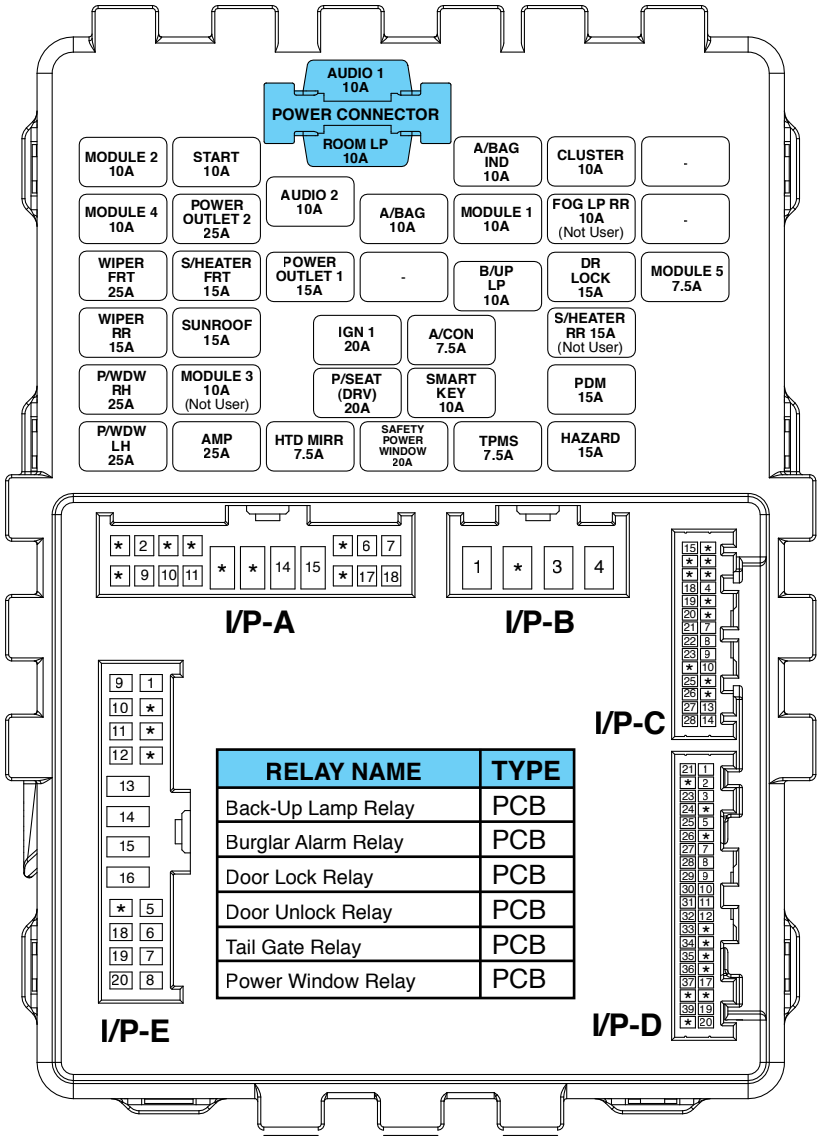
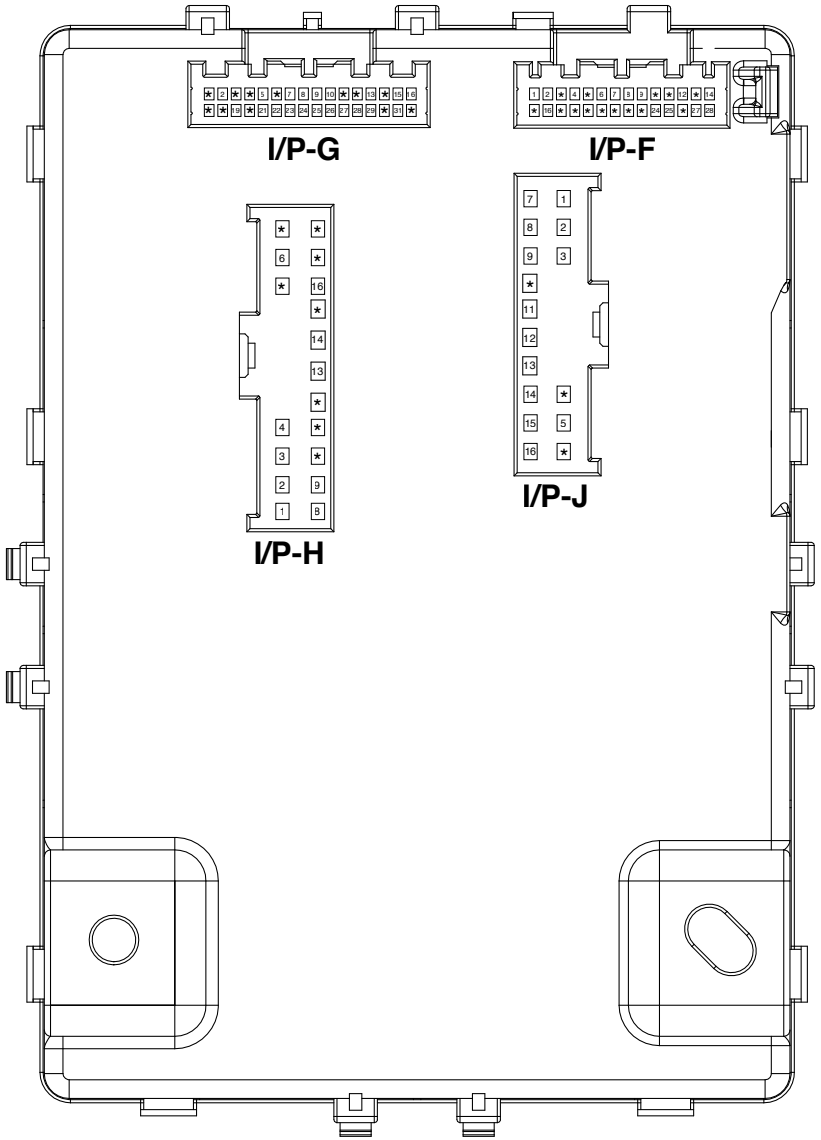
I/P JUNCTION BOX



RELAY NAME	TYPE
Back-Up Lamp Relay	PCB
Burglar Alarm Relay	PCB
Door Lock Relay	PCB
Door Unlock Relay	PCB
Tail Gate Relay	PCB
Power Window Relay	PCB



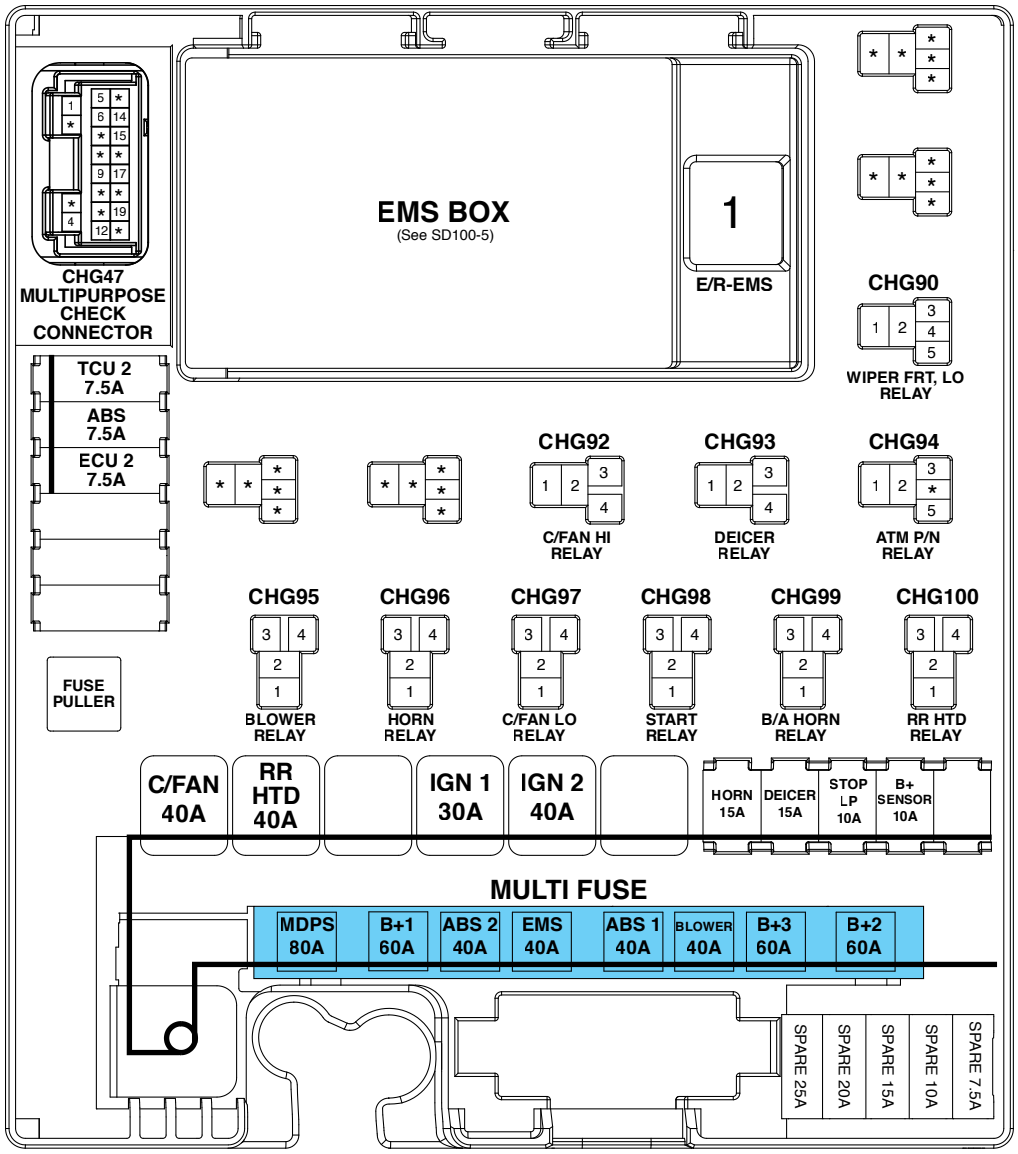
※USE THE DESIGNATED FUSE AND RELAY ONLY

Circuit (I/P Junction Box)

