OFF										
	LEFT										
	RIGHT										

**OUTSIDE MIRROR FOLDING**

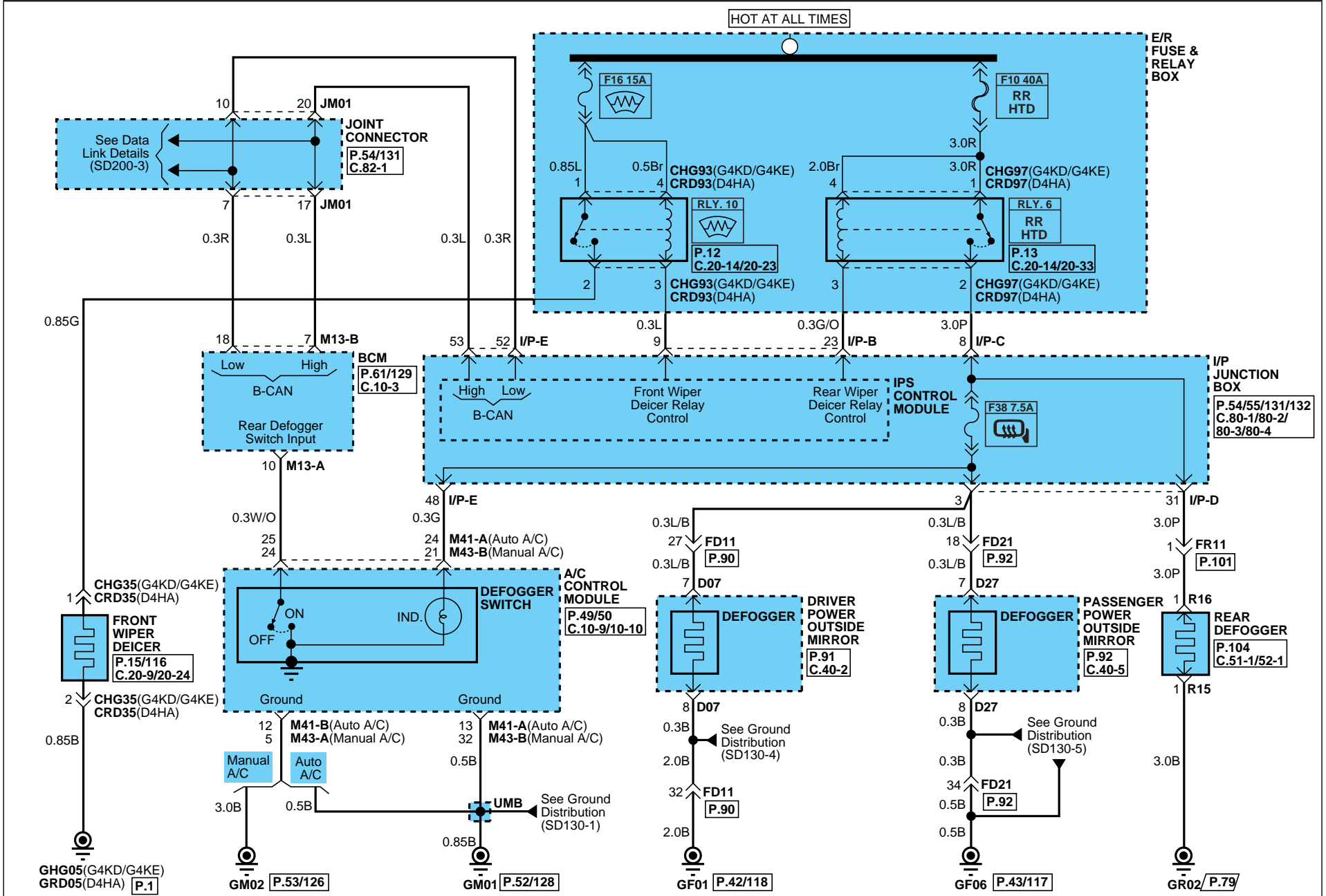
Outside Mirror Folding (2)

**SD878-2**

**MEMO**

Glass & Mirror Defogger (1)

SD879-1



**GLASS & MIRROR DEFOGGER**

**Glass & Mirror Defogger (2)**

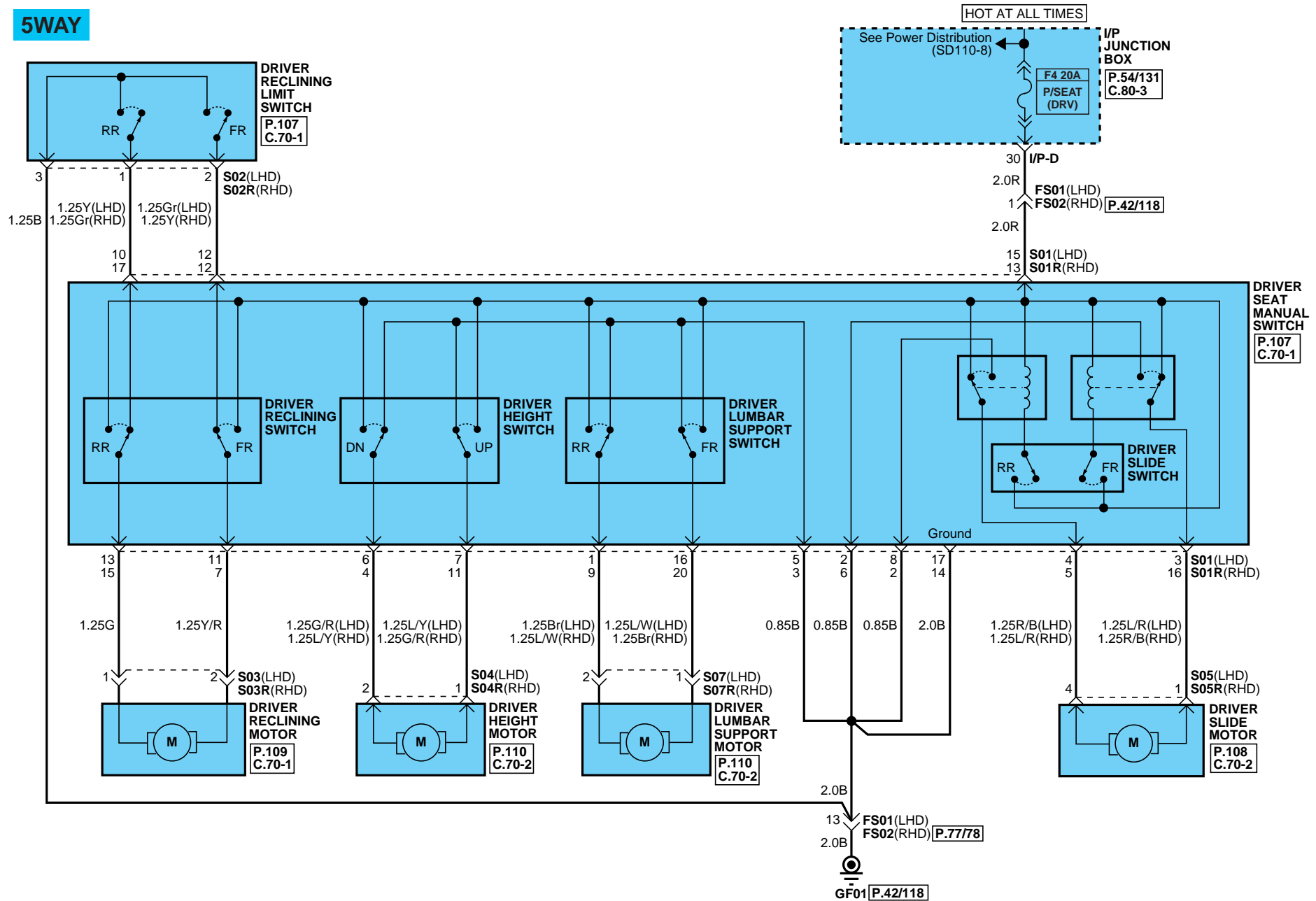
**SD879-2**

**MEMO**

Driver Power Seat (1)

SD880-1

5WAY

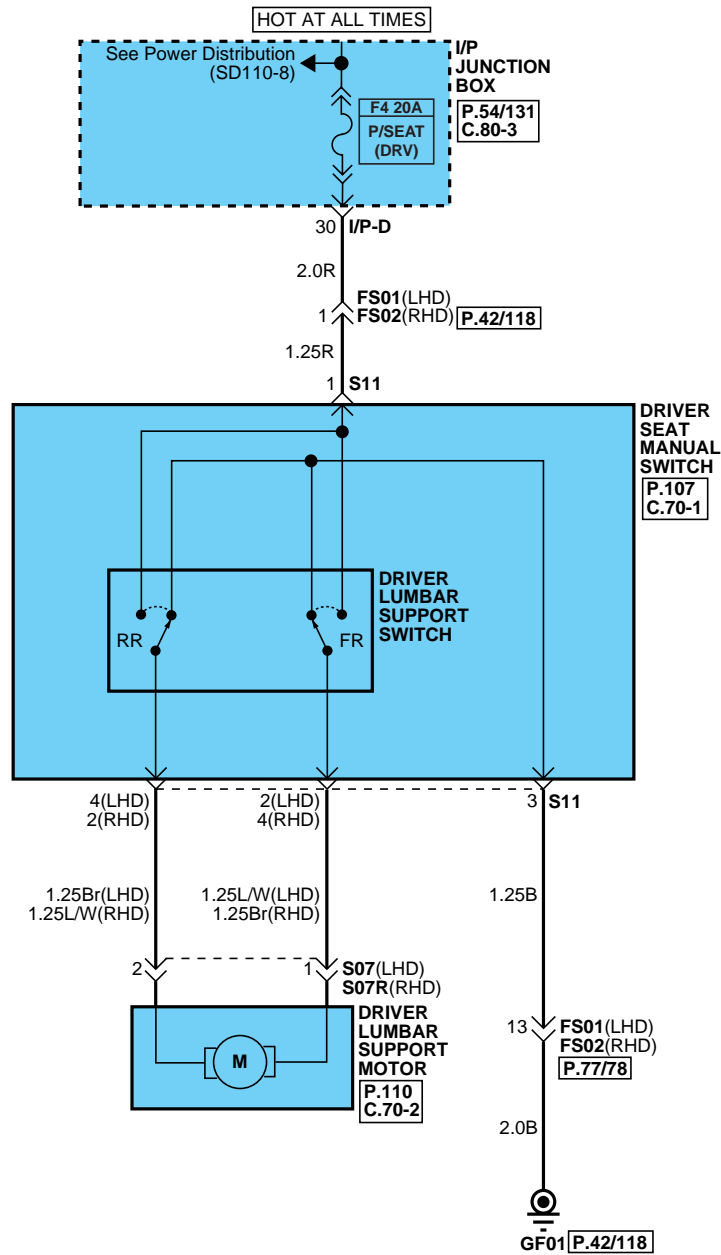


# DRIVER POWER SEAT

## Driver Power Seat (2)

SD880-2

2WAY



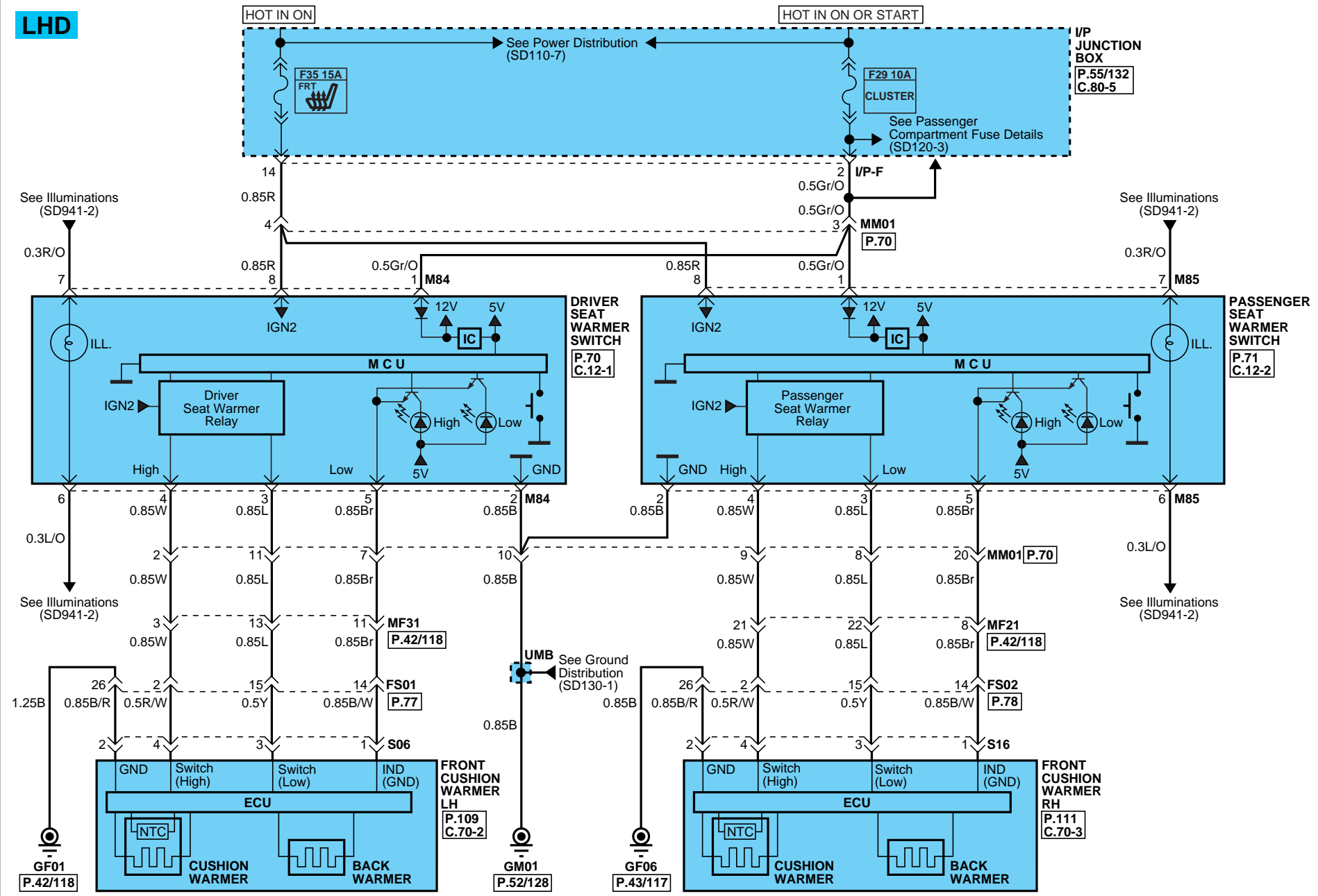
# ADJUSTABLE SEAT WARMER SYSTEM

E8D5DF9D

## Adjustable Seat Warmer System (1)

SD885-1

**LHD**



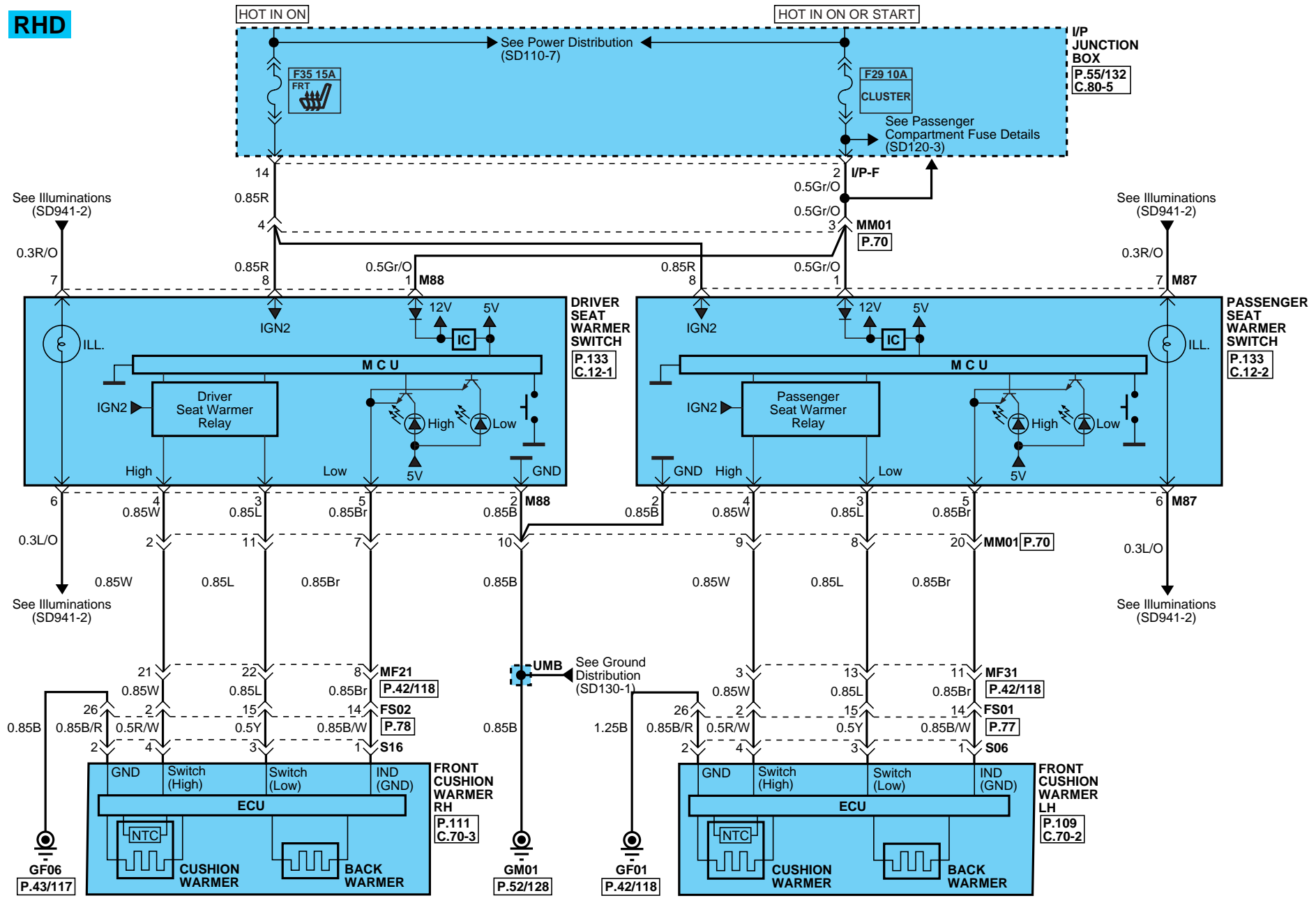


# ADJUSTABLE SEAT WARMER SYSTEM

## Adjustable Seat Warmer System (2)

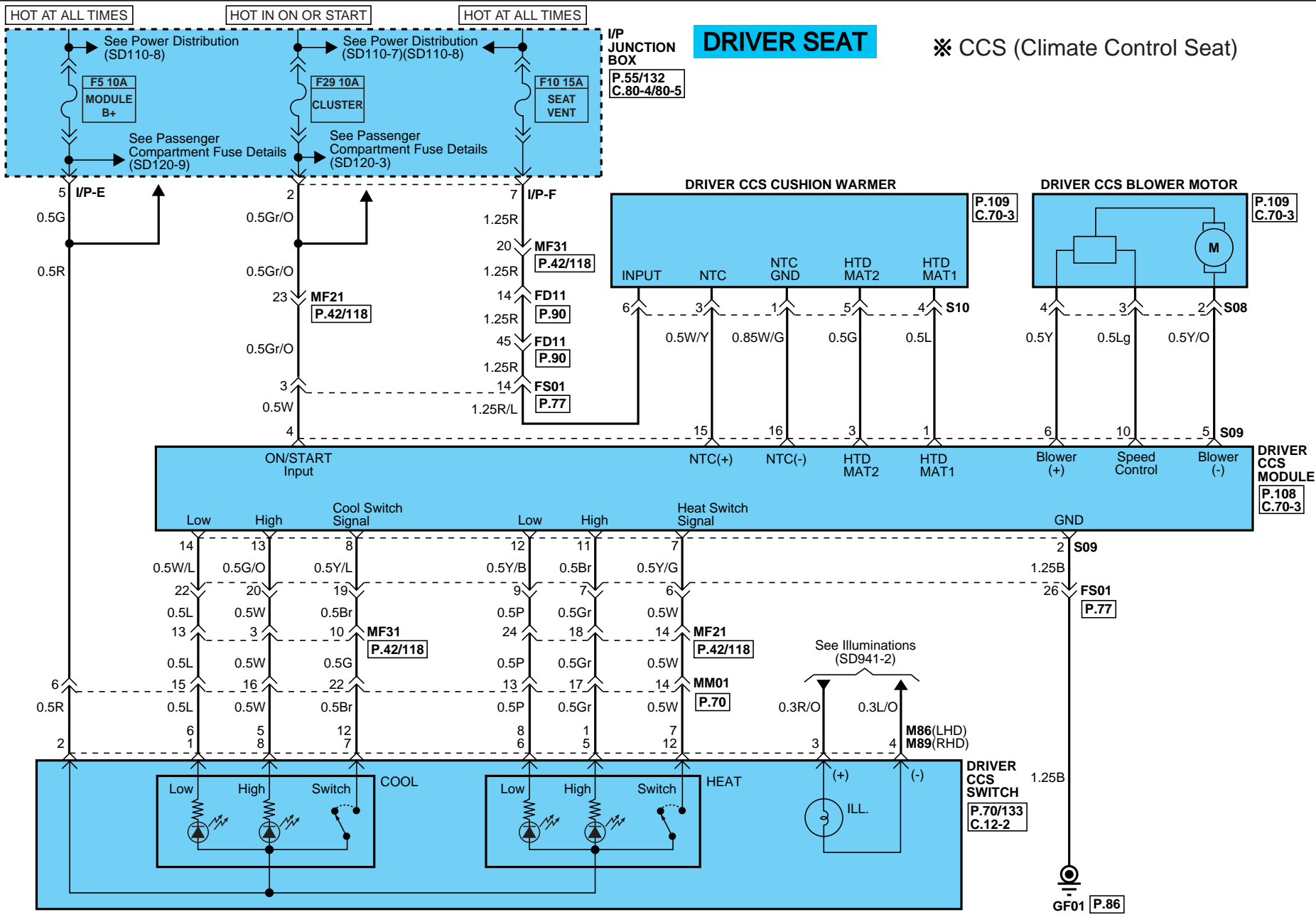
SD885-2

**RHD**



Climate Seat Control (1)

SD886-1



**CLIMATE SEAT CONTROL**

**Climate Seat Control (2)**

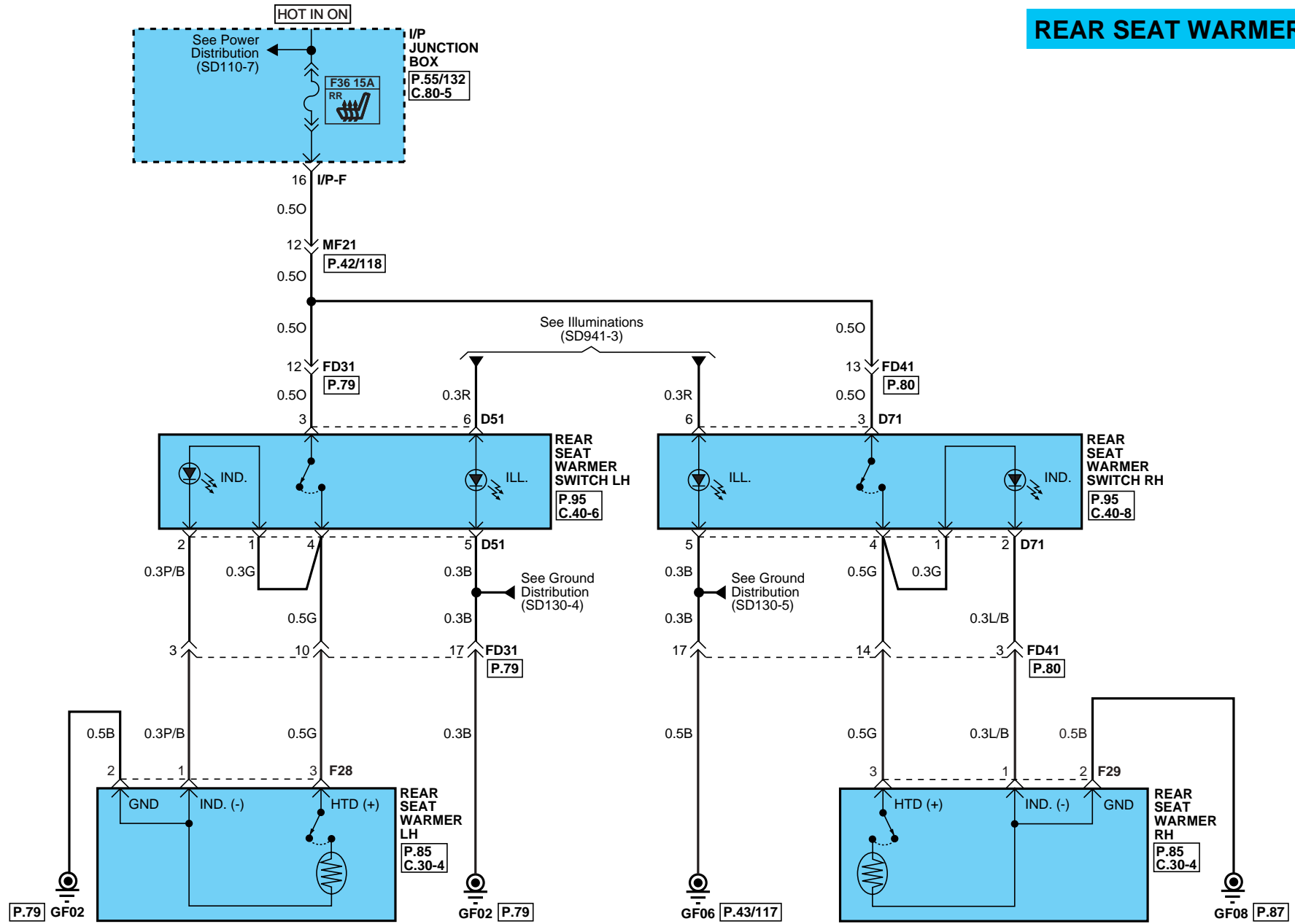
**SD886-2**

**MEMO**

Seat Warmer (1)

SD889-1

REAR SEAT WARMER



**SEAT WARMER**

Seat Warmer (2)

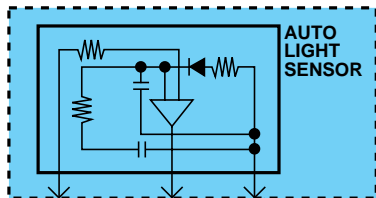
**SD889-2**

**MEMO**

Head Lamps (1)

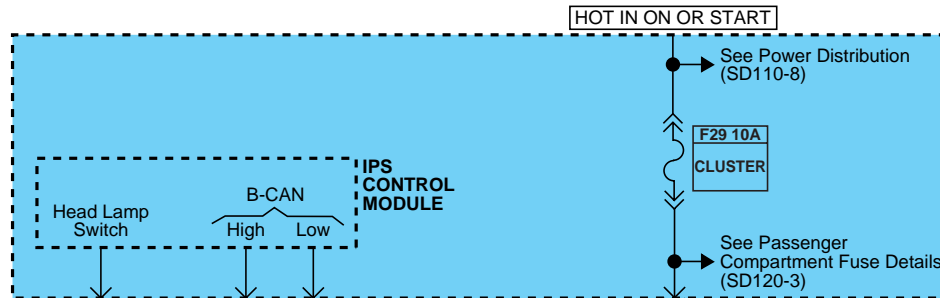
SD921-1

✳️ 2-STAGE Auto Light  
 STAGE 1 : Tail Lamp ON  
 STAGE 2 : Tail Lamp + Head Lamp ON

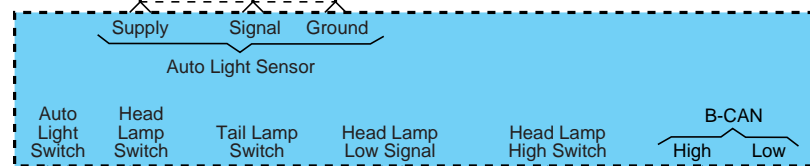


AUTO LIGHT & PHOTO SENSOR  
 P.59/126  
 C.10-4

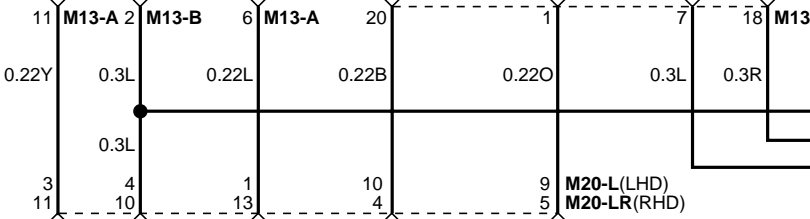
With Auto Light



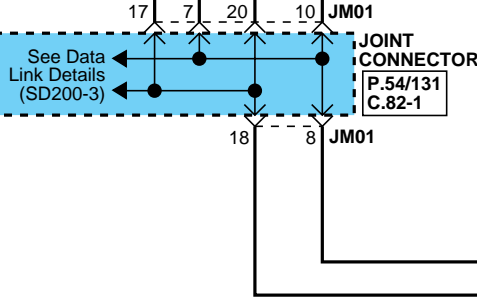
I/P JUNCTION BOX  
 P.55/132  
 C.80-4/80-5



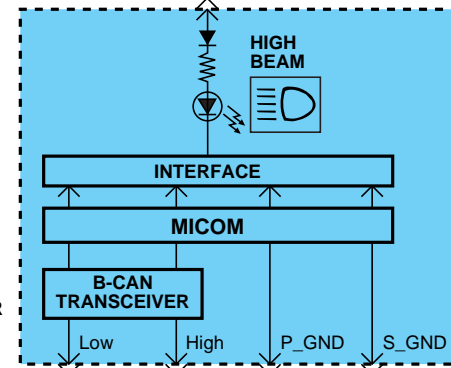
BCM  
 P.61/129  
 C.10-3



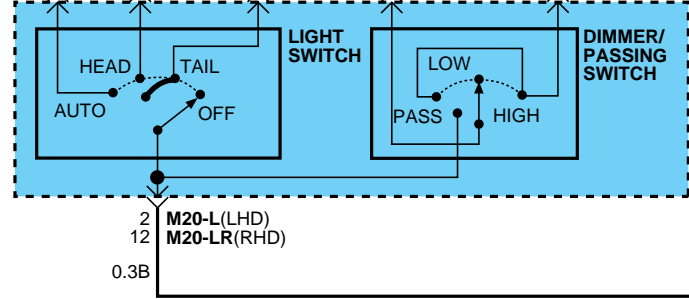
MULTI-FUNCTION SWITCH  
 P.56/130  
 C.10-5



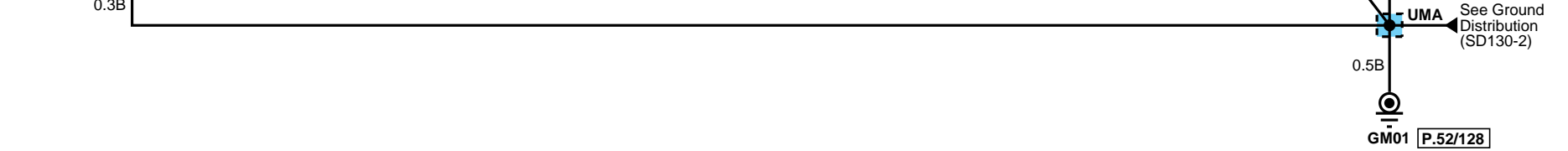
JOINT CONNECTOR  
 P.54/131  
 C.82-1



INSTRUMENT CLUSTER  
 P.44  
 C.10-4



M20-L (LHD)  
 M20-LR (RHD)



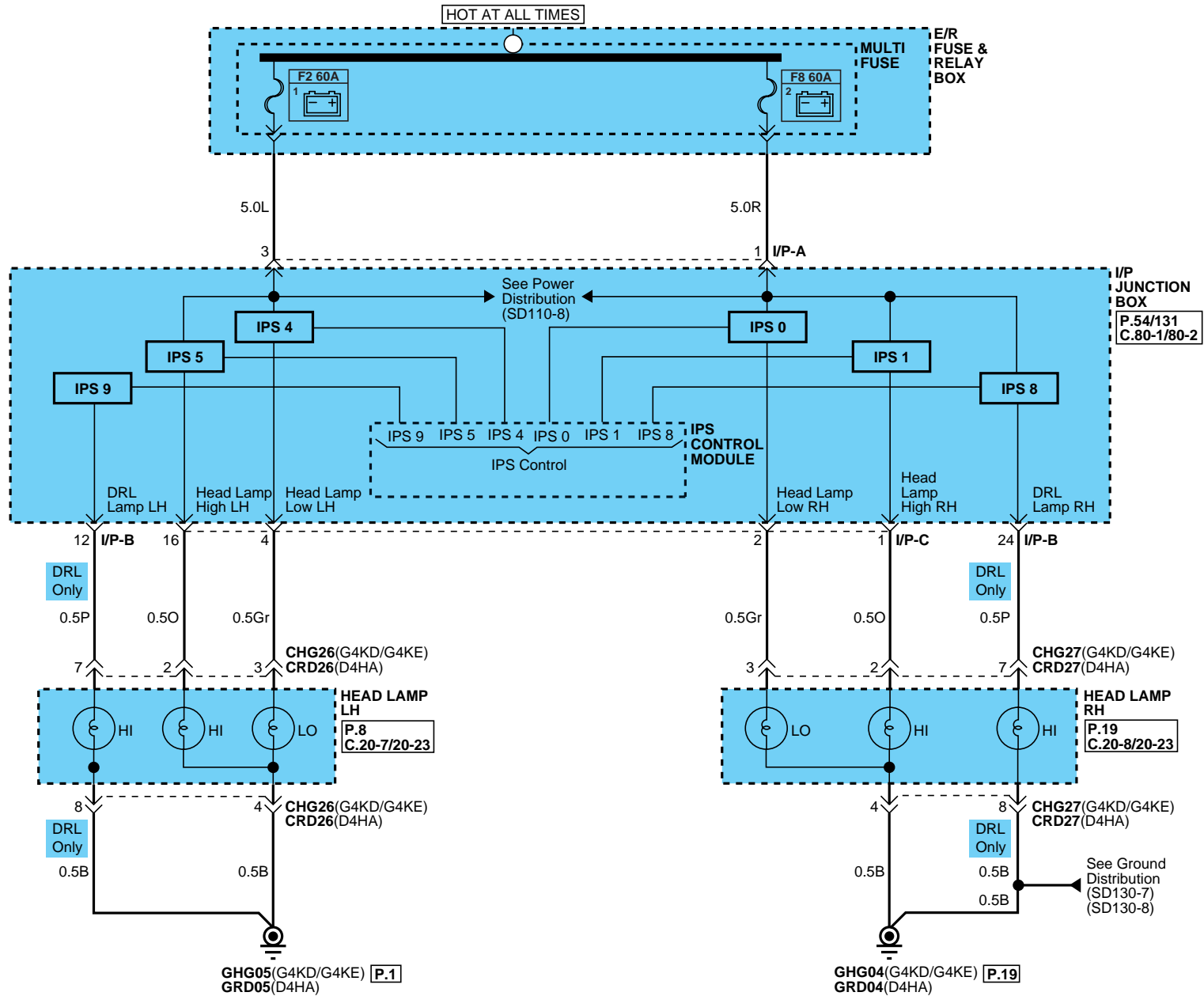
UMA See Ground Distribution (SD130-2)

GM01 P.52/128

# HEAD LAMPS

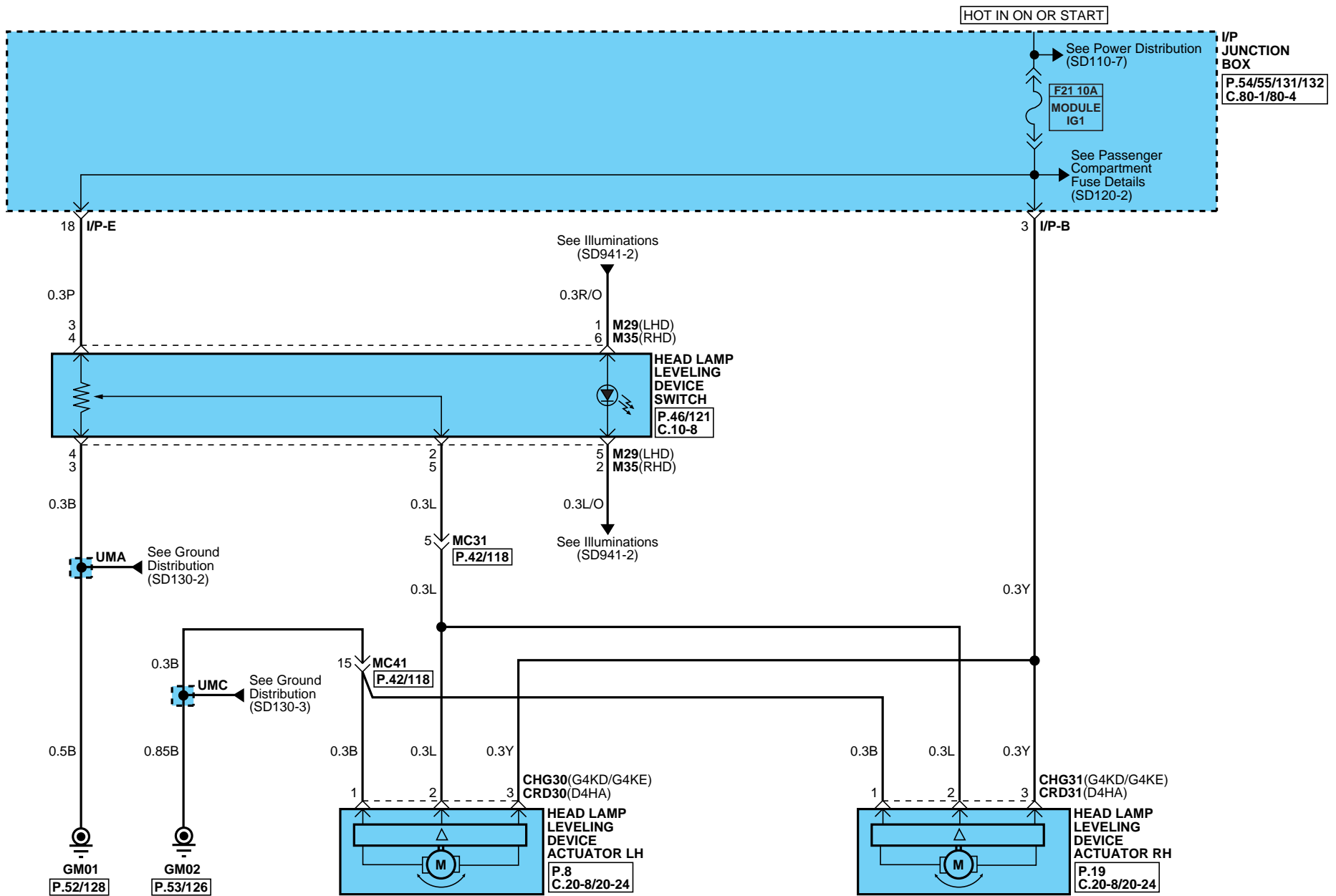
## Head Lamps (2)

SD921-2



Head Lamp Leveling Device (1)

SD922-1





**HEAD LAMP LEVELING DEVICE**

Head Lamp Leveling Device (2)

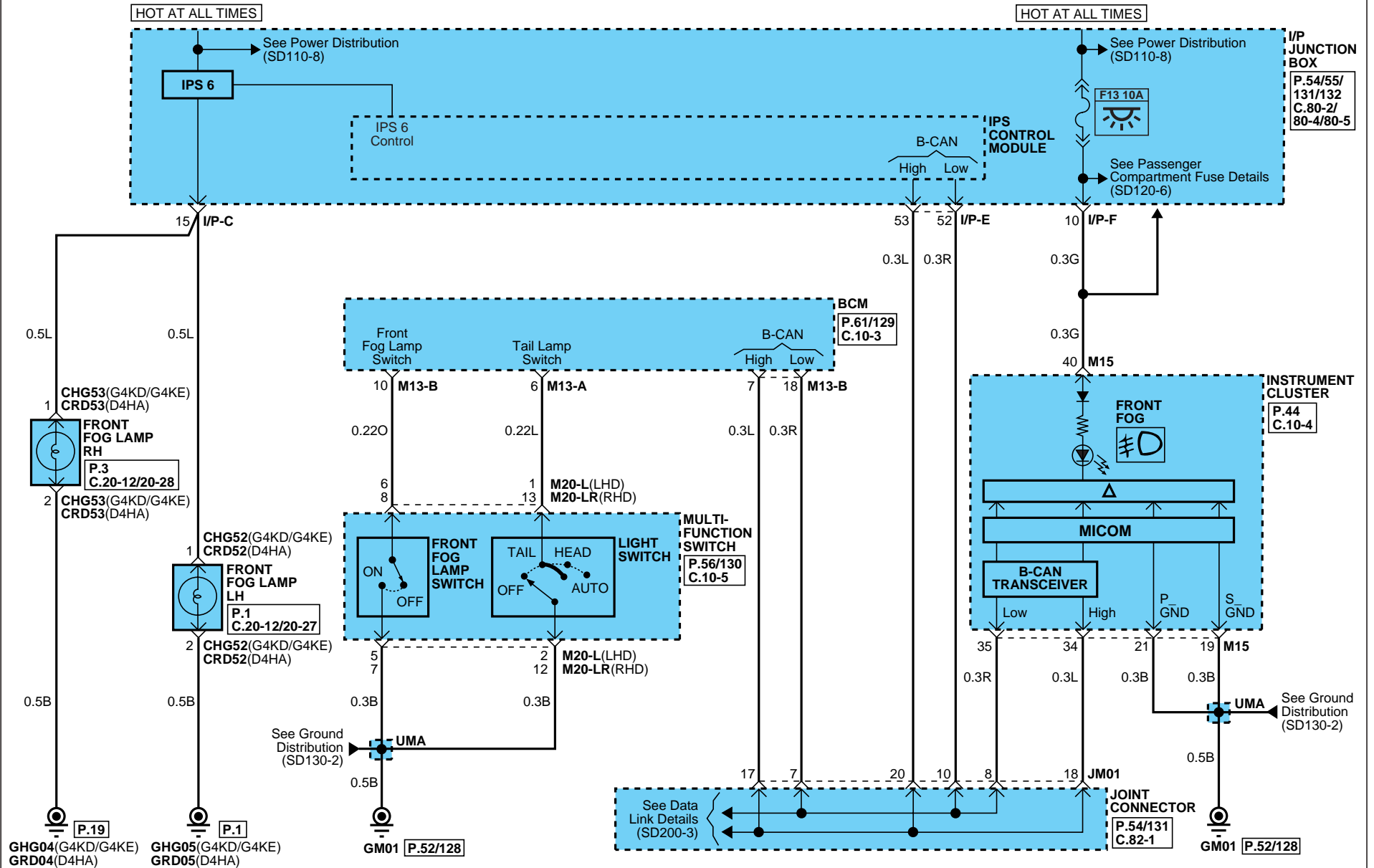
**SD922-2**

**MEMO**

Front Fog & Rear Fog Lamps (1)

SD924-1

**FRONT FOG LAMPS**

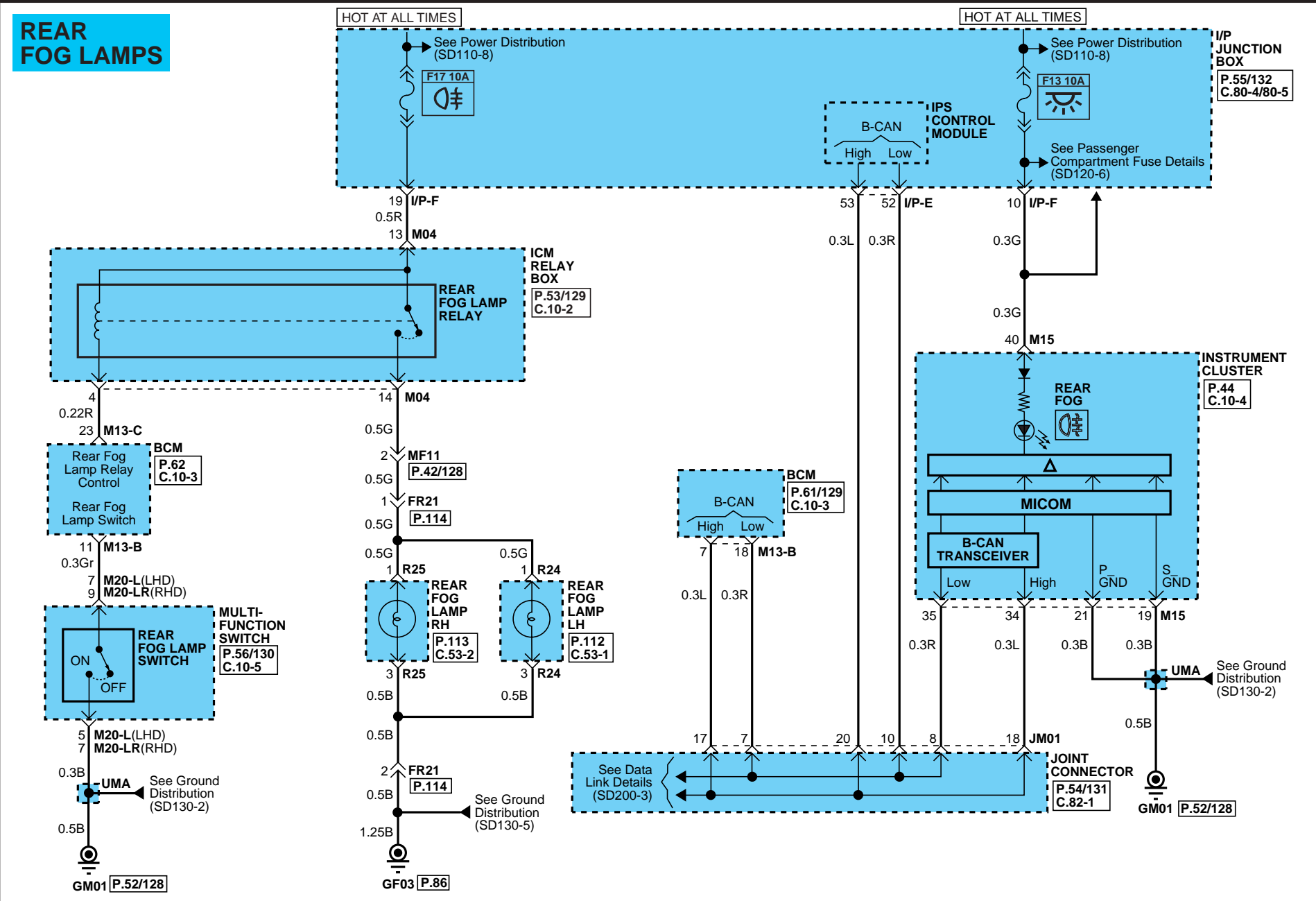


# FRONT FOG & REAR FOG LAMPS

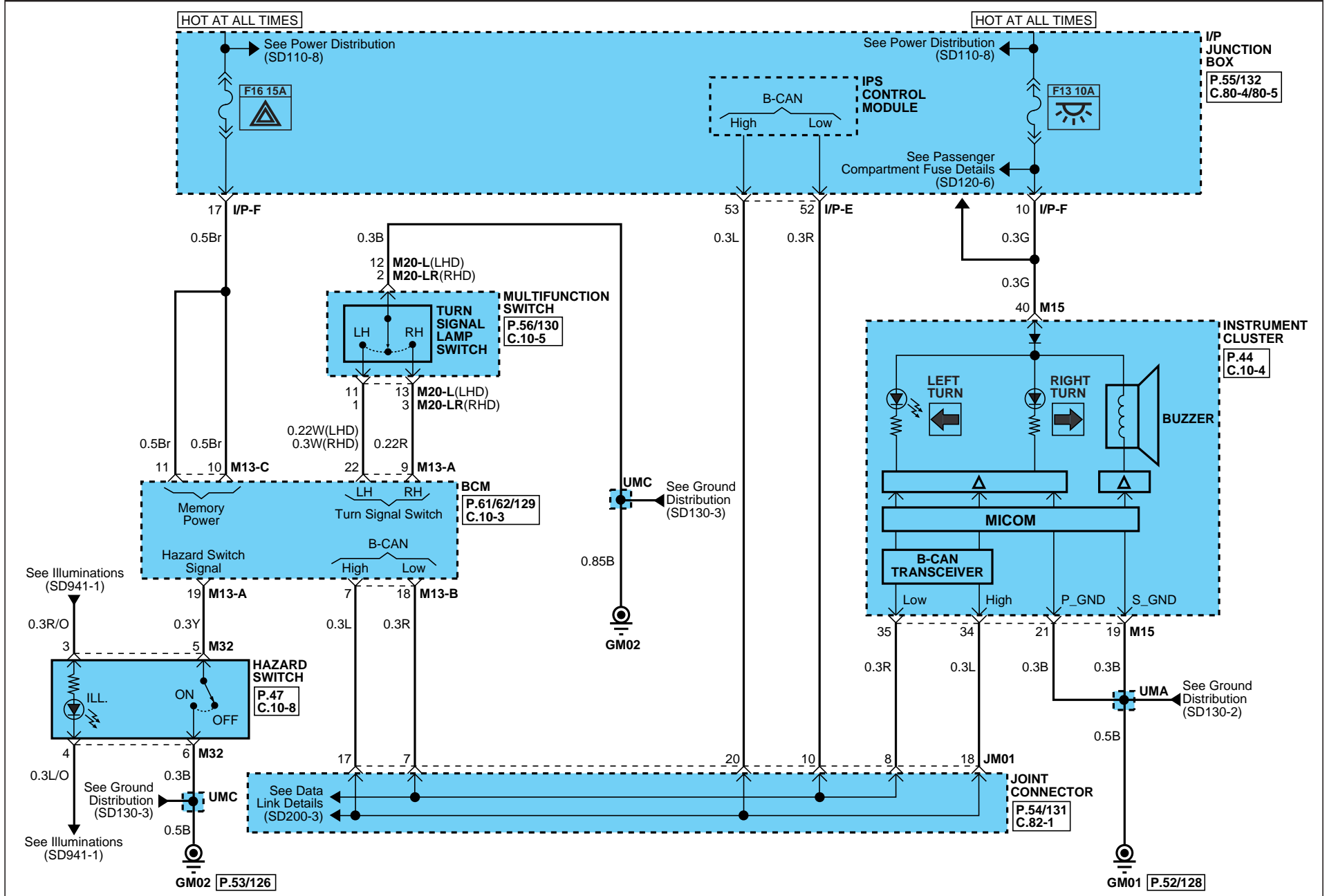
## Front Fog & Rear Fog Lamps (2)

SD924-2

### REAR FOG LAMPS



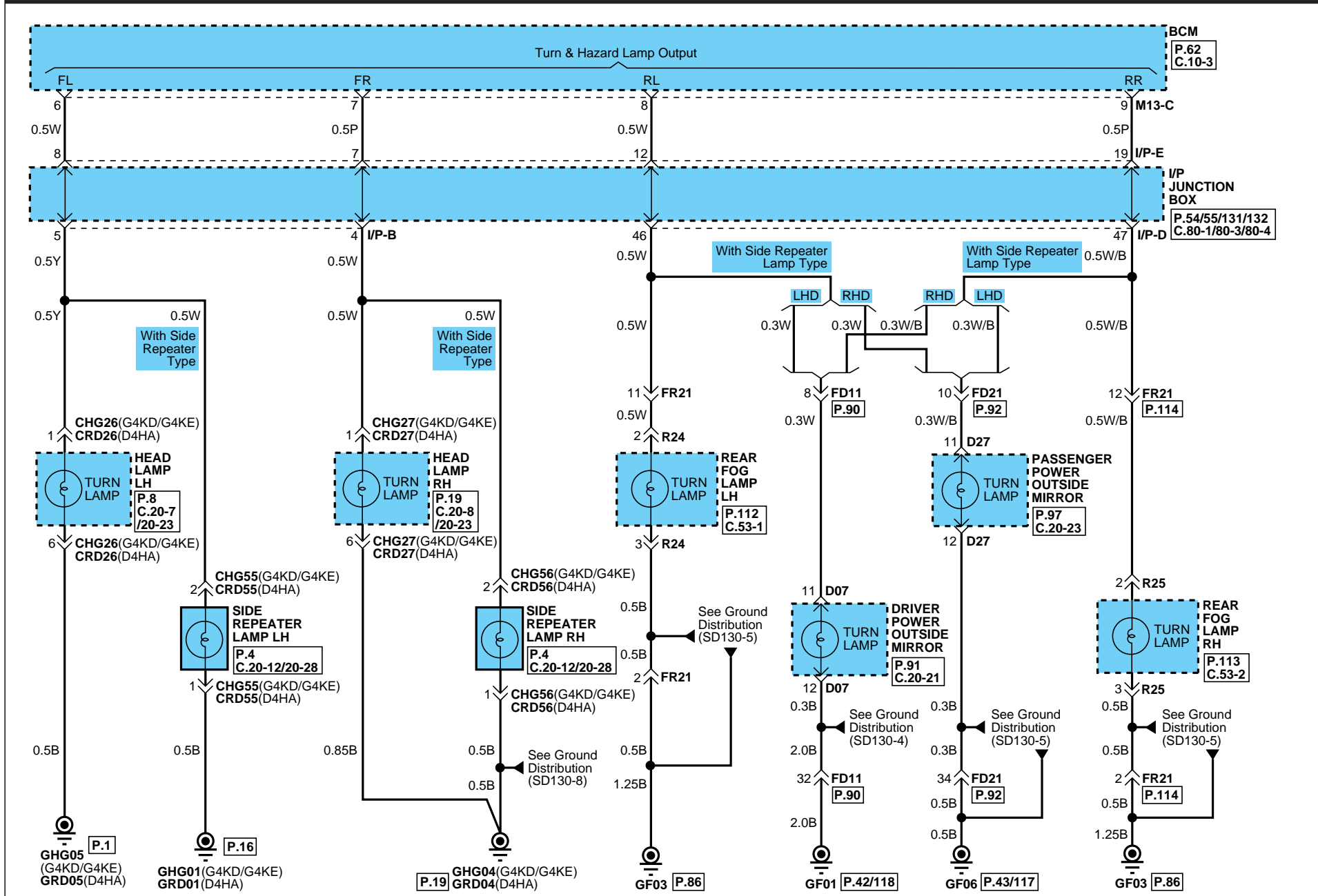
Turn & Hazard Lamps (1)



# TURN & HAZARD LAMPS

## Turn & Hazard Lamps (2)

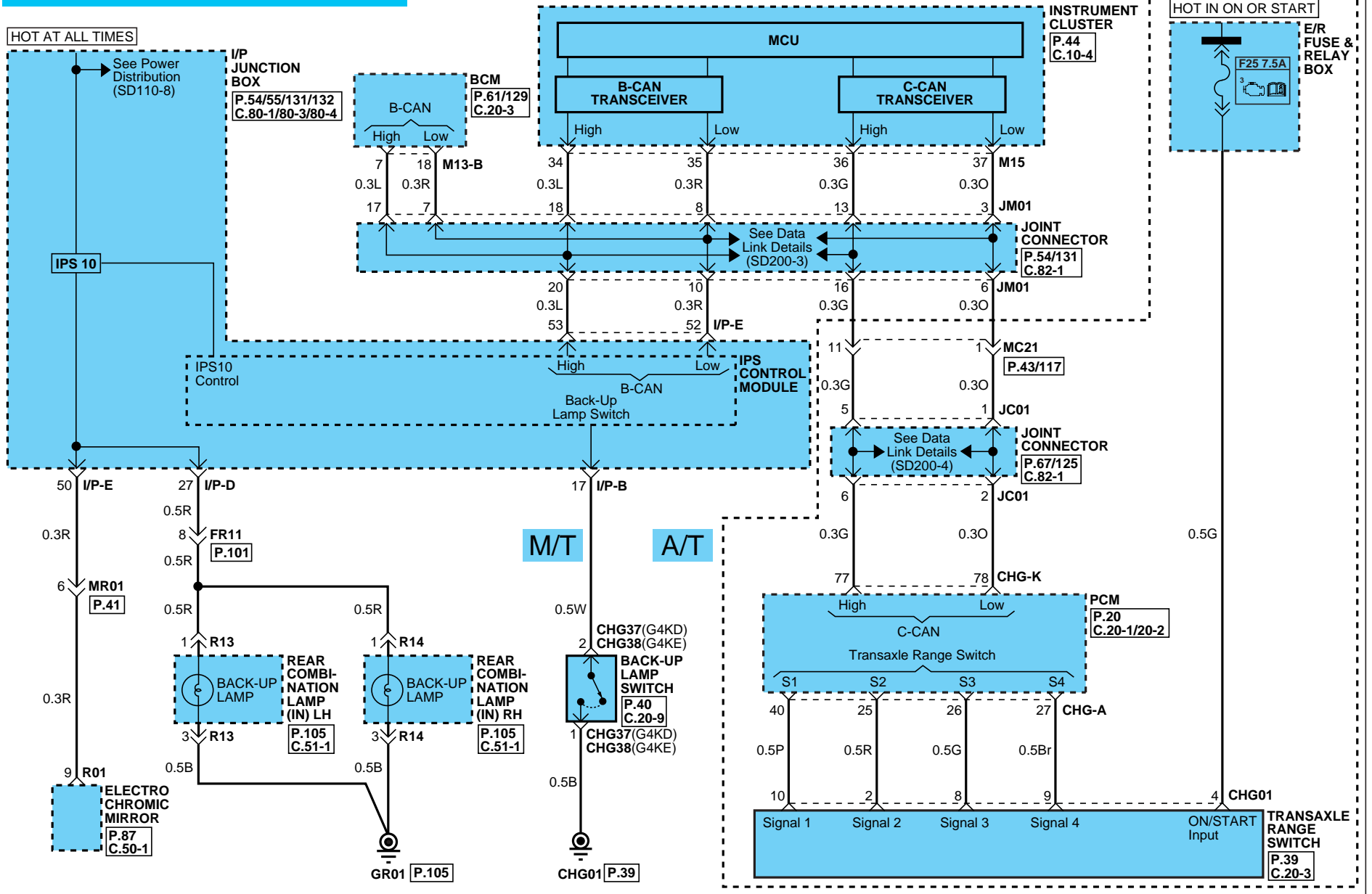
SD925-2



Back-Up Lamps (1)

SD926-1

G4KD/G4KE : THETA II 2.0L/2.4L

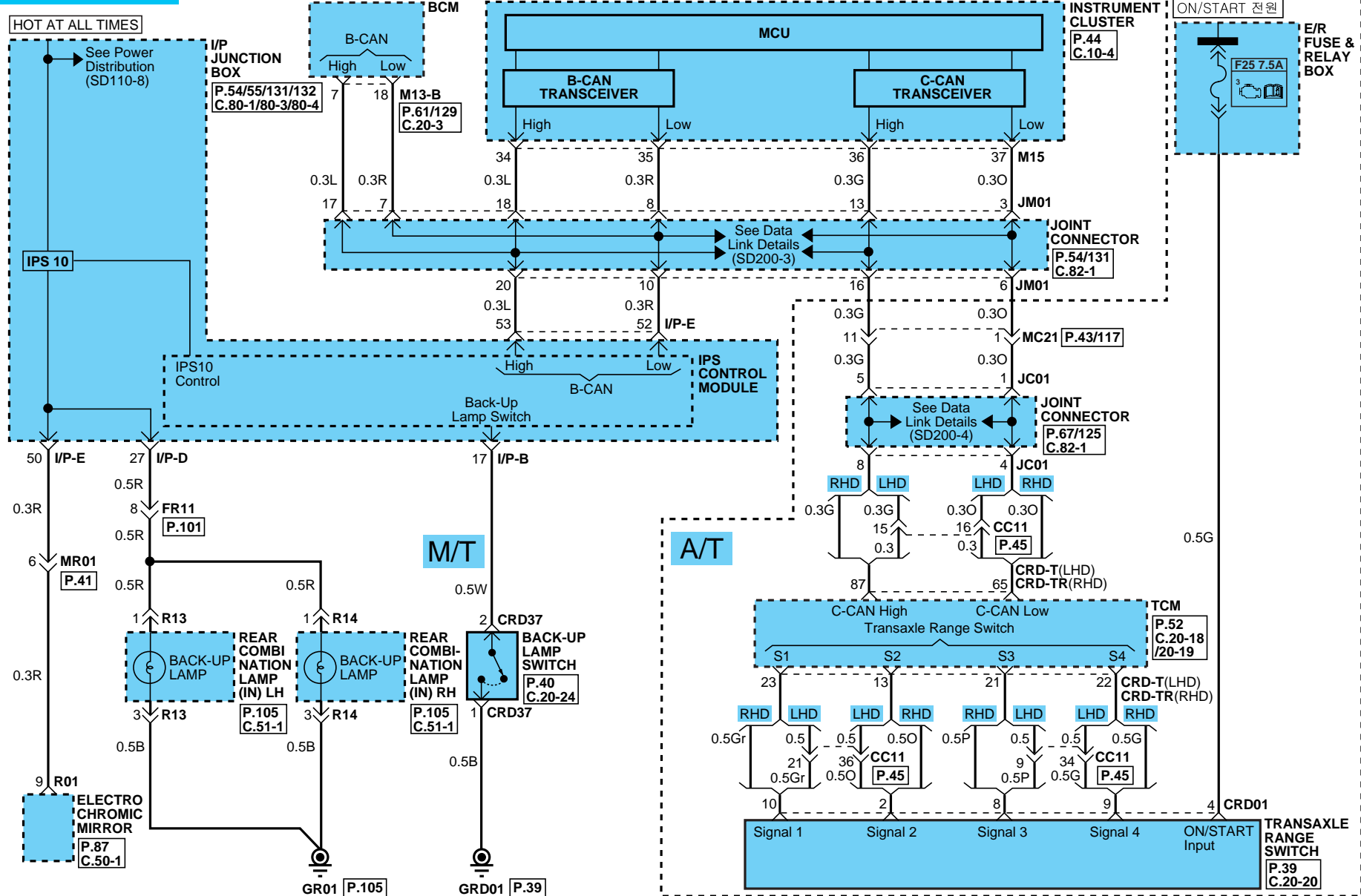


# BACK-UP LAMPS

## Back-Up Lamps (2)

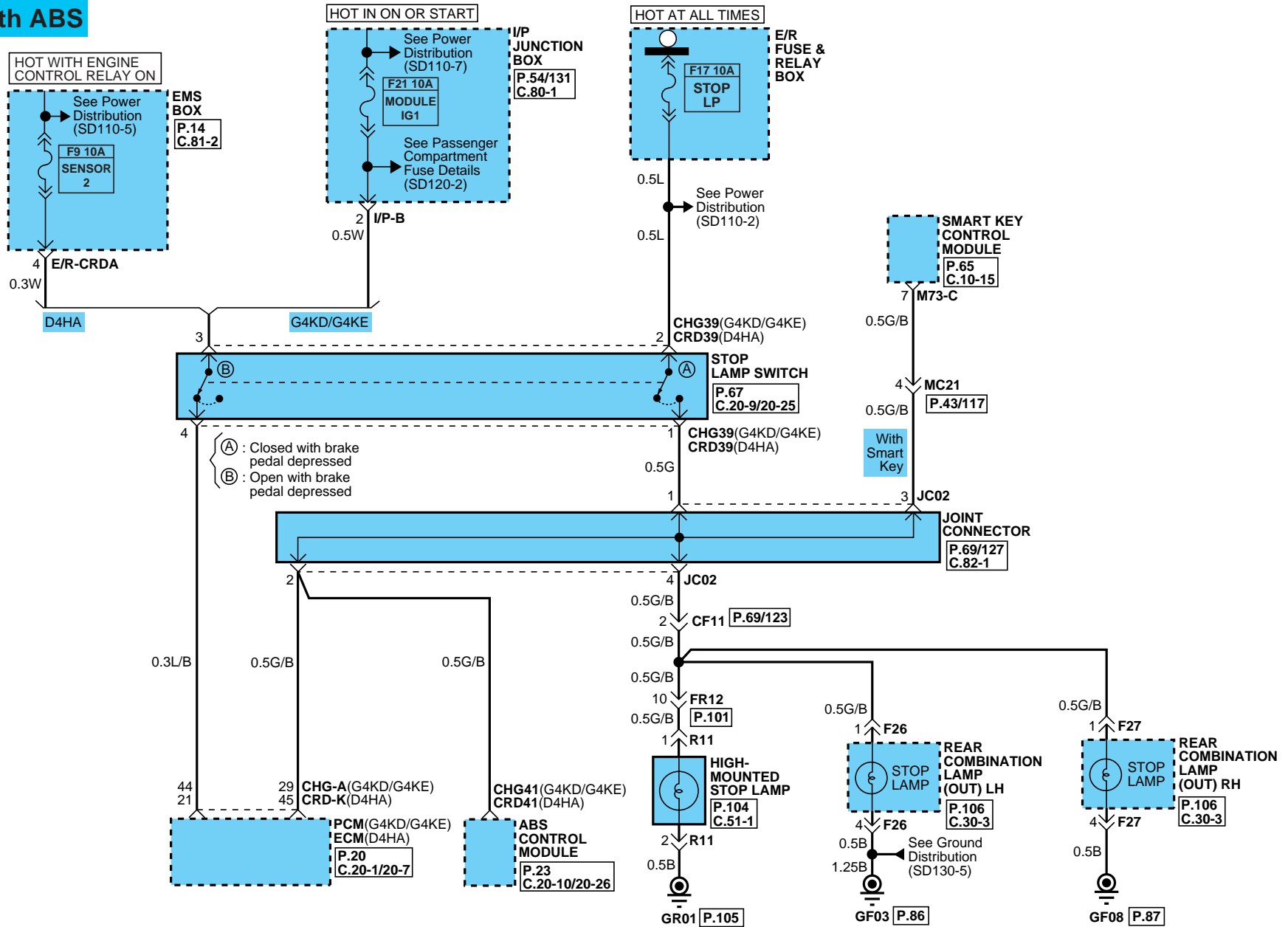
SD926-2

### D4HA : R 2.0L



Stop Lamps (1)

With ABS



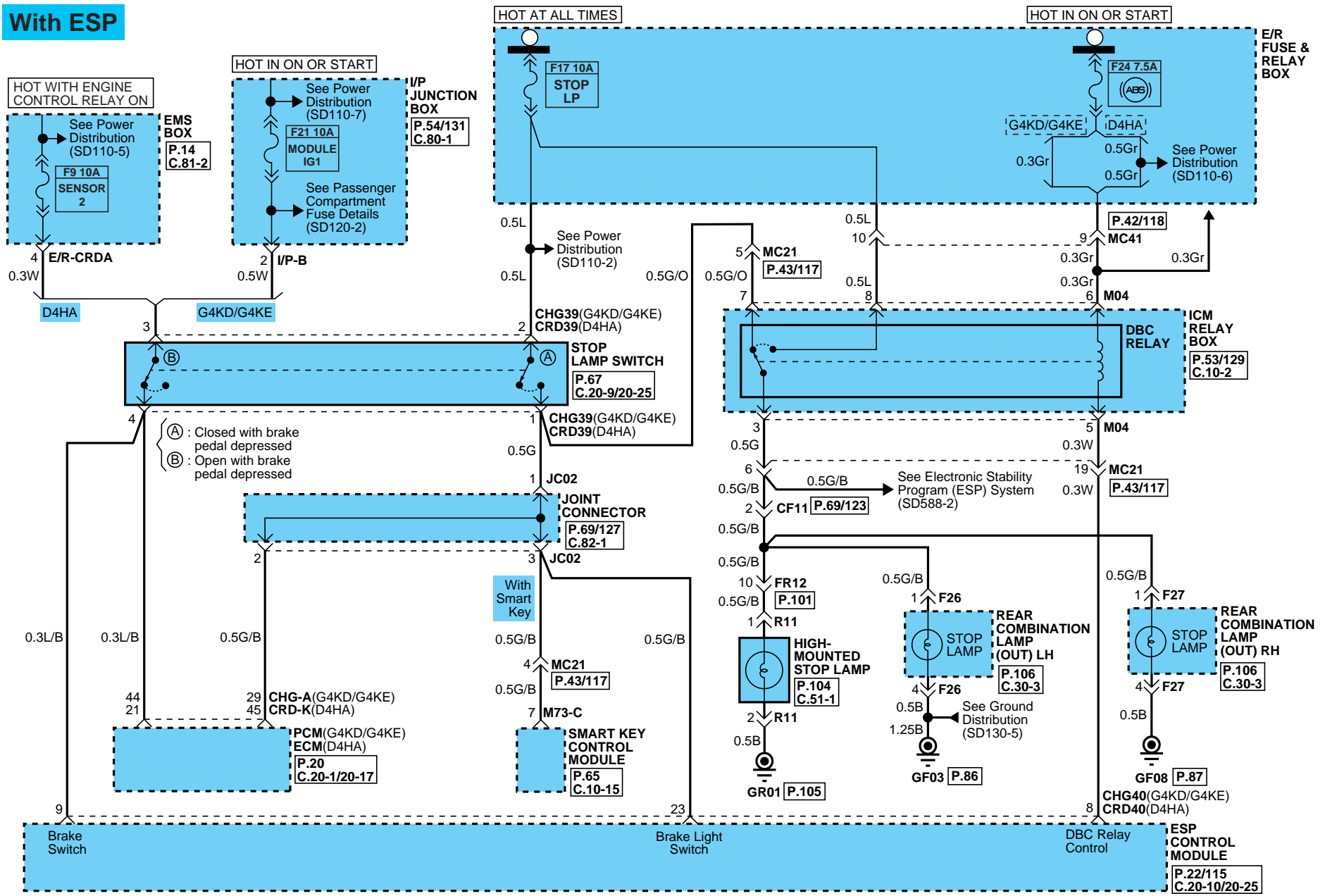


# STOP LAMPS

## Stop Lamps (2)

SD927-2

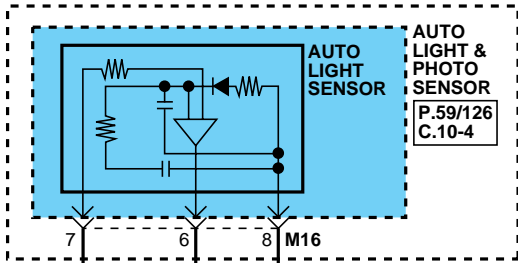
**With ESP**



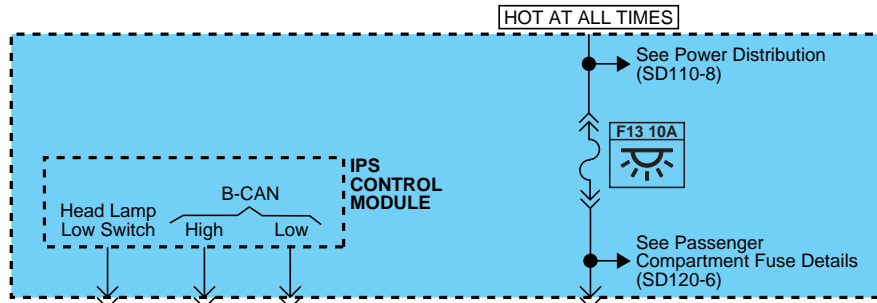
Tail, Parking & License Lamps (1)

SD928-1

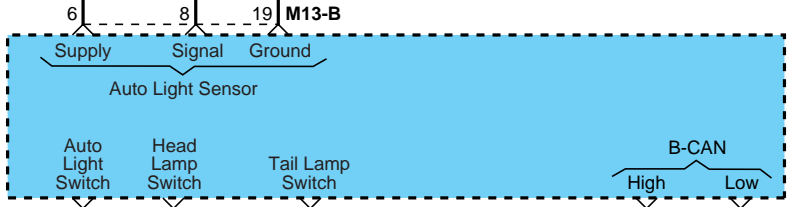
※ 2-STAGE Auto Light  
 STAGE 1 : Tail Lamp ON  
 STAGE 2 : Tail Lamp + Head Lamp ON



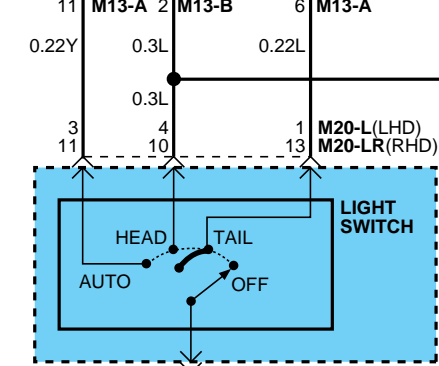
With Auto Light



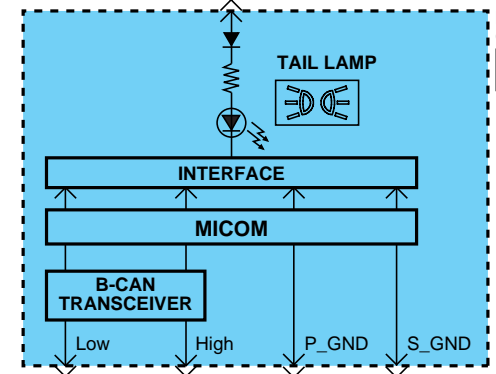
I/P JUNCTION BOX  
 P.55/132  
 C.80-4/80-5



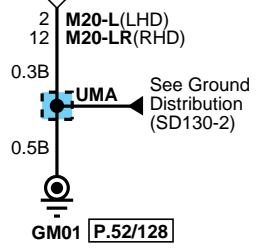
BCM  
 P.61/129  
 C.10-3



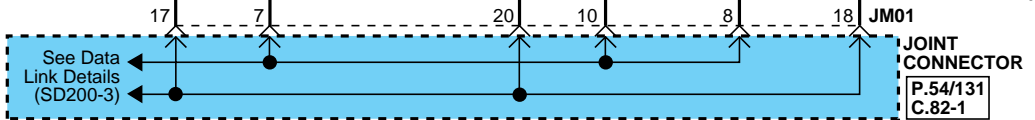
MULTIFUNCTION SWITCH  
 P.56/130  
 C.10-5



INSTRUMENT CLUSTER  
 P.44  
 C.10-4



GM01 P.52/128



JOINT CONNECTOR  
 P.54/131  
 C.82-1

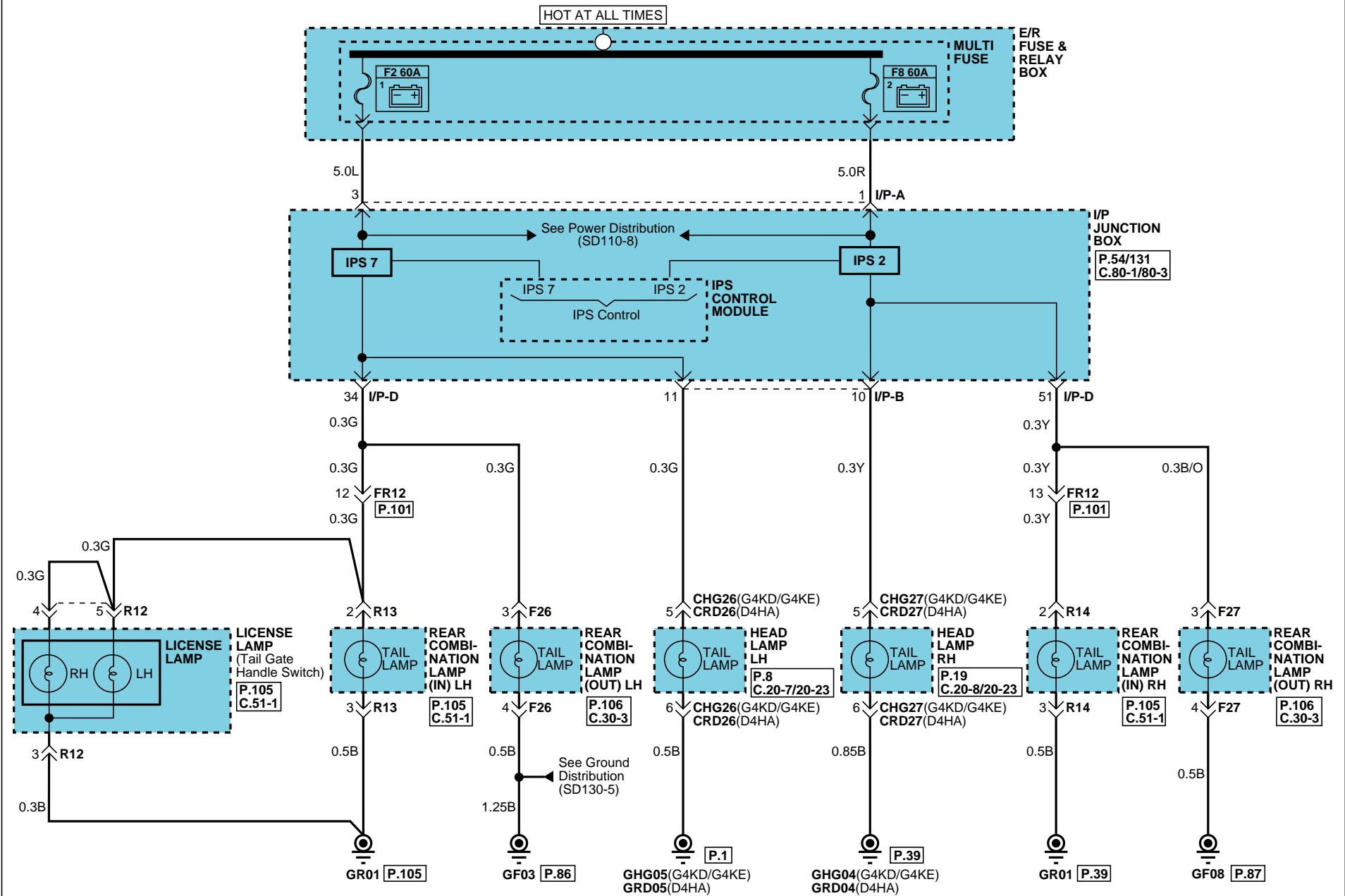


GM01 P.52/128

# TAIL, PARKING & LICENSE LAMPS

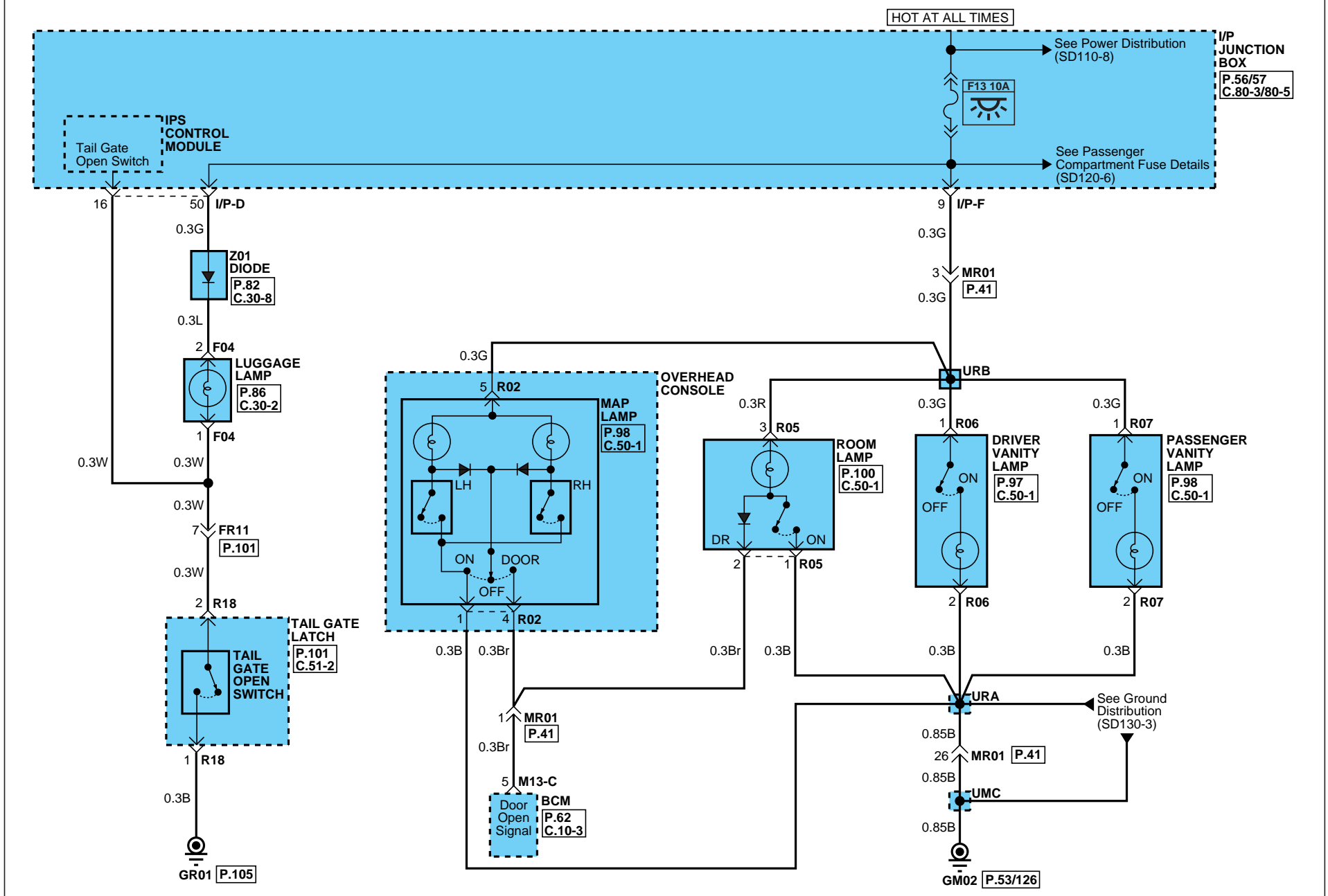
## Tail, Parking & License Lamps (2)

SD928-2



Courtesy & Tail Gate Lamps (1)