Fuse Name		(A)	Circuit Protected
POWER CONNECTOR	AUDIO 1	10A	Audio, A/V & Navigation Head Module
	ROOM LP	10A	BCM, Auto Light & Photo Sensor, Room Lamp, Driver/Passenger Vanity Lamp Switch, Date Link Connector, Door warning Switch, RF Receiver A/C Control Module, Luggage Lamp, IPS Control Module, Instrument Cluster (IND.), Map Lamp, Electro Chromic Mirror
MODULE 2		10A	IPS Control Module, BCM, Electro Chromic Mirror, PDM
START		10A	W/O Smart Key : Burglar Alarm Relay, E/R Fuse & Relay Box(Start Relay) With Smart Key : E/R Fuse & Relay Box(ATM P/N Relay), PCM
A/BAG IND		10A	Instrument Cluster (Air Bag IND.)
CLUSTER		10A	Audio, Console Switch, Instrument Cluster(IND.), BCM, Alternator, A/V & Navigation Head Module, Smart Key Control Module
MODULE 4		10A	E/R Fuse & Relay Box(Blower Relay), Cluster Ionizer, A/C Control Module, Sunroof Motor
POWER OUTLET 2		25A	Cigarette Lighter & Front Power Outlet, Rear Power Outlet
AUDIO 2		10A	Smart Key Control Module, Power Outside Mirror Switch, AMP, BCM, PDM, A/V & Navigation Head Module, Audio, SRS Control Module
A/BAG		10A	Passenger Occupant Detection Sensor, Telltale Lamp
MODULE 1		10A	IPS Control Module, Tire Pressure Monitoring Module, EPS Control Module, ESC OFF Switch DBC Switch, ICM Relay Box(DBC Relay), Multifunction Switch(Light), Stop Lamp Switch, 4WD ECM
FOG LP RR		10A	-
WIPER FRT		25A	Front Wiper Motor, Multifunction Switch(Wiper), E/R Fuse & Relay Box(Front Wiper Relay)
S/HEATER FRT		15A	Console Switch
POWER OUTLET 1		15A	Cigarette Lighter & Front Power Outlet
B/UP LP		10A	B/UP LP Relay
DR LOCK		15A	Door Lock Relay, Tail Gate Relay, Door Unlock Relay
MODULE 5		7.5A	BCM, Smart Key Control Module, PDM
WIPER RR		15A	ICM Relay Box (Rear Wiper Relay), Rear Wiper Motor, Multifunction Switch (Wiper)
SUNROOF		15A	Sunroof Motor
IGN 1		20A	E/R Fuse & Relay Box(ECU 2 7.5A, ABS 7.5A, TCU 2 7.5A)
A/CON		7.5A	A/C Control Module
S/HEATER RR		15A	-
P/WDW RH		25A	Power Window Main Switch, Passenger Power Window Switch, Rear Power Window Switch RH
MODULE 3		10A	-
P/SEAT (DRV)		20A	Driver Seat Manual Switch
SMART KEY		10A	PDM, Smart Key Control Module, Start Stop Button Switch, FOB Holder, Key Solenoid
PDM		15A	PDM
P/WDW LH		25A	Power Window Main Switch, Rear Power Window Switch LH
AMP		25A	AMP
HTD MIRR		7.5A	Rear Defogger Switch, Rear Defogger (+), Driver/Passenger Power Outside Mirror
SAFETY POWER WINDOW		20A	Driver Safety Power Window Module
TPMS		7.5A	ATM Shift Lever, 4WD ECM, Tire Pressure Monitoring Module
HAZARD		15A	ICM Relay Box(Flasher Sound Relay), BCM

※ USE THE DESIGNATED FUSE AND RELAY ONLY

E/R Fuse & Relay Box



NO.	RELAY NAME	TYPE
CHG90	Wiper FRT, LO Relay	Plug Micro(5P)
CHG92	C/FAN HI Relay	Plug Micro(4P)
CHG93	Deicer Relay	Plug Micro(4P)
CHG94	ATM P/N Relay	Plug Micro(5P)
CHG95	Blower Relay	Plug Micro(4P)
CHG96	Horn Relay	Plug Micro(4P)
CHG97	C/FAN LO Relay	Plug Micro(4P)
CHG98	Start Relay	Plug Micro(4P)
CHG99	B/A Horn Relay	Plug Micro(4P)
CHG100	RR HTD Relay	Plug Micro(4P)

※ USE THE DESIGNATED FUSE AND RELAY ONLY

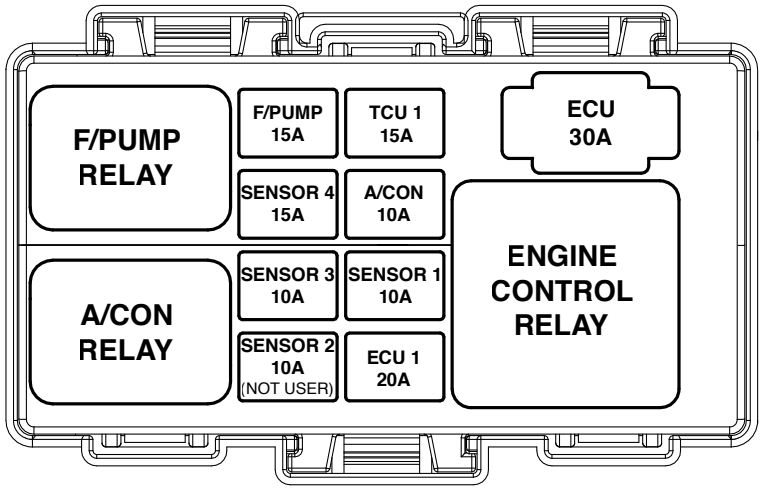
Circuit (E/R Fuse & Relay Box)

Fuse Name		(A)	Circuit Protected
MULTI FUSE	MDPS	80A	EPS Control Module
	B+1	60A	I/P Junction Box(PDM 15A, DR LOCK 15A, HAZARD 15A, IPS 4, IPS 5, IPS 6, IPS 7)
	ABS 2	40A	Multipurpose Check Connector, ESC Module
	EMS	40A	EMS Box(TCU 1 15A, ECU 30A, A/CON 10A, F/PUMP 15A)
	ABS 1	40A	Multipurpose Check Connector, ESC Module
	BLOWER	40A	Blower Relay
	B+3	60A	I/P Junction Box(P/SEAT(DRV) 20A, SAFETY POWER WINDOW 20A, SMART KEY 10A, TPMS 7.5A Power Connector(AUDIO 1 10A, ROOM LP 10A))
	B+2	60A	I/P Junction Box(Power Window Relay, SUNROOF 15A, AMP 25A, IPS 0, IPS 1, IPS 2, IPS 3)
FUSE	C/FAN	40A	E/R Fuse & Relay Box(C/FAN LO Relay, C/FAN HI Relay)
	RR HTD	40A	E/R Fuse & Relay Box(RR HTD Relay)
	IGN 1	30A	PDM Relay Box(IGN1 Relay), Ignition Switch
	IGN 2	40A	E/R Fuse & Relay Box(Start Relay), PDM Relay Box(IGN2 Relay), Ignition Switch
	HORN	15A	E/R Fuse & Relay Box(Horn Relay, B/A Horn Relay)
	DEICER	15A	E/R Fuse & Relay Box(Deicer Relay, RR HTD Relay)
	STOP LP	10A	Stop Lamp Switch, ICM Relay Box(DBC Relay)
	B+ SENSOR	10A	Battery Sensor
	ECU 2	7.5A	E/R Fuse & Relay Box(ATM P/N Relay), Mass Air Flow Sensor, PCM
	ABS	7.5A	Multipurpose Check Connector, ESC Module
	TCU 2	7.5A	Transaxle Range Switch(A/T), Vehicle Speed Sensor(M/T)

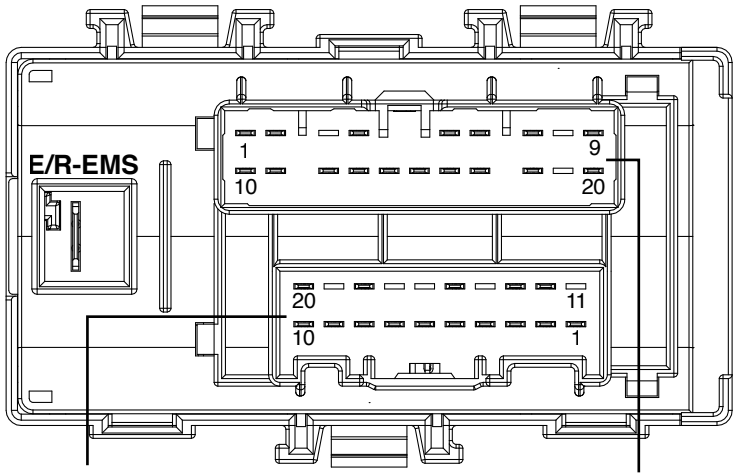
※ USE THE DESIGNATED FUSE AND RELAY ONLY

EMS BOX

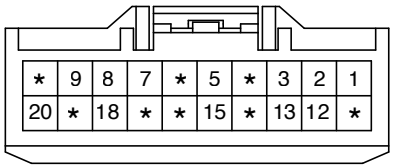
Front View



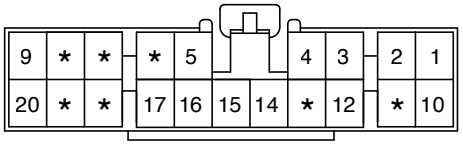
Rear View



E/R-CHGA



E/R-CHGK



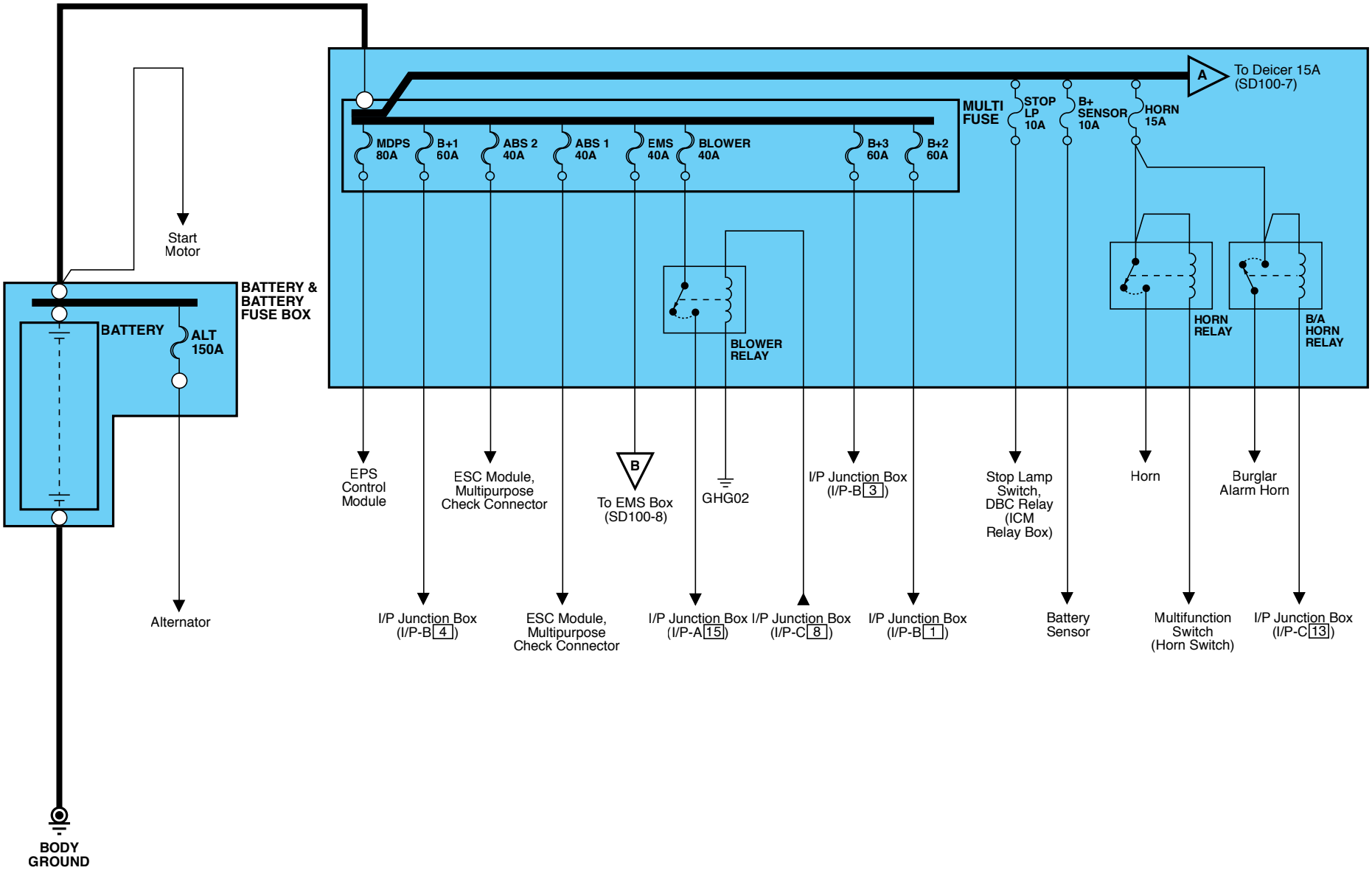
RELAY NAME	TYPE
F/PUMP Relay	Plug Micro
A/CON Relay	Plug Micro
Engine Control Relay	Plug Mini

Circuit (EMS Box)

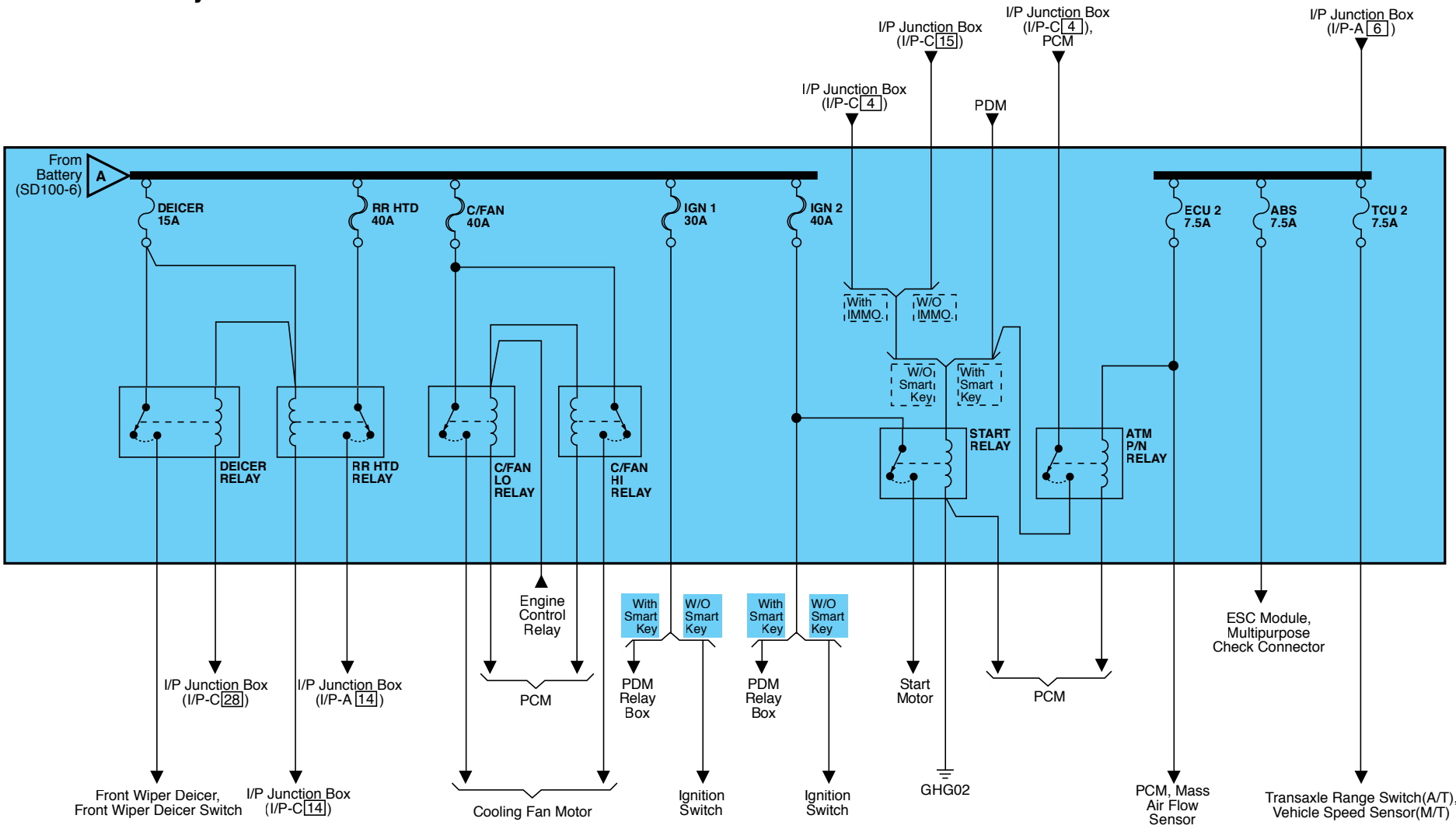
Fuse Name	(A)	Circuit Protected
F/PUMP	15A	EMS Box(F/PUMP Relay)
SENSOR 4	15A	E/R Fuse & Relay Box(C/FAN HI, LO Relay), EMS Box(F/PUMP Relay), Oxygen Sensor (UP, DOWN), PCM
SENSOR 3	10A	EMS Box(A/CON Relay), Injector(#1, #2, #3, #4)
SENSOR 2	10A	-
TCU 1	15A	PCM
A/CON	10A	EMS Box(A/CON Relay)
SENSOR 1	10A	Immobilizer Module, Crankshaft Position Sensor, Camshaft Position Sensor #1/2, Oil Control Valve #1/2 Canister Purge Control Solenoid Valve, Variable Intake Manifold Valve, Canister Close Valve
ECU 1	20A	Ignition Coil (#1, #2, #3, #4), Condenser
ECU	30A	EMS Box(Engine Control Relay)