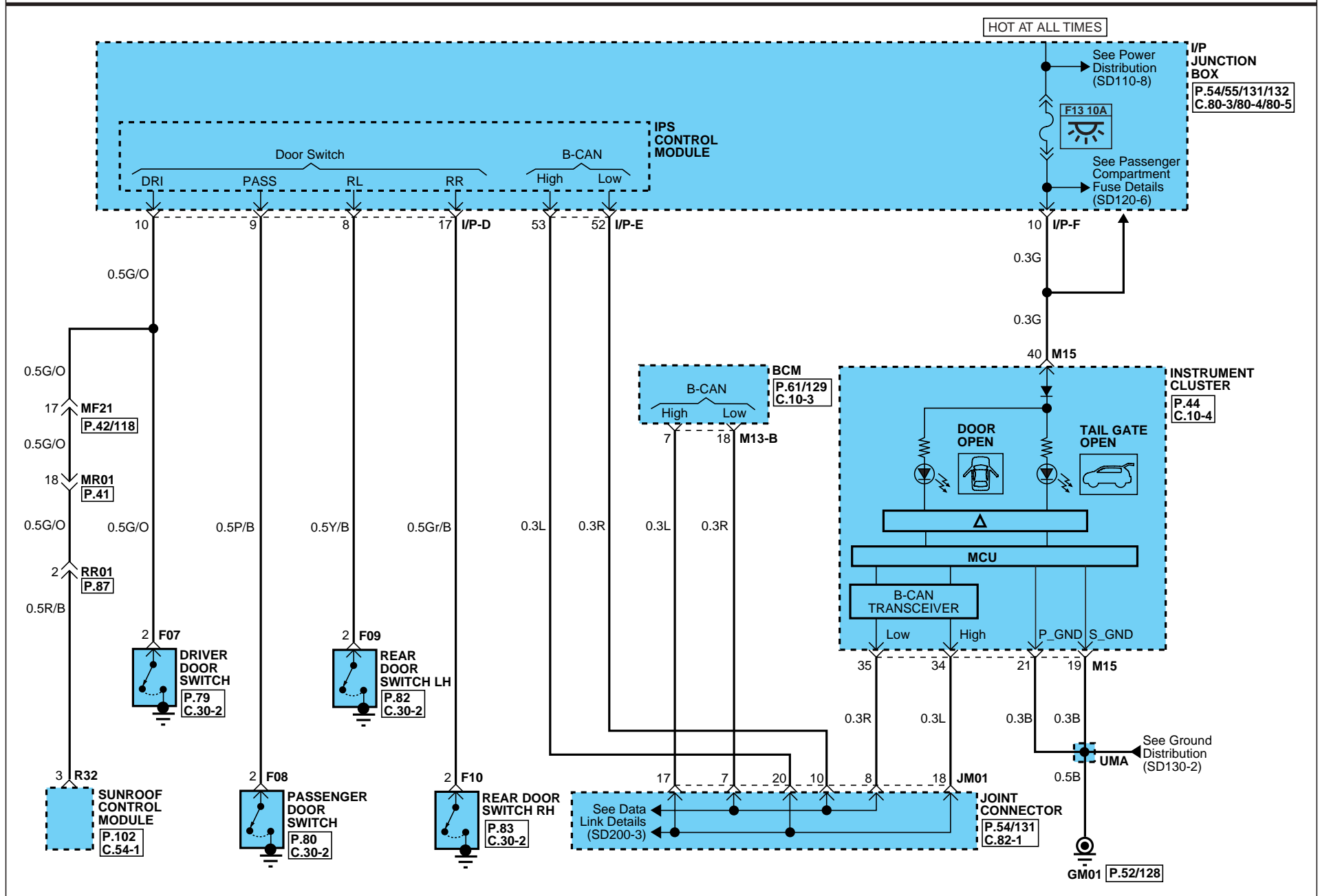
SD929-1



# COURTESY & TAIL GATE LAMPS

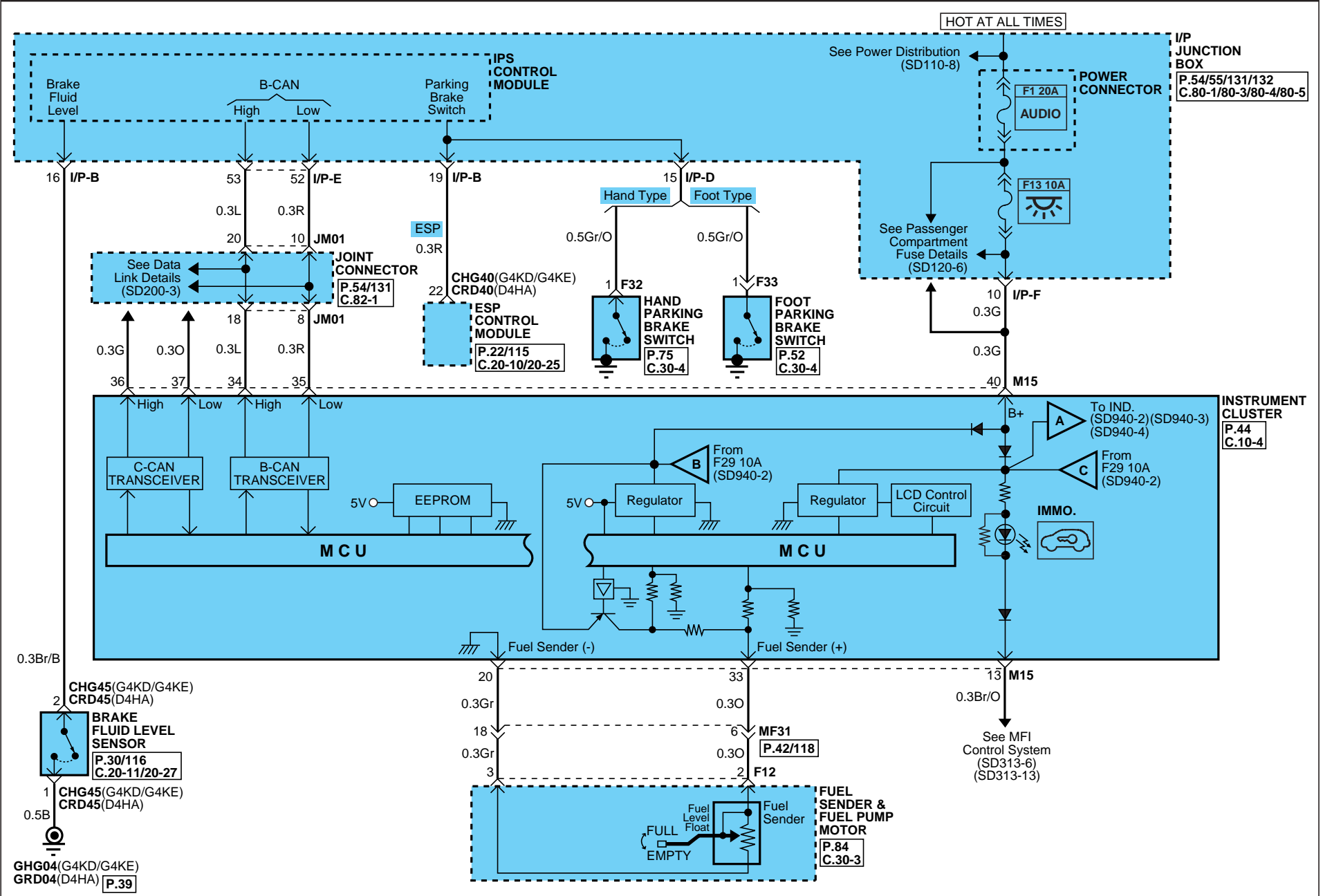
## Courtesy & Tail Gate Lamps (2)

SD929-2



Indicators & Gauges (1)

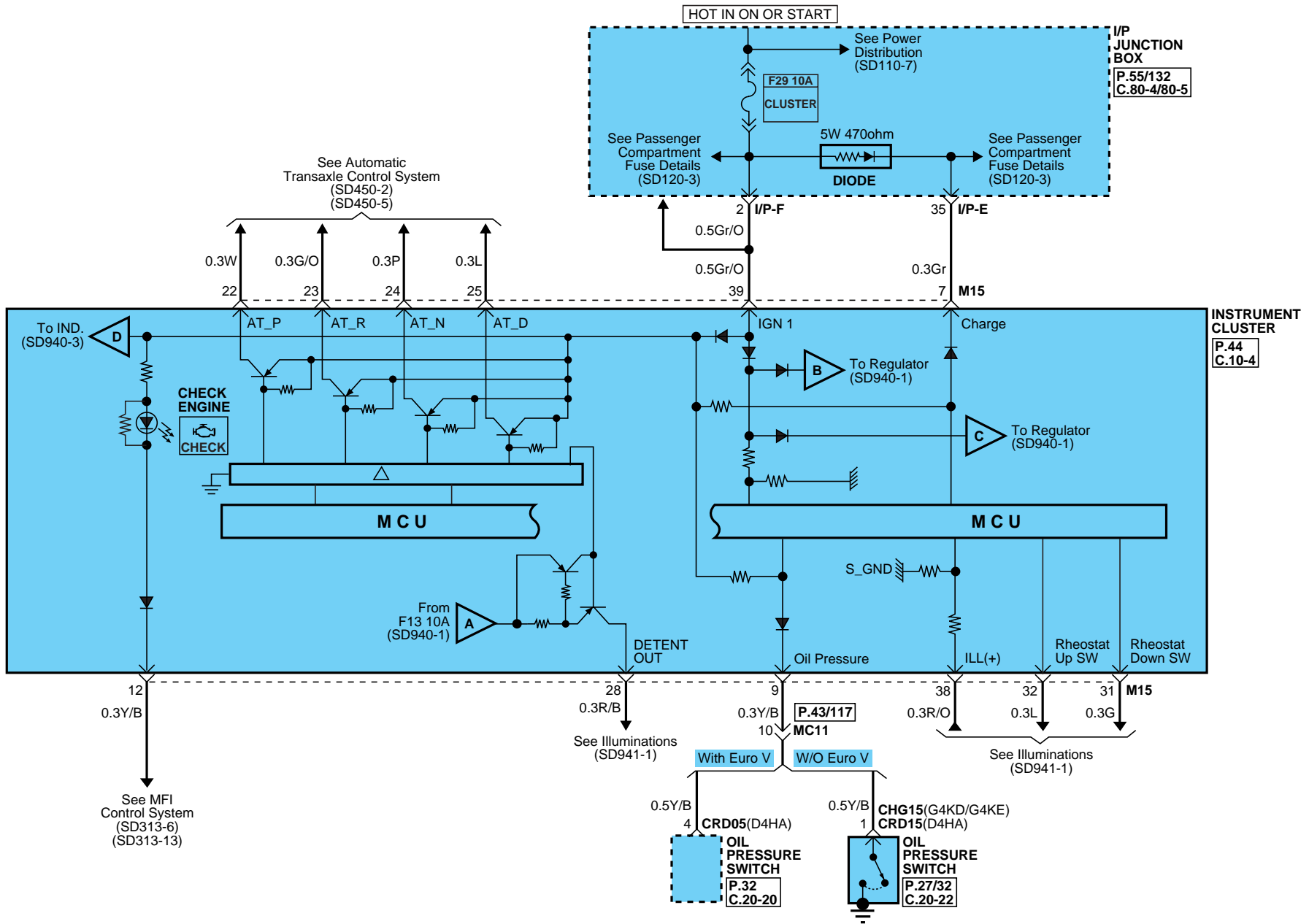
SD940-1



# INDICATORS & GAUGES

## Indicators & Gauges (2)

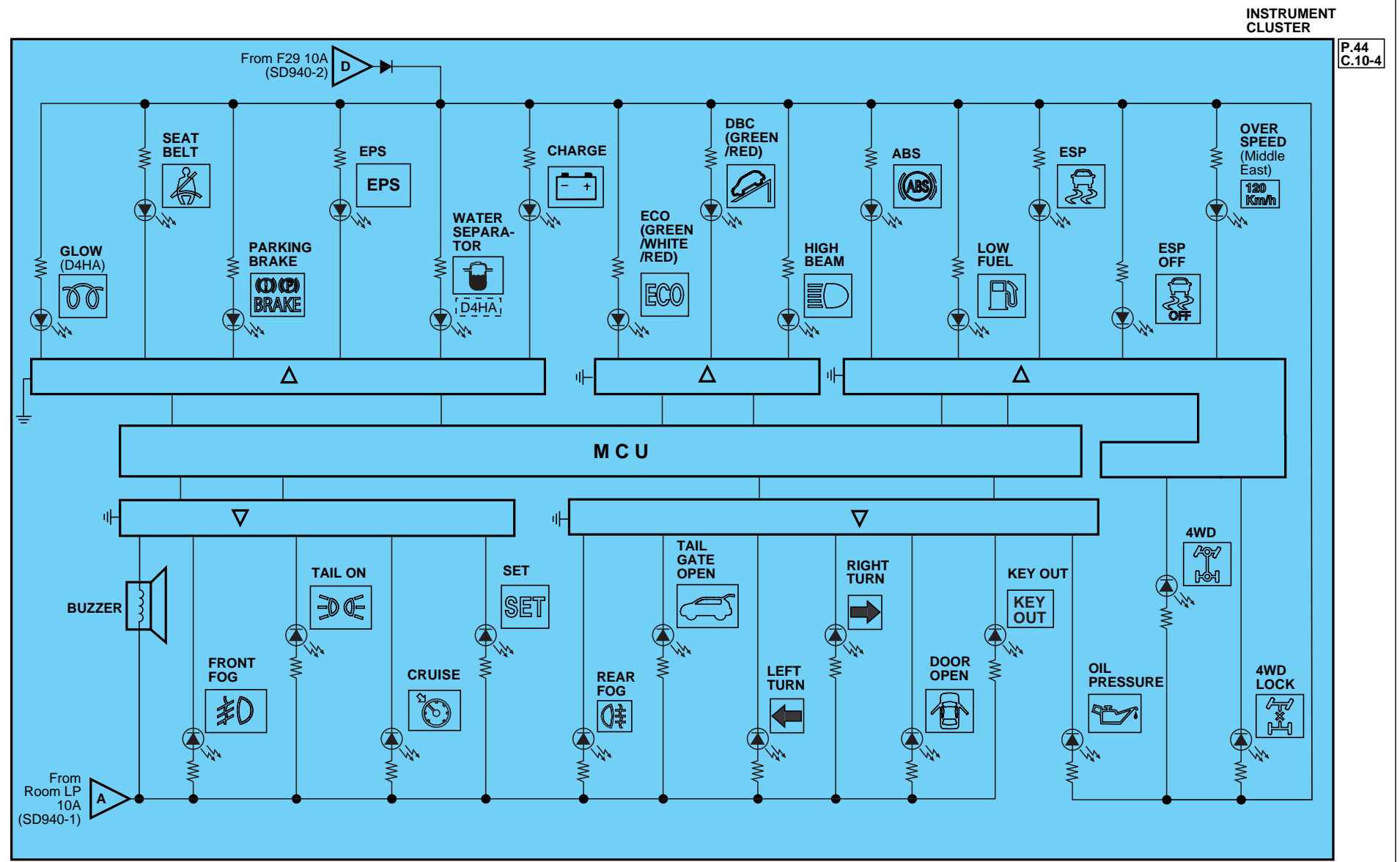
SD940-2



# INDICATORS & GAUGES

## Indicators & Gauges (3)

SD940-3

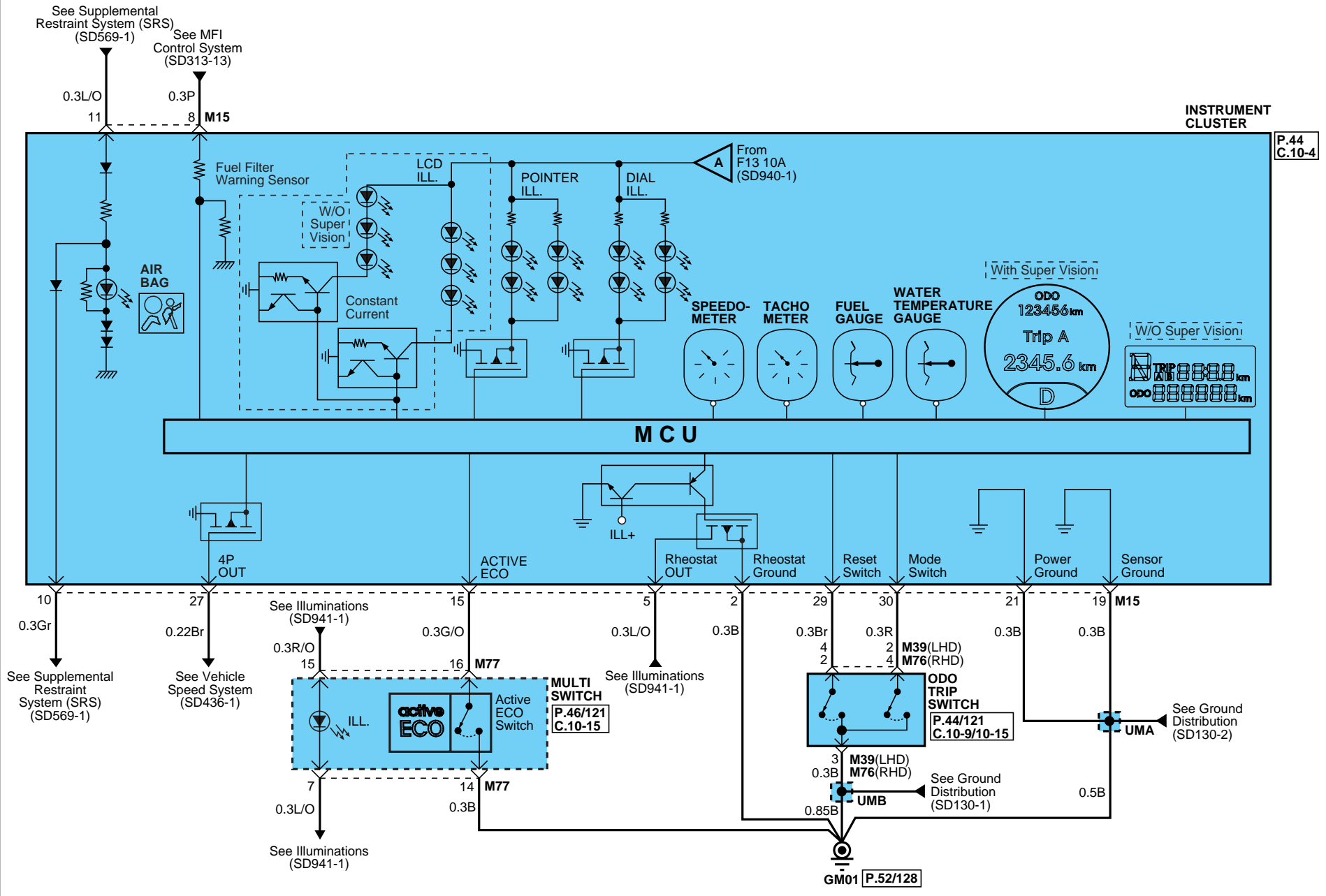




# INDICATORS & GAUGES

## Indicators & Gauges (4)

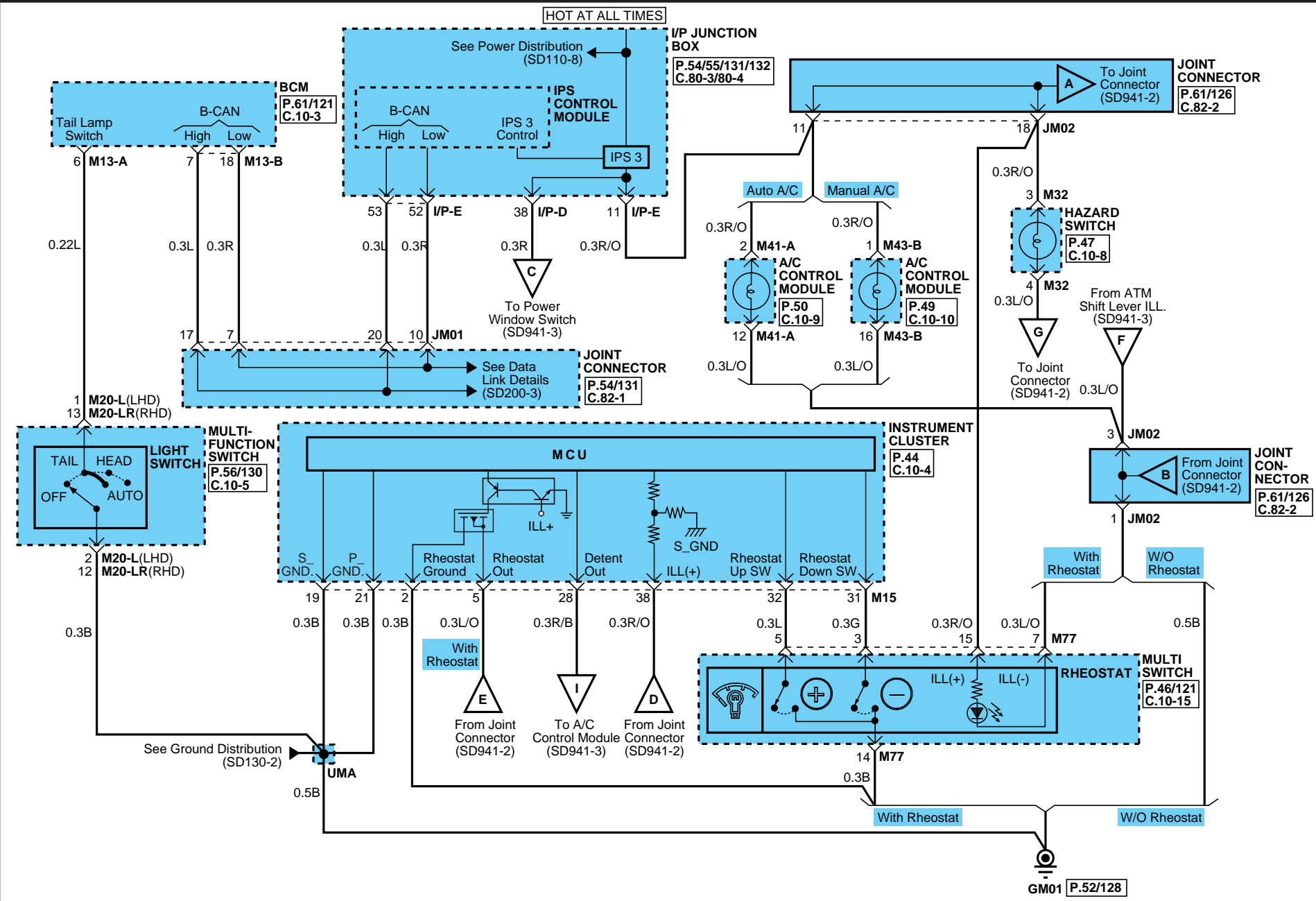
SD940-4



P.44  
C.10-4

Illuminations (1)

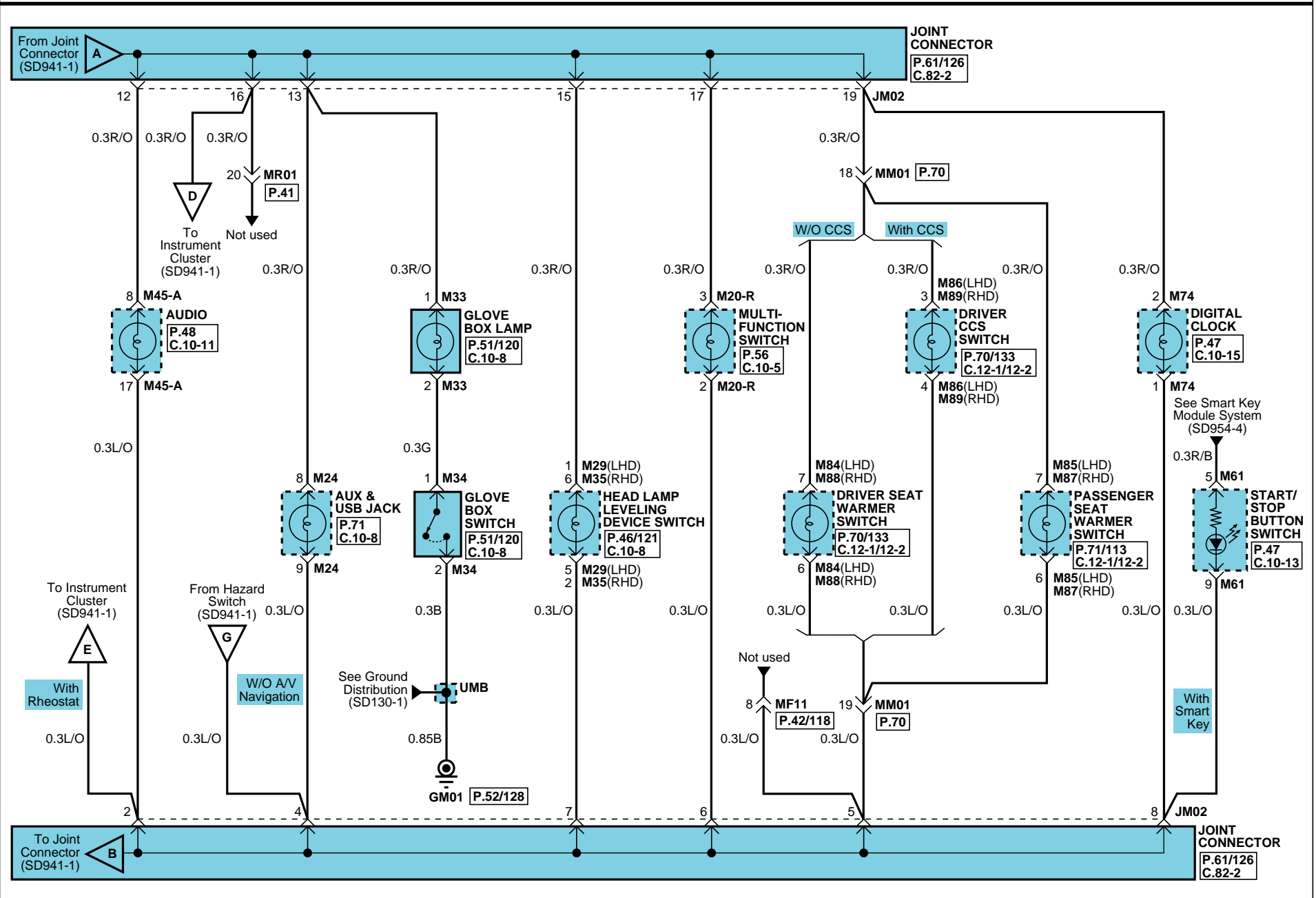
SD941-1



# ILLUMINATIONS

## Illuminations (2)

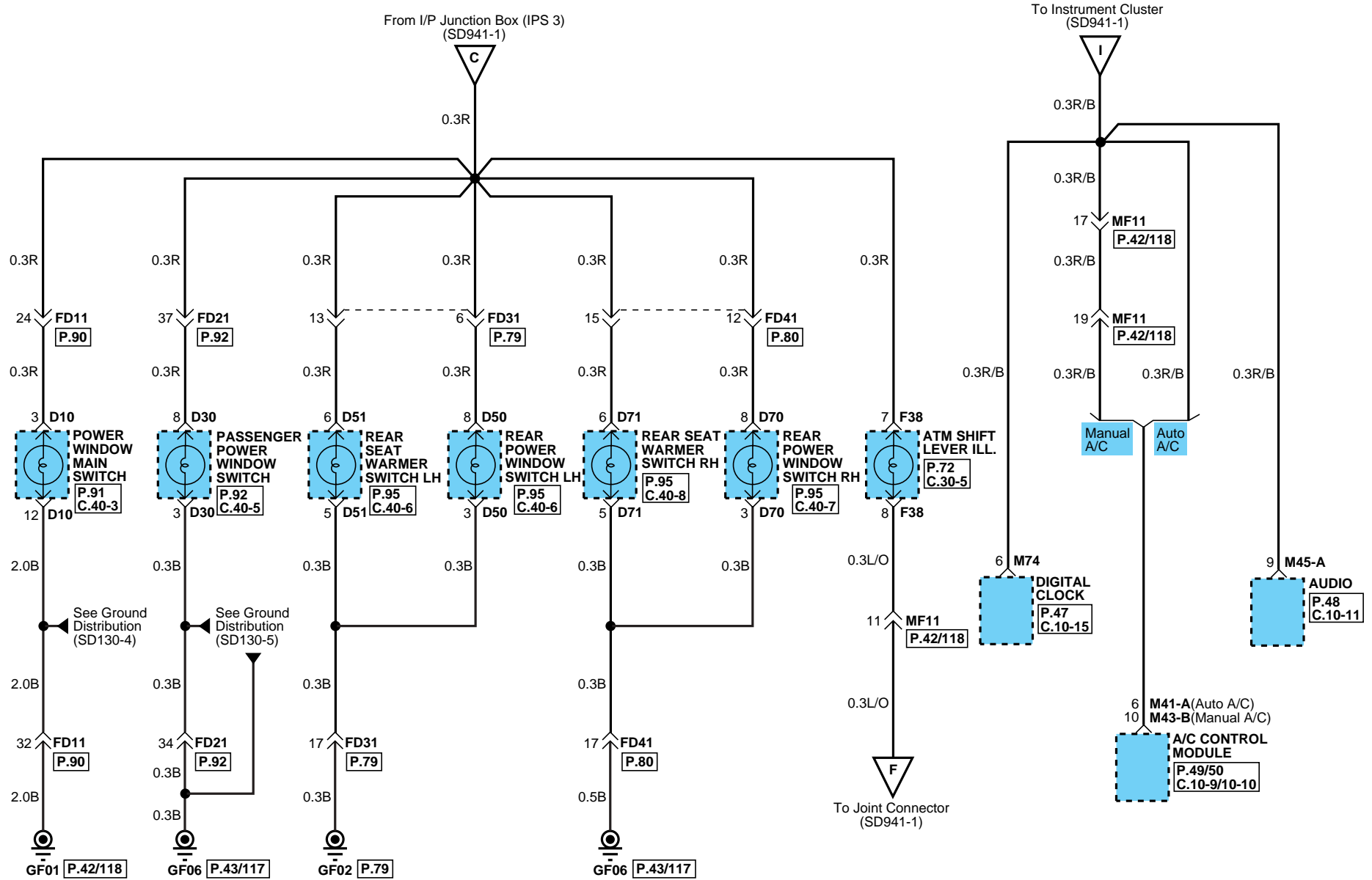
SD941-2



# ILLUMINATIONS

## Illuminations (3)

SD941-3



**ILLUMINATIONS**

**Illuminations (4)**

**SD941-4**

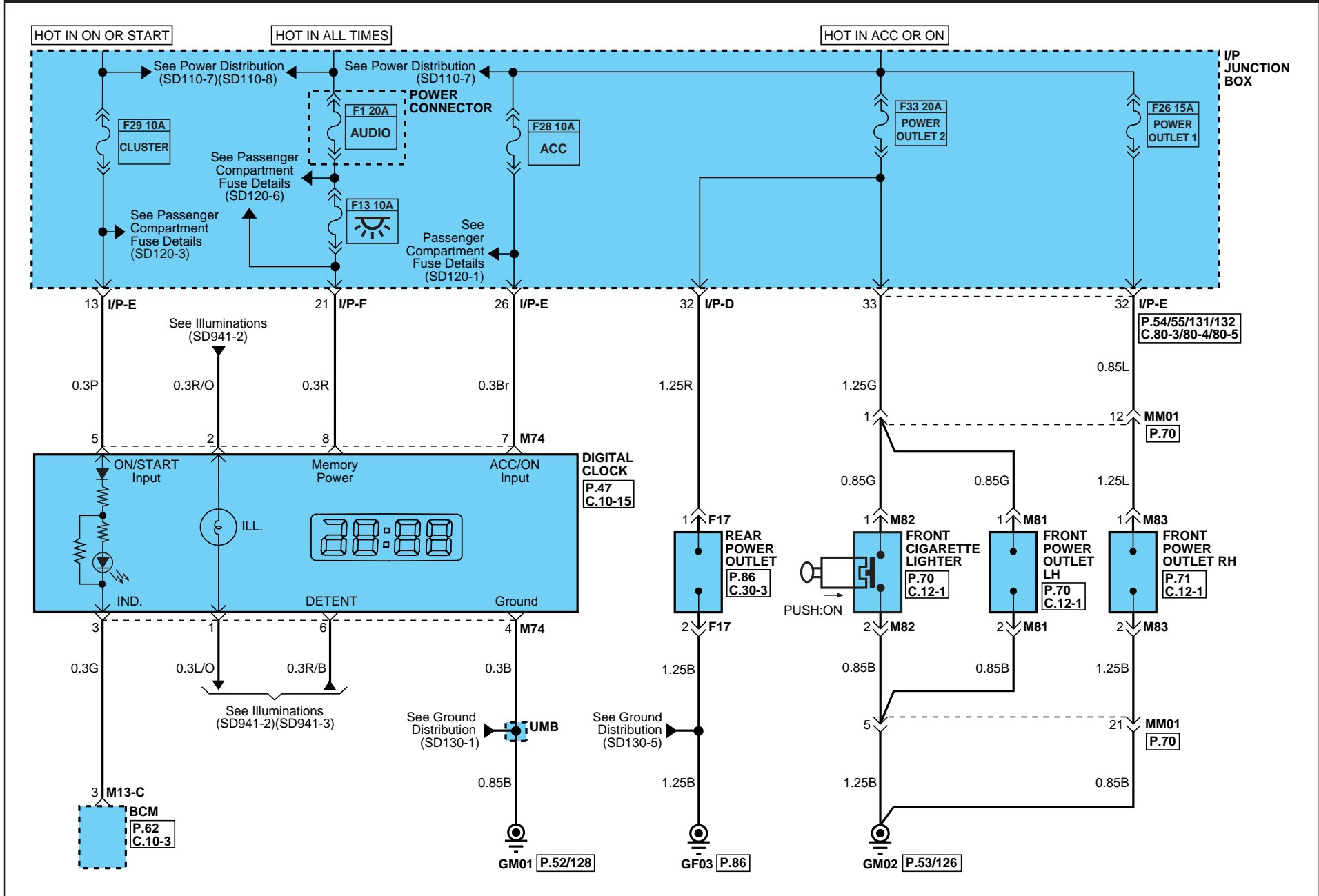
**MEMO**

# CLOCK & CIGARETTE LIGHTER (POWER OUTLET) SYSTEM

E90CA6C7

## Clock & Cigarette Lighter (Power Outlet) System (1)

SD945-1



## CLOCK & CIGARETTE LIGHTER (POWER OUTLET) SYSTEM

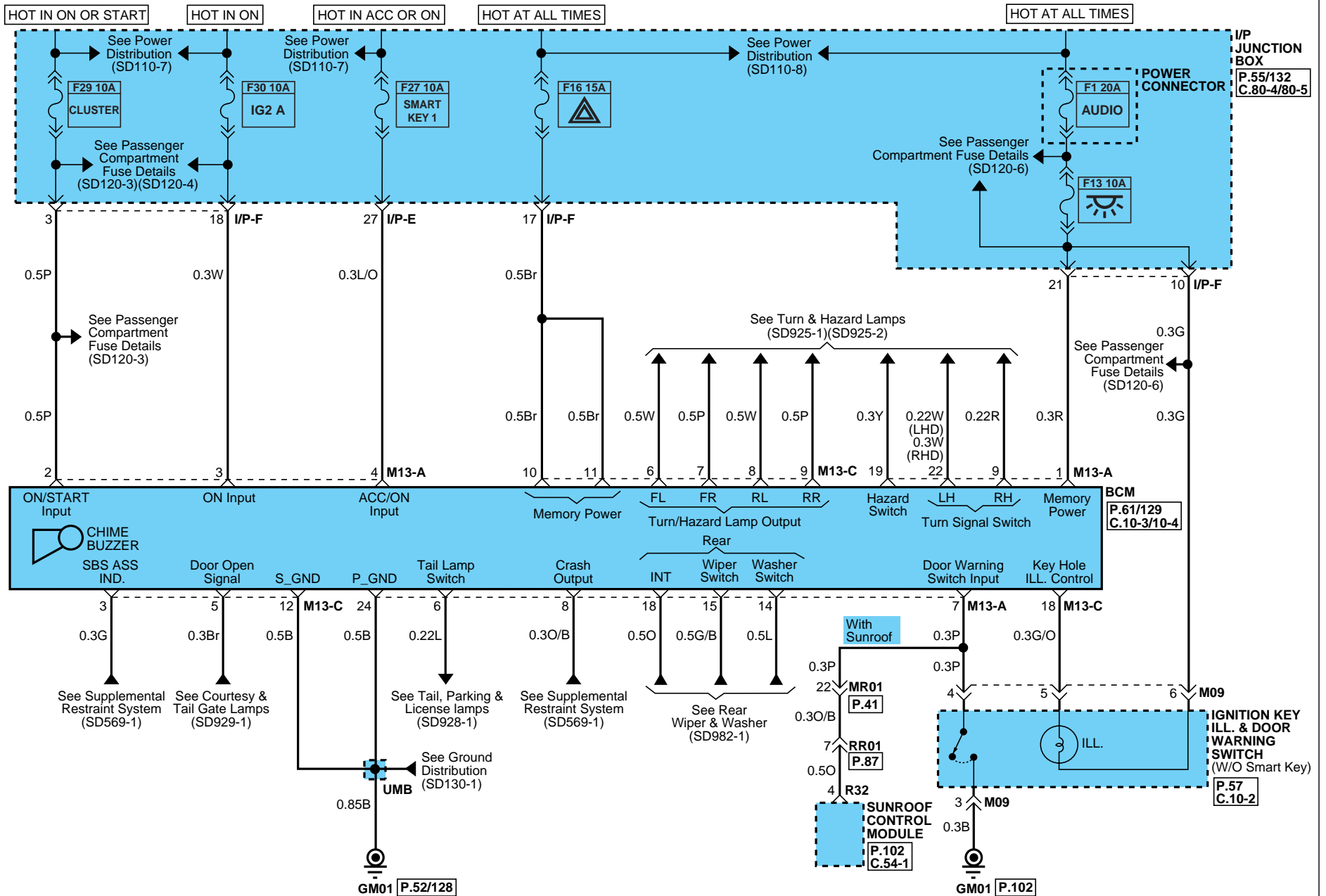
Clock & Cigarette Lighter (Power Outlet) System (2)

SD945-2

MEMO

**Body Control Module (BCM) System (1)**

**SD952-1**

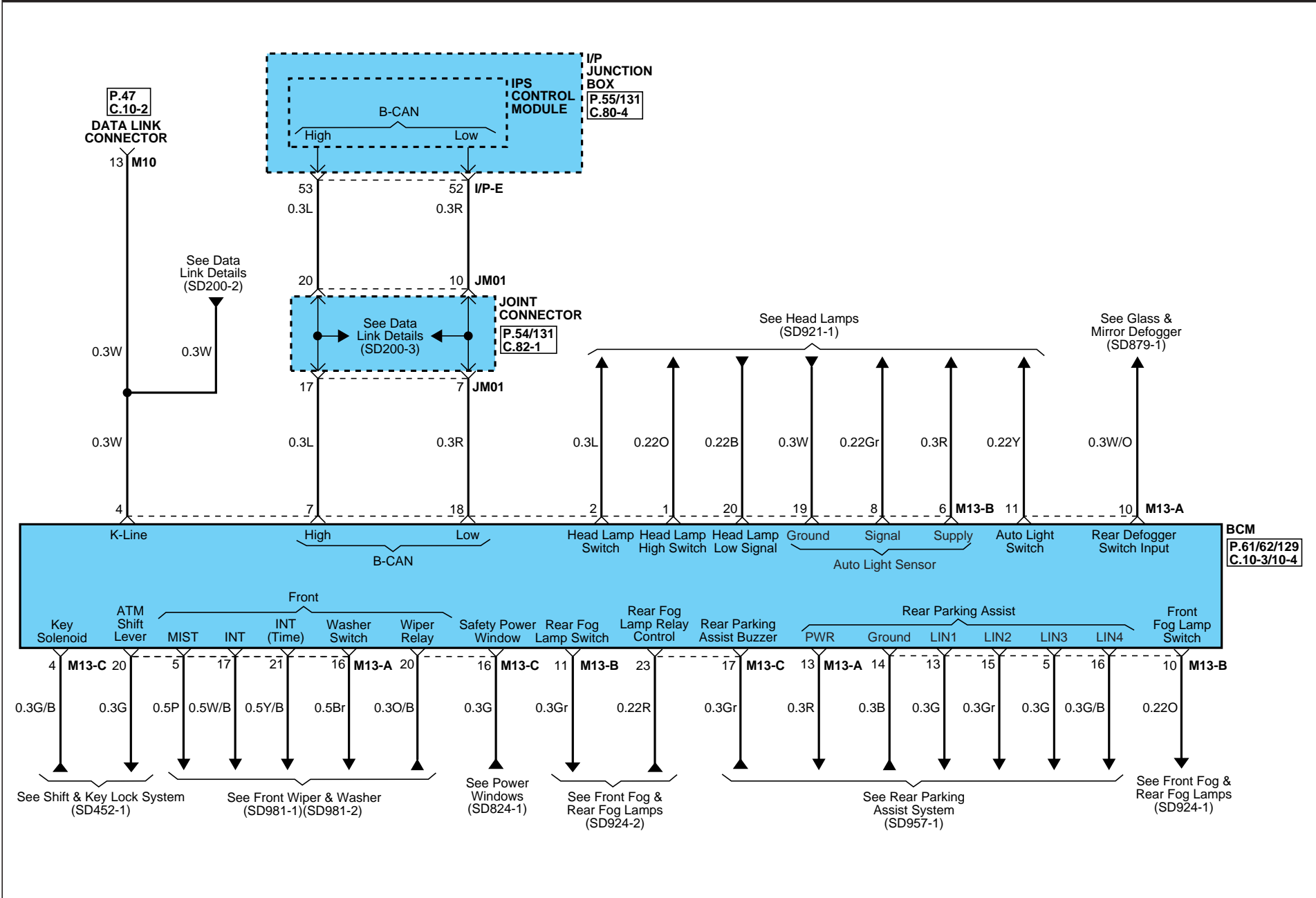




# BODY CONTROL MODULE (BCM) SYSTEM

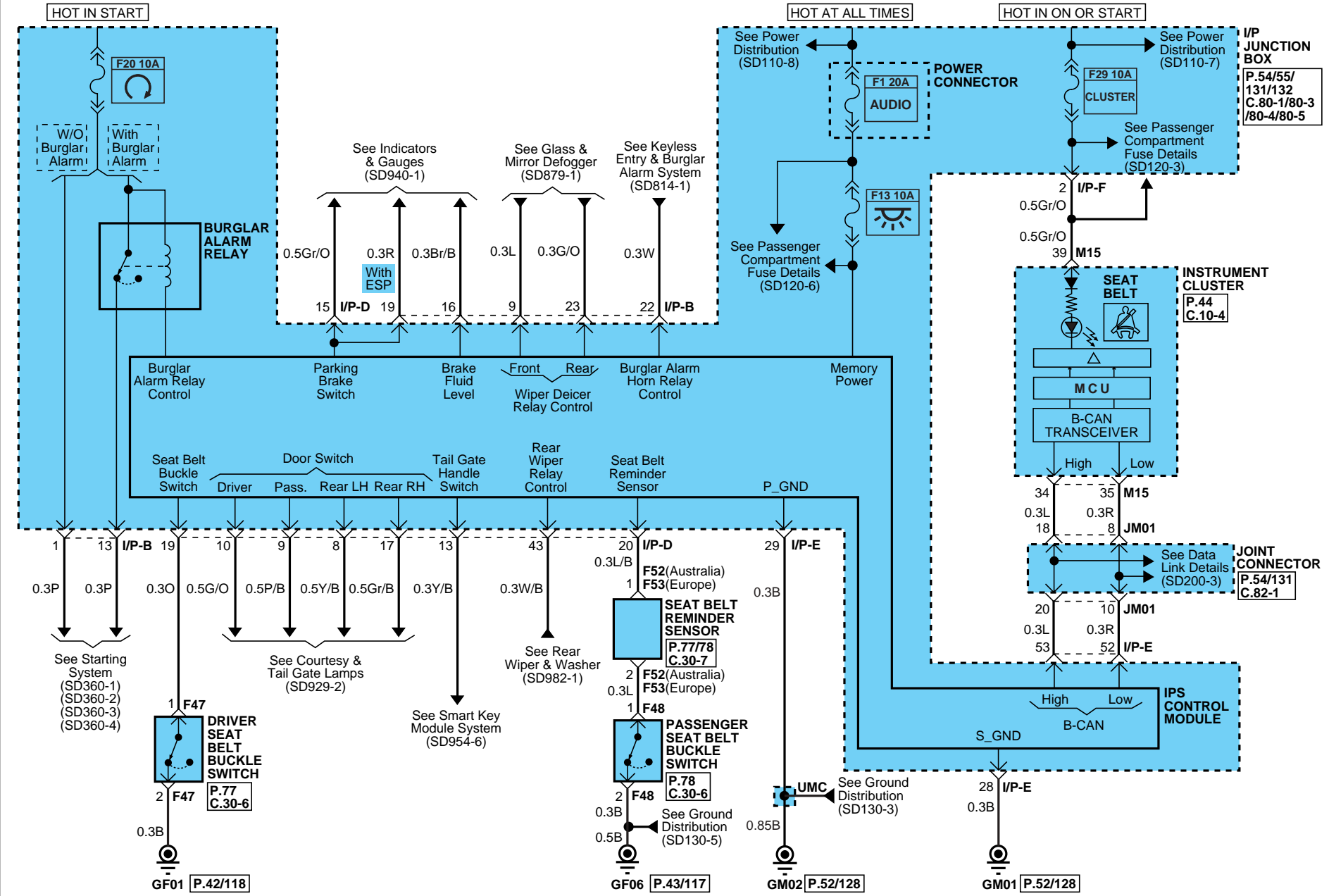
## Body Control Module (BCM) System (2)

SD952-2



Intelligent Power Switch (IPS) System (1)

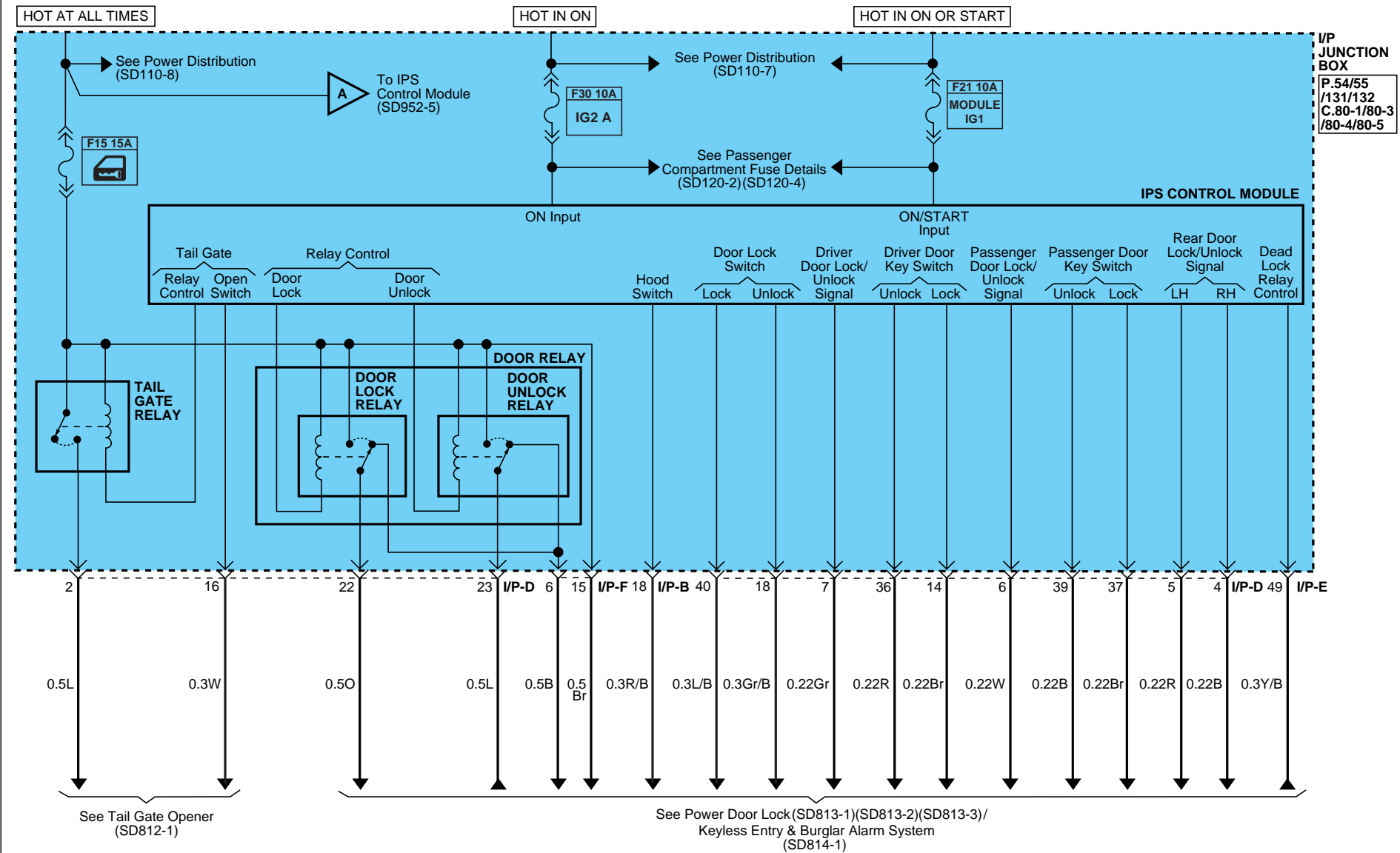
SD952-3



# INTELLIGENT POWER SWITCH (IPS) SYSTEM

## Intelligent Power Switch (IPS) System (2)

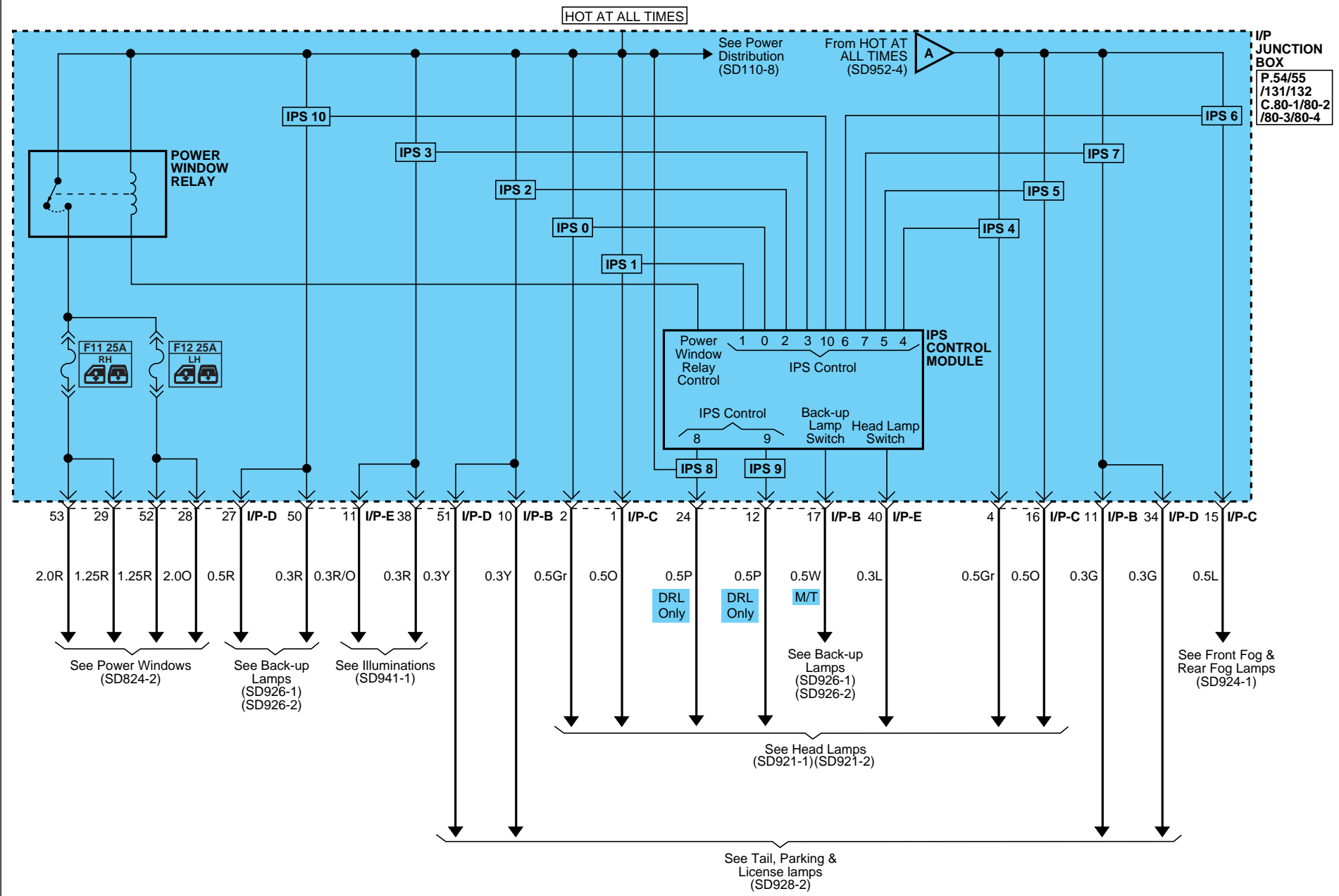
SD952-4



# INTELLIGENT POWER SWITCH (IPS) SYSTEM

## Intelligent Power Switch (IPS) System (3)

SD952-5



# INTELLIGENT POWER SWITCH (IPS) SYSTEM

Intelligent Power Switch (IPS) System (4)

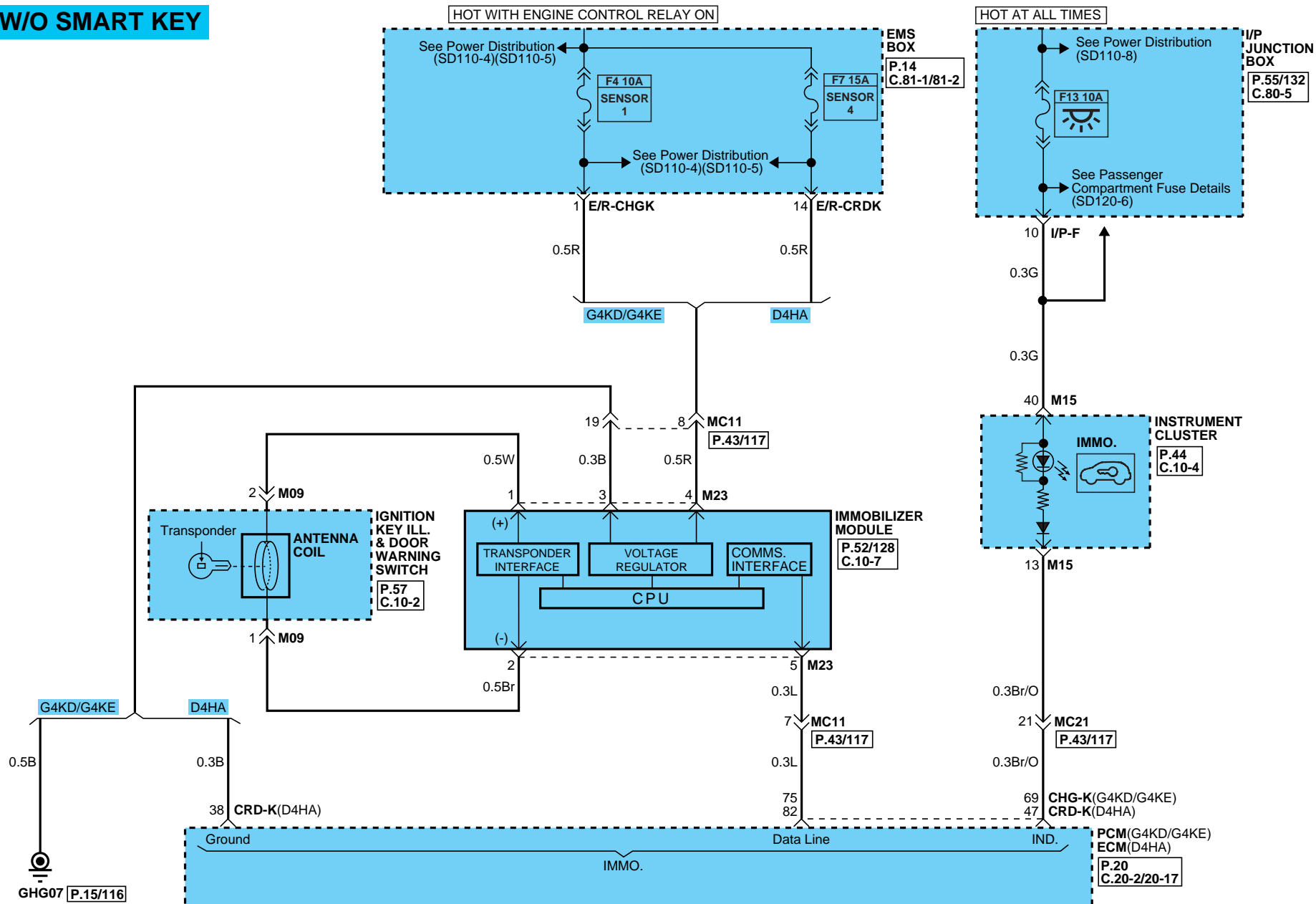
SD952-6

MEMO

Immobilizer System (1)

SD954-1

W/O SMART KEY



## IMMOBILIZER SYSTEM

Immobilizer System (2)

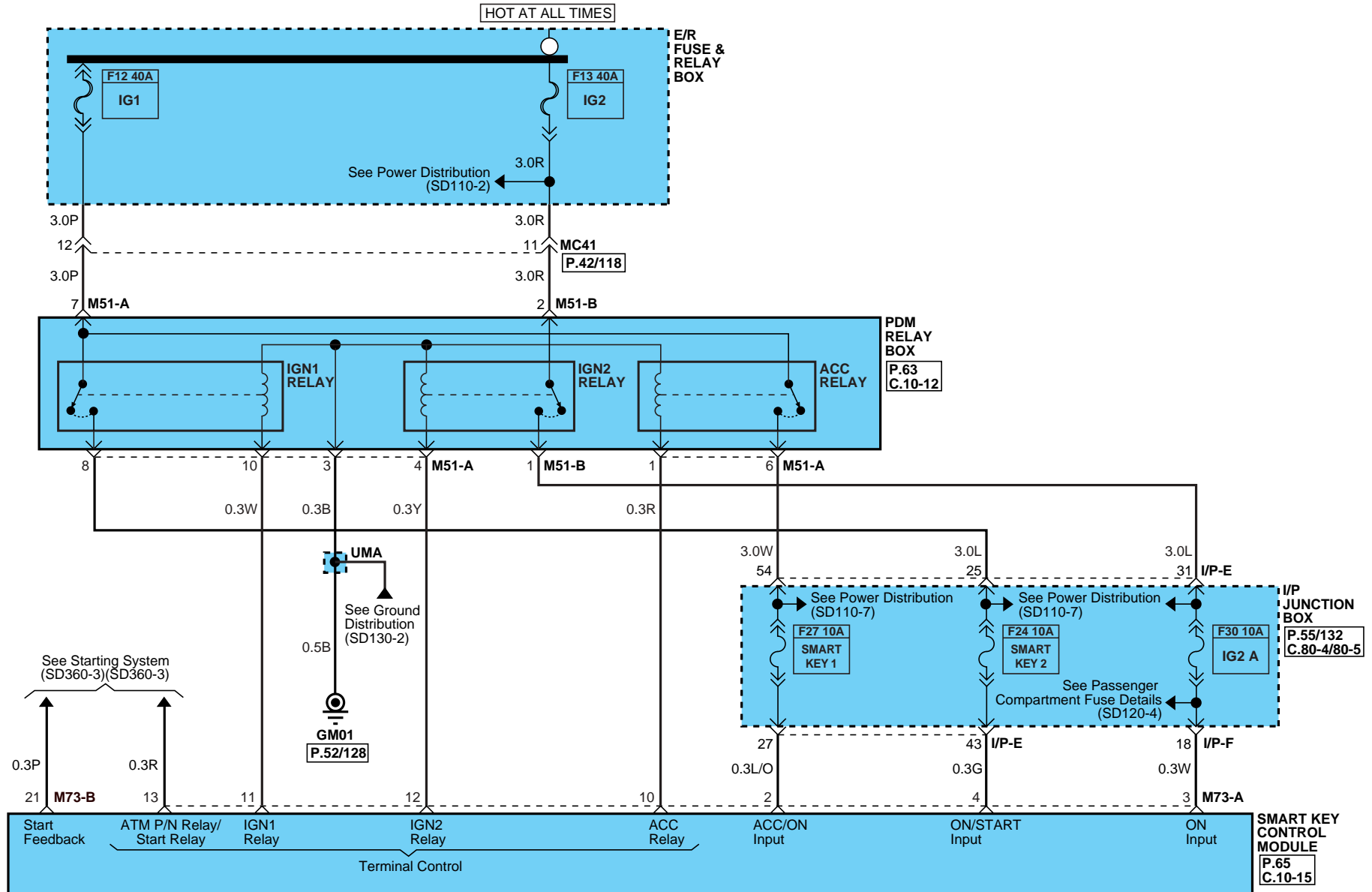
SD954-2

MEMO

Smart Key Module System (1)

SD954-3

WITH SMART KEY

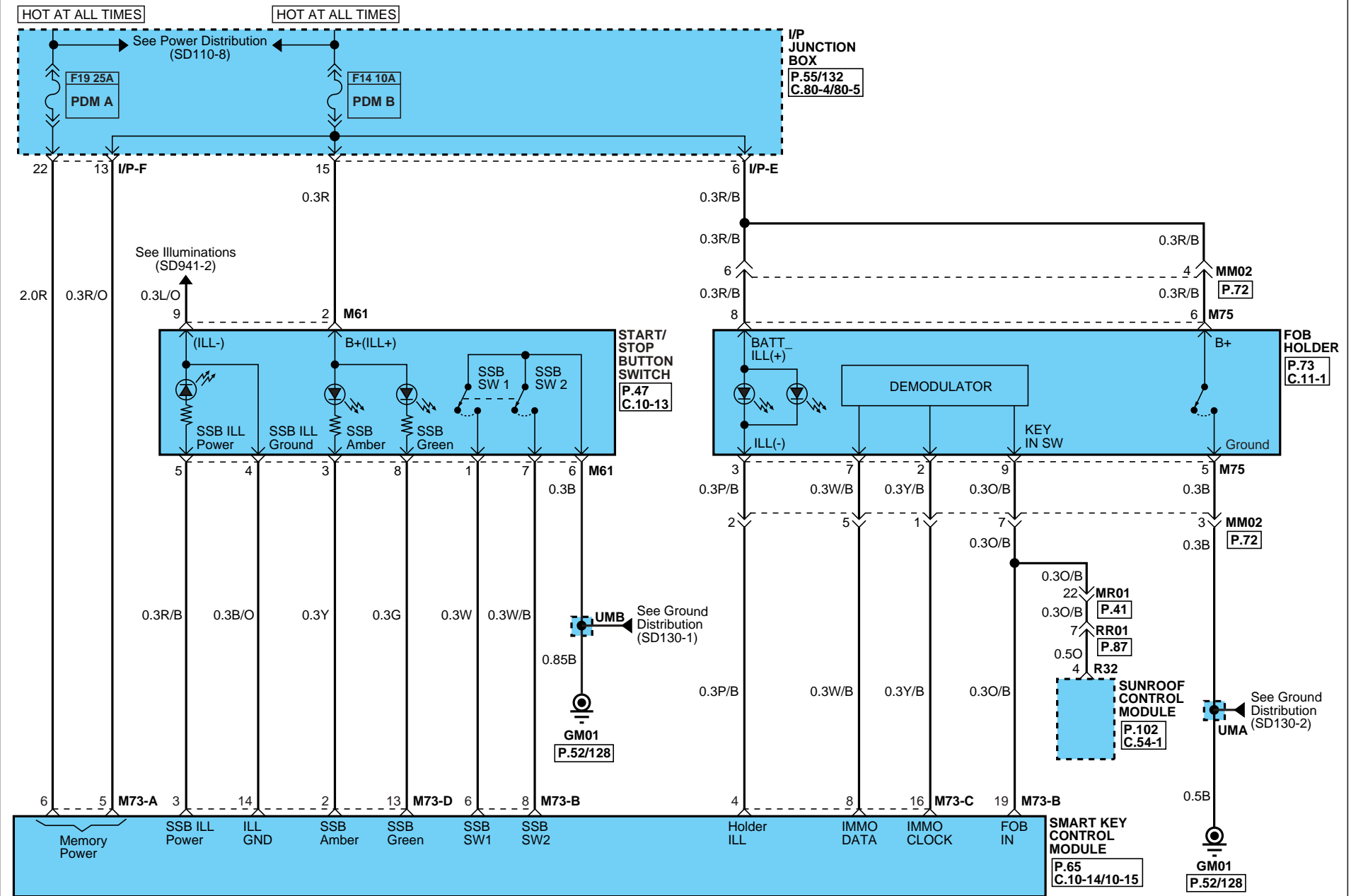




# SMART KEY MODULE SYSTEM

## Smart Key Module System (2)

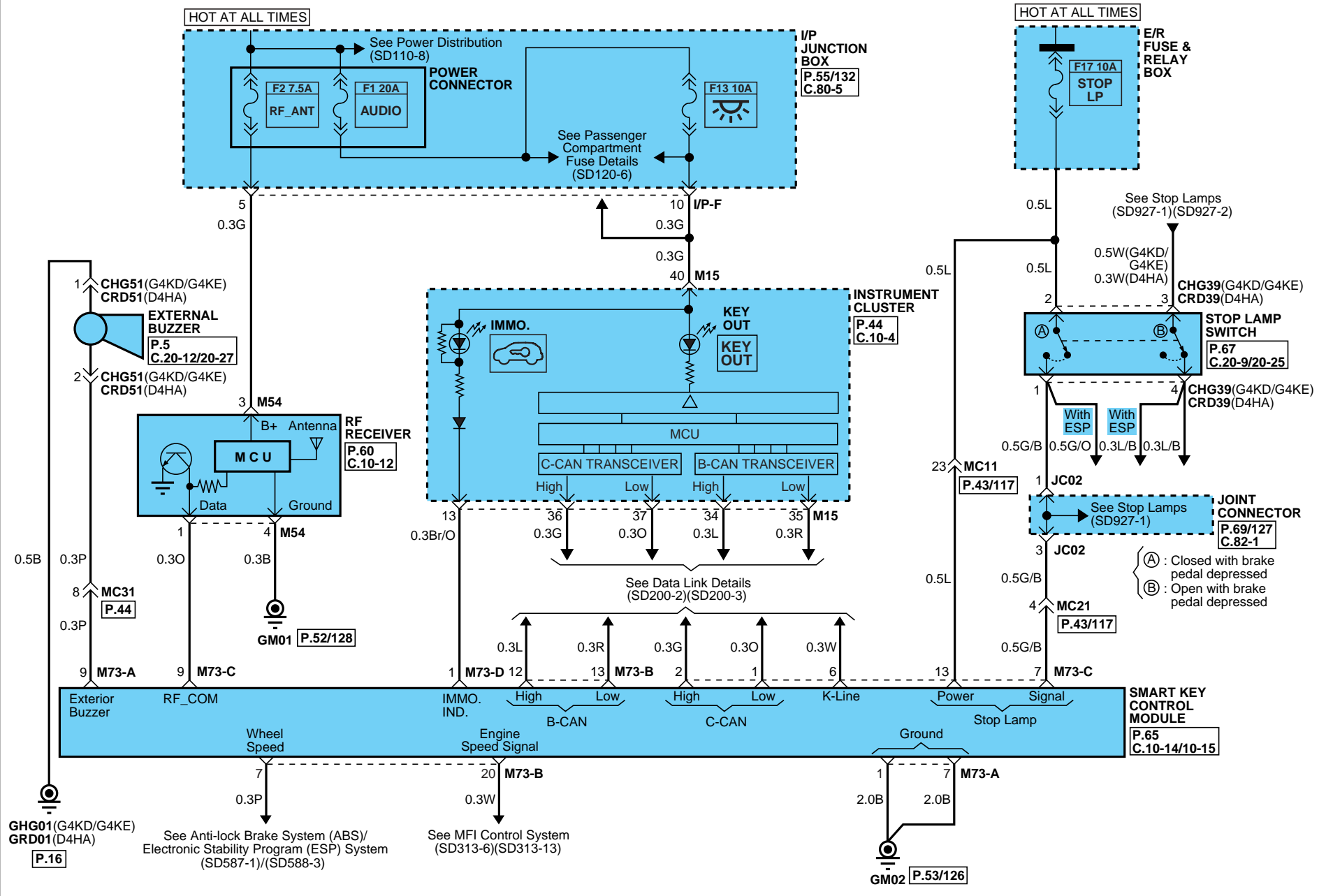
SD954-4



# SMART KEY MODULE SYSTEM

## Smart Key Module System (3)

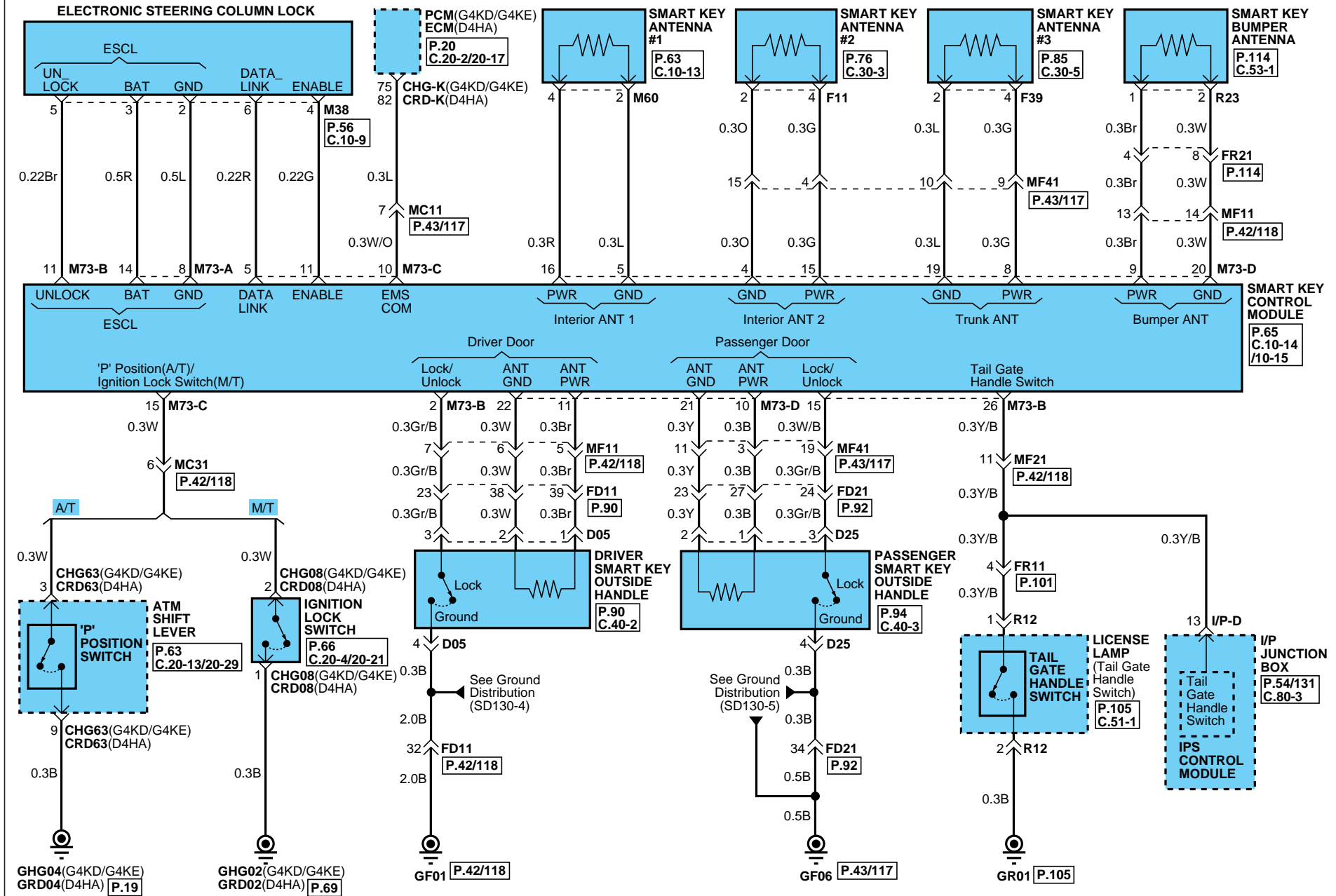
SD954-5



# SMART KEY MODULE SYSTEM

## Smart Key Module System (4)

SD954-6

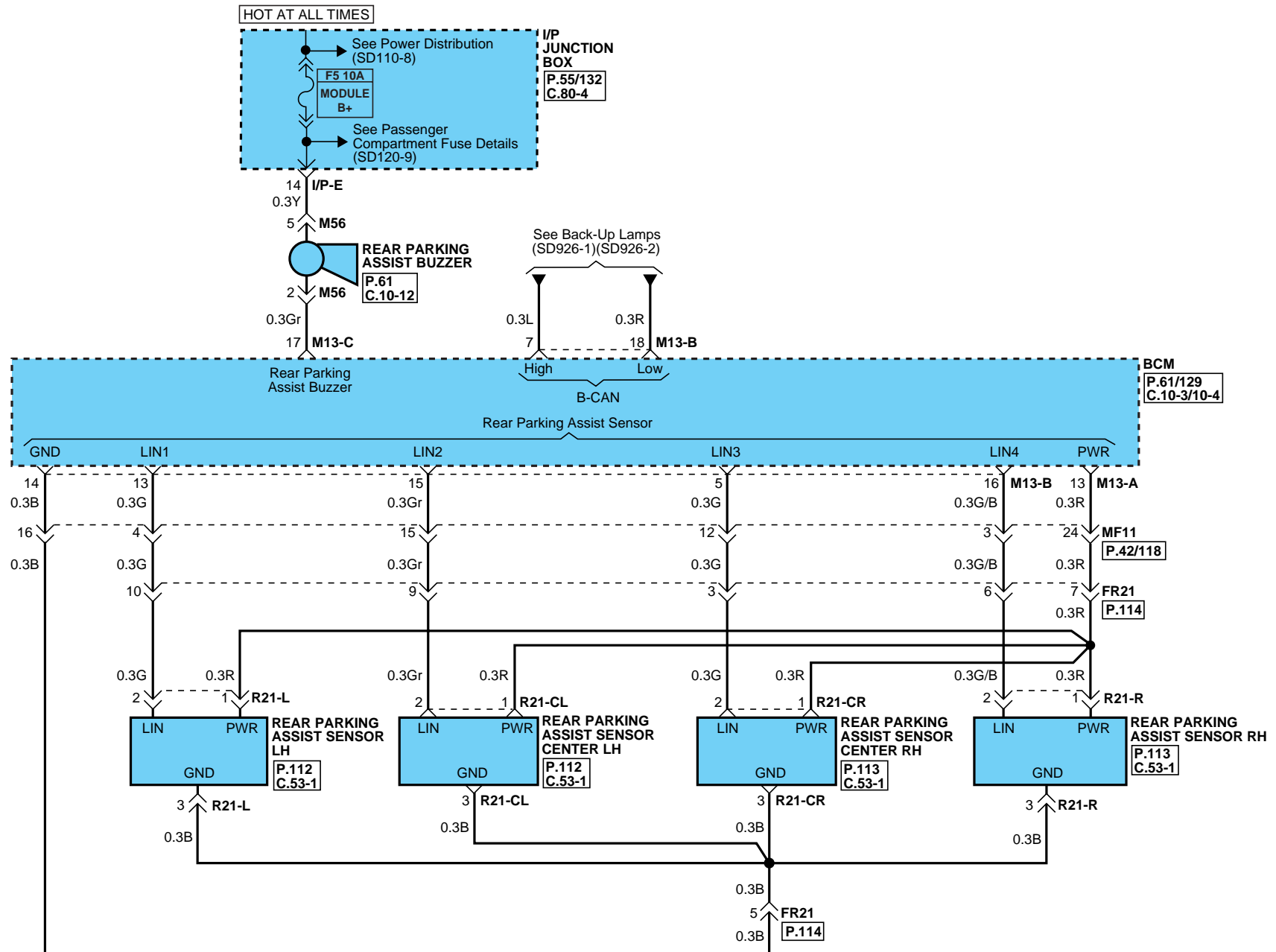


# REAR PARKING ASSIST SYSTEM

ECA7D1F3

## Rear Parking Assist System (1)

SD957-1



## REAR PARKING ASSIST SYSTEM

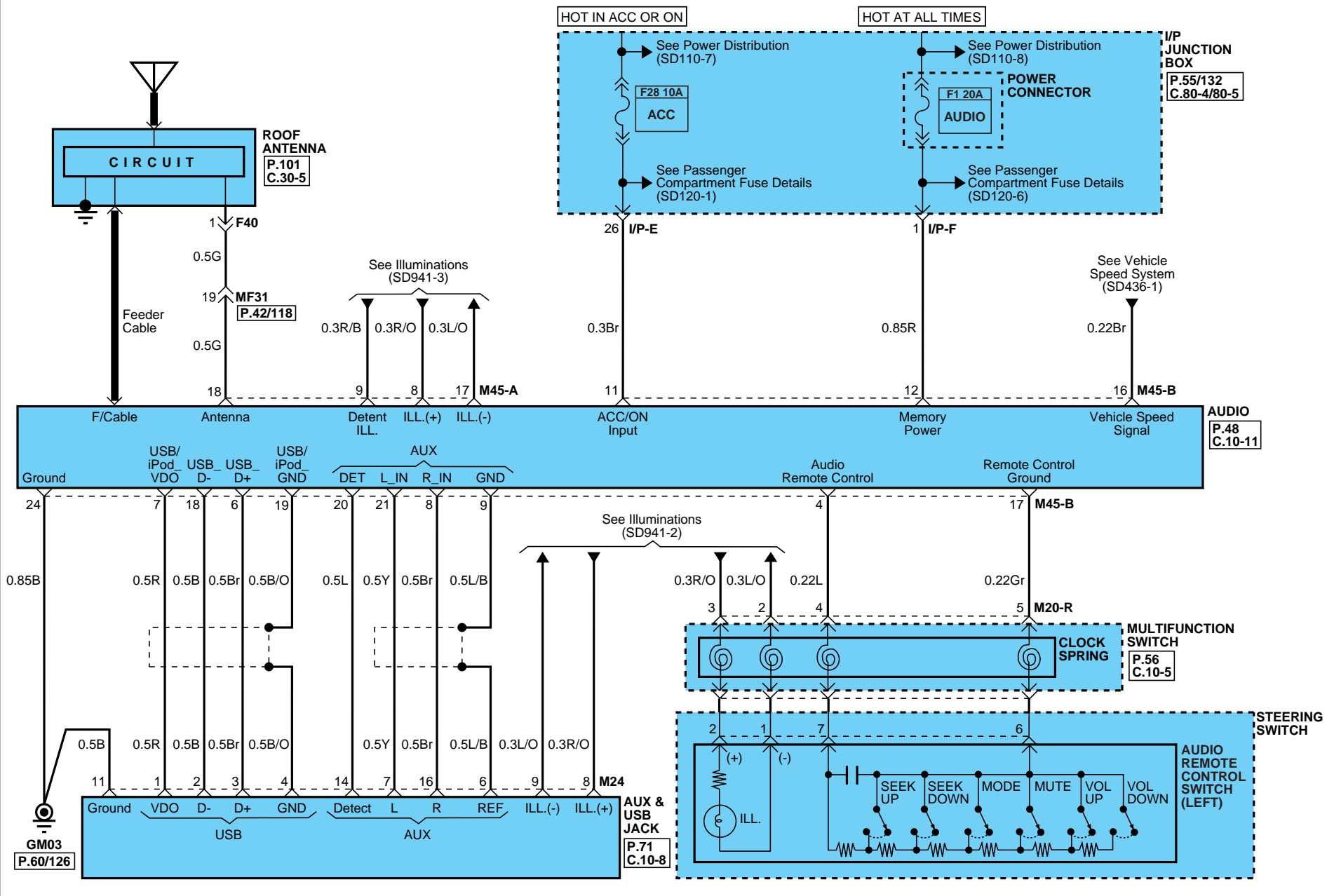
Rear Parking Assist System (2)

SD957-2

MEMO

Audio (1)

SD961-1



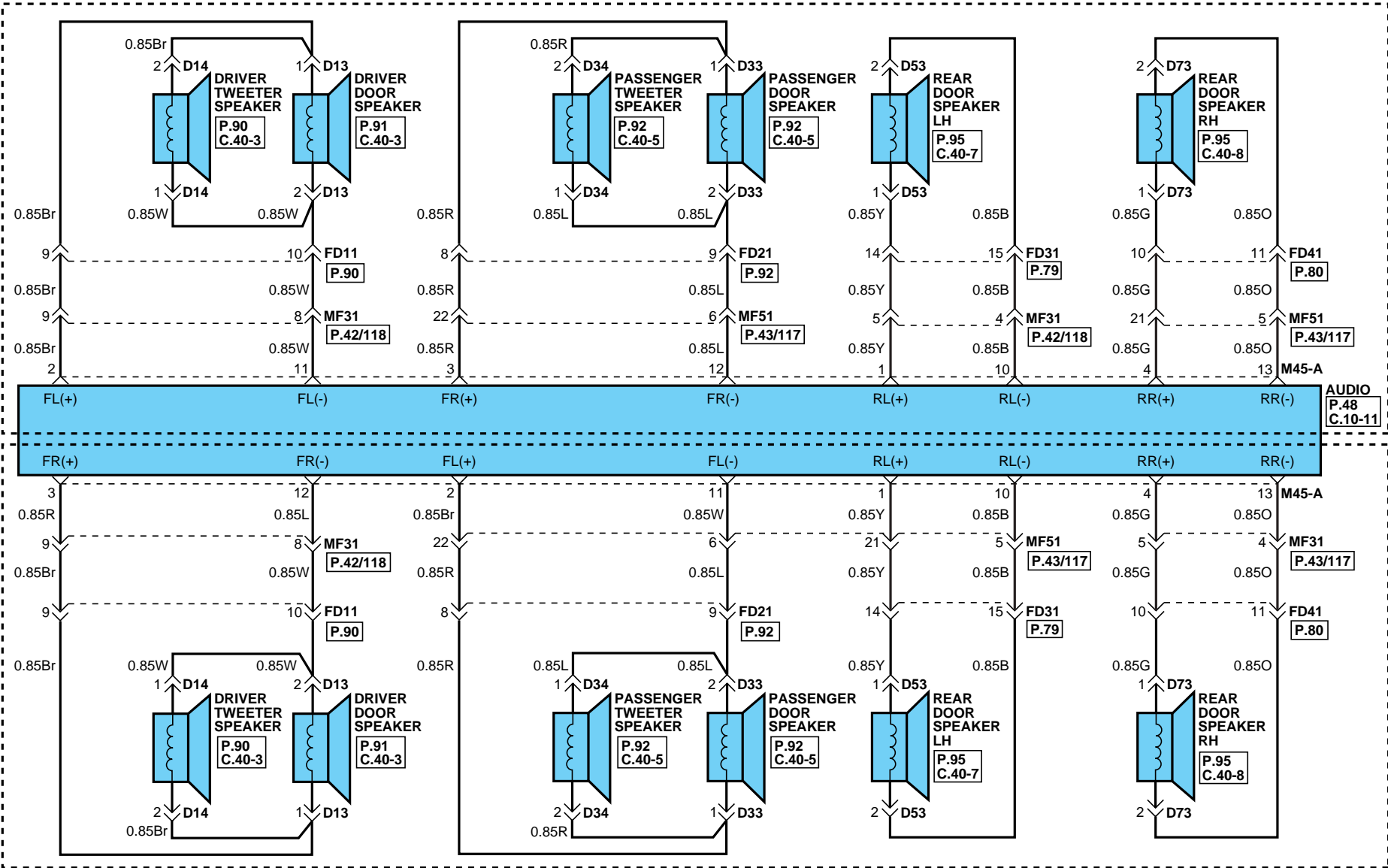
**AUDIO**

**Audio (2)**

**SD961-2**

**W/O AMP**

**LHD**



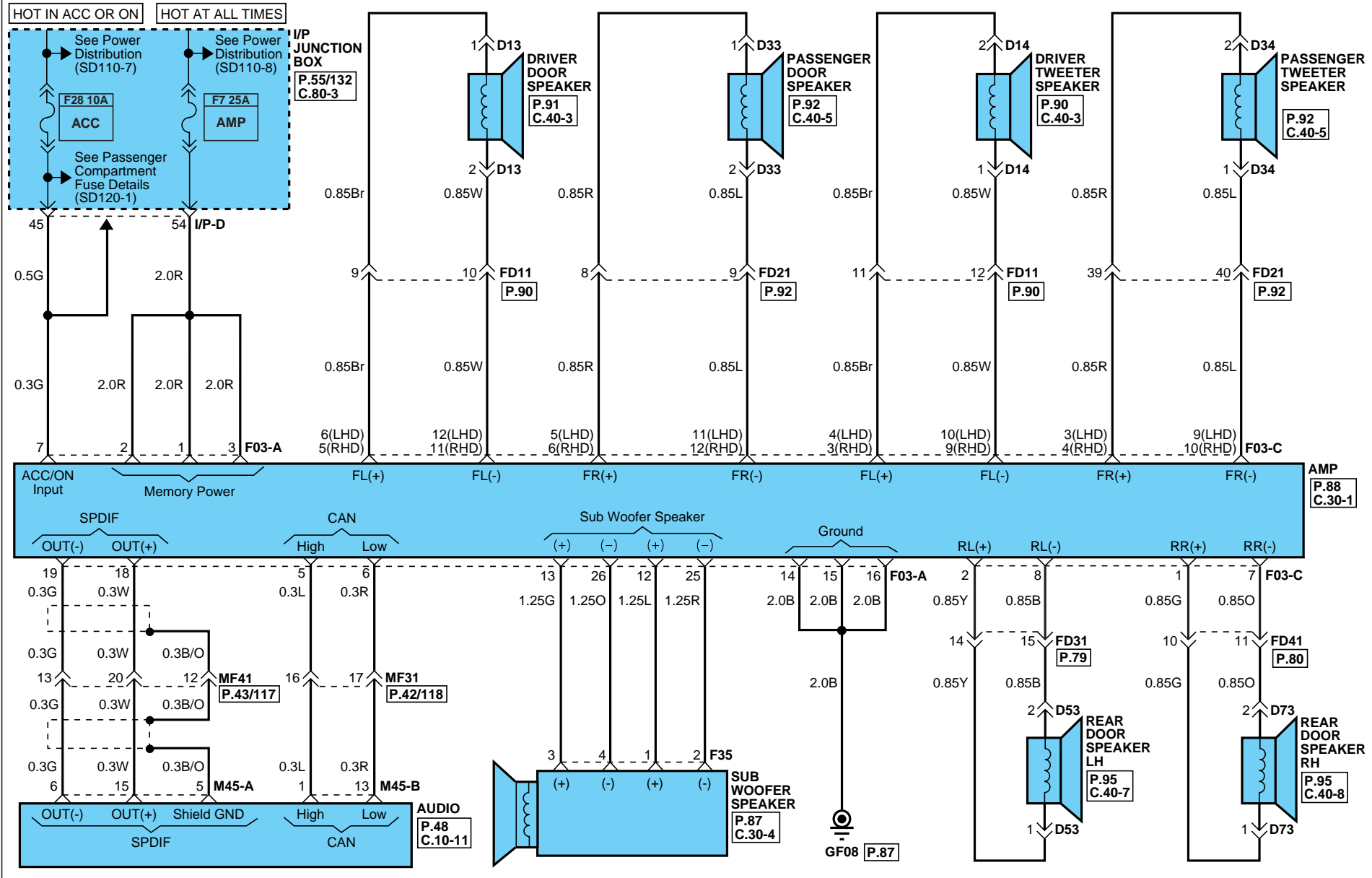
**RHD**

# AUDIO

## Audio (3)

SD961-3

### With AMP





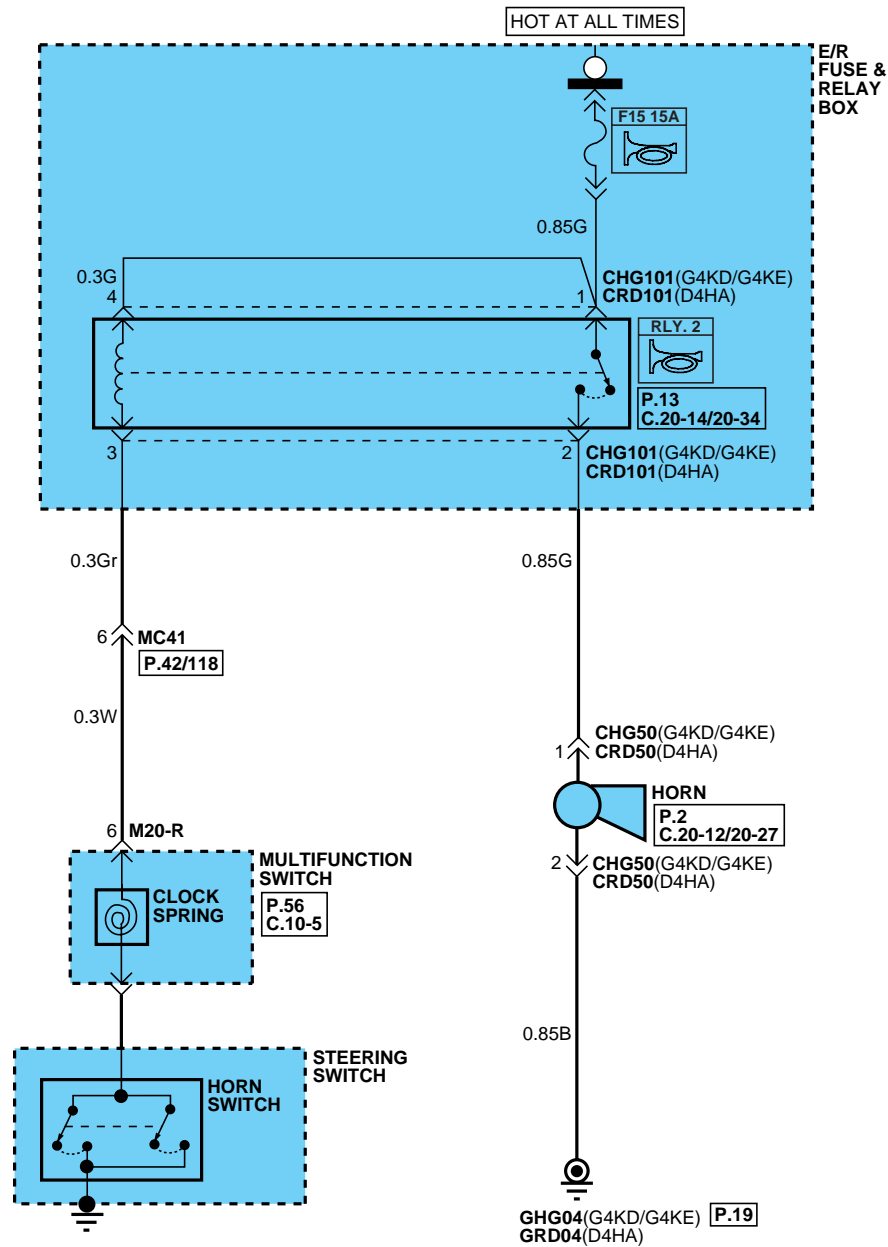
**AUDIO**

Audio (4)