※ USE THE DESIGNATED FUSE AND RELAY ONLY

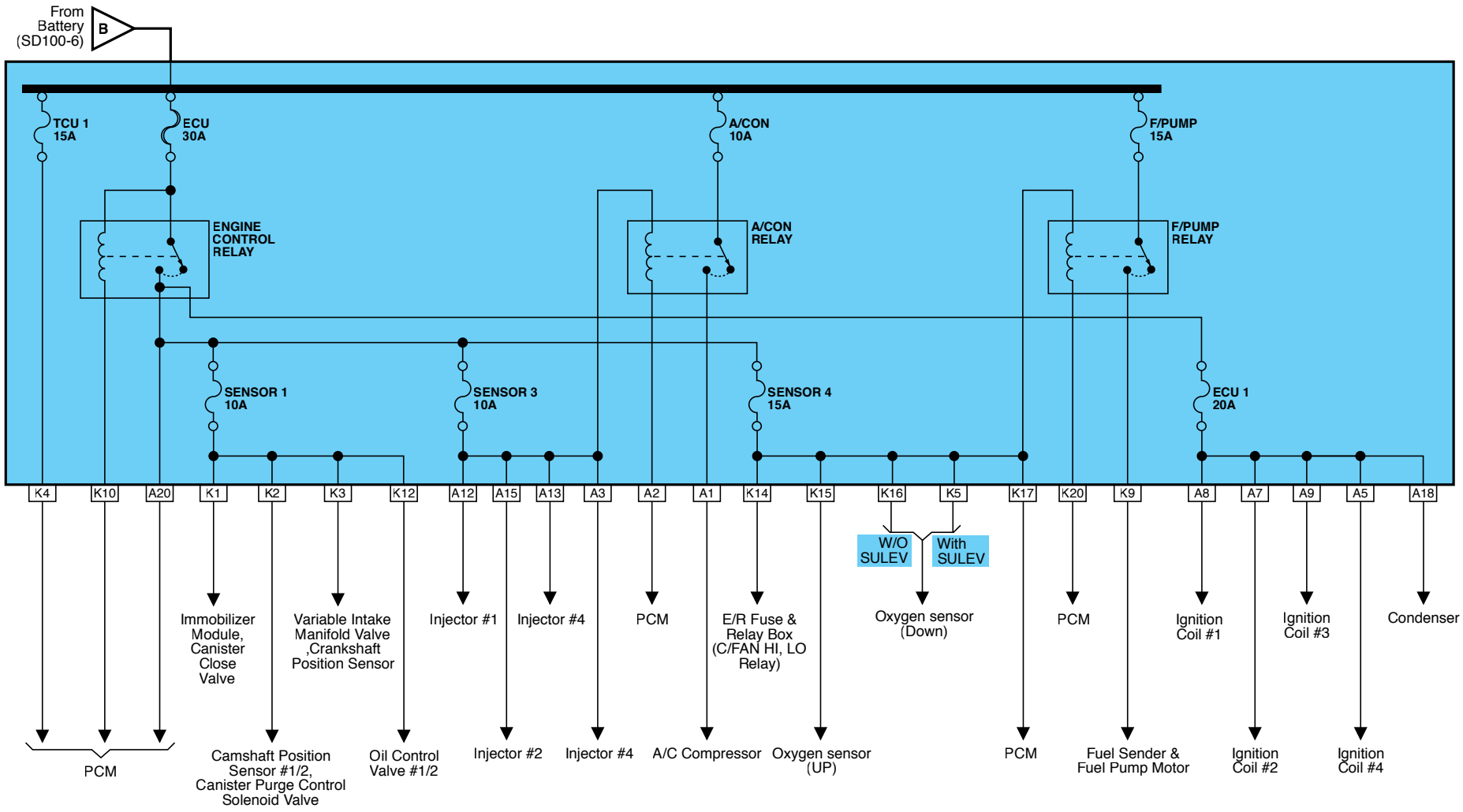
E/R Fuse & Relay Box



E/R Fuse & Relay Box

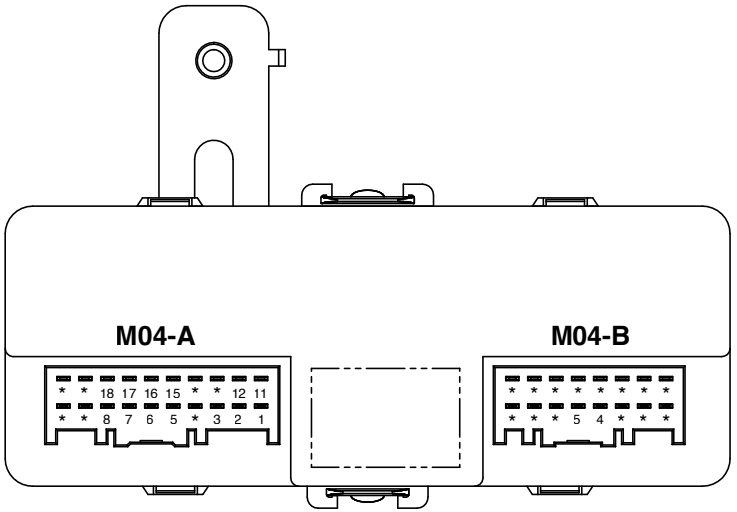


EMS Box

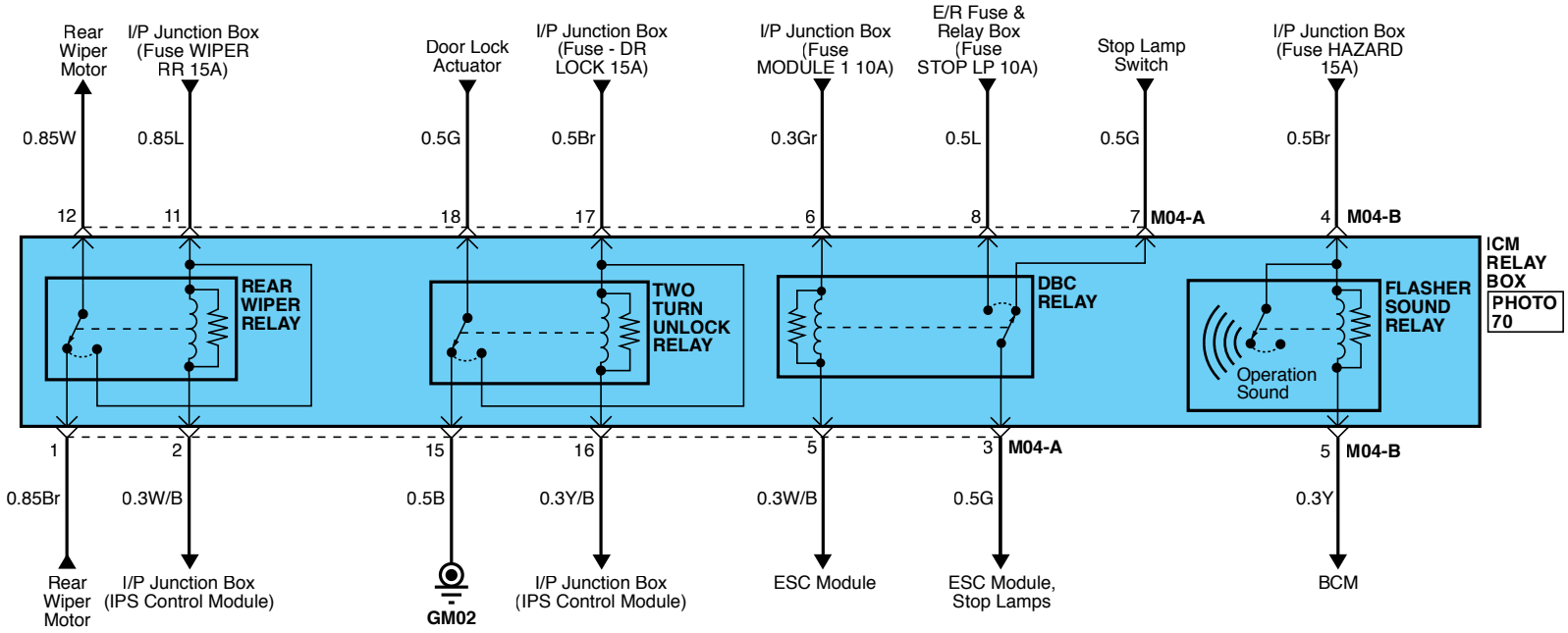

From Battery (SD100-6)
B
TCU 1 15A
ECU 30A
A/CON 10A
F/PUMP 15A
ENGINE CONTROL RELAY
A/CON RELAY
F/PUMP RELAY
SENSOR 1 10A
SENSOR 3 10A
SENSOR 4 15A
ECU 1 20A
K4
K10
A20
K1
K2
K3
K12
A12
A15
A13
A3
A2
A1
K14
K15
K16
K5
K17
K20
K9
A8
A7
A9
A5
A18
W/O SULEV
With SULEV
Immobilizer Module, Canister Close Valve
Variable Intake Manifold Valve ,Crankshaft Position Sensor
Injector #1
Injector #4
PCM
E/R Fuse & Relay Box (C/FAN HI, LO Relay)
Oxygen sensor (Down)
PCM
Ignition Coil #1
Ignition Coil #3
Condenser
PCM
Camshaft Position Sensor #1/2, Canister Purge Control Solenoid Valve
Oil Control Valve #1/2
Injector #2
Injector #4
A/C Compressor
Oxygen sensor (UP)
PCM
Fuel Sender & Fuel Pump Motor
Ignition Coil #2
Ignition Coil #4

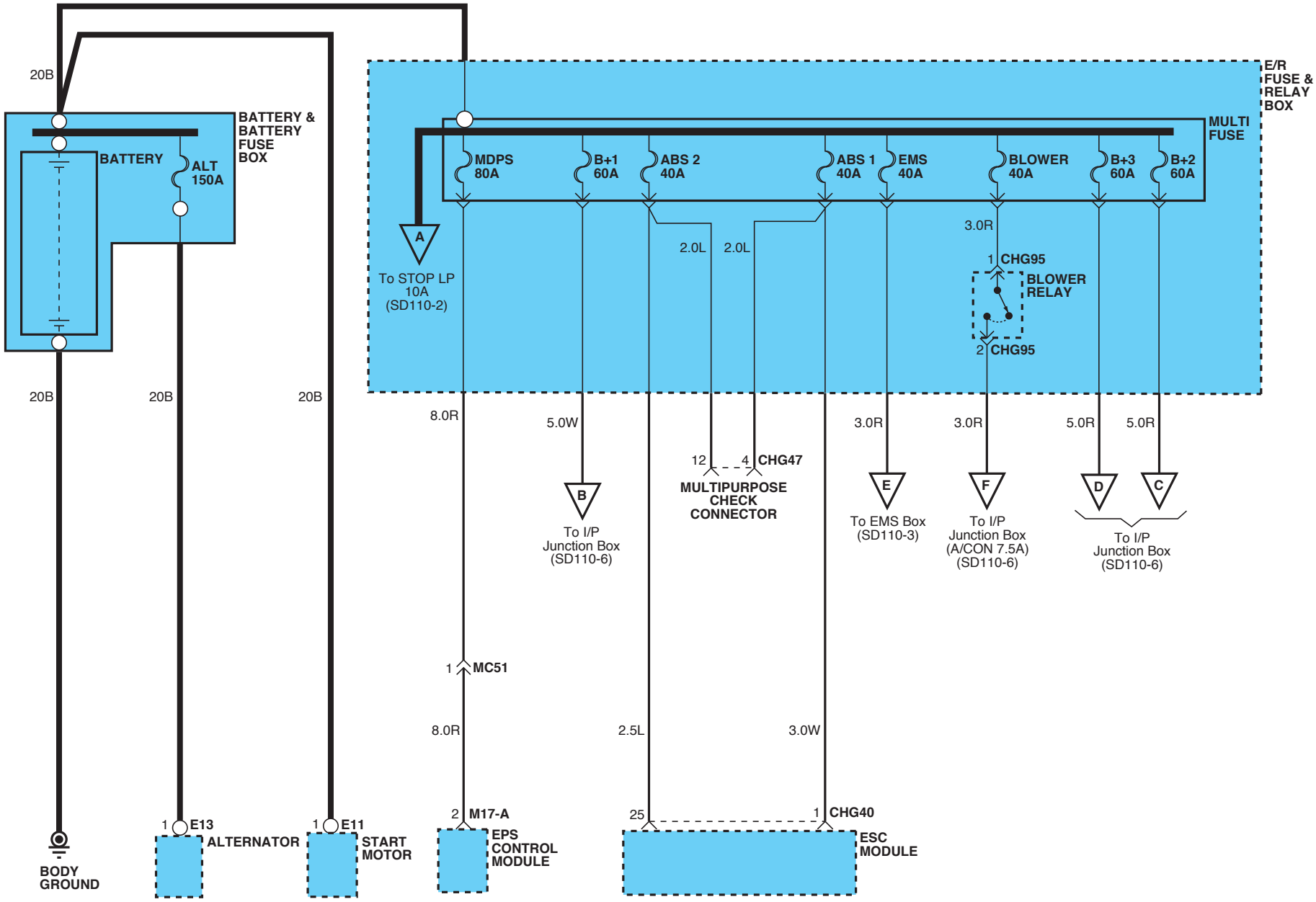
ICM Relay Box

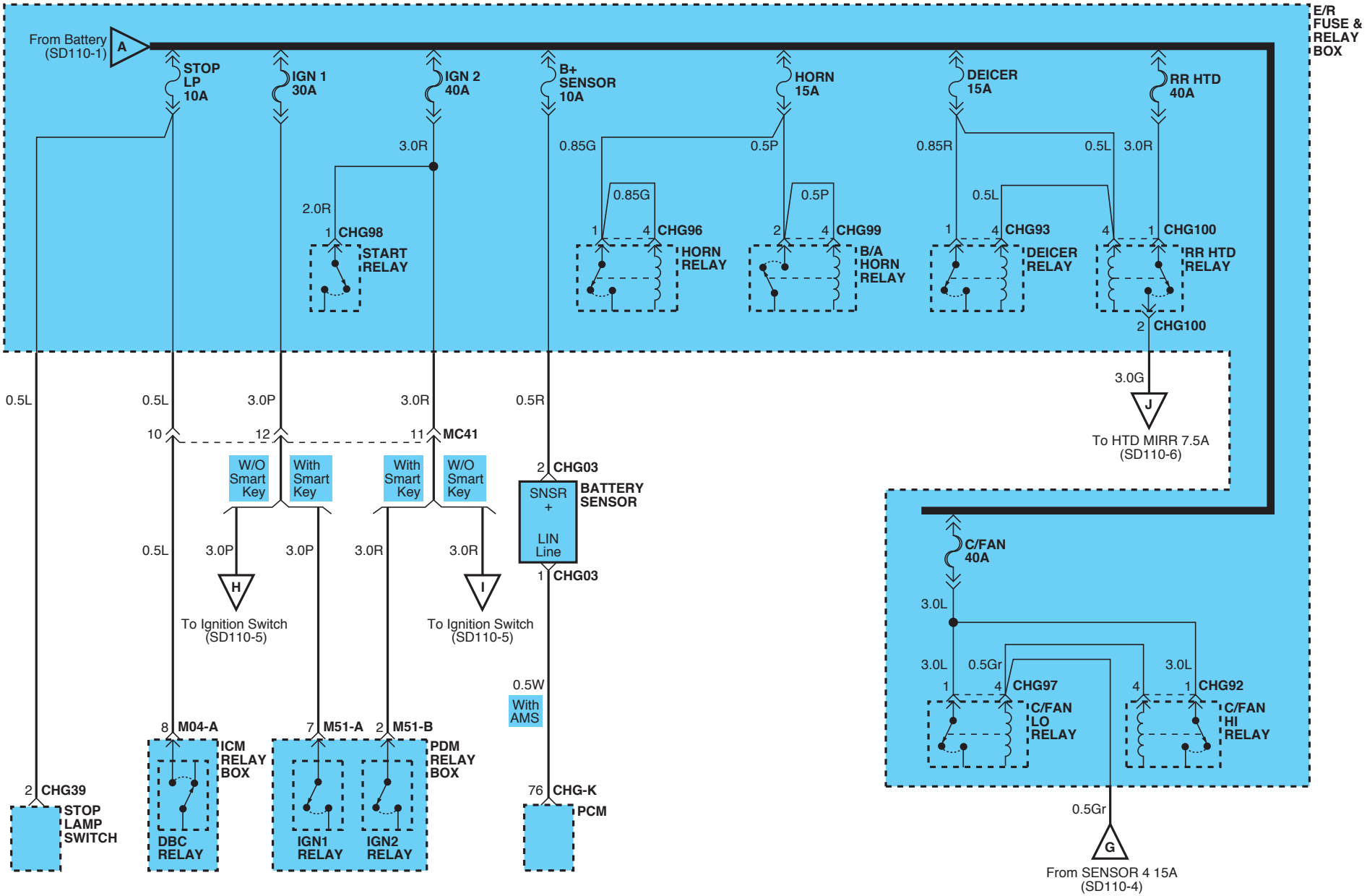
- Layout

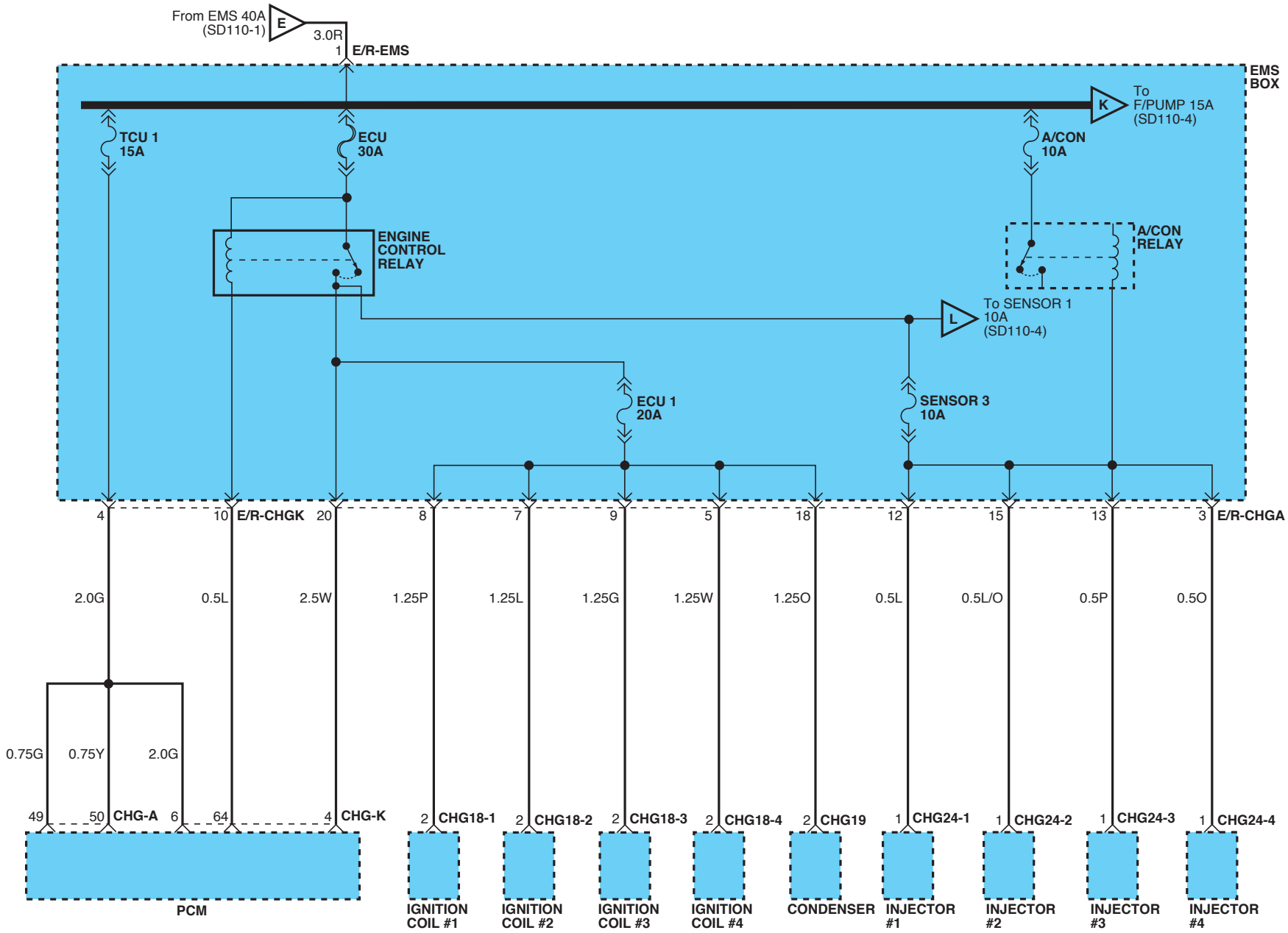


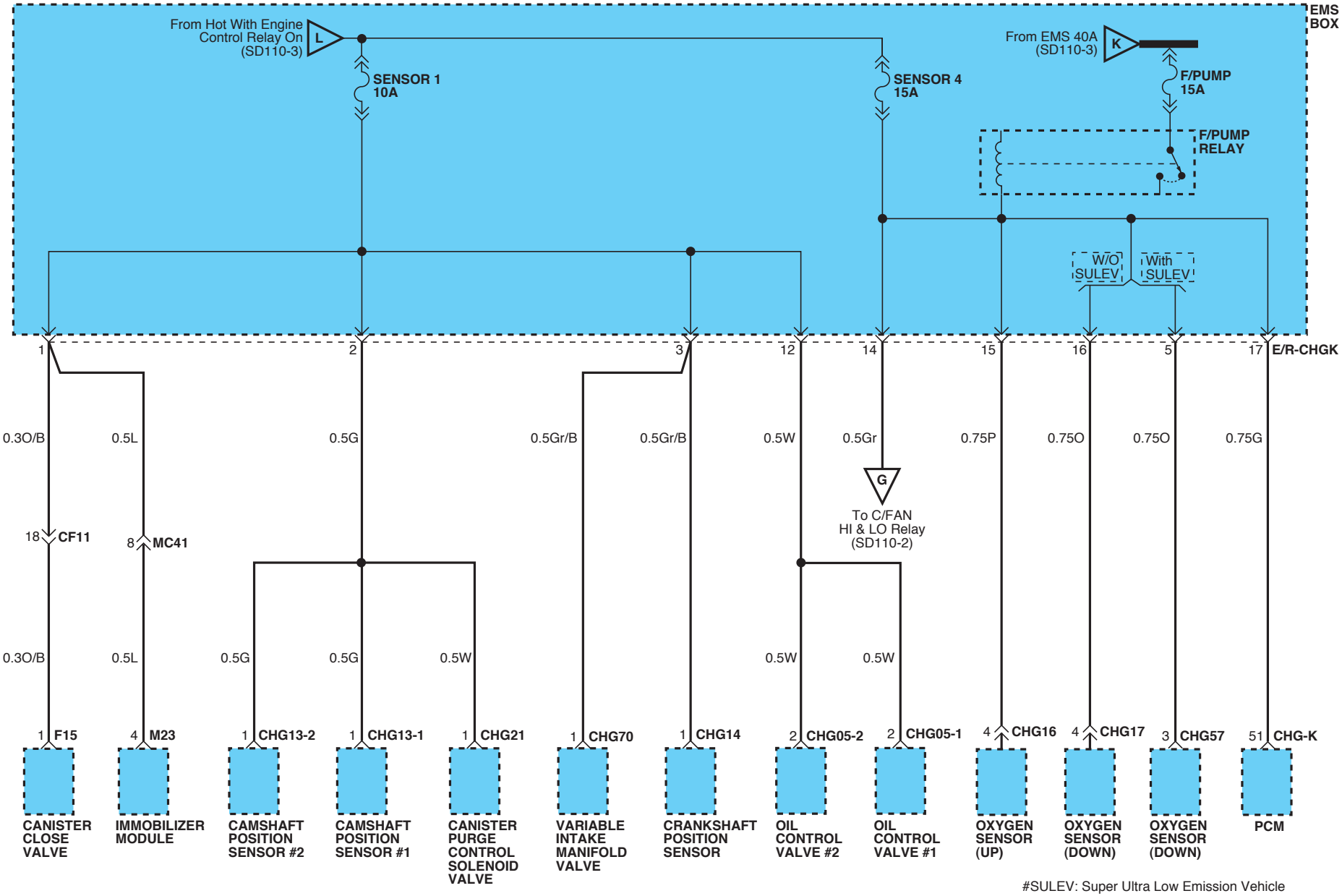
- Circuit



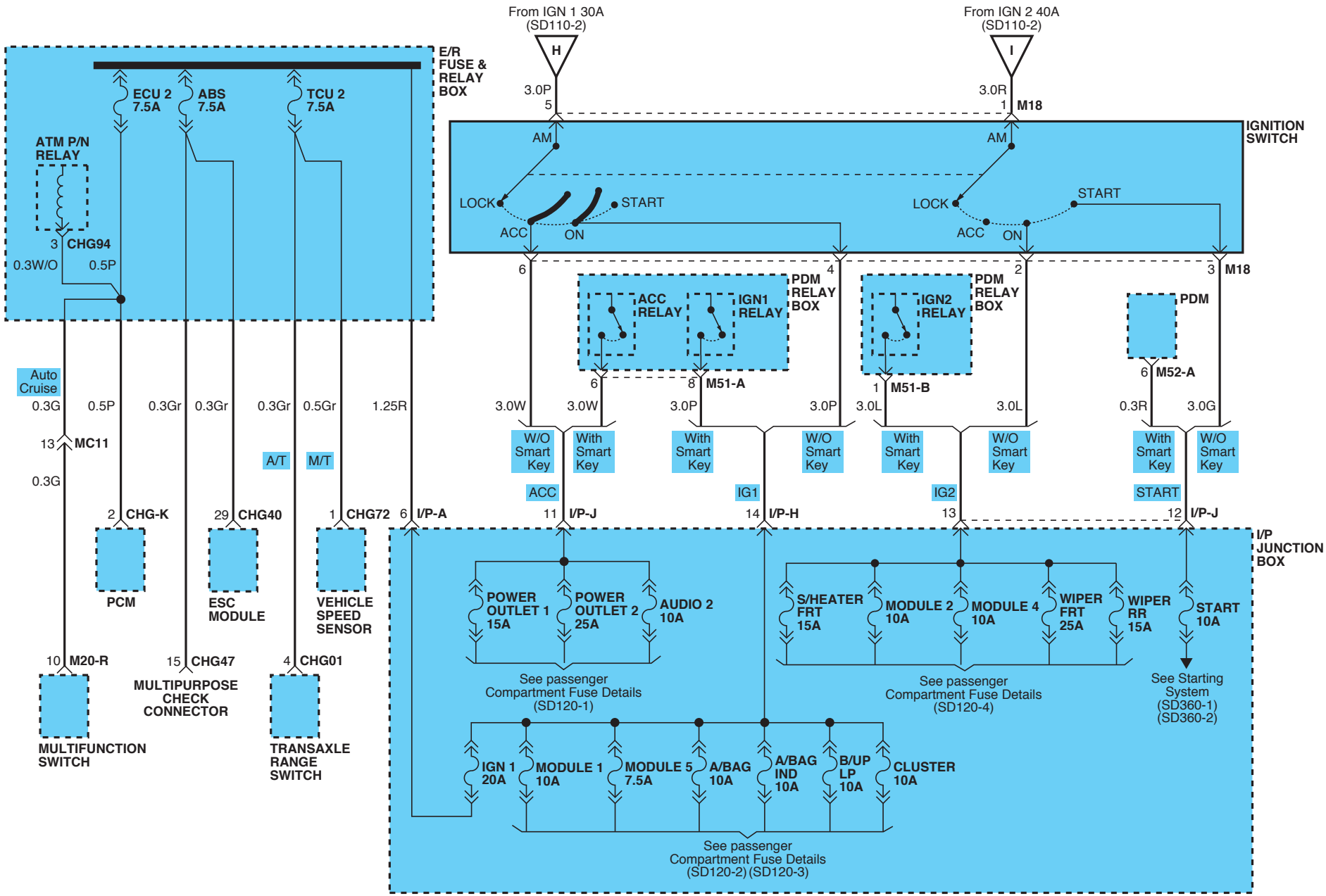

20B
BATTERY & BATTERY FUSE BOX
BATTERY
ALT 150A
E/R FUSE & RELAY BOX
MULTI FUSE
MDPS 80A
B+1 60A
ABS 2 40A
ABS 1 40A
EMS 40A
BLOWER 40A
B+3 60A
B+2 60A
A
To STOP LP 10A (SD110-2)
2.0L
2.0L
3.0R
1 CHG95
BLOWER RELAY
2 CHG95
20B
20B
20B
8.0R
5.0W
12 4 CHG47
3.0R
3.0R
5.0R
5.0R
B
To I/P Junction Box (SD110-6)
MULTIPURPOSE CHECK CONNECTOR
E
To EMS Box (SD110-3)
F
To I/P Junction Box (A/CON 7.5A) (SD110-6)
D
C
To I/P Junction Box (SD110-6)
1 MC51
8.0R
2.5L
3.0W
1 E13
ALTERNATOR
1 E11
START MOTOR
2 M17-A
EPS CONTROL MODULE
25
1 CHG40
ESC MODULE
BODY GROUND