SD961-4

MEMO

Horn (1)



**HORN**

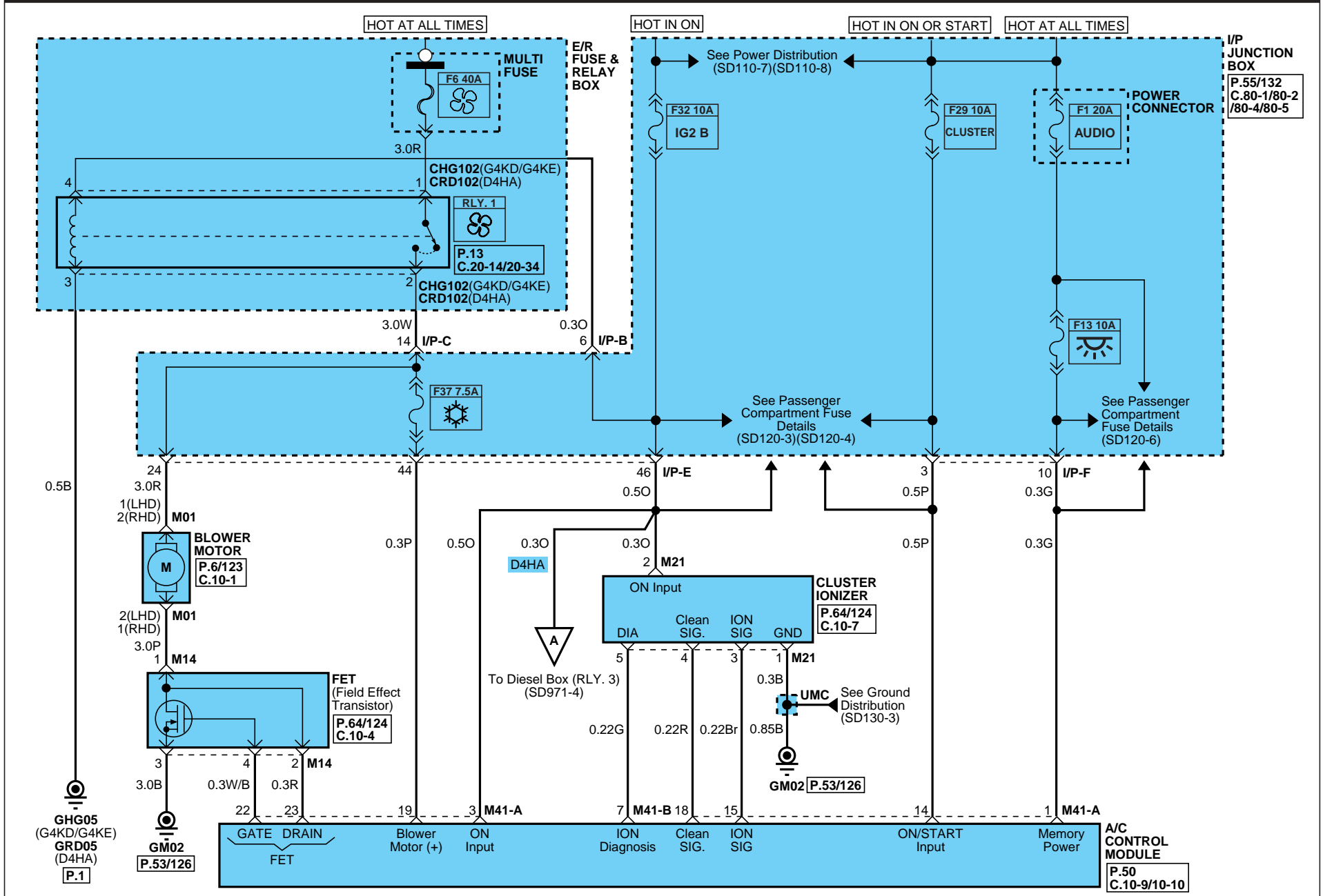
**Horn (2)**

**SD968-2**

**MEMO**

**Blower & A/C Control System (Auto) (1)**

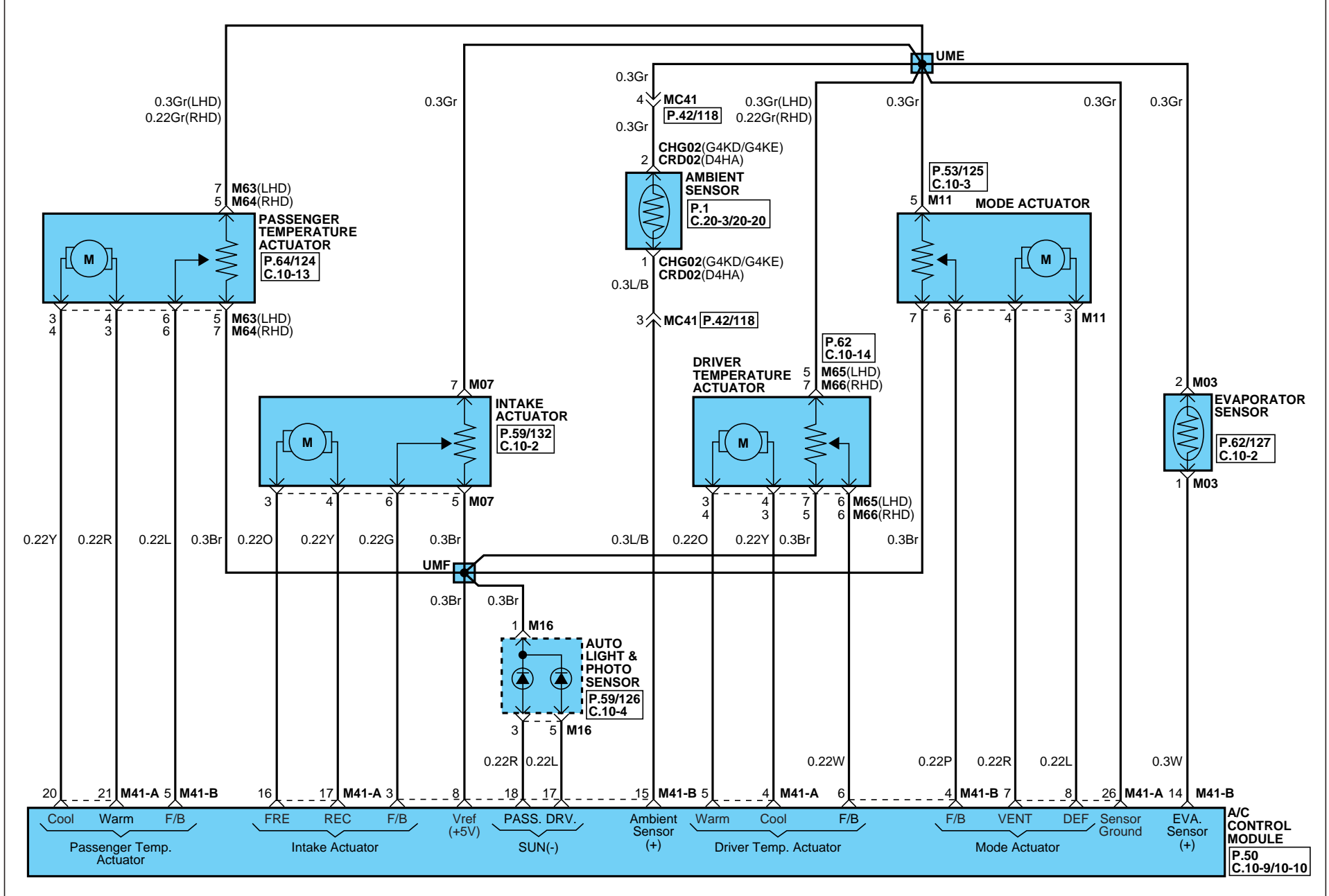
**SD971-1**



# BLOWER & A/C CONTROL SYSTEM (AUTO)

## Blower & A/C Control System (Auto) (2)

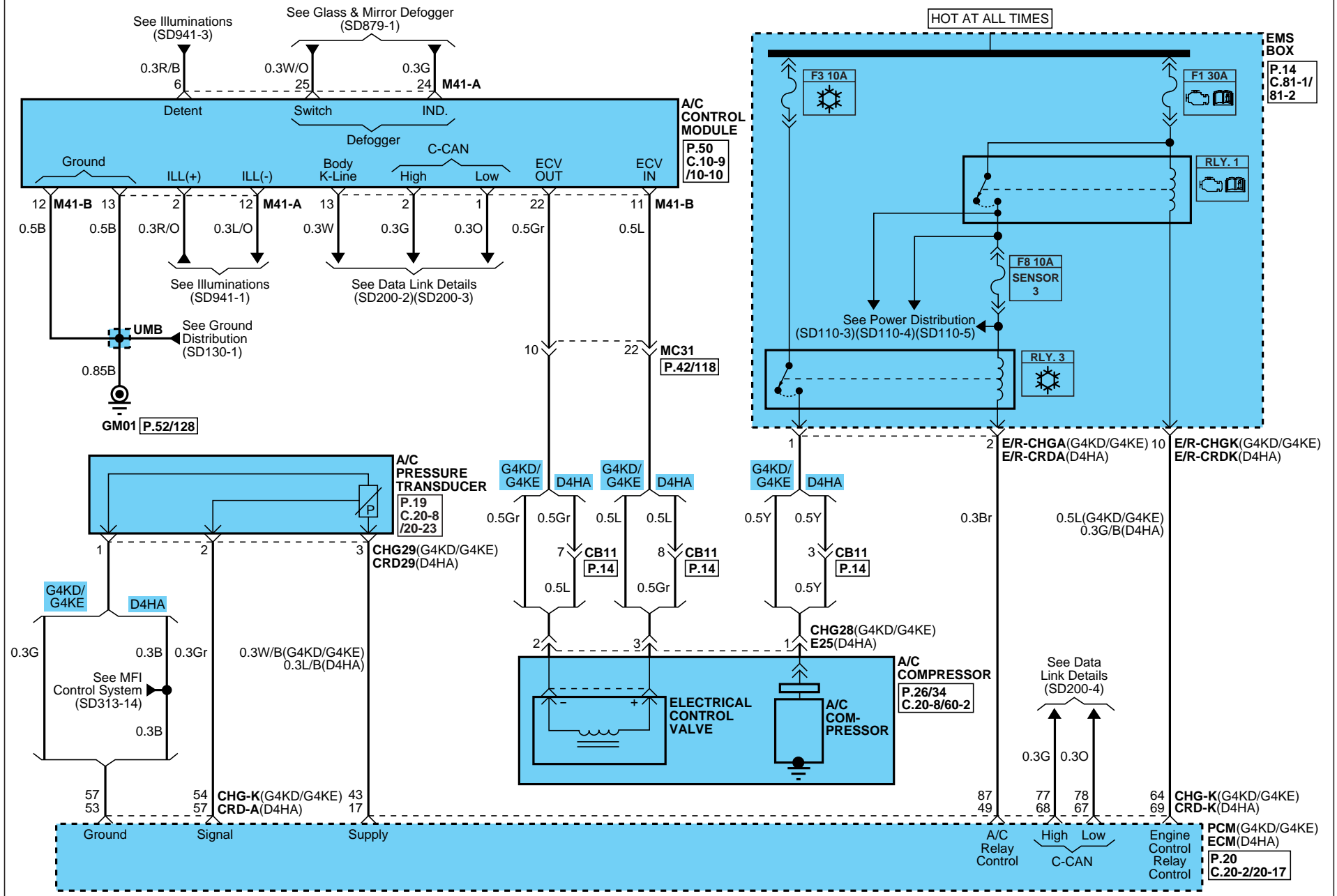
SD971-2



# BLOWER & A/C CONTROL SYSTEM (AUTO)

## Blower & A/C Control System (Auto) (3)

SD971-3

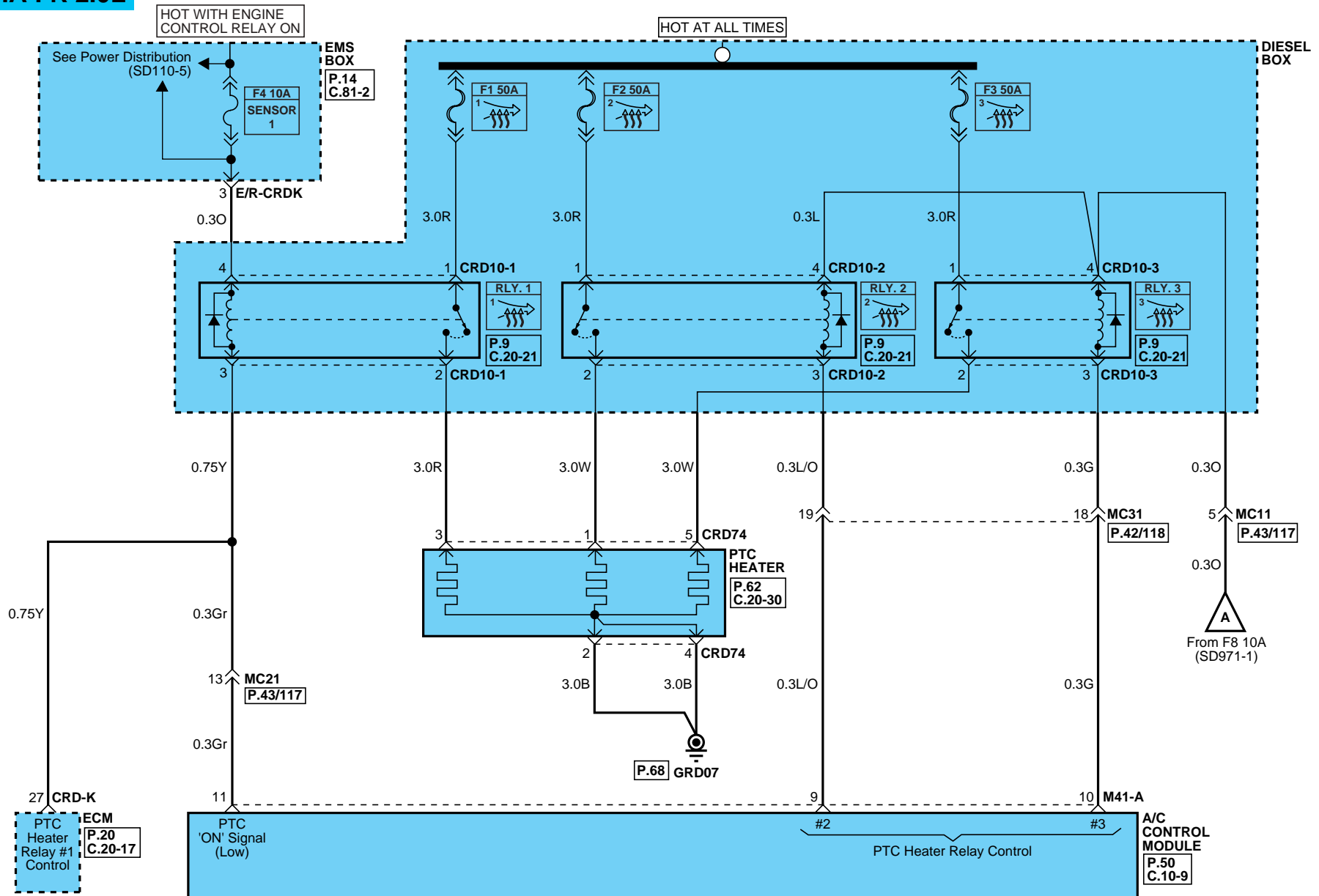


# BLOWER & A/C CONTROL SYSTEM (AUTO)

## Blower & A/C Control System (Auto) (4)

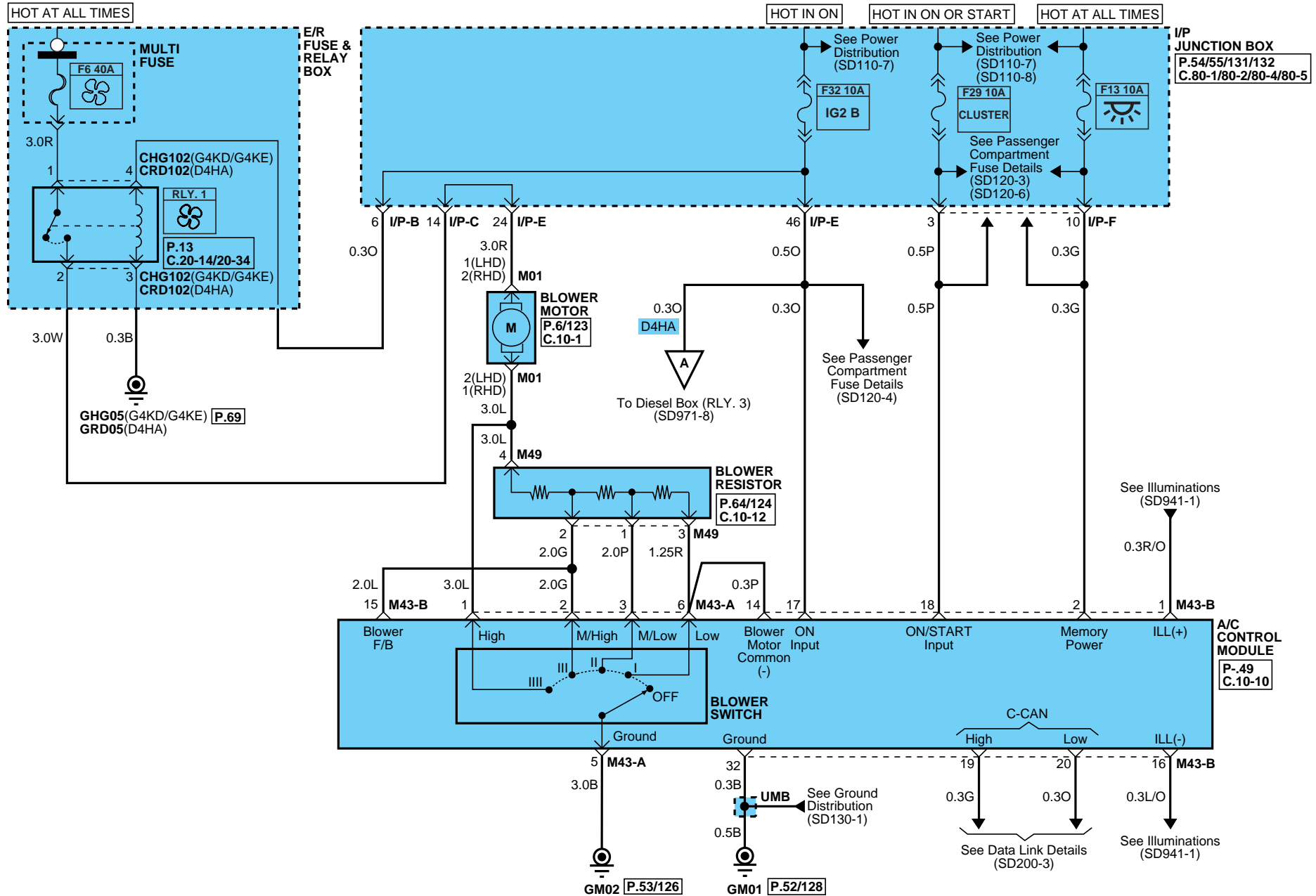
SD971-4

**D4HA : R 2.0L**

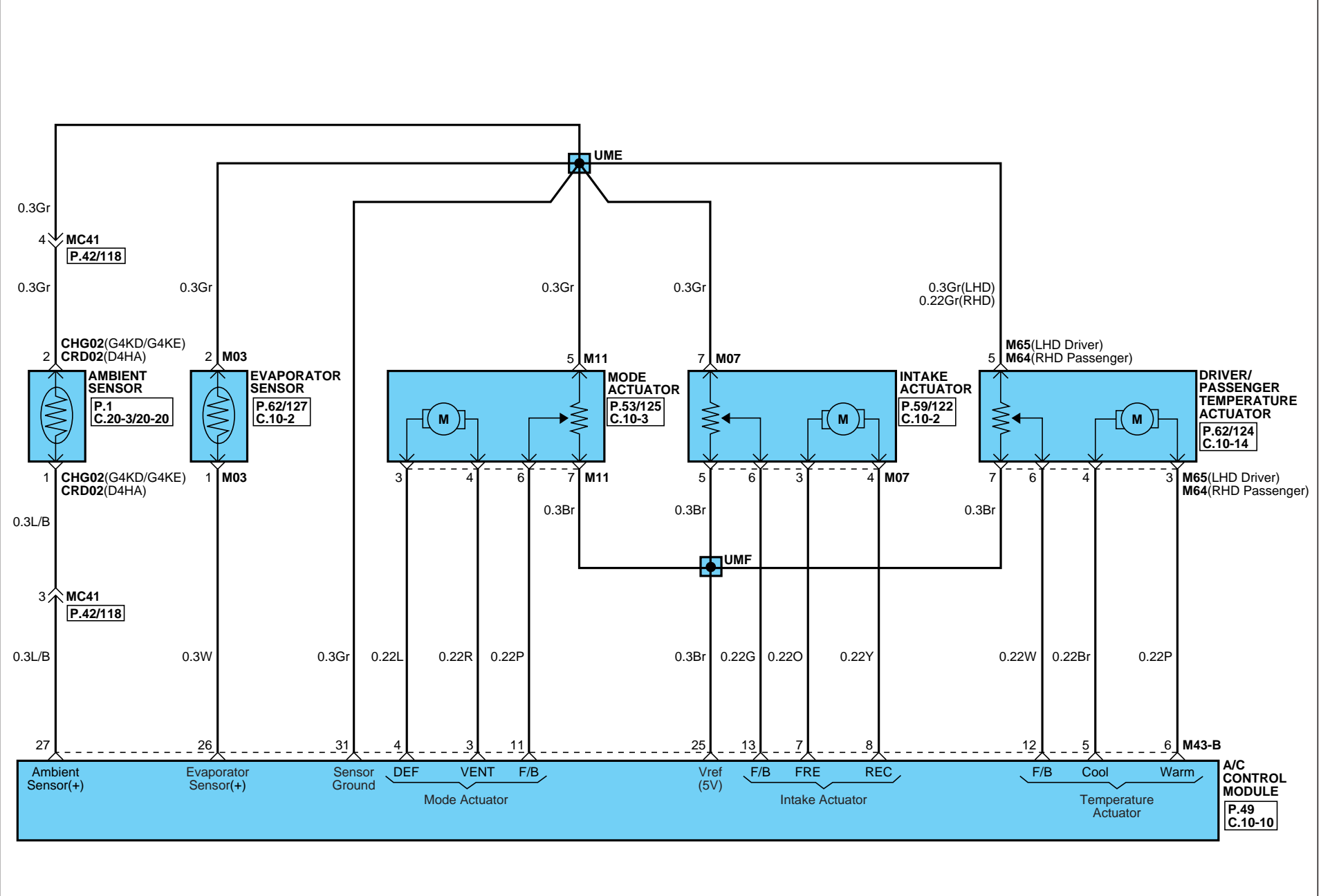


Blower & A/C Control System (Manual) (1)

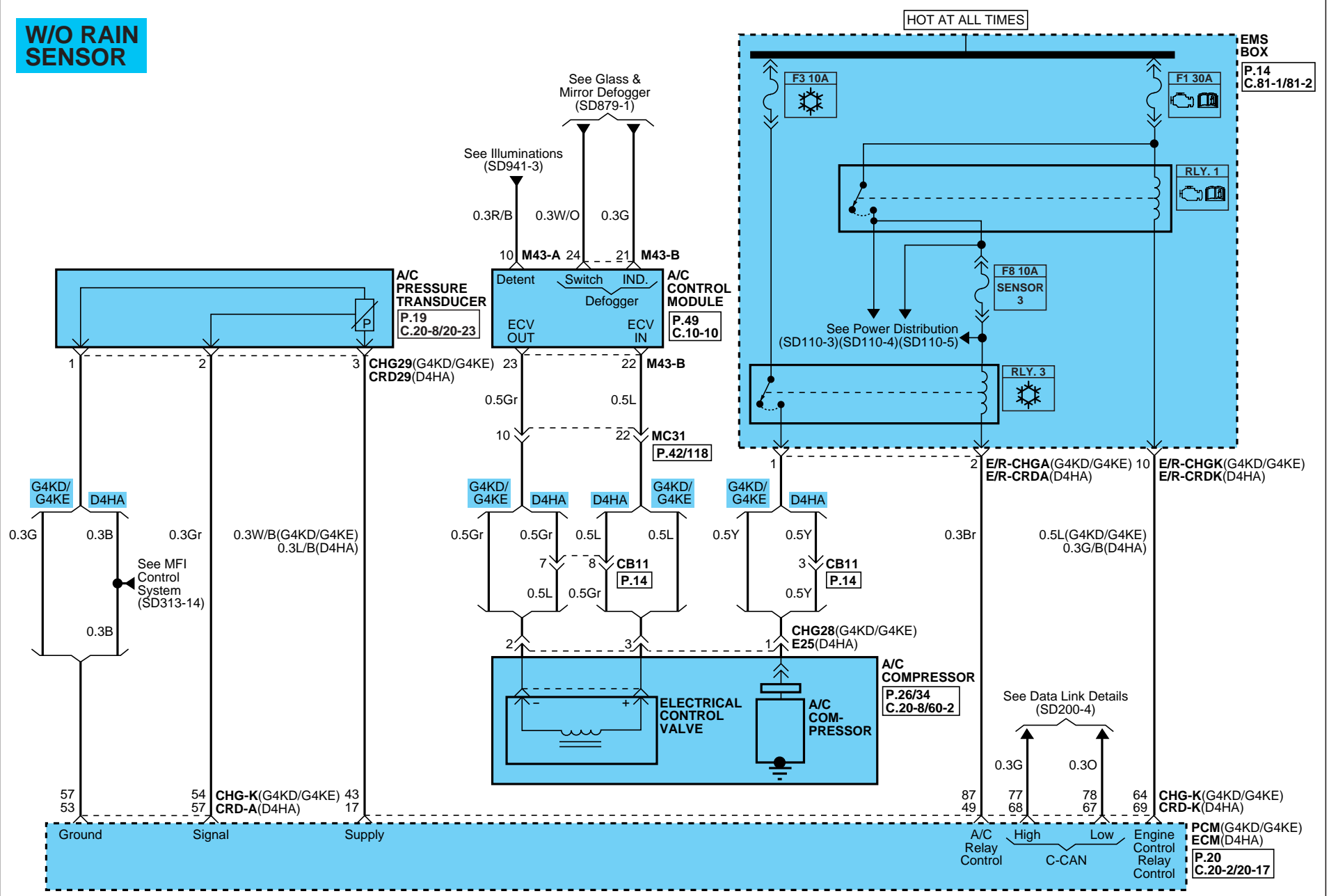
SD971-5



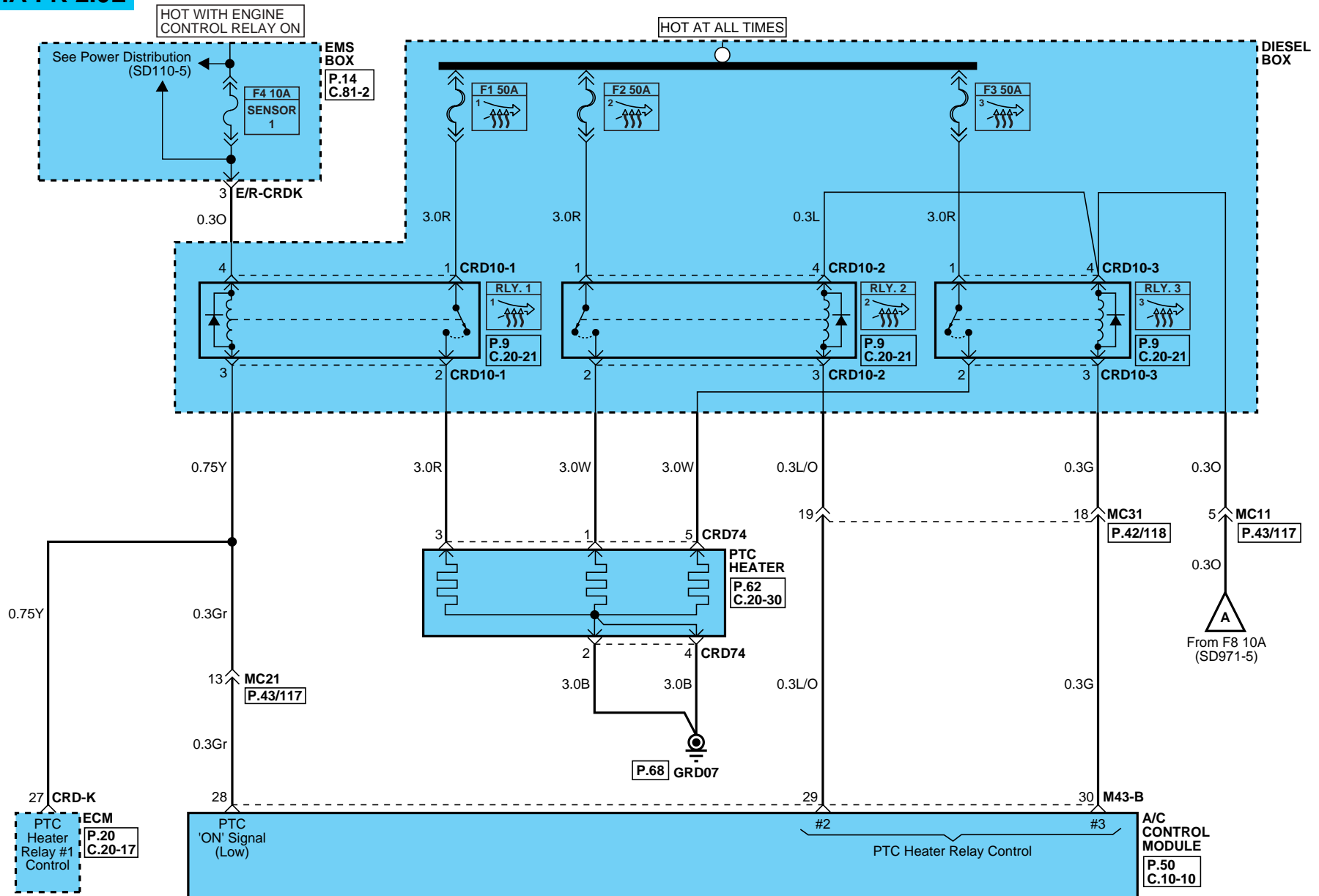




**W/O RAIN SENSOR**

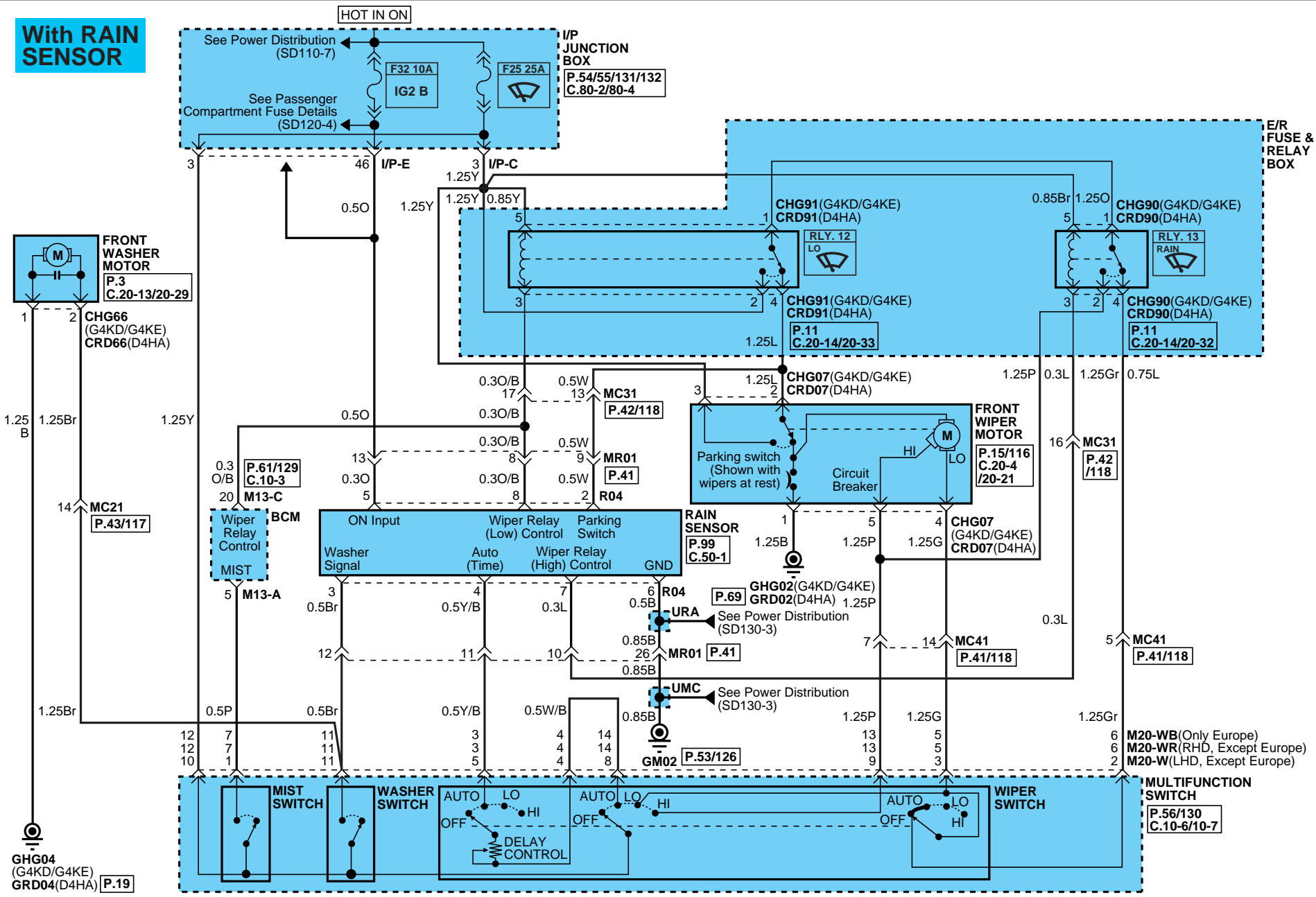


**D4HA : R 2.0L**



Front Wiper & Washer (1)

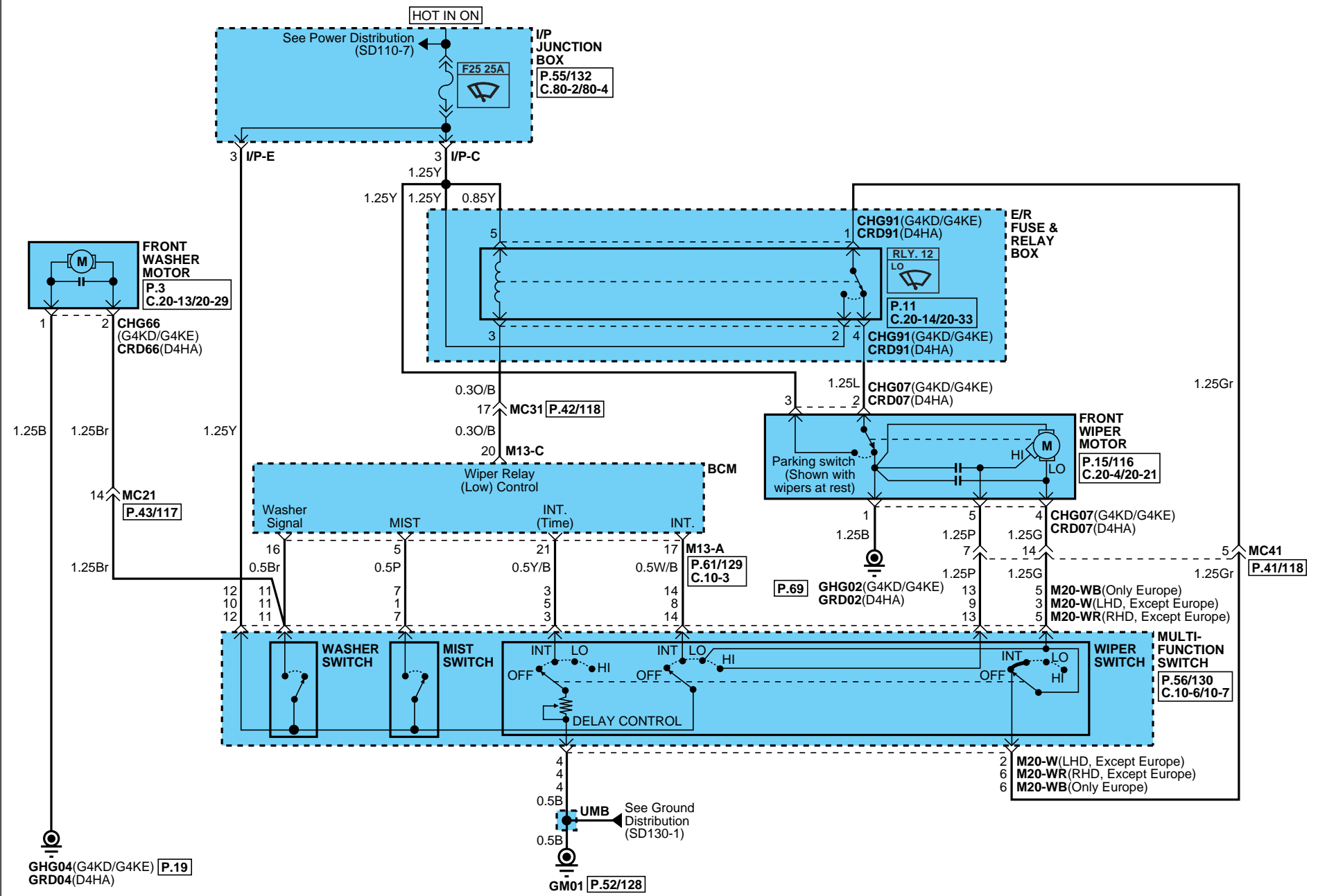
SD981-1



# FRONT WIPER & WASHER

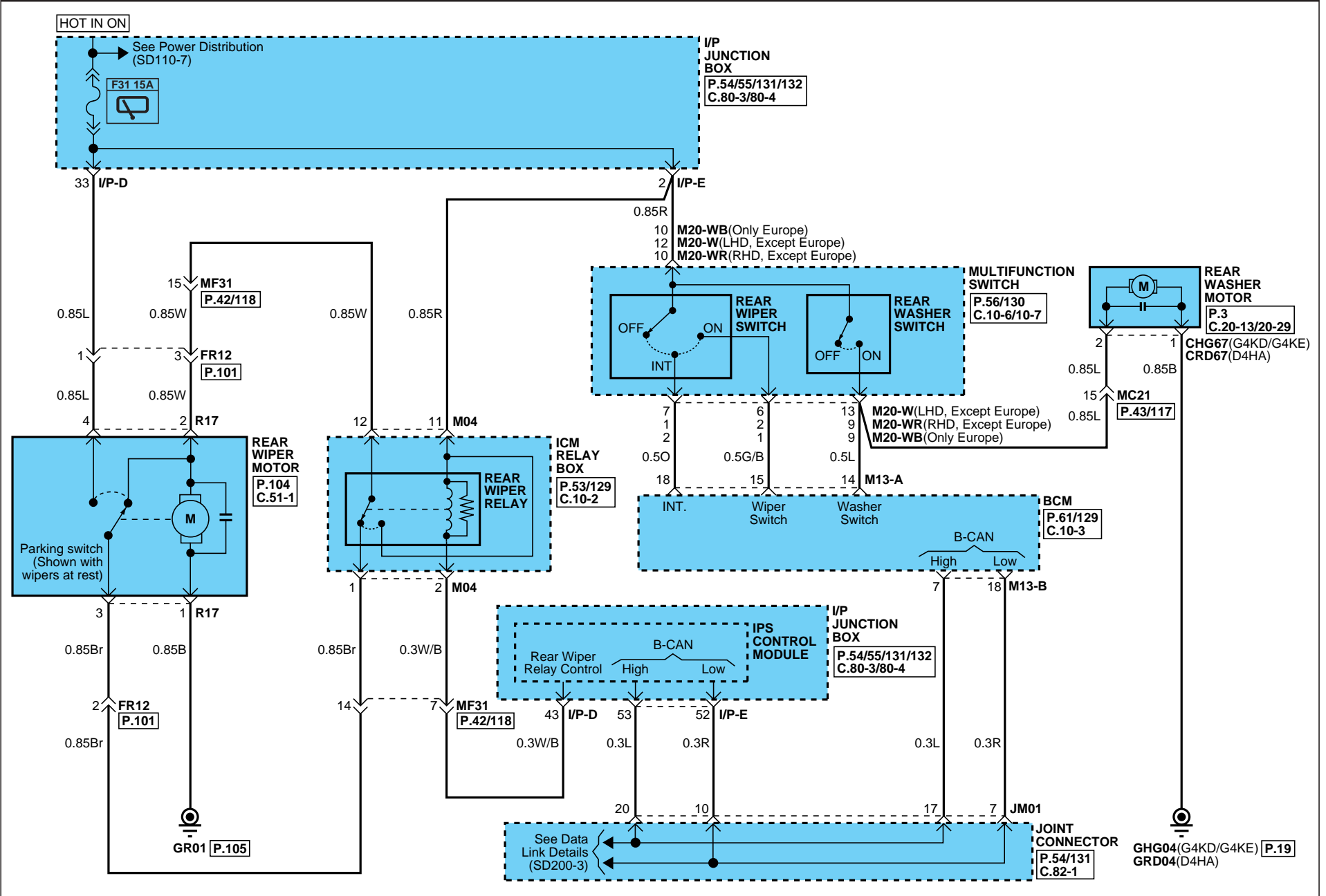
## Front Wiper & Washer (2)

SD981-2



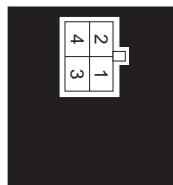
Rear Wiper & Washer (1)

SD982-1



# CONNECTOR VIEWS

Main Harness.....	CV10-1
Fob EXT. Harness .....	CV11-1
Console EXT. Harness.....	CV12-1
Control Harness.....	CV20-1
Floor Harness.....	CV30-1
4WD Harness.....	CV31-1
Door Harness.....	CV40-1
Roof Harness.....	CV50-1
Tail Gate Harness.....	CV51-1
Rear Defogger (-) Harness.....	CV52-1
Rear Bumper Harness.....	CV53-1
Sunroof EXT. Harness.....	CV54-1
Battery Harness.....	CV60-1
Seat Harness.....	CV70-1
I/P Junction Box .....	CV80-1
EMS (Engine Management System) Box.....	CV81-1
Joint Connector.....	CV82-1
Harness Connection.....	CV90-1

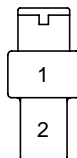


Main Harness (1)

CV10-1

**M01 Blower Motor**

- 2 Female / White (KET\_250\_02F\_W)



**LHD**

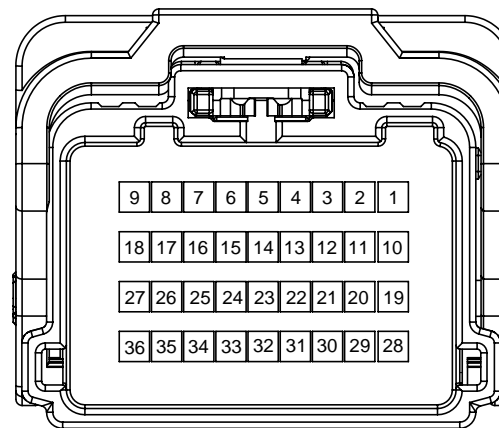
- 1. R E/R Fuse & Relay Box - RLY. 1
- 2. Auto A/C
- P FET (Field Effect Transistor)
- Manual A/C
- L Blower Switch, Blower Resistor

**RHD**

- 1. Auto A/C
- P FET (Field Effect Transistor)
- Manual A/C
- L Blower Switch, Blower Resistor
- 2. R E/R Fuse & Relay Box - RLY. 1

**M02 SRS Control Module**

- 36 Female / Yellow (JST\_WIC\_36F\_Y)



- |        |                            |         |                    |
|--------|----------------------------|---------|--------------------|
| 1. L   | I/P Junction Box - F34 10A | 19. B   | Ground (GM04)      |
| 2. -   | -                          | 20. -   | -                  |
| 3. Gr  | Air Bag IND.               | 21. O/B | BCM (Crash Unlock) |
| 4. L/O | Driver Air Bag - High      | 22. -   | -                  |
| 5. R   | Driver Air Bag - Low       | 23. -   | -                  |
| 6. -   | -                          | 24. -   | -                  |
| 7. -   | -                          | 25. -   | -                  |
| 8. Br  | Driver FIS High            | 26. B   | Passenger FIS High |
| 9. G   | C-CAN High                 | 27. -   | -                  |
| 10. -  | -                          | 28. -   | -                  |
| 11. -  | -                          | 29. -   | -                  |
| 12. -  | -                          | 30. -   | -                  |
| 13. L  | Passenger Air Bag - High   | 31. -   | -                  |
| 14. Br | Passenger Air Bag - Low    | 32. -   | -                  |
| 15. -  | -                          | 33. -   | -                  |
| 16. -  | -                          | 34. -   | -                  |
| 17. W  | Driver FIS Low             | 35. Y   | Passenger FIS Low  |
| 18. O  | C-CAN Low                  | 36. -   | -                  |



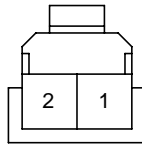
# MAIN HARNESS

## Main Harness (2)

CV10-2

### M03 Evaporator Sensor

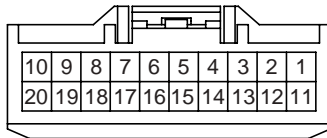
- 2 Female / White (AMP\_070\_02F\_W)



- |      |                               |       |                                    |
|------|-------------------------------|-------|------------------------------------|
| 1. W | A/C Control Module (Sensor +) | 2. Gr | A/C Control Module (Sensor Ground) |
|------|-------------------------------|-------|------------------------------------|

### M04 ICM Relay Box

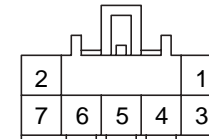
- 20 Female / White (AMP\_090III\_20F\_W)



- |        |   |         |  |
|--------|---|---------|--|
| 1. Br  | Rear Wiper Relay (Rear Wiper Motor)                                     | 11. L   | Rear Wiper Relay (I/P Junction Box - F31 15A)    |
| 2. W/B | Rear Wiper Relay (IPS Control Module)                                   | 12. W   | Rear Wiper Relay (Rear Wiper Motor)              |
| 3. G   | DBC Relay (ESP Control Module, High-Mounted Stop Lamp, Stop Lamp LH/RH) | 13. R   | Rear Fog Lamp Relay (I/P Junction Box - F17 10A) |
| 4. R   | Rear Fog Lamp Relay (BCM)   | 14. G   | Rear Fog Lamp Relay (Rear Fog Lamp LH/RH, IND.)  |
| 5. W/B | DBC Relay (ESP Control Module)  | 15. B   | Dead Lock Relay (Ground (GM02))                  |
| 6. Gr  | DBC Relay (E/R Fuse & Relay Box - F7 7.5A)                              | 16. Y/B | Dead Lock Relay (IPS Control Module)             |
| 7. G   | DBC Relay (Stop Lamp Switch)  | 17. Br  | Dead Lock Relay (I/P Junction Box - F15 15A)     |
| 8. L   | DBC Relay (E/R Fuse & Relay Box - F17 10A)                              | 18. G   | Dead Lock Relay (Door Lock Actuator)             |
| 9. -   | -   | 19. -   | -  |
| 10. -  | -   | 20. -   | -  |

### M07 Intake Actuator

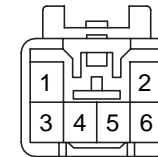
- 7 Female / Blue (KUM\_CDR\_07F\_L)



- |                           |                          |       |                                 |
|---------------------------|--------------------------|-------|---------------------------------|
| 1. -                      | -                        | 5. Br | A/C Control Module (Vref(+5V))  |
| 2. -                      | -                        | 6. Gr | A/C Control Module (F/B)        |
| 3. Auto - Br / Manual - B | A/C Control Module (FRE) | 7. Gr | A/C Control Module (Sensor GND) |
| 4. P                      | A/C Control Module (REC) |       |                                 |

### M09 Ignition Key ILL. & Door Warning Switch (W/O Smart Key)

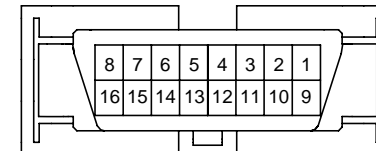
- 6 Male / White (KET\_090II\_06M\_W)



- |       |               |      |                            |
|-------|---------------|------|----------------------------|
| 1. W  | Antenna (-)   | 4. P | BCM - Switch Input         |
| 2. Br | Antenna (+)   | 5. G | BCM - Key Hole ILL.        |
| 3. B  | Ground (GM01) | 6. G | I/P Junction Box - F13 10A |

### M10 Data Link Connector

- 16 Female / Black (MLX\_OBDII\_16F\_B\_SIN)



- |       |                      |       |                           |
|-------|----------------------|-------|---------------------------|
| 1. -  | -                    | 9. G  | I/P Junction Box - F5 10A |
| 2. -  | -                    | 10. - | -                         |
| 3. G  | C-CAN High           | 11. O | C-CAN Low                 |
| 4. B  | Ground (GM01)        | 12. - | -                         |
| 5. B  | Ground (GM01)        | 13. W | Body K-Line               |
| 6. Br | Vehicle Speed Signal | 14. - | -                         |
| 7. -  | -                    | 15. - | -                         |
| 8. -  | -                    | 16. - | -                         |

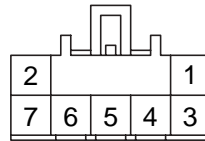
# MAIN HARNESS

## Main Harness (3)

CV10-3

### M11 Mode Actuator

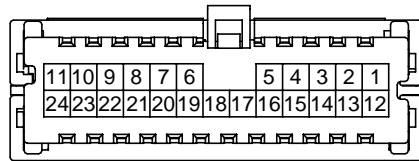
- 7 Female / White (KUM\_CDR\_07F\_W)



1. -	-	5. Gr	A/C Control Module (Sensor GND)
2. -	-	6. P	A/C Control Module (F/B)
3. L	A/C Control Module (DEF)	7. Br	A/C Control Module (Vref(+5V))
4. R	A/C Control Module (VENT)		

### M13-A BCM

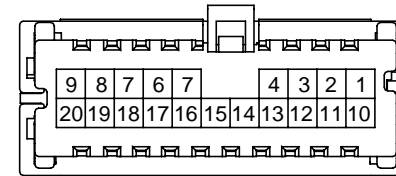
- 24 Female / White (KET\_040III\_24F\_W)



1. R	I/P Junction Box - F13 10A	13. R	Rear Parking Assist Supply
2. P	I/P Junction Box - F29 10A	14. L	Rear Washer Switch
3. W	I/P Junction Box - F30 10A	15. G/B	Rear Wiper Switch
4. L/O	I/P Junction Box - F27 10A	16. Br	Front Washer Switch
5. P	Front Wiper - Mist	17. W/B	Front Wiper - INT.
6. L	Tail Lamp Switch	18. O	Rear Wiper - INT
7. P	Door Warning Switch - Input	19. Y	Hazard Switch
8. O/B	Crash Output	20. G	ATM Shift Lever
9. R	Turn Signal Switch RH	21. Y/B	Front Wiper - INT. (Time)
10. W/O	Rear Defogger Switch Input	22. W	Turn Signal Switch LH
11. Y	Auto Light Switch	23. -	-
12. -	-	24. B	Ground (GM01)

### M13-B BCM

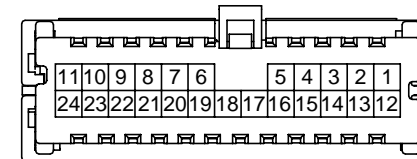
- 20 Female / White (KET\_040III\_20F\_W)



1. O	Head Lamp High Switch	11. Gr	Rear Fog Lamp Switch
2. L	Head Lamp Switch	12. -	-
3. -	-	13. G	Rear Parking Assist Module (LIN 1)
4. W	K-Line	14. B	Rear Parking Assist Ground
5. G	Rear Parking Assist Module (LIN 3)	15. Gr	Rear Parking Assist Module (LIN 2)
6. R	Auto Light Sensor Supply	16. G/B	Rear Parking Assist Module (LIN 4)
7. L	B-CAN High	17. -	-
8. Gr	Auto Light Sensor Signal	18. R	B-CAN Low
9. -	-	19. R	Auto Light Sensor Ground
10. O	Front Fog Lamp Switch	20. B	Head Lamp Low Signal

### M13-C BCM

- 24 Female / Gray (KET\_040III\_24F\_GR\_B)



1. -	-	13. -	-
2. -	-	14. -	-
3. G	AST Seat Belt IND.	15. -	-
4. G/B	Key Solenoid	16. G	Safety Power Window
5. Br	Door Open Signal	17. Gr	Rear Parking Assist Buzzer
6. W	Turn/Hazard Lamp Output - FL	18. G/O	Key Hole ILL. Control
7. P	Turn/Hazard Lamp Output - FR	19. -	-
8. W	Turn/Hazard Lamp Output - RL	20. O/B	Front Wiper Relay
9. P	Turn/Hazard Lamp Output - RR	21. -	-
10. Br	I/P Junction Box - F16 15A	22. -	-
11. Br	I/P Junction Box - F16 15A	23. P	Rear Fog Lamp Relay Control
12. B	Ground (GM01)	24. -	-

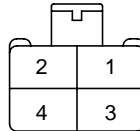
# MAIN HARNESS

## Main Harness (4)

CV10-4

### M14 FET (Field Effect Transistor) (Auto A/C)

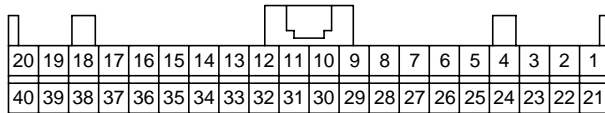
- 4 Female / Black (KET\_DSD\_04F\_B\_L)



- |      |              |        |               |
|------|--------------|--------|---------------|
| 1. P | Blower Motor | 3. B   | Ground (GM02) |
| 2. R | FET-Drain    | 4. W/B | FET-Gate      |

### M15 Instrument Cluster

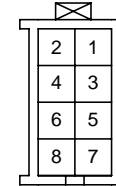
- 40 Female / White (AMP\_025\_40F\_W)



- |          |   |          |  |
|----------|---|----------|--|
| 1. -     | -   | 21. B    | Power Ground (GM01)  |
| 2. B     | Ground (GM01)   | 22. W    | ATM Shift Lever ILL. (P IND.)  |
| 3. -     | -   | 23. R    | ATM Shift Lever ILL. (R IND.)  |
| 4. -     | -   | 24. P    | ATM Shift Lever ILL. (N IND.)  |
| 5. G/O   | Rheostat Out  | 25. L    | ATM Shift Lever ILL. (D IND.)  |
| 6. -     | -   | 26. -    | -  |
| 7. Gr    | I/P Junction Box - F29 10A<br>: Charge IND.   | 27. Br   | A/T - 4 P Output :<br>Data Link Connector, Audio<br>ECM, Sunroof Motor |
| 8. P     | [D4HA]<br>Fuel Filter Warning Sensor  | 28. R/B  | ILL. (Detent Out)  |
| 9. Y/B   | Oil Pressure  | 29. Br   | Trip Switch (Reset)  |
| 10. Gr   | SRS Control Module (Air Bag IND.)   | 30. R    | Trip Switch (Mode)   |
| 11. L/O  | I/P Junction Box - F23 10A  | 31. G    | Multi Switch<br>( Rheostat Down Switch)                                |
| 12. Y/B  | ECM/PCM (Check Engine IND.)   | 32. L    | Multi Switch<br>( Rheostat Up Switch)                                  |
| 13. Br/O | [With Smart Key]<br>Smart Key Control Module<br>[W/O Smart Key]<br>ECM/PCM (IMMO. IND.) | 33. O    | Fuel Sender (+)  |
| 14. -    | -   | 34. L    | B-CAN (High)   |
| 15. G/O  | Multi Switch (Active ECO Switch)  | 35. R    | B-CAN (Low)  |
| 16. -    | -   | 36. G    | C-CAN (High)   |
| 17. -    | -   | 37. R    | C-CAN (Low)  |
| 18. -    | -   | 38. R/O  | ILL (+)  |
| 19. B    | Sensor Ground (GM01)  | 39. Gr/O | I/P Junction Box - F29 10A   |
| 20. Gr   | Fuel Sender (-)   | 40. G    | I/P Junction Box - F13 10A   |

### M16 Auto Light & Photo Sensor

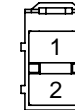
- 8 Female / White (KET\_030\_08F\_W)



- |       |                                |       |                                  |
|-------|--------------------------------|-------|----------------------------------|
| 1. Br | Auto A/C Control Module - Vref | 5. L  | Auto A/C - Sun (-) (Driver)      |
| 2. -  | -                              | 6. Gr | BCM (Auto Light Sensor (Signal)) |
| 3. R  | Auto A/C - Sun (-) (Passenger) | 7. R  | BCM (Auto Light Sensor (Supply)) |
| 4. -  | -                              | 8. W  | BCM (Auto Light Sensor (Ground)) |

### M17-A EPS Control Module

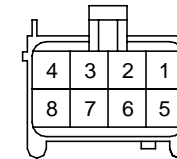
- 2 Female / Black (AMP\_375\_02F\_B)



- |      |               |      |                               |
|------|---------------|------|-------------------------------|
| 1. B | Ground (GM05) | 2. R | E/R Fuse & Relay Box - F1 30A |
|------|---------------|------|-------------------------------|

### M17-B EPS Control Module

- 8 Female / Gray (PKD\_MIC64\_08F\_GR)



- |      |                            |      |              |
|------|----------------------------|------|--------------|
| 1. R | I/P Junction Box - F21 10A | 5. - | -            |
| 2. - | -                          | 6. - | -            |
| 3. - | -                          | 7. G | C-CAN (High) |
| 4. - | -                          | 8. O | C-CAN (Low)  |

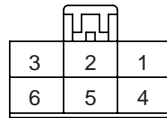
# MAIN HARNESS

## Main Harness (5)

CV10-5

### M18 Ignition Switch (W/O Smart Key)

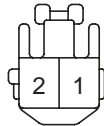
- 6 Female / Black (KUM\_DSD\_06F\_B)



- |      |                                 |      |  |
|------|---------------------------------|------|--|
| 1. R | E/R Fuse & Relay Box - F13 40A  | 4. G | I/P Junction Box   |
| 2. L | I/P Junction Box (ON Output)    | 5. P | (ON or START Output)   |
| 3. W | I/P Junction Box (START Output) | 6. W | E/R Fuse & Relay Box - F12 40A<br>I/P Junction Box<br>(ACC or ON Output) |

### M19 Key Solenoid (W/O Smart Key & A/T)

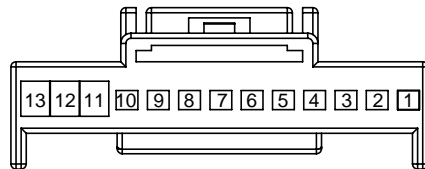
- 2 Female / White (KET\_090III\_02F\_W\_L)



- |        |                           |        |     |
|--------|---------------------------|--------|-----|
| 1. W/B | I/P Junction Box - F8 10A | 2. G/B | BCM |
|--------|---------------------------|--------|-----|

### M20-L Multifunction Switch (Light) (LHD)

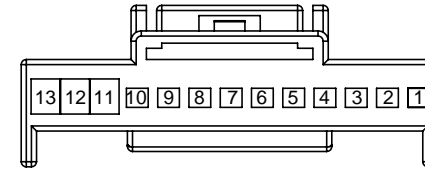
- 13 Female / White (KET\_0409\_13F\_W)



- |       |                             |       |                                  |
|-------|-----------------------------|-------|----------------------------------|
| 1. L  | BCM (Tail Lamp Switch)      | 8. -  | -                                |
| 2. B  | Ground (GM01)               | 9. O  | BCM (Head Lamp High Switch)      |
| 3. Y  | BCM (Auto Light Switch)     | 10. B | BCM (Head Lamp Low Signal)       |
| 4. L  | BCM (Head Lamp Switch)      | 11. W | BCM (Turn Signal Lamp Switch LH) |
| 5. B  | Ground (GM01)               | 12. B | Ground (GM02)                    |
| 6. O  | BCM (Front Fog Lamp Switch) | 13. R | BCM (Turn Signal Lamp Switch LH) |
| 7. Gr | BCM (Rear Fog Lamp Switch)  |       |                                  |

### M20-LR Multifunction Switch (Light) (RHD)

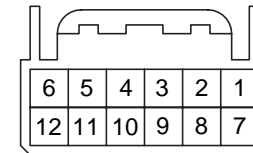
- 13 Female / White (KET\_0409\_13F\_W\_R)



- |      |                                  |       |                             |
|------|----------------------------------|-------|-----------------------------|
| 1. W | BCM - Turn Signal Lamp Switch LH | 8. O  | BCM - Front Fog Lamp Switch |
| 2. B | Ground (GM02)                    | 9. Gr | BCM - Rear Fog Lamp Switch  |
| 3. P | BCM - Turn Signal Lamp Switch RH | 10. L | BCM - Head Lamp Switch      |
| 4. B | BCM - Head Lamp Low Signal       | 11. Y | BCM - Auto Light Switch     |
| 5. B | BCM - Head Lamp High Switch      | 12. B | Ground (GM01)               |
| 6. - | -                                | 13. Y | BCM - Tail Lamp Switch      |
| 7. B | Ground (GM01)                    |       |                             |

### M20-R Multifunction Switch (Remote Control)

- 12 Female / White (AMP\_025\_12F\_W)



- |        |                               |       |                                 |
|--------|-------------------------------|-------|---------------------------------|
| 1. -   | -                             | 7. -  | -                               |
| 2. L/O | ILL (-)                       | 8. -  | -                               |
| 3. R/O | ILL (+)                       | 9. -  | -                               |
| 4. L   | Audio Remote Control          | 10. G | E/R Fuse & Relay Box - F23 7.5A |
| 5. Gr  | Audio Remote Control Ground   | 11. O | Cruise Control Switch Signal    |
| 6. Gr  | E/R Fuse & Relay Box - RLY. 2 | 12. B | Cruise Control Switch Ground    |

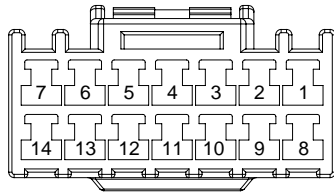
# MAIN HARNESS

## Main Harness (6)

CV10-6

### M20-W Multifunction Switch (Wiper) (LHD, Except Europe)

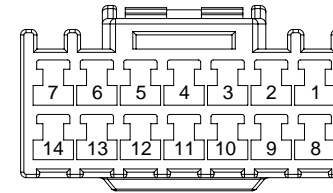
- 14 Female / White (KET\_N090III\_14F\_W)



- |        |   |        |   |
|--------|---|--------|---|
| 1. P   | BCM - Front Wiper Switch (Mist)   | 6. G/B | BCM - Rear Wiper Switch (ON)  |
| 2. Gr  | [With Rain Sensor]<br>E/R Fuse & Relay Box - RLY. 13                    | 7. O   | BCM - Rear Wiper Switch (INT.)  |
|        | [W/O Rain Sensor]<br>E/R Fuse & Relay Box - RLY. 12                     | 8. W/B | [With Rain Sensor]<br>Multifunction Switch<br>(Front Wiper Auto Switch) |
| 3. G   | Front Wiper Motor<br>(Front Wiper Motor Lo Switch)                      |        | [W/O Rain Sensor]<br>BCM - Front Wiper Switch (INT.)                    |
| 4. W/B | [With Rain Sensor]<br>Multifunction Switch<br>(Front Wiper Auto Switch) | 9. P   | Front Wiper Motor<br>(Front Wiper Motor Hi Switch)                      |
| B      | [W/O Rain Sensor]<br>Ground (GM01)                                      | 10. Y  | I/P Junction Box - F25 25A  |
| 5. Y/B | [With Rain Sensor]<br>BCM - Front Wiper Switch (INT. Time)              | 11. Br | BCM - Front Washer Signal,<br>Front Washer Motor                        |
|        | [W/O Rain Sensor]<br>BCM - Front Wiper Switch (INT.)                    | 12. R  | I/P Junction Box - F31 15A  |
|        |   | 13. L  | BCM - Rear Washer Switch  |
|        |   | 14. —  | —   |

### M20-WB Multifunction Switch (Wiper) (Only Europe)

- 14 Female / White (KET\_N090III\_14F\_W)



- |        |   |         |   |
|--------|---|---------|---|
| 1. G/B | BCM - Rear Wiper Switch (ON)  | 8. W/B  | [With Rain Sensor]<br>Multifunction Switch<br>(Front Wiper Auto Switch) |
| 2. O   | BCM - Rear Wiper Switch (INT.)  |         | [W/O Rain Sensor]<br>BCM - Front Wiper Switch (INT.)                    |
| 3. Y/B | [With Rain Sensor]<br>BCM - Front Wiper Switch (INT. Time)              | 9. L    | BCM - Rear Washer Switch  |
|        | [W/O Rain Sensor]<br>BCM - Front Wiper Switch (INT)                     | 10. R   | I/P Junction Box - F31 15A  |
| 4. W/B | [With Rain Sensor]<br>Multifunction Switch<br>(Front Wiper Auto Switch) | 11. Br  | BCM - Front Washer Signal,<br>Front Washer Motor                        |
| B      | [W/O Rain Sensor]<br>Ground (GM01)                                      | 12. Br  | I/P Junction Box - F25 25A  |
| 5. G   | Front Wiper Motor<br>(Front Wiper Motor Lo Switch)                      | 13. P   | Front Wiper Motor<br>(Front Wiper Motor Hi Switch)                      |
| 6. Gr  | [With Rain Sensor]<br>E/R Fuse & Relay Box - RLY. 13                    | 14. W/B | [With Rain Sensor]<br>Multifunction Switch<br>(Front Wiper Auto Switch) |
|        | [W/O Rain Sensor]<br>E/R Fuse & Relay Box - RLY. 12                     |         | [W/O Rain Sensor]<br>BCM - Front Wiper Switch (INT.)                    |
| 7. O   | BCM - Front Wiper Switch (Mist)   |         |   |

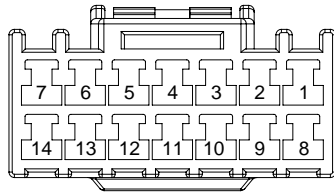
# MAIN HARNESS

## Main Harness (7)

CV10-7

### M20-WR Multifunction Switch (Wiper) (RHD, Except Europe)

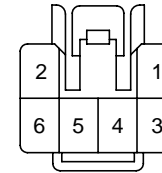
- 14 Female / White (KET\_N090III\_14F\_W)



1. O	BCM - Rear Wiper Switch (ON)	8. W/B	[With Rain Sensor] Multifunction Switch
2. G/B	BCM - Rear Wiper Switch (INT.)		(Front Wiper Auto Switch)
3. Y/B	[With Rain Sensor] BCM - Front Wiper Switch (INT. Time)		[W/O Rain Sensor] BCM - Front Wiper Switch (INT.)
	[W/O Rain Sensor] BCM - Front Wiper Switch (INT)	9. L	BCM - Rear Washer Switch
4. W/B	[With Rain Sensor] Multifunction Switch	10. R	I/P Junction Box - F31 15A
	(Front Wiper Auto Switch)	11. Br	BCM - Front Washer Signal, Front Washer Motor
B	[W/O Rain Sensor] Ground (GM01)	12. Br	I/P Junction Box - F25 25A
5. G	Front Wiper Motor	13. P	Front Wiper Motor
	(Front Wiper Motor Lo Switch)		(Front Wiper Motor Hi Switch)
6. Gr	[With Rain Sensor] E/R Fuse & Relay Box - RLY. 13	14. W/B	[With Rain Sensor] Multifunction Switch
	[W/O Rain Sensor] E/R Fuse & Relay Box - RLY. 12		(Front Wiper Auto Switch)
7. O	BCM - Front Wiper Switch (Mist)		[W/O Rain Sensor] BCM - Front Wiper Switch (INT.)

### M21 Cluster Ionizer (Auto A/C)

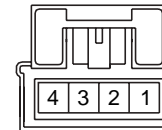
- 6 Female / White (KET\_090\_06F\_W)



1. B	Ground (GM02)	4. R	A/C Control Module (Clean SIG)
2. O	I/P Junction Box - F32 10A	5. G	A/C Control Module (Diagnosis)
3. Br	A/C Control Module (ION SIG)	6. -	-

### M22 Driver Air Bag

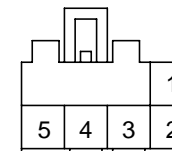
- 4 Female / Yellow (YAZ\_040\_04F\_Y)



1. R/B	SRS Control Module (Low)	3. -	-
2. L/O	SRS Control Module (High)	4. -	-

### M23 Immobilizer Module (W/O Smart Key)

- 5 Female / White (KUM\_CDR\_05F\_W)



1. W	Ignition Key ILL. & Door Warning Switch (Antenna (+))	4. R	[G4KD/G4KE] EMS Box - F4 10A
2. Br	Ignition Key ILL. & Door Warning Switch (Antenna (-))		[D4HA] EMS Box - F7 10A
3. B	[G4KD/G4KE] Ground (GHG07)	5. L	PCM/ECM (Data Line)
	[D4HA] ECM (Ground)		

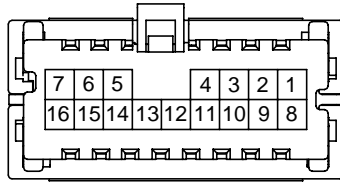
# MAIN HARNESS

## Main Harness (8)

CV10-8

### M24 AUX & USB Jack (W/O A/V Navigation)

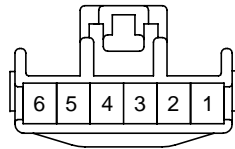
- 16 Female / White (KET\_040III\_16F\_W)



1. R	Audio (USB VDO)	9. L/O	ILL (-)
2. G	Audio (USB D(-))	10. -	-
3. Br	Audio (USB D(+))	11. B	Ground (GM03)
4. B	Audio (USB GND/Shield)	12. -	-
5. -	-	13. -	-
6. B	Audio (AUX GND/Shield)	14. L	Audio (AUX Detect)
7. Y	Audio (AUX L)	15. -	-
8. R/O	ILL (+)	16. Br	Audio (AUX R)

### M29 Head Lamp Leveling Device Switch (LHD)

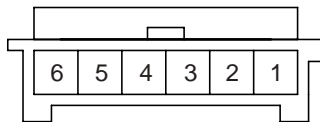
- 6 Female / White (KET\_090II\_06F\_W\_SW)



1. R/O	ILL (+)	4. B	Ground (GM01)
2. L	HLLD Actuator LH/RH	5. L/O	ILL. (-)
3. P	I/P Junction Box - F21 10A	6. -	-

### M32 Hazard Switch

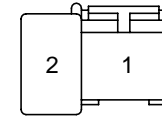
- 6 Female / Black (AMP\_MQS\_06F\_B)



1. -	-	4. L/O	ILL (-)
2. -	-	5. Y	BCM (Hazard Switch Signal)
3. R/O	ILL (+)	6. B	Ground (GM02)

### M33 Glove Box Lamp

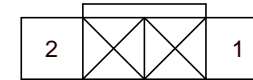
- 2 Female / Black (AMP\_PLM2\_02F\_B)



1. R/O	I/P Junction Box (IPS3 - ILL(+))	2. G	Glove Box Switch
--------	----------------------------------	------	------------------

### M34 Glove Box Lamp Switch

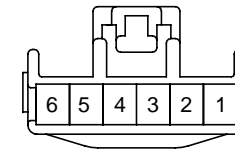
- 2 Female / White (KET\_187\_02F\_W)



1. G	Glove Box Lamp	2. B	Ground (GM01)
------	----------------	------	---------------

### M35 Head Lamp Leveling Device Switch (RHD)

- 6 Female / White (KET\_090II\_06F\_W\_SW)



1. -	-	4. P	I/P Junction Box - F21 10A
2. L/O	ILL. (-)	5. L	HLLD Actuator LH/RH
3. B	Ground (GM01)	6. R/O	ILL (+)

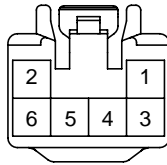
# MAIN HARNESS

## Main Harness (9)

CV10-9

### M38 Electronic Steering Column Lock (With Smart Key)

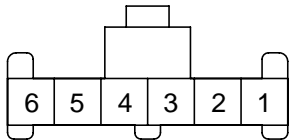
- 6 Female / White (KET\_090III\_06F\_W)



- |      |                                   |       |                                      |
|------|-----------------------------------|-------|--------------------------------------|
| 1. — | —                                 | 4. G  | Smart Key Control Module (Enable)    |
| 2. L | Smart Key Control Module (Ground) | 5. Br | Smart Key Control Module (Unlock)    |
| 3. R | Smart Key Control Module (BAT)    | 6. R  | Smart Key Control Module (Data Line) |

### M39 ODO Trip Switch (LHD)

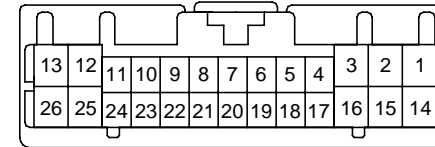
- 6 Female / White (KET\_91A\_06F\_W)



- |      |                                  |       |                                   |
|------|----------------------------------|-------|-----------------------------------|
| 1. — | —                                | 4. Br | Instrument Cluster (Reset Switch) |
| 2. R | Instrument Cluster (Mode Switch) | 5. —  | —                                 |
| 3. B | Ground (GM01)                    | 6. —  | —                                 |

### M41-A A/C Control Module (Auto)

- 26 Female / White (KET\_0407\_26F\_W)



- |         |                                  |         |                                       |
|---------|----------------------------------|---------|---------------------------------------|
| 1. G    | I/P Junction Box - F13 10A       | 14. P   | I/P Junction Box - F29 10A            |
| 2. R/O  | ILL (+)                          | 15. Br  | Cluster Ionizer Signal                |
| 3. O    | I/P Junction Box - F32 10A       | 16. O   | Intake Actuator (FRE)                 |
| 4. Y    | Driver Temp. Actuator (Cool)     | 17. Y   | Intake Actuator (REC)                 |
| 5. O    | Driver Temp. Actuator (Warm)     | 18. R   | Cluster Ionizer Clean Signal          |
| 6. R/B  | Instrument Cluster (ILL. Detent) | 19. P   | I/P Junction Box - F37 7.5A           |
| 7. R    | Mode Actuator (Vent)             | 20. Y   | Passenger Temp. Actuator (Cool)       |
| 8. L    | Mode Actuator (DEF)              | 21. R   | Passenger Temp. Actuator (Warm)       |
| 9. L/O  | [D4HA]                           | 22. W/B | FET (Field Effect Transistor) (Gate)  |
|         | PTC Heater Relay #2 Control      | 23. R   | FET (Field Effect Transistor) (Drain) |
| 10. G   | [D4HA]                           | 24. G   | I/P Junction Box - F38 7.5A           |
|         | PTC Heater Relay #3 Control      | 25. W/O | BCM (Rear Defogger Switch Input)      |
| 11. Gr  | [D4HA]                           | 26. Gr  | Sensor Ground                         |
|         | PTC Heater Relay #1 Control, ECM |         |                                       |
| 12. L/O | ILL (-)                          |         |                                       |
| 13. B   | Ground (GM01)                    |         |                                       |



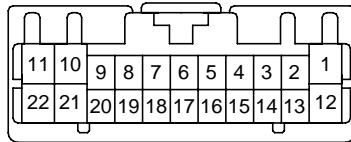
# MAIN HARNESS

## Main Harness (10)

CV10-10

### M41-B A/C Control Module (Auto)

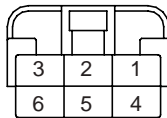
- 22 Female / White (KET\_0407\_22F\_W)



- |       |   |         |   |
|-------|---|---------|---|
| 1. O  | C-CAN (Low)                                   | 12. B   | Ground (GM01)                                 |
| 2. G  | C-CAN (High)                                  | 13. W   | Body K-Line                                   |
| 3. G  | Intake Actuator (F/B)                         | 14. W   | Evaporator Sensor (+)                         |
| 4. P  | Mode Actuator (F/B)                           | 15. L/B | Ambient Sensor (+)                            |
| 5. L  | Passenger Temp. Actuator (F/B)                | 16. -   | -   |
| 6. W  | Driver Temp. Actuator (F/B)                   | 17. L   | Auto Light & Photo Sensor (Driver)            |
| 7. G  | Cluster Ionizer (ION Diagnosis)               | 18. R   | Auto Light & Photo Sensor (Passenger)         |
| 8. Br | Vref (+)                                      | 19. -   | -   |
| 9. -  | -   | 20. -   | -   |
| 10. - | -   | 21. -   | -   |
| 11. L | A/C Compressor (Electrical Control Valve (+)) | 22. Gr  | A/C Compressor (Electrical Control Valve (-)) |

### M43-A A/C Control Module (Manual)

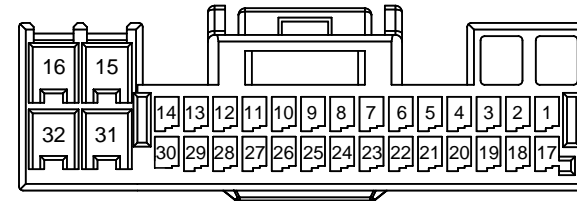
- 6 Female / White (KET\_250DL\_06F\_W)



- |      |   |      |   |
|------|---|------|---|
| 1. L | A/C Control Module (Blower Switch (High))   | 4. - | -   |
| 2. G | A/C Control Module (Blower Switch (M/High)) | 5. B | Ground (GM02)   |
| 3. P | A/C Control Module (Blower Switch (M/Low))  | 6. P | A/C Control Module, Blower Resistor (Blower Switch (Low)) |

### M43-B A/C Control Module (Manual)

- 32 Female / White (KET\_02509\_32F\_W)



- |         |  |         |   |
|---------|--|---------|---|
| 1. R/O  | ILL (+)                                      | 17. O   | I/P Junction Box - F32 10A                    |
| 2. G    | I/P Junction Box - F13 10A                   | 18. P   | I/P Junction Box - F29 10A                    |
| 3. R    | Mode Actuator (Vent)                         | 19. G   | C-CAN (High)                                  |
| 4. L    | Mode Actuator (DEF)                          | 20. O   | C-CAN (Low)                                   |
| 5. Br   | Temp. Actuator (Warm)                        | 21. G   | I/P Junction Box - F38 7.5A                   |
| 6. P    | Temp. Actuator (Cool)                        | 22. L   | A/C Compressor (Electrical Control Valve (+)) |
| 7. O    | Intake Actuator (FRE)                        | 23. Gr  | A/C Compressor (Electrical Control Valve (-)) |
| 8. Y    | Intake Actuator (REC)                        | 24. W/O | BCM (Defogger Switch)                         |
| 9. -    | -  | 25. Br  | Vref (+)                                      |
| 10. R/B | Instrument Cluster (ILL. Detent)             | 26. W   | Evaporator Sensor (+)                         |
| 11. P   | Mode Actuator (F/B)                          | 27. L/B | Ambient Sensor (+)                            |
| 12. W   | Temp. Actuator (F/B)                         | 28. Gr  | [D4HA] PTC Heater Relay #1 Control, ECM       |
| 13. G   | Intake Actuator (F/B)                        | 29. L/O | [D4HA] PTC Heater Relay #2 Control            |
| 14. P   | A/C Control Module (Blower Motor Common (-)) | 30. G   | [D4HA] PTC Heater Relay #3 Control            |
| 15. L   | Blower Resistor (Blower Motor - F/B)         | 31. Gr  | Sensor Ground                                 |
| 16. L/O | ILL (-)                                      | 32. B   | Ground (GM01)                                 |

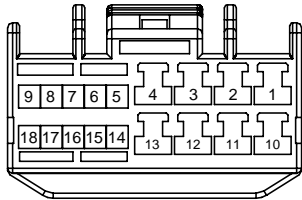
# MAIN HARNESS

## Main Harness (11)

CV10-11

### M45-A Audio

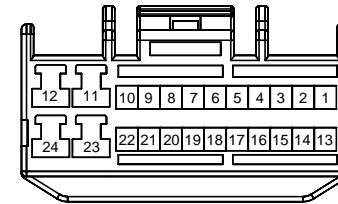
- 18 Female / White (KET\_09025\_18F\_W)



1. Y	Rear Door Speaker LH (+)	10. L	Rear Door Speaker LH (+)
2. Br	[LHD]	11. W	[LHD]
	Driver Door Speaker (+)		Driver Door Speaker (-)
R	[RHD]	L	[RHD]
	Passenger Door Speaker (+)		Passenger Door Speaker (-)
3. R	[LHD]	12. L	[LHD]
	Passenger Door Speaker (+)		Passenger Door Speaker (-)
Br	[RHD]	W	[RHD]
	Driver Door Speaker (+)		Driver Door Speaker (-)
4. G	Rear Door Speaker RH (+)	13. O	Rear Door Speaker RH (-)
5. B	SPDIF Shield	14. -	-
6. G	AMP (SPDIF - OUT (-))	15. W	AMP (SPDIF - OUT (+))
7. -	-	16. -	-
8. R/O	ILL (+)	17. L/O	ILL (-)
9. R/B	Instrument Cluster (Detent)	18. G	Roof Antenna

### M45-B Audio

- 24 Female / White (KET\_09025\_24F\_W)



1. L	CAN High	13. R	CAN Low
2. -	-	14. -	-
3. -	-	15. -	-
4. L	Audio Remote Control	16. Br	Vehicle Speed Signal
5. -	-	17. Gr	Audio Remote Control Ground
6. Br	AUX & USB Jack (USB D (+))	18. B	AUX & USB Jack (USB D (-))
7. R	AUX & USB Jack (USB/iPOD - VDO)	19. B/O	AUX & USB Jack (USB/iPOD - GND)
8. Br	AUX & USB Jack (AUX R_IN)	20. L	AUX & USB Jack (AUX DET)
9. L/B	AUX & USB Jack (AUX GND)	21. Y	AUX & USB Jack (AUX L_IN)
10. -	-	22. -	-
11. Br	I/P Junction Box - F28 10A	23. -	-
12. R	I/P Junction Box - F1 20A (Power Connector)	24. B	Ground (GM03)

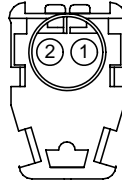
# MAIN HARNESS

## Main Harness (12)

CV10-12

### M46 Passenger Air Bag

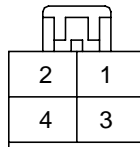
- 2 Female / Light Green (FCI\_AKII\_02F\_LG\_II)



- |      |                           |       |                          |
|------|---------------------------|-------|--------------------------|
| 1. L | SRS Control Module (High) | 2. Br | SRS Control Module (Low) |
|------|---------------------------|-------|--------------------------|

### M49 Blower Resistor (Manual A/C)

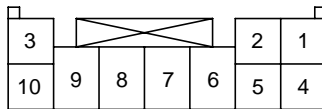
- 4 Female / Black (KUM\_DSD\_04F\_B\_L)



- |      |  |      |  |
|------|--|------|--|
| 1. P | A/C Control Module<br>(Blower Switch (M/Low))              | 3. R | A/C Control Module<br>(Blower Switch (M/Low))              |
| 2. G | A/C Control Module<br>(Blower Switch (M/High), Blower F/B) | 4. L | Blower Motor, A/C Control Module<br>(Blower Switch (High)) |

### M51-A PDM Relay Box (With Smart Key)

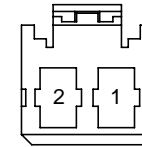
- 10 Female / White (AMP\_0925\_10F\_W)



- |      |  |       |  |
|------|--|-------|--|
| 1. R | Smart Key Control Module<br>(ACC Relay Control)  | 6. W  | I/P Junction Box - F27 10A                       |
| 2. - | -  | 7. P  | E/R Fuse & Relay Box<br>- F12 30A (IG1)          |
| 3. B | Ground (GM01)                                    | 8. L  | I/P Junction Box - F24 10A                       |
| 4. Y | Smart Key Control Module<br>(IGN2 Relay Control) | 9. -  | -  |
| 5. - | -  | 10. W | Smart Key Control Module<br>(IGN1 Relay Control) |

### M51-B PDM Relay Box (With Smart Key)

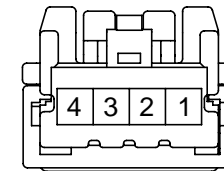
- 2 Female / Black (AMP\_250JPT\_02F\_B)



- |      |                            |      |   |
|------|----------------------------|------|---|
| 1. L | I/P Junction Box - F30 10A | 2. R | E/R Fuse & Relay Box<br>- F13 40A (IG2) |
|------|----------------------------|------|---|

### M54 RF Receiver (With Smart Key)

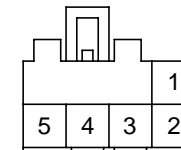
- 4 Female / White (KET\_040III\_04F\_W)



- |      |                                      |      |   |
|------|--------------------------------------|------|---|
| 1. O | Smart Key Control Module<br>(RF_COM) | 3. G | /P Junction Box - F2 10A<br>(Power Connector) |
| 2. - | -                                    | 4. B | Ground (GM01)                                 |

### M56 Rear Parking Assist Buzzer

- 5 Female / White (KUM\_CDR\_05F\_W)



- |       |                                  |      |                           |
|-------|----------------------------------|------|---------------------------|
| 1. -  | -                                | 4. - | -                         |
| 2. Gr | BCM (Rear Parking Assist Buzzer) | 5. Y | I/P Junction Box - F5 10A |
| 3. -  | -                                |      |                           |

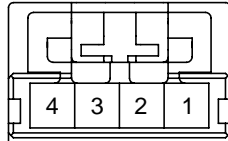
# MAIN HARNESS

## Main Harness (13)

CV10-13

### M58 Steering Angle Sensor (W/O MDPS)

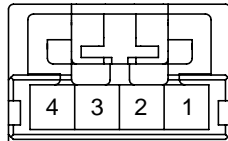
- 4 Female / Black (AMP\_MQS\_04F\_B\_040)



- |       |                             |      |            |
|-------|-----------------------------|------|------------|
| 1. B  | Ground (GM01)               | 3. G | C-CAN High |
| 2. Gr | I/P Junction Box - F24 7.5A | 4. O | C-CAN Low  |

### M60 Smart Key Antenna #1

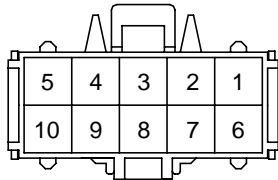
- 4 Female / Black (AMP\_MQS\_04F\_B\_040)



- |      |   |      |   |
|------|---|------|---|
| 1. - | -   | 3. - | -   |
| 2. L | Smart Key Control Module<br>(Interior Antenna #1 PWR) | 4. R | Smart Key Control Module<br>(Interior Antenna #1 GND) |

### M61 Start/Stop Button Switch (With Smart Key)

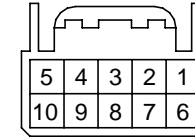
- 10 Female / Black (MLX\_FIT\_10F\_B)



- |        |   |        |   |
|--------|---|--------|---|
| 1. W   | Smart Key Control Module<br>(SSB SW2)       | 6. B   | Ground (GM01)                               |
| 2. R   | I/P Junction Box - F14 10A                  | 7. W/B | Smart Key Control Module<br>(SSB SW1)       |
| 3. Y   | Smart Key Control Module<br>(SSB ILL Amber) | 8. G   | Smart Key Control Module<br>(SSB ILL Green) |
| 4. B/O | Smart Key Control Module<br>(SSB ILL GND)   | 9. L/O | ILL (-)                                     |
| 5. R/B | Smart Key Control Module<br>(SSB ILL Power) | 10. -  | -   |

### M62 Telltale Lamp

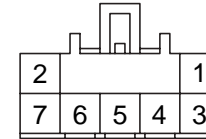
- 10 Female / Black (AMP\_025\_10F\_B)



- |      |                            |         |                    |
|------|----------------------------|---------|--------------------|
| 1. - | -                          | 6. -    | -                  |
| 2. - | -                          | 7. -    | -                  |
| 3. R | I/P Junction Box - F29 10A | 8. B    | Ground (GM01)      |
| 4. - | -                          | 9. -    | -                  |
| 5. - | -                          | 10. O/B | BCM (Crash Unlock) |

### M63 Passenger Temperature Actuator (LHD)

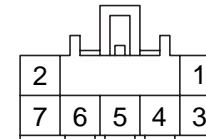
- 7 Female / White (KUM\_CDR\_07F\_W)



- |      |                           |       |                                 |
|------|---------------------------|-------|---------------------------------|
| 1. - | -                         | 5. Br | A/C Control Module (Vref (+))   |
| 2. - | -                         | 6. G  | A/C Control Module (F/B)        |
| 3. Y | A/C Control Module (Cool) | 7. Gr | A/C Control Module (Sensor GND) |
| 4. R | A/C Control Module (Warm) |       |                                 |

### M64 Passenger Temperature Actuator (RHD)

- 7 Female / White (KUM\_CDR\_07F\_W)



- |      |                           |       |                                 |
|------|---------------------------|-------|---------------------------------|
| 1. - | -                         | 5. Br | A/C Control Module (Sensor GND) |
| 2. - | -                         | 6. G  | A/C Control Module (F/B)        |
| 3. Y | A/C Control Module (Warm) | 7. Gr | A/C Control Module (Vref (+))   |
| 4. R | A/C Control Module (Cool) |       |                                 |

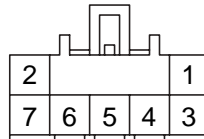
# MAIN HARNESS

## Main Harness (14)

CV10-14

### M65 Driver Temperature Actuator (LHD)

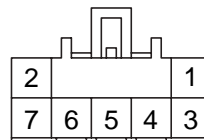
- 7 Female / White (KUM\_CDR\_07F\_W)



- |      |                           |       |                                 |
|------|---------------------------|-------|---------------------------------|
| 1. - | -                         | 5. Gr | A/C Control Module (Sensor GND) |
| 2. - | -                         | 6. W  | A/C Control Module (F/B)        |
| 3. O | A/C Control Module (Warm) | 7. Br | A/C Control Module (Vref (+))   |
| 4. Y | A/C Control Module (Cool) |       |                                 |

### M66 Driver Temperature Actuator (RHD)

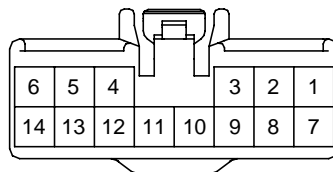
- 7 Female / White (KUM\_CDR\_07F\_W)



- |      |                           |       |                                 |
|------|---------------------------|-------|---------------------------------|
| 1. - | -                         | 5. Gr | A/C Control Module (Vref (+))   |
| 2. - | -                         | 6. W  | A/C Control Module (F/B)        |
| 3. O | A/C Control Module (Cool) | 7. Br | A/C Control Module (Sensor GND) |
| 4. Y | A/C Control Module (Warm) |       |                                 |

### M73-A Smart Key Control Module

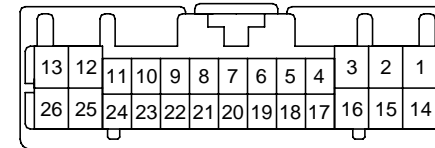
- 14 Female / White (KET\_090III\_14F\_W)



- |        |                            |       |                            |
|--------|----------------------------|-------|----------------------------|
| 1. B   | Ground (GM02)              | 8. L  | ESCL (Ground)              |
| 2. L/O | I/P Junction Box - F27 10A | 9. P  | External Buzzer            |
| 3. W   | I/P Junction Box - F30 10A | 10. R | PDM Relay Box (ACC Relay)  |
| 4. G   | I/P Junction Box - F24 10A | 11. W | PDM Relay Box (IGN1 Relay) |
| 5. R/O | I/P Junction Box - F14 10A | 12. Y | PDM Relay Box (IGN2 Relay) |
| 6. R   | I/P Junction Box - F19 25A | 13. R | I/P Junction Box - F20 10A |
| 7. B   | Ground (GM02)              | 14. R | ESCL (Bat)                 |

### M73-B Smart Key Control Module

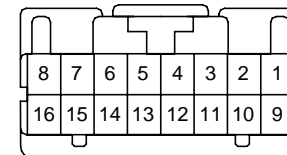
- 26 Female / White (KET\_0407\_26F\_W)



- |         |  |         |   |
|---------|--|---------|---|
| 1. -    | -  | 14. -   | -   |
| 2. Gr/B | Driver Smart Key Outside Handle (Lock/Unlock Switch) | 15. W/B | Passenger Smart Key Outside Handle (Lock/Unlock Switch) |
| 3. -    | -  | 16. -   | -   |
| 4. -    | -  | 17. -   | -   |
| 5. -    | -  | 18. -   | -   |
| 6. W    | Start/Stop Button Switch (SSB SW1)                   | 19. O/B | FOB Holder (Key In Switch)                              |
| 7. P    | ESP Control Module                                   | 20. W   | PCM/ECM (Engine RPM)                                    |
| 8. W/B  | Start/Stop Button Switch (SSB SW2)                   | 21. P   | E/R Fuse & Relay Box (RLY. 4)                           |
| 9. -    | -  | 22. -   | -   |
| 10. -   | -  | 23. -   | -   |
| 11. Br  | ESCL (Unlock)  | 24. -   | -   |
| 12. L   | B-CAN (High)   | 25. -   | -   |
| 13. R   | B-CAN (Low)  | 26. Y/B | License Lamp (Tail Gate Handle Switch)                  |

### M73-C Smart Key Control Module

- 16 Female / White (KET\_0407\_16F\_W)



- |         |                        |         |                                |
|---------|------------------------|---------|--------------------------------|
| 1. O    | C-CAN (Low)            | 11. G   | ESCL (Enable)                  |
| 2. G    | C-CAN (High)           | 12. -   | -                              |
| 3. -    | -                      | 13. L   | E/R Fuse & Relay Box - F17 10A |
| 4. P/B  | FOB Holder (FOB ILL)   | 14. -   | -                              |
| 5. -    | ESCL (Data-Link)       | 15. W   | [A/T]                          |
| 6. W    | K-Line                 |         | ATM Shift Lever                |
| 7. G/B  | Stop Lamp Switch       |         | ('P' Position Switch)          |
| 8. W/B  | FOB Holder (IMMO Data) |         | [M/T]                          |
| 9. O    | RF Receiver            |         | Ignition Lock Switch           |
| 10. W/O | ECM/PCM (EMS COM)      | 16. Y/B | FOB Holder (IMMO Clock)        |

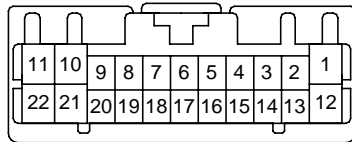
# MAIN HARNESS

## Main Harness (15)

CV10-15

### M73-D Smart Key Control Module

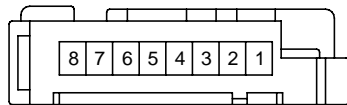
- 22 Female / White (KET\_0407\_22F\_W)



1. Br/O	Instrument Cluster (IMMO. IND.)	12. -	-
2. Y	Start/Stop Button Switch (SSB Amber)	13. G	Start/Stop Button Switch (SSB Green)
3. R/B	Start/Stop Button Switch (SSB ILL. (+))	14. B/O	Start/Stop Button Switch (ILL. (-))
4. O	Smart Key Antenna #2 (GND)	15. G	Smart Key Antenna #2 (PWR)
5. L	Smart Key Antenna #1 (GND)	16. B	Smart Key Antenna #1 (PWR)
6. -	-	17. -	-
7. -	-	18. -	-
8. G	Smart Key Antenna #3 (PWR)	19. L	Smart Key Antenna #3 (GND)
9. Br	Smart Key Bumper Antenna (PWR)	20. W	Smart Key Bumper Antenna (GND)
10. B	Passenger Smart Key Outside Handle (ANT PWR)	21. Y	Passenger Smart Key Outside Handle (ANT GND)
11. Br	Driver Smart Key Outside Handle (ANT PWR)	22. W	Driver Smart Key Outside Handle (ANT GND)

### M74 Digital Clock

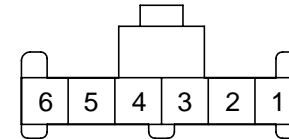
- 8 Female / White (AMP\_MQS\_08F\_W)



1. L/O	ILL (-)	5. -	I/P Junction Box - F29 10A
2. R/O	ILL (+)	6. R/B	Instrument Cluster (Detent)
3. -	BCM (IND.)	7. Br	I/P Junction Box - F28 10A
4. B	Ground (GM01)	8. R	I/P Junction Box - F13 10A

### M76 ODO Trip Switch (RHD)

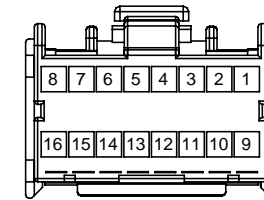
- 6 Female / White (KET\_91A\_06F\_W)



1. -	-	4. R	Instrument Cluster (Mode Switch)
2. Br	Instrument Cluster (Reset Switch)	5. -	-
3. B	Ground (GM01)	6. -	-

### M77 Multi Switch

- 16 Female / Black (KET\_040II\_16F\_B)



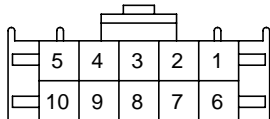
1. Gr	E/R Fuse & Relay Box - F24 7.5A	8. -	-
2. R	ESP Control Module (ESP Off Switch)	9. -	-
3. G	Instrument Cluster (Rheostat Down Switch)	10. -	-
4. Y	[G4KD/G4KE] 4WD ECM (4WD Lock Switch)	11. -	-
5. L	Instrument Cluster (Rheostat Up Switch)	12. -	-
6. P	ESP Control Module (DBC Switch)	13. -	-
7. L/O	ILL (-)	14. B	Ground (GM01)
		15. R/O	ILL (+)
		16. G	Instrument Cluster (Active ECO Switch)

**Fob EXT. Harness (1)**

**CV11-1**

**M75 Fob Holder**

- 10 Female / White (YAZ\_SP\_10F\_W)



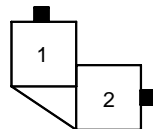
- |        |  |        |                                       |
|--------|--|--------|---------------------------------------|
| 1. -   | -                                      | 6. R/B | I/P Junction Box - F14 10A            |
| 2. Y/B | Smart Key Control Module (IMMO. Clock) | 7. W/B | Smart Key Control Module (IMMO. Data) |
| 3. P/B | Smart Key Control Module (Holder ILL)  | 8. R/B | I/P Junction Box - F14 10A            |
| 4. -   | -                                      | 9. O/B | Smart Key Control Module (FOB In)     |
| 5. B   | Ground (GM01)                          | 10. -  | -                                     |

Console EXT. Harness (1)

CV12-1

**M81 Front Power Outlet LH**

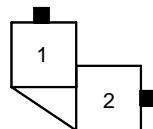
- 2 Female / N/A (N/A)



- |      |                            |      |               |
|------|----------------------------|------|---------------|
| 1. G | I/P Junction Box - F33 20A | 2. B | Ground (GM02) |
|------|----------------------------|------|---------------|

**M82 Front Cigarette Lighter LH**

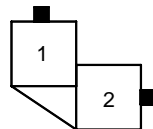
- 2 Female / N/A (N/A)



- |      |                            |      |               |
|------|----------------------------|------|---------------|
| 1. G | I/P Junction Box - F33 20A | 2. B | Ground (GM02) |
|------|----------------------------|------|---------------|

**M83 Front Power Outlet RH**

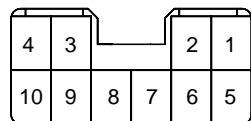
- 2 Female / N/A (N/A)



- |      |                            |      |               |
|------|----------------------------|------|---------------|
| 1. L | I/P Junction Box - F26 15A | 2. B | Ground (GM02) |
|------|----------------------------|------|---------------|

**M84 Driver Seat Warmer Switch (LHD)**

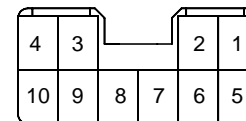
- 10 Female / N/A (N/A)



- |         |                                     |        |                            |
|---------|-------------------------------------|--------|----------------------------|
| 1. Gr/O | I/P Junction Box - F29 10A          | 6. L/O | ILL (+)                    |
| 2. B    | Ground (GM01)                       | 7. R/O | ILL (-)                    |
| 3. L    | Driver Cushion Warmer (Low Switch)  | 8. R   | I/P Junction Box - F35 15A |
| 4. W    | Driver Cushion Warmer (High Switch) | 9. -   | -                          |
| 5. Br   | Driver Cushion Warmer (IND)         | 10. -  | -                          |

**M85 Passenger Seat Warmer Switch (LHD)**

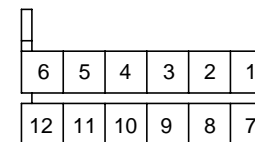
- 10 Female / N/A (N/A)



- |         |  |        |                                |
|---------|--|--------|--------------------------------|
| 1. Gr/O | I/P Junction Box - F29 10A             | 5. Br  | Passenger Cushion Warmer (IND) |
| 2. B    | Ground (GM01)                          | 6. L/O | ILL (+)                        |
| 3. L    | Passenger Cushion Warmer (Low Switch)  | 7. R/O | ILL (-)                        |
| 4. W    | Passenger Cushion Warmer (High Switch) | 8. R   | I/P Junction Box - F35 15A     |
|         | Passenger Cushion Warmer (IND)         | 9. -   | -                              |
|         |  | 10. -  | -                              |

**M86 Driver CCS Switch (LHD)**

- 12 Female / N/A (N/A)



- |        |                                     |        |                                    |
|--------|-------------------------------------|--------|------------------------------------|
| 1. Gr  | Driver CCS Module (Heat High - IND) | 8. P   | Driver CCS Module (Heat Low - IND) |
| 2. R   | I/P Junction Box - F5 10A           | 9. -   | -                                  |
| 3. R/O | ILL (+)                             | 10. -  | -                                  |
| 4. L/O | ILL (-)                             | 11. -  | -                                  |
| 5. W   | Driver CCS Module (Cool High - IND) | 12. Br | Driver CCS Module (Cool Switch)    |
| 6. L   | Driver CCS Module (Cool Low - IND)  |        |                                    |
| 7. W   | Driver CCS Module (Heat Switch)     |        |                                    |



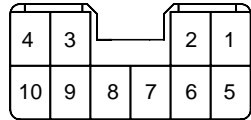
# CONSOLE EXT. HARNESS

## Console EXT. Harness (2)

CV12-2

### M87 Passenger Seat Warmer Switch (RHD)

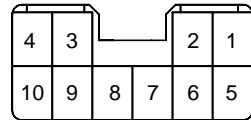
- 10 Female / N/A (N/A)



- |         |  |        |                                |
|---------|--|--------|--------------------------------|
| 1. Gr/O | I/P Junction Box - F29 10A             | 5. Br  | Passenger Cushion Warmer (IND) |
| 2. B    | Ground (GM01)                          | 6. L/O | ILL (+)                        |
| 3. L    | Passenger Cushion Warmer (Low Switch)  | 7. R/O | ILL (-)                        |
| 4. W    | Passenger Cushion Warmer (High Switch) | 8. R   | I/P Junction Box - F35 15A     |
|         | Passenger Cushion Warmer (IND)         | 9. -   | -                              |
|         |  | 10. -  | -                              |

### M88 Driver Seat Warmer Switch (RHD)

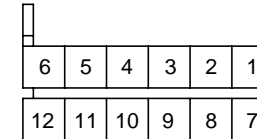
- 10 Female / N/A (N/A)



- |         |                                     |        |                            |
|---------|-------------------------------------|--------|----------------------------|
| 1. Gr/O | I/P Junction Box - F29 10A          | 6. L/O | ILL (+)                    |
| 2. B    | Ground (GM01)                       | 7. R/O | ILL (-)                    |
| 3. L    | Driver Cushion Warmer (Low Switch)  | 8. R   | I/P Junction Box - F35 15A |
| 4. W    | Driver Cushion Warmer (High Switch) | 9. -   | -                          |
| 5. Br   | Driver Cushion Warmer (IND)         | 10. -  | -                          |

### M89 Driver CCS Switch (RHD)

- 12 Female / N/A (N/A)



- |        |                                     |       |                                     |
|--------|-------------------------------------|-------|-------------------------------------|
| 1. L   | Driver CCS Module (Cool Low - IND)  | 8. W  | Driver CCS Module (Cool High - IND) |
| 2. R   | I/P Junction Box - F5 10A           | 9. -  | -                                   |
| 3. R/O | ILL (+)                             | 10. - | -                                   |
| 4. L/O | ILL (-)                             | 11. - | -                                   |
| 5. Gr  | Driver CCS Module (Heat High - IND) | 12. W | Driver CCS Module (Heat Switch)     |
| 6. P   | Driver CCS Module (Heat Low - IND)  |       |                                     |
| 7. Br  | Driver CCS Module (Cool Switch)     |       |                                     |

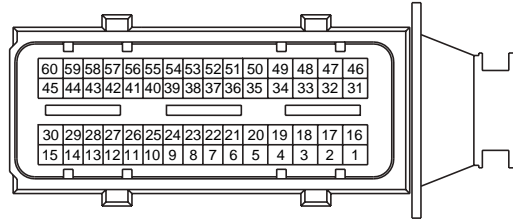
Control Harness (1)

CV20-1

**G4KD/G4KE : THETA II 2.0L/2.4L**

**CHG-A PCM**

- 60 Female / Black (AMP\_ECU\_60F\_B\_R)



1. G	[IMMO./With Smart Key] IGN. Coil #4 Control [IMMO./W/O Smart Key] IGN. Coil #1 Control	16. W	[IMMO./With Smart Key] IGN. Coil #2 Control [IMMO./W/O Smart Key] IGN. Coil #3 Control	31. B	[IMMO./With Smart Key] IGN. Coil #1 Control [IMMO./W/O Smart Key] IGN. Coil #4 Control	46. R	[IMMO./With Smart Key] IGN. Coil #3 Control [IMMO./W/O Smart Key] IGN. Coil #2 Control
2. B	Ignition Coil Shield Ground	17. Br	[A/T] ATM Solenoid Valve (UD_VFS)	32. G	[A/T] ATM Solenoid Valve (SS-B)	47. Gr	[A/T] ATM Solenoid Valve (Solenoid Power 1)
3. L	[A/T] ATM Solenoid Valve (LP_VFS)	18. P	[A/T] ATM Solenoid Valve (26_VFS)	33. P	[A/T] ATM Solenoid Valve (SS-A)	48. O	[A/T] ATM Solenoid Valve (Solenoid Power 2)
4. G/B	[A/T] ATM Solenoid Valve (DC_VFS)	19. G	[A/T] Shift Lever (Shift Lock Solenoid)	34. B	[A/T] Ground (GHG07)	49. G	EMS Box - F2 15A
5. W	[A/T] ATM Solenoid Valve (35R_VFS)	20. Y	[A/T] ATM Solenoid Valve (OD_VFS)	35. B	[A/T] Ground (GHG07)	50. G	EMS Box - F2 15A
6. Br	[A/T] Input Speed Supply	21. -	-	36. P	[A/T] Shift Lever (Down Shift)	51. -	-
7. Gr	[A/T] Output Speed Supply	22. -	-	37. Gr	[A/T] Shift Lever (Up Shift)	52. -	-
8. W	[A/T] Input Speed Signal	23. -	-	38. W	[A/T] Shift Lever (Select Switch)	53. Br	[A/T] ATM Solenoid Valve (Oil Temp. Sensor (-))
9. L	[A/T] Output Speed Signal	24. W	E/R Fuse & Relay Box - RLY. 4	39. -	-	54. R	[A/T] ATM Solenoid Valve (Oil Temp. Sensor (+))
10. -	-	25. R	[A/T] Transaxle Range Switch (Position Switch Code (S2))	40. P	[A/T] Transaxle Range Switch (Position Switch Code (S1))	55. -	-
11. -	-	26. G	[A/T] Transaxle Range Switch (Position Switch Code (S3))	41. -	-	56. -	-
12. -	-	27. Br	[A/T] Transaxle Range Switch (Position Switch Code (S4))	42. -	-	57. -	-
13. -	-	28. P	E/R Fuse & Relay Box - RLY. 11	43. W	[M/T] Clutch Switch	58. W	Power Steering Switch
14. W	Alternator (FR)	29. G/B	Stop Lamp Switch (Brake Light Switch)	44. L/B	Stop Lamp Switch (Brake Test Switch)	59. -	-
15. B	Cruise Control Switch Ground	30. O	Cruise Control Switch Signal	45. -	-	60. -	-

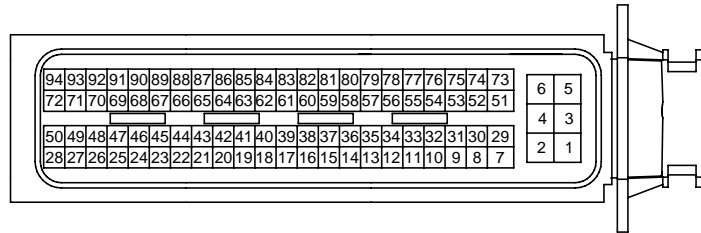
# CONTROL HARNESS

## Control Harness (2)

CV20-2

### CHG-K PCM

- 94 Female / Black (AMP\_ECU\_94F\_B\_R)



1. B	Ground (GHG07)	25. Br	Injector #1 Control	49. -	-	73. -	-
2. G	E/R Fuse & Relay Box - F23 7.5A	26. L	Injector #3 Control	50. W	Variable Intake Manifold Valve	74. B	Map Sensor (Sensor Ground)
3. B	Ground (GHG07)	27. G	Injector #4 Control	51. G	EMS Box - F7 15A	75. L	[With Smart Key] IMMO. Data Line
4. L	EMS Box - RLY. 1	28. Gr	Injector #2 Control	52. -	-		[With IMMO.] IMMO. Data Line
5. B	Ground (GHG07)	29. -	-	53. G	Map Sensor (IAT Sensor)		
6. G	EMS Box - F2 15A	30. L	Map Sensor (MAP Sensor Supply)	54. Gr	APT (Signal)		
7. -	-	31. P	Map Sensor (MAF/MAP Sensor Signal)	55. -	-	76. -	-
8. -	-			56. -	-	77. G	C-CAN (High)
9. -	-	32. L	ETC Motor & Throttle Position Sensor (TPS. 2 (Signal))	57. G	APT (Ground)	78. O	C-CAN (Low)
10. -	-			58. -	-	79. -	-
11. -	-	33. W	ECTS Signal	59. B	ETC Motor & Throttle Position Sensor ((TPS) Ground)	80. P	ETC Motor & Throttle Position Sensor (TPS. 1 (Signal))
12. R	Knock Sensor (Signal)	34. B	Knock Sensor (Ground)			81. -	-
13. Br	APS. 2 (Ground)	35. L/O	APS. 2 (Signal)	60. Gr	APS. 1 (Supply)	82. O	APS.1 (Signal)
14. L	ECTS Ground	36. L	APS. 2 (Supply)	61. Y	APS. 1 (Ground)	83. P	CMPS #1 (Ground)
15. Y	CMPS #2 (Signal)	37. W	CMPS #2 (Ground)	62. W	CMPS #1 (Signal)	84. W	O2 Sensor (Down) Signal
16. B	[W/O Euro V] O2 Sensor (Up) Ground	38. P	[W/O Euro V] O2 Sensor (Up) Signal	63. Y	ETC Motor & Throttle Position Sensor (TPS (Supply))	85. P	O2 Sensor (Down) Ground
17. P	CKPS (Signal)	39. G	CKPS (Ground)			86. W	Smart Key Control Module (Engine RPM)
18. W	[Euro V] O2 Sensor (UP) V_IP	40. P	Vehicle Speed Input : ABS/ESP Control Module	64. L	EMS Box - RLY. 1		
19. R	[Euro V] O2 Sensor (UP) V_N			65. O	E/R Fuse & Relay Box - RLY. 3	87. Br	EMS Box - RLY. 3
20. L	[Euro V] O2 Sensor (UP) V_G			66. L	OCV #1 (Actuator Control Signal 1)	88. Gr/O	E/R Fuse & Relay Box - RLY. 9
21. -	-	41. -	-	67. G	PCSV (Control)	89. -	-
22. -	-	42. P	[Euro V] O2 Sensor (UP) V_RC	68. Y/B	OCV #2 (Actuator Control Signal 2)	90. -	-
23. -	-	43. W/B	APT (Supply)	69. Br/O	[With IMMO.] Instrument Cluster (IMMO. IND.)	91. -	-
24. R/B	E/R Fuse & Relay Box - RLY. 4	44. -	-			92. Y/B	Instrument Cluster (Engine Check IND.)
		45. -	-	70. G	EMS BOX - RLY. 2	93. G	O2 Sensor (Up) Heater
		46. -	-	71. W	ETC Motor & Throttle Position Sensor (DC Motor 1)	94. Y	O2 Sensor (Down) Heater
		47. -	-				
		48. -	-	72. R	ETC Motor & Throttle Position Sensor (DC Motor 2)		

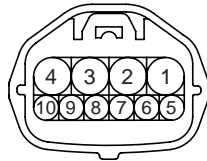
# CONTROL HARNESS

## Control Harness (3)

CV20-3

### CHG01 Transaxle Range Switch

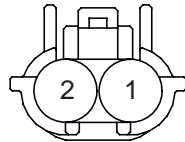
- 10 Female / Black (KET\_0509WP\_10F\_B)



1. -	-	6. -	-
2. R	PCM (S2)	7. -	-
3. -	-	8. G	PCM (S3)
4. G	E/R Fuse & Relay Box - F25 7.5A	9. Br	PCM (S4)
5. -	-	10. P	PCM (S1)

### CHG02 Ambient Sensor

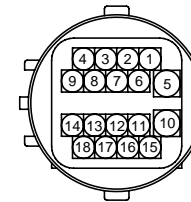
- 2 Female / Black (KET\_SWP\_02F\_B)



1. L/B	A/C Control Module (Sensor (+))	2. Gr	A/C Control Module (Sensor Ground)
--------	---------------------------------	-------	------------------------------------

### CHG04 ATM Solenoid Valve

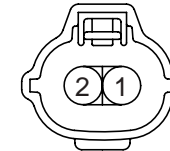
- 18 Female / Black (FCI\_MULWP\_18F\_B\_1)



1. -	-	10. Gr	PCM (Solenoid Power 1)
2. G/B	PCM (DC_VFS)	11. P	PCM (26_VFS)
3. Gr	PCM (Output Speed Supply)	12. G	PCM (SS-B)
4. L	PCM (Output Speed Signal)	13. R	PCM (Oil Temp. Sensor (+))
5. O	PCM (Solenoid Power 2)	14. Br	PCM (Input Speed Supply)
6. W	PCM (35R_VFS)	15. -	-
7. Y	PCM (OD_VFS)	16. Br	PCM (UD_VFS)
8. W	PCM (Input Speed Signal)	17. L	PCM (LP_VFS)
9. Br	PCM (Oil Temp. Sensor (-))	18. P	PCM (SS-A)

### CHG05-1 Oil Control Valve #1

- 2 Female / Black (KET\_090WP\_02F\_B\_L)



1. L	PCM (Actuator Control Signal 1)	2. W	EMS Box - F4 10A
------	---------------------------------	------	------------------

### CHG05-2 Oil Control Valve #2

- 2 Female / Black (KET\_090WP\_02F\_B\_L)



1. Y/B	PCM (Actuator Control Signal 2)	2. W	EMS Box - F4 10A
--------	---------------------------------	------	------------------

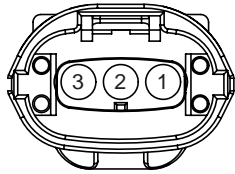
# CONTROL HARNESS

## Control Harness (4)

CV20-4

### CHG06 Alternator

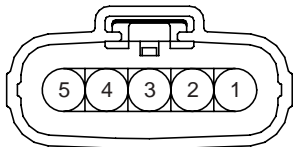
- 3 Female / Gray (KET\_090IWP\_03F\_GR\_3)



- |      |                                       |      |          |
|------|---------------------------------------|------|----------|
| 1. - | -                                     | 3. W | PCM (FR) |
| 2. G | I/P Junction Box<br>(Diode : F29 10A) |      |          |

### CHG07 Front Wiper Motor

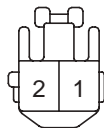
- 5 Female / Black (KUM\_NDWP\_05F\_B)



- |      |   |      |   |
|------|---|------|---|
| 1. B | Ground (GHG02)  | 4. G | Multifunction Switch (Low Switch)                                     |
| 2. L | E/R Fuse & Relay Box - RLY. 12<br>[With Rain Sensor]  | 5. P | Multifunction Switch (High Switch)<br>[With Rain Sensor]              |
|      | E/R Fuse & Relay Box - RLY. 12,<br>I/P Junction Box - F25 25A<br>I/P Junction Box - F25 25A |      | E/R Fuse & Relay Box - RLY. 13,<br>Multifunction Switch (High Switch) |
| 3. Y | [With Rain Sensor]<br>E/R Fuse & Relay Box - RLY. 12,<br>Rain Sensor (Parking Switch)       |      |   |

### CHG08 Ignition Lock Switch (M/T)

- 2 Female / White (KET\_090III\_02F\_W\_L)



- |      |                |      |  |
|------|----------------|------|--|
| 1. B | Ground (GHG02) | 2. W | [With Smart Key]<br>Smart Key Control Module |
|------|----------------|------|--|

### CHG11 Engine Coolant Temperature Sensor

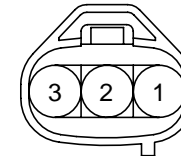
- 4 Female / Black (AMP\_EJWP\_04F\_B)



- |      |                |        |                     |
|------|----------------|--------|---------------------|
| 1. B | Ground (GHG01) | 3. L   | PCM (Sensor Ground) |
| 2. - | -              | 4. W/B | PCM (Sensor Signal) |

### CHG13-1 Camshaft Position Sensor #1

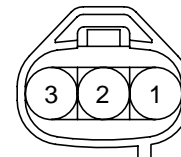
- 3 Female / Gray (SUM\_090IWP\_03F\_GR\_R)



- |      |                     |      |                     |
|------|---------------------|------|---------------------|
| 1. G | EMS Box - F4 10A    | 3. W | PCM (Sensor Signal) |
| 2. P | PCM (Sensor Ground) |      |                     |

### CHG13-2 Camshaft Position Sensor #2

- 3 Female / Gray (SUM\_090IWP\_03F\_GR\_R)



- |      |                     |      |                     |
|------|---------------------|------|---------------------|
| 1. G | EMS Box - F4 10A    | 3. Y | PCM (Sensor Signal) |
| 2. W | PCM (Sensor Ground) |      |                     |

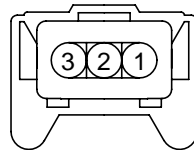
# CONTROL HARNESS

## Control Harness (5)

CV20-5

### CHG14 Crankshaft Position Sensor

- 3 Female / Black (AMP\_JPT\_03F\_B\_S2)



- |         |                     |      |                     |
|---------|---------------------|------|---------------------|
| 1. Gr/B | EMS Box - F4 10A    | 3. P | PCM (Sensor Signal) |
| 2. G    | PCM (Sensor Ground) |      |                     |

### CHG15 Oil Pressure Switch

- 1 Female / Black (KUM\_NMWP\_01F\_B)



- |        |  |
|--------|--|
| 1. Y/B | Instrument Cluster (Oil Pressure IND.) |
|--------|--|

### CHG16 Oxygen Sensor (Up) (W/O Euro V)

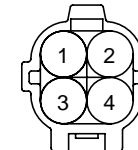
- 4 Female / Black (KET\_090IWP\_04F\_B)



- |      |                     |      |                     |
|------|---------------------|------|---------------------|
| 1. P | PCM (Sensor Signal) | 3. P | EMS Box - F7 15A    |
| 2. W | PCM (Sensor Ground) | 4. O | PCM (Sensor Heater) |

### CHG17 Oxygen Sensor (Down)

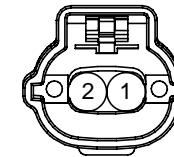
- 4 Male / Black (KET\_SWP\_04M\_B)



- |      |                     |      |                     |
|------|---------------------|------|---------------------|
| 1. P | PCM (Sensor Ground) | 3. Y | PCM (Sensor Heater) |
| 2. W | PCM (Sensor Signal) | 4. O | EMS Box - F7 15A    |

### CHG18-1 Ignition Coil #1

- 2 Female / Black (KET\_090WP\_02F\_B\_L3)



[With IMMO. / Smart Key]

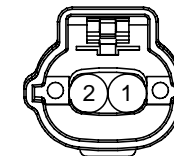
- |      |                  |
|------|------------------|
| 1. B | PCM              |
| 2. P | EMS Box - F5 20A |

[W/O IMMO. / Smart Key]

- |      |
|------|
| 1. G |
| 2. P |

### CHG18-2 Ignition Coil #2

- 2 Female / Black (KET\_090WP\_02F\_B\_L3)



[With IMMO. / Smart Key]

- |      |                  |
|------|------------------|
| 1. W | PCM              |
| 2. L | EMS Box - F5 20A |

[W/O IMMO. / Smart Key]

- |      |                  |
|------|------------------|
| 1. R | PCM              |
| 2. L | EMS Box - F5 20A |

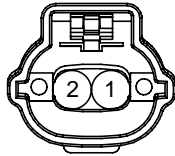
# CONTROL HARNESS

## Control Harness (6)

CV20-6

### CHG18-3 Ignition Coil #3

- 2 Female / Black (KET\_090WP\_02F\_B\_L3)



[With IMMO. / Smart Key]

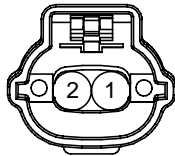
- 1. R PCM
- 2. G EMS Box - F5 20A

[W/O IMMO. / Smart Key]

- 1. W PCM
- 2. G EMS Box - F5 20A

### CHG18-4 Ignition Coil #4

- 2 Female / Black (KET\_090WP\_02F\_B\_L3)



[With IMMO. / Smart Key]

- 1. G PCM
- 2. W EMS Box - F5 20A

[W/O IMMO. / Smart Key]

- 1. B PCM
- 2. W EMS Box - F5 20A

### CHG19 Condenser

- 2 Female / Black (MLX\_090CIGAR\_02F\_B)

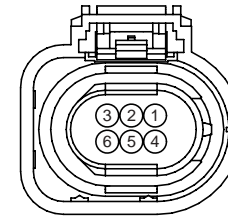


- 1. B Ground (GHG01)

- 2. P EMS Box - F5 20A

### CHG20 Oxygen Sensor (Up) (With Euro V)

- 6 Female / Black (AMP\_MTIWP\_06F\_B)

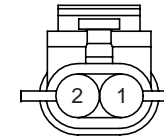


- 1. L PCM (V\_G)
- 2. R PCM (V\_N)
- 3. W PCM (V\_IP)

- 4. P EMS Box - F7 15A
- 5. G PCM (Heater)
- 6. P PCM (V\_RC)

### CHG21 Canister Purge Control Solenoid Valve

- 2 Female / Black (PKD\_MP150\_02F\_B)

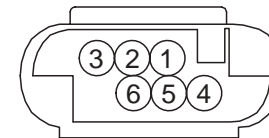


- 1. W EMS Box - F4 10A

- 2. G PCM

### CHG22 ETC Motor & Throttle Position Sensor

- 6 Female / Black (AMP\_MQSWP\_06F\_B\_1)



- 1. B PCM (TPS Ground)
- 2. Y PCM (TPS Supply)
- 3. W PCM (DC Motor 1)

- 4. P PPCM (TPS 1 Signal)
- 5. L PCM (TPS 2 Signal)
- 6. R PCM (DC Motor 2)

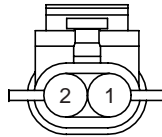
# CONTROL HARNESS

## Control Harness (7)

CV20-7

### CHG23 Knock Sensor

- 2 Female / Gray (PKD\_150WP\_02F\_GR)



- |      |                     |      |                     |
|------|---------------------|------|---------------------|
| 1. B | PCM (Sensor Ground) | 2. R | PCM (Sensor Signal) |
|------|---------------------|------|---------------------|

### CHG24-1 Injector #1

- 2 Female / Black (KUM\_NDWP\_02F\_B)



- |      |                  |       |     |
|------|------------------|-------|-----|
| 1. L | EMS Box - F8 10A | 2. Br | PCM |
|------|------------------|-------|-----|

### CHG24-2 Injector #2

- 2 Female / Black (KUM\_NDWP\_02F\_B)



- |      |                  |       |     |
|------|------------------|-------|-----|
| 1. O | EMS Box - F8 10A | 2. Gr | PCM |
|------|------------------|-------|-----|

### CHG24-3 Injector #3

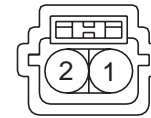
- 2 Female / Black (KUM\_NDWP\_02F\_B)



- |      |                  |      |     |
|------|------------------|------|-----|
| 1. P | EMS Box - F8 10A | 2. L | PCM |
|------|------------------|------|-----|

### CHG24-4 Injector #4

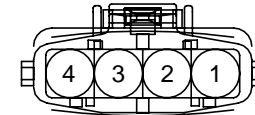
- 2 Female / Black (KUM\_NDWP\_02F\_B)



- |      |                  |      |     |
|------|------------------|------|-----|
| 1. O | EMS Box - F8 10A | 2. G | PCM |
|------|------------------|------|-----|

### CHG25 MAP Sensor

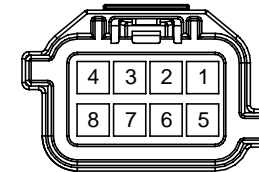
- 4 Female / Black (AMP\_JPT\_04F\_B\_BOSCH)



- |      |                             |      |                     |
|------|-----------------------------|------|---------------------|
| 1. P | PCM (MAF/MAP Sensor Signal) | 3. G | PCM (IAT Sensor)    |
| 2. L | PCM (MAP Sensor Supply)     | 4. B | PCM (Sensor Ground) |

### CHG26 Head Lamp LH

- 8 Female / Black (KUM\_XWP\_08F\_B)



- |       |   |      |  |
|-------|---|------|--|
| 1. Y  | BCM (Turn Lamp)                           | 5. G | I/P Junction Box - IPS 7 (Tail Lamp)     |
| 2. O  | I/P Junction Box - IPS 5 (Head Lamp High) | 6. B | Ground (GHG05)                           |
| 3. Gr | I/P Junction Box - IPS 4 (Head Lamp Low)  | 7. P | I/P Junction Box - IPS 9 (DRL Lamp High) |
| 4. B  | Ground (GHG05)                            | 8. B | Ground (GHG05)                           |



# CONTROL HARNESS

## Control Harness (8)

CV20-8

### CHG27 Head Lamp RH

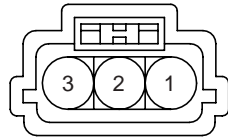
- 8 Female / Black (KUM\_XWP\_08F\_B)



- |       |   |      |  |
|-------|---|------|--|
| 1. W  | BCM (Turn Lamp)                             | 5. Y | I/P Junction Box - IPS 2<br>(Tail Lamp)    |
| 2. O  | I/P Junction Box - IPS 0<br>(Head Lamp Low) | 6. B | Ground (GHG04)                             |
| 3. Gr | I/P Junction Box - IPS 0<br>(Head Lamp Low) | 7. P | I/P Junction Box - IPS 8<br>(DRL Lamp Low) |
| 4. B  | Ground (GHG04)                              | 8. B | Ground (GHG04)                             |

### CHG28 A/C Compressor

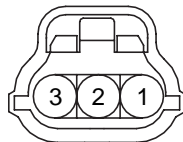
- 3 Female / Gray (KUM\_NDWP\_03F\_GR)



- |      |                              |       |                             |
|------|------------------------------|-------|-----------------------------|
| 1. Y | EMS Box - RLY. 3             | 3. Gr | A/C Control Module (ECV IN) |
| 2. L | A/C Control Module (ECV OUT) |       |                             |

### CHG29 A/C Pressure Transducer

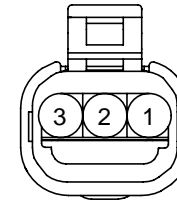
- 3 Female / Black (KET\_040WP\_03F\_B)



- |      |                             |        |              |
|------|-----------------------------|--------|--------------|
| 1. G | [G4KD/G4KE]<br>PCM (Ground) | 2. Gr  | PCM (Signal) |
| B    | [D4HA]<br>PCM (Ground)      | 3. L/B | PCM (Supply) |

### CHG30 Head Lamp Leveling Device Actuator LH

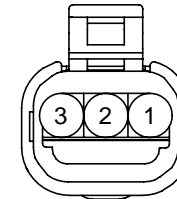
- 3 Female / Black (AMP\_025WP\_03F\_B)



- |      |                |        |                            |
|------|----------------|--------|----------------------------|
| 1. B | Ground (GHG02) | 3. Y/B | I/P Junction Box - F21 10A |
| 2. L | HLLD Switch    |        |                            |

### CHG31 Head Lamp Leveling Device Actuator RH

- 3 Female / Black (AMP\_025WP\_03F\_B)



- |      |                |      |                            |
|------|----------------|------|----------------------------|
| 1. B | Ground (GHG02) | 3. Y | I/P Junction Box - F21 10A |
| 2. L | HLLD Switch    |      |                            |

### CHG32 Power Steering Switch

- 1 Female / Black (KUM\_NMWP\_01F\_B)



- |      |     |
|------|-----|
| 1. W | PCM |
|------|-----|

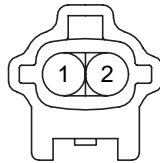
# CONTROL HARNESS

## Control Harness (9)

CV20-9

### CHG34 Front Wheel Sensor RH

- 2 Male / Black (KET\_090IWP\_02M\_B)



1. L ABS/ESP Control Module (SIG) 2. R ABS/ESP Control Module (VCC)

### CHG35 Front Wiper Deicer

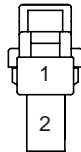
- 2 Female / Black (KUM\_NMWP\_02F\_B)



1. G E/R Fuse & Relay Box - RLY. 10 2. B Ground (GHG05)

### CHG36 Clutch Switch (M/T)

- 2 Female / White (KET\_250DL\_02F\_W)



1. B Ground (GHG04) 2. W PCM  
[With ESP] ESP Control Module

### CHG37 Back-Up Lamp Switch (G4KD, M/T)

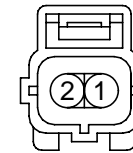
- 2 Female / Black (KUM\_NMWP\_02F\_B)



1. B Ground (GHG01) 2. W IPS Control Module

### CHG38 Back-Up Lamp Switch (G4KE, M/T)

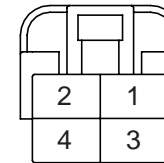
- 2 Female / Black (AMP\_EJWP\_02F\_B)



1. G E/R Fuse & Relay Box - RLY. 10 2. B Ground (GHG05)

### CHG39 Stop Lamp Switch

- 4 Female / White (KET\_250DL\_04F\_W)



1. G/B	ABS/ESP Control Module, PCM, ECM, DBC Relay, Smart Key Control Module,	3. G/B	Smart Key Control Module, ESP Control Module
2. L	E/R Fuse & Relay Box - F17 10A	4. L/B	ESP Control Module, PCM

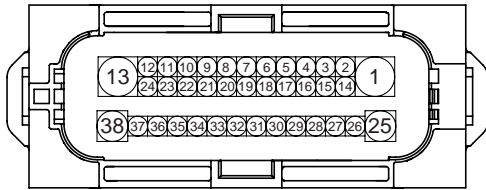
# CONTROL HARNESS

## Control Harness (10)

CV20-10

### CHG40 ESP Control Module

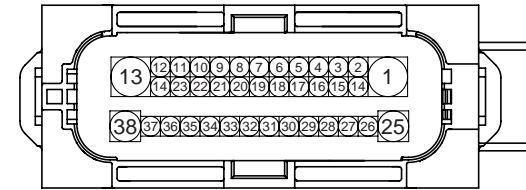
- 38 Female / Black (AMP\_ABS\_38F\_B\_A)



1. W	E/R Fuse & Relay Box - F5 40A (Multi Fuse)	22. R	I/P Junction Box (IPS Control Module), Parking Brake Switch
2. -	-	23. G/B	Stop Lamp Switch (Brake Light Switch)
3. -	-	24. B	Yaw Rate Sensor (CAN Low)
4. R	Yaw Rate Sensor (Power)	25. L	E/R Fuse & Relay Box - F3 40A (Multi Fuse)
5. -	-	26. G	C-CAN (High)
6. -	-	27. -	-
7. -	-	28. P	PCM (Wheel Speed Sensor Output FR)
8. W	ICM Relay Box (DBC Relay Control)	29. Gr	E/R Fuse & Relay Box - F24 7.5A
9. L	Stop Lamp Switch (Brake Switch)	30. -	-
10. R	Multi Switch (ESP Off Switch 'ON')	31. G	Front Wheel Sensor LH (SIG)
11. L	Yaw Rate Sensor (Ground)	32. L	Rear Wheel Sensor LH (SIG)
12. Y	Yaw Rate Sensor (CAN High)	33. W	Rear Wheel Sensor RH (VCC)
13. B	Ground (GHG06)	34. R	Front Wheel Sensor RH (VCC)
14. R	C-CAN (Low)	35. -	[M/T]
15. -	-	36. G/B	ICM Relay Box (DBC Relay 'ON' Signal)
16. -	-	37. P	Multi Switch (DBC Switch 'ON')
17. P	Smart Key Control Module (Wheel Speed Sensor Output RR)	38. B	Ground (GHG06)
18. L	Front Wheel Sensor LH (VCC)		
19. R	Rear Wheel Sensor LH (VCC)		
20. B	Rear Wheel Sensor RH (SIG)		
21. L	Front Wheel Sensor RH (SIG)		

### CHG41 ABS Control Module

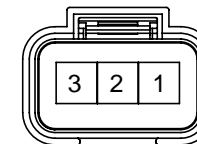
- 38 Female / Black (AMP\_ABS\_38F\_B\_A)



1. W	E/R Fuse & Relay Box - F5 40A (Multi Fuse)	20. B	Rear Wheel Sensor RH (SIG)
2. Gr	G-Sensor (Power)	21. L	Front Wheel Sensor RH (SIG)
3. Gr/O	G-Sensor (Signal)	22. -	-
4. -	-	23. G/B	Stop Lamp Switch (Brake Switch)
5. B	G-Sensor (Ground)	24. -	-
6. -	-	25. L	E/R Fuse & Relay Box - F3 40A (Multi Fuse)
7. -	-	26. G	C-CAN High
8. -	-	27. -	-
9. -	-	28. P	[G4KD/G4KE] PCM (Wheel Speed Sensor Output FR)
10. -	-	29. Gr	E/R Fuse & Relay Box - F24 7.5A
11. -	-	30. -	-
12. -	-	31. G	Front Wheel Sensor LH (SIG)
13. B	Ground (GHG06)	32. L	Rear Wheel Sensor LH (SIG)
14. O	C-CAN Low	33. W	Rear Wheel Sensor RH (VCC)
15. -	-	34. R	Front Wheel Sensor RH (VCC)
16. -	-	35. -	-
17. P	Smart Key Control Module (Wheel Speed Sensor Output RR)	36. -	-
18. L	Front Wheel Sensor LH (VCC)	37. -	-
19. R	Rear Wheel Sensor LH (VCC)	38. B	Ground (GHG06)

### CHG42 Cooling Fan Motor

- 3 Female / Black (AMP\_SPTWP\_03F\_B)



1. R	E/R Fuse & Relay Box - RLY. 9	3. B	Ground (GHG02)
2. W	E/R Fuse & Relay Box - RLY. 3		

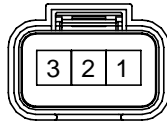
# CONTROL HARNESS

## Control Harness (11)

CV20-11

### CHG43 G-Sensor

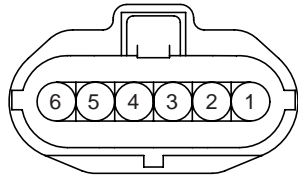
- 3 Female / Black (AMP\_SPTWP\_03F\_B)



- |       |                          |         |                          |
|-------|--------------------------|---------|--------------------------|
| 1. Gr | ABS Control Module (PWR) | 3. Br/B | ABS Control Module (GND) |
| 2. R  | ABS Control Module (SIG) |         |                          |

### CHG44 Accel Pedal Position Sensor

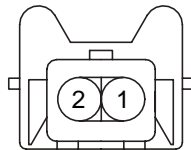
- 6 Female / Black (AMP\_070WP\_06F\_B)



- |        |                    |       |                    |
|--------|--------------------|-------|--------------------|
| 1. L   | PCM (APS 2 Supply) | 4. Gr | PCM (APS 1 Supply) |
| 2. O   | PCM (APS 1 Signal) | 5. Y  | PCM (APS 1 Ground) |
| 3. L/O | PCM (APS 2 Signal) | 6. Br | PCM (APS 2 Ground) |

### CHG45 Brake Fluid Level Sensor

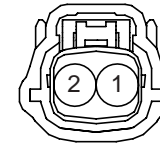
- 2 Female / Black (AMP\_JPT\_02F\_B\_CLIP)



- |      |                |         |  |
|------|----------------|---------|--|
| 1. B | Ground (GHG04) | 2. Br/B | IPS Control Module - Brake Fluid Level |
|------|----------------|---------|--|

### CHG46 Burglar Alarm Horn

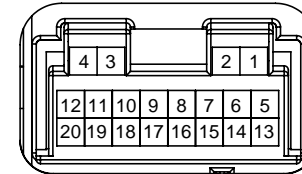
- 2 Female / Black (MLX\_HORN\_02F\_B\_FILT)



- |      |                               |      |                |
|------|-------------------------------|------|----------------|
| 1. R | E/R Fuse & Relay Box - RLY. 5 | 2. B | Ground (GHG04) |
|------|-------------------------------|------|----------------|

### CHG47 Multipurpose Check Connector

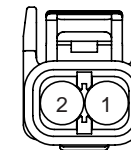
- 20 Female / Black (LM\_DIAGNOSIS\_20F\_B)



- |       |                |       |                           |
|-------|----------------|-------|---------------------------|
| 1. B  | Ground (GHG05) | 11. - | -                         |
| 2. -  | -              | 12. G | I/P Junction Box - F5 10A |
| 3. -  | -              | 13. - | -                         |
| 4. -  | -              | 14. - | -                         |
| 5. B  | Ground (GHG02) | 15. - | -                         |
| 6. -  | -              | 16. - | -                         |
| 7. -  | -              | 17. O | C-CAN (Low)               |
| 8. -  | -              | 18. - | -                         |
| 9. G  | C-CAN (High)   | 19. W | Body K-Line               |
| 10. - | -              | 20. - | -                         |

### CHG49 Hood Switch

- 2 Female / Black (KET\_090IWP\_02F\_B\_ASM)



- |        |                                       |      |                |
|--------|---------------------------------------|------|----------------|
| 1. R/B | I/P Junction Box (IPS Control Module) | 2. B | Ground (GHG04) |
|--------|---------------------------------------|------|----------------|

# CONTROL HARNESS

## Control Harness (12)

CV20-12

### CHG50 Horn

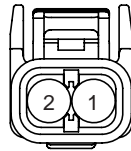
- 2 Female / Gray (KUM\_NDWP\_02F\_GR)



1. G E/R Fuse & Relay Box - RLY. 2      2. B Ground (GHG04)

### CHG51 External Buzzer

- 2 Female / Black (KET\_090IWP\_02F\_B\_ASM)



1. B Ground (GHG01)      2. P Smart Key Control Module

### CHG52 Front Fog Lamp LH

- 2 Female / Black (KET\_110WP\_02F\_B\_A)



1. L I/P Junction Box (IPS 6)      2. B Ground (GHG05)

### CHG53 Front Fog Lamp RH

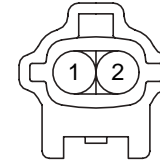
- 2 Female / Black (KET\_110WP\_02F\_B\_A)



1. L I/P Junction Box (IPS 6)      2. B Ground (GHG04)

### CHG54 Front Wheel Sensor LH

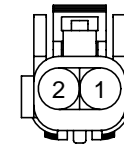
- 2 Male / Black (KET\_090IWP\_02M\_B)



1. G ABS/ESP Control Module (SIG)      2. L ABS/ESP Control Module (VCC)

### CHG55 Side Repeater Lamp LH

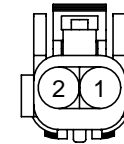
- 2 Female / Gray (KUM\_62Z\_02F\_GR)



1. B Ground (GHG01)      2. Y BCM (Turn & Hazard Lamp Output)

### CHG56 Side Repeater Lamp RH

- 2 Female / Gray (KUM\_62Z\_02F\_GR)



1. B Ground (GHG04)      2. W BCM (Turn & Hazard Lamp Output)

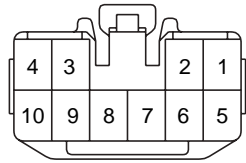
# CONTROL HARNESS

## Control Harness (13)

CV20-13

### CHG63 ATM Shift Lever

- 10 Female / White (KET\_090III\_10F\_W)



- |       |                            |       |                           |
|-------|----------------------------|-------|---------------------------|
| 1. -  | -                          | 6. W  | PCM (Select Switch)       |
| 2. B  | Ground (GHG04)             | 7. P  | PCM (Down Shift)          |
| 3.    | 'P' Position Switch :      | 8. -  | -                         |
| W     | Smart Key Control Module   | 9. B  | Ground (GHG04)            |
| G     | BCM                        | 10. G | PCM (Shift Lock Solenoid) |
| 4. L  | I/P Junction Box - F8 7.5A |       |                           |
| 5. Gr | PCM (Up Shift)             |       |                           |

### CHG64 Driver Front Impact Sensor

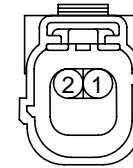
- 2 Female / Dark Gray (FCI\_PAERP\_02F\_DG\_B)



- |       |                           |      |                          |
|-------|---------------------------|------|--------------------------|
| 1. Br | SRS Control Module (High) | 2. W | SRS Control Module (Low) |
|-------|---------------------------|------|--------------------------|

### CHG65 Passenger Front Impact Sensor

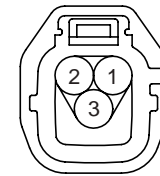
- 2 Female / Dark Gray (FCI\_PAERP\_02F\_DG\_B)



- |      |                           |      |                          |
|------|---------------------------|------|--------------------------|
| 1. B | SRS Control Module (High) | 2. Y | SRS Control Module (Low) |
|------|---------------------------|------|--------------------------|

### CHG66 Front Washer Motor

- 3 Female / Gray (KET\_090IWP\_03F\_GR)



- |       |  |      |   |
|-------|--|------|---|
| 1. B  | Ground (GHG04)                             | 3. - | - |
| 2. Br | Multifunction Switch (Front Washer Switch) |      |   |

### CHG67 Rear Washer Motor

- 2 Female / Black (KET\_090WP\_02F\_B\_SIDE)



- |      |                |       |   |
|------|----------------|-------|---|
| 1. B | Ground (GHG04) | 2. Br | Multifunction Switch (Rear Washer Switch) |
|------|----------------|-------|---|

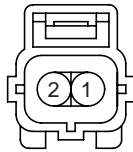
# CONTROL HARNESS

## Control Harness (14)

CV20-14

### CHG70 Variable Intake Solenoid Valve

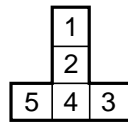
- 2 Female / Black (AMP\_EJWP\_02F\_B)



- |         |                  |      |                         |
|---------|------------------|------|-------------------------|
| 1. Gr/B | EMS Box - F4 10A | 2. W | PCM (VIS Valve Control) |
|---------|------------------|------|-------------------------|

### CHG90 Wiper (Rain Sensor) Relay (RLY. 13)

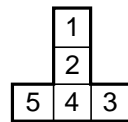
- 5 Female / N/A (CR05F011)



- |      |                                |       |                            |
|------|--------------------------------|-------|----------------------------|
| 1. O | E/R Fuse & Relay Box - RLY. 12 | 4. Gr | Multifunction Switch       |
| 2. P | Front Wiper Motor              | 5. Br | (Front Wiper Switch)       |
| 3. L | Rain Sensor (Control)          |       | I/P Junction Box - F25 10A |

### CHG91 Front Wiper (Low) Relay (RLY. 12)

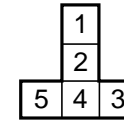
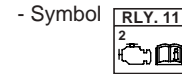
- 5 Female / N/A (CR05F011)



- | With Rain Sensor |                                   | W/O Rain Sensor |                                 |
|------------------|-----------------------------------|-----------------|---------------------------------|
| 1. O             | E/R Fuse & Relay Box - RLY. 13    | 1. Gr           | Multifunction Switch            |
| 2. Y             | I/P Junction Box - F25 25A        |                 | (Front Wiper Switch)            |
| 3. O/B           | Rain Sensor, BCM                  | 2. Y            | I/P Junction Box - F25 25A      |
| 4. L             | Front Wiper Motor,<br>Rain Sensor | 3. O/B          | BCM (Wiper Relay (Low) Control) |
| 5. Y             | I/P Junction Box - F25 25A        | 4. L            | Front Wiper Motor               |
|                  |                                   | 5. Y            | I/P Junction Box - F25 25A      |

### CHG92 ATM P/N Relay (RLY. 11) (With Smart Key)

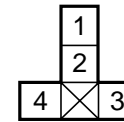
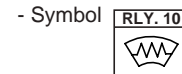
- 5 Female / N/A (CR05F011)



- |      |   |      |                                 |
|------|---|------|---------------------------------|
| 1. P | I/P Junction Box - F4 10A,<br>PCM (Start Overrun (PDM)) | 3. G | E/R Fuse & Relay Box - F23 7.5A |
| 2. P | E/R Fuse & Relay Box - RLY. 4                           | 4. - | -                               |
|      |   | 5. W | PCM (ATM P/N Relay)             |

### CHG93 Front Wiper Deicer Relay (RLY. 10)

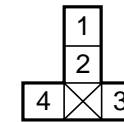
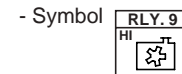
- 4 Female / N/A (CR04F086)



- |      |                                |       |  |
|------|--------------------------------|-------|--|
| 1. L | E/R Fuse & Relay Box - F16 15A | 3. L  | I/P Junction Box<br>(IPS Control Module) |
| 2. G | Front Wiper Deicer             | 4. Br | E/R Fuse & Relay Box - F16 15A           |

### CHG94 Cooling Fan (High) Relay (RLY. 9)

- 4 Female / N/A (CR04F086)



- |      |                               |         |   |
|------|-------------------------------|---------|---|
| 1. L | E/R Fuse & Relay Box - F9 40A | 3. Gr/O | PCM<br>(Cooling Fan Relay High Control) |
| 2. R | Cooling Fan Motor             | 4. Gr   | E/R Fuse & Relay Box - RLY. 3           |

# CONTROL HARNESS

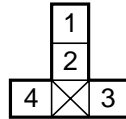
## Control Harness (15)

CV20-15

### CHG97 Rear Defogger Relay (RLY. 6)

- 4 Female / N/A (CR04F086)

- Symbol

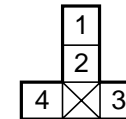


- |      |  |        |  |
|------|--|--------|--|
| 1. R | E/R Fuse & Relay Box - F10 40A                       | 3. G/O | I/P Junction Box                                       |
| 2. P | I/P Junction Box - F38 7.5A,<br>Rear Defogger Output | 4. Br  | (IPS Control Module)<br>E/R Fuse & Relay Box - F10 40A |

### CHG100 Cooling Fan (Low) Relay (RLY. 3)

- 4 Female / N/A (CR04F086)

- Symbol

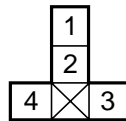


- |      |                               |       |   |
|------|-------------------------------|-------|---|
| 1. L | E/R Fuse & Relay Box - F9 40A | 3. O  | PCM   |
| 2. W | Cooling Fan Motor             | 4. Gr | (Cooling Fan Relay (Low) Control)<br>EMS Box - F7 15A |

### CHG98 Burglar Alarm Horn Relay (RLY. 5)

- 4 Female / N/A (CR04F086)

- Symbol

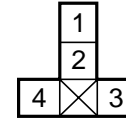


- |      |                                |      |   |
|------|--------------------------------|------|---|
| 1. R | Burglar Alarm Horn             | 3. W | I/P Junction Box                                      |
| 2. P | E/R Fuse & Relay Box - F15 15A | 4. L | (IPS Control Module)<br>E/R Fuse & Relay Box - RLY. 5 |

### CHG101 Horn Relay (RLY. 2)

- 4 Female / N/A (CR04F086)

- Symbol

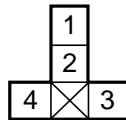


- |      |                                |       |  |
|------|--------------------------------|-------|--|
| 1. G | E/R Fuse & Relay Box - F15 15A | 3. Gr | Multifunction Switch                           |
| 2. G | Horn                           | 4. G  | (Horn Switch)<br>E/R Fuse & Relay Box - RLY. 2 |

### CHG99 Start Relay (RLY. 4)

- 4 Female / N/A (CR04F086)

- Symbol

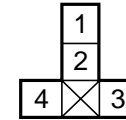


- |                  |   |                 |   |
|------------------|---|-----------------|---|
| [With Smart Key] |   | [W/O Smart Key] |   |
| 1. R             | E/R Fuse & Relay Box - F13 40A  | 1. R            | E/R Fuse & Relay Box - F13 40A  |
| 2. L             | Start Solenoid  | 2. L            | Start Solenoid  |
| 3. W             | PCM (Start Overrun (GND))   | 3. W            | [A/T]<br>PCM (Start Relay Control)  |
| 4. P             | Smart Key Control Module,<br>[A/T]<br>E/R Fuse & Relay Box - RLY. 11<br>[M/T]<br>I/P Junction Box - F20 10A | B               | [M/T]<br>Ground (GHG05)<br>[W/O B/Alarm]<br>I/P Junction Box - F20 10A<br>[With B/Alarm]<br>Burglar Alarm Relay |
|                  |   | 4. P            |   |

### CHG102 Blower Relay (RLY. 1)

- 4 Female / N/A (CR04F086)

- Symbol



- |      |  |      |                            |
|------|--|------|----------------------------|
| 1. R | E/R Fuse & Relay Box -<br>F6 40A (Multi Fuse)              | 3. B | Ground (GHG05)             |
| 2. W | Blower Motor,<br>[Auto A/C]<br>I/P Junction Box - F37 7.5A | 4. O | I/P Junction Box - F32 10A |



# CONTROL HARNESS

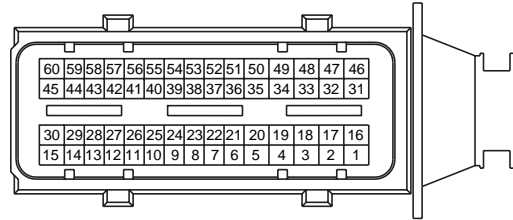
## Control Harness (16)

CV20-16

### D4HA : R 2.0L

#### CRD-A ECM

- 60 Female / Black (AMP\_ECU\_60F\_B\_R)



1. L	[With Smart Key] Injector #3 Control [W/O Smart Key] Injector #2 Control	16. R	[With Smart Key] Injector #3 Control [W/O Smart Key] Injector #2 Control	31. Br	[With Smart Key] Injector #1 Control [W/O Smart Key] Injector #4 Control	46. W	[With Smart Key] Injector #1 Control [W/O Smart Key] Injector #4 Control
2. B	[With Smart Key] Injector #2 Control [W/O Smart Key] Injector #3 Control	17. P	[With Smart Key] Injector #2 Control [W/O Smart Key] Injector #3 Control	32. Y	[With Smart Key] Injector #4 Control [W/O Smart Key] Injector #1 Control	47. G	[With Smart Key] Injector #4 Control [W/O Smart Key] Injector #1 Control
3. -	-	18. -	-	33. -	-	48. -	-
4. G	ACV (Motor (-))	19. G	ACV (Motor (+))	34. O	EGR (Motor (-))	49. G	EGR (Motor (+))
5. -	-	20. O	Electronic VGT Actuator (PWM In)	35. Y	VSA (Motor (-))	50. B	VSA (Motor (+))
6. -	-	21. -	-	36. -	-	51. Br/B	Sensor Ground : (ECTS/FTS/IATS/EGTS/ BPS/CKPS/AFS)
7. -	-	22. -	-	37. -	-	52. -	-
8. -	-	23. -	-	38. Br	CMPS (Ground)	53. B	Sensor Ground : APT/DPF/Cruise Switch
9. -	-	24. -	-	39. -	-	54. L	Ground : VSA/EGR/ACV (Feedback Ground)
10. R	Ground : VSA/EGR/ACV (Feedback Supply)	25. Gr	Sensor Supply : (DPS/RDS/BPS/CMPS)	40. O	RPS (Signal)	55. -	-
11. -	-	26. Gr	VSA (Feedback Signal)	41. G	ACV (Feedback Signal)	56. -	-
12. G	RPS (Ground)	27. G	EGR (Feedback Signal)	42. Gr	FTS (Signal)	57. Gr	PT (Signal)
13. -	-	28. -	-	43. W	ECTS (Signal)	58. -	-
14. Br	EGR Cooling Bypass Solenoid Valve	29. -	-	44. G	Camshaft Position Sensor (Signal)	59. B	Ground (GRD09)
15. -	-	30. -	-	45. O	Rail Pressure Control Valve	60. L	Fuel Pressure Regulating Valve

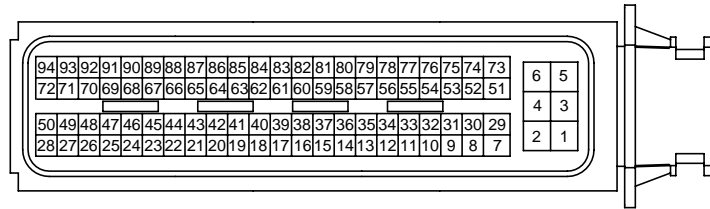
# CONTROL HARNESS

## Control Harness (17)

CV20-17

### CRD-K ECM

- 94 Female / Black (AMP\_ECU\_94F\_B\_R)



1. B	Ground (GRD09)	26. —	—	51. —	—	76. P	MAFS (Air Temp. Signal)
2. B	Ground (GRD09)	27. Y	Diesel Box - RLY. 1	52. O	Cruise Control Switch Signal	77. L	Lambda Sensor (Current Pump)
3. R	EMS Box - F5 20A	28. —	—	53. Gr	APS. 1 (Signal)	78. Y	Lambda Sensor (Nernst Voltage)
4. B	Ground (GRD09)	29. —	—	54. P/B	APS. 2 (Signal)	79. —	—
5. W	EMS Box - F5 20A	30. —	—	55. O	Lambda Sensor (Current Adjust)	80. —	—
6. R	EMS Box - F5 20A	31. —	—	56. B	Lambda Sensor (Vertual Ground)	81. —	—
7. —	—	32. —	—	57. —	—	82. L	[With IMMO.] Immobilizer Ground
8. W	APS. 2 (Ground)	33. —	—	58. —	—		[With Smart Key] Smart Key Control Module
9. L	EGTS (Signal)	34. Br	DPS (Signal)	59. —	—		Smart Key Control Module
10. —	—	35. —	—	60. W	Smart Key Control Module (Engine Speed Signal)	83. Y	[M/T] Neutral Switch
11. Y	BPS (Signal)	36. —	—	61. O	Glow Plug Output Signal	84. —	—
12. —	—	37. —	—	62. —	—	85. —	—
13. Br	APS. 1 (Supply)	38. B	IMMO. Ground	63. —	—	86. W	Battery Sensor (LIN)
14. G	Cruise Control Switch Supply	39. —	—	64. —	—	87. G	E/R Fuse & Relay Box - F23 7.5A
15. R	APS. 2 (Supply)	40. W	CKPS (Signal)	65. B	Automatic Recognition - 2WD/4WD (Ground (GF06))	88. P	Water In Fuel Sensor
16. —	—	41. Br	Vehicle Speed Signal	66. —	—	89. —	—
17. L/B	APT (Supply)	42. —	—	67. O	C-CAN (Low)	90. Gr/O	E/R Fuse & Relay Box - RLY. 9
18. L	MAFS (Signal)	43. B	DPF Auto Detection Ground (GRD05)	68. G	C-CAN (High)	91. —	—
19. G	Glow Time Feedback Signal	44. W	[M/T] Clutch Switch	69. G	—	92. —	—
20. B	Automatic Recognition A/T & M/T Ground (GRD05)	45. G/B	Stop Lamp Switch (Brake Main Switch Signal)	70. O	E/R Fuse & Relay Box - RLY. 3	93. —	—
21. L/B	Stop Lamp Switch (Redundant Brake Switch Signal)	46. —	—	71. G	EMS Box - RLY. 2	94. —	—
22. G	Electric VGT Actuator (Feedback)	47. Br/O	IMMO. IND.	72. —	—		
23. Br	MAFS (Reference Frequency)	48. —	—	73. G	Lambda Sensor (Sensor Heater)		
24. —	—	49. Br	EMS Box - RLY. 3	74. L/B	APS. 1 (Ground)		
25. —	—	50. Y/B	Instrument Cluster (Engine Check IND.)vv	75. P	ATS (Signal)		

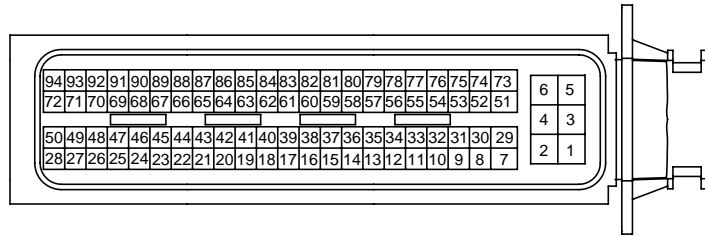
# CONTROL HARNESS

## Control Harness (18)

CV20-18

### CRD-T TCM (LHD)

- 94 Female / Black (AMP\_ECU\_94F\_B\_R)



1. N/A	EMS Box - F2 15A	23. N/A	Transaxle Range Switch (Position Switch Code (S1))	46. N/A	ATM Solenoid Valve (LINE_VFS)	71. -	-
2. N/A	EMS Box - F2 15A	24. -	-	47. N/A	ATM Solenoid Valve (UD_VFS)	72. -	-
3. N/A	E/R Fuse & Relay Box - F25 7.5A	25. -	-	48. -	-	73. N/A	ATM Solenoid Valve (Solenoid Power 2)
4. N/A	Ground (GRD08)	26. -	-	49. -	-	74. -	-
5. N/A	Ground (GRD08)	27. -	-	50. N/A	ATM Solenoid Valve (26B_VFS)	75. -	-
6. -	-	28. -	-	51. -	-	76. -	-
7. N/A	[With Smart Key] E/R Fuse & Relay Box - RLY. 11 [W/O Smart Key] E/R Fuse & Relay Box - RLY. 4	29. N/A	ATM Solenoid Valve (Solenoid Power 1)	52. N/A	ATM Solenoid Valve (SS-A)	77. -	-
8. N/A	ATM Solenoid Valve (SS-B)	30. N/A	ATM Solenoid Valve (Output Speed Supply)	53. -	-	78. -	-
9. N/A	ATM Shift Lever (Shift Lock Solenoid)	31. N/A	ATM Solenoid Valve (Input Speed Supply)	54. -	-	79. -	-
10. -	-	32. -	-	55. N/A	ATM Solenoid Valve (Input Speed Signal)	80. -	-
11. -	-	33. -	-	56. N/A	ATM Solenoid Valve (Output Speed Signal)	81. -	-
12. -	-	34. -	-	57. -	-	82. -	-
13. N/A	Transaxle Range Switch (Position Switch Code (S2))	35. -	-	58. -	-	83. -	-
14. N/A	ATM Solenoid Valve (Oil Temp. Sensor (+))	36. -	-	59. -	-	84. -	-
15. N/A	ATM Solenoid Valve (Oil Temp. Sensor (-))	37. -	-	60. -	-	85. -	-
16. N/A	ATM Shift Lever (Up Shift)	38. -	-	61. N/A	ATM Shift Lever (Select Switch)	86. -	-
17. N/A	ATM Shift Lever (Down Shift)	39. -	-	62. -	-	87. -	-
18. -	-	40. -	-	63. -	-	88. -	-
19. -	-	41. -	-	64. -	-	89. -	-
20. -	-	42. -	-	65. -	-	90. -	-
21. N/A	Transaxle Range Switch (Position Switch Code (S3))	43. N/A	ATM Solenoid Valve (T/CON_VFS)	66. -	-	91. -	-
22. N/A	Transaxle Range Switch (Position Switch Code (S4))	44. N/A	ATM Solenoid Valve (OD_VFS)	67. -	-	92. -	-
		45. N/A	ATM Solenoid Valve (35R_VFS)	68. -	-	93. -	-
				69. -	-	94. -	-
				70. -	-		

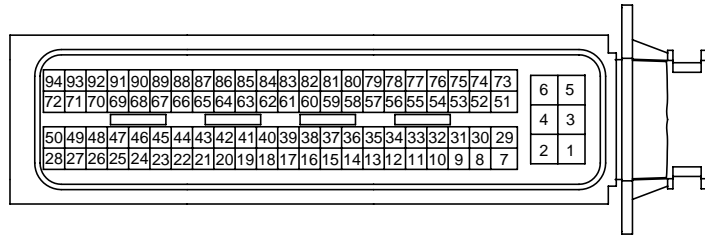
# CONTROL HARNESS

## Control Harness (19)

CV20-19

### CRD-TR TCM (RHD)

- 94 Female / Black (AMP\_ECU\_94F\_B\_R)



1. G	EMS Box - F2 15A	23. Gr	Transaxle Range Switch (Position Switch Code (S1))	46. P	ATM Solenoid Valve (LINE_VFS)	71. -	-
2. R	EMS Box - F2 15A	24. -	-	47. Y	ATM Solenoid Valve (UD_VFS)	72. -	-
3. G	E/R Fuse & Relay Box - F25 7.5A	25. -	-	48. -	-	73. L	ATM Solenoid Valve (Solenoid Power 2)
4. B	Ground (GRD08)	26. -	-	49. -	-	74. -	-
5. B	Ground (GRD08)	27. -	-	50. Y	ATM Solenoid Valve (26B_VFS)	75. -	-
6. -	-	28. -	-	51. -	-	76. -	-
7. W	[With Smart Key] E/R Fuse & Relay Box - RLY. 11 [W/O Smart Key]	29. R	ATM Solenoid Valve (Solenoid Power 1)	52. G	ATM Solenoid Valve (SS-A)	77. -	-
8. L	ATM Solenoid Valve (SS-B)	30. G	ATM Solenoid Valve (Output Speed Supply)	53. -	-	78. -	-
9. G	ATM Shift Lever (Shift Lock Solenoid)	31. B	ATM Solenoid Valve (Input Speed Supply)	54. -	-	79. -	-
10. -	-	32. -	-	55. W	ATM Solenoid Valve (Input Speed Signal)	80. -	-
11. -	-	33. -	-	56. B	ATM Solenoid Valve (Output Speed Signal)	81. -	-
12. -	-	34. -	-	57. -	-	82. -	-
13. O	Transaxle Range Switch (Position Switch Code (S2))	35. -	-	58. -	-	83. -	-
14. B	ATM Solenoid Valve (Oil Temp. Sensor (+))	36. -	-	59. -	-	84. -	-
15. Y	ATM Solenoid Valve (Oil Temp. Sensor (-))	37. -	-	60. -	-	85. -	-
16. Gr	ATM Shift Lever (Up Shift)	38. -	-	61. W	ATM Shift Lever (Select Switch)	86. -	-
17. P	ATM Shift Lever (Down Shift)	39. -	-	62. -	-	87. -	-
18. -	-	40. -	-	63. -	-	88. -	-
19. -	-	41. -	-	64. -	-	89. -	-
20. -	-	42. -	-	65. -	-	90. -	-
21. P	Transaxle Range Switch (Position Switch Code (S3))	43. P	ATM Solenoid Valve (T/CON_VFS)	66. -	-	91. -	-
22. G	Transaxle Range Switch (Position Switch Code (S4))	44. Y	ATM Solenoid Valve (OD_VFS)	67. -	-	92. -	-
		45. G	ATM Solenoid Valve (35R_VFS)	68. -	-	93. -	-
				69. -	-	94. -	-
				70. -	-		

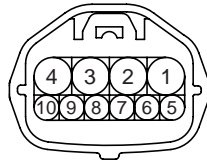
# CONTROL HARNESS

## Control Harness (20)

CV20-20

### CRD01 Transaxle Range Switch

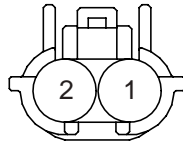
- 10 Female / Black (KET\_0509WP\_10F\_B)



1. -	-	6. -	-
2. O	TCM (Position Switch Code (S2))	7. -	-
3. -	-	8. P	TCM (Position Switch Code (S3))
4. G	E/R Fuse & Relay Box - F25 7.5A	9. G	TCM (Position Switch Code (S4))
5. -	-	10. Gr	TCM (Position Switch Code (S1))

### CRD02 Ambient Sensor

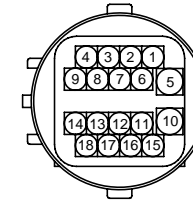
- 2 Female / Black (KET\_SWP\_02F\_B)



1. L/B	A/C Control Module (Sensor (+))	2. Gr	A/C Control Module (Sensor Ground)
--------	---------------------------------	-------	------------------------------------

### CRD04 ATM Solenoid Valve

- 18 Female / Black (FCI\_MULWP\_18F\_B\_1)



1. -	-	10. L	TCM (Solenoid Power 2)
2. P	TCM (EC_VFS)	11. Y	TCM (26B_VFS)
3. G	TCM (Output Speed Supply)	12. L	TCM (SS-B)
4. B	TCM (Output Speed Signal)	13. Y	TCM (Oil Temp. Sensor (-))
5. R	TCM (Solenoid Power 1)	14. B	TCM (Input Speed Supply)
6. G	TCM (35R_VFS)	15. -	-
7. Y	TCM (OD_VFS)	16. L	TCM (UD_VFS)
8. W	TCM (Input Speed Signal)	17. P	TCM (LINE_VFS)
9. B	TCM (Oil Temp. Sensor (+))	18. G	TCM (SS-A)

### CRD05 Oil Level Sensor

- 4 Female / Black (KUM\_NMWP\_04F\_B)



1. Gr	EMS Box - F4 10A	3. W	ECM (LIN)
2. B	Ground (GRD01)	4. Y/B	Instrument Cluster (Oil Pressure IND.)

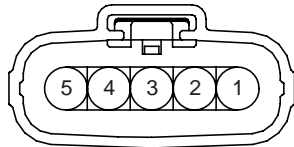
# CONTROL HARNESS

## Control Harness (21)

CV20-21

### CRD07 Front Wiper Motor

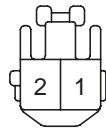
- 5 Female / Black (KUM\_NDWP\_05F\_B)



- |      |                                |      |  |
|------|--------------------------------|------|--|
| 1. B | Ground (GRD02)                 | 4. G | Front Wiper Switch (LO)                              |
| 2. L | E/R Fuse & Relay Box - RLY. 12 | 5. P | Front Wiper Switch (HI)                              |
| 3. Y | I/P Junction Box - F25 25A     |      | [With Rain Sensor]<br>E/R Fuse & Relay Box - RLY. 13 |

### CRD08 Ignition Lock Switch (M/T)

- 2 Female / White (KET\_090III\_02F\_W\_L)

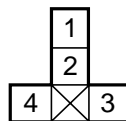


- |      |                |      |  |
|------|----------------|------|--|
| 1. B | Ground (GRD02) | 2. W | [With Smart Key]<br>Smart Key Control Module<br>[W/O Smart Key]<br>E/R Fuse & Relay Box - RLY. 4 |
|------|----------------|------|--|

### CRD09 Fuel Filter Heater Relay (Diesel Box - RLY. 4)

- 4 Female / N/A (CR04F086)

- Symbol

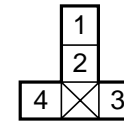


- |      |                     |       |                                 |
|------|---------------------|-------|---------------------------------|
| 1. R | Diesel Box - F4 30A | 3. G  | Thermo Switch                   |
| 2. W | Fuel Filter Heater  | 4. Gr | E/R Fuse & Relay Box - F24 7.5A |

### CRD10-1 PTC Heater Relay #1 (Diesel Box - RLY. 1)

- 4 Female / N/A (CR04F086)