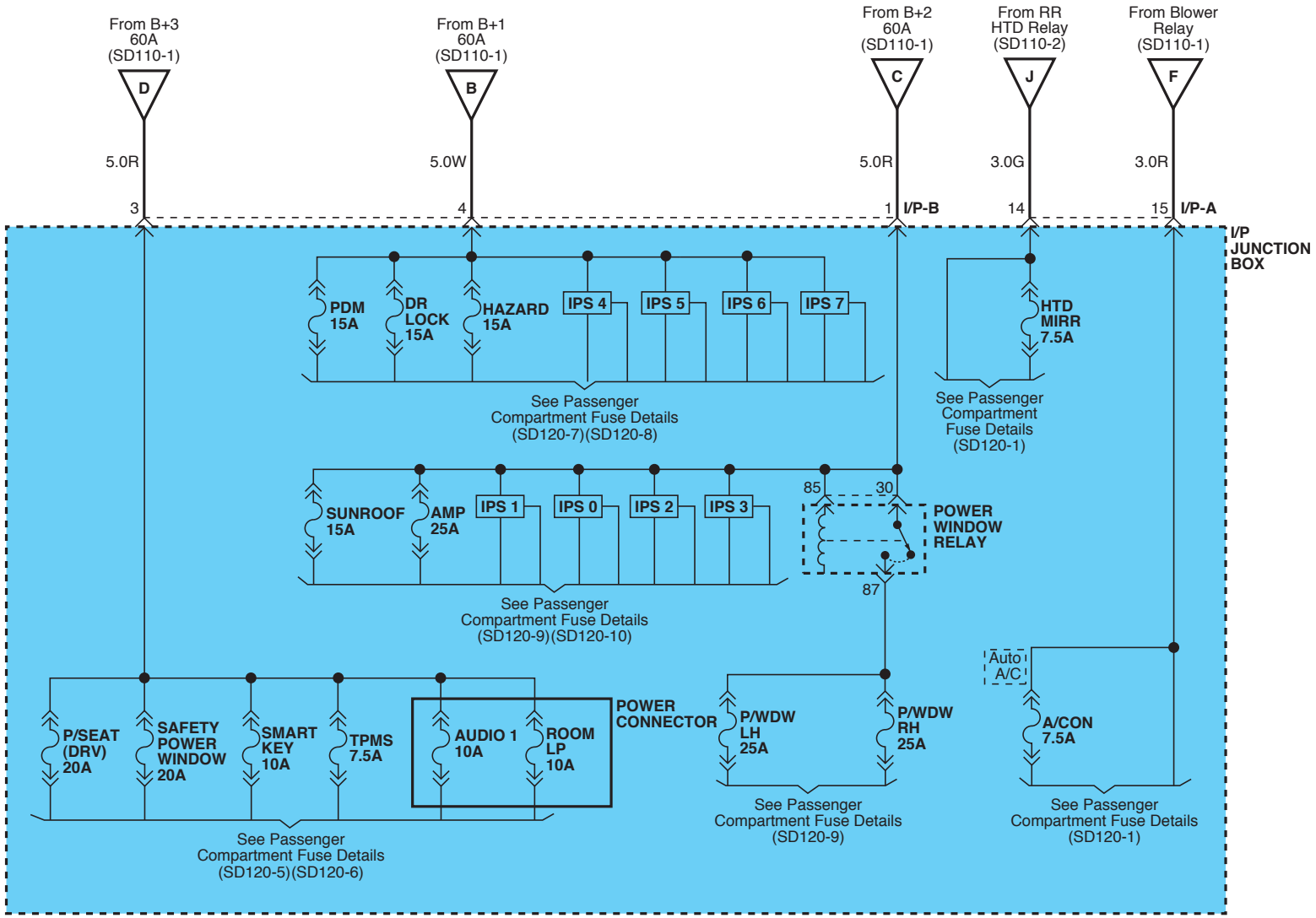

From Battery (SD110-1)
A
E/R FUSE & RELAY BOX
STOP LP 10A
IGN 1 30A
IGN 2 40A
B+ SENSOR 10A
HORN 15A
DEICER 15A
RR HTD 40A
3.0R
2.0R
1 CHG98
START RELAY
0.85G
0.5P
0.85R
0.5L
1 4 CHG96
HORN RELAY
2 4 CHG99
B/A HORN RELAY
1 4 CHG93
DEICER RELAY
4 1 CHG100
RR HTD RELAY
2 CHG100
3.0G
J
To HTD MIRR 7.5A (SD110-6)
0.5L
0.5L
3.0P
3.0R
0.5R
10
12
11 MC41
W/O Smart Key
With Smart Key
With Smart Key
W/O Smart Key
2 CHG03
SNSR +
LIN Line
BATTERY SENSOR
1 CHG03
H
I
To Ignition Switch (SD110-5)
To Ignition Switch (SD110-5)
C/FAN 40A
3.0L
0.5Gr
0.5W
With AMS
8 M04-A
ICM RELAY BOX
DBC RELAY
7 M51-A
2 M51-B
PDM RELAY BOX
IGN1 RELAY
IGN2 RELAY
2 CHG39
STOP LAMP SWITCH
76 CHG-K
PCM
1 4 CHG97
C/FAN LO RELAY
4 1 CHG92
C/FAN HI RELAY
0.5Gr
G
From SENSOR 4 15A (SD110-4)


From EMS 40A
(SD110-1)
E
3.0R
1
E/R-EMS
EMS
BOX
K
To
F/PUMP 15A
(SD110-4)
TCU 1
15A
ECU
30A
A/CON
10A
ENGINE
CONTROL
RELAY
A/CON
RELAY
L
To SENSOR 1
10A
(SD110-4)
ECU 1
20A
SENSOR 3
10A
4
10
E/R-CHGK
20
8
7
9
5
18
12
15
13
3
E/R-CHGA
2.0G
0.5L
2.5W
1.25P
1.25L
1.25G
1.25W
1.25O
0.5L
0.5L/O
0.5P
0.5O
0.75G
0.75Y
2.0G
49
50
CHG-A
6
64
4
CHG-K
2
CHG18-1
2
CHG18-2
2
CHG18-3
2
CHG18-4
2
CHG19
1
CHG24-1
1
CHG24-2
1
CHG24-3
1
CHG24-4
PCM
IGNITION
COIL #1
IGNITION
COIL #2
IGNITION
COIL #3
IGNITION
COIL #4
CONDENSER
INJECTOR
#1
INJECTOR
#2
INJECTOR
#3
INJECTOR
#4