- Symbol

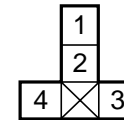


- |      |                     |      |                         |
|------|---------------------|------|-------------------------|
| 1. R | Diesel Box - F1 50A | 3. Y | A/C Control Module, ECM |
| 2. R | PTC Heater          | 4. O | EMS Box - F4 10A        |

### CRD10-2 PTC Heater Relay #2 (Diesel Box - RLY. 2)

- 4 Female / N/A (CR04F086)

- Symbol

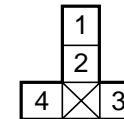


- |      |                     |        |                     |
|------|---------------------|--------|---------------------|
| 1. R | Diesel Box - F2 50A | 3. L/O | A/C Control Module  |
| 2. W | PTC Heater          | 4. L   | Diesel Box - RLY. 3 |

### CRD10-3 PTC Heater Relay #3 (Diesel Box - RLY. 3)

- 4 Female / N/A (CR04F086)

- Symbol



- |      |                     |      |  |
|------|---------------------|------|--|
| 1. W | Diesel Box - F3 50A | 3. G | A/C Control Module                                 |
| 2. W | PTC Heater          | 4. O | I/P Junction Box - F32 10A,<br>Diesel Box - RLY. 2 |

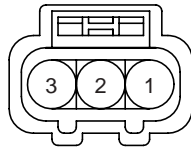
# CONTROL HARNESS

## Control Harness (22)

CV20-22

### CRD11 Engine Coolant Temperature Sensor

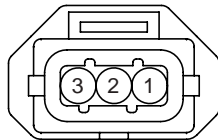
- 3 Female / Black (KUM\_62Z\_03F\_B\_WTS)



1. W	ECM (Sensor Signal)	3. Br/B	ECM (Sensor Ground)
2. -	-		

### CRD13 Camshaft Position Sensor

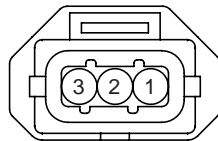
- 3 Female / Black (AMP\_JPT\_03F\_B\_L1)



1. Gr	ECM (Sensor Supply)	3. Br	ECM (Sensor Ground)
2. G	ECM (Sensor Signal)		

### CRD14 Crankshaft Position Sensor

- 3 Female / Black (AMP\_JPT\_03F\_B\_L1)



1. Br/B	ECM (Sensor Ground)	3. O	EMS Box - F8 10A
2. W	ECM (Sensor Signal)		

### CRD15 Oil Pressure Switch

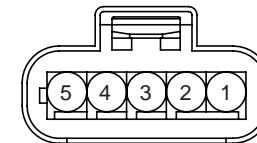
- 1 Female / Black (KUM\_NMWP\_01F\_B)



1. Y/B	Oil Pressure IND.
--------	-------------------

### CRD20 Mass Air Flow Sensor

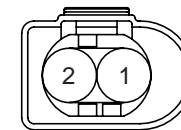
- 5 Female / Black (HSM\_SENSOR\_05F\_B\_3)



1. L	ECM (Sensor Signal)	4. Br/B	ECM (Sensor Ground)
2. Br	ECM (Reference Frequency)	5. G	E/R Fuse & Relay Box - F23 7.5A
3. Gr	ECM (Air Temp. Signal)		

### CRD24-1 Injector #1

- 2 Female / Black (AMP\_INJ\_02F\_B)



[With IMMO. / Smart Key]

1. W	ECM (Injector Control)
2. Br	ECM (Injector Control)

[W/O IMMO. / Smart Key]

1. G	ECM (Injector Control)
2. Y	ECM (Injector Control)

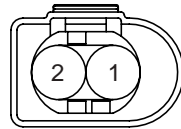
# CONTROL HARNESS

## Control Harness (23)

CV20-23

### CRD24-2 Injector #2

- 2 Female / Black (KUM\_NDWP\_02F\_B)



[With IMMO. / Smart Key]

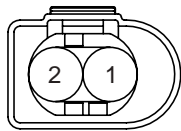
- 1. B ECM (Injector Control)
- 2. P ECM (Injector Control)

[W/O IMMO. / Smart Key]

- 1. L ECM (Injector Control)
- 2. R ECM (Injector Control)

### CRD24-3 Injector #3

- 2 Female / Black (KUM\_NDWP\_02F\_B)



[With IMMO. / Smart Key]

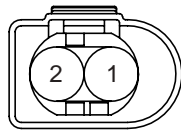
- 1. L ECM (Injector Control)
- 2. R ECM (Injector Control)

[W/O IMMO. / Smart Key]

- 1. B ECM (Injector Control)
- 2. P ECM (Injector Control)

### CRD24-4 Injector #4

- 2 Female / Black (KUM\_NDWP\_02F\_B)



[With IMMO. / Smart Key]

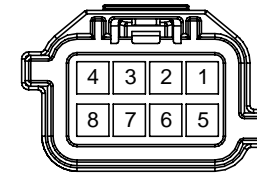
- 1. G ECM (Injector Control)
- 2. Y ECM (Injector Control)

[W/O IMMO. / Smart Key]

- 1. W ECM (Injector Control)
- 2. Br ECM (Injector Control)

### CRD26 Head Lamp LH

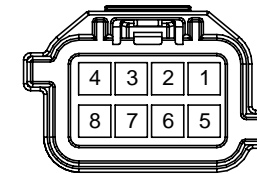
- 8 Female / Black (KUM\_XWP\_08F\_B)



- |       |   |      |  |
|-------|---|------|--|
| 1. Y  | BCM (Turn Lamp)                           | 5. G | I/P Junction Box - IPS 7 (Tail Lamp)     |
| 2. O  | I/P Junction Box - IPS 5 (Head Lamp High) | 6. B | Ground (GRD05)                           |
| 3. Gr | I/P Junction Box - IPS 4 (Head Lamp Low)  | 7. P | I/P Junction Box - IPS 9 (DRL Lamp High) |
| 4. B  | Ground (GRD05)                            | 8. B | Ground (GRD05)                           |

### CRD27 Head Lamp RH

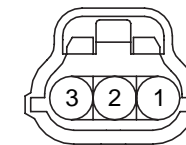
- 8 Female / Black (KUM\_XWP\_08F\_B)



- |       |   |      |  |
|-------|---|------|--|
| 1. W  | BCM (Turn Lamp)                           | 5. Y | I/P Junction Box - IPS 2 (Tail Lamp)     |
| 2. O  | I/P Junction Box - IPS 1 (Head Lamp High) | 6. B | Ground (GRD04)                           |
| 3. Gr | I/P Junction Box - IPS 0 (Head Lamp Low)  | 7. - | I/P Junction Box - IPS 8 (DRL Lamp High) |
| 4. B  | Ground (GRD04)                            | 8. B | Ground (GRD04)                           |

### CRD29 A/C Pressure Transducer

- 3 Female / White (KET\_040WP\_03F\_B)



- |       |              |        |              |
|-------|--------------|--------|--------------|
| 1. B  | ECM (Ground) | 3. W/B | ECM (Supply) |
| 2. Gr | ECM (Signal) |        |              |



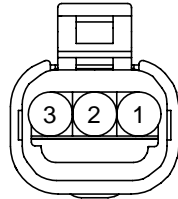
# CONTROL HARNESS

## Control Harness (24)

CV20-24

### CRD30 Head Lamp Leveling Device Actuator LH

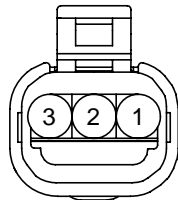
- 3 Female / Black (AMP\_025WP\_03F\_B)



- |      |                |      |                            |
|------|----------------|------|----------------------------|
| 1. B | Ground (GRD02) | 3. Y | I/P Junction Box - F21 10A |
| 2. L | HLLD Switch    |      |                            |

### CRD31 Head Lamp Leveling Device Actuator RH

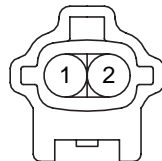
- 3 Female / Black (AMP\_025WP\_03F\_B)



- |      |               |      |                            |
|------|---------------|------|----------------------------|
| 1. B | Ground (GM02) | 3. Y | I/P Junction Box - F21 10A |
| 2. L | HLLD Switch   |      |                            |

### CRD34 Front Wheel Sensor RH

- 2 Male / Black (KET\_090IWP\_02M\_B)



- |      |                              |      |                              |
|------|------------------------------|------|------------------------------|
| 1. L | ABS/ESP Control Module (SIG) | 2. R | ABS/ESP Control Module (VCC) |
|------|------------------------------|------|------------------------------|

### CRD35 Front Wiper Deicer

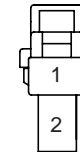
- 2 Female / Black (KUM\_NMWP\_02F\_B)



- |      |                                |      |                |
|------|--------------------------------|------|----------------|
| 1. G | E/R Fuse & Relay Box - RLY. 10 | 2. B | Ground (GRD05) |
|------|--------------------------------|------|----------------|

### CRD36 Clutch Switch (M/T)

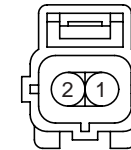
- 2 Female / White (KET\_250DL\_02F\_W)



- |      |                |      |                                      |
|------|----------------|------|--------------------------------------|
| 1. B | Ground (GRD04) | 2. W | ECM<br>[With ESP] ESP Control Module |
|------|----------------|------|--------------------------------------|

### CRD37 Back-Up Lamp Switch (M/T)

- 2 Female / Black (AMP\_EJWP\_02F\_B)



- |      |                |      |  |
|------|----------------|------|--|
| 1. B | Ground (GRD01) | 2. W | I/P Junction Box<br>(IPS Control Module) |
|------|----------------|------|--|

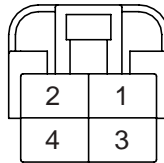
# CONTROL HARNESS

## Control Harness (25)

CV20-25

### CRD39 Stop Lamp Switch

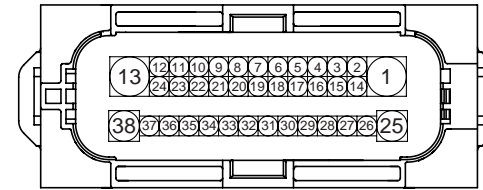
- 4 Female / White (KET\_250DL\_04F\_W)



- |        |   |      |   |
|--------|---|------|---|
| 1. G/B | ABS/ESP Control Module,<br>Smart Key Control Module,<br>ECM | 3. W | [G4KD/G4KE]<br>I/P Junction Box - F21 10A<br>[D4HA]         |
| 2. L   | E/R Fuse & Relay Box - F17 10A,<br>Smart Key Control Module | 4. L | EMS Box - F9 10A<br>ECM<br>[With ESP]<br>ESP Control Module |
|        |   | L/B  |   |

### CRD40 ESP Control Module

- 38 Female / Black (AMP\_ABS\_38F\_B\_A)



- |        |  |         |   |
|--------|--|---------|---|
| 1. W   | E/R Fuse & Relay Box - F5 40A<br>(Multi Fuse)              | 20. B   | Rear Wheel Sensor RH (SIG)  |
| 2. -   | -  | 21. L   | Front Wheel Sensor RH (SIG)                                       |
| 3. -   | -  | 22. R   | I/P Junction Box<br>(IPS Control Module),<br>Parking Brake Switch |
| 4. R   | Yaw Rate Sensor (Power)                                    | 23. G/B | Stop Lamp Switch<br>(Brake Light Switch)                          |
| 5. -   | -  | 24. B   | Yaw Rate Sensor (CAN Low)   |
| 6. -   | -  | 25. L   | E/R Fuse & Relay Box - F3 40A<br>(Multi Fuse)                     |
| 7. -   | -  | 26. G   | C-CAN (High)  |
| 8. W   | ICM Relay Box (DBC Relay Control)                          | 27. -   | -   |
| 9. L/B | Stop Lamp Switch (Brake Switch)                            | 28. -   | -   |
| 10. R  | Multi Switch (ESP Off Switch 'ON')                         | 29. Gr  | E/R Fuse & Relay Box - F24 7.5A                                   |
| 11. L  | Yaw Rate Sensor (Ground)                                   | 30. -   | -   |
| 12. Y  | Yaw Rate Sensor (CAN High)                                 | 31. G   | Front Wheel Sensor LH (SIG)                                       |
| 13. B  | Ground (GRD06)   | 32. L   | Rear Wheel Sensor LH (SIG)  |
| 14. R  | C-CAN (Low)  | 33. W   | Rear Wheel Sensor RH (VCC)  |
| 15. -  | -  | 34. R   | Front Wheel Sensor RH (VCC)                                       |
| 16. -  | -  | 35. W   | [M/T] Clutch Switch   |
| 17. P  | Smart Key Control Module<br>(Wheel Speed Sensor Output RR) | 36. G/B | ICM Relay Box<br>(DBC Relay 'ON' Signal)                          |
| 18. L  | Front Wheel Sensor LH (VCC)                                | 37. P   | Multi Switch (DBC Switch 'ON')                                    |
| 19. R  | Rear Wheel Sensor LH (VCC)                                 | 38. B   | Ground (GRD06)  |

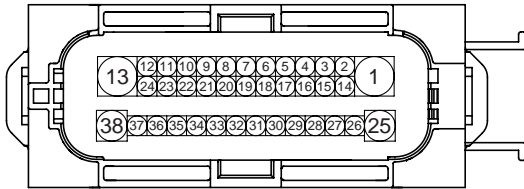
# CONTROL HARNESS

## Control Harness (26)

CV20-26

### CRD41 ABS Control Module

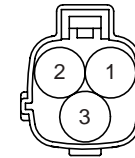
- 38 Female / Black (AMP\_ABS\_38F\_B\_A)



1. W	E/R Fuse & Relay Box - F5 40A (Multi Fuse)	20. B	Rear Wheel Sensor RH (SIG)
2. Gr	G-Sensor (Power)	21. L	Front Wheel Sensor RH (SIG)
3. R	G-Sensor (Signal)	22. -	-
4. -	-	23. G/B	Stop Lamp Switch (Brake Switch)
5. B	G-Sensor (Ground)	24. -	-
6. -	-	25. L	E/R Fuse & Relay Box - F3 40A (Multi Fuse)
7. -	-	26. G	C-CAN High
8. -	-	27. -	-
9. -	-	28. -	-
10. -	-	29. Gr	E/R Fuse & Relay Box - F24 7.5A
11. -	-	30. -	-
12. -	-	31. G	Front Wheel Sensor LH (SIG)
13. B	Ground (GRD06)	32. L	Rear Wheel Sensor LH (SIG)
14. O	C-CAN Low	33. W	Rear Wheel Sensor RH (VCC)
15. -	-	34. R	Front Wheel Sensor RH (VCC)
16. -	-	35. -	-
17. P	Smart Key Control Module (Wheel Speed Sensor Output RR)	36. -	-
18. L	Front Wheel Sensor LH (VCC)	37. -	-
19. R	Rear Wheel Sensor LH (VCC)	38. B	Ground (GRD06)

### CRD42 Cooling Fan Motor

- 3 Female / Black (KET\_312IWP\_03F\_B)



1. R	E/R Fuse & Relay Box - RLY. 3	3. B	Ground (GRD05)
2. R	E/R Fuse & Relay Box - RLY. 9		

### CRD43 G-Sensor

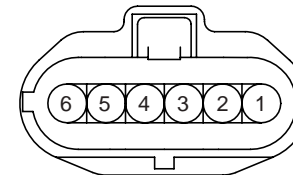
- 3 Female / Gray (KET\_SSD\_03F\_GR\_B)



1. R	ABS Control Module (PWR)	3. B	ABS Control Module (GND)
2. R	ABS Control Module (SIG)		

### CRD44 Accel Pedal Position Sensor

- 6 Female / Black (AMP\_070WP\_06F\_B)



1. Br	ECM (APS 2 Supply)	4. Br	ECM (APS 1 Supply)
2. Gr	ECM (APS 1 Signal)	5. L/B	ECM (APS 1 Ground)
3. P/B	ECM (APS 2 Signal)	6. W	ECM (APS 2 Ground)

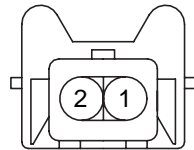
# CONTROL HARNESS

## Control Harness (27)

CV20-27

### CRD45 Brake Fluid Level Sensor

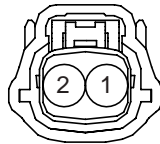
- 2 Female / Black (AMP\_JPT\_02F\_B\_CLIP)



- |      |                |      |  |
|------|----------------|------|--|
| 1. B | Ground (GRD04) | 2. B | IPS Control Module - Brake Fluid Level |
|------|----------------|------|--|

### CRD46 Burglar Alarm Horn

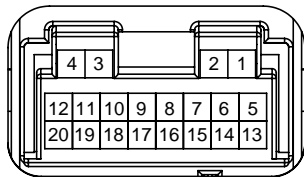
- 2 Female / Black (MLX\_HORN\_02F\_B\_FILT)



- |      |                               |      |                |
|------|-------------------------------|------|----------------|
| 1. R | E/R Fuse & Relay Box - RLY. 5 | 2. B | Ground (GRD04) |
|------|-------------------------------|------|----------------|

### CRD47 Multipurpose Check Connector

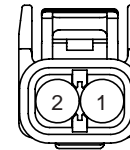
- 20 Female / Black (LM\_DIAGNOSIS\_20F\_B)



- |       |                |       |                           |
|-------|----------------|-------|---------------------------|
| 1. B  | Ground (GRD05) | 11. - | -                         |
| 2. -  | -              | 12. G | I/P Junction Box - F5 10A |
| 3. -  | -              | 13. - | -                         |
| 4. -  | -              | 14. - | -                         |
| 5. B  | Ground (GRD02) | 15. - | -                         |
| 6. -  | -              | 16. - | -                         |
| 7. -  | -              | 17. O | C-CAN (Low)               |
| 8. -  | -              | 18. - | -                         |
| 9. G  | C-CAN (High)   | 19. W | Body K-Line               |
| 10. - | -              | 20. - | -                         |

### CRD49 Hood Switch

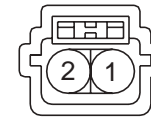
- 2 Female / Black (KET\_090IWP\_02F\_B\_ASM)



- |        |                                       |      |                |
|--------|---------------------------------------|------|----------------|
| 1. R/B | I/P Junction Box (IPS Control Module) | 2. B | Ground (GRD04) |
|--------|---------------------------------------|------|----------------|

### CRD50 Horn

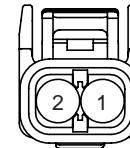
- 2 Female / Gray (KUM\_NDWP\_02F\_GR)



- |      |                               |      |                |
|------|-------------------------------|------|----------------|
| 1. G | E/R Fuse & Relay Box - RLY. 2 | 2. B | Ground (GRD04) |
|------|-------------------------------|------|----------------|

### CRD51 External Buzzer

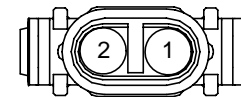
- 2 Female / Black (KET\_090IWP\_02F\_B\_ASM)



- |      |                |      |                          |
|------|----------------|------|--------------------------|
| 1. B | Ground (GRD01) | 2. P | Smart Key Control Module |
|------|----------------|------|--------------------------|

### CRD52 Front Fog Lamp LH

- 2 Female / Black (KET\_110WP\_02F\_B\_A)



- |      |                          |      |                |
|------|--------------------------|------|----------------|
| 1. L | I/P Junction Box (IPS 6) | 2. B | Ground (GRD05) |
|------|--------------------------|------|----------------|

# CONTROL HARNESS

## Control Harness (28)

CV20-28

### CRD53 Front Fog Lamp RH

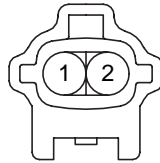
- 2 Female / Black (KET\_110WP\_02F\_B\_A)



1. L I/P Junction Box (IPS 6)                      2. B Ground (GRD04)

### CRD54 Front Wheel Sensor LH

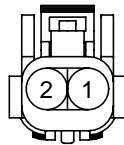
- 2 Male / Black (KET\_090IWP\_02M\_B)



1. G ABS/ESP Control Module (SIG)                      2. L ABS/ESP Control Module (VCC)

### CRD55 Side Repeater Lamp LH

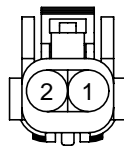
- 2 Female / Gray (KUM\_62Z\_02F\_GR)



1. B Ground (GRD01)                      2. Y BCM (Turn & Hazard Lamp Output)

### CRD56 Side Repeater Lamp RH

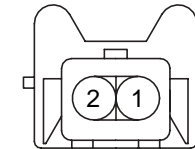
- 2 Female / Gray (KUM\_62Z\_02F\_GR)



1. B Ground (GRD04)                      2. W BCM (Turn & Hazard Lamp Output)

### CRD57 Intake Temperature Sensor

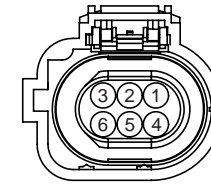
- 2 Female / Black (AMP\_JPT\_02F\_B\_CLIP)



1. Br/B ECM (Sensor Ground)                      2. P ECM (Sensor Signal)

### CRD58 Air Control Valve

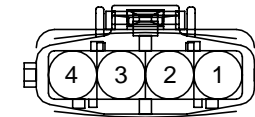
- 6 Female / Brown (AMP\_MTIWP\_06F\_Br\_1)



1. G	ECM (Motor (+))	4. G	ECM (F/B Signal)
2. -	-	5. L	ECM (F/B Ground)
3. O	ECM (Motor (-))	6. R	ECM (F/B Supply)

### CRD59 Boost Pressure Sensor

- 4 Female / Black (AMP\_JPT\_04F\_B\_BOSCH)



1. Y	ECM (Sensor Signal)	3. -	-
2. Gr	ECM (Sensor Supply)	4. Br/B	ECM (Sensor Ground)

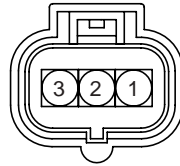
# CONTROL HARNESS

## Control Harness (29)

CV20-29

### CRD60 Differential Pressure Sensor

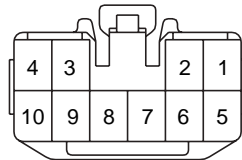
- 3 Female / Black (SUM\_090IWP\_03F\_B)



- |       |                     |      |                     |
|-------|---------------------|------|---------------------|
| 1. Gr | ECM (Sensor Supply) | 3. B | ECM (Sensor Ground) |
| 2. P  | ECM (Sensor Signal) |      |                     |

### CRD63 ATM Shift Lever

- 10 Female / White (KET\_090III\_10F\_W)



- |       |                            |       |                           |
|-------|----------------------------|-------|---------------------------|
| 1. -  | -                          | 6. W  | TCM (Select Switch)       |
| 2. B  | Ground (GRD04)             | 7. P  | TCM (Down Shift)          |
| 3.    | "P" Position Switch :      | 8. -  | -                         |
| W     | Smart Key Control Module   | 9. B  | Ground (GRD04)            |
| G     | BCM                        | 10. G | TCM (Shift Lock Solenoid) |
| 4. L  | I/P Junction Box - F8 7.5A |       |                           |
| 5. Gr | TCM (Up Shift)             |       |                           |

### CRD64 Driver Front Impact Sensor

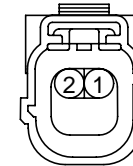
- 2 Female / Dark Gray (FCI\_PAEWP\_02F\_DG\_B)



- |       |                           |      |                          |
|-------|---------------------------|------|--------------------------|
| 1. Br | SRS Control Module (High) | 2. W | SRS Control Module (Low) |
|-------|---------------------------|------|--------------------------|

### CRD65 Passenger Front Impact Sensor

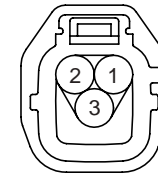
- 2 Female / Dark Gray (FCI\_PAEWP\_02F\_DG\_B)



- |      |                           |      |                          |
|------|---------------------------|------|--------------------------|
| 1. B | SRS Control Module (High) | 2. Y | SRS Control Module (Low) |
|------|---------------------------|------|--------------------------|

### CRD66 Front Washer Motor

- 3 Female / Gray (KET\_090IWP\_03F\_GR)



- |       |   |      |   |
|-------|---|------|---|
| 1. B  | Ground (CRD04)                                | 3. - | - |
| 2. Br | Multifunction Switch<br>(Front Washer Switch) |      |   |

### CRD67 Rear Washer Motor

- 2 Female / Black (KET\_090WP\_02F\_B\_SIDE)



- |      |                |      |  |
|------|----------------|------|--|
| 1. B | Ground (GRD04) | 2. L | Multifunction Switch<br>(Rear Washer Switch) |
|------|----------------|------|--|

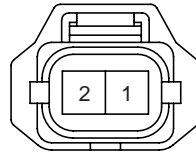
# CONTROL HARNESS

## Control Harness (30)

CV20-30

### CRD68 Fuel Pressure Regulator Valve

- 2 Female / Black (AMP\_2.8WP\_02F\_B)



- |      |                             |      |                  |
|------|-----------------------------|------|------------------|
| 1. L | ECM (Fuel Pressure Control) | 2. G | EMS Box - F7 10A |
|------|-----------------------------|------|------------------|

### CRD69 Glow Relay Unit (M/T & Euro V)

- 8 Female / Black (FCI\_DSCWP\_08F\_B\_A)



- |      |                                 |      |                     |
|------|---------------------------------|------|---------------------|
| 1. G | ECM (Glow Time F/B Signal)      | 5. B | Ground (GRD01)      |
| 2. R | Glow Plug                       | 6. - | -                   |
| 3. O | ECM (Glow Plug Output Signal)   | 7. R | Diesel Box - F5 80A |
| 4. L | E/R Fuse & Relay Box - F24 7.5A | 8. - | -                   |

### CRD70 Glow Relay Unit (A/T or M/T & W/O Euro V)

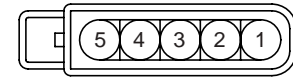
- 8 Female / Black (FCI\_DSCWP\_08F\_B\_D)



- |      |                                 |      |                     |
|------|---------------------------------|------|---------------------|
| 1. G | ECM (Glow Time F/B Signal)      | 5. B | Ground (GRD01)      |
| 2. R | Glow Plug                       | 6. - | -                   |
| 3. O | ECM (Glow Plug Output Signal)   | 7. R | Diesel Box - F5 80A |
| 4. L | E/R Fuse & Relay Box - F24 7.5A | 8. - | -                   |

### CRD74 PTC Heater

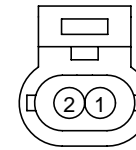
- 5 Female / Black (AMP\_PTC\_05F\_B)



- |      |                     |      |                     |
|------|---------------------|------|---------------------|
| 1. W | Diesel Box - RLY. 2 | 4. B | Ground (GRD07)      |
| 2. B | Ground (GRD07)      | 5. W | Diesel Box - RLY. 3 |
| 3. R | Diesel Box - RLY. 1 |      |                     |

### CRD75 Fuel Filter Heater

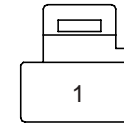
- 2 Female / Black (PKD\_280WP\_02F\_B\_1)



- |      |                |         |                     |
|------|----------------|---------|---------------------|
| 1. B | Ground (GRD01) | 2. Br/B | Diesel Box - RLY. 4 |
|------|----------------|---------|---------------------|

### CRD76 Glow Plug

- 1 Female / Black (KET\_375WP\_01F\_B)



- |      |                 |
|------|-----------------|
| 1. R | Glow Relay Unit |
|------|-----------------|

### CRD77 Exhaust Gas Temperature Sensor

- 2 Female / Black (KUM\_NMWP\_02F\_B)



- |      |                     |         |                     |
|------|---------------------|---------|---------------------|
| 1. L | ECM (Sensor Signal) | 2. Br/B | ECM (Sensor Ground) |
|------|---------------------|---------|---------------------|

# CONTROL HARNESS

## Control Harness (31)

CV20-31

### CRD78 Fuel Filter Warning Sensor

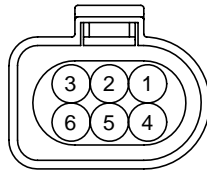
- 3 Female / Black (AMP\_090\_03F\_B\_WP)



- |      |                                 |      |                |
|------|---------------------------------|------|----------------|
| 1. G | E/R Fuse & Relay Box - F24 7.5A | 3. B | Ground (GRD01) |
| 2. P | Instrument Cluster, ECM         |      |                |

### CRD79 Lambda Sensor

- 6 Female / Black (BSH\_SENSOR\_06F\_B\_NF)



- |      |                      |      |                      |
|------|----------------------|------|----------------------|
| 1. Y | ECM (Nernst Voltage) | 4. O | ECM (Current Adjust) |
| 2. P | EMS Box - F8 10A     | 5. G | ECM (Sensor Heater)  |
| 3. B | ECM (Virtual Ground) | 6. L | ECM (Current Pump)   |

### CRD80 Neutral Switch (M/T)

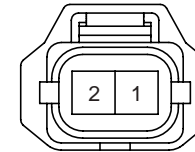
- 2 Female / Gray (AMP\_EJWP\_02F\_GR)



- |      |     |      |                |
|------|-----|------|----------------|
| 1. Y | ECM | 2. B | Ground (GRD01) |
|------|-----|------|----------------|

### CRD81 Rail Pressure Regulator Valve

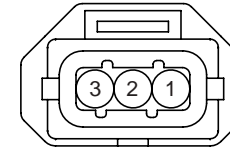
- 2 Female / Black (AMP\_2.8WP\_02F\_B)



- |      |     |      |                  |
|------|-----|------|------------------|
| 1. O | ECM | 2. G | EMS Box - F7 15A |
|------|-----|------|------------------|

### CRD82 Rail Pressure Sensor

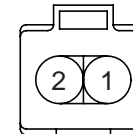
- 3 Female / Black (AMP\_2.8WP\_03F\_B)



- |       |                     |      |                     |
|-------|---------------------|------|---------------------|
| 1. Gr | ECM (Sensor Supply) | 3. G | ECM (Sensor Ground) |
| 2. O  | ECM (Sensor Signal) |      |                     |

### CRD83 Thermo Switch

- 2 Female / Black (AMP\_090WP\_02F\_B)



- |      |                |      |                     |
|------|----------------|------|---------------------|
| 1. B | Ground (GRD01) | 2. G | Diesel BOx - RLY. 4 |
|------|----------------|------|---------------------|



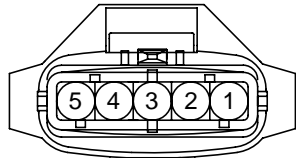
# CONTROL HARNESS

## Control Harness (32)

CV20-32

### CRD84 Variable Swirl Control Actuator

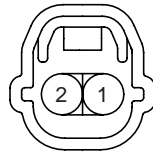
- 5 Female / Black (AMP\_JPT\_05F\_B\_SFT)



- |      |                         |       |                         |
|------|-------------------------|-------|-------------------------|
| 1. B | ECM (Motor (+))         | 4. Gr | ECM (F/B Sensor Signal) |
| 2. Y | ECM (Motor (-))         | 5. L  | ECM (F/B Sensor Ground) |
| 3. R | ECM (F/B Sensor Supply) |       |                         |

### CRD85 Fuel Temperature Sensor

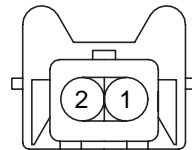
- 2 Female / Black (KET\_SSD\_02F\_B)



- |      |                     |         |                     |
|------|---------------------|---------|---------------------|
| 1. L | ECM (Sensor Signal) | 2. Br/B | ECM (Sensor Ground) |
|------|---------------------|---------|---------------------|

### CRD86 EGR Cooling Bypass Solenoid Valve

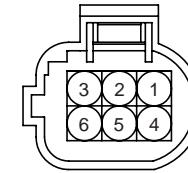
- 2 Female / Black (AMP\_JPT\_02F\_B\_CLIP)



- |       |     |      |                  |
|-------|-----|------|------------------|
| 1. Br | ECM | 2. L | EMS Box - F4 10A |
|-------|-----|------|------------------|

### CRD87 EGR Actuator

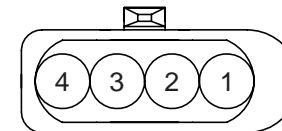
- 6 Female / Gray (FEP\_EGR\_06F\_GR)



- |      |                 |      |                  |
|------|-----------------|------|------------------|
| 1. G | ECM (Motor (+)) | 4. G | ECM (F/B Signal) |
| 2. - | -               | 5. L | ECM (F/B Ground) |
| 3. O | ECM (Motor (-)) | 6. R | ECM (F/B Supply) |

### CRD88 Electrical VGT Actuator

- 4 Female / N/A (FEP\_NFDSL\_04F\_N)

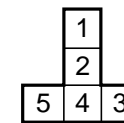


- |      |                  |      |                  |
|------|------------------|------|------------------|
| 1. G | ECM (F/B Signal) | 3. P | EMS Box - F4 10A |
| 2. O | ECM (PWM Input)  | 4. B | Ground (GRD09)   |

### CRD90 Wiper (Rain Sensor) Relay (RLY. 13)

- 5 Female / N/A (CR05F011)

- Symbol



- |      |                                |       |   |
|------|--------------------------------|-------|---|
| 1. O | E/R Fuse & Relay Box - RLY. 12 | 4. Gr | Multifunction Switch (Front Wiper Switch) |
| 2. P | Front Wiper Motor              | 5. Br | I/P Junction Box - F25 25A                |
| 3. L | Rain Sensor (Control)          |       |   |

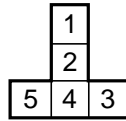
# CONTROL HARNESS

## Control Harness (33)

CV20-33

### CRD91 Front Wiper (Low) Relay (RLY. 12)

- 5 Female / N/A (CR05F011)



[With Rain Sensor]

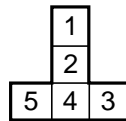
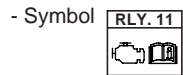
- 1. O E/R Fuse & Relay Box - RLY. 13
- 2. Y I/P Junction Box - F25 25A
- 3. O/B Rain Sensor, BCM
- 4. O Front Wiper Motor, Rain Sensor
- 5. O I/P Junction Box - F25 25A

[W/O Rain Sensor]

- 1. Gr Multifunction Switch (Front Wiper Switch)
- 2. Y I/P Junction Box - F25 25A
- 3. O/B BCM
- 4. L Front Wiper Motor
- 5. Y I/P Junction Box - F25 25A

### CRD92 ATM P/N Relay (RLY. 11) (With Smart Key)

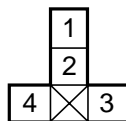
- 5 Female / N/A (CR05F011)



- 1. P I/P Junction Box - F20 10A
- 2. P E/R Fuse & Relay Box - RLY. 4
- 3. G E/R Fuse & Relay Box - F23 7.5A
- 4. -
- 5. W TCM (Relay Control)

### CRD93 Front Wiper Deicer Relay (RLY. 10)

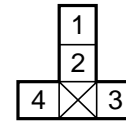
- 4 Female / N/A (CR04F086)



- 1. L E/R Fuse & Relay Box - F16 15A
- 2. G Front Wiper Deicer
- 3. L I/P Junction Box (IPS Control Module)
- 4. Br E/R Fuse & Relay Box - F16 15A

### CRD94 Cooling Fan (High) Relay (RLY. 9)

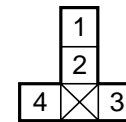
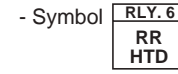
- 4 Female / N/A (CR04F086)



- 1. W E/R Fuse & Relay Box - F9 50A
- 2. R Cooling Fan Motor
- 3. Gr/O ECM (Relay High Control)
- 4. Gr E/R Fuse & Relay Box - RLY. 3

### CRD97 Rear Defogger Relay (RLY. 6)

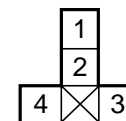
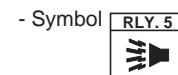
- 4 Female / N/A (CR04F086)



- 1. R E/R Fuse & Relay Box - F10 40A
- 2. P I/P Junction Box - F38 7.5A, Rear Defogger
- 3. G/O I/P Junction Box (IPS Control Module)
- 4. Br E/R Fuse & Relay Box - F10 40A

### CRD98 Burglar Alarm Horn Relay (RLY. 5)

- 4 Female / N/A (CR04F086)



- 1. R Burglar Alarm Horn
- 2. P E/R Fuse & Relay Box - F15 15A
- 3. W I/P Junction Box (IPS Control Module)
- 4. L E/R Fuse & Relay Box - RLY. 5


# CONTROL HARNESS

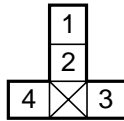
## Control Harness (34)

CV20-34

### CRD99 Start Relay (RLY. 4)

- 4 Female / N/A (CR04F086)

- Symbol 



[W/O Smart Key]

- 1. R E/R Fuse & Relay Box - F13 40A, Ignition Switch
- 2. L Start Solenoid
- 3. B [MT, W/O Ignition Lock Switch] Ground (GRD02)
- W [MT-With Ignition Lock Switch] Ignition Lock Switch
- W [A/T] TCM (Relay Control)
- 4. P [W/O B/Alarm] I/P Junction Box - F20 10A
- P [With B/Alarm] I/P Junction Box (Burglar Alarm Relay)

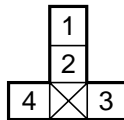
[With Smart Key]

- 1. R E/R Fuse & Relay Box - F13 40A
- 2. R Start Solenoid
- 3. B Ground (GRD02)
- 4. P Smart Key Control Module (Start F/B Signal) [M/T] I/P Junction Box - F23 7.5A [A/T] E/R Fuse & Relay Box - RLY. 11

### CRD100 Cooling Fan (Low) Relay (RLY. 3)

- 4 Female / N/A (CR04F086)


- Symbol 

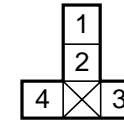


- 1. W E/R Fuse & Relay Box - F9 50A
- 2. R Cooling Fan Motor
- 3. O ECM (Relay Low Control)
- 4. Gr EMS Box - F7 15A, E/R Fuse & Relay Box - RLY. 9

### CRD101 Horn Relay (RLY. 2)

- 4 Female / N/A (CR04F086)


- Symbol 

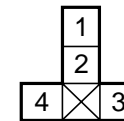


- 1. G E/R Fuse & Relay Box - F15 15A
- 2. G Horn
- 3. Gr Multifunction Switch (Horn Switch)
- 4. G E/R Fuse & Relay Box - RLY. 2

### CRD102 Blower Relay (RLY. 1)

- 4 Female / N/A (CR04F086)

- Symbol 



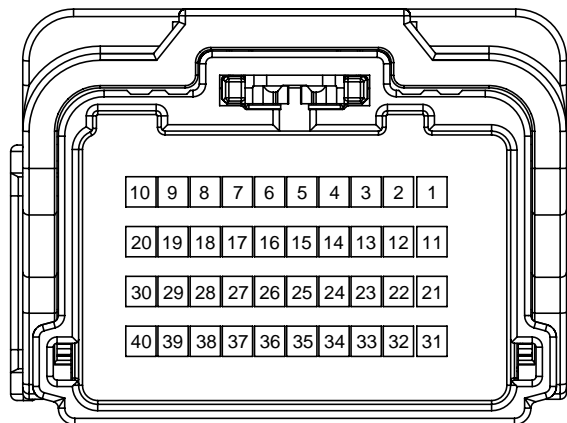
- 1. R E/R Fuse & Relay Box - F6 40A (Multi Fuse)
- 2. W Blower Motor, [Auto A/C] I/P Junction Box - F37 7.5A
- 3. B Ground (GRD05)
- 4. O I/P Junction Box - F32 10A

Floor Harness (1)

CV30-1

**F01 SRS Control Module**

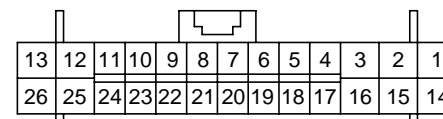
- 40 Female / N/A (JST\_WIC\_40F)



- |          |   |       |   |
|----------|---|-------|---|
| 1. Br    | Driver Side Impact Sensor (High)        | 21. L | Passenger Side Impact Sensor (High)         |
| 2. -     | -                                       | 22. - | -   |
| 3. P/B   | Driver Seat Belt Pretensioner (High)    | 23. G | Driver Curtain Air Bag (High)               |
| 4. Gr    | Driver Seat Belt Pretensioner (Low)     | 24. W | Driver Curtain Air Bag (Low)                |
| 5. G/B   | Driver Side Air Bag (High)              | 25. - | Driver Seat Belt Pretensioner Anchor (High) |
| 6. W/B   | Driver Side Air Bag (Low)               | 26. - | Driver Seat Belt Pretensioner Anchor (Low)  |
| 7. -     | -                                       | 27. - | -   |
| 8. -     | -                                       | 28. - | -   |
| 9. -     | -                                       | 29. - | -   |
| 10. -    | -                                       | 30. - | -   |
| 11. W    | Driver Side Impact Sensor (Low)         | 31. R | Passenger Side Impact Sensor (Low)          |
| 12. -    | -                                       | 32. - | -   |
| 13. L/O  | Passenger Seat Belt Pretensioner (High) | 33. B | Passenger Curtain Air Bag (High)            |
| 14. Y/B  | Passenger Seat Belt Pretensioner (Low)  | 34. R | Passenger Curtain Air Bag (Low)             |
| 15. Br/O | Passenger Side Air Bag (High)           | 35. - | -   |
| 16. O/B  | Passenger Side Air Bag (Low)            | 36. - | -   |
| 17. -    | -                                       | 37. - | -   |
| 18. -    | -                                       | 38. - | -   |
| 19. -    | -                                       | 39. - | -   |
| 20. -    | -                                       | 40. - | -   |

**F03-A Amp**

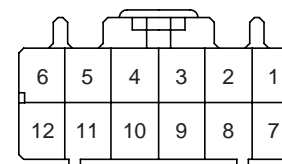
- 26 Female / White (AMP\_0407\_26F\_W\_HD)



- |       |                            |       |                        |
|-------|----------------------------|-------|------------------------|
| 1. R  | I/P Junction Box - F7 25A  | 14. B | Ground (GF08)          |
| 2. R  | I/P Junction Box - F7 25A  | 15. B | Ground (GF08)          |
| 3. R  | I/P Junction Box - F7 25A  | 16. B | Ground (GF08)          |
| 4. -  | -                          | 17. - | -                      |
| 5. L  | CAN - High                 | 18. W | Audio (SPDIF OUT (+))  |
| 6. R  | CAN - Low                  | 19. G | Audio (SPDIF OUT (-))  |
| 7. G  | I/P Junction Box - F28 10A | 20. - | -                      |
| 8. -  | -                          | 21. - | -                      |
| 9. -  | -                          | 22. - | -                      |
| 10. - | -                          | 23. - | -                      |
| 11. - | -                          | 24. - | -                      |
| 12. L | Sub Woofer Speaker (+)     | 25. R | Sub Woofer Speaker (-) |
| 13. G | Sub Woofer Speaker (+)     | 26. O | Sub Woofer Speaker (-) |

**F03-C Amp**

- 12 Female / White (AMP\_0407\_12F\_W\_070)



- |       |                                     |       |                                     |
|-------|-------------------------------------|-------|-------------------------------------|
| 1. G  | Rear Door Speaker RH (+)            | 7. O  | Rear Door Speaker RH (-)            |
| 2. Y  | Rear Door Speaker LH (+)            | 8. B  | Rear Door Speaker LH (-)            |
| 3. R  | [LHD] Passenger Tweeter Speaker (+) | 9. L  | [LHD] Passenger Tweeter Speaker (-) |
| 4. Br | [RHD] Driver Tweeter Speaker (+)    | 10. W | [RHD] Driver Tweeter Speaker (-)    |
| 5. R  | [LHD] Passenger Door Speaker (+)    | 11. L | [LHD] Passenger Door Speaker (-)    |
| 6. Br | [RHD] Driver Door Speaker (+)       | 12. W | [RHD] Driver Door Speaker (-)       |
|       | [LHD] Passenger Door Speaker (+)    |       | [LHD] Passenger Door Speaker (-)    |
|       | [RHD] Driver Door Speaker (+)       |       | [RHD] Driver Door Speaker (-)       |

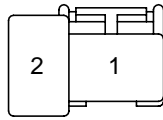
# FLOOR HARNESS

## Floor Harness (2)

CV30-2

### F04 Luggage Lamp

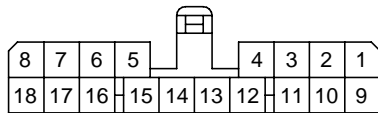
- 2 Female / White (AMP\_PLM2\_02F\_W)



- |      |  |      |                            |
|------|--|------|----------------------------|
| 1. W | Tail Gate Latch<br>(Tail Gate Open Switch)<br>I/P Junction Box<br>(IPS Control Module) | 2. L | I/P Junction Box - F13 10A |
|------|--|------|----------------------------|

### F05 4WD ECM

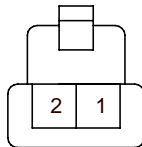
- 18 Female / Black (AMP\_070\_18F\_B)



- |      |                                |         |                                |
|------|--------------------------------|---------|--------------------------------|
| 1. O | C-CAN (Low)                    | 10. -   | -                              |
| 2. G | C-CAN (High)                   | 11. R   | 4WD Pressure Sensor (PWR)      |
| 3. - | -                              | 12. B   | 4WD Pressure Sensor (GND)      |
| 4. G | 4WD Pressure Sensor (SIG)      | 13. R   | E/R Fuse & Relay Box - F18 20A |
| 5. - | -                              | 14. B   | Ground (GF01)                  |
| 6. - | Multi Switch (4WD Lock Switch) | 15. R/B | I/P Junction Box - F21 10A     |
| 7. B | 4WD Motor (B)                  | 16. -   | -                              |
| 8. R | 4WD Motor (A)                  | 17. -   | -                              |
| 9. - | -                              | 18. -   | I/P Junction Box               |

### F07 Driver Door Switch

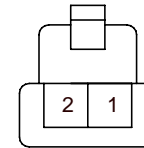
- 2 Female / White (AMP\_040M1\_02F\_W)



- |      |   |        |  |
|------|---|--------|--|
| 1. - | - | 2. G/O | I/P Junction Box<br>(IPS Control Module) |
|------|---|--------|--|

### F08 Passenger Door Switch

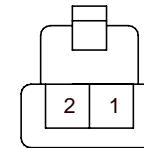
- 2 Female / White (AMP\_040M1\_02F\_W)



- |      |   |        |  |
|------|---|--------|--|
| 1. - | - | 2. P/B | I/P Junction Box<br>(IPS Control Module) |
|------|---|--------|--|

### F09 Rear Door Switch LH

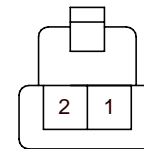
- 2 Female / White (AMP\_040M1\_02F\_W)



- |      |   |        |  |
|------|---|--------|--|
| 1. - | - | 2. Y/B | I/P Junction Box<br>(IPS Control Module) |
|------|---|--------|--|

### F10 Rear Door Switch RH

- 2 Female / White (AMP\_040M1\_02F\_W)



- |      |   |         |  |
|------|---|---------|--|
| 1. - | - | 2. Gr/B | I/P Junction Box<br>(IPS Control Module) |
|------|---|---------|--|

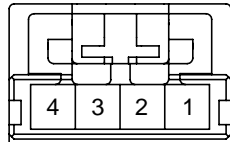
# FLOOR HARNESS

## Floor Harness (3)

CV30-3

### F11 Smart Key Antenna #2

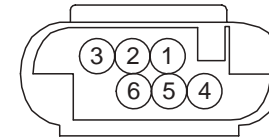
- 4 Female / Black (AMP\_MQS\_04F\_B\_040)



1. -	-	3. -	-
2. O	Smart Key Control Module (Interior ANT 2 GND)	4. O	Smart Key Control Module (Interior ANT 2 PWR)

### F18 Yaw Rate Sensor

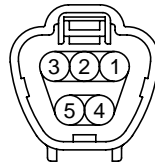
- 6 Female / Black (AMP\_MQSWP\_06F\_B\_1)



1. B	ESP Control Module (CAN - Low)	4. L	ESP Control Module (Ground)
2. Y	ESP Control Module (CAN - High)	5. -	-
3. R	ESP Control Module (PWR)	6. -	-

### F12 Fuel Sender & Fuel Pump Motor

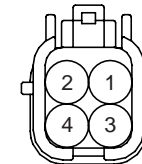
- 5 Female / Gray (KET\_090IWP\_05F\_GR\_2)



1. -	-	4. P	EMS Box -RLY. 2
2. O	Instrument Cluster (Fuel Sender (+))	5. B	Ground (GF02)
3. Gr	Instrument Cluster (Fuel Sender (-))		

### F26 Rear Combination Lamp (Out) LH

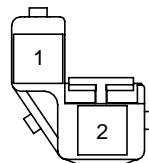
- 4 Female / Black (KET\_SWP\_04F\_B)



1. G/B	Stop Lamp : I/P Junction Box (DBC Relay)	3. G	Tail Lamp : I/P Junction Box (IPS 7)
2. -	-	4. B	Ground (GF03)

### F17 Rear Power Outlet

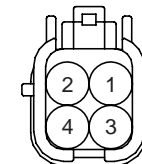
- 2 Female / Black (KET\_2505\_02F\_B\_CIGAR)



1. R	I/P Junction Box - F33 20A	2. B	Ground (GF03)
------	----------------------------	------	---------------

### F27 Rear Combination Lamp (Out) RH

- 4 Female / Black (KET\_SWP\_04F\_B)



1. G/B	Stop Lamp : I/P Junction Box (DBC Relay)	3. B/O	Tail Lamp : I/P Junction Box (IPS 2)
2. -	-	4. B	Ground (GF08)

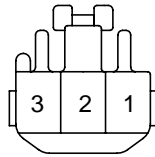
# FLOOR HARNESS

## Floor Harness (4)

CV30-4

### F28 Rear Seat Warmer LH

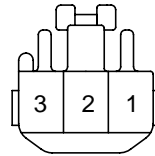
- 3 Female / White (KET\_090III\_03F\_W)



- |        |                                       |      |                                     |
|--------|---------------------------------------|------|-------------------------------------|
| 1. P/B | Rear Seat Warmer Switch LH (IND. (-)) | 3. G | Rear Seat Warmer Switch LH (Switch) |
| 2. B   | Ground (GF02)                         |      |                                     |

### F29 Rear Seat Warmer RH

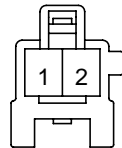
- 3 Female / White (KET\_090III\_03F\_W)



- |        |                                       |      |                                     |
|--------|---------------------------------------|------|-------------------------------------|
| 1. L/B | Rear Seat Warmer Switch RH (IND. (-)) | 3. G | Rear Seat Warmer Switch RH (Switch) |
| 2. B   | Ground (GF08)                         |      |                                     |

### F30 Rear Wheel Sensor LH

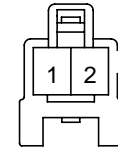
- 2 Male / White (KET\_090III\_02M\_W\_L\_1)



- |      |                              |      |                              |
|------|------------------------------|------|------------------------------|
| 1. L | ABS/ESP Control Module (SIG) | 2. R | ABS/ESP Control Module (VCC) |
|------|------------------------------|------|------------------------------|

### F31 Rear Wheel Sensor RH

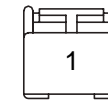
- 2 Male / White (KET\_090III\_02M\_W\_L\_1)



- |      |                              |      |                              |
|------|------------------------------|------|------------------------------|
| 1. B | ABS/ESP Control Module (SIG) | 2. W | ABS/ESP Control Module (VCC) |
|------|------------------------------|------|------------------------------|

### F32 Parking Brake Switch (Hand Type)

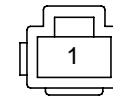
- 1 Female / Black (AMP\_PLM2\_01F\_B)



- |         |                                       |
|---------|---------------------------------------|
| 1. Gr/O | I/P Junction Box (IPS Control Module) |
|---------|---------------------------------------|

### F33 Parking Brake Switch (Foot Type)

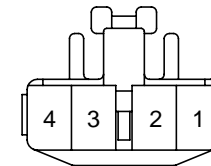
- 1 Male / Black (KET\_250\_01M\_B)



- |         |                                       |
|---------|---------------------------------------|
| 1. Gr/O | I/P Junction Box (IPS Control Module) |
|---------|---------------------------------------|

### F35 Sub Woofer Speaker

- 4 Female / White (KET\_090III\_04F\_W)



- |      |         |      |         |
|------|---------|------|---------|
| 1. L | AMP (+) | 3. G | AMP (+) |
| 2. R | AMP (-) | 4. O | AMP (-) |

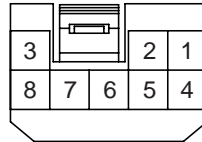
# FLOOR HARNESS

## Floor Harness (5)

CV30-5

### F38 ATM Shift Lever III.

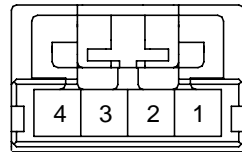
- 8 Female / White (AMP\_090III\_08F\_W)



- |        |                             |        |                            |
|--------|-----------------------------|--------|----------------------------|
| 1. W   | Instrument Cluster (P IND.) | 5. L   | I/P Junction Box - F21 10A |
| 2. G/O | Instrument Cluster (R IND.) | 6. B   | Ground (GF01)              |
| 3. P   | Instrument Cluster (N IND.) | 7. R   | ILL +                      |
| 4. L   | Instrument Cluster (D IND.) | 8. L/O | ILL -                      |

### F39 Smart Key Antenna #3

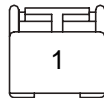
- 4 Female / Black (AMP\_MQS\_04F\_B\_040)



- |      |   |      |   |
|------|---|------|---|
| 1. - | -   | 3. - | -   |
| 2. L | Smart Key Control Module<br>(Trunk ANT GND) | 4. G | Smart Key Control Module<br>(Trunk ANT PWR) |

### F40 Roof Antenna

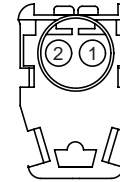
- 1 Female / Black (AMP\_PLM2\_01F\_B)



- |      |       |
|------|-------|
| 1. G | Audio |
|------|-------|

### F41 Driver Curtain Air Bag

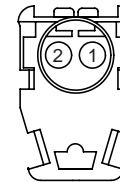
- 2 Female / Yellow (FCI\_AKII\_02F\_Y\_III)



- |      |                           |      |                          |
|------|---------------------------|------|--------------------------|
| 1. G | SRS Control Module (High) | 2. W | SRS Control Module (Low) |
|------|---------------------------|------|--------------------------|

### F42 Passenger Curtain Air Bag

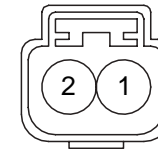
- 2 Female / Yellow (FCI\_AKII\_02F\_Y\_III)



- |      |                           |      |                          |
|------|---------------------------|------|--------------------------|
| 1. B | SRS Control Module (High) | 2. R | SRS Control Module (Low) |
|------|---------------------------|------|--------------------------|

### F43 Driver Side Air Bag

- 2 Female / Yellow (YAZ\_040WP\_02F\_Y\_GH)



- |        |                           |        |                          |
|--------|---------------------------|--------|--------------------------|
| 1. G/B | SRS Control Module (High) | 2. W/B | SRS Control Module (Low) |
|--------|---------------------------|--------|--------------------------|



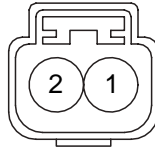
# FLOOR HARNESS

## Floor Harness (6)

CV30-6

### F44 Passenger Side Air Bag

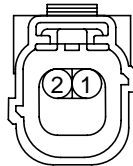
- 2 Female / Yellow (YAZ\_040WP\_02F\_Y\_GH)



1. Br/B SRS Control Module (High)      2. O/B SRS Control Module (Low)

### F45 Driver Side Impact Sensor

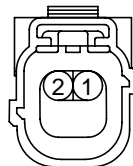
- 2 Female / Dark Gray (FCI\_PAEWP\_02F\_DG\_B)



1. Br SRS Control Module (High)      2. W SRS Control Module (Low)

### F46 Passenger Side Impact Sensor

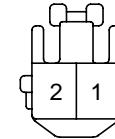
- 2 Female / Dark Gray (FCI\_PAEWP\_02F\_DG\_B)



1. L SRS Control Module (High)      2. R SRS Control Module (Low)

### F47 Driver Seat Belt Buckle Switch

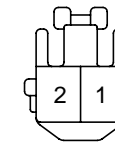
- 2 Female / White (KET\_090III\_02F\_W\_L)



1. O I/P Junction Box (IPS Control Module)      2. B Ground (GF01)

### F48 Passenger Seat Belt Buckle Switch

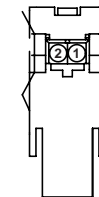
- 2 Female / White (KET\_090III\_02F\_W\_L)



1. L Seat Belt Reminder Sensor      2. B Ground (GF06)

### F49 Driver Seat Belt Pretensioner

- 2 Female / Black (JST\_SQS\_02F\_B)



1. P/B SRS Control Module (High)      2. Gr SRS Control Module (Low)

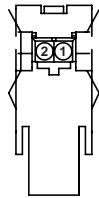
# FLOOR HARNESS

## Floor Harness (7)

CV30-7

### F50 Passenger Seat Belt Pretensioner

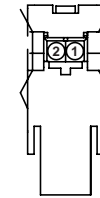
- 2 Female / Black (JST\_SQS\_02F\_B)



1. L/O SRS Control Module (High)      2. Y/B SRS Control Module (Low)

### F54 Driver Seat Belt Pretensioner Anchor

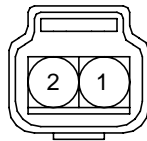
- 2 Female / Black (JST\_SQS\_02F\_B)



1. Gr/B SRS Control Module (High)      2. Gr/O SRS Control Module (Low)

### F52 Seat Belt Reminder Sensor (Australia)

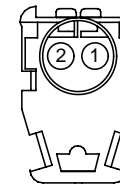
- 2 Female / Black (AMP\_MQSWP\_02F\_B)



1. L I/P Junction Box (IPS Control Module)      2. B Ground (GF06)

### F58 Driver Curtain Air Bag (With Rollover Sensor)

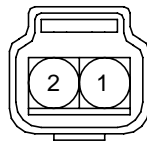
- 2 Female / Black (FCI\_AKII\_02F\_B\_I)



1. G SRS Control Module (High)      2. W SRS Control Module (Low)

### F53 Seat Belt Reminder Sensor (Europe)

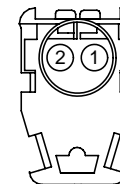
- 2 Female / Black (AMP\_MQSWP\_02F\_B)



1. L I/P Junction Box (IPS Control Module)      2. B Ground (GF06)

### F59 Passenger Curtain Air Bag (With Rollover Sensor)

- 2 Female / Black (FCI\_AKII\_02F\_B\_I)



1. B SRS Control Module (High)      2. R SRS Control Module (Low)

# FLOOR HARNESS

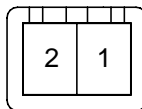
## Floor Harness (8)

CV30-8

Z01

Diode

- 2 Female / Black (KET\_090\_02F\_B\_DIODE)



1. G

I/P Junction Box - F13 10A

2. L

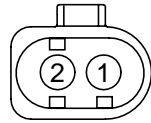
Luggage Lamp

4WD Harness (1)

CV31-1

**F61 4WD Motor**

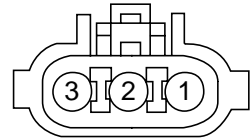
- 2 Female / Black (Hirschmann Automotive 02F\_BLACK)



1. R 4WD ECM (Motor A)                      2. B/O 4WD ECM (Motor B)

**F62 4WD Pressure Sensor**

- 3 Female / Black (KET\_SWP\_03F\_B)



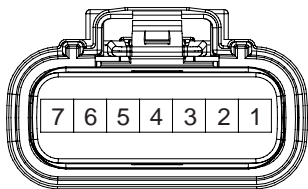
1. R 4WD ECM (PWR)                      3. G 4WD ECM (GND)  
2. G 4WD ECM (G)

**Door Harness (1)**

**CV40-1**

**D01 Driver Door Lock Actuator (LHD, W/O Dead Lock)**

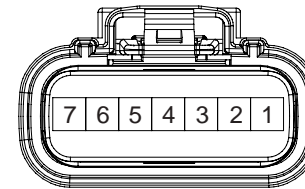
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |         |   |       |   |
|---------|---|-------|---|
| 1. L    | I/P Junction Box<br>(Door Unlock Relay)                         | 5. B  | Ground (GF01)   |
| 2. O    | I/P Junction Box (Door Lock Relay)                              | 6. Gr | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
| 3. Br/O | Key Lock Switch : I/P Junction Box<br>(IPS Control Module)      | 7. -  | -   |
| 4. P    | Key Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) |       |   |

**D03 Driver Door Lock Actuator (RHD, With Dead Lock)**

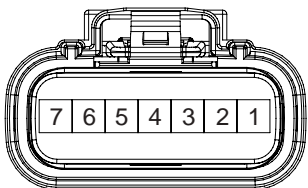
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |       |   |         |   |
|-------|---|---------|---|
| 1. G  | ICM Relay Box<br>(Dead Lock Relay)                                    | 5. Br/O | Key Lock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
| 2. Gr | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) | 6. O    | I/P Junction Box<br>(Door Lock Relay)                         |
| 3. B  | Ground (GF01)   | 7. L    | I/P Junction Box<br>(Door Unlock Relay)                       |
| 4. P  | Key Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module)       |         |   |

**D02 Driver Door Lock Actuator (LHD, With Dead Lock)**

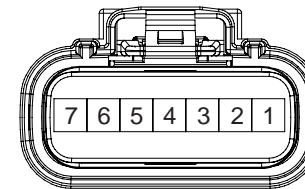
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |         |   |       |  |
|---------|---|-------|--|
| 1. L    | I/P Junction Box<br>(Door Unlock Relay)                         | 5. B  | Ground (GF01)  |
| 2. O    | I/P Junction Box (Door Lock Relay)                              | 6. Gr | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(Dead Lock Relay) |
| 3. Br/O | Key Lock Switch : I/P Junction Box<br>(IPS Control Module)      | 7. G  | ICM Relay Box<br>(Dead Lock Relay)                                 |
| 4. P    | Key Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) |       |  |

**D04 Driver Door Lock Actuator (RHD, W/O Dead Lock)**

- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |       |   |         |   |
|-------|---|---------|---|
| 1. -  | -   | 5. Br/O | Key Lock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
| 2. Gr | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) | 6. O    | I/P Junction Box<br>(Door Lock Relay)                         |
| 3. B  | Ground (GF01)   | 7. L    | I/P Junction Box<br>(Door Unlock Relay)                       |
| 4. P  | Key Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module)       |         |   |

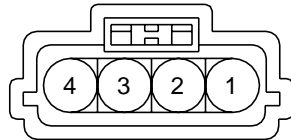
# DOOR HARNESS

## Door Harness (2)

CV40-2

### D05 Driver Smart Key Outside Handle

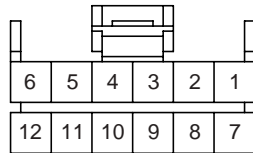
- 4 Female / Black (KUM\_NDWP\_04F\_B)



- |       |   |         |   |
|-------|---|---------|---|
| 1. Br | Smart Key Control Module<br>(Driver Door ANT PWR) | 3. Gr/B | Smart Key Control Module<br>(Driver Door Lock/ Unlock Switch) |
| 2. W  | Smart Key Control Module<br>(Driver Door ANT GND) | 4. B    | Ground (GF01)   |

### D07 Driver Power Outside Mirror

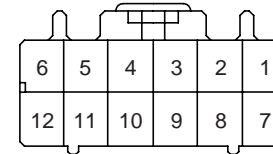
- 12 Female / Gray (MLX\_040WW\_12F\_GR)



- |       |  |        |   |
|-------|--|--------|---|
| 1. Gr | [LHD]<br>Power Outside Mirror Switch (HL)<br>[RHD]<br>Power Outside Mirror Switch (HR) | 5. Y   | Power Outside Mirror Switch<br>(Folding (F))  |
| 2. P  | Power Outside Mirror Switch<br>(Mirror Motor Up/Down)                                  | 6. Br  | Power Outside Mirror Switch<br>(Folding (UF)) |
| 3. G  | [LHD]<br>Power Outside Mirror Switch (VL)<br>[RHD]<br>Power Outside Mirror Switch (VR) | 7. L/B | Defogger :<br>I/P Junction Box - F37 7.5A     |
| 4. -  | -  | 8. B   | Defogger : Ground (GF01)                      |
|       |  | 9. -   | -   |
|       |  | 10. -  | -   |
|       |  | 11. W  | Turn Lamp : BCM                               |
|       |  | 12. B  | Turn Lamp : Ground (GF01)                     |

### D08 Power Outside Mirror Switch

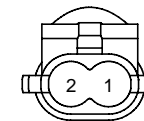
- 12 Female / White (AMP\_0407\_12F\_W\_070)



- |       |   |       |   |
|-------|---|-------|---|
| 1. -  | -   | 10. P | [LHD]<br>Driver Power Outside Mirror    |
| 2. Br | Power Outside Mirror (UF)   |       | [RHD]<br>Passenger Power Outside Mirror |
| 3. Y  | Power Outside Mirror (F)  | 11. Y | [LHD]<br>Passenger Power Outside Mirror |
| 4. Y  | I/P Junction Box - F5 10A   |       | [RHD]<br>Driver Power Outside Mirror    |
| 5. B  | Ground (GF01)   | 12. G | [LHD]<br>Passenger Power Outside Mirror |
| 6. G  | I/P Junction Box - F28 10A  |       | [RHD]<br>Driver Power Outside Mirror    |
| 7. -  | -   |       |   |
| 8. G  | [LHD]<br>Driver Power Outside Mirror<br>[RHD]<br>Passenger Power Outside Mirror |       |   |
| 9. Gr | [LHD]<br>Driver Power Outside Mirror<br>[RHD]<br>Passenger Power Outside Mirror |       |   |

### D09 Driver Power Window Motor

- 2 Female / Black (FCI\_DENSOR\_02F\_B)



- |       |                          |       |                          |
|-------|--------------------------|-------|--------------------------|
| [LHD] |                          | [RHD] |                          |
| 1. P  | Power Window Main Switch | 1. G  | Power Window Main Switch |
| 2. W  | Power Window Main Switch | 2. Gr | Power Window Main Switch |

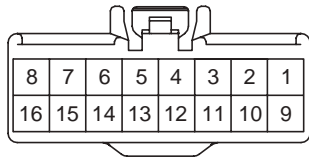
# DOOR HARNESS

## Door Harness (3)

CV40-3

### D10 Power Window Main Switch

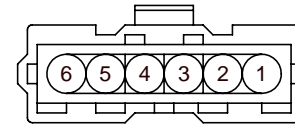
- 16 Female / White (KET\_090III\_16F\_W)



LHD		RHD	
1. Gr	Passenger Window Switch (DN)	1. L	[With Safety]
2. G	Passenger Window Switch (UP)		Safety Power Window Module (Up)
3. R	ILL. (+)	Gr	[W/O Safety]
4. -	-		Driver Power Window Motor
5. Gr/B	IPS Control Module (Door Unlock)	2. G	[With Safety]
6. W	Safety Power Window Module (Auto)		Safety Power Window Module (DN)
7. L	[With Safety]	G	[W/O Safety]
	Safety Power Window Module (Up)		Driver Power Window Motor
W	[W/O Safety]	3. R	ILL. (+)
	Driver Power Window Motor	4. -	-
8. G	[With Safety]	5. Gr/B	IPS Control Module (Door Unlock)
	Safety Power Window Module (DN)	6. W	Safety Power Window Module (Auto)
P	[W/O Safety]	7. W	Passenger Power Window Switch
	Driver Power Window Motor	8. P	Passenger Power Window Switch
9. R	I/P Junction Box - F11 25A	9. R	I/P Junction Box - F11 25A
10. L	Rear Power Window Switch RH	10. L	Window Switch RR
11. O	Rear Power Window Switch RH	11. O	Window Switch RR
12. B	Ground (GF01)	12. B	Ground (GF01)
13. L/B	IPS Control Module (Door Lock)	13. L/B	IPS Control Module (Door Lock)
14. P	Rear Power Window Switch LH	14. P	Window Switch RL
15. Br	Rear Power Window Switch LH	15. Br	Window Switch RL
16. O	I/P Junction Box - F12 25A	16. O	I/P Junction Box - F12 25A

### D12 Driver Safety Power Window Module (With Safety)

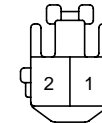
- 6 Female / Black (FCI\_SENSOR\_06F\_B)



1. G	Power Window Main Switch (Driver Window Switch (Down))	4. Y	I/P Junction Box - F3 20A
2. L	Power Window Main Switch (Driver Window Switch (Up))	5. O	Power Window Main Switch (Driver Window Switch (Auto))
3. B	Ground (GF01)	6. G	BCM (COM)

### D13 Driver Door Speaker

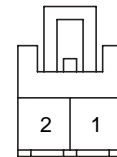
- 2 Female / White (KET\_090III\_02F\_W\_L)



[With AMP]		[W/O AMP]	
1. Br	AMP (+)	1. Br	Audio (+)
2. W	AMP (-)	2. W	Audio (-)

### D14 Driver Door Tweeter Speaker

- 2 Female / White (KUM\_CDR\_02F\_W)



[With AMP]		[W/O AMP]	
1. W	AMP (-)	1. W	Audio (-)
2. Br	AMP (+)	2. Br	Audio (+)

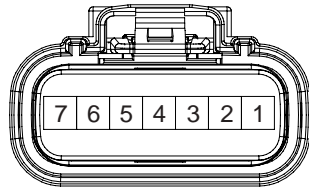
# DOOR HARNESS

## Door Harness (4)

CV40-4

### D21 Passenger Door Lock Actuator (LHD, W/O Dead Lock)

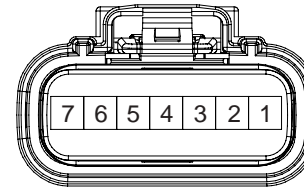
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |        |   |       |   |
|--------|---|-------|---|
| 1. -   | -   | 5. Br | Key Lock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
| 2. W   | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) | 6. O  | IPS Control Module<br>(Door Lock Relay)                       |
| 3. B   | Ground (GF06)   | 7. L  | IPS Control Module<br>(Door Unlock Relay)                     |
| 4. P/B | Key Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module)       |       |   |

### D23 Passenger Door Lock Actuator (RHD, With Dead Lock)

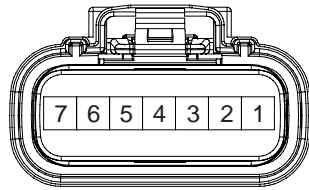
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |       |   |        |   |
|-------|---|--------|---|
| 1. L  | IPS Control Module<br>(Door Unlock Relay)                     | 4. P/B | Key Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module)       |
| 2. O  | IPS Control Module<br>(Door Lock Relay)                       | 5. Br  | Ground (GF06)   |
| 3. Br | Key Lock Switch :<br>I/P Junction Box<br>(IPS Control Module) | 6. W   | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
|       |   | 7. G   | ICM Relay Box (Dead Lock Relay)                                       |

### D22 Passenger Door Lock Actuator (LHD, With Dead Lock)

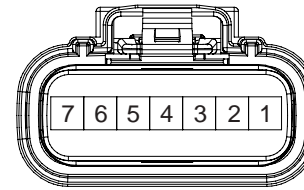
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |        |   |       |   |
|--------|---|-------|---|
| 1. G   | ICM Relay Box (Dead Lock Relay)                                       | 5. Br | Key Lock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
| 2. W   | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) | 6. O  | IPS Control Module<br>(Door Lock Relay)                       |
| 3. B   | Ground (GF06)   | 7. L  | IPS Control Module<br>(Door Unlock Relay)                     |
| 4. P/B | Key Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module)       |       |   |

### D24 Passenger Door Lock Actuator (RHD, W/O Dead Lock)

- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |        |   |      |   |
|--------|---|------|---|
| 1. L   | IPS Control Module<br>(Door Unlock Relay)                       | 5. B | Ground (GF06)   |
| 2. O   | IPS Control Module<br>(Door Lock Relay)                         |      | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
| 3. Br  | Key Lock Switch :<br>I/P Junction Box<br>(IPS Control Module)   | 6. W | IPS Control Module<br>(Door Unlock Relay)                             |
| 4. P/B | Key Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) | 7. - | -   |



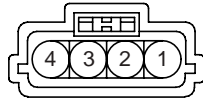
# DOOR HARNESS

## Door Harness (5)

CV40-5

### D25 Passenger Smart Key Outside Handle

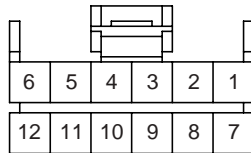
- 4 Female / Black (KUM\_NDWP\_04F\_B)



- |       |  |         |   |
|-------|--|---------|---|
| 1. Br | Smart Key Control Module<br>(Passenger Door ANT PWR) | 3. Gr/B | Smart Key Control Module<br>(Passenger Door Lock/<br>Unlock Switch) |
| 2. W  | Smart Key Control Module<br>(Passenger Door ANT GND) | 4. B    | Ground (GF06)   |

### D27 Passenger Power Outside Mirror

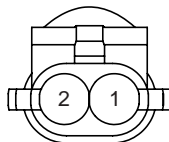
- 12 Female / Gray (MLX\_040WW\_12F\_GR)



- |       |  |         |   |
|-------|--|---------|---|
| 1. Gr | [LHD]<br>Power Outside Mirror Switch (HR)<br>[RHD]<br>Power Outside Mirror Switch (HL) | 5. Y    | Power Outside Mirror Switch<br>(Folding (F))  |
| 2. P  | Power Outside Mirror Switch<br>(Mirror Motor Up/Down)                                  | 6. Br   | Power Outside Mirror Switch<br>(Folding (UF)) |
| 3. G  | [LHD]<br>Power Outside Mirror Switch (VR)<br>[RHD]<br>Power Outside Mirror Switch (VL) | 7. L/B  | Defogger :<br>I/P Junction Box - F37 7.5A     |
| 4. -  | -  | 8. B    | Defogger : Ground (GF06)                      |
|       |  | 9. -    | -   |
|       |  | 10. -   | -   |
|       |  | 11. W/B | Turn Lamp : BCM                               |
|       |  | 12. B   | Turn Lamp : Ground (GF06)                     |

### D29 Passenger Power Window Motor

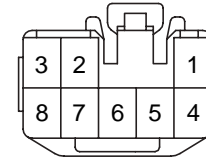
- 2 Female / Black (FCI\_SENSOR\_02F\_B)



- |       |   |      |                                       |
|-------|---|------|---------------------------------------|
| 1. Br | Passenger Power Window Switch<br>(Down) | 2. P | Passenger Power Window Switch<br>(Up) |
|-------|---|------|---------------------------------------|

### D30 Passenger Power Window Switch

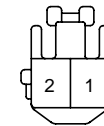
- 8 Female / White (KET\_090III\_08F\_W)



- |       |  |      |  |
|-------|--|------|--|
| 1. P  | Passenger Power Window Motor<br>(Up)   | 5. - | -  |
| 2. Y  | Power Window Main Switch (Up)          | 6. L | [LHD]<br>I/P Junction Box - F11 25A                              |
| 3. B  | ILL (-)                                |      | [RHD]  |
| 4. Br | Passenger Power Window Motor<br>(Down) | 7. R | I/P Junction Box - F12 25A<br>Power Window Main Switch<br>(Down) |
|       |  | 8. R | ILL (+)  |

### D33 Passenger Door Speaker

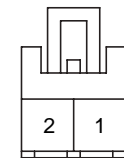
- 2 Female / White (KET\_090III\_02F\_W\_L)



- |            |         |           |           |
|------------|---------|-----------|-----------|
| [With AMP] |         | [W/O AMP] |           |
| 1. R       | AMP (+) | 1. R      | Audio (+) |
| 2. L       | AMP (-) | 2. L      | Audio (-) |

### D34 Passenger Door Tweeter Speaker

- 2 Female / White (KUM\_CDR\_02F\_W)



- |            |         |           |           |
|------------|---------|-----------|-----------|
| [With AMP] |         | [W/O AMP] |           |
| 1. L       | AMP (-) | 1. L      | Audio (-) |
| 2. R       | AMP (+) | 2. R      | Audio (+) |

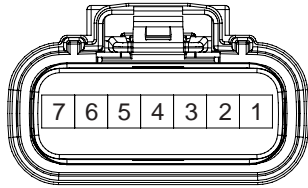
# DOOR HARNESS

## Door Harness (6)

CV40-6

### D41 Rear Door Lock Actuator LH (W/O Dead Lock)

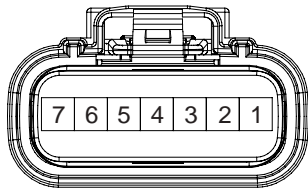
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |      |   |        |   |
|------|---|--------|---|
| 1. L | I/P Junction Box<br>(Door Unlock Relay) | 5. B   | Ground (GF02)   |
| 2. O | I/P Junction Box<br>(Door Lock Relay)   | 6. P/B | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
| 3. - | -                                       | 7. -   | -   |
| 4. - | -                                       |        |   |

### D42 Rear Door Lock Actuator LH (With Dead Lock)

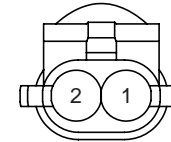
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |      |   |        |   |
|------|---|--------|---|
| 1. L | I/P Junction Box<br>(Door Unlock Relay) | 5. B   | Ground (GF02)   |
| 2. O | I/P Junction Box<br>(Door Lock Relay)   | 6. P/B | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) |
| 3. - | -                                       | 7. -   | ICM Relay Box<br>(Dead Lock Relay)                                    |
| 4. - | -                                       |        |   |

### D49 Rear Power Window Motor LH

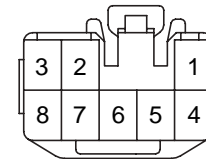
- 2 Female / Black (FCI\_SENSOR\_02F\_B)



- |      |                                       |      |                                     |
|------|---------------------------------------|------|-------------------------------------|
| 1. L | Rear Power Window Switch LH<br>(Down) | 2. G | Rear Power Window Switch LH<br>(Up) |
|------|---------------------------------------|------|-------------------------------------|

### D50 Rear Power Window Switch LH

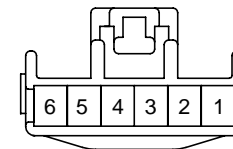
- 8 Female / White (KET\_090III\_08F\_W)



- |      |                                      |       |                                    |
|------|--------------------------------------|-------|------------------------------------|
| 1. G | Rear Power Window Motor LH (Up)      | 5. -  | -                                  |
| 2. P | Power Window Main Switch (Up)        | 6. R  | I/P Junction Box - F12 25A         |
| 3. B | ILL (-)                              | 7. Br | Power Window Main Switch<br>(Down) |
| 4. L | Rear Power Window Motor LH<br>(Down) | 8. R  | ILL (+)                            |

### D51 Rear Seat Warmer Switch LH

- 6 Female / White (KET\_090II\_06F\_W\_SW)



- |        |                               |      |                              |
|--------|-------------------------------|------|------------------------------|
| 1. G   | IND (+) : Switch              | 4. G | Rear Seat Warmer LH (HTD(+)) |
| 2. P/B | Rear Seat Warmer LH (IND (-)) | 5. B | Ground (GF02)                |
| 3. O   | I/P Junction Box - F36 15A    | 6. R | ILL (+)                      |

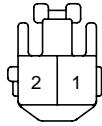
# DOOR HARNESS

## Door Harness (7)

CV40-7

### D53 Rear Door Speaker LH

- 2 Female / White (KET\_090III\_02F\_W\_L)



[With AMP]

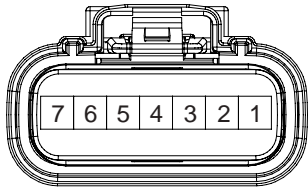
- 1. Y AMP (+)
- 2. B AMP (-)

[W/O AMP]

- 1. Y Audio (+)
- 2. B Audio (-)

### D61 Rear Door Lock Actuator RH (W/O Dead Lock)

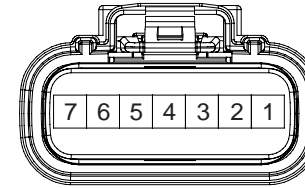
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |        |   |      |   |
|--------|---|------|---|
| 1. -   | -   | 5. - | -                                       |
| 2. P/B | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) | 6. O | I/P Junction Box<br>(Door Lock Relay)   |
| 3. B   | Ground (GF06)   | 7. L | I/P Junction Box<br>(Door Unlock Relay) |
| 4. -   | -   |      |   |

### D62 Rear Door Lock Actuator RH (With Dead Lock)

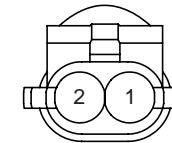
- 7 Female / Black (FCI\_DRLATCH\_07F\_B)



- |        |   |      |   |
|--------|---|------|---|
| 1. G   | ICM Relay Box<br>(Dead Lock Relay)                                    | 5. - | -                                       |
| 2. P/B | Door Lock/Unlock Switch :<br>I/P Junction Box<br>(IPS Control Module) | 6. O | I/P Junction Box<br>(Door Lock Relay)   |
| 3. B   | Ground (GF06)   | 7. L | I/P Junction Box<br>(Door Unlock Relay) |
| 4. -   | -   |      |   |

### D69 Rear Power Window Motor RH

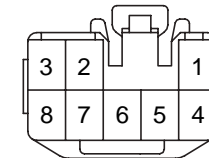
- 2 Female / Black (FCI\_SENSOR\_02F\_B)



- |      |                                       |       |                                     |
|------|---------------------------------------|-------|-------------------------------------|
| 1. P | Rear Power Window Switch RH<br>(Down) | 2. Br | Rear Power Window Switch RH<br>(Up) |
|------|---------------------------------------|-------|-------------------------------------|

### D70 Rear Power Window Switch RH

- 8 Female / White (KET\_090III\_08F\_W)



- |       |                                      |      |                                    |
|-------|--------------------------------------|------|------------------------------------|
| 1. Br | Rear Power Window Motor RH (Up)      | 5. - | -                                  |
| 2. L  | Power Window Main Switch (Up)        | 6. R | I/P Junction Box - F11 25A         |
| 3. B  | ILL (-)                              | 7. P | Power Window Main Switch<br>(Down) |
| 4. P  | Rear Power Window Motor RH<br>(Down) | 8. R | ILL (+)                            |

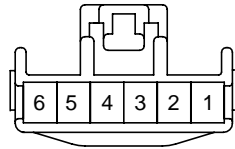
# DOOR HARNESS

## Door Harness (8)

CV40-8

### D71 Rear Seat Warmer Switch RH

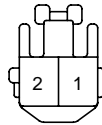
- 6 Female / White (KET\_090II\_06F\_W\_SW)



1. G	IND (+) : Switch	4. G	Rear Seat Warmer RH (HTD(+))
2. L/B	IND (-) : Rear Seat Warmer RH	5. B	Ground (GF06)
3. O	I/P Junction Box - F36 15A	6. R	ILL (+)

### D73 Rear Door Speaker RH

- 2 Female / White (KET\_090III\_02F\_W\_L)



#### [With AMP]

1. G	AMP (+)
2. O	AMP (-)

#### [W/O AMP]

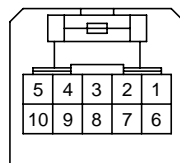
1. G	Audio (+)
2. O	Audio (-)

Roof Harness (1)

CV50-1

**R01 Electro chromic mirror**

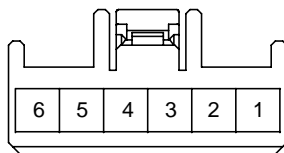
- 10 Female / Black (SUM\_025\_10F\_B)



1. Y/B	Rear View Camera (Video GND)	6. -	-
2. -	-	7. -	-
3. Y	Rear View Camera (Video PWR)	8. B	Ground (GM02)
4. R/B	Rear View Camera (Video VGND)	9. R	I/P Junction Box (IPS 10)
5. R	Rear View Camera (Video IN)	10. O	I/P Junction Box - F32 10A

**R02 Map Lamp Switch**

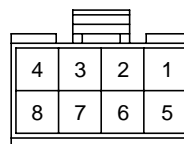
- 6 Female / White (AMP\_090III\_06F\_W\_1)



1. B	Ground (GM02)	4. Br	BCM (Door Open Signal)
2. -	-	5. G	I/P Junction Box - F13 10A
3. -	-	6. -	-

**R04 Rain Sensor**

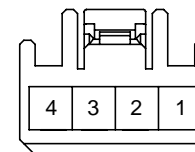
- 8 Female / Black (MLX\_118\_08F\_B)



1. -	-	5. O	I/P Junction Box - F32 10A
2. W	Front Wiper Motor (Parking Switch), E/R Fuse & Relay Box -RLY. 12	6. B	Ground (GM02)
3. Br	Multifunction Switch (Washer Switch)	7. L	E/R Fuse & Relay Box -RLY. 13
4. Y/B	Multifunction Switch (Wiper Auto Switch)	8. O/B	E/R Fuse & Relay Box -RLY. 12, BCM

**R05 Room Lamp**

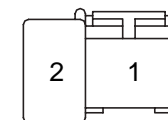
- 4 Female / White (AMP\_090III\_04F\_W)



1. B	Ground (GM02)	3. R	I/P Junction Box - F13 10A
2. Br	BCM (Door Open Signal)	4. -	-

**R06 Driver Vanity Lamp**

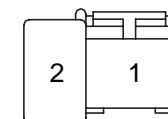
- 2 Female / Black (AMP\_PLM2\_02F\_B\_DL)



1. G	I/P Junction Box - F13 10A	1. B	Ground (GM02)
------	----------------------------	------	---------------

**R07 Passenger Vanity Lamp**

- 2 Female / Black (AMP\_PLM2\_02F\_B\_DL)



1. G	I/P Junction Box - F13 10A	1. B	Ground (GM02)
------	----------------------------	------	---------------

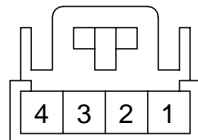
# ROOF HARNESS

## Roof Harness (2)

CV50-2

### R08 Sunroof Switch

- 4 Female / White (AMP\_070\_04F\_W)



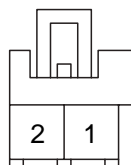
- |      |                      |         |                                 |
|------|----------------------|---------|---------------------------------|
| 1. W | Sunroof Motor (Open) | 3. L    | Sunroof Motor (Tilt Up)         |
| 2. B | Ground (GM02)        | 4. Br/B | Sunroof Motor (Close/Tilt Down) |

**Tail Gate Harness (1)**

**CV51-1**

**R11 High-Mounted Stop Lamp**

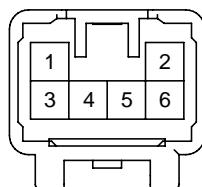
- 2 Female / White (KUM\_CDR\_02F\_W)



- |        |                           |      |               |
|--------|---------------------------|------|---------------|
| 1. G/B | ICM Relay Box (DBC Relay) | 2. B | Ground (GR01) |
|--------|---------------------------|------|---------------|

**R12 License Lamp (Tail Gate Handle Switch)**

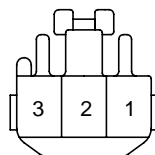
- 6 Male / White (KET\_090III\_06M\_W)



- |        |  |      |   |
|--------|--|------|---|
| 1. Y/B | Tail Gate Handle Switch :<br>Smart Key Con Trol Module | 4. G | License Lamp RH :<br>I/P Junction Box (IPS 7) |
| 2. B   | Tail Gate Handle Switch :<br>Ground (GR01)             | 5. G | License Lamp LH :<br>I/P Junction Box (IPS 7) |
| 3. B   | License Lamp : Ground (GR01)                           | 6. - | -   |

**R13 Rear Combination Lamp (In) LH**

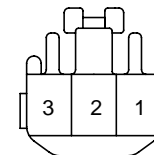
- 3 Female / White (KET\_090III\_03F\_W)



- |      |   |      |               |
|------|---|------|---------------|
| 1. R | Back-Up Lamp :<br>I/P Junction Box (IPS 10) | 3. B | Ground (GR01) |
| 2. G | Tail Lamp :<br>I/P Junction Box (IPS 7)     |      |               |

**R14 Rear Combination Lamp (In) RH**

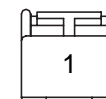
- 3 Female / White (KET\_090III\_03F\_W)



- |      |   |      |               |
|------|---|------|---------------|
| 1. R | Back-Up Lamp :<br>I/P Junction Box (IPS 10) | 3. B | Ground (GR01) |
| 2. Y | Tail Lamp :<br>I/P Junction Box (IPS 2)     |      |               |

**R16 Rear Defogger (+)**

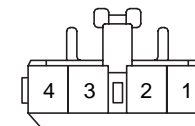
- 1 Female / Black (AMP\_PLM2\_01F\_B)



- |      |                               |
|------|-------------------------------|
| 1. P | E/R Fuse & Relay Box - RLY. 6 |
|------|-------------------------------|

**R17 Rear Wiper Motor**

- 4 Female / White (KET\_090III\_04F\_W)



- |      |                                  |       |                                  |
|------|----------------------------------|-------|----------------------------------|
| 1. B | Ground (GR01)                    | 3. Br | ICM Relay Box (Rear Wiper Relay) |
| 2. W | ICM Relay Box (Rear Wiper Relay) | 4. L  | I/P Junction Box - Fuse F31      |

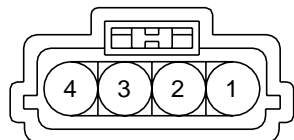
# TAIL GATE HARNESS

## Tail Gate Harness (2)

CV51-2

### R18 Tail Gate Latch

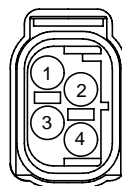
- 4 Female / Black (KUM\_NDWP\_04F\_B)



- |      |  |      |                                    |
|------|--|------|------------------------------------|
| 1. B | Tail Gate Open Switch :<br>Ground (GR01) | 3. L | I/P Junction Box - Tail Gate Relay |
| 2. W | I/P Junction Box<br>(IPS Control Module) | 4. B | Motor : Ground (GR01)              |

### R19 Rear View Camera

- 4 Female / Black (AMP\_MQSWP\_04F\_B)



- |        |  |        |                                    |
|--------|--|--------|------------------------------------|
| 1. R/B | Electro Chromic Mirror<br>(Video VGND) | 3. Y/B | Electro Chromic Mirror (Video GND) |
| 2. R   | Electro Chromic Mirror (Video In)      | 4. Y   | Electro Chromic Mirror (Video PWR) |

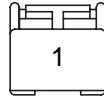


**REAR DEFOGGER (-) HARNESS** EABFACB7

**Rear Defogger (-) Harness (1)**

**CV52-1**

**R15 Rear Defogger (-)**  
- 1 Female / Black (AMP\_PLM2\_01F\_B)



1. B Ground (GR02)

# REAR BUMPER HARNESS

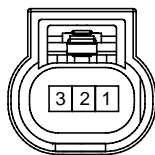
E2F7BA60

## Rear Bumper Harness (1)

CV53-1

### R21-CL Rear Parking Assist Sensor Center LH

- 3 Female / Black (AMP\_MCPWP\_03F\_B)



- |       |           |      |           |
|-------|-----------|------|-----------|
| 1. R  | BCM (PWR) | 3. B | BCM (GND) |
| 2. Gr | BCM (LIN) |      |           |

### R21-CR Rear Parking Assist Sensor Center RH

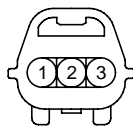
- 3 Female / Black (AMP\_MCPWP\_03F\_B)



- |      |           |      |           |
|------|-----------|------|-----------|
| 1. R | BCM (PWR) | 3. B | BCM (GND) |
| 2. G | BCM (LIN) |      |           |

### R21-L Rear Parking Assist Sensor LH

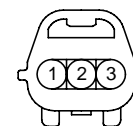
- 3 Male / Black (KET\_SSD\_03M\_B\_A)



- |      |           |      |           |
|------|-----------|------|-----------|
| 1. R | BCM (PWR) | 3. B | BCM (GND) |
| 2. G | BCM (LIN) |      |           |

### R21-R Rear Parking Assist Sensor RH

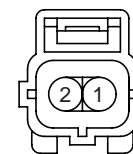
- 3 Male / Black (KET\_SSD\_03M\_B\_A)



- |        |           |      |           |
|--------|-----------|------|-----------|
| 1. R   | BCM (PWR) | 3. B | BCM (GND) |
| 2. G/B | BCM (LIN) |      |           |

### R23 Smart Key Bumper Antenna

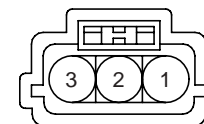
- 2 Female / Black (AMP\_EJWP\_02F\_B)



- |       |                                |      |                                |
|-------|--------------------------------|------|--------------------------------|
| 1. Br | Smart Key Control Module (PWR) | 2. W | Smart Key Control Module (GND) |
|-------|--------------------------------|------|--------------------------------|

### R24 Rear Fog Lamp LH

- 3 Female / Gray (KUM\_NDWP\_03F\_GR)



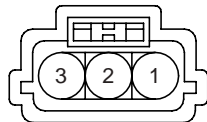
- |      |  |      |               |
|------|--|------|---------------|
| 1. G | ICM Relay Box<br>(Rear Fog Lamp Relay) | 3. B | Ground (GF03) |
| 2. W | BCM (Turn & Hazard Lamp Output)        |      |               |

# REAR BUMPER HARNESS

## Rear Bumper Harness (2)

CV53-2

**R25 Rear Fog Lamp RH**  
- 3 Female / Gray (KUM\_NDWP\_03F\_GR)



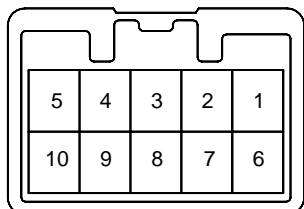
- |        |  |      |               |
|--------|--|------|---------------|
| 1. G   | ICM Relay Box<br>(Rear Fog Lamp Relay) | 3. B | Ground (GF03) |
| 2. W/B | BCM (Turn & Hazard Lamp Output)        |      |               |

**Sunroof EXT. Harness (1)**

**CV54-1**

**R31 Sunroof Motor**

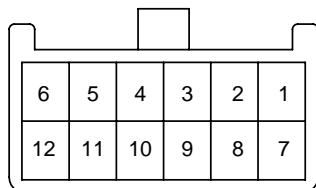
- 10 Female / N/A (YAZAKI\_7283\_6455\_40)



- |         |   |         |   |
|---------|---|---------|---|
| 1. B    | Ground (GM02),<br>Sunroof Control Module (Ground) | 6. Y/O  | I/P Junction Box (Fuse - F06),<br>Sunroof Control Module (B+) |
| 2. -    | -   | 7. -    | -   |
| 3. R    | I/P Junction Box (Fuse - F32)                     | 8. P    | Vehicle Speed Signal  |
| 4. Br/B | Sunroof Switch (Close/Tilt Down)                  | 9. -    | -   |
| 5. G/O  | Sunroof Switch (Open)                             | 10. L/B | Sunroof Switch (Tilt Up)                                      |

**R32 Sunroof Control Module**

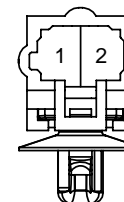
- 12 Female / N/A (KET\_MG610376)



- |        |   |        |                              |
|--------|---|--------|------------------------------|
| 1. -   | -   | 7. -   | -                            |
| 2. B   | Ground (GM02),<br>Sunroof Motor (Ground)  | 8. -   | -                            |
| 3. R/B | Driver Door Switch Signal   | 9. Y/O | Sunroof Motor (B+)           |
| 4. O   | [W/O Smart Key]<br>BCM, Door Warning Switch<br>[With Smart Key]<br>Fob Holder, Smart Key Control Module | 10. O  | Sunroof Push Switch (GS IN)  |
| 5. W   | I/P Junction Box (Fuse - F28)   | 11. P  | Sunroof Push Switch (GS OUT) |
| 6. -   | -   | 12. -  | -                            |

**R33 Sunroof Push Switch**

- 2 Male / N/A (KET\_MG641029(L))



- |      |                                 |      |                                |
|------|---------------------------------|------|--------------------------------|
| 1. P | Sunroof Control Module (GS OUT) | 2. O | Sunroof Control Module (GS IN) |
|------|---------------------------------|------|--------------------------------|

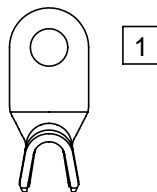
**Battery Harness (1)**

**CV60-1**

**G4KD/G4KE : THETA II 2.0L/2.4L**

**E11 Start Motor**

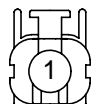
- 1 Female / N/A (CHT\_919312B310\_01F)



1. B Battery

**E12 Start Solenoid**

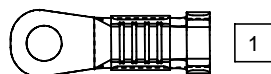
- 1 Female / Gray (KET\_58X\_01F\_GR)



1. L E/R Fuse & Relay Box - RLY. 4

**E13 Alternator**

- 1 Female / N/A (TAE\_919803K100\_01F\_N)



1. B Battery & Battery Fuse Box - Fuse ALT 150A

# BATTERY HARNESS

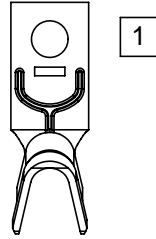
## Battery Harness (2)

CV60-2

### D4HA : R 2.0L

#### E21 Start Motor

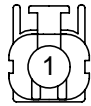
- 1 Female / N/A (CHT\_919901H050\_01F)



1. B Battery

#### E22 Start Solenoid

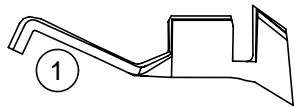
- 1 Female / Gray (KET\_58X\_01F\_GR)



1. L E/R Fuse & Relay Box - RLY. 4

#### E23 Alternator

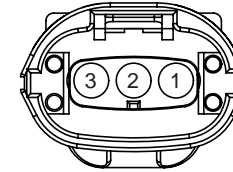
- 1 Female / N/A (TML\_ALT\_GSL\_HD)



1. B Battery & Battery Fuse Box - Fuse ALT 180A

#### E24 Alternator

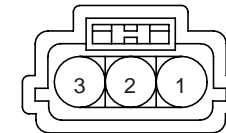
- 3 Female / Gray (KET\_090IWP\_03F\_GR\_3)



1. -	-	3. -	-
2. G	I/P JUNCTION BOX (Diode) Charge IND.		

#### E25 A/C Compressor

- 3 Female / Gray (KUM\_NDWP\_03F\_GR)



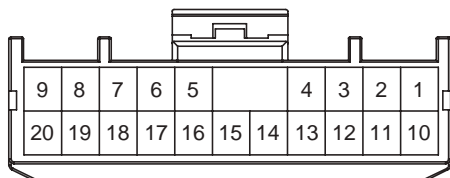
1. Y	EMS Box (RLY. 3)	3. Gr	A/C Control Module (Electrical Control Valve (+))
2. L	A/C Control Module (Electrical Control Valve (-))		

Seat Harness (1)

CV70-1

**S01 Driver Seat Manual Switch (LHD)**

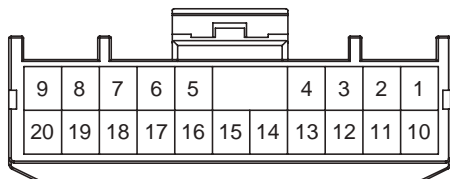
- 20 Female / N/A (AMP\_070\_20F)



- |        |                                    |         |                                    |
|--------|------------------------------------|---------|------------------------------------|
| 1. Br  | Driver Lumbar Support Motor (RR)   | 11. Y/R | Driver Reclining Motor (FR)        |
| 2. B   | Ground (GF01)                      | 12. Gr  | Driver Reclining Limit Switch (FR) |
| 3. L/R | Driver Slide Motor (FR)            | 13. G   | Driver Reclining Motor (RR)        |
| 4. R/B | Driver Slide Motor (RR)            | 14. —   | —                                  |
| 5. B   | Ground (GF01)                      | 15. R   | I/P Junction Box - Fuse F4         |
| 6. G/R | Driver Height Motor (Down)         | 16. L/W | Driver Lumbar Support Motor (FR)   |
| 7. L/Y | Driver Height Motor (Up)           | 17. B   | Ground (GF01)                      |
| 8. B   | Ground (GF01)                      | 18. —   | —                                  |
| 9. —   | —                                  | 19. —   | —                                  |
| 10. Y  | Driver Reclining Limit Switch (RR) | 20. —   | —                                  |

**S01R Driver Seat Manual Switch (RHD)**

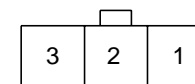
- 20 Female / N/A (AMP\_070\_20F)



- |        |                                  |         |                                    |
|--------|----------------------------------|---------|------------------------------------|
| 1. —   | —                                | 11. G/R | Driver Height Motor (Up)           |
| 2. B   | Ground (GF01)                    | 12. Y   | Driver Reclining Limit Switch (FR) |
| 3. B   | Ground (GF01)                    | 13. R   | I/P Junction Box - Fuse F4         |
| 4. L/Y | Driver Height Motor (Down)       | 14. B   | Ground (GF01)                      |
| 5. L/R | Driver Slide Motor (RR)          | 15. G   | Driver Reclining Motor (RR)        |
| 6. B   | Ground (GF01)                    | 16. R/B | Driver Slide Motor (FR)            |
| 7. Y/R | Driver Reclining Motor (FR)      | 17. Gr  | Driver Reclining Limit Switch (RR) |
| 8. —   | —                                | 18. —   | —                                  |
| 9. L/W | Driver Lumbar Support Motor (RR) | 19. —   | —                                  |
| 10. —  | —                                | 20. Br  | Driver Lumbar Support Motor (FR)   |

**S02 Driver Reclining Limit Switch (LHD)**

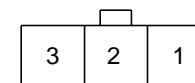
- 3 Female / N/A (KET\_0902\_03F)



- |       |                                |      |               |
|-------|--------------------------------|------|---------------|
| 1. Y  | Driver Seat Manual Switch (RR) | 3. B | Ground (GF01) |
| 2. Gr | Driver Seat Manual Switch (FR) |      |               |

**S02R Driver Reclining Limit Switch (RHD)**

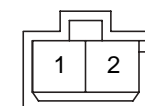
- 3 Female / N/A (KET\_0902\_03F)



- |       |                                |      |               |
|-------|--------------------------------|------|---------------|
| 1. Gr | Driver Seat Manual Switch (RR) | 3. B | Ground (GF01) |
| 2. Y  | Driver Seat Manual Switch (FR) |      |               |

**S03 Driver Reclining Motor (LHD)**

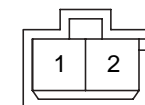
- 2 Male / N/A (KET\_090II\_02M)



- |      |                                |        |                                |
|------|--------------------------------|--------|--------------------------------|
| 1. G | Driver Seat Manual Switch (RR) | 2. Y/R | Driver Seat Manual Switch (FR) |
|------|--------------------------------|--------|--------------------------------|

**S03R Driver Reclining Motor (RHD)**

- 2 Male / N/A (KET\_090II\_02M)



- |      |                                |        |                                |
|------|--------------------------------|--------|--------------------------------|
| 1. G | Driver Seat Manual Switch (RR) | 2. Y/R | Driver Seat Manual Switch (FR) |
|------|--------------------------------|--------|--------------------------------|

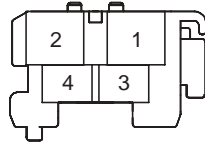
# SEAT HARNESS

## Seat Harness (2)

CV70-2

### S04 Front Height Motor (LHD)

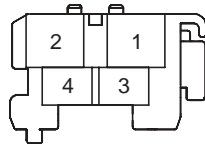
- 4 Female / N/A (AMP\_JPMT\_04F)



- |        |                                  |      |   |
|--------|----------------------------------|------|---|
| 1. L/Y | Driver Seat Manual Switch (Up)   | 3. - | - |
| 2. G/R | Driver Seat Manual Switch (Down) | 4. - | - |

### S04R Front Height Motor (RHD)

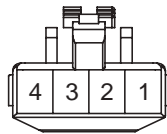
- 4 Female / N/A (AMP\_JPMT\_04F)



- |        |                                  |      |   |
|--------|----------------------------------|------|---|
| 1. G/R | Driver Seat Manual Switch (Up)   | 3. - | - |
| 2. L/Y | Driver Seat Manual Switch (Down) | 4. - | - |

### S05 Driver Slide Motor (LHD)

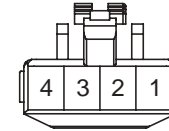
- 4 Female / N/A (KET\_090-2\_04F)



- |        |                                |        |                                |
|--------|--------------------------------|--------|--------------------------------|
| 1. L/R | Driver Seat Manual Switch (FR) | 3. -   | -                              |
| 2. -   | -                              | 4. R/B | Driver Seat Manual Switch (RR) |

### S05R Driver Slide Motor (RHD)

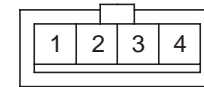
- 4 Female / N/A (KET\_090-2\_04F)



- |        |                                |        |                                |
|--------|--------------------------------|--------|--------------------------------|
| 1. R/B | Driver Seat Manual Switch (FR) | 3. -   | -                              |
| 2. -   | -                              | 4. L/R | Driver Seat Manual Switch (RR) |

### S06 Front Cushion Warmer LH (W/O CCS)

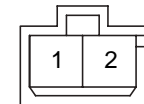
- 4 Male / N/A (KET\_090-2\_04M)



- |        |                                  |        |   |
|--------|----------------------------------|--------|---|
| 1. B/W | Driver Seat Warmer Switch (IND.) | 3. Y   | Driver Seat Warmer Switch (Low Switch)  |
| 2. B/R | Ground (GF01)                    | 4. R/W | Driver Seat Warmer Switch (High Switch) |

### S07 Driver Lumbar Support Switch (LHD)

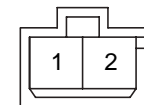
- 2 Male / N/A (KET\_090II\_02M)



- |        |                                |       |                                |
|--------|--------------------------------|-------|--------------------------------|
| 1. L/W | Driver Seat Manual Switch (FR) | 2. Br | Driver Seat Manual Switch (RR) |
|--------|--------------------------------|-------|--------------------------------|

### S07R Driver Lumbar Support Switch (RHD)

- 2 Male / N/A (KET\_090II\_02M)



- |       |                                |        |                                |
|-------|--------------------------------|--------|--------------------------------|
| 1. Br | Driver Seat Manual Switch (FR) | 2. L/W | Driver Seat Manual Switch (RR) |
|-------|--------------------------------|--------|--------------------------------|



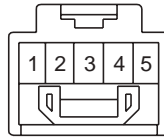
# SEAT HARNESS

## Seat Harness (3)

CV70-3

### S08 Driver CCS Blower Motor (With CCS)

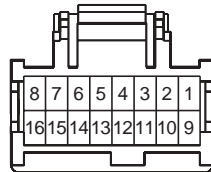
- 5 Male / N/A (040-III\_5M)



- |        |                                   |      |                                |
|--------|-----------------------------------|------|--------------------------------|
| 1. -   | -                                 | 4. Y | Driver CCS Module (Blower (+)) |
| 2. Y/O | Driver CCS Module (Blower (-))    | 5. - | -                              |
| 3. Lg  | Driver CCS Module (Speed Control) |      |                                |

### S09 Driver CCS Control Module (With CCS)

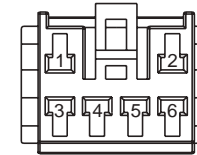
- 16 Female / N/A (060\_WTOW\_16)



- |        |  |         |   |
|--------|--|---------|---|
| 1. L   | Driver CCS Cushion Warmer (HTD MAT1)   | 9. -    | -                                       |
| 2. B   | Ground (GF03)                          | 10. Lg  | Driver CCS Blower Motor (Speed Control) |
| 3. G   | Driver CCS Cushion Warmer (HTD MAT2)   | 11. Br  | Driver CCS Switch (Heat_High)           |
| 4. W   | I/P Junction Box - Fuse F29            | 12. Y/B | Driver CCS Switch (Heat_Low)            |
| 5. Y/O | Driver CCS Blower Motor (Blower (-))   | 13. G/O | Driver CCS Switch (Cool_High)           |
| 6. Y   | Driver CCS Blower Motor (Blower (+))   | 14. W/L | Driver CCS Switch (Cool_Low)            |
| 7. Y/G | Driver CCS Switch (Heat Switch Signal) | 15. W/Y | Driver CCS Cushion Warmer (NTC)         |
| 8. Y/L | Driver CCS Switch (Cool Switch Signal) | 16. W/G | Driver CCS Cushion Warmer (NTC GND)     |

### S10 Driver CCS Cushion Warmer (With CCS)

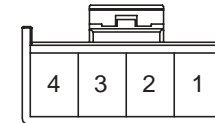
- 6 Male / N/A (KET\_060\_06M)



- |        |                             |        |                              |
|--------|-----------------------------|--------|------------------------------|
| 1. W/G | Driver CCS Module (NTC (-)) | 4. L   | Driver CCS Module (HTD MAT1) |
| 2. -   | -                           | 5. G   | Driver CCS Module (HTD MAT2) |
| 3. W/Y | Driver CCS Module (NTC (+)) | 6. R/L | I/P Junction Box - Fuse F10  |

### S11 Driver Seat Manual Switch

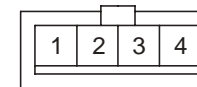
- 4 Female / N/A (AMP\_070\_04F)



- |        |                                     |        |  |
|--------|-------------------------------------|--------|--|
| 1. B/W | Passenger Seat Warmer Switch (IND.) | 3. Y   | Passenger Seat Warmer Switch (Low Switch)  |
| 2. B/R | Ground (GF06)                       | 4. R/W | Passenger Seat Warmer Switch (High Switch) |

### S16 Front Cushion Warmer RH (W/O CCS)

- 4 Male / N/A (KET\_090-2\_04M)



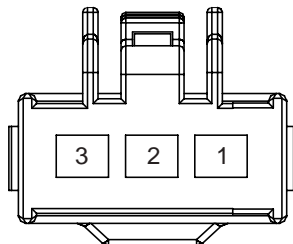
- |        |                                     |        |  |
|--------|-------------------------------------|--------|--|
| 1. B/W | Passenger Seat Warmer Switch (IND.) | 3. Y   | Passenger Seat Warmer Switch (Low Switch)  |
| 2. B/R | Ground (GF06)                       | 4. R/W | Passenger Seat Warmer Switch (High Switch) |

I/P Junction Box (1)

CV80-1

I/P-A I/P Junction Box

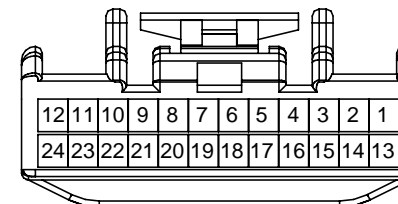
- 3 Female / Black (KET\_312II\_03F\_B)



- |      |   |      |   |
|------|---|------|---|
| 1. R | E/R Fuse & Relay Box - F8 60A<br>(Multi Fuse) | 3. L | E/R Fuse & Relay Box - F2 60A<br>(Multi Fuse) |
| 2. W | E/R Fuse & Relay Box - F7 60A                 |      |   |

I/P-B I/P Junction Box

- 24 Female / N/A (KET\_025\_24F\_)



- |       |  |          |   |
|-------|--|----------|---|
| 1. P  | Fuse F20 :<br>[W/O Smart Key -<br>W/O Burglar Alarm]<br>E/R Fuse & Relay Box - RLY. 4<br>[With Smart Key - M/T]<br>E/R Fuse & Relay Box - RLY. 4<br>[With Smart Key - A/T]<br>E/R Fuse & Relay Box - RLY. 11 | 13. P    | [W/O Smart Key -<br>With Burglar Alarm]<br>Burglar Alarm Relay :<br>E/R Fuse & Relay Box - RLY. 4 |
| 2. W  | Fuse F21 :<br>[G4KD/G4KE] Stop Lamp Switch<br>Fuse F21 : Head Lamp Leveling  | 14. G    | Fuse F29 : Alternator   |
| 3. Y  | Device Actuator LH/RH  | 15. -    | -   |
| 4. W  | BCM : Head Lamp RH,<br>Side Repeater Lamp RH   | 16. Br/O | IPS Control Module :<br>Brake Fluid Level Sensor  |
| 5. Y  | BCM : Head Lamp LH,<br>Side Repeater Lamp LH   | 17. W    | [M/T]<br>IPS Control Module :<br>Back-Up Lamp Switch  |
| 6. O  | Fuse F32 :<br>E/R Fuse & Relay Box - RLY. 1  | 18. R/B  | IPS Control Module :<br>Hood Switch   |
| 7. -  | -  | 19. R    | IPS Control Module :<br>ESP Control Module  |
| 8. -  | -  | 20. -    | -   |
| 9. L  | PS Control Module :<br>E/R Fuse & Relay Box - RLY. 10  | 21. -    | -   |
| 10. Y | IPS2 : Head Lamp RH  | 22. W    | IPS Control Module :<br>E/R Fuse & Relay Box - RLY. 5   |
| 11. G | IPS7 : Head Lamp LH  | 23. G/O  | PS Control Module :<br>E/R Fuse & Relay Box - RLY. 6  |
| 12. P | IPS9 : Head Lamp LH  | 24. P    | IPS8 : Head Lamp RH   |

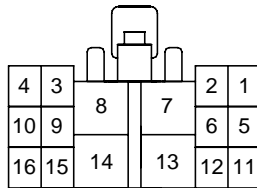
# I/P JUNCTION BOX

## I/P Junction Box (2)

CV80-2

### I/P-C I/P Junction Box

- 16 Female / White (KET\_1809\_16F\_W)



- |       |                                |       |                               |
|-------|--------------------------------|-------|-------------------------------|
| 1. O  | IPS2 : Head Lamp RH            | 9. —  | —                             |
| 2. Gr | IPS0 : Head Lamp RH,           | 10. R | Fuse F22 :                    |
| 3.    | Fuse F25 :                     |       | E/R Fuse & Relay Box          |
| Y     | Front Wiper Motor,             |       | (Fuse - F23, F24, F25)        |
|       | E/R Fuse & Relay Box - RLY. 12 | 11. — | —                             |
| Br    | E/R Fuse & Relay Box - RLY. 13 | 12. — | —                             |
| 4. Gr | IPS4 : Head Lamp LH            | 13. — | —                             |
| 5. —  | —                              | 14. W | Fuse F37 :                    |
| 6. —  | —                              |       | E/R Fuse & Relay Box - RLY. 1 |
| 7. —  | —                              | 15. L | IPS6 : Front Fog Lamp LH/RH   |
| 8. P  | Fuse F38 :                     | 16. O | IPS5 : Head Lamp LH           |
|       | E/R Fuse & Relay Box - RLY. 6  |       |                               |

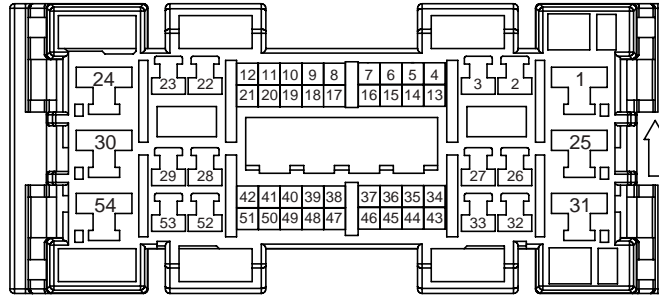
# I/P JUNCTION BOX

## I/P Junction Box (3)

CV80-3

### I/P-D I/P Junction Box

- 54 Female / White (KET\_HYBRID\_54F\_W)



1. —	—	15. Gr/O	IPS Control Module : Parking Brake Switch (Hand/Foot Type)	30. R	Fuse F4 : Driver Seat Manual Switch	43. W/B	IPS Control Module : ICM Relay Box (Rear Wiper Relay)
2. L	Tail Gate Relay : Tail Gate Latch	16. W	IPS Control Module : Tail Gate Latch	31. P	E/R Fuse & Relay Box - RLY. 6 :	44. R/B	Fuse F21 : 4WD ECM
3. L/B	Fuse F38 : Driver/Passenger Power Outside Mirror (Defogger)	17. Gr/B	IPS Control Module : Rear Door Switch RH	32. R	Fuse F33 : Rear Power Outlet	45. G	Fuse F28 : Sunroof Control Module, AMP Power Outside Mirror Switch
4. B	IPS Control Module : Rear Door Lock Actuator RH (Door Lock/Unlock)	18. Gr/B	IPS Control Module : Power Window Main Switch (Door Lock Switch)	33. L	Fuse F31 : Rear Wiper Mirror (Tail Gate Handle Switch)	46. W	BCM : Rear Fog Lamp LH, [LHD] Driver Power Outside Mirror (Turn Lamp) [RHD] Passenger Power Outside Mirror (Turn Lamp)
5. R	IPS Control Module : Rear Door Lock Actuator LH (Door Lock/Unlock)	19. O	IPS Control Module : Driver Seat Belt Buckle Switch	34. G	IPS7 : License Lamp Rear Combination Lamp (IN/OUT) LH	47. W/B	BCM : Rear Fog Lamp RH, [LHD] Passenger Power Outside Mirror (Turn Lamp) [RHD] Driver Power Outside Mirror (Turn Lamp)
6. W	IPS Control Module : Passenger Door Lock Actuator (Door Lock/Unlock)	20. L/B	IPS Control Module : Seat Belt Reminder Sensor	35. L	Fuse F21 : ATM Shift Lever ILL.	48. W	Fuse F8 : ATM Shift Lever
7. Gr	IPS Control Module : Driver Door Lock Actuator (Door Lock/Unlock)	21. —	—	36. R	IPS Control Module : Driver Door Lock Actuator (Key Unlock)	49. Y	Fuse F5 : Power Outside Mirror Switch
8. Y/B	IPS Control Module : Rear Door Switch LH	22. O	Door Lock Relay : Rear Door Lock Actuator LH/RH, Driver/Passenger Door Lock Actuator Door Unlock Relay :	37. Br	IPS Control Module : Passenger Door Lock Actuator (Key Lock)	50. G	Fuse F13 : Diode, Luggage Lamp
9. P/B	IPS Control Module : Passenger Door Switch	23. L	Rear Door Lock Actuator LH/RH, Driver/Passenger Door Lock Actuator	38. R	IPS3 : Power Window Switch, Passenger Power Window Switch, Rear Seat Warmer Switch LH/RH	51. Y	IPS2 : Rear Combination Lamp (IN/OUT) RH
10. G/O	IPS Control Module : Driver Door Switch, Sunroof Control Module	24. Y	Fuse F3 : Driver Safety Power Window Module	39. B	IPS Control Module : Passenger Door Lock Actuator (Key Unlock)	52. R	Fuse F12 : Rear Power Window Switch LH
11. —	—	25. —	—	40. L/B	IPS Control Module : Power Window Main Switch (Door Lock Switch)	53. R	Fuse F11 : Power Window Main Switch, [LHD] Passenger Power Window Switch
12. —	—	26. —	—	41. —	—	54. R	Fuse F7 : AMP
13. Y/B	IPS Control Module : Tail Gate Handle Switch, Smart Key Control Module	27. R	IPS10 : Rear Combination Lamp (IN) LH/RH	42. —	—		
14. Br	IPS Control Module : Driver Door Lock Actuator (Key Lock)	28. O	Fuse F11 : Power Window Main Switch, [RHD] Passenger Power Window Switch				
		29. R	Fuse F11 : Rear Power Window Switch RH				

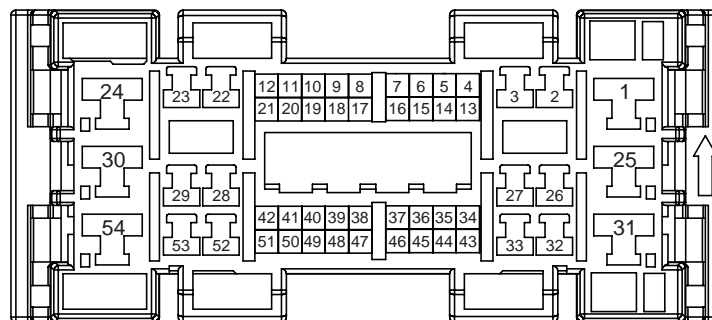
# I/P JUNCTION BOX

## I/P Junction Box (4)

CV80-4

### I/P-E I/P Junction Box

- 54 Female / White (KET\_HYBRID\_54F\_W)



1. W	Fuse F20 : [W/O Smart Key] Ignition Switch	15. R	Fuse F14 : [With Smart Key] Start/Stop Button Switch	31. L	Fuse F30 : [With Smart Key] PDM Relay Box (IG2 Relay)	44. P	Fuse F37 : [Auto A/C] A/C Control Module
R	[With Smart Key] Smart Key Control Module	16. R	Fuse F21 : EPS Control Module		[W/O Smart Key] Ignition Switch	45. -	-
2. R	Fuse F31 : Multifunction Switch, ICM Relay Box (Rear Wiper Relay)	17. -	-	32. L	Fuse F26 : Front Power Outlet RH	46. O	Fuse F32 : Cluster Ionizer, A/C Control Module Sunroof Motor, Rain Sensor Electro Chromic Mirror
3. Y	Fuse F25 : Multifunction Switch	18. P	Fuse F21 : Head Lamp Leveling Device Switch	33. G	Fuse F33 : Front Power Outlet, Front Cigarette Lighter LH	47. -	-
4. -	-	19. P	Turn Lamp RH : BCM		Fuse F23 : Instrument Cluster	48. G	Fuse F38 : A/C Control Module
5. G	Fuse F5 : Driver CCS Switch, Multipurpose Check Connector, Data Link Connector	20. -	-	34. L/O	Fuse F29 : Instrument Cluster	49. Y/B	IPS Control Module : ICM Relay Box (Dead Lock Relay)
6. R/B	Fuse F14 : [With Smart Key] Fob Holder	21. -	-	35. Gr	-	50. R	IPS10 : Electro Chromic Mirror
7. P	Turn Lamp RH : BCM	22. -	-	36. -	-	51. -	-
8. W	Turn Lamp LH : BCM	23. -	-	37. -	-	52. R	IPS Control Module : B-CAN (Low)
9. -	Fuse F8 : [W/O Smart Key & A/T] Key Solenoid	24. R	Blower Relay : Blower Motor	38. -	-	53. L	IPS Control Module : B-CAN (High)
10. -	-	25. L	Fuse F24 : [With Smart Key] PDM Relay Box (IG1 Relay)	39. -	-	54. W	Fuse F27 : [With Smart Key] PDM Relay Box (ACC Relay)
11. R/O	IPS3 : Joint Connector (ILL+)		[W/O Smart Key] Ignition Switch	40. L	IPS Control Module : Multifunction Switch, BCM		Ignition Switch
12. W	Turn Lamp LH : BCM	26. Br	Fuse F28 : Digital Clock, Audio	41. -	-		
13. P	Fuse F29 : Digital Clock, Telltale Lamp	27. L/O	Fuse F27 : Smart Key Control Module, BCM	42. -	-		
14. Y	Fuse F5 : Rear Parking Assist Buzzer	28. B	IPS Control Module : Ground (GM01)	43. G	Fuse F24 : Smart Key Control Module		
		29. B	IPS Control Module : Ground (GM02)				
		30. -	-				

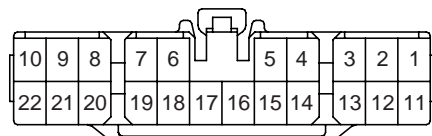
# I/P JUNCTION BOX

## I/P Junction Box (5)

CV80-5

### I/P-F I/P Junction Box

- 22 Female / White (KET\_090II\_22F\_W)



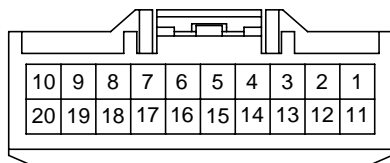
- |         |   |         |  |
|---------|---|---------|--|
| 1. R    | Fuse F1 (Power Connector) : Audio   | 12. —   | —  |
| 2. Gr/O | Fuse F34 : Instrument Cluster, Driver CCS Control Module, Driver/Passenger Seat Warmer Switch | 13. R/O | Fuse F10 : Smart Key Control Module            |
| 3. P    | Fuse F34 : BCM, A/C Control Module  | 14. R   | Fuse F35 : Driver/Passenger Seat Warmer Switch |
| 4. —    | —   | 15. Br  | ICM Relay Box (Dead Lock Relay)                |
| 5. G    | Fuse F2 (Power Connector) : RF Receiver   | 16. O   | Fuse F36 : Rear Seat Warmer Switch LH/RH       |
| 6. B    | Door Lock/Unlock Relay : Ground (GM02)  | 17. Br  | Fuse F16 : BCM                                 |
| 7. R    | Fuse F10 : Driver CCS Control Module  | 18. W   | Fuse F30 : BCM, Smart Key Control Module       |
| 8. R    | Fuse F6 : Sunroof Motor   | 19. R   | Fuse F17 : ICM Relay Box (Rear Fog Lamp Relay) |
| 9. G    | Fuse F13 : Map Lamp, Room Lamp, Driver/Passenger Vanity Lamp                                  | 20. —   | —  |
| 10. G   | Fuse F13 : Instrument Cluster, A/C Control Module, Ignition Key ILL. & Door Warning Switch    | 21. R   | Fuse F13 : BCM, Digital Clock                  |
| 11. R   | Fuse F34 : SRS Control Module   | 22. R   | Fuse F19 : Smart Key Control Module            |

EMS (Engine Management System) Box (1)

CV81-1

**E/R-CHGA EMS Box (G4KD/G4KE)**

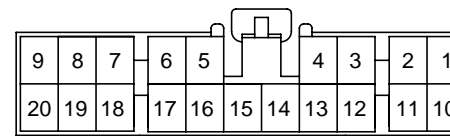
- 20 Female / White (AMP\_090III\_20F\_W)



- |       |                                      |       |                            |
|-------|--------------------------------------|-------|----------------------------|
| 1. Y  | EMS Box - RLY. 3 :<br>A/C Compressor | 11. — | —                          |
| 2. Br | EMS Box - RLY. 3 : PCM               | 12. L | EMS Box - F8 : Injector #1 |
| 3. O  | EMS Box - F8 : Injector #4           | 13. P | EMS Box - F8 : Injector #3 |
| 4. —  | —                                    | 14. — | —                          |
| 5. W  | EMS Box - F5 : Ignition Coil #4      | 15. O | EMS Box - F8 : Injector #2 |
| 6. —  | —                                    | 16. — | —                          |
| 7. L  | EMS Box - F5 : Ignition Coil #2      | 17. — | —                          |
| 8. P  | EMS Box - F5 : Ignition Coil #1      | 18. P | EMS Box - F5 : Condenser   |
| 9. G  | EMS Box - F5 : Ignition Coil #3      | 19. — | —                          |
| 10. — | —                                    | 20. L | EMS Box - RLY. 1 : PCM     |

**E/R-CHGK EMS Box (G4KD/G4KE)**

- 20 Female / White (KET\_090III\_20F\_W)



- |         |   |        |  |
|---------|---|--------|--|
| 1. R    | EMS Box - F4 : [W/O Smart Key]<br>Immobilizer Module  | 11. —  | —  |
| 2. G    | EMS Box - F4 :<br>Camshaft Position Sensor #1/#2,<br>Canister Purge Control Solenoid<br>Valve | 12. W  | EMS Box - F4 :<br>Oil Control Valve #1/#2          |
| 3. Gr/B | EMS Box - F4 :<br>Crankshaft Position Sensor<br>Variable Intake Manifold Valve                | 13. —  | —  |
| 4. G    | EMS Box - F2 : PCM  | 14. Gr | EMS Box - F7 :<br>E/F Fuse & Relay Box - RLY. 3    |
| 5. P    | EMS Box - F7 : [W/O Euro V]<br>Oxygen Sensor (Up)   | 15. P  | EMS Box - F7 : [With Euro V]<br>Oxygen Sensor (Up) |
| 6. —    | —   | 16. O  | EMS Box - F7 :<br>Oxygen Sensor (Down)             |
| 7. —    | —   | 17. G  | EMS Box - F7 : PCM                                 |
| 8. —    | —   | 18. —  | —  |
| 9. P    | EMS Box - RLY. 2 :<br>Fuel Sender & Fuel Pump Motor   | 19. —  | —  |
| 10. L   | EMS Box - RLY. 1 : PCM  | 20. G  | EMS Box - RLY. 2 : PCM                             |

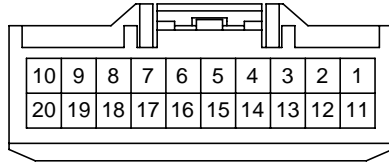
# EMS (ENGINE MANAGEMENT SYSTEM) BOX

## EMS (Engine Management System) BOX (2)

CV81-2

### E/R-CRDA EMS Box (D4HA)

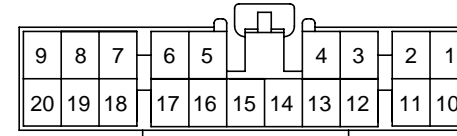
- 20 Female / White (AMP\_090III\_20F\_W)



- |       |                                      |       |  |
|-------|--------------------------------------|-------|--|
| 1. Y  | EMS Box - RLY. 3 :<br>A/C Compressor | 11. — | —  |
| 2. Br | EMS Box - RLY. 3 : ECM               | 12. — | —  |
| 3. —  | —                                    | 13. O | EMS Box - F8 :<br>Crankshaft Position Sensor |
| 4. W  | EMS Box - F9 : Stop Lamp Switch      | 14. — | —  |
| 5. R  | EMS Box - F5 : ECM                   | 15. P | EMS Box - F8 : Lambda Sensor                 |
| 6. —  | —                                    | 16. — | —  |
| 7. R  | EMS Box - F5 : ECM                   | 17. — | —  |
| 8. —  | —                                    | 18. — | —  |
| 9. W  | EMS Box - F5 : ECM                   | 19. — | —  |
| 10. — | —                                    | 20. — | —  |

### E/R-CRDK EMS Box (D4HA)

- 20 Female / White (KET\_090III\_20F\_W)



- |       |   |        |  |
|-------|---|--------|--|
| 1. R  | EMS Box - F4 : Immobilizer Module,<br>E/R Fuse & Relay Box - RLY. 3 | 11. —  | —  |
| 2. G  | EMS Box - F4 :<br>EGR Cooling Bypass Solenoid Valve                 | 12. P  | EMS Box - F4 :<br>Electrical VGT Actuator            |
| 3. O  | EMS Box - F4 : Diesel Box -RLY. 1                                   | 13. —  | —  |
| 4. G  | EMS Box - F2 : TCM  | 14. Gr | EMS Box - F7 : [W/O Smart Key]<br>Immobilizer Module |
| 5. —  | —   | 15. P  | EMS Box - F7 :<br>Rail Pressure Regulator Valve      |
| 6. —  | —   | 16. G  | EMS Box - F7 :<br>Fuel Pressure Regulating Valve     |
| 7. —  | —   | 17. —  | —  |
| 8. —  | —   | 18. —  | —  |
| 9. P  | EMS Box - RLY. 2 :<br>Fuel Sender & Fuel Pump Motor                 | 19. —  | —  |
| 10. L | EMS Box - RLY. 1 : ECM  | 20. G  | EMS Box - RLY. 2 : ECM                               |

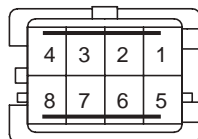


**Joint Connector (1)**

**CV82-1**

**JC01 Joint Connector (G4KD/G4KE) (C-CAN)**

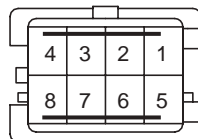
- 8 Female / White (KET\_070\_08F\_W\_JCH)



- |      |   |      |  |
|------|---|------|--|
| 1. O | C - CAN (Low) :<br>ABS/ESP Control Module       | 5. G | C - CAN (High) :<br>ABS/ESP Control Module       |
| 2. O | C - CAN (Low) : PCM                             | 6. G | C - CAN (High) : PCM                             |
| 3. O | C - CAN (Low) :<br>Multipurpose Check Connector | 7. G | C - CAN (High) :<br>Multipurpose Check Connector |
| 4. - | -   | 8. - | -  |

**JC01 Joint Connector (D4HA) (C-CAN)**

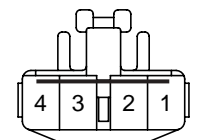
- 8 Female / White (KET\_070\_08F\_W\_JCH)



- |      |  |      |  |
|------|--|------|--|
| 1. O | C - CAN (Low) :<br>ABS/ESP Control Module            | 5. G | C - CAN (Low) :<br>ABS/ESP Control Module            |
| 2. - | -  | 6. - | -  |
| 3. O | C - CAN (Low) : ECM,<br>Multipurpose Check Connector | 7. G | C - CAN (Low) : ECM,<br>Multipurpose Check Connector |
| 4. O | C - CAN (Low) : TCM                                  | 8. G | C - CAN (Low) : TCM                                  |

**JC02 Joint Connector (G4KD/G4KE)**

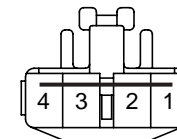
- 4 Female / White (KET\_090III\_04F\_W)



- |        |   |        |   |
|--------|---|--------|---|
| 1. G/B | Stop Lamp Switch                                    | 4. G/B | High-Mounted Stop Lamp,<br>Rear Combination Lamp<br>(Out) LH/RH |
| 2. G/B | PCM, ABS Control Module                             |        |   |
| 3. G/B | ESP ABS Control Module,<br>Smart Key Control Module |        |   |

**JC02 Joint Connector (D4HA)**

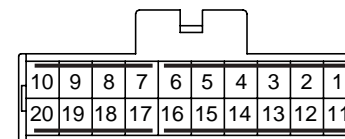
- 4 Female / White (KET\_090III\_04F\_W)



- |        |   |        |   |
|--------|---|--------|---|
| 1. G/B | Stop Lamp Switch                                    | 4. G/B | High-Mounted Stop Lamp,<br>Rear Combination Lamp<br>(Out) LH/RH |
| 2. G/B | PCM, ABS Control Module                             |        |   |
| 3. G/B | ESP ABS Control Module,<br>Smart Key Control Module |        |   |

**JM01 Joint Connector (B/C-CAN)**

- 20 Female / Black (KET\_090II\_20F\_B\_JCH)



- |       |   |       |   |
|-------|---|-------|---|
| 1. O  | C - CAN (Low) :<br>Smart Key Control Module                   | 11. G | C - CAN (High) :<br>Smart Key Control Module                      |
| 2. O  | C - CAN (Low) : 4WD ECM,<br>Data Link Connector               | 12. G | C - CAN (High) : 4WD ECM,<br>Data Link Connector                  |
| 3. O  | C - CAN (Low) : Instrument Cluster<br>EPS Control Module      | 13. G | C - CAN (High) : Instrument Cluster<br>EPS Control Module         |
| 4. O  | C - CAN (Low) :<br>Steering Angle Sensor                      | 14. G | C - CAN (High) :<br>Steering Angle Sensor                         |
| 5. O  | C - CAN (Low) : SRS Control Module                            | 15. G | C - CAN (High) :<br>SRS Control Module                            |
| 6. O  | C - CAN (Low) : A/C Control Module,<br>ABS/ESP Control Module | 16. G | C - CAN (High) :<br>A/C Control Module,<br>ABS/ESP Control Module |
| 7. R  | B - CAN (Low) : BCM   | 17. L | B - CAN (High) : BCM  |
| 8. R  | B - CAN (Low) : Instrument Cluster                            | 18. L | B - CAN (High) : Instrument Cluster                               |
| 9. R  | B - CAN (Low) :<br>Smart Key Control Module                   | 19. L | B - CAN (High) :<br>Smart Key Control Module                      |
| 10. R | B - CAN (Low) : I/P Junction Box<br>(IPS Control Module)      | 20. L | B - CAN (High) : I/P Junction Box<br>(IPS Control Module)         |

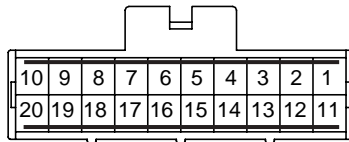
# JOINT CONNECTOR

## Joint Connector (2)

CV82-2

### JM02 Joint Connector (ILL)

- 20 Female / Black (KET\_090II\_20F\_B\_JCH)



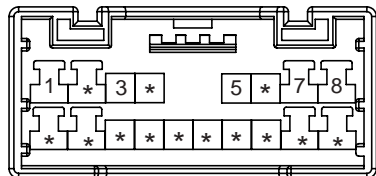
- |        |  |         |   |
|--------|--|---------|---|
| 1. B   | [W/O Rheostat]<br>Ground (GM01)  | 11. R/O | I/P Junction Box (IPS 3)<br>ILL (+) : A/C Control Module                              |
| L/O    | [With Rheostat]<br>Multi Switch (Rheostat)                             | 12. R/O | ILL (+) : Audio   |
| 2. L/O | ILL (-) : Instrument Cluster, Audio                                    | 13. R/O | ILL (+) : AUX & USB Jack,<br>Glove Box Lamp   |
| 3. L/O | ILL (-) : A/C Control Module,<br>ATM Shift Lever ILL.                  | 14. -   | -   |
| 4. L/O | ILL (-) : Hazard Switch,<br>AUX & USB Jack                             | 15. R/O | Head Lamp Leveling<br>Device Switch   |
| 5. L/O | ILL (-) : Driver CCS Switch,<br>Driver/Passenger Seat Warmer<br>Switch | 16. R/O | ILL (+) : Instrument Cluster  |
| 6. L/O | ILL (-) : Multifunction Switch   | 17. R/O | ILL (+) : Multifunction Switch  |
| 7. L/O | ILL (-) : Head Lamp Leveling<br>Device Switch                          | 18. R/O | ILL (+) : Hazard Switch,<br>Multi Switch (Rheostat)                                   |
| 8. L/O | ILL (-) : Digital Clock,<br>Start/Stop Button Switch                   | 19. R/O | ILL (+) : Driver CCS Switch,<br>Driver/Passenger Seat Warmer<br>Switch, Digital Clock |
| 9. -   | -  | 20. -   | -   |
| 10. -  | -  |         |   |

**Harness Connection (1)**

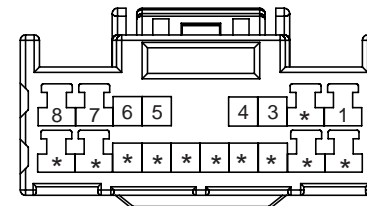
**CV90-1**

**CB11 Control To Battery Harness Connection (D4HA)**

- 18 Male / White (KET\_0409\_18M\_W)
- Control Harness

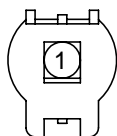


- 18 Female / White (KET\_0409\_18F\_W)
- Battery Harness



**CB21 Control To Battery Harness Connection (G4KD/G4KE)**

- 1 Male / Black (KUM\_NMWP\_01M\_B)
- Control Harness

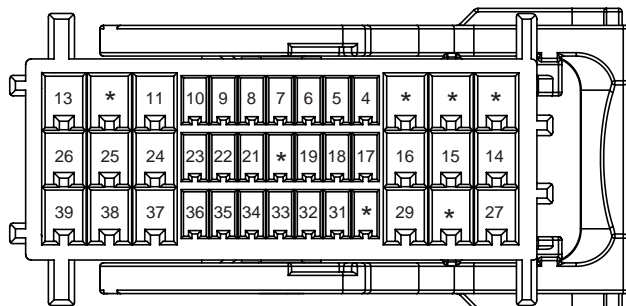


- 1 Female / Black (KUM\_NMWP\_01F\_B)
- Battery Harness

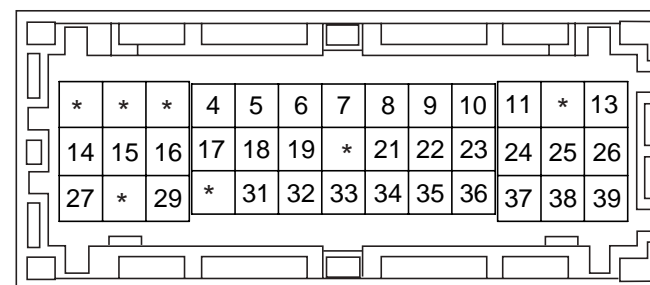


**CC11 Control To TCU Harness Connection**

- 39 Female / Black (AMP\_0409LIF\_39F\_B)
- Control Harness



- 39 Male / N/A (AMP\_0409LIF\_39M)
- TCU Harness



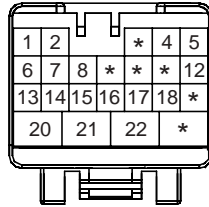
# HARNES CONNECTION

## Harness Connection (2)

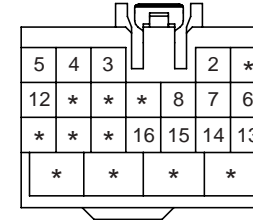
CV90-2

### CF11 Control To Floor Harness Connection (G4KD/G4KE)

- 23 Male / N/A (KET\_1809\_23M\_)
- Control Harness

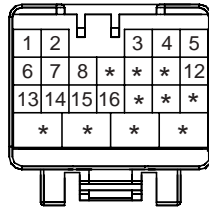


- 23 Female / N/A (KET\_1809\_23F\_)
- Floor Harness

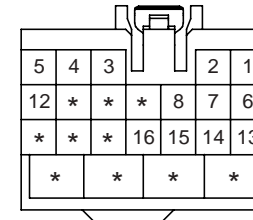


### CF11 Control To Floor Harness Connection (D4HA)

- 23 Male / N/A (KET\_1809\_23M\_)
- Control Harness

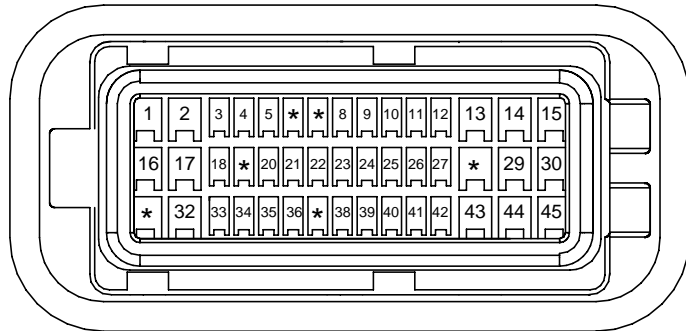


- 23 Female / N/A (KET\_1809\_23F\_)
- Floor Harness

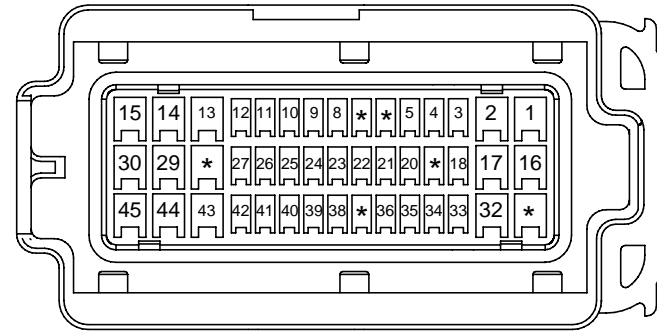


### FD11 Floor To Driver Door Harness Connection

- 45 Male / Black (AMP\_HBDD00R\_45M\_B)
- Floor Harness



- 45 Female / Black (AMP\_HBDD00R\_45F\_B)
- Driver Door Harness



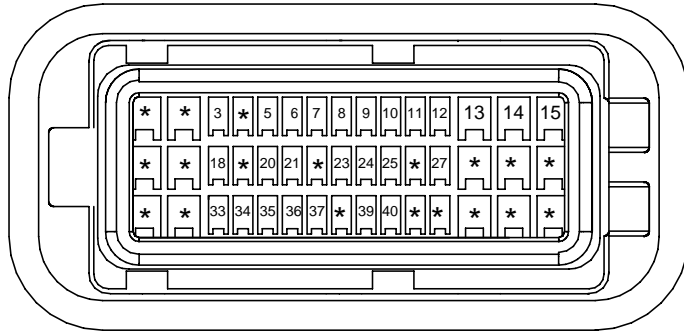
# HARNES CONNECTION

## Harness Connection (3)

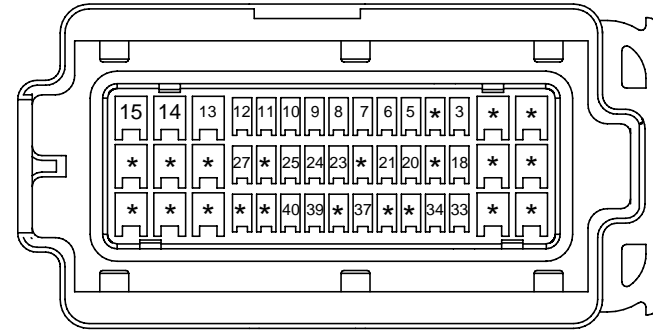
CV90-3

### FD21 Floor To Passenger Door Harness Connection

- 45 Male / Black (AMP\_HBDD00R\_45M\_B)
- Floor Harness

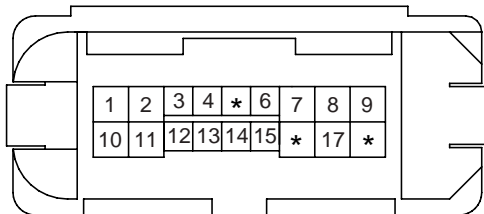


- 45 Female / Black (AMP\_HBDD00R\_45F\_B)
- Passenger Door Harness

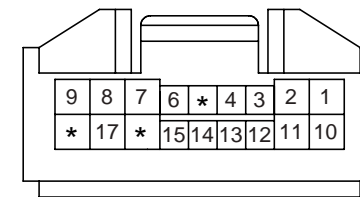


### FD31 Floor To Rear Door LH Harness Connection

- 18 Male / White (AMP\_DOOR\_18M\_W)
- Floor Harness

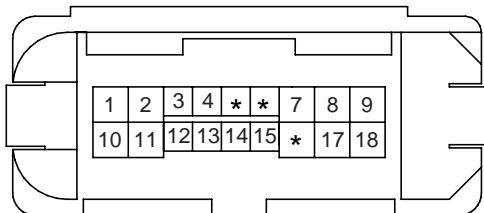


- 18 Female / White (AMP\_DOOR\_18F\_W)
- Rear Door LH Harness

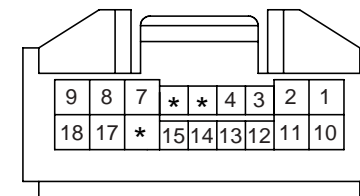


### FD41 Floor To Rear Door RH Harness Connection

- 18 Male / White (AMP\_DOOR\_18M\_W)
- Floor Harness



- 18 Female / White (AMP\_DOOR\_18F\_W)
- Rear Door RH Harness



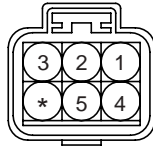
# HARNES CONNECTION

## Harness Connection (4)

CV90-4

### FF01 Floor To 4WD Harness Connection

- 6 Female / Black (KUM\_NMWP\_06F\_B)
- Floor Harness

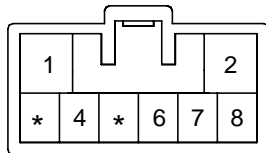


- 6 Male / Black (KUM\_NMWP\_06M\_B)
- 4WD Harness

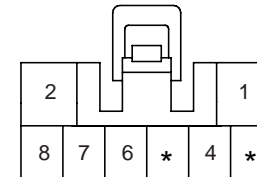


### FR11 Floor To Tail Gate Harness Connection

- 8 Male / Gray (KET\_2507\_08M\_GR)
- Floor Harness

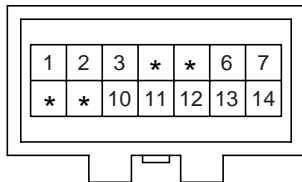


- 8 Female / Gray (KET\_2507\_08F\_GR)
- Tail Gate Harness

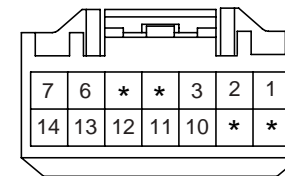


### FR12 Floor To Tail Gate Harness Connection

- 14 Male / White (AMP\_090III\_14M\_W)
- Floor Harness



- 14 Female / White (AMP\_090III\_14F\_W)
- Tail Gate Harness



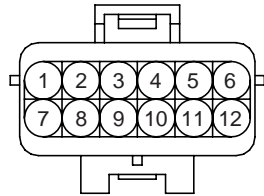
# HARNES CONNECTION

## Harness Connection (5)

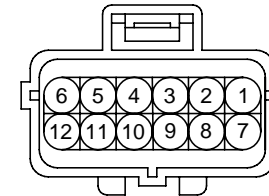
CV90-5

### FR21 Floor To Rear Bumper Harness Connection

- 12 Male / Black (AMP\_EJWP\_12M\_B)
- Floor Harness

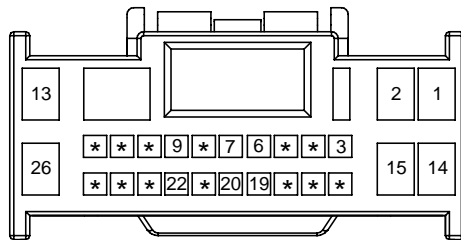


- 12 Female / Black (AMP\_EJWP\_12F\_B)
- Rear Bumper Harness

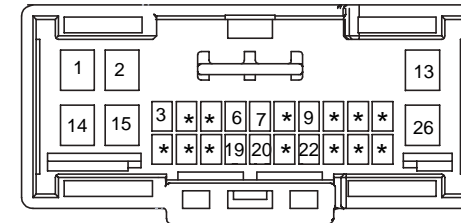


### FS01 Floor To Driver Seat Harness Connection

- 26 Female / White (KET\_02509\_26F\_W)
- Floor Harness

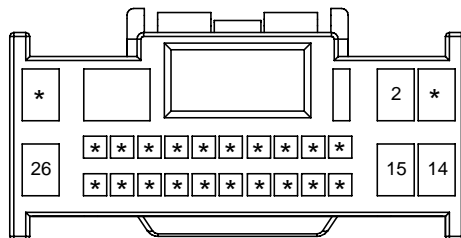


- 26 Male / White (KET\_02509\_26M\_W)
- Driver Seat Harness

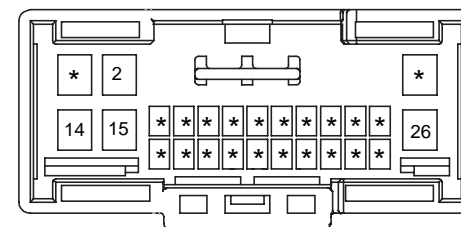


### FS02 Floor To Passenger Seat Harness Connection

- 26 Female / White (KET\_02509\_26F\_W)
- Floor Harness



- 26 Male / White (KET\_02509\_26M\_W)
- Passenger Seat Harness



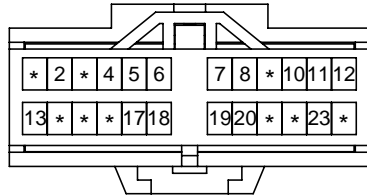
# HARNES CONNECTION

## Harness Connection (6)

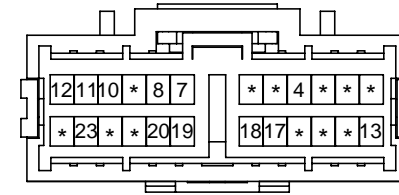
CV90-6

### MC11 Main To Control Harness Connection (G4KD/G4KE)

- 24 Male / Yellow (KUM\_HSC\_24M\_Y)
- Main Harness

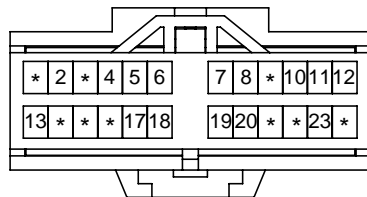


- 24 Female / Yellow (KUM\_HSC\_24F\_Y)
- Control Harness

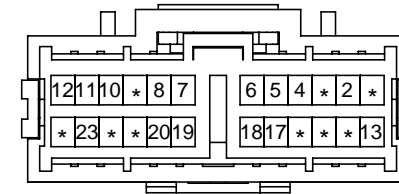


### MC11 Main To Control Harness Connection (D4HA)

- 24 Male / Yellow (KUM\_HSC\_24M\_Y)
- Main Harness

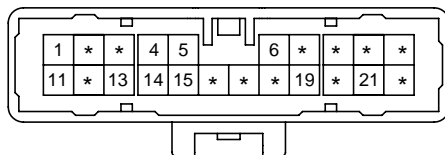


- 24 Female / Yellow (KUM\_HSC\_24F\_Y)
- Control Harness

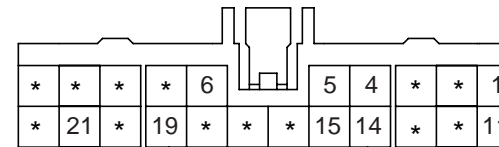


### MC21 Main To Control Harness Connection (G4KD/G4KE)

- 22 Male / Blue (KET\_090III\_22M\_L)
- Main Harness



- 22 Female / Blue (KET\_090III\_22F\_L)
- Control Harness





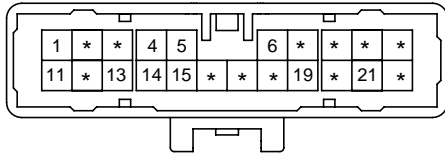
# HARNES CONNECTION

## Harness Connection (7)

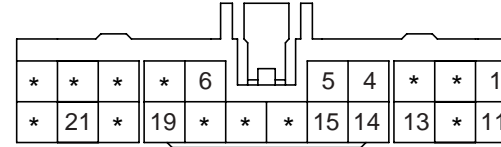
CV90-7

### MC21 Main To Control Harness Connection (D4HA)

- 22 Male / Blue (KET\_090III\_22M\_L)
- Main Harness

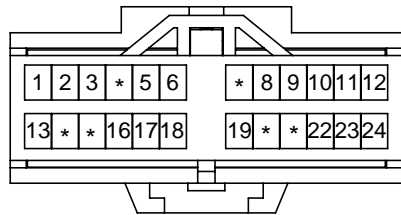


- 22 Female / Blue (KET\_090III\_22F\_L)
- Control Harness

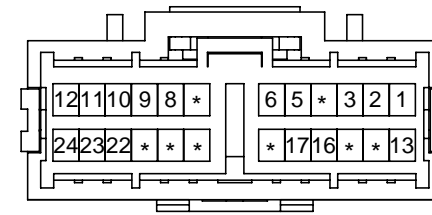


### MC31 Main To Control Harness Connection (G4KD/G4KE)

- 24 Male / Yellow (KUM\_HSC\_24M\_Y)
- Main Harness

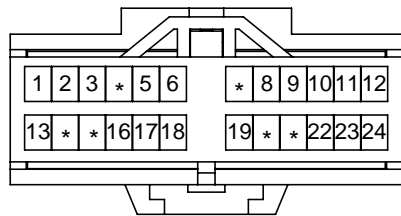


- 24 Female / Yellow (KUM\_HSC\_24F\_Y)
- Control Harness

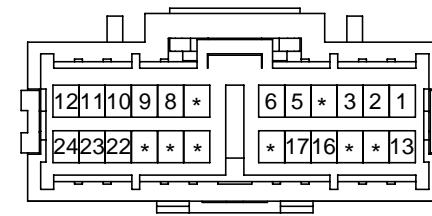


### MC31 Main To Control Harness Connection (D4HA)

- 24 Male / Yellow (KUM\_HSC\_24M\_Y)
- Main Harness



- 24 Female / Yellow (KUM\_HSC\_24F\_Y)
- Control Harness



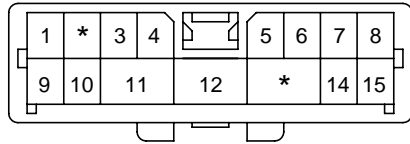
# HARNES CONNECTION

## Harness Connection (8)

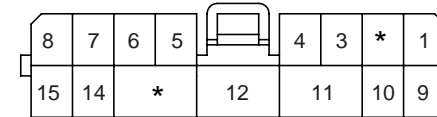
CV90-8

### MC41 Main To Control Harness Connection

- 15 Male / White (AMP\_0725\_15M\_W)
- Main Harness

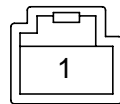


- 15 Female / White (AMP\_0725\_15F\_W)
- Control Harness

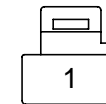


### MC51 Main To Control Harness Connection

- 1 Male / White (KET\_58L\_01M\_W)
- Main Harness

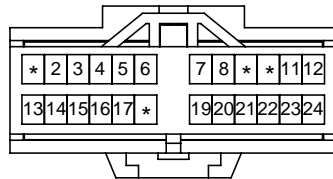


- 1 Female / White (KET\_58L\_01F\_W)
- Control Harness

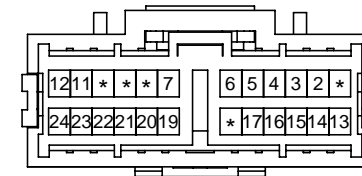


### MF11 Main To Floor Harness Connection

- 24 Male / White (KUM\_HSC\_24M\_W)
- Main Harness

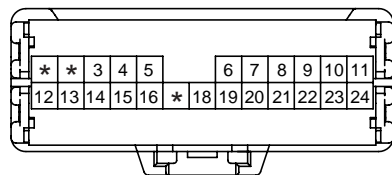


- 24 Female / White (KUM\_HSC\_24F\_W)
- Floor Harness

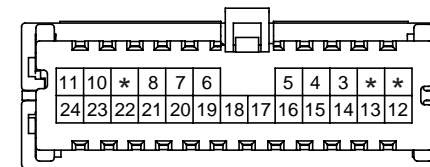


### MF21 Main To Floor Harness Connection

- 24 Male / Gray (KET\_040III\_24M\_GR)
- Main Harness



- 24 Female / Gray (KET\_040III\_24F\_GR)
- Floor Harness



# HARNES CONNECTION

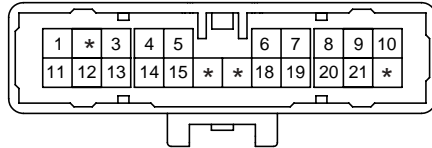
## Harness Connection (9)

CV90-9

### MF31 Main To Floor Harness Connection

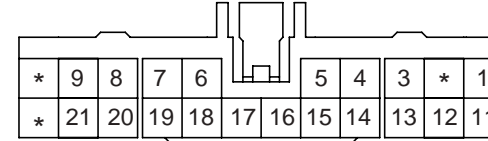
- 22 Male / Blue (KET\_090III\_22M\_L)

- Main Harness



- 22 Female / Blue (KET\_090III\_22F\_L)

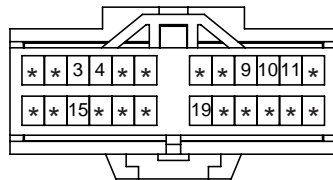
- Floor Harness



### MF41 Main To Floor Harness Connection

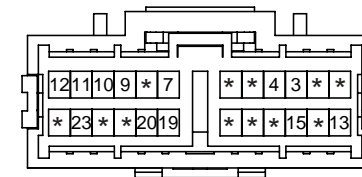
- 24 Male / White (KUM\_HSC\_24M\_W)

- Main Harness



- 24 Female / White (KUM\_HSC\_24F\_W)

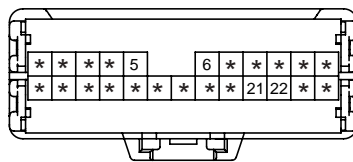
- Floor Harness



### MF51 Main To Floor Harness Connection

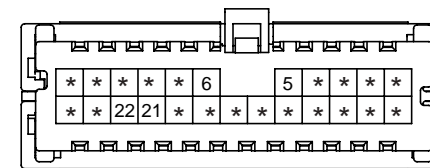
- 24 Male / Gray (KET\_040III\_24M\_GR)

- Main Harness



- 24 Female / Gray (KET\_040III\_24F\_GR)

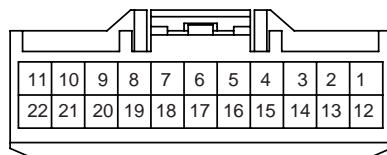
- Floor Harness



### MM01 Main To Consol EXTN. Harness Connection

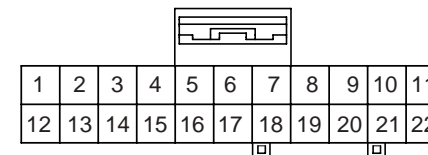
- 22 Female / White (AMP\_090III\_22F\_W)

- Main Harness



- 22 Male / N/A (AMP\_JAT\_DL\_22M)

- Consol EXTN. Harness



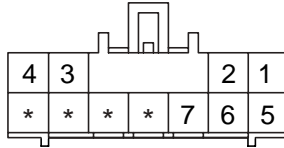
# HARNES CONNECTION

## Harness Connection (10)

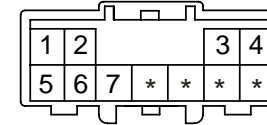
CV90-10

### MM02 Main To FOB EXTN. Harness Connection

- 11 Female / White (KUM\_CDR\_11F\_W)
- Main Harness

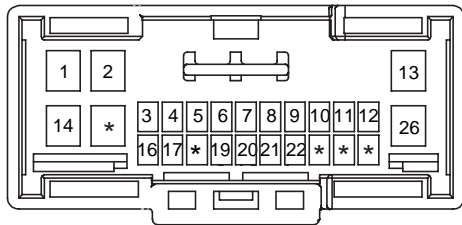


- 11 Male / White (KUM\_CDR\_11M\_W)
- FOB EXTN. Harness

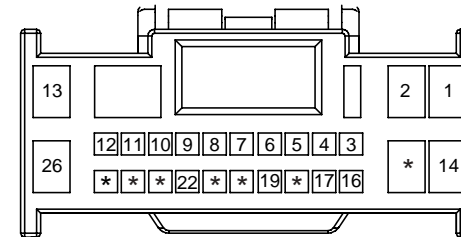


### MR01 Main To Roof Harness Connection

- 26 Male / White (KET\_02509\_26M\_W)
- Main Harness

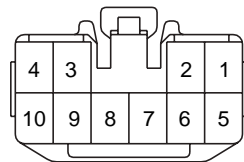


- 26 Female / White (KET\_02509\_26F\_W)
- Roof Harness

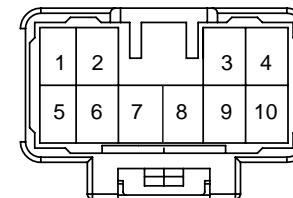


### RR01 Roof To Sunroof EXTN. Harness Connection

- 10 Female / White (KET\_090III\_10F\_W)
- Roof Harness



- 10 Male / White (KET\_090III\_10M\_W)
- Sunroof EXTN. Harness



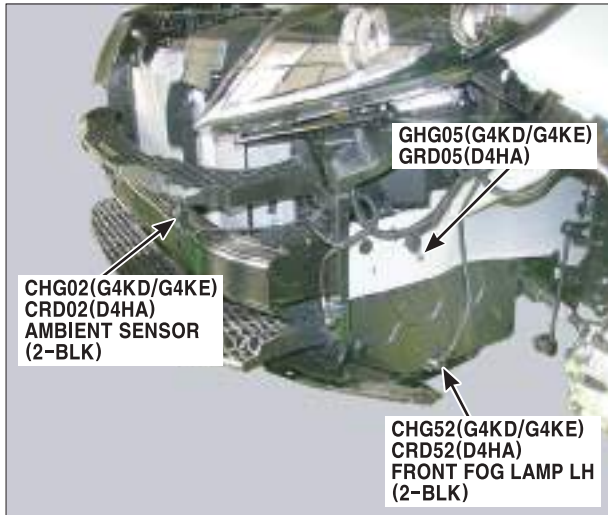
# COMPONENT LOCATIONS



Component Locations (1)

CL-1

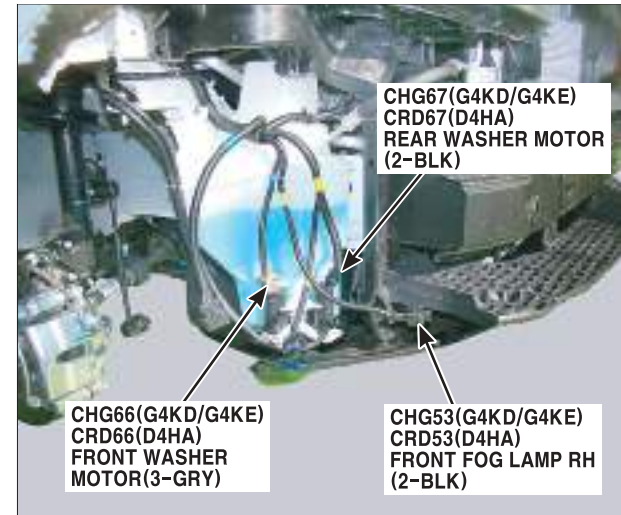
1. Left Side of Front End Module



2. Center of Front End Module



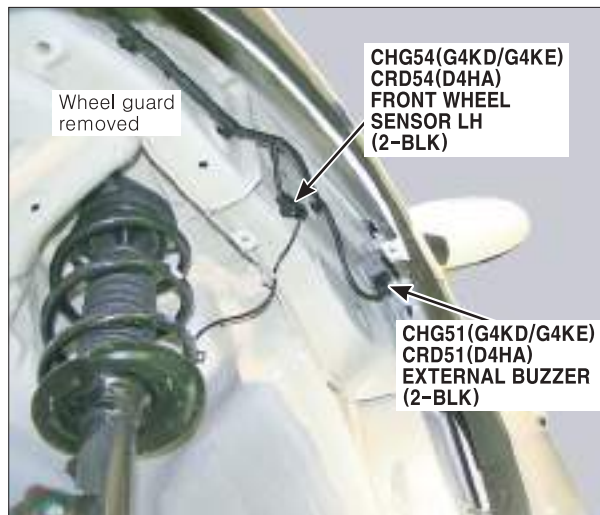
3. Right Side of Front End Module



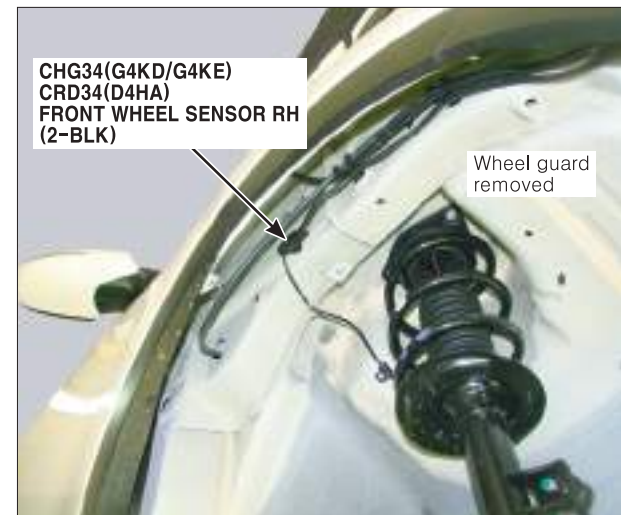
4. Front Fender



5. Left Front Wheel Housing



6. Right Front Wheel Housing

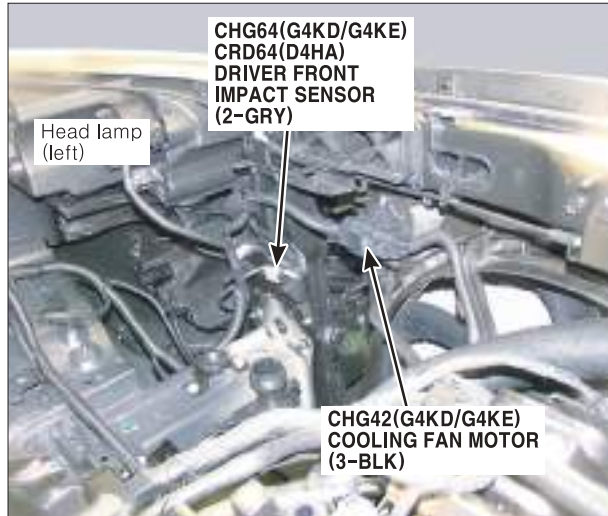


# COMPONENT LOCATIONS

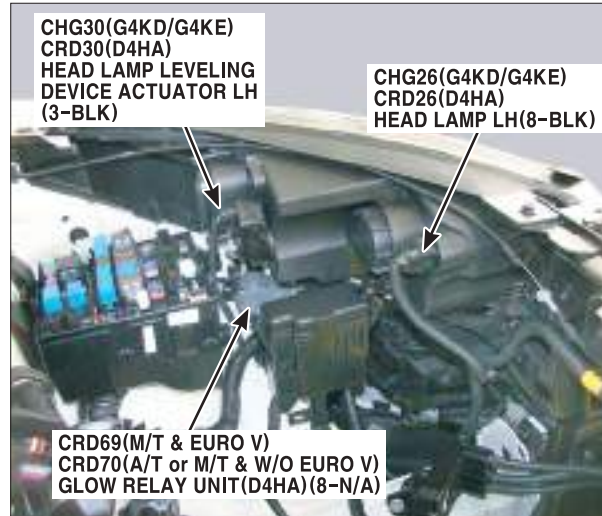
## Component Locations (2)

CL-2

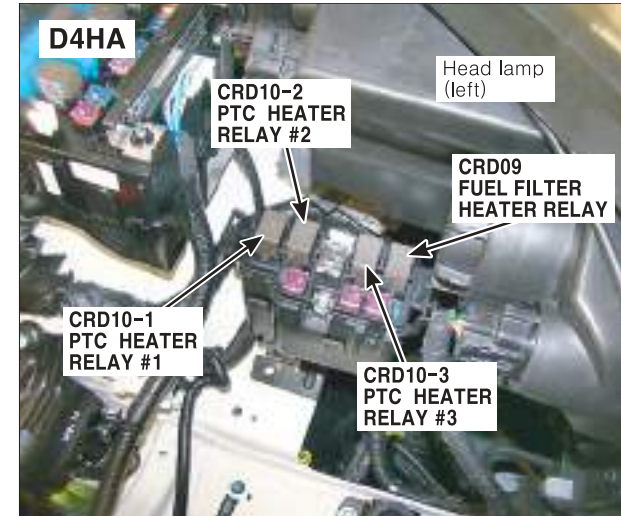
7. Left Front of Engine Room



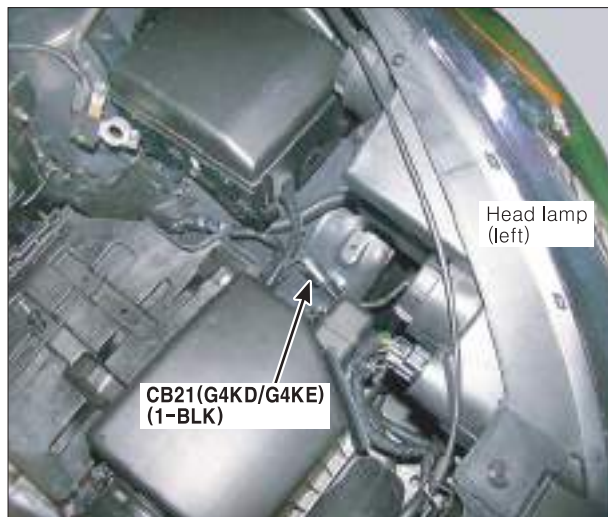
8. Left Front of Engine Room



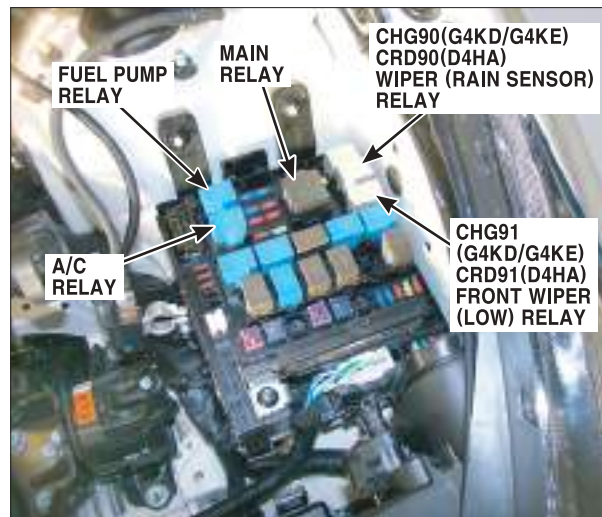
9. Left Front of Engine Room



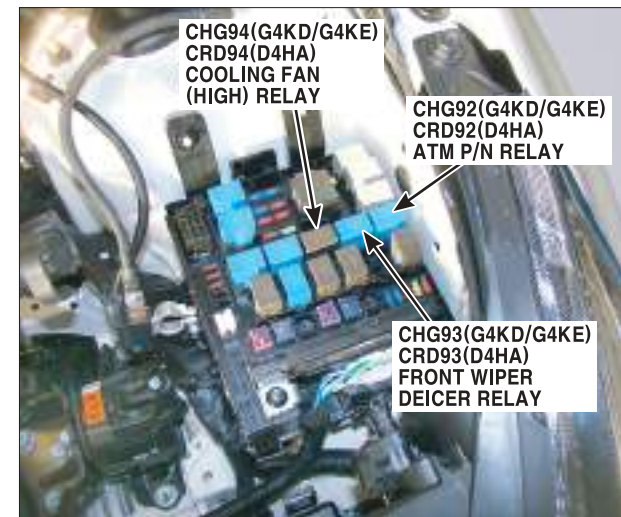
10. Left Front of Engine Room



11. Left Side of Engine Room



12. Left Side of Engine Room

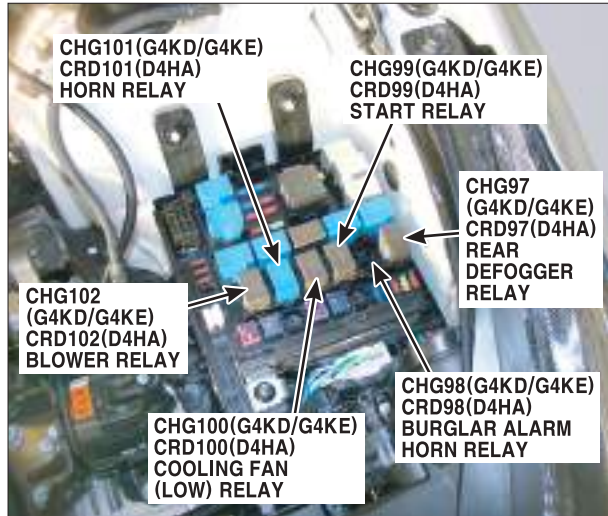


# COMPONENT LOCATIONS

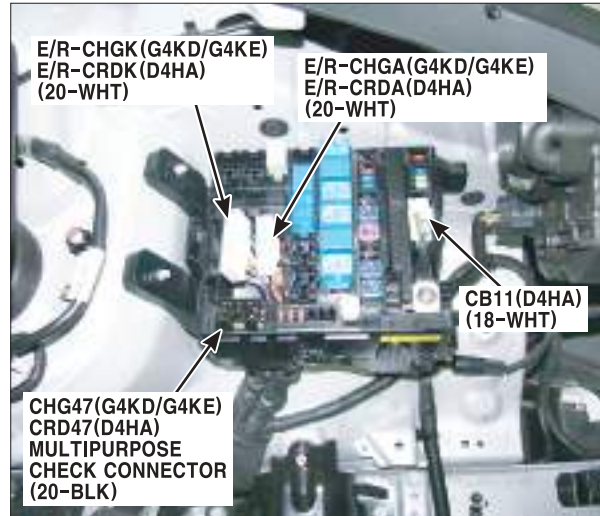
## Component Locations (3)

CL-3

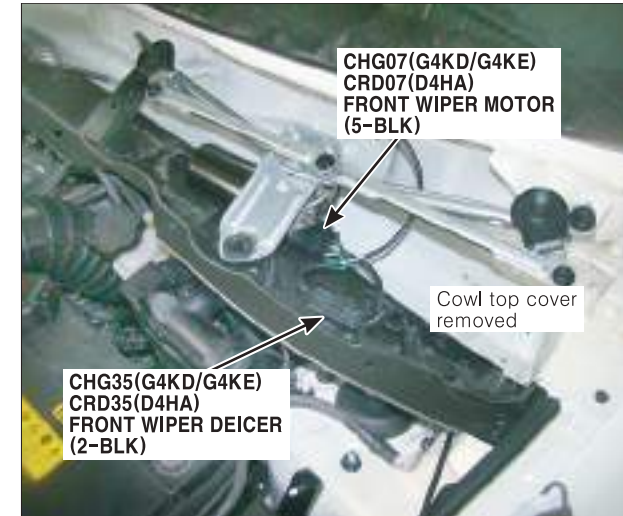
13. Left Side of Engine Room



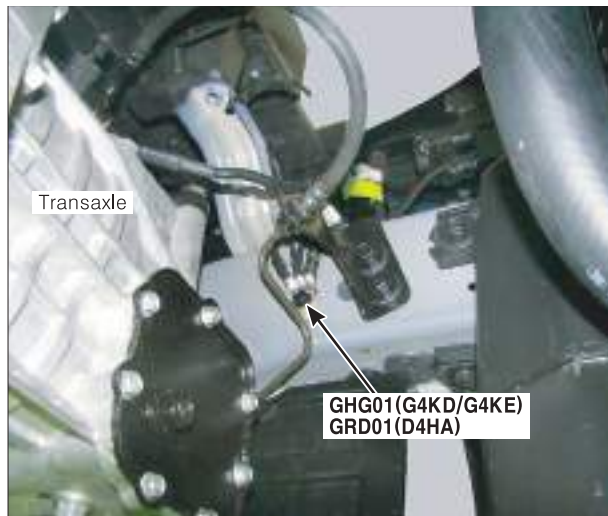
14. Left Side of Engine Room



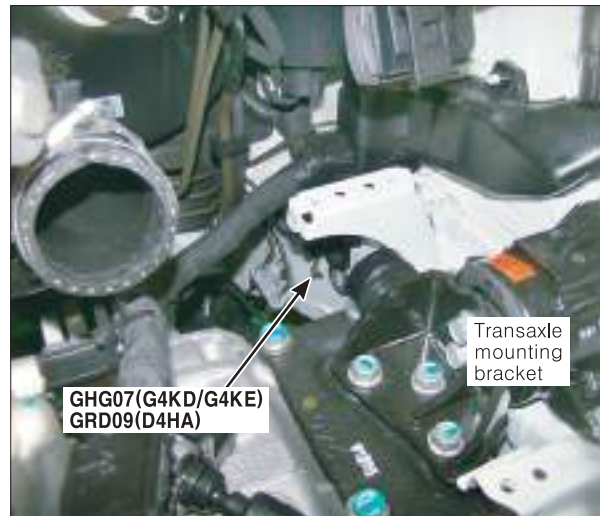
15. Left Side of Cowl Top Panel



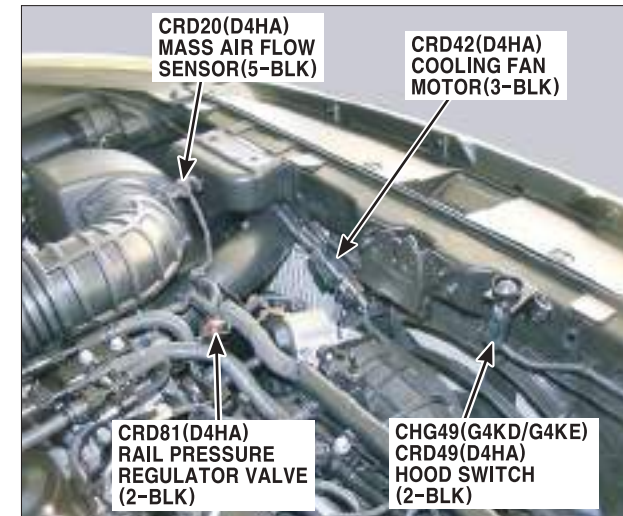
16. Left Side of Engine Room



17. Left Rear of Engine Room



18. Front of Engine Room



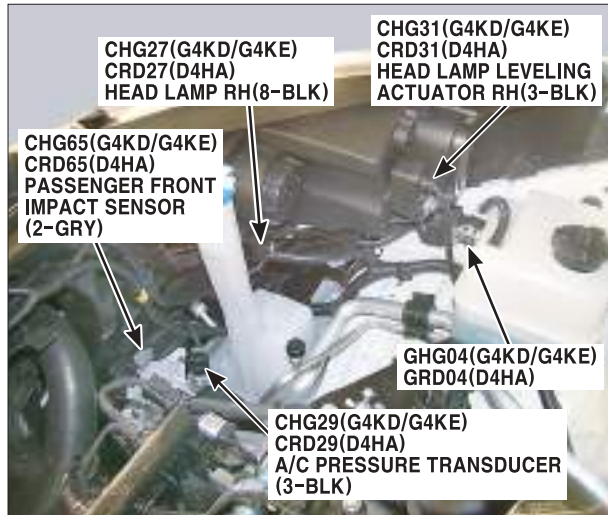


# COMPONENT LOCATIONS

## Component Locations (4)

CL-4

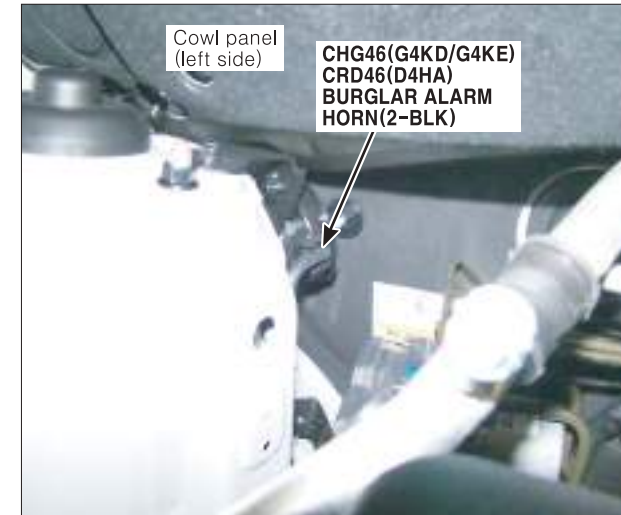
19. Right Front of Engine Room



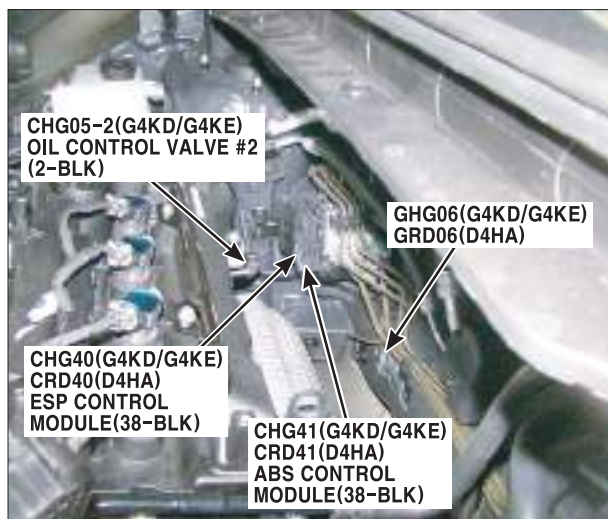
20. Left Rear of Engine Room



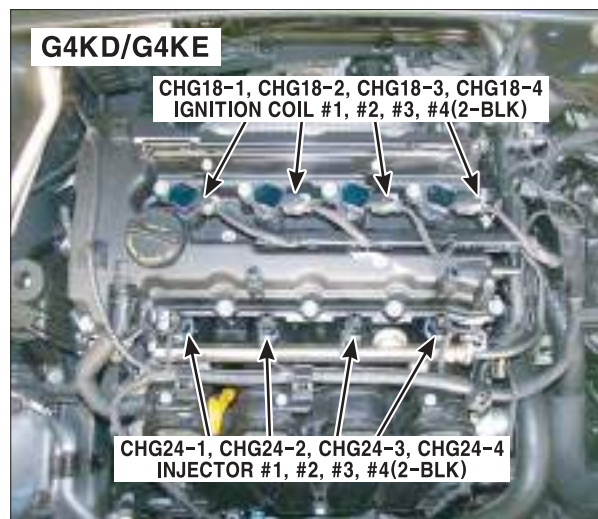
21. Right Rear of Engine Room



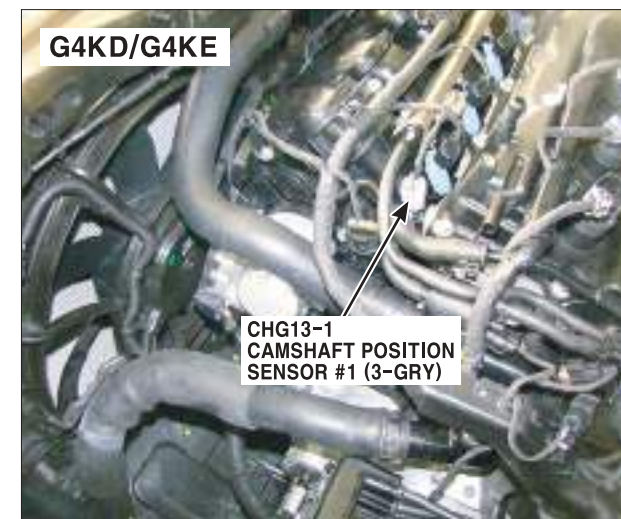
22. Right Rear of Engine Room



23. Top of Engine



24. Left Front of Engine

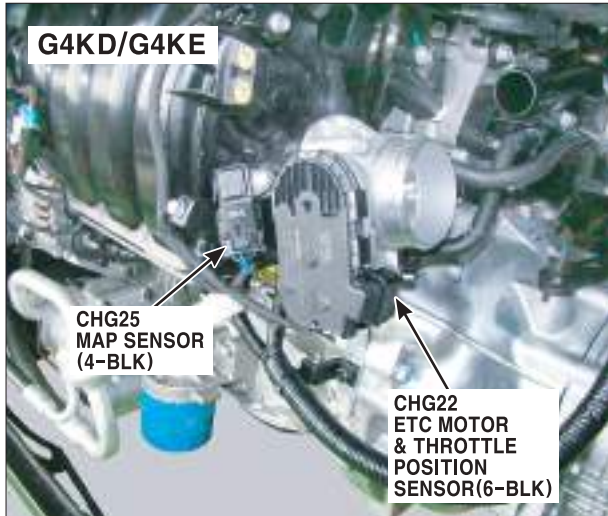


# COMPONENT LOCATIONS

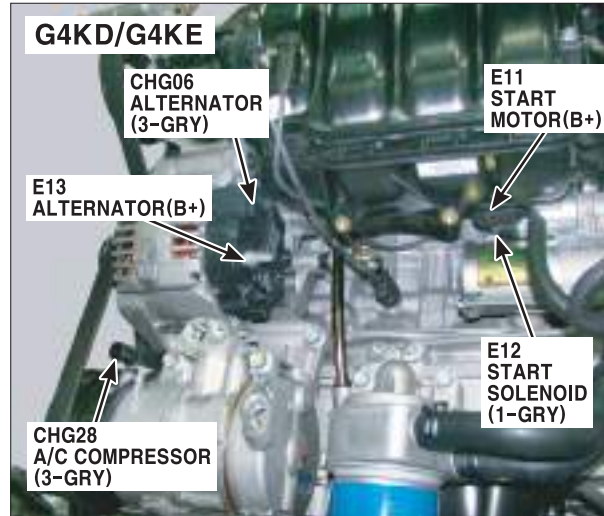
## Component Locations (5)

CL-5

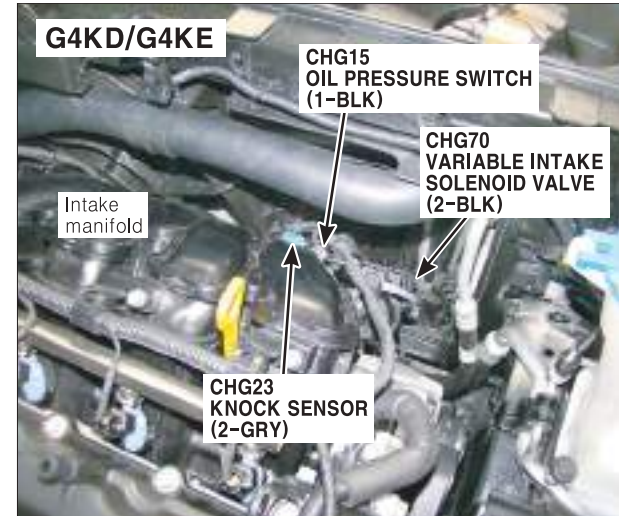
### 25. Left Front of Engine



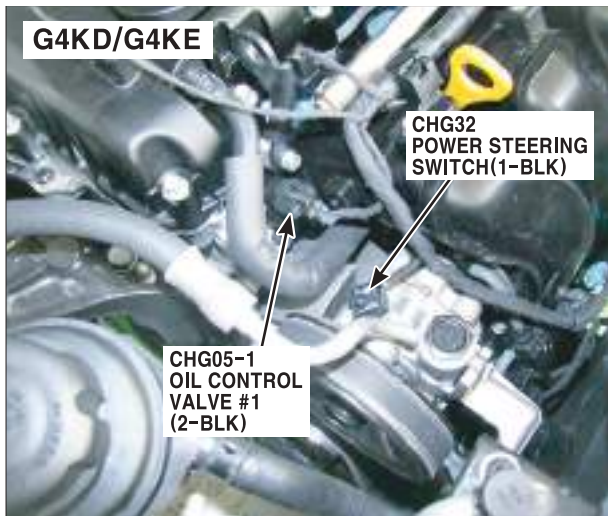
### 26. Front of Engine



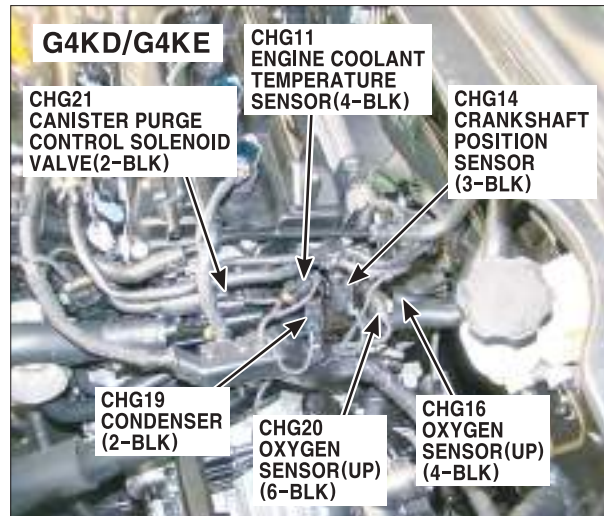
### 27. Right Front of Engine



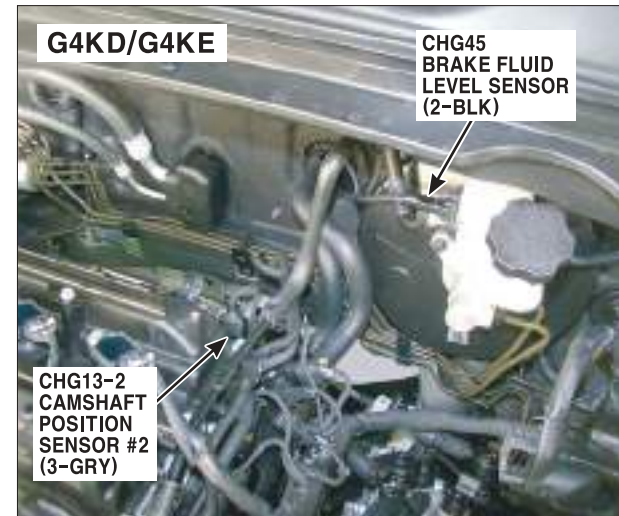
### 28. Right Front of Engine



### 29. Left Side of Engine



### 30. Left Rear of Engine Room



# COMPONENT LOCATIONS

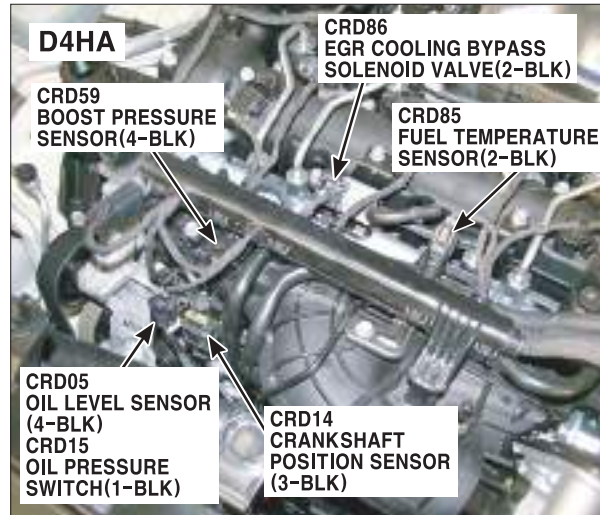
## Component Locations (6)

CL-6

### 31. Top of Engine



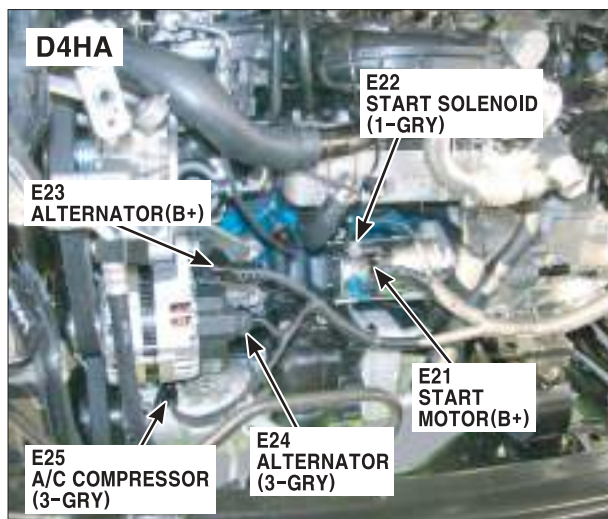
### 32. Top of Engine



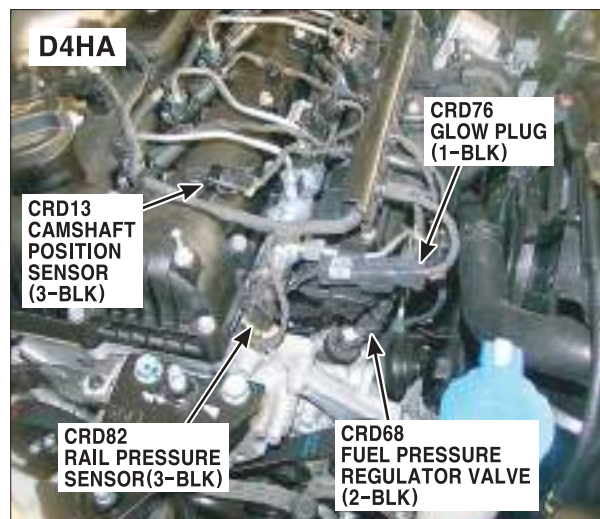
### 33. Left Front of Engine



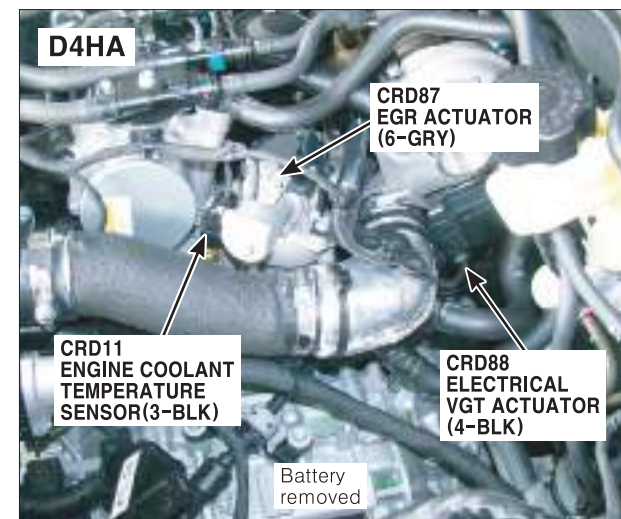
### 34. Front of Engine



### 35. Right Front of Engine



### 36. Left Side of Engine

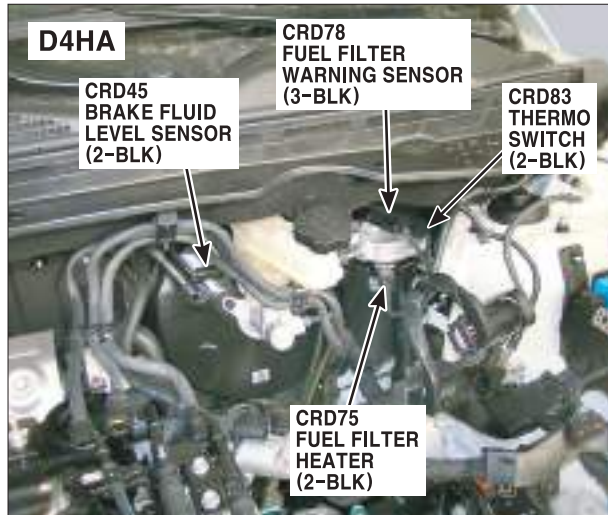


# COMPONENT LOCATIONS

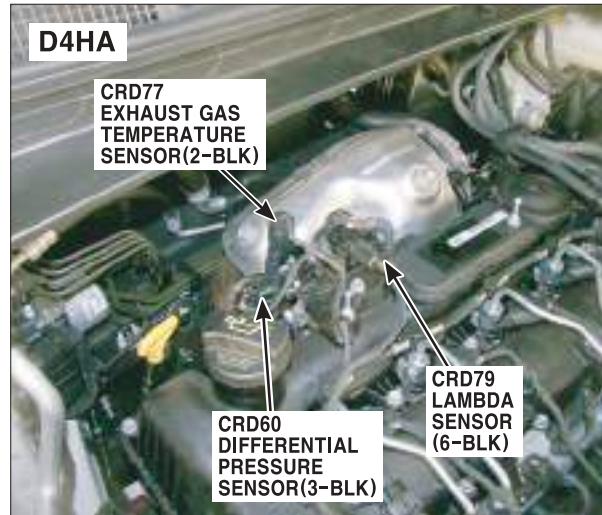
## Component Locations (7)

CL-7

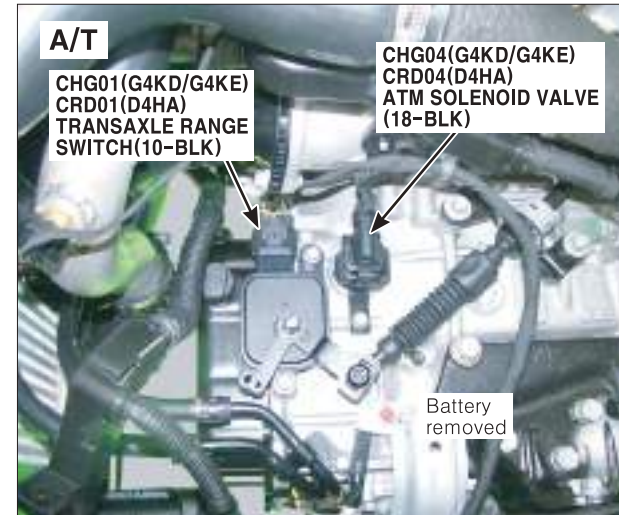
37. Left Rear of Engine Room



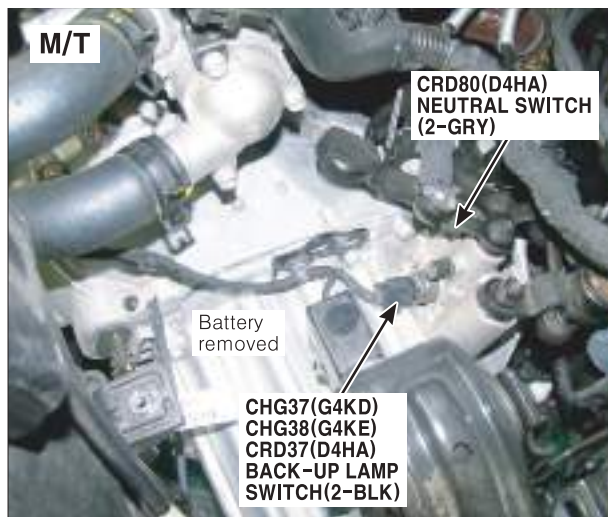
38. Right Rear of Engine



39. Top of Transaxle



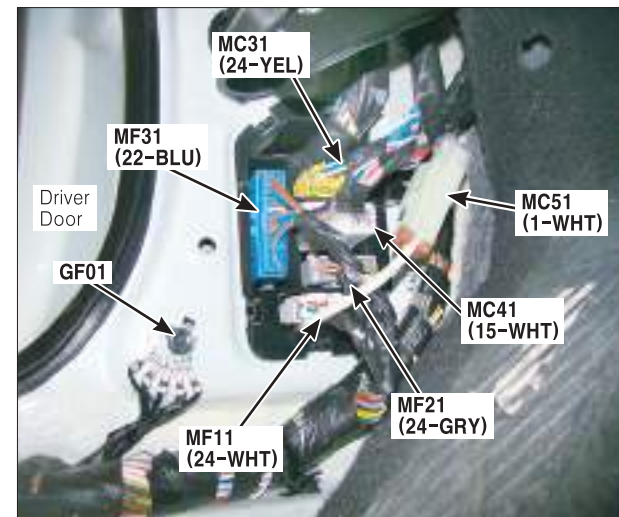
40. Top of Transaxle



41. Left A-pillar



42. Under of Left A-pillar

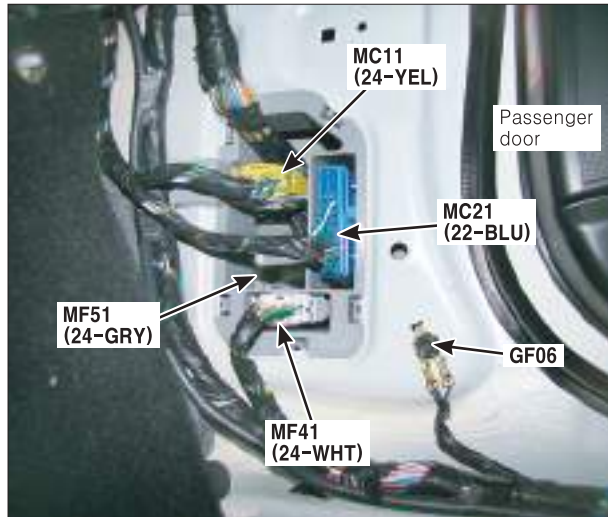


# COMPONENT LOCATIONS

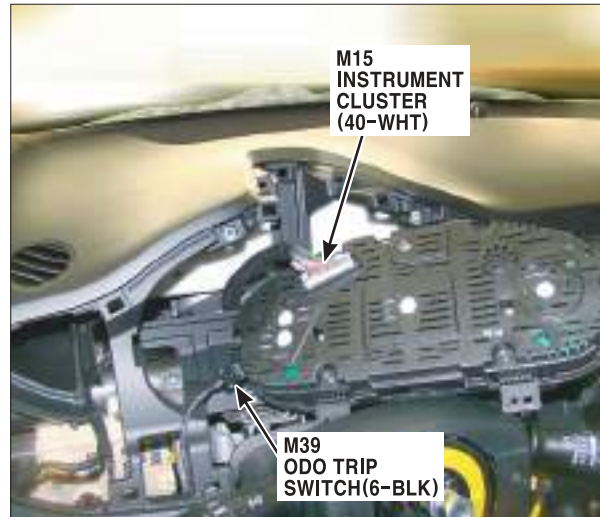
## Component Locations (8)

CL-8

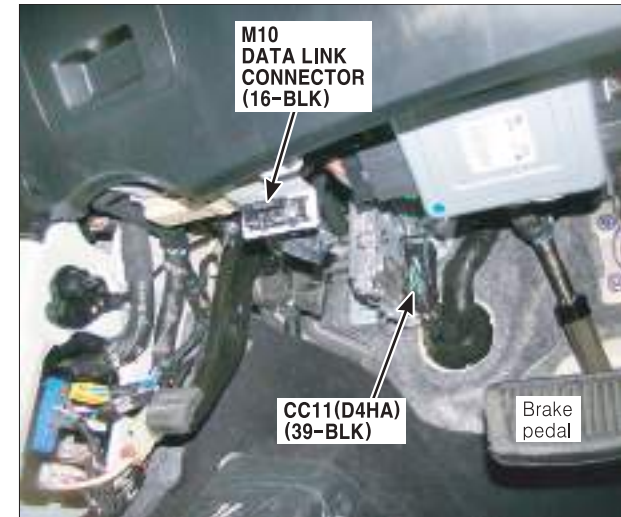
### 43. Under of Right A-pillar



### 44. Left Side of Dash Panel



### 45. Left Under of Dash Panel



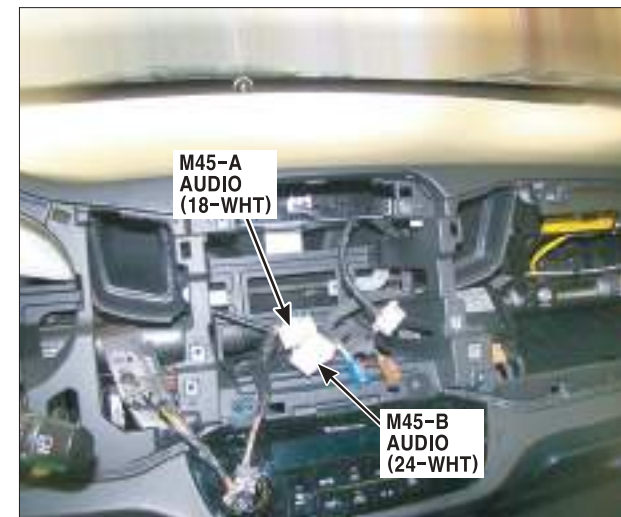
### 46. Left Side of Dash Panel



### 47. Center of Dash Panel



### 48. Center of Dash Panel



# COMPONENT LOCATIONS

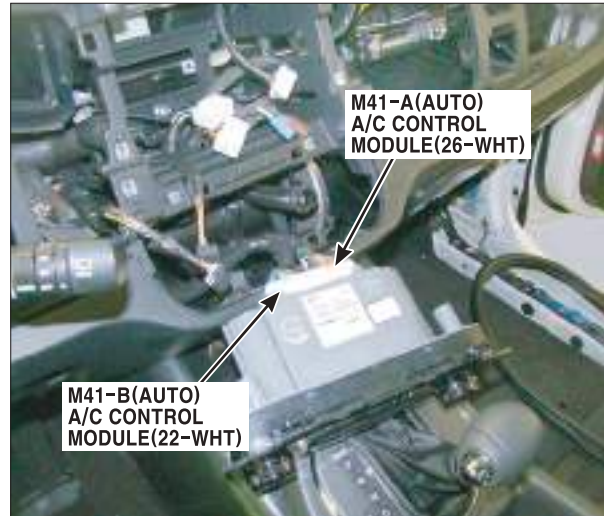
## Component Locations (9)

CL-9

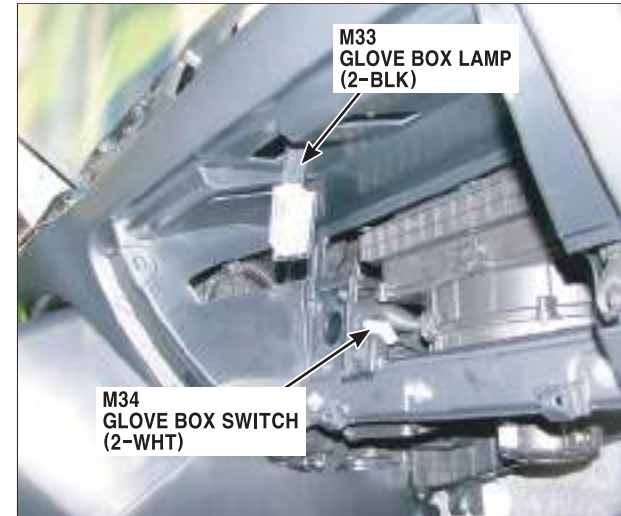
### 49. Center of Dash Panel



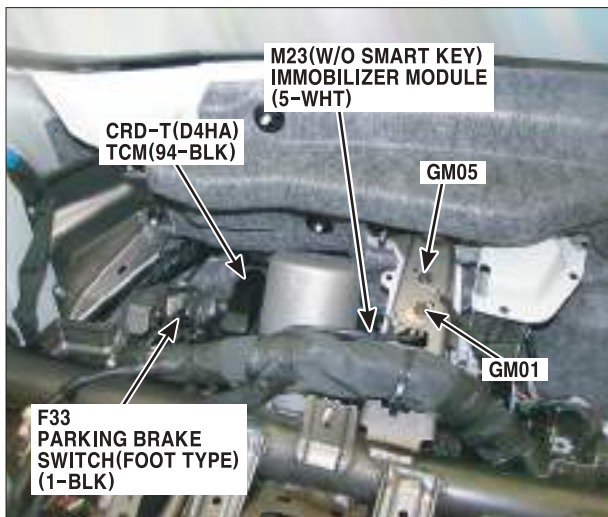
### 50. Center of Dash Panel



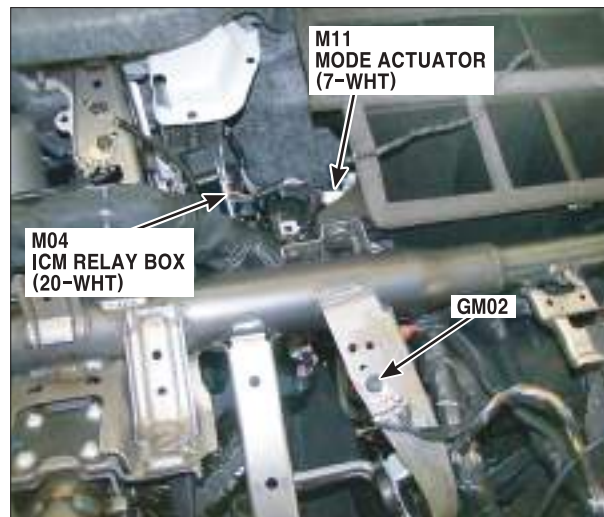
### 51. Glove Box



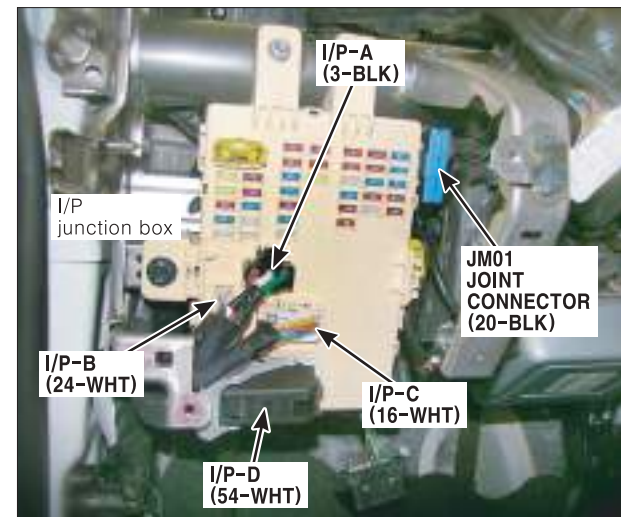
### 52. Left Top of Dash Panel



### 53. Center Top of Dash Panel



### 54. Left Side of Dash Panel

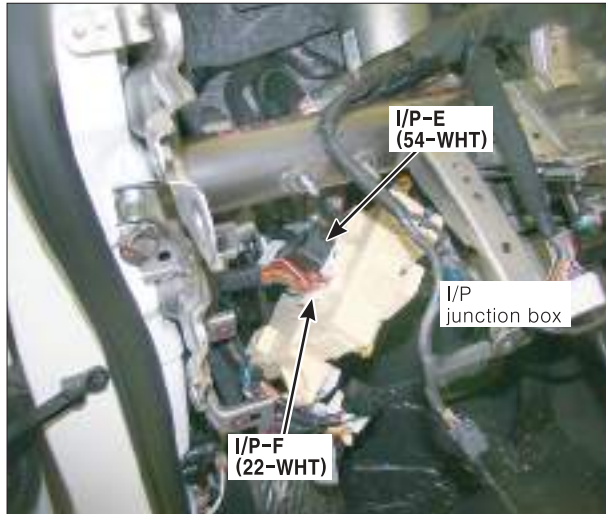


# COMPONENT LOCATIONS

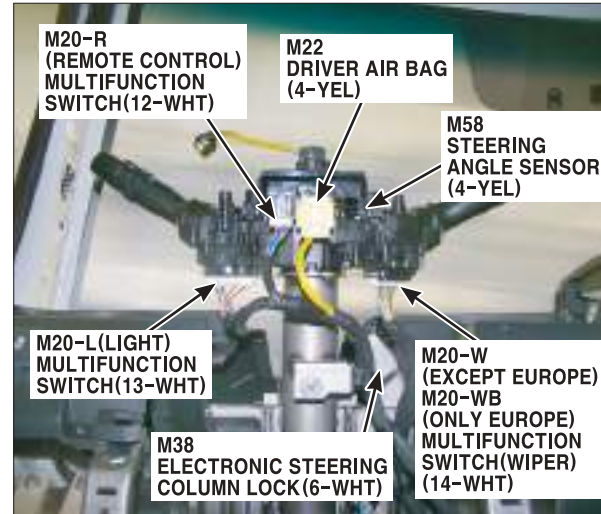
## Component Locations (10)

CL-10

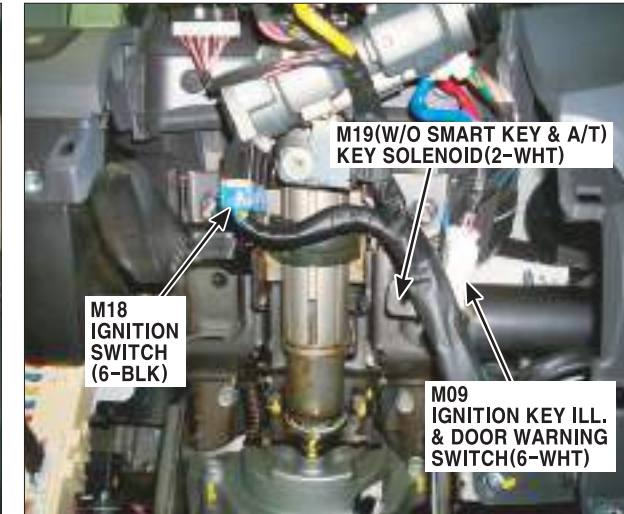
### 55. eft Side of Dash Panel



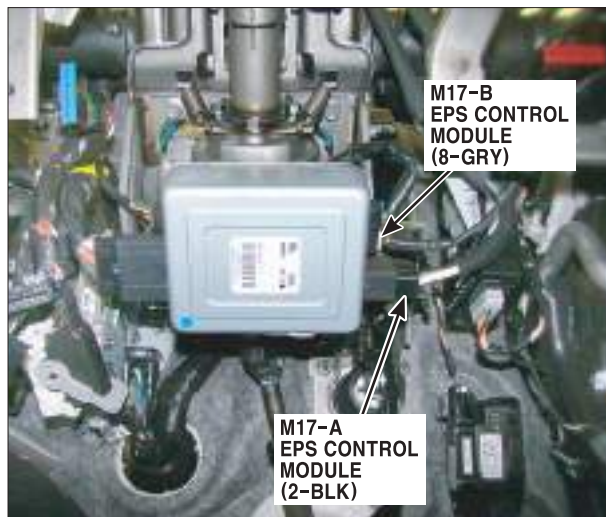
### 56. Steering Column



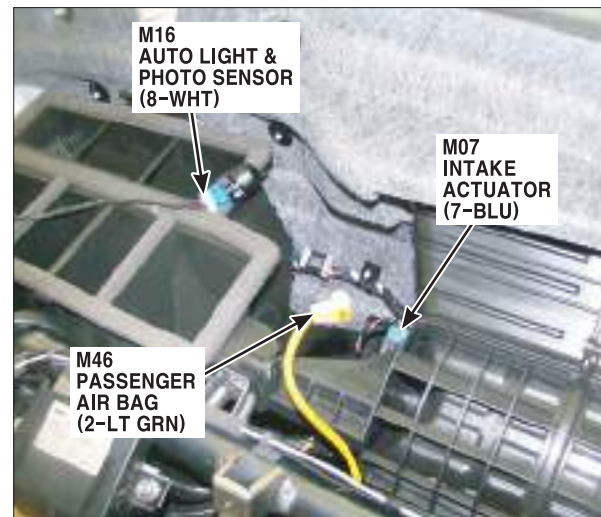
### 57. Steering Column



### 58. Steering Column



### 59. Center Top of Dash Panel



### 60. Center of Dash Panel

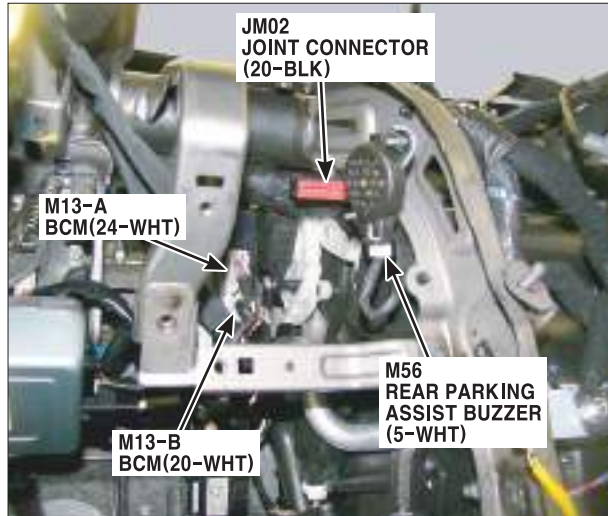


# COMPONENT LOCATIONS

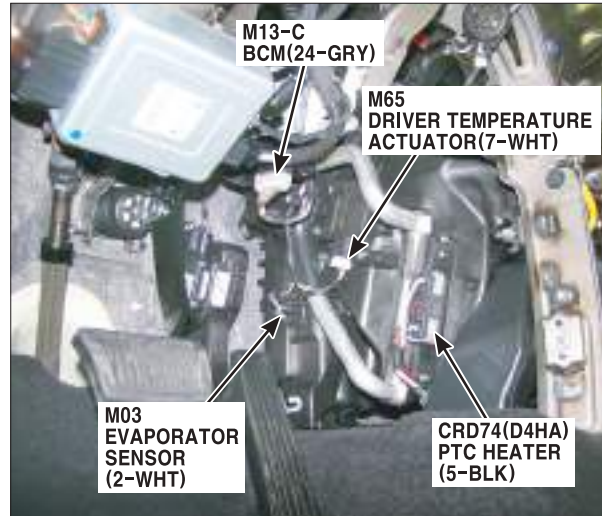
## Component Locations (11)

CL-11

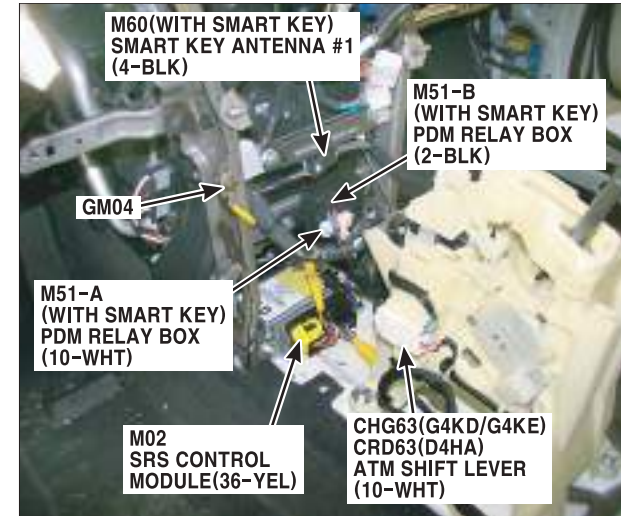
61. Center of Dash Panel



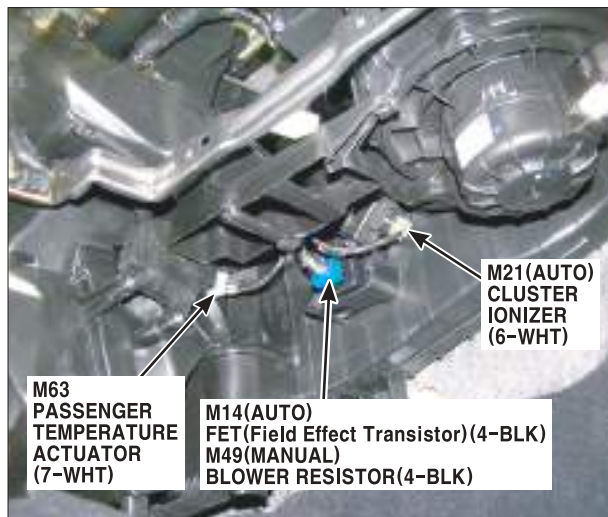
62. Center Under of Dash Panel



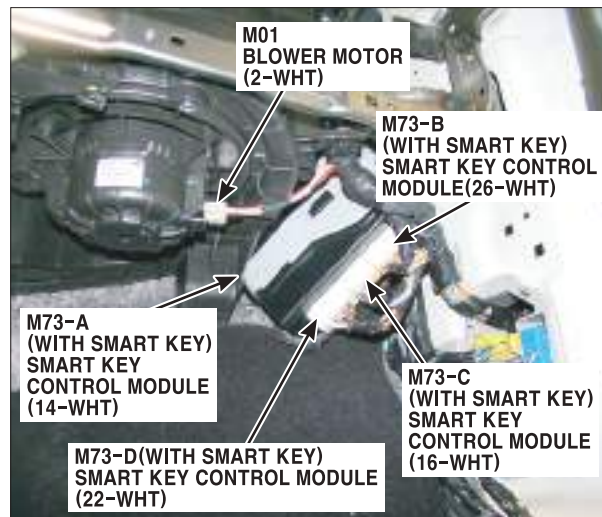
63. Center Under of Dash Panel



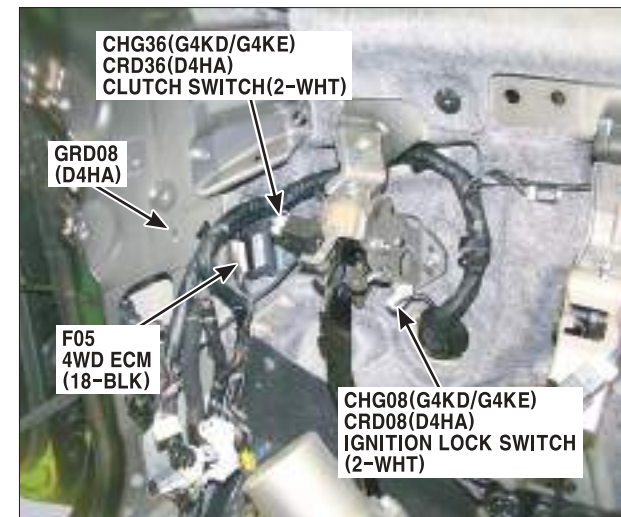
64. Center Under of Dash Panel



65. Under of Right A-pillar



66. Left Rear of Dash Panel



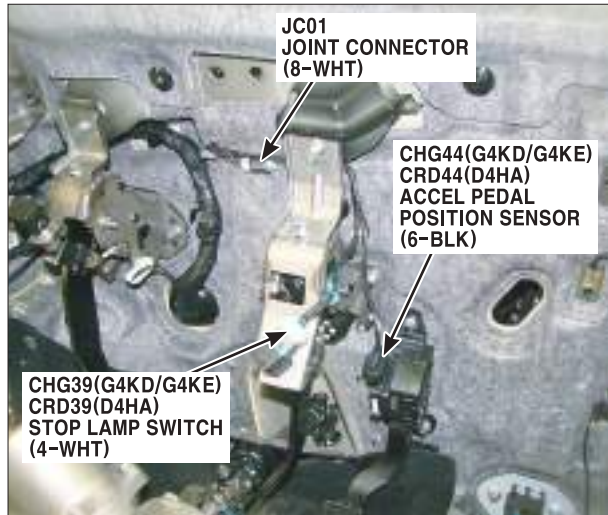


# COMPONENT LOCATIONS

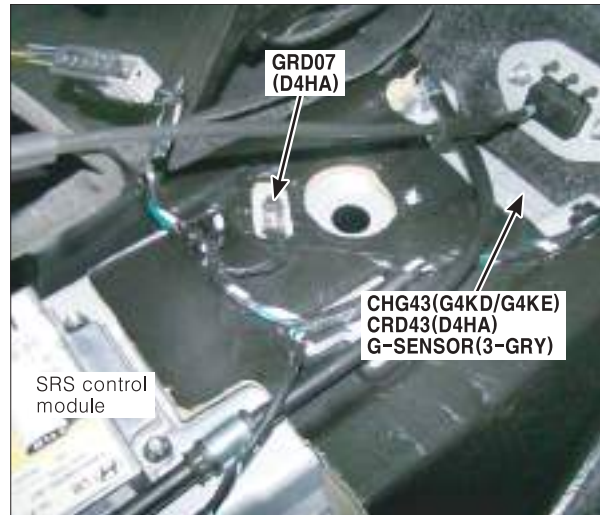
## Component Locations (12)

CL-12

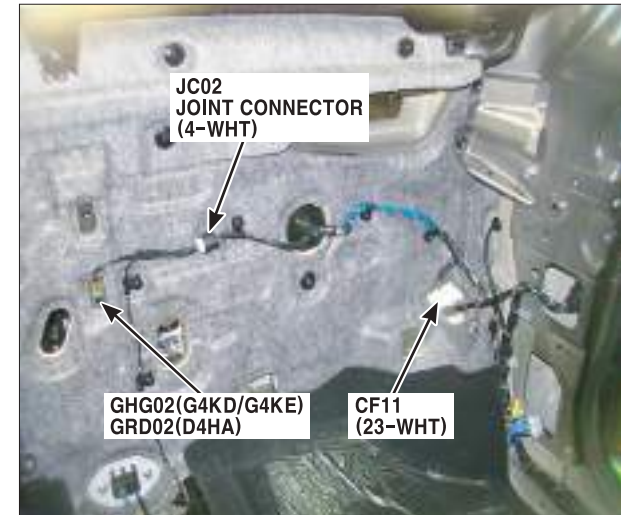
67. Left Rear of Dash Panel



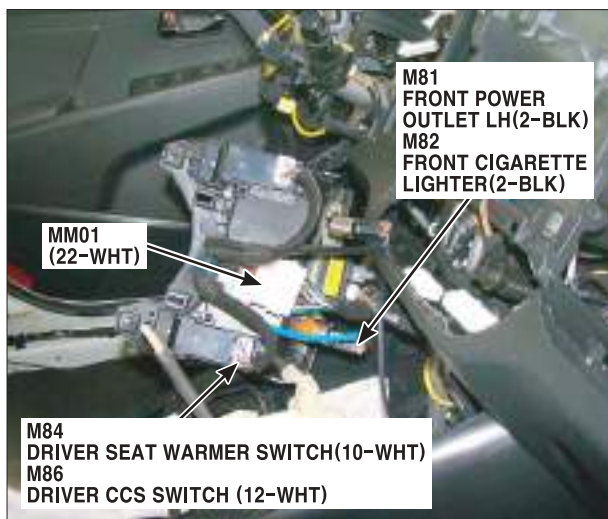
68. Center Under of Dash Panel



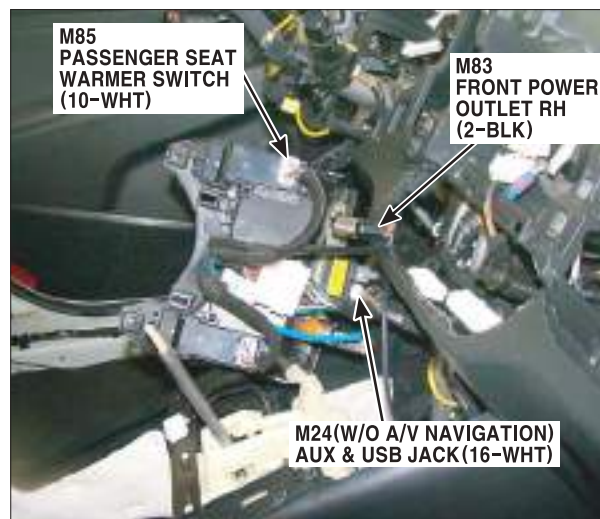
69. Right Rear of Dash Panel



70. Front of Console



71. Front of Console



72. Center of Console



# COMPONENT LOCATIONS

## Component Locations (13)

CL-13

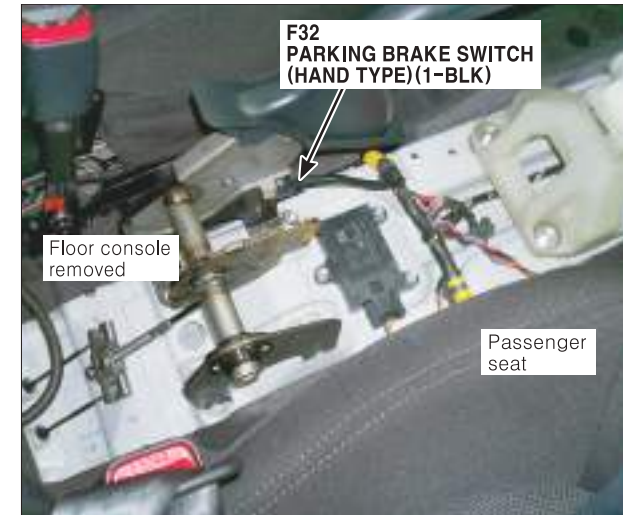
### 73. Rear of Console



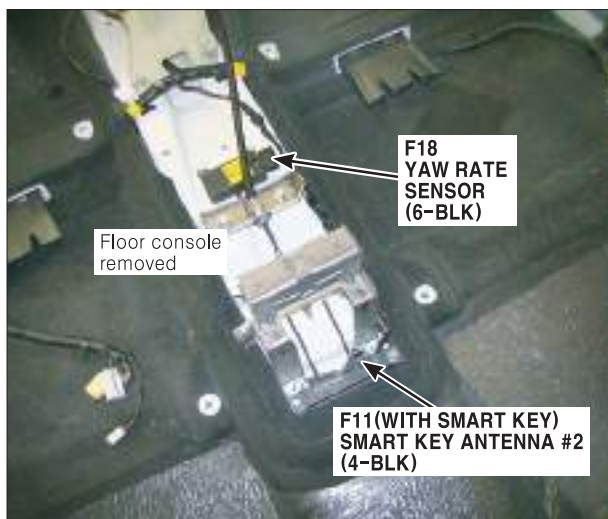
### 74. Front of Console



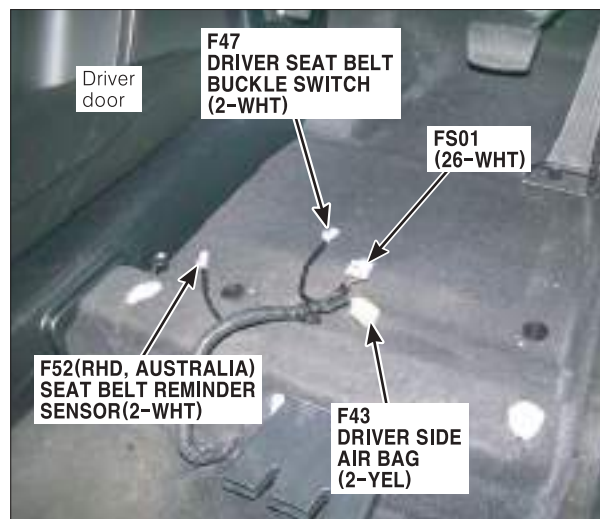
### 75. Center of Console



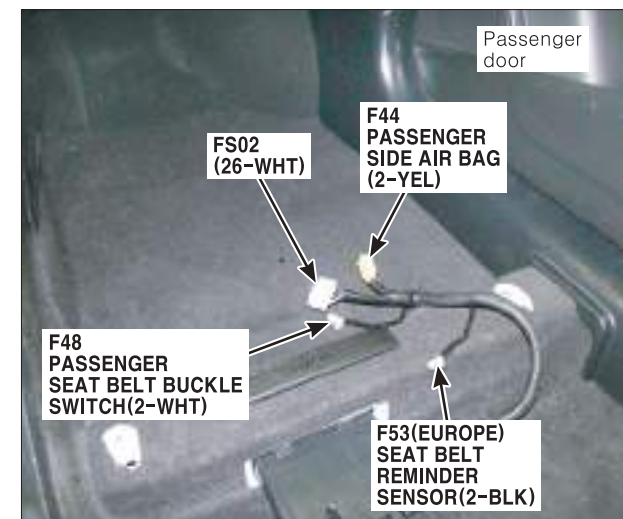
### 76. Rear of Console



### 77. Under of Driver Seat



### 78. Under of Passenger Seat

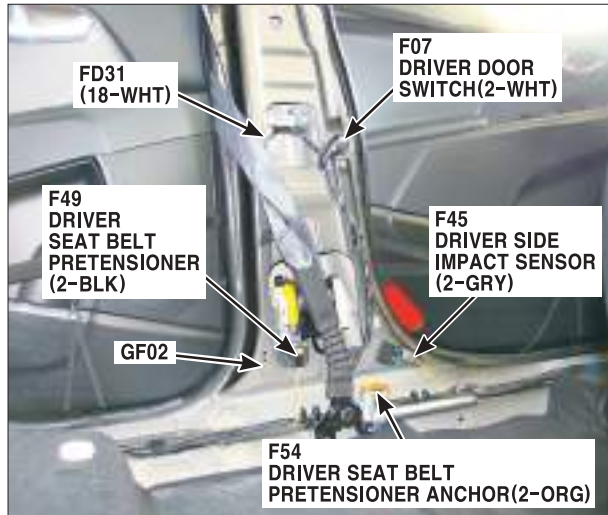


# COMPONENT LOCATIONS

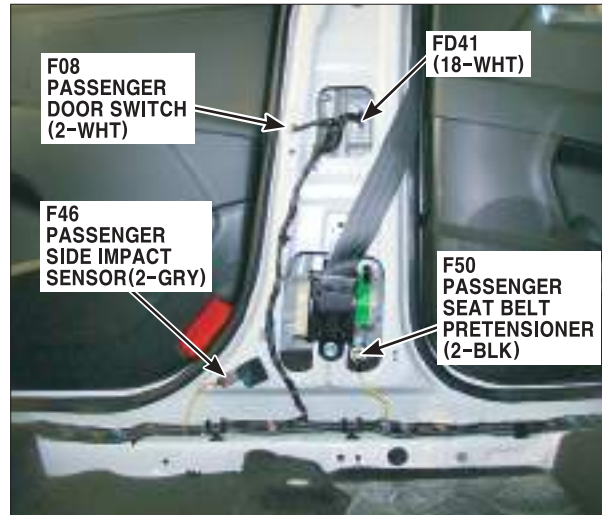
## Component Locations (14)

CL-14

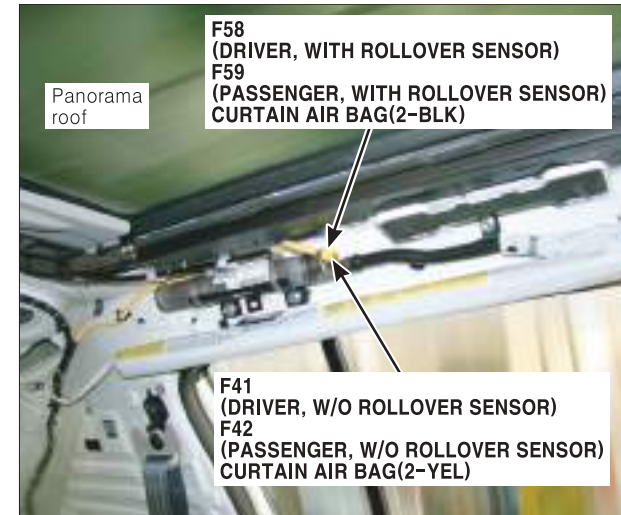
79. Left B-pillar



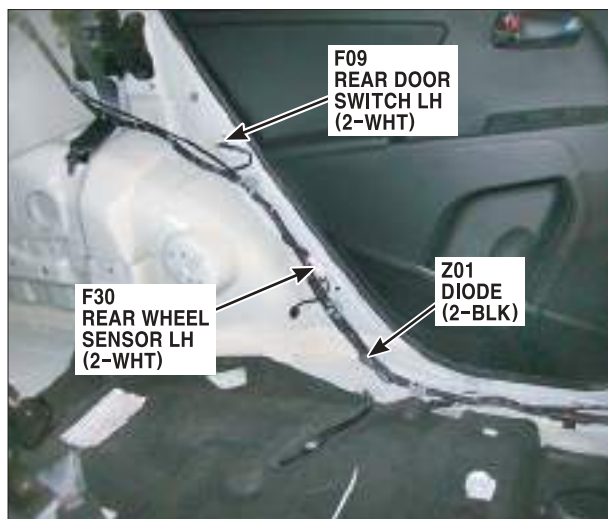
80. Right B-pillar



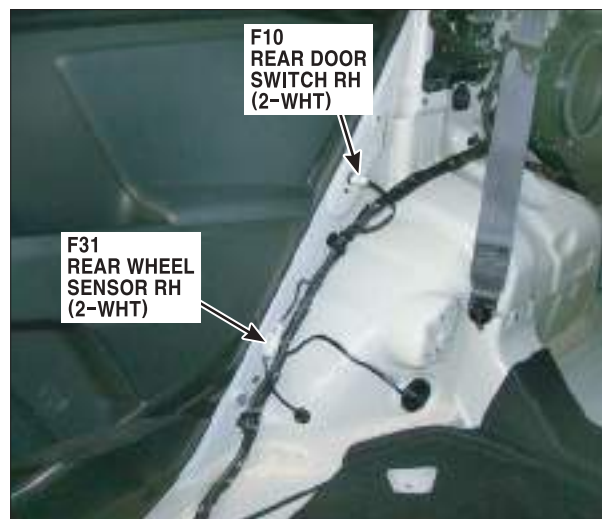
81. Top of C-pillar



82. Under of Left C-pillar



83. Under of Right C-pillar



84. Under of Rear Seat Cushion

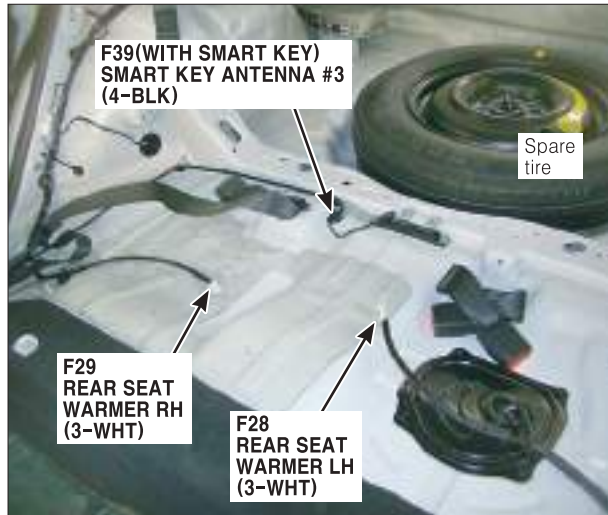


# COMPONENT LOCATIONS

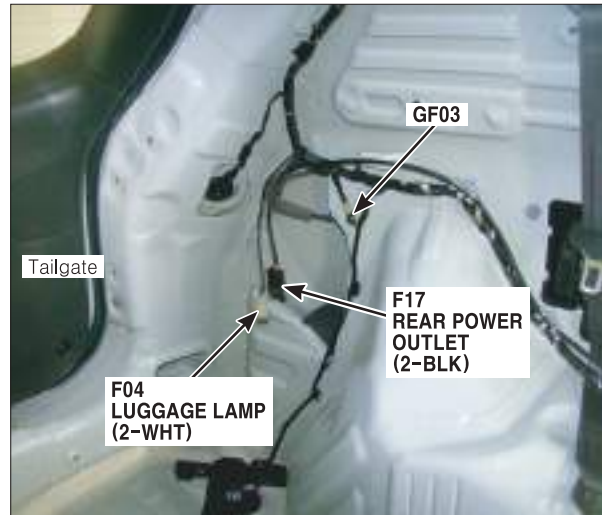
## Component Locations (15)

CL-15

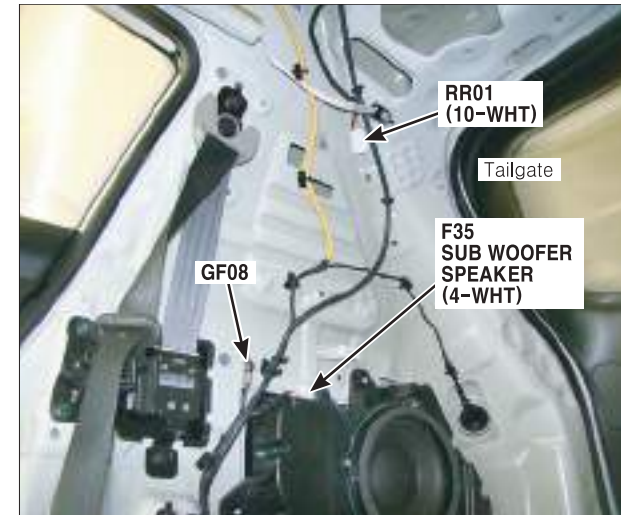
### 85. Under of Rear Seat Cushion



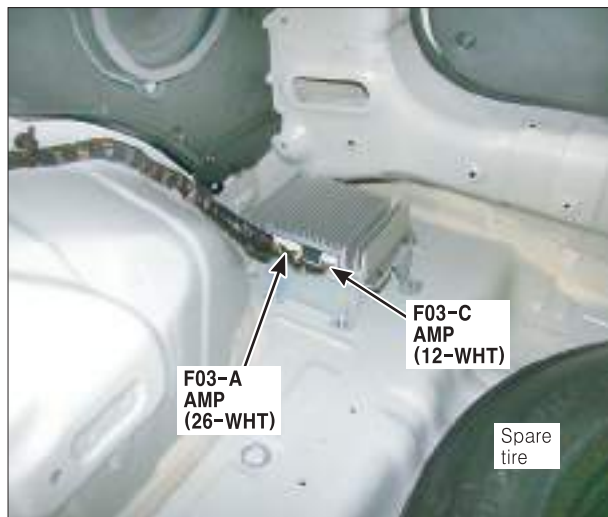
### 86. Left Side of Luggage Panel



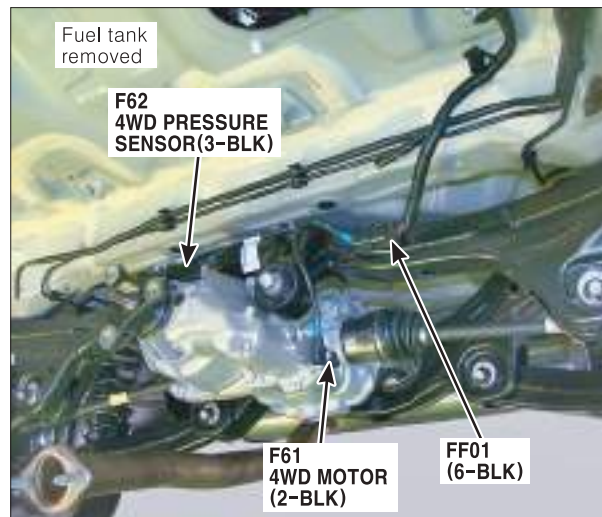
### 87. Right Side of Luggage Panel



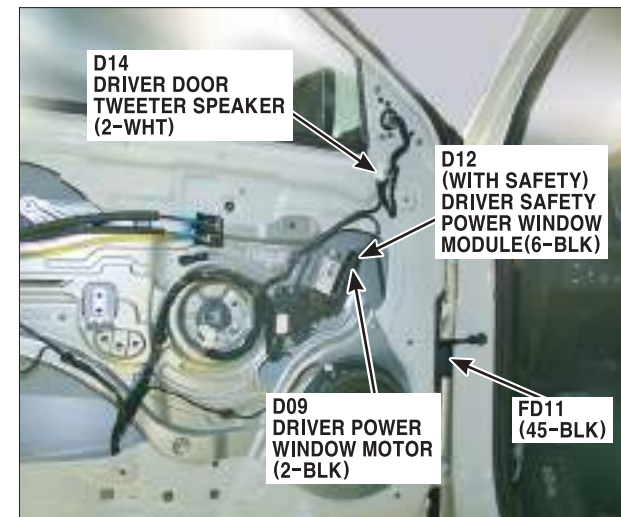
### 88. Right Under of Luggage Panel



### 89. Rear of Fuel Tank



### 90. Driver Door



# COMPONENT LOCATIONS

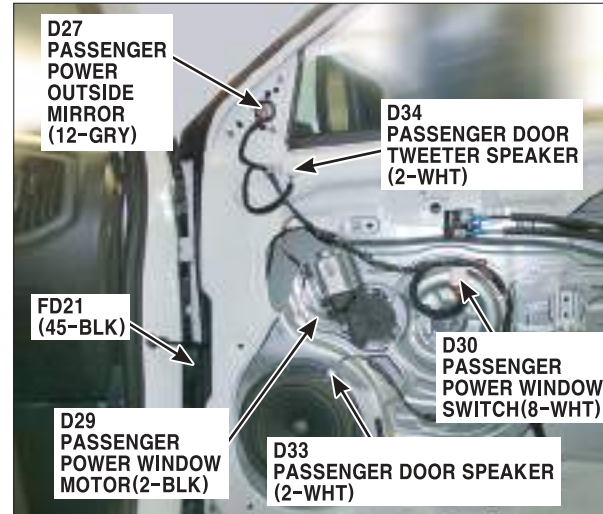
## Component Locations (16)

CL-16

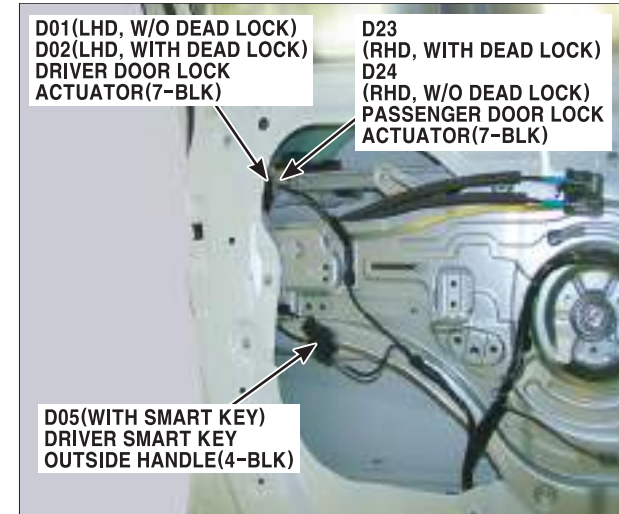
### 91. Driver Door



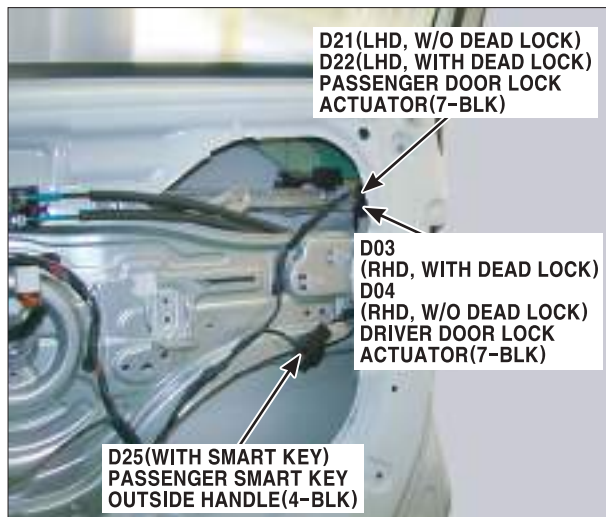
### 92. Passenger Door



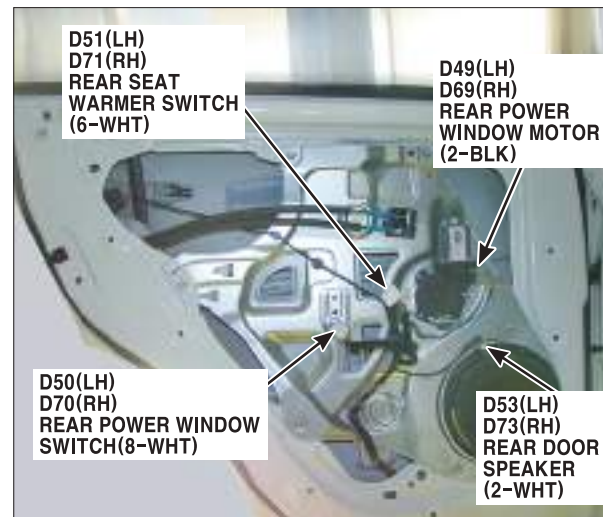
### 93. Left Front Door



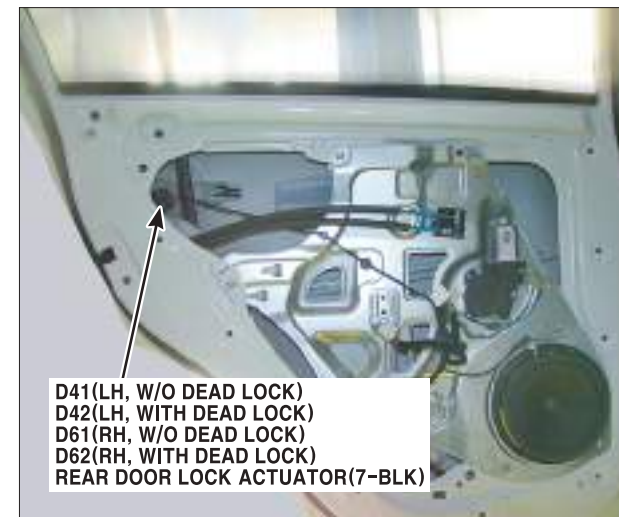
### 94. Right Front Door



### 95. Rear Door



### 96. Rear Door



# COMPONENT LOCATIONS

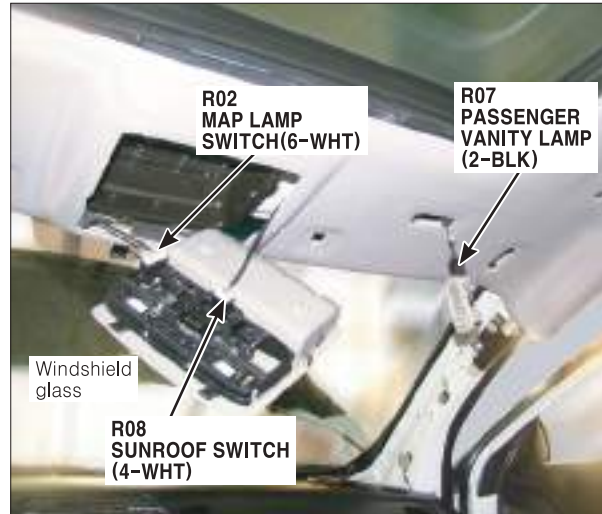
## Component Locations (17)

CL-17

### 97. Left Front of Roof Trim



### 98. Front of Roof Trim



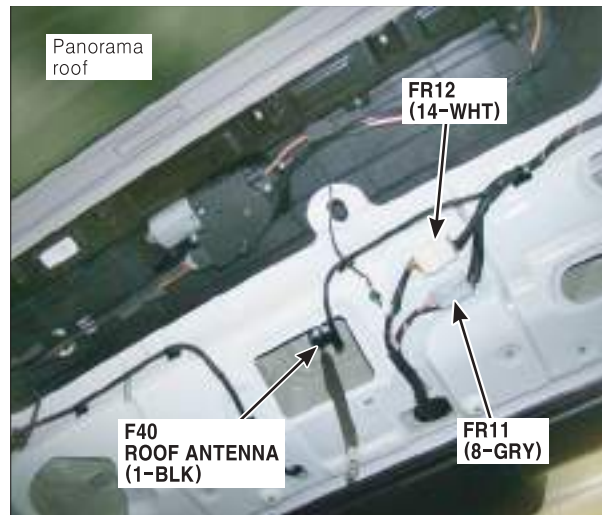
### 99. Windshield Glass



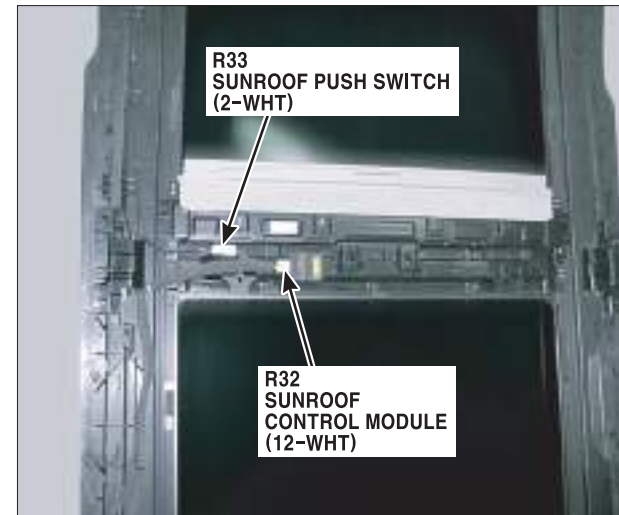
### 100. Center of Roof Trim



### 101. Rear of Roof Trim



### 102. Center of Panorama Roof



# COMPONENT LOCATIONS

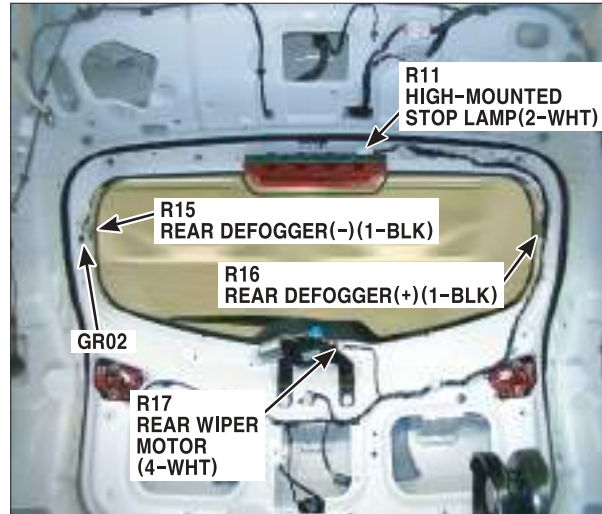
## Component Locations (18)

CL-18

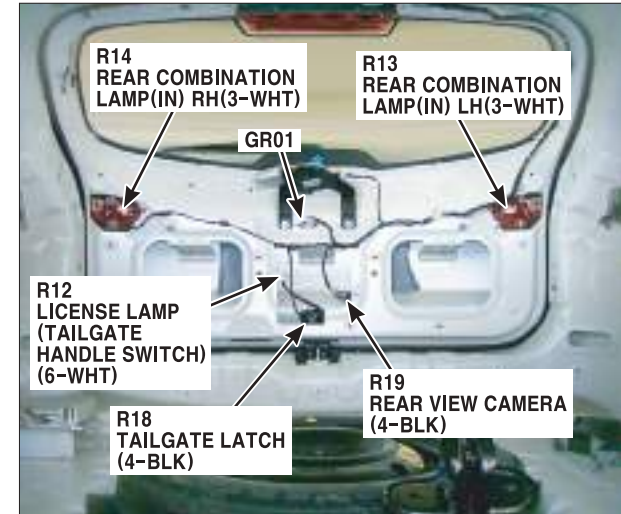
### 103. Rear of Panorama Roof



### 104. Tailgate



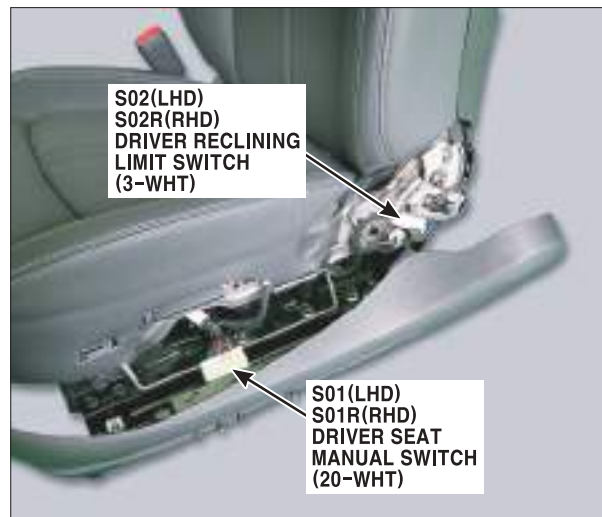
### 105. Tailgate



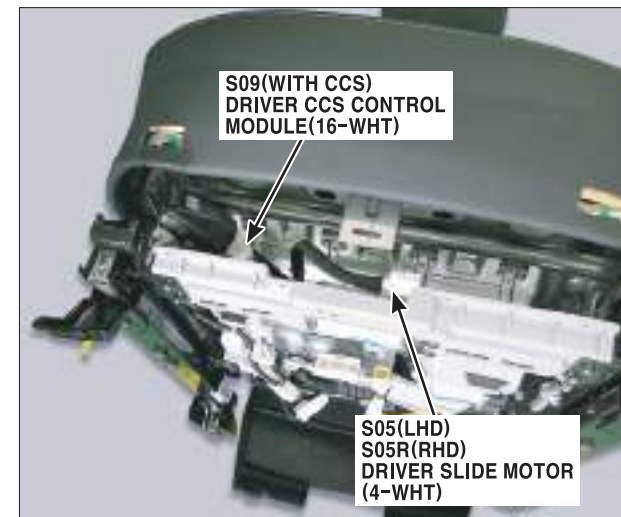
### 106. Side of Luggage Room



### 107. Driver Seat



### 108. Driver Seat

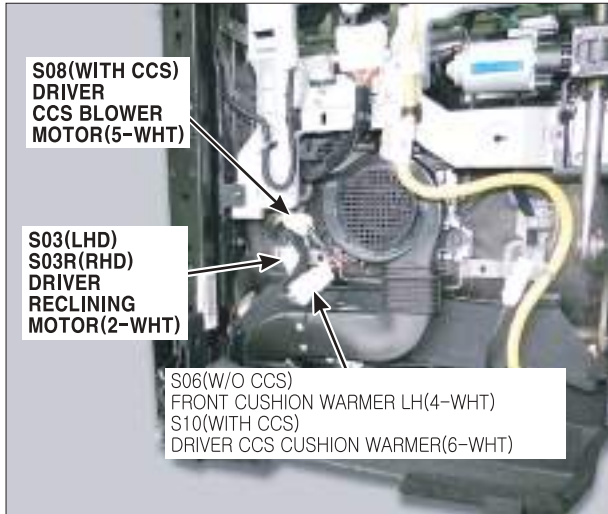


# COMPONENT LOCATIONS

## Component Locations (19)

CL-19

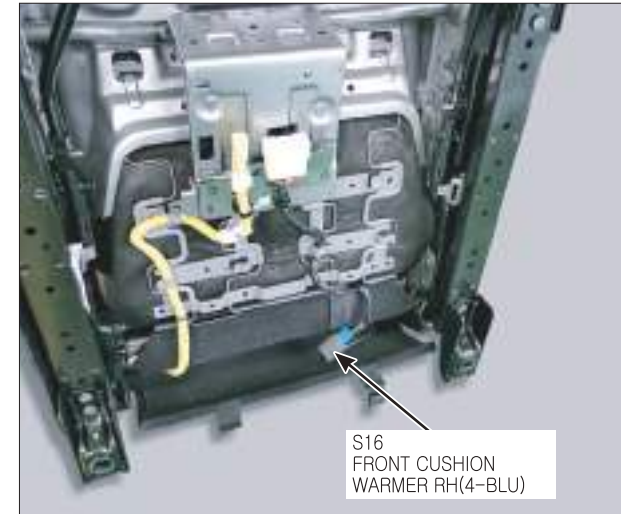
109. Driver Seat



110. Driver Seat



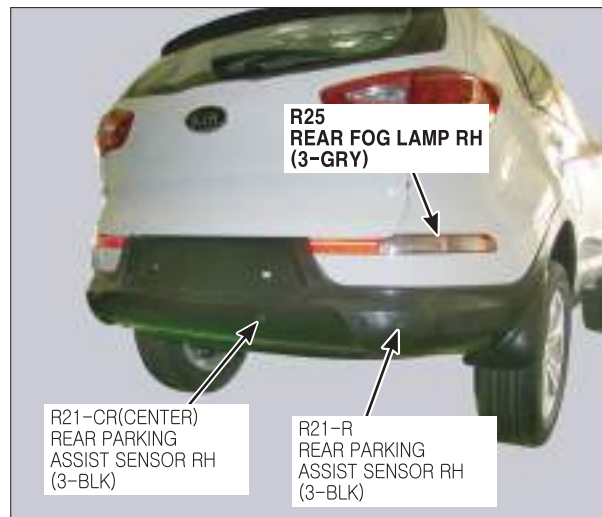
111. Passenger Seat



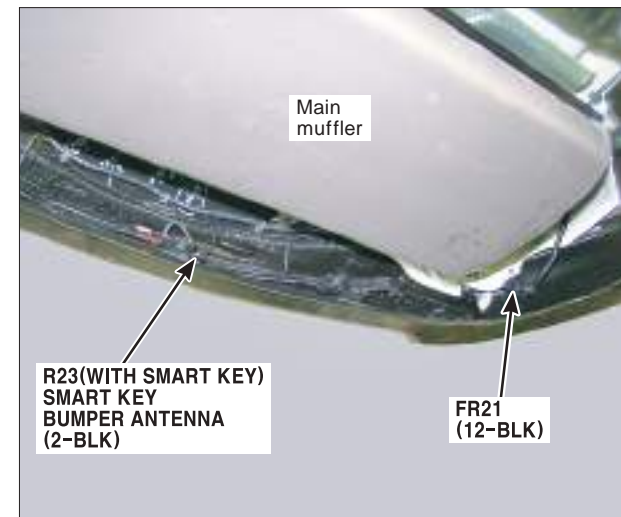
112. Left Side of Rear Bumper



113. Right Side of Rear Bumper



114. Left Under of Rear Bumper



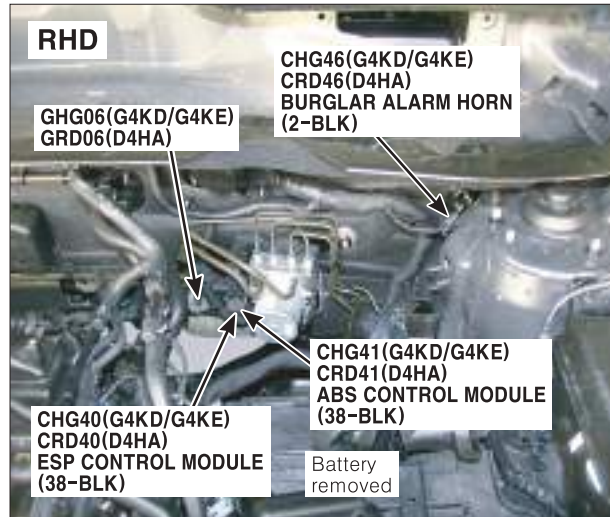


# COMPONENT LOCATIONS

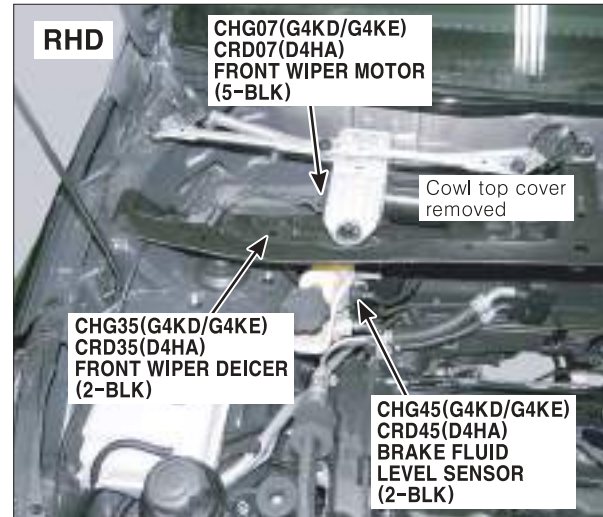
## Component Locations (20)

CL-20

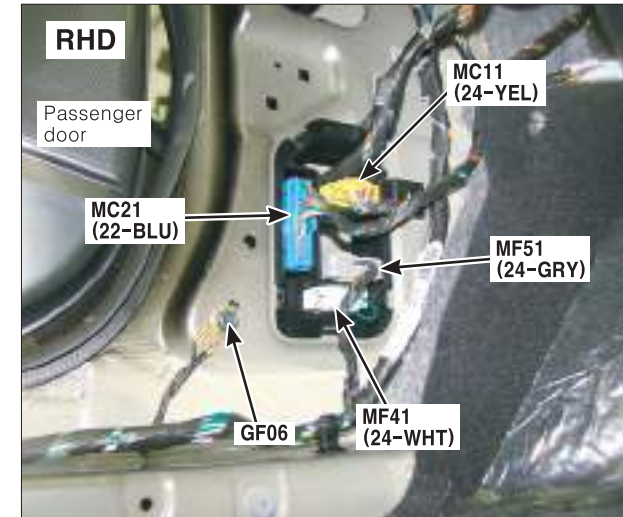
115. Left Rear of Engine Room



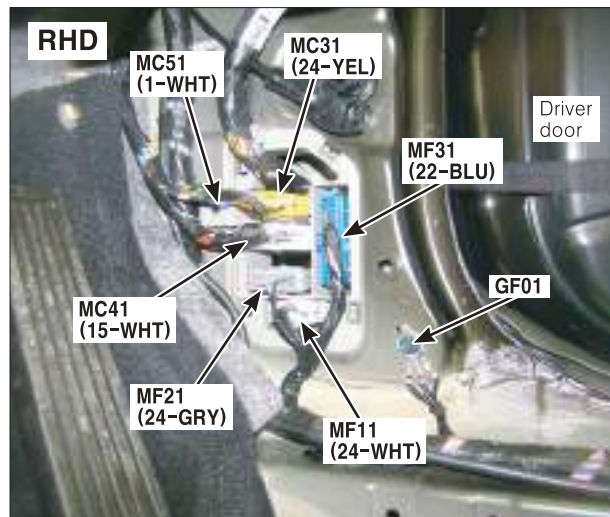
116. Right Side of Cowl Top Panel



117. Under of Left A-pillar



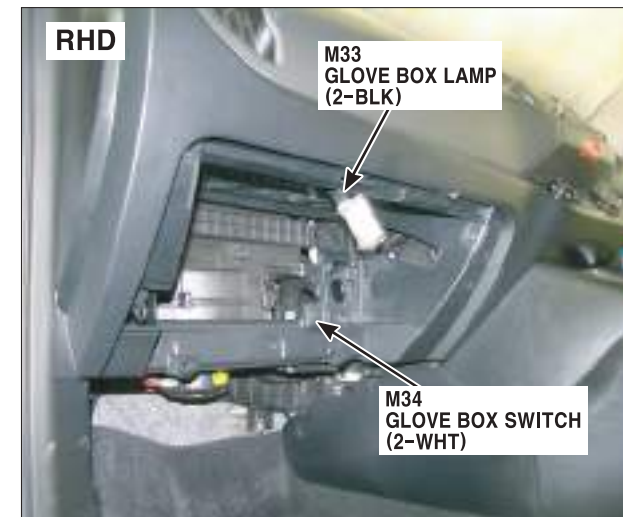
118. Under of Right A-pillar



119. Left Side of Dash Panel



120. Glove Box

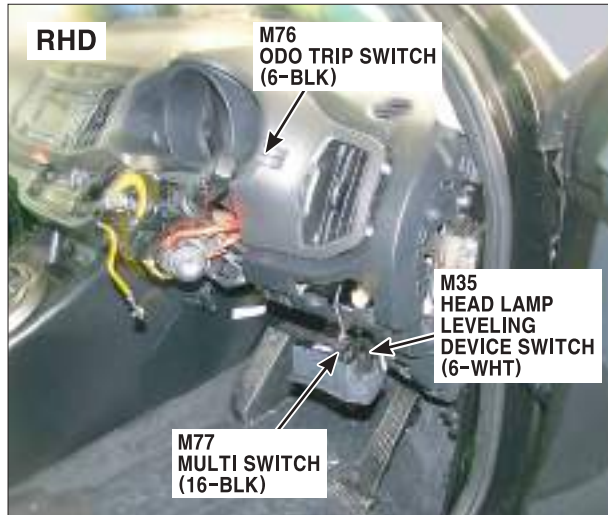


# COMPONENT LOCATIONS

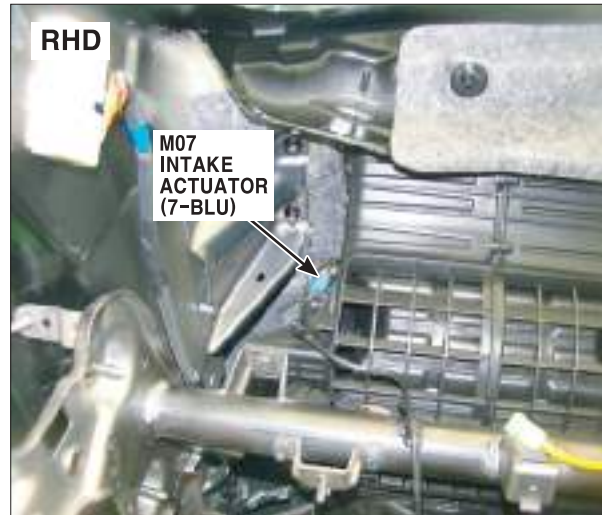
## Component Locations (21)

CL-21

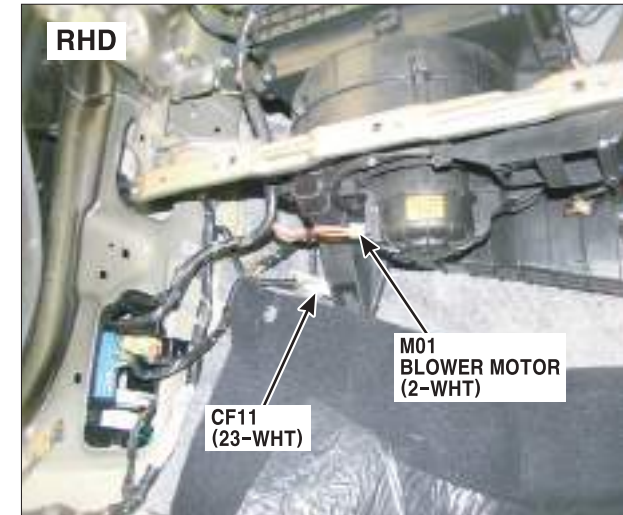
### 121. Right Side of Dash Panel



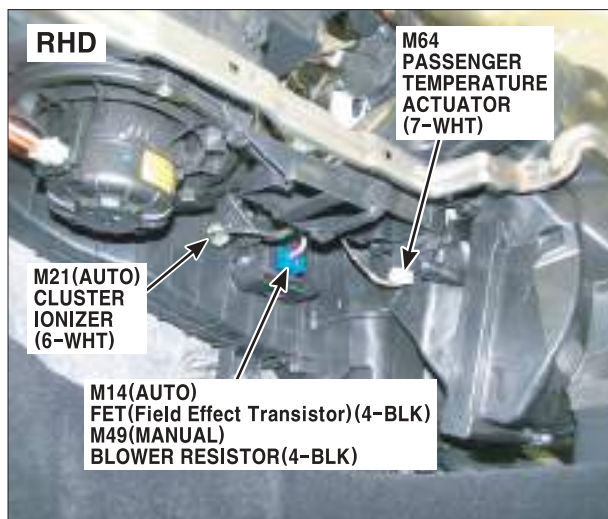
### 122. Left Top of Dash Panel



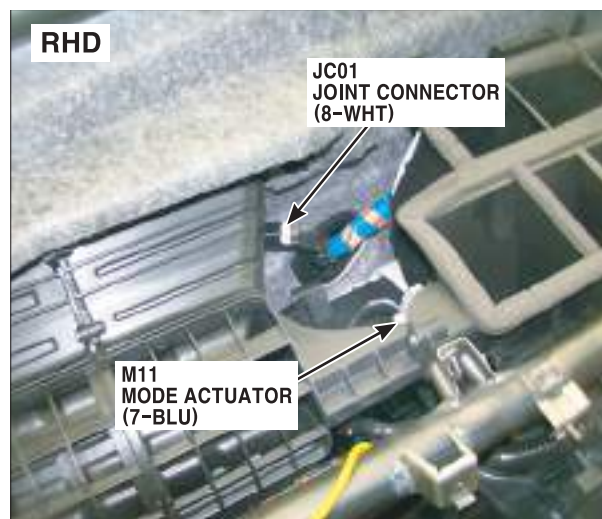
### 123. Left Under of Dash Panel



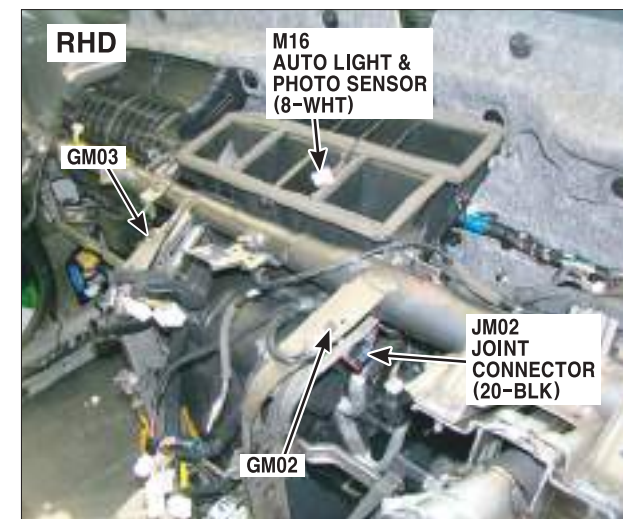
### 124. Center Under of Dash Panel



### 125. Center Top of Dash Panel



### 126. Center Top of Dash Panel

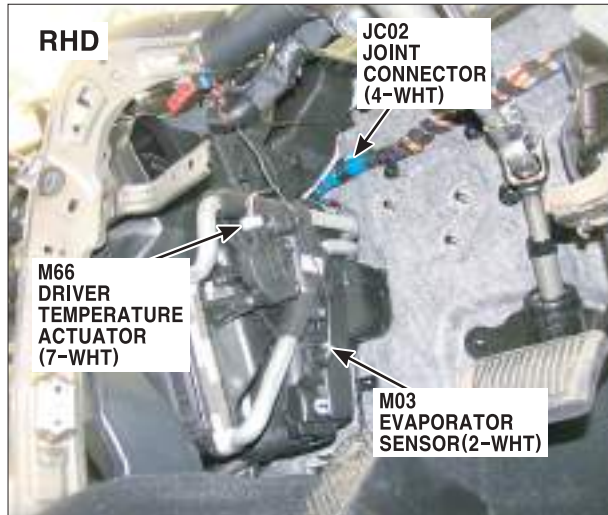


# COMPONENT LOCATIONS

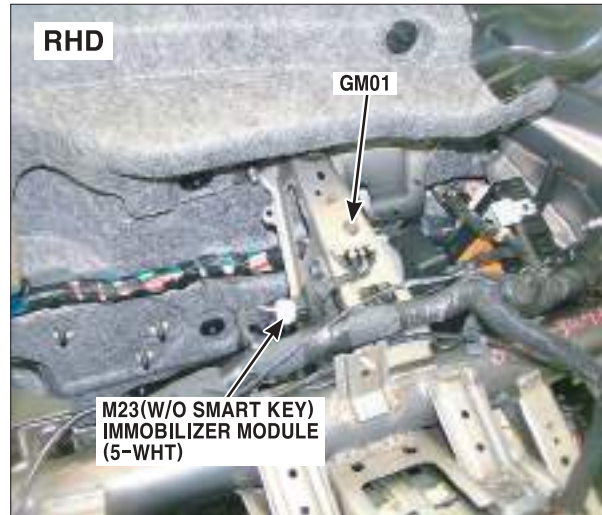
## Component Locations (22)

CL-22

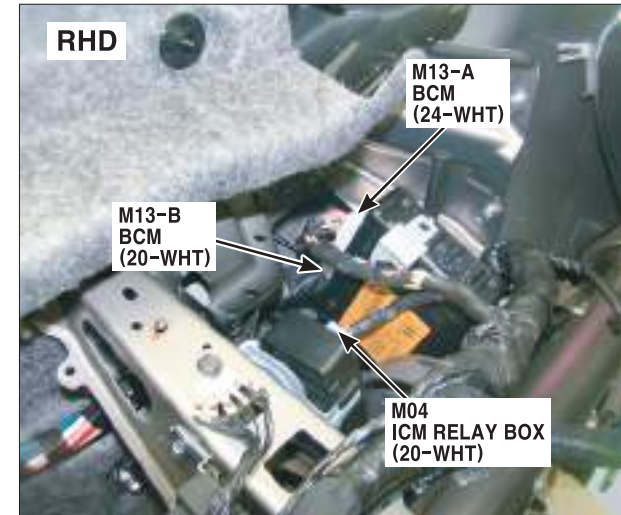
### 127. Center of Dash Panel



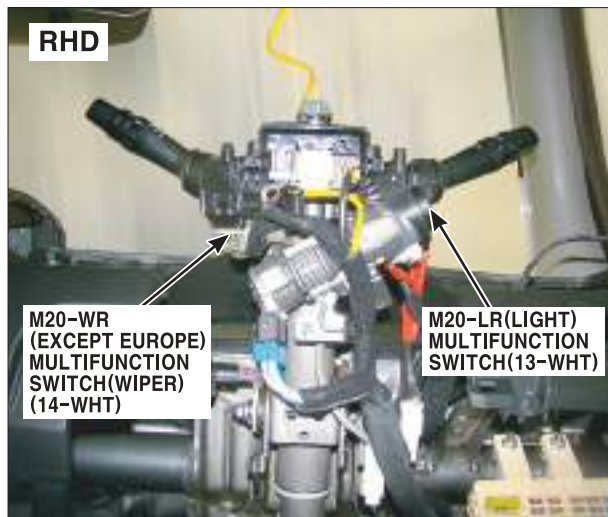
### 128. Right Top of Dash Panel



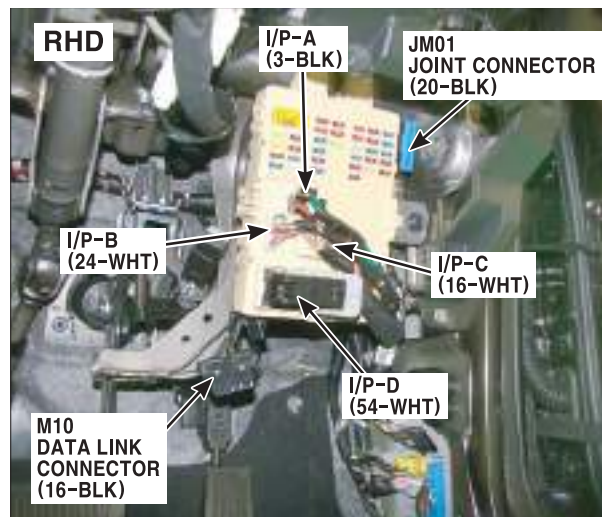
### 129. Right Top of Dash Panel



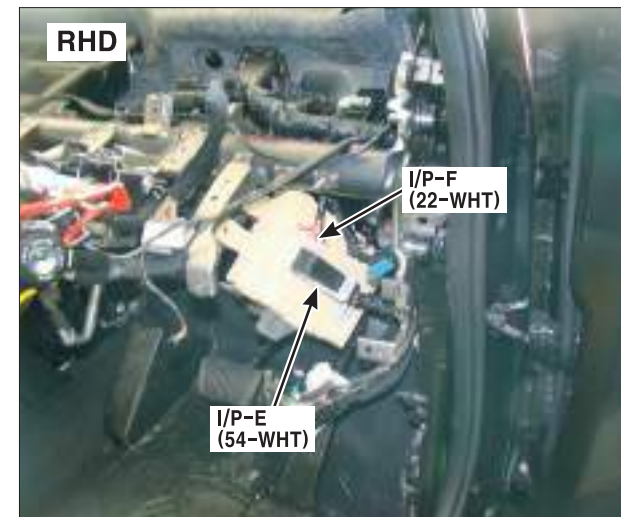
### 130. Steering Column



### 131. Right Side of Dash Panel



### 132. Right Side of Dash Panel

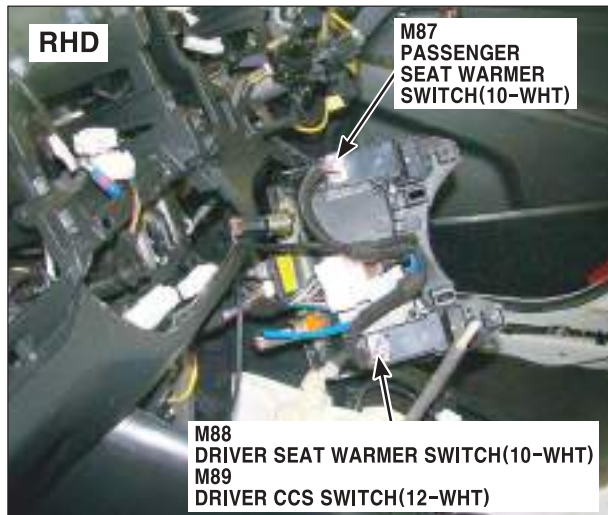


## COMPONENT LOCATIONS

### Component Locations (23)

CL-23

#### 133. Front of Console



# HARNESSES LAYOUTS

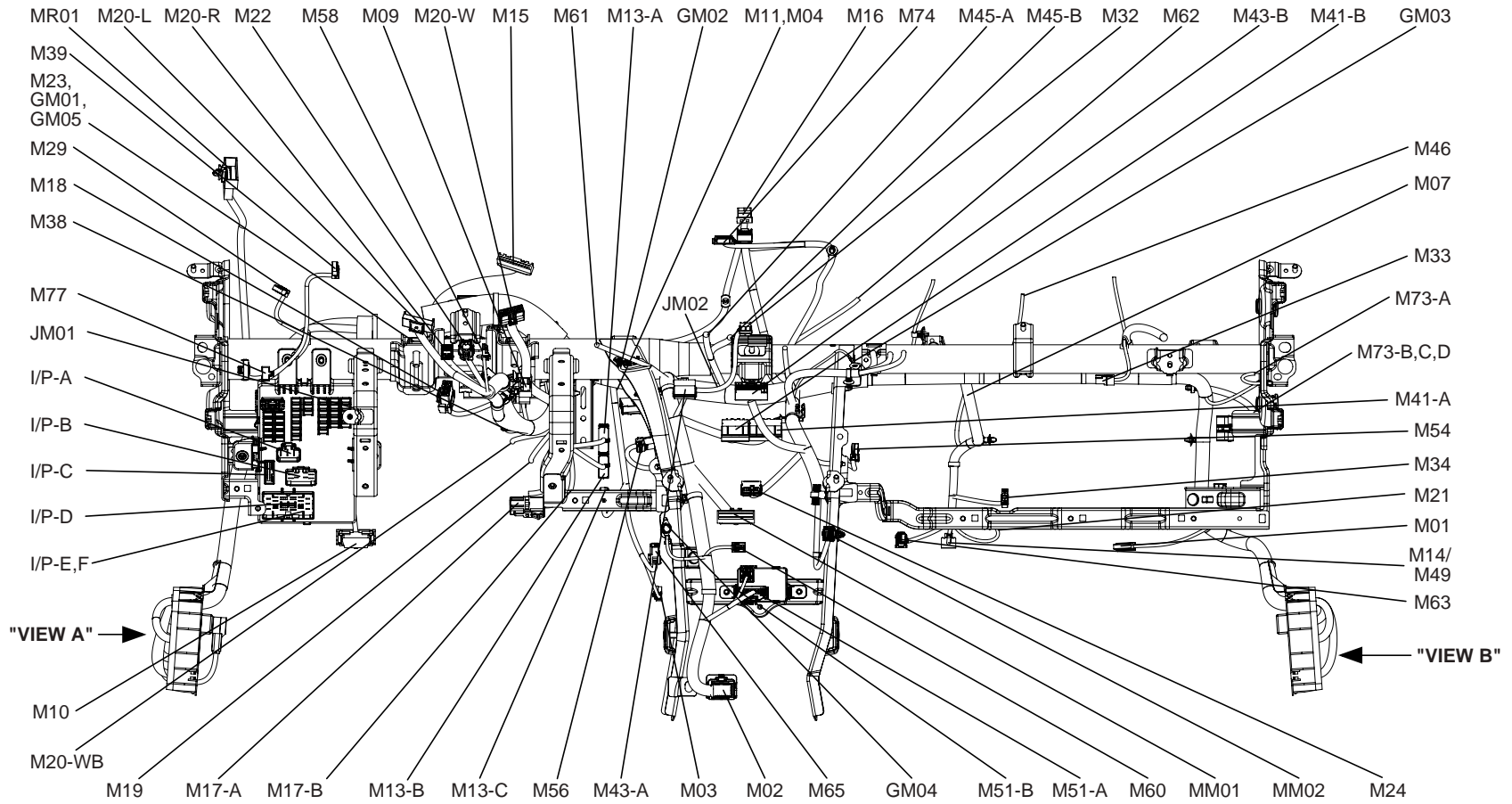
<b>Main Harness.....</b>	<b>HL-1</b>
<b>Control Harness.....</b>	<b>HL-5</b>
<b>Floor Harness.....</b>	<b>HL-9</b>
<b>Door Harness.....</b>	<b>HL-11</b>
<b>Battery Harness.....</b>	<b>HL-13</b>
<b>Tail Gate &amp; Rear Bumper Harness.....</b>	<b>HL-14</b>
<b>Roof &amp; Sunroof EXT. Harness.....</b>	<b>HL-15</b>
<b>Seat Harness.....</b>	<b>HL-16</b>



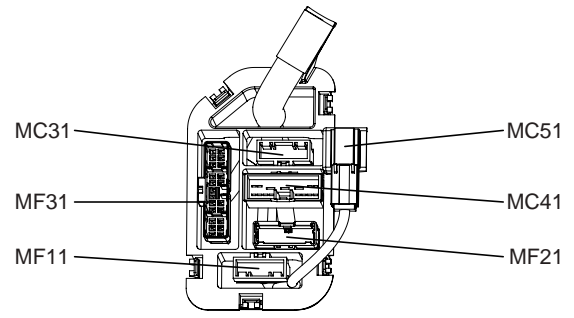
Main Harness (1)

HL-1

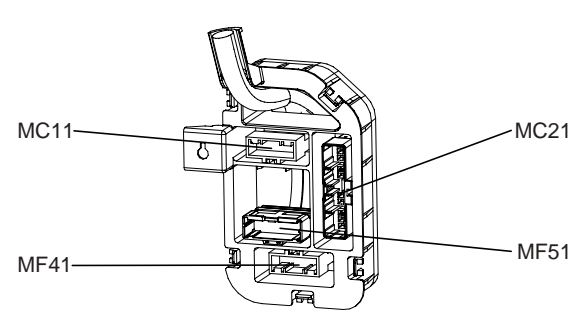
LHD



"VIEW A"



"VIEW B"



# MAIN HARNESS

## Main Harness (2)

HL-2

### LHD

#### MAIN HARNESS

M01	Blower Motor	M38	Electronic Steering Column Lock (With Smart Key)	MC31	Connection With Control Harness
M02	SRS Control Module			MC41	Connection With Control Harness
M03	Evaporator Sensor	M39	ODO Trip Switch	MC51	Connection With Control Harness
M04	ICM Relay Box	M41-A	A/C Control Module (Auto)	MF11	Connection With Floor Harness
M07	Intake Actuator	M41-B	A/C Control Module (Auto)	MF21	Connection With Floor Harness
M09	Ignition Key ILL. & Door Warning Switch (W/O Smart Key)	M43-A	A/C Control Module (Manual)	MF31	Connection With Floor Harness
		M43-B	A/C Control Module (Manual)	MF41	Connection With Floor Harness
M10	Data Link Connector	M45-A	Audio	MF51	Connection With Floor Harness
M11	Mode Actuator	M45-B	Audio	MM01	Connection With CONSOLE EXT. Harness
M13-A	BCM	M46	Passenger Air Bag		
M13-B	BCM	M49	Blower Resistor	MM02	Connection With FOB EXT. Harness
M13-C	BCM	M51-A	PDM Relay Box (With Smart Key)	MR01	Connection With ROOF Harness
M14	FET(Field Effect Transistor)	M51-B	PDM Relay Box (With Smart Key)	GM01	Ground
M15	Instrument Cluster	M54	RF Receiver (With Smart Key)	GM02	Ground
M16	Auto Light & Photo Sensor	M56	Rear Parking Assist Buzzer	GM03	Ground
M17-A	EPS Control Module	M58	Steering Angle Sensor	GM04	Ground
M17-B	EPS Control Module	M60	Smart Key Antenna #1	GM05	Ground
M18	Ignition Switch	M61	Start/Stop Button Switch (With Smart Key)		
M19	Key Solenoid (W/O Smart Key & A/T)	M62	Telltale Lamp		
M20-L	Multifunction Switch (Light) (LHD)	M63	Passenger Temperature Actuator (LHD)		
M20-R	Multifunction Switch (Remote Control)	M65	Driver Temperature Actuator (LHD)		
M20-W	Multifunction Switch (Wiper) (LHD, Except Europe)	M73-A	Smart Key Control Module	M75	Fob Holder
		M73-B	Smart Key Control Module	MM02	Connection With MAIN Harness
M20-WB	Multifunction Switch (Wiper) (Only Europe)	M73-C	Smart Key Control Module		
		M73-D	Smart Key Control Module		
M21	Cluster Ionizer (Auto A/C)	M74	Digital Clock		
M22	Driver Air Bag	M77	Multi Switch		
M23	Immobilizer Module (W/O Smart Key)	I/P-E	Connection With I/P Junction Box	M81	Front Power Outlet LH
M24	AUX & USB Jack (W/O A/V Navigation)	I/P-F	Connection With I/P Junction Box	M82	Front Cigarette Lighter
M29	Head Lamp Leveling Device Switch (LHD)	JM01	Joint Connector	M83	Front Power Outlet RH
		JM02	Joint Connector	M84	Driver Seat Warmer Switch (LHD)
M32	Hazard Switch	MC11	Connection With Control Harness	M85	Passenger Seat Warmer Switch (LHD)
M33	Glove Box Lamp	MC21	Connection With Control Harness	M86	Driver CCS Switch (LHD)
M34	Glove Box Switch			MM01	Connection With MAIN Harness

#### FOB EXT. HARNESS

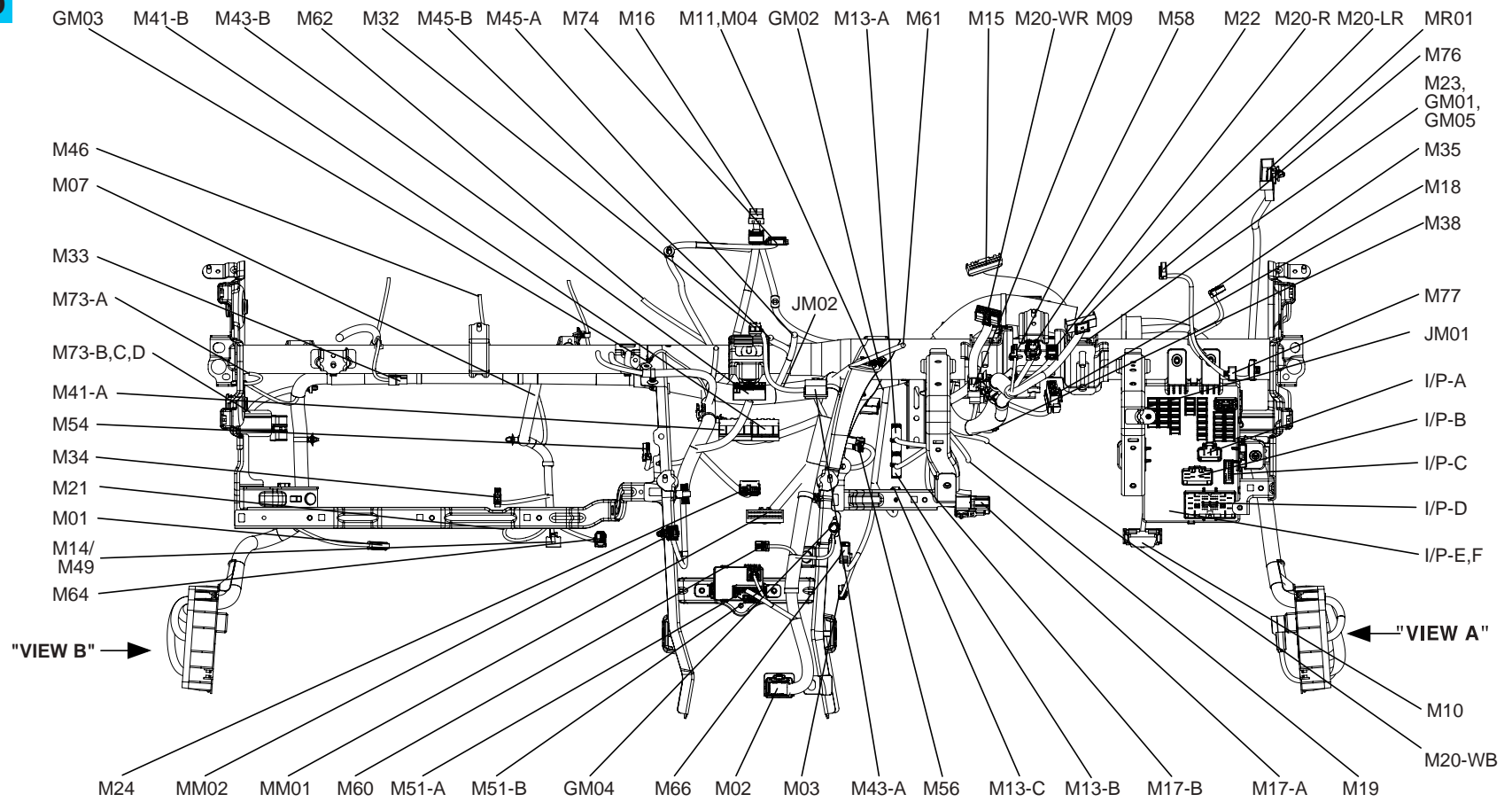
#### CONSOLE EXT. HARNESS

# MAIN HARNESS

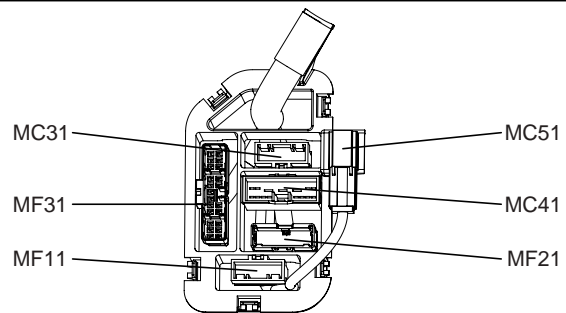
## Main Harness (3)

HL-3

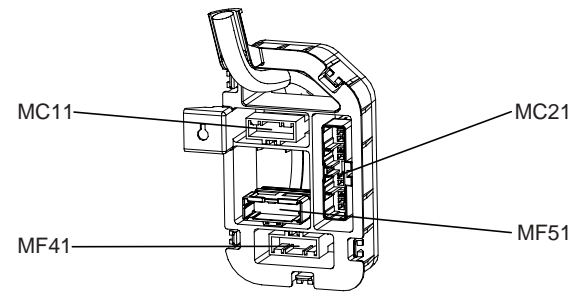
**RHD**



"VIEW A"



"VIEW B"





# MAIN HARNESS

## Main Harness (4)

HL-4

### RHD

#### MAIN HARNESS

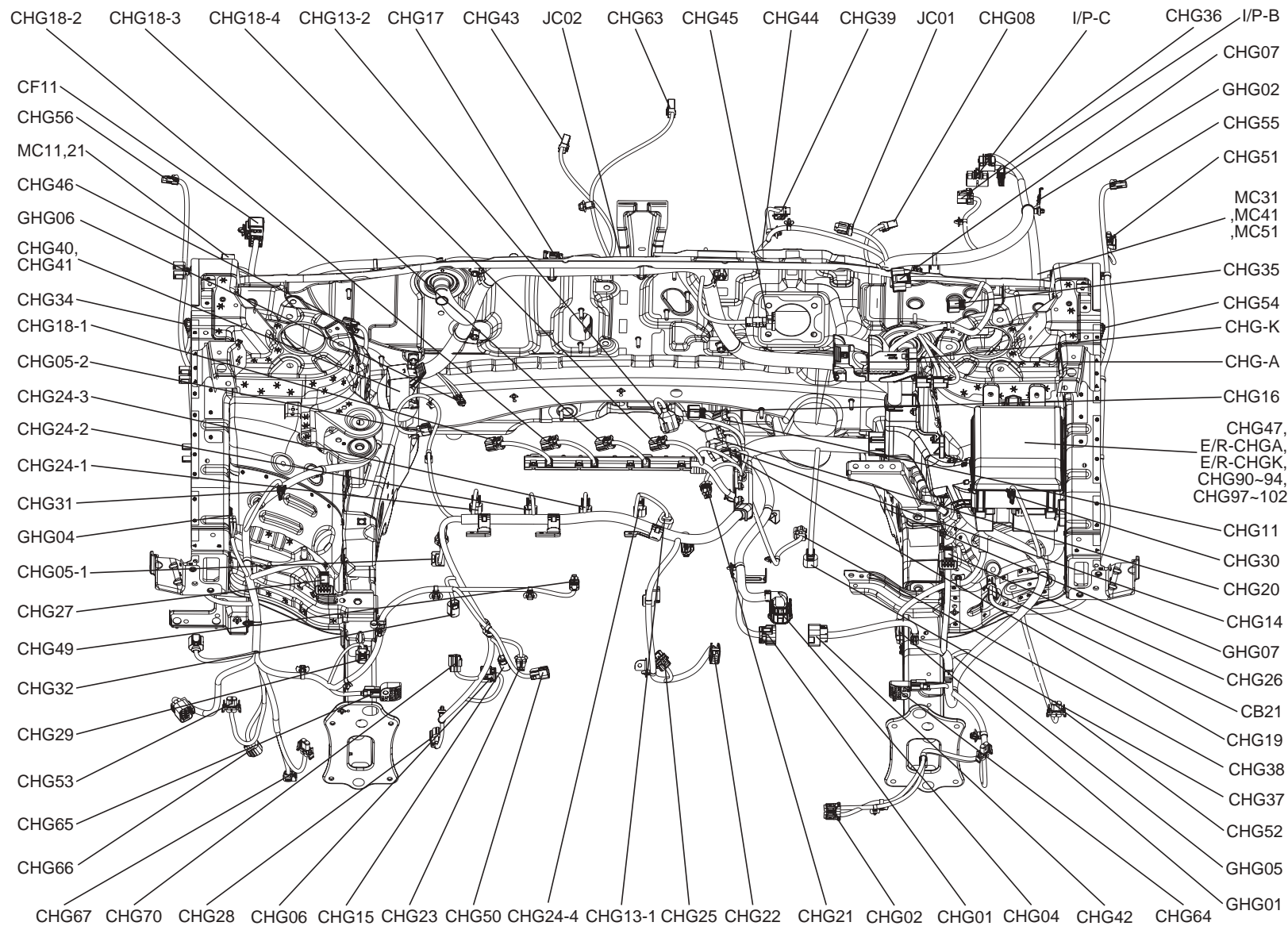
M01	Blower Motor	M35	Head Lamp Leveling Device Switch (RHD)	MC31	Connection With Control Harness
M02	SRS Control Module	M38	Electronic Steering Column Lock (With Smart Key)	MC41	Connection With Control Harness
M03	Evaporator Sensor			MC51	Connection With Control Harness
M04	ICM Relay Box	M39	ODO Trip Switch	MF11	Connection With Floor Harness
M07	Intake Actuator	M41-A	A/C Control Module (Auto)	MF21	Connection With Floor Harness
M09	Ignition Key ILL. & Door Warning Switch (W/O Smart Key)	M41-B	A/C Control Module (Auto)	MF31	Connection With Floor Harness
		M43-A	A/C Control Module (Manual)	MF41	Connection With Floor Harness
M10	Data Link Connector	M43-B	A/C Control Module (Manual)	MF51	Connection With Floor Harness
M11	Mode Actuator	M45-A	Audio	MM01	Connection With CONSOLE EXT. Harness
M13-A	BCM	M45-B	Audio		
M13-B	BCM	M46	Passenger Air Bag	MM02	Connection With FOB EXT. Harness
M13-C	BCM	M49	Blower Resistor	MR01	Connection With ROOF Harness
M14	FET(Field Effect Transistor)	M51-A	PDM Relay Box (With Smart Key)	GM01	Ground
M15	Instrument Cluster	M51-B	PDM Relay Box (With Smart Key)	GM02	Ground
M16	Auto Light & Photo Sensor	M54	RF Receiver (With Smart Key)	GM03	Ground
M17-A	EPS Control Module	M56	Rear Parking Assist Buzzer	GM04	Ground
M17-B	EPS Control Module	M58	Steering Angle Sensor	GM05	Ground
M18	Ignition Switch	M60	Smart Key Antenna #1		
M19	Key Solenoid (W/O Smart Key & A/T)	M61	Start/Stop Button Switch (With Smart Key)		
M20-LR	Multifunction Switch (Light) (RHD)	M62	Telltale Lamp		
M20-R	Multifunction Switch (Remote Control)	M64	Passenger Temperature Actuator (RHD)		
M20-WB	Multifunction Switch (Wiper) (Only Europe)	M66	Driver Temperature Actuator (RHD)	M75	Fob Holder
		M73-A	Smart Key Control Module	MM02	Connection With MAIN Harness
M20-WR	Multifunction Switch (Wiper) (RHD, Except Europe)	M73-B	Smart Key Control Module		
		M73-C	Smart Key Control Module		
M21	Cluster Ionizer (Auto A/C)	M73-D	Smart Key Control Module		
M22	Driver Air Bag	M74	Digital Clock	M81	Front Power Outlet LH
M23	Immobilizer Module (W/O Smart Key)	M76	ODO Trip Switch (RHD)	M82	Front Cigarette Lighter
M24	AUX & USB Jack (W/O A/V Navigation)	M77	Multi Switch	M83	Front Power Outlet RH
M32	Hazard Switch	I/P-E	Connection With I/P Junction Box	M87	Passenger Seat Warmer Switch (RHD)
M33	Glove Box Lamp	I/P-F	Connection With I/P Junction Box	M88	Driver Seat Warmer Switch (RHD)
M34	Glove Box Switch	JM01	Joint Connector	M89	Driver CCS Switch (RHD)
		JM02	Joint Connector	MM01	Connection With MAIN Harness
		MC11	Connection With Control Harness		
		MC21	Connection With Control Harness		

#### FOB EXT. HARNESS

#### CONSOLE EXT. HARNESS

Control Harness (1)

G4KD/G4KE : THETA II 2.0L/2.4L



## CONTROL HARNESS

### Control Harness (2)

HL-6

#### CONTROL HARNESS (G4KD/G4KE : THETA II 2.0L/2.4L)

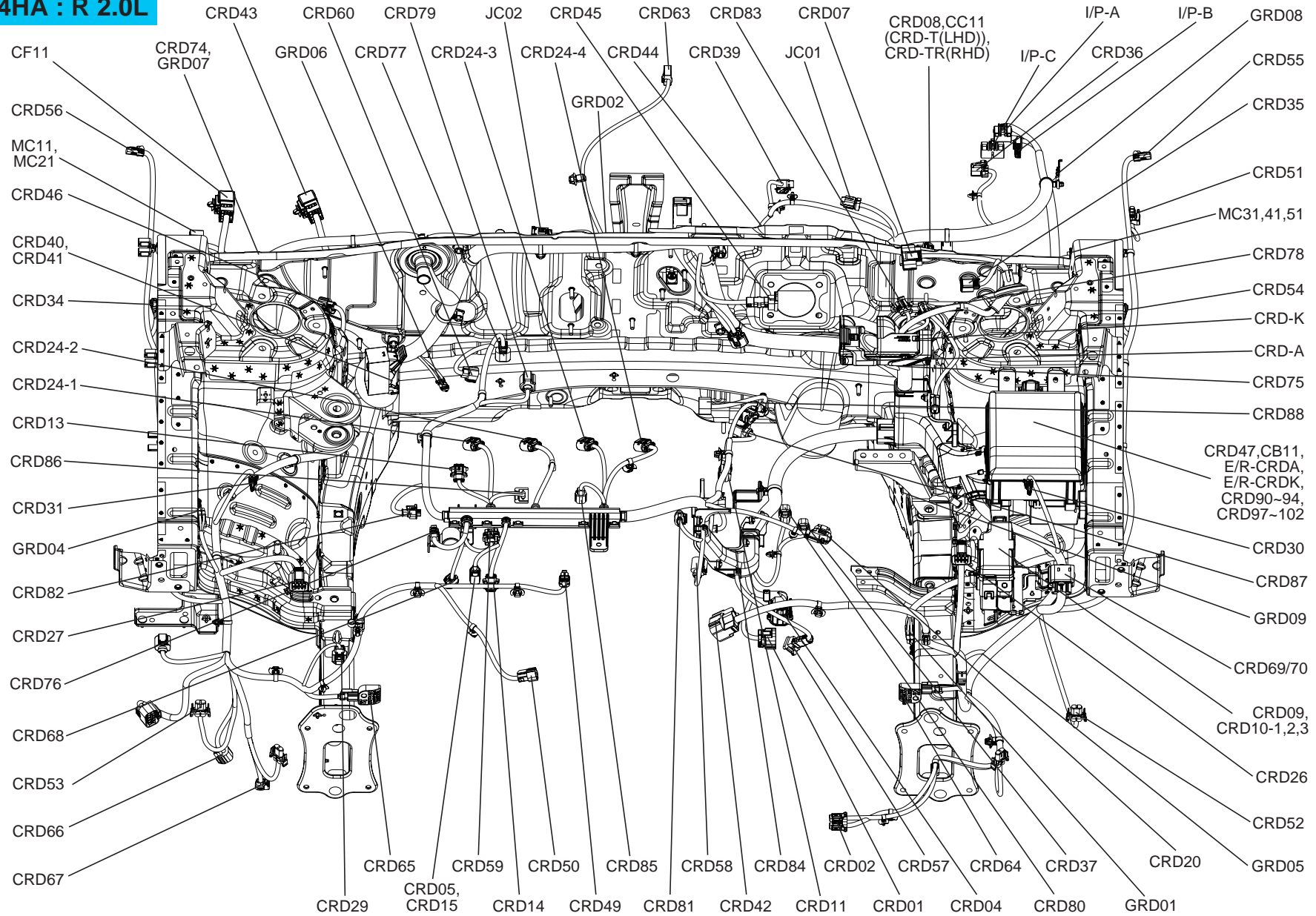
CHG-A	PCM	CHG30	Head Lamp Leveling	CHG70	Variable Intake Manifold Valve
CHG-K	PCM		Device Actuator LH	CHG90	Wiper (Rain Sensor) Relay
CHG01	Transaxle Range Switch	CHG31	Head Lamp Leveling	CHG91	Front Wiper (Low) Relay
CHG02	Ambient Sensor		Device Actuator RH	CHG92	ATM P/N Relay
CHG04	ATM Solenoid Valve	CHG32	Power Steering Switch	CHG93	Front Wiper Deicer Relay
CHG05-1	Oil Control Valve #1	CHG34	Front Wheel Sensor RH	CHG94	Cooling Fan (High) Relay
CHG05-2	Oil Control Valve#2	CHG35	Front Wiper Deicer	CHG97	Rear Defogger Relay
CHG06	Alternator	CHG36	Clutch Switch (M/T)	CHG98	Burglar Alarm Horn Relay
CHG07	Front Wiper Motor	CHG37	Back-Up Lamp Switch	CHG99	Start Relay
CHG08	Ignition Lock Switch (M/T)		(G4KD M/T)	CHG100	Cooling Fan (Low) Relay
CHG11	Engine Coolant Temperature Sensor	CHG38	Back-Up Lamp Switch	CHG101	Horn Relay
CHG13-1	Camshaft Position Sensor #1		(G4KE M/T)	CHG102	Blower Relay
CHG13-2	Camshaft Position Sensor #2	CHG39	Stop Lamp Switch	E/R-CHGA	Connection With EMS Box
CHG14	Crankshaft Position Sensor	CHG40	ESP Control Module	E/R-CHGK	Connection With EMS Box
CHG15	Oil Pressure Switch	CHG41	ABS Control Module	I/P-A	Connection With I/P Junction Box
CHG16	Oxygen Sensor (Up) (W/O Euro V)	CHG42	Cooling Fan Motor	I/P-B	Connection With I/P Junction Box
CHG17	Oxygen Sensor (Down)	CHG43	G-Sensor	I/P-C	Connection With I/P Junction Box
CHG18-1	Ignition Coil #1	CHG44	Accel Pedal Position Sensor	JC01	Joint Connector
CHG18-2	Ignition Coil #2	CHG45	Brake Fluid Level Sensor	JC02	Joint Connector
CHG18-3	Ignition Coil #3	CHG46	Burglar Alarm Horn	CB21	Connection With Battery Harness
CHG18-4	Ignition Coil #4	CHG47	Multipurpose Check	CF11	Connection With Floor Harness
CHG19	Condenser		Connector	MC11	Connection With Main Harness
CHG20	Oxygen Sensor (Up) (With Euro V)	CHG49	Hood Switch	MC21	Connection With Main Harness
CHG21	Canister Purge Control Solenoid Valve	CHG50	Horn	MC31	Connection With Main Harness
CHG22	ETC Motor & Throttle Position Sensor	CHG51	External Buzzer	MC41	Connection With Main Harness
CHG23	Knock Sensor	CHG52	Front Fog Lamp LH	MC51	Connection With Main Harness
CHG24-1	Injector #1	CHG53	Front Fog Lamp RH	GHG01	Ground
CHG24-2	Injector #2	CHG54	Front Wheel Sensor LH	GHG02	Ground
CHG24-3	Injector #3	CHG55	Side Repeater Lamp LH	GHG04	Ground
CHG24-4	Injector #4	CHG56	Side Repeater Lamp RH	GHG05	Ground
CHG25	MAP Sensor	CHG63	ATM Shift Lever	GHG06	Ground
CHG26	Head Lamp LH	CHG64	Driver Front Impact Sensor	GHG07	Ground
CHG27	Head Lamp RH	CHG65	Passenger Front Impact Sensor		
CHG28	A/C Compressor	CHG66	Front Washer Motor		
CHG29	A/C Pressure Transducer	CHG67	Rear Washer Motor		

# CONTROL HARNESS

## Control Harness (3)

HL-7

**D4HA : R 2.0L**



## CONTROL HARNESS

### Control Harness (4)

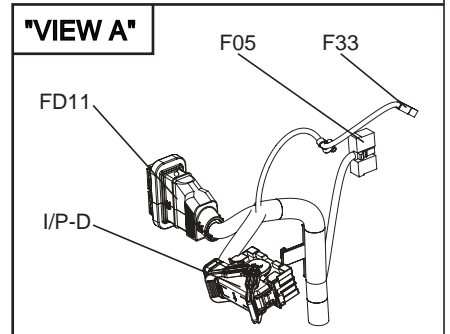
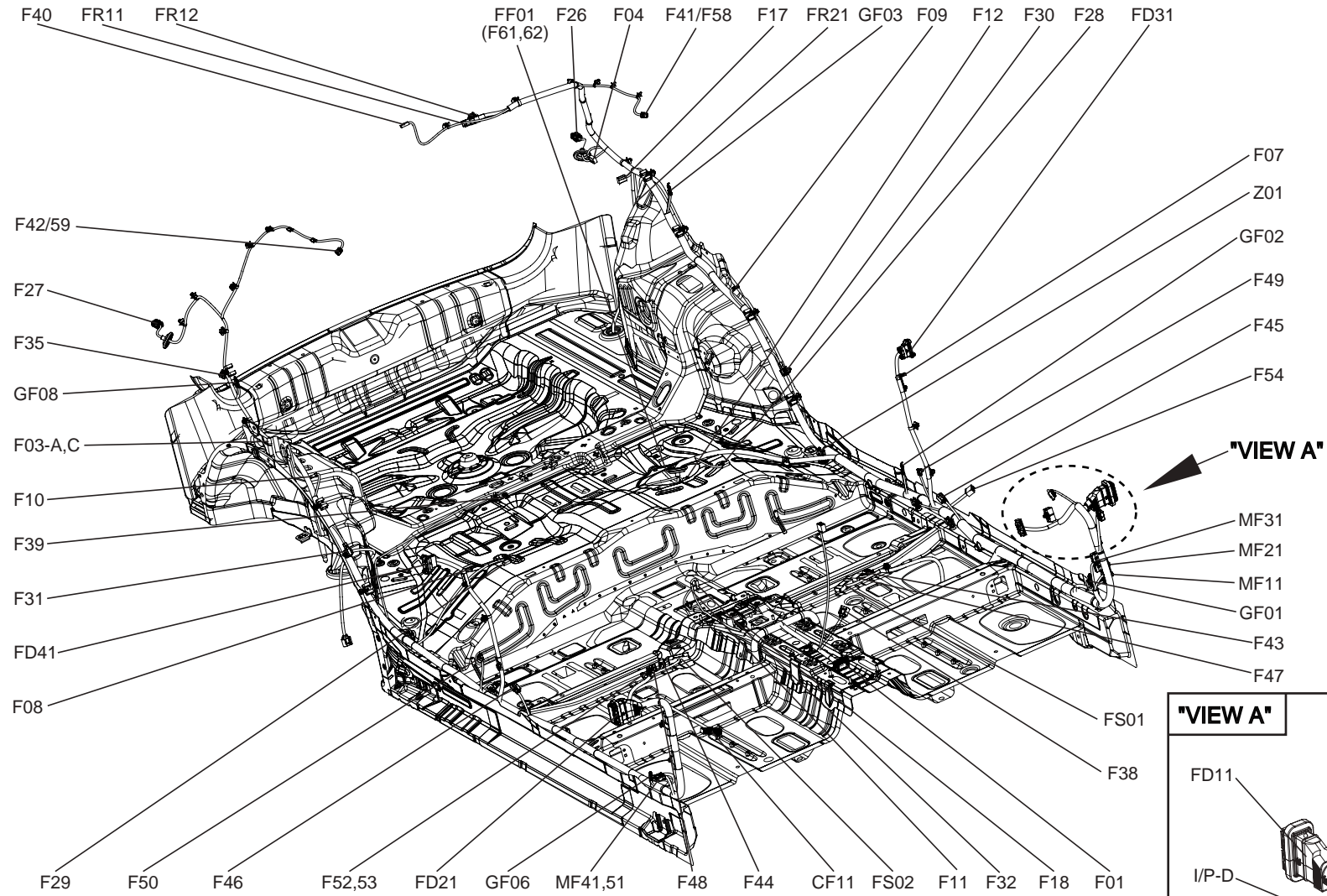
HL-8

#### CONTROL HARNESS (D4HA : R 2.0L)

CRD-A	ECM	CRD45	Brake Fluid Level Sensor	CRD91	Front Wiper (Low) Relay
CRD-K	ECM	CRD46	Burglar Alarm Horn	CRD92	ATM P/N Relay
CRD-TR	TCM (RHD)	CRD47	Multipurpose Check Connector	CRD93	Front Wiper Deicer Relay
CRD01	Transaxle Range Switch	CRD49	Hood Switch	CRD94	Cooling Fan (High) Relay
CRD02	Ambient Sensor	CRD50	Horn	CRD97	Rear Defogger Relay
CRD04	ATM Solenoid Valve	CRD51	External Buzzer	CRD98	Burglar Alarm Horn Relay
CRD05	Oil Level Sensor	CRD52	Front Fog Lamp LH	CRD99	Start Relay
CRD07	Front Wiper Motor	CRD53	Front Fog Lamp RH	CRD100	Cooling Fan (Low) Relay
CRD08	Ignition Lock Switch (M/T)	CRD54	Front Wheel Sensor LH	CRD101	Horn Relay
CRD09	Fuel Filter Heater Relay	CRD55	Side Repeater Lamp LH	CRD102	Blower Relay
CRD10-1	PTC Heater Relay #1	CRD56	Side Repeater Lamp RH	E/R-CRDA	Connection With EMS Box
CRD10-2	PTC Heater Relay #2	CRD57	Intake Temperature Sensor	E/R-CRDK	Connection With EMS Box
CRD10-3	PTC Heater Relay #3	CRD58	Air Control Valve	I/P-A	Connection With I/P Junction Box
CRD11	Engine Coolant Temperature Sensor	CRD59	Boost Pressure Sensor	I/P-B	Connection With I/P Junction Box
CRD13	Camshaft Position Sensor	CRD60	Differential Pressure Sensor	I/P-C	Connection With I/P Junction Box
CRD14	Crankshaft Position Sensor	CRD63	ATM Shift Lever	JC01	Joint Connector
CRD15	Oil pressure switch	CRD64	Driver Front Impact Sensor	JC02	Joint Connector
CRD20	Mass air flow sensor	CRD65	Passenger Front Impact Sensor	CB11	Connection With Battery Harness
CRD24-1	Injector #1	CRD66	Front Washer Motor	CC11	Connection With TCM Harness
CRD24-2	Injector #2	CRD67	Rear Washer Motor	CF11	Connection With Floor Harness
CRD24-3	Injector #3	CRD68	Fuel Pressure Regulating Valve	MC11	Connection With Main Harness
CRD24-4	Injector #4	CRD69	Glow Relay Unit (M/T & Euro V)	MC21	Connection With Main Harness
CRD26	Head Lamp LH	CRD70	Glow Relay Unit (A/T or M/T & W/O Euro V)	MC31	Connection With Main Harness
CRD27	Head Lamp RH	CRD74	PTC Heater	MC41	Connection With Main Harness
CRD29	A/C Pressure Transducer	CRD75	Fuel Filter Heater	MC51	Connection With Main Harness
CRD30	Head Lamp Leveling Device Actuator LH	CRD76	Glow Plug	GRD01	Ground
CRD31	Head Lamp Leveling Device Actuator RH	CRD77	Exhaust Gas Temperature Sensor	GRD02	Ground
CRD34	Front Wheel Sensor RH	CRD78	Fuel Filter Warning Sensor	GRD04	Ground
CRD35	Front Wiper Deicer	CRD79	Lambda Sensor	GRD05	Ground
CRD36	Clutch Switch (M/T)	CRD80	Neutral Switch (M/T)	GRD06	Ground
CRD37	Back-Up Lamp Switch (M/T)	CRD81	Rail Pressure Regulator Valve	GRD07	Ground
CRD39	Stop Lamp Switch	CRD82	Rail Pressure Sensor	GRD08	Ground
CRD40	ESP Control Module	CRD83	Thermo Switch	GRD09	Ground
CRD41	ABS Control Module	CRD84	Variable Swirl Control Actuator		
CRD42	Cooling Fan Motor	CRD85	Fuel Temperature Sensor		
CRD43	G-Sensor	CRD86	EGR Cooling Bypass Solenoid Valve	<b>TCU HARNESS</b>	
CRD44	Accel Pedal Position Sensor	CRD87	EGR Actuator	CRD-T	TCM
		CRD88	Electrical VGT Actuator	CC11	Connection With CONTROL Harness
		CRD90	Wiper (Rain Sensor) Relay		

Floor Harness (1)

HL-9



## FLOOR HARNESS

### Floor Harness (2)

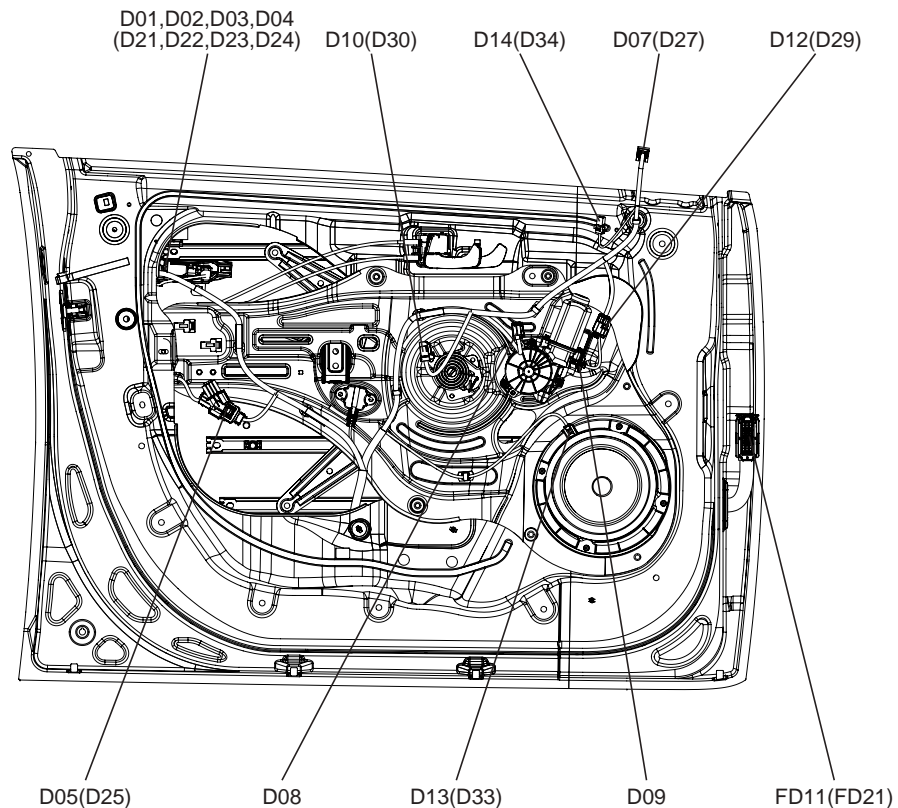
HL-10

#### FLOOR HARNESS

F01	SRS Control Module	F52	Seat Belt Reminder Sensor (Australia)
F03-A	AMP	F53	Seat Belt Reminder Sensor (Europe)
F03-C	AMP	F54	Driver Seat Belt Pretensioner Anchor
F04	Luggage Lamp	F58	Driver Curtain Air Bag (With Rollover Sensor)
F05	4WD ECM	F59	Passenger Curtain Air Bag (With Rollover Sensor)
F07	Driver Door Switch	I/P-D	Connection with I/P JUNCTION BOX
F08	Passenger Door Switch	CF11	Connection with CONTROL harness
F09	Rear Door Switch LH	FD11	Connection with DRIVER DOOR harness
F10	Rear Door Switch RH	FD21	Connection with PASSENGER DOOR harness
F11	Smart Key Antenna #2	FD31	Connection with REAR DOOR LH harness
F12	Fuel Sender & Fuel Pump Motor	FD41	Connection with REAR DOOR RH harness
F17	Rear Power Outlet	FF01	Connection with 4WD EXT. harness
F18	Yaw Rate Sensor	FR11	Connection With Tail Gate Harness
F26	Rear Combination Lamp (Out) LH	FR12	Connection With Tail Gate Harness
F27	Rear Combination Lamp (Out) RH	FR21	Connection With Bumper Harness
F28	Rear Seat Warmer LH	FS01	Connection with DRIVER SEAT harness
F29	Rear Seat Warmer RH	FS02	Connection with PASSENGER SEAT harness
F30	Rear Wheel Sensor LH	MF11	Connection with MAIN harness
F31	Rear Wheel Sensor RH	MF21	Connection with MAIN harness
F32	Hand Parking Brake Switch(Hand Type)	MF31	Connection with MAIN harness
F33	Foot Parking Brake Switch(Foot Type)	MF41	Connection with MAIN harness
F35	Sub Woofer Speaker	MF51	Connection with MAIN harness
F38	ATM Shift Lever Ill.	GF01	Ground
F39	Smart Key Antenna #3	GF02	Ground
F40	Roof Antenna	GF03	Ground
F41	Driver Curtain Air Bag	GF06	Ground
F42	Passenger Curtain Air Bag	GF08	Ground
F43	Driver Side Air Bag	Z01	Diode
F44	Passenger Side Air Bag		
F45	Driver Side Impact Sensor		
F46	Passenger Side Impact Sensor		
F47	Driver Seat Belt Buckle Switch		
F48	Passenger Seat Belt Buckle Switch		
F49	Driver Seat Belt Pretensioner		
F50	Passenger Seat Belt Pretensioner		

#### 4WD EXT. HARNESS

F61	4WD Motor
F62	4WD Pressure Sensor
FF01	Connection with FLOOR Harness



**DRIVER DOOR HARNESS**

- D01 Driver Door Lock Actuator (LHD, W/O Dead Lock)
- D02 Driver Door Lock Actuator (LHD, With Dead Lock)
- D03 Driver Door Lock Actuator (RHD, With Dead Lock)
- D04 Driver Door Lock Actuator (RHD, W/O Dead Lock)
- D05 Driver Smart Key Outside Handle
- D07 Driver Power Outside Mirror
- D08 Power Outside Mirror Switch
- D09 Driver Power Window Motor
- D10 Power Window Main Switch
- D12 Driver Safety Power Window Module (With Safety)
- D13 Driver Door Speaker
- D14 Driver Door Tweeter Speaker
- FD11 Connection With Floor Harness

**PASSENGER DOOR HARNESS**

- D21 Passenger Door Lock Actuator (LHD, W/O Dead Lock)
- D22 Passenger Door Lock Actuator (LHD, With Dead Lock)
- D23 Passenger Door Lock Actuator (RHD, With Dead Lock)
- D24 Passenger Door Lock Actuator (RHD, W/O Dead Lock)
- D25 Passenger Smart Key Outside Handle
- D27 Passenger Power Outside Mirror
- D29 Passenger Power Window Motor
- D30 Passenger Power Window Switch
- D33 Passenger Door Speaker
- D34 Passenger Door Tweeter Speaker
- FD21 Connection With Floor Harness

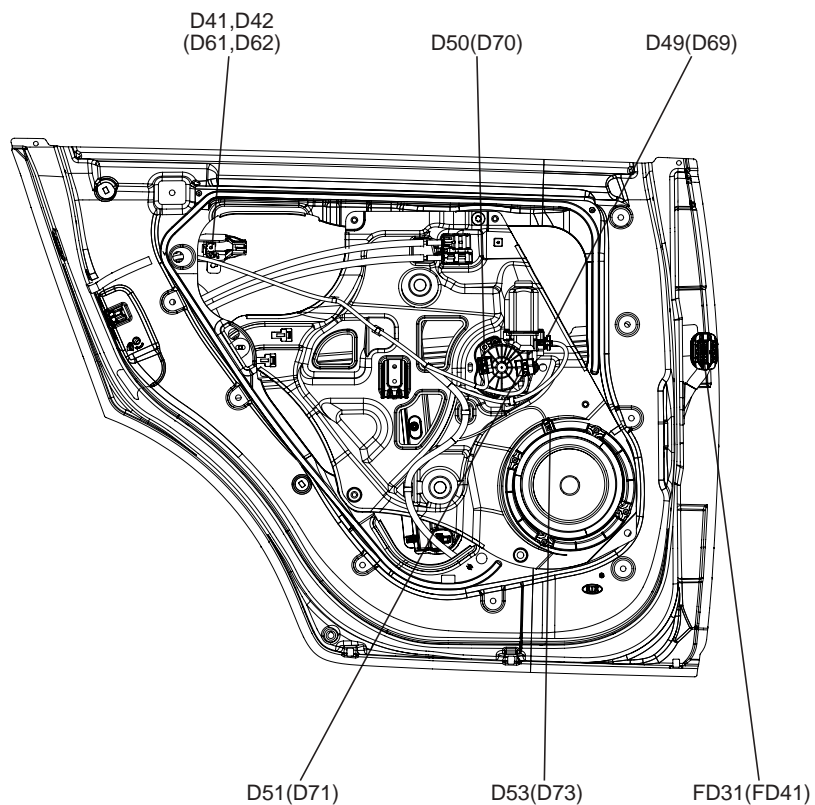
( ): Passenger



# DOOR HARNESS

## Door Harness (2)

HL-12



### REAR DOOR LH HARNESS

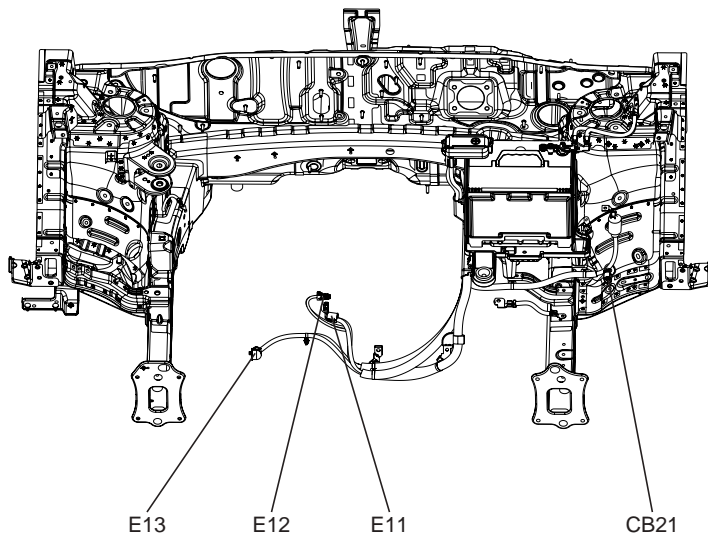
- D41 Rear Door Lock Actuator LH (W/O Dead Lock)
- D42 Rear Door Lock Actuator LH (With Dead Lock)
- D49 Rear Power Window Motor LH
- D50 Rear Power Window Switch LH
- D51 Rear Seat Warmer Switch LH
- D53 Rear Door Speaker LH
- FD31 Connection With Floor Harness

### REAR DOOR RH HARNESS

- D61 Rear Door Lock Actuator RH (W/O Dead Lock)
- D62 Rear Door Lock Actuator RH (With Dead Lock)
- D69 Rear Power Window Motor RH
- D70 Rear Power Window Switch RH
- D71 Rear Seat Warmer Switch RH
- D73 Rear Door Speaker RH
- FD41 Connection With Floor Harness

( ): RH

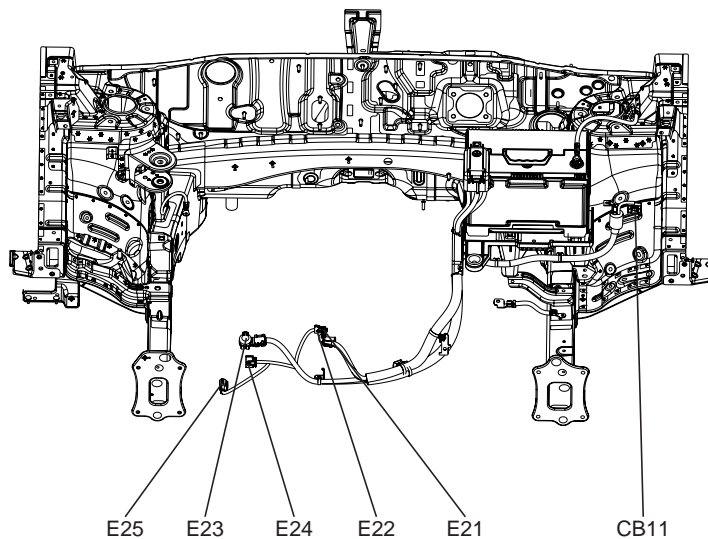
**G4KD/G4KE : THETA II 2.0L/2.4L**



**BATTERY HARNESS (G4KD/G4KE : THETA II 2.0L/2.4L)**

- E11 Start Motor
- E12 Start Solenoid
- E13 Alternator
- CB21 Connection with CONTROL harness

**D4HA : R 2.0L**



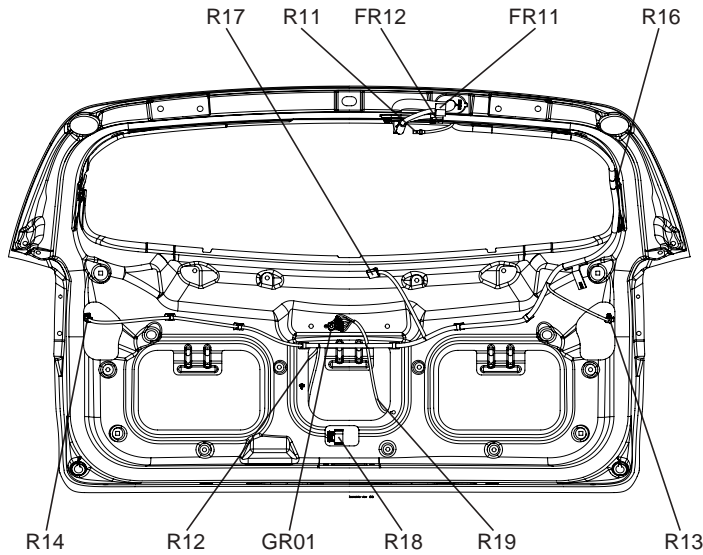
**BATTERY HARNESS (D4HA : R 2.0L)**

- E21 Start Motor
- E22 Start Solenoid
- E23 Alternator
- E24 Alternator
- E25 A/C Compressor
- CB11 Connection with CONTROL harness

Tail Gate & Rear Bumper Harness (1)

HL-14

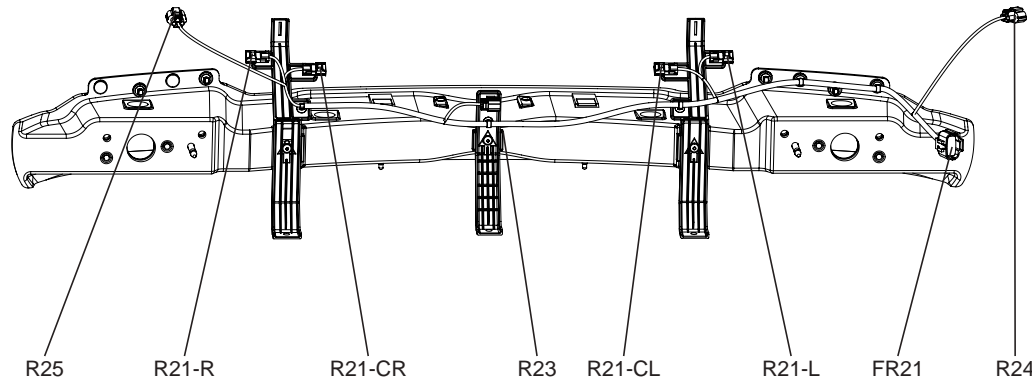
**TAIL GATE HARNESS**



**TAIL GATE HARNESS**

- R11 High-Mounted Stop Lamp
- R12 License Lamp (Tail Gate Handle Switch)
- R13 Rear combination lamp (In) LH
- R14 Rear combination lamp (In) RH
- R16 Rear Defogger (+)
- R17 Rear Wiper Motor
- R18 Tail Gate Latch
- R19 Rear View Camera
- FR11 Connection with FLOOR Harness
- FR12 Connection with FLOOR Harness
- GR01 Ground

**REAR BUMPER HARNESS**

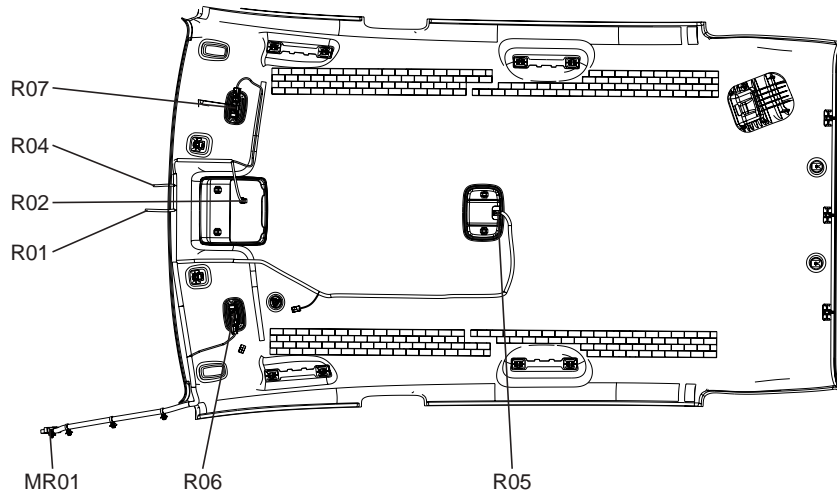


**REAR BUMPER HARNESS**

- R21-L Rear Parking Assist Sensor LH
- R21-CL Rear Parking Assist Sensor Center LH
- R21-R Rear Parking Assist Sensor RH
- R21-CR Rear Parking Assist Sensor Center RH
- R23 Smart Key Bumper antenna
- R24 Rear Fog Lamp LH
- R25 Rear Fog Lamp RH
- FR21 Connection with FLOOR Harness

Roof & Sunroof EXT. Harness (1)

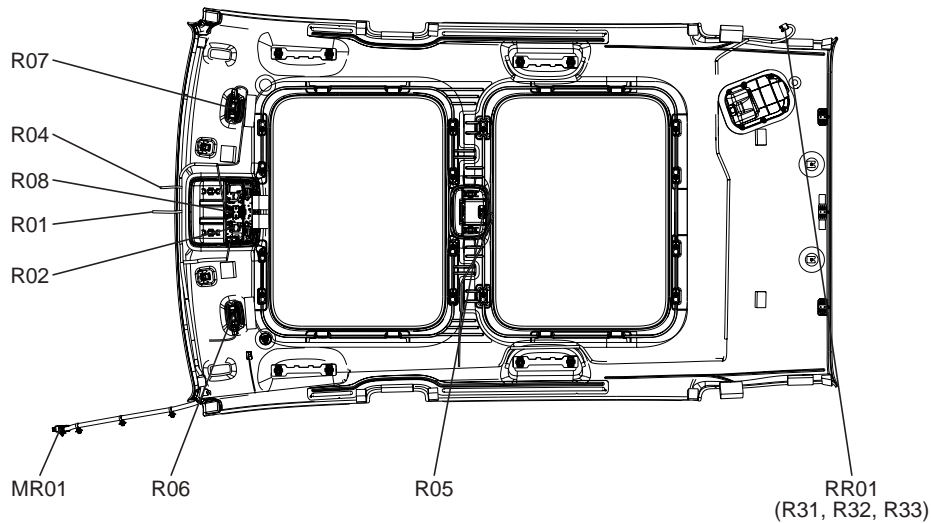
W/O Sunroof



ROOF HARNESS

- R01 Electro chromic mirror
- R02 Map Lamp Switch
- R04 Rain Sensor
- R05 Room Lamp
- R06 Driver Vanity Lamp
- R07 Passenger Vanity Lamp
- R08 Sunroof Switch
- MR01 Connection With MAIN Harness
- RR01 Connection With SUNROOF EXT. Harness

With Sunroof



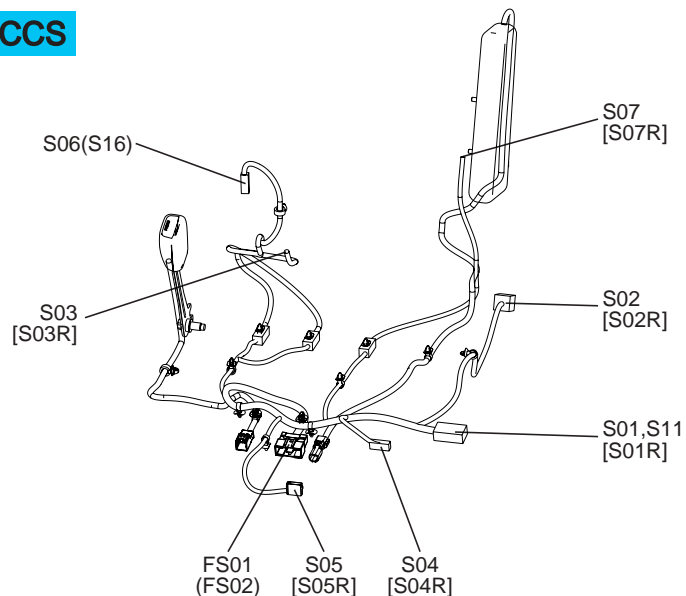
SUNROOF EXT. HARNESS

- R31 Sunroof Motor
- R32 Sunroof Control Module
- R33 Sunroof Push Switch
- RR01 Connection With ROOF Harness

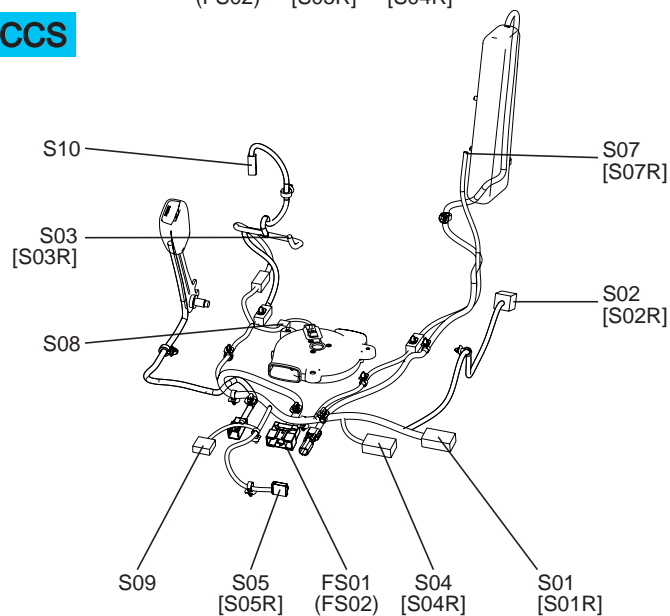
Seat Harness (1)

HL-16

W/O CCS



With CCS



[ ] : RHD  
 ( ) : Passenger

DRIVER SEAT HARNESS

- S01 Driver Seat Manual Switch (LHD)
- S01R Driver Seat Manual Switch (RHD)
- S02 Driver Reclining Limit Switch (LHD)
- S02R Driver Reclining Limit Switch (RHD)
- S03 Driver Reclining Motor (LHD)
- S03R Driver Reclining Motor (RHD)
- S04 Front Height Motor (LHD)
- S04R Front Height Motor (RHD)
- S05 Driver Slide Motor (LHD)
- S05R Driver Slide Motor (RHD)
- S06 Front Cushion Warmer LH
- S07 Driver Lumbar Support Switch (LHD)
- S07R Driver Lumbar Support Switch (RHD)
- S08 Driver CCS Blower motor (With CCS)
- S09 Driver CCS Control module
- S10 Driver CCS Cushion Warmer (With CCS)
- S11 Driver Seat Manual Switch
- FS01 Connection with FLOOR Harness

PASSENGER SEAT HARNESS

- S16 Front Cushion Warmer RH
- FS02 Connection with FLOOR Harness