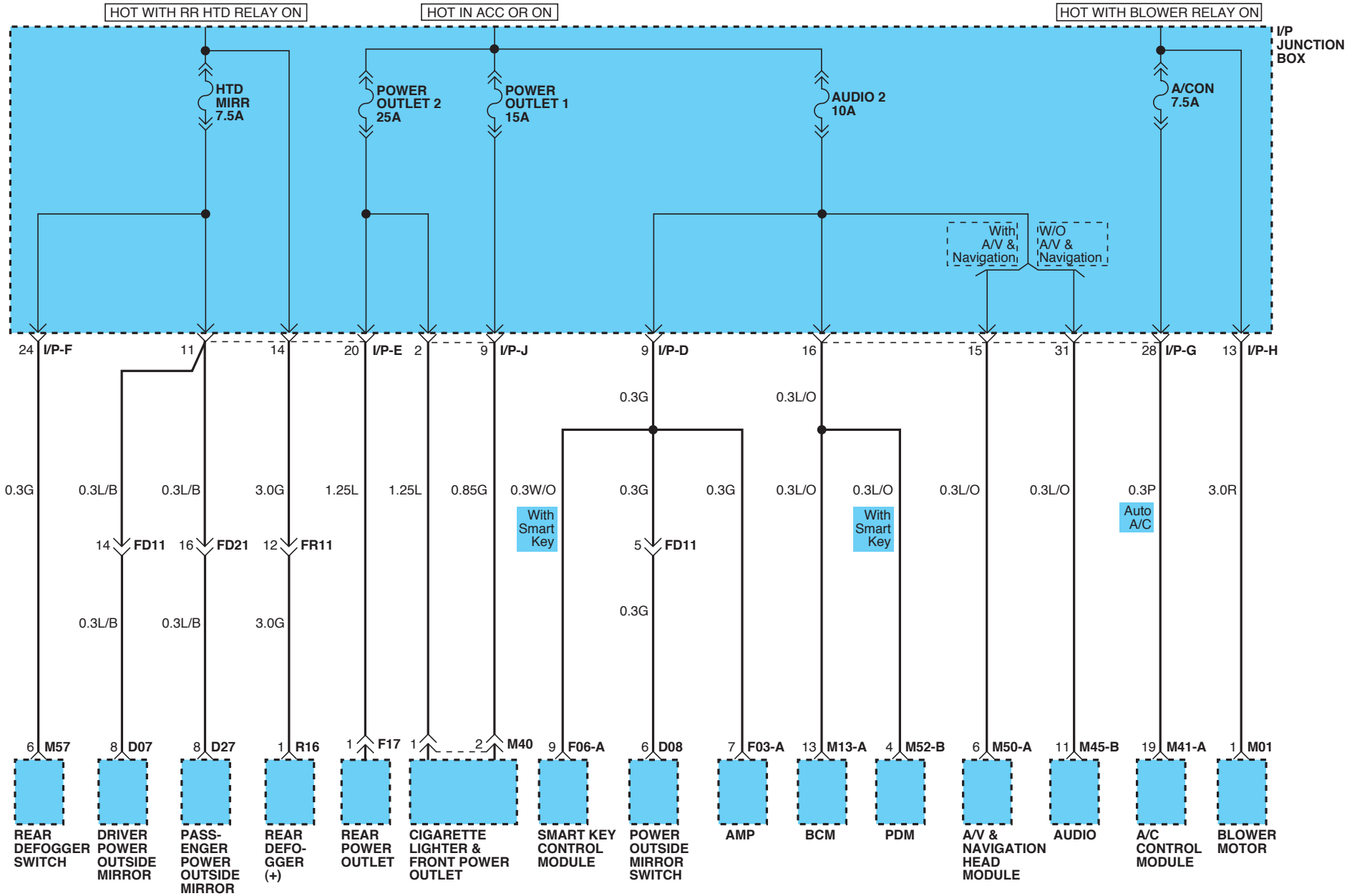


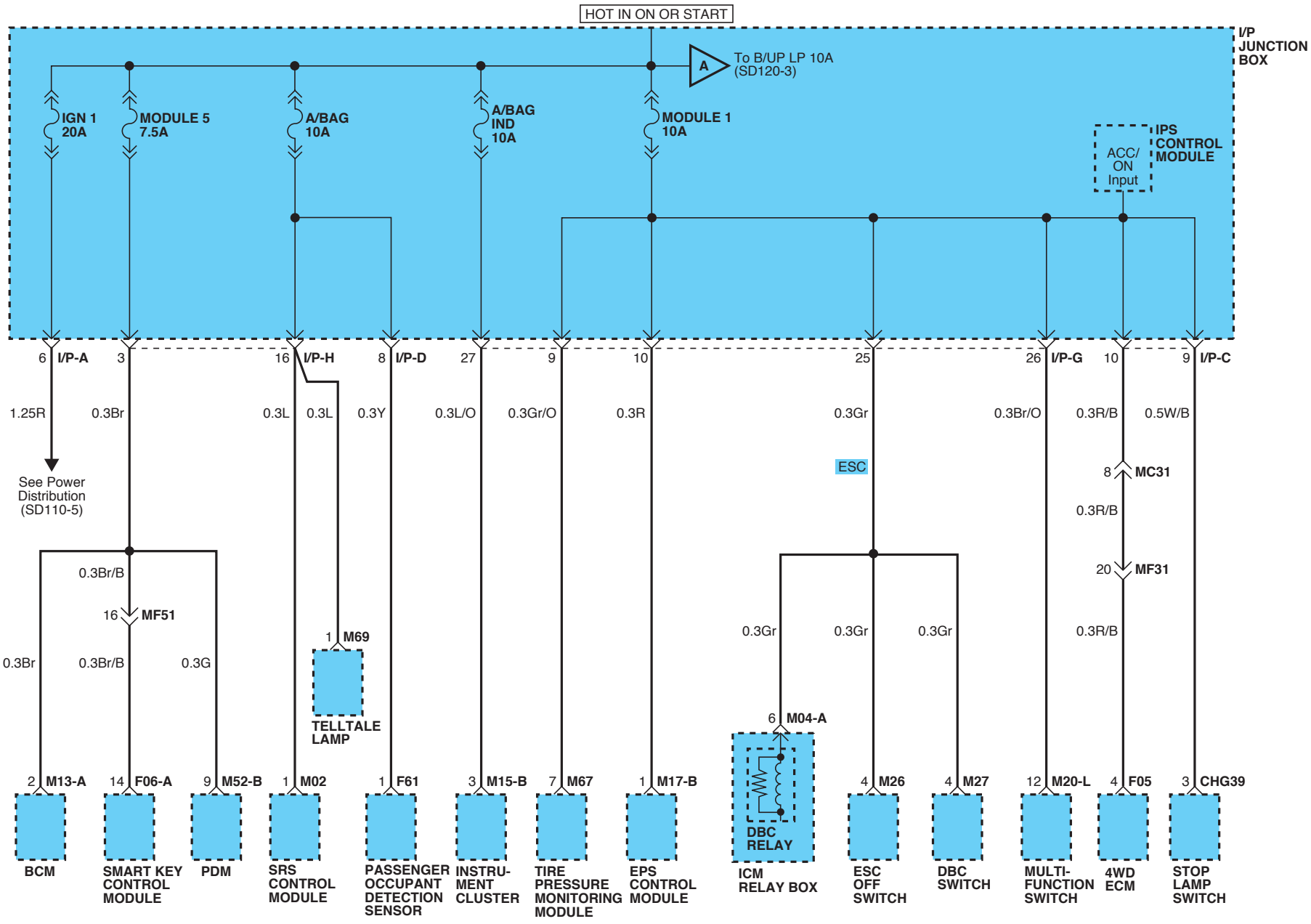
#SULEV: Super Ultra Low Emission Vehicle


From IGN 1 30A (SD110-2)
From IGN 2 40A (SD110-2)
H
I
3.0P
5
3.0R
1
M18
E/R FUSE & RELAY BOX
ECU 2 7.5A
ABS 7.5A
TCU 2 7.5A
ATM P/N RELAY
3
CHG94
0.3W/O
0.5P
IGNITION SWITCH
AM
LOCK
ACC
ON
START
6
4
2
3
M18
ACC RELAY
IGN1 RELAY
PDM RELAY BOX
IGN2 RELAY
PDM RELAY BOX
PDM
6
8
M51-A
1
M51-B
6
M52-A
Auto Cruise
0.3G
0.5P
0.3Gr
0.3Gr
0.3Gr
0.5Gr
1.25R
3.0W
3.0W
3.0P
3.0P
3.0L
3.0L
0.3R
3.0G
13
MC11
0.3G
A/T
M/T
W/O Smart Key
With Smart Key
With Smart Key
W/O Smart Key
With Smart Key
W/O Smart Key
With Smart Key
W/O Smart Key
ACC
IG1
IG2
START
2
CHG-K
29
CHG40
1
CHG72
6
I/P-A
11
I/P-J
14
I/P-H
13
12
I/P-J
I/P JUNCTION BOX
PCM
ESC MODULE
VEHICLE SPEED SENSOR
POWER OUTLET 1 15A
POWER OUTLET 2 25A
AUDIO 2 10A
S/HEATER FRT 15A
MODULE 2 10A
MODULE 4 10A
WIPER FRT 25A
WIPER RR 15A
START 10A
See passenger Compartment Fuse Details (SD120-1)
See passenger Compartment Fuse Details (SD120-4)
See Starting System (SD360-1) (SD360-2)
10
M20-R
15
CHG47
4
CHG01
MULTIFUNCTION SWITCH
MULTIPURPOSE CHECK CONNECTOR
TRANSAXLE RANGE SWITCH
IGN 1 20A
MODULE 1 10A
MODULE 5 7.5A
A/BAG 10A
A/BAG IND 10A
B/UP LP 10A
CLUSTER 10A
See passenger Compartment Fuse Details (SD120-2) (SD120-3)

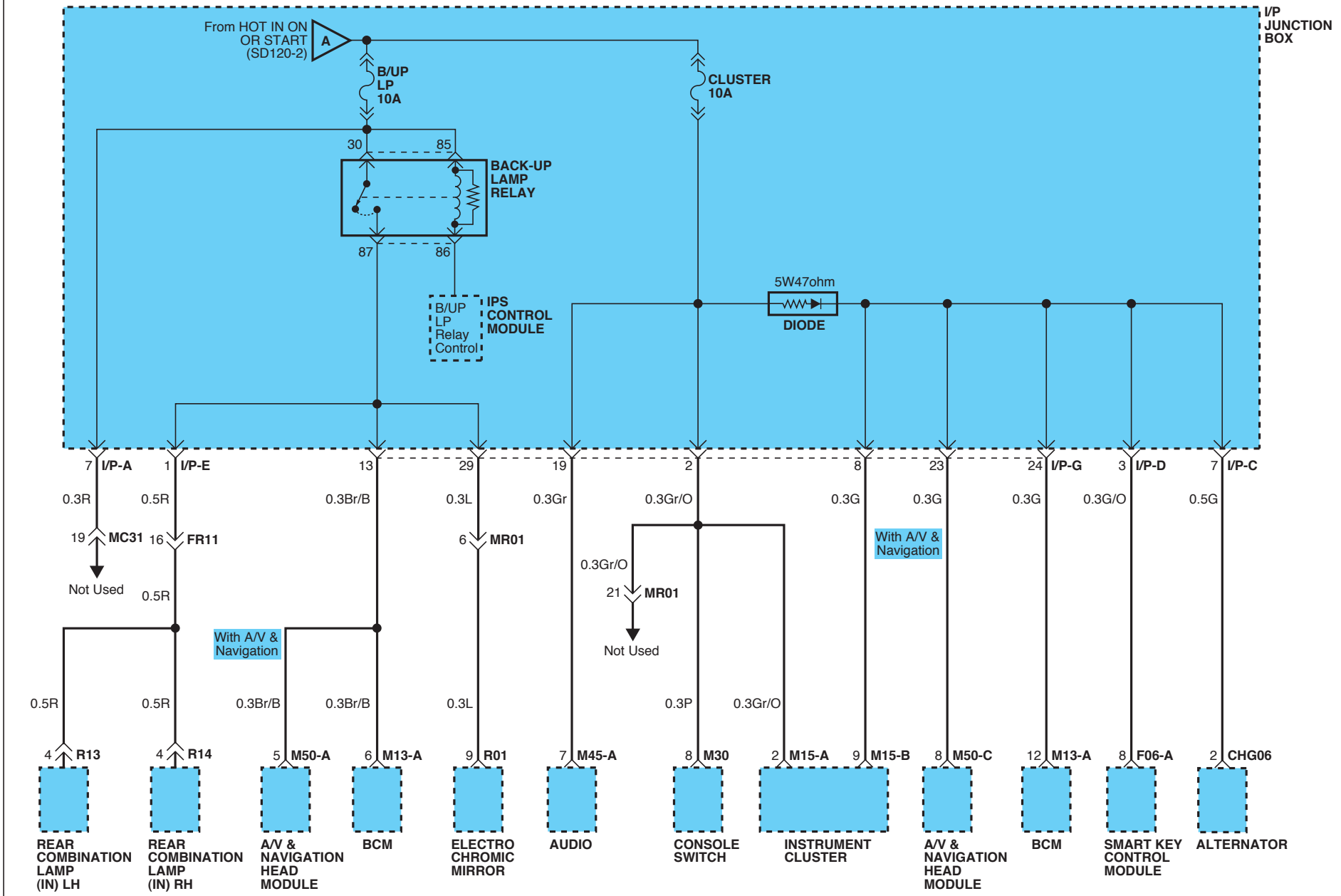

From B+3
60A
(SD110-1)
D
5.0R
3
From B+1
60A
(SD110-1)
B
5.0W
4
From B+2
60A
(SD110-1)
C
5.0R
1
I/P-B
From RR
HTD Relay
(SD110-2)
J
3.0G
14
From Blower
Relay
(SD110-1)
F
3.0R
15
I/P-A
I/P
JUNCTION
BOX
PDM
15A
DR
LOCK
15A
HAZARD
15A
IPS 4
IPS 5
IPS 6
IPS 7
See Passenger
Compartment Fuse Details
(SD120-7)(SD120-8)
HTD
MIRR
7.5A
See Passenger
Compartment
Fuse Details
(SD120-1)
SUNROOF
15A
AMP
25A
IPS 1
IPS 0
IPS 2
IPS 3
See Passenger
Compartment Fuse Details
(SD120-9)(SD120-10)
85
30
87
POWER
WINDOW
RELAY
P/SEAT
(DRV)
20A
SAFETY
POWER
WINDOW
20A
SMART
KEY
10A
TPMS
7.5A
AUDIO 1
10A
ROOM
LP
10A
POWER
CONNECTOR
See Passenger
Compartment Fuse Details
(SD120-5)(SD120-6)
P/WDW
LH
25A
P/WDW
RH
25A
See Passenger
Compartment Fuse Details
(SD120-9)
Auto
A/C
A/CON
7.5A
See Passenger
Compartment Fuse Details
(SD120-1)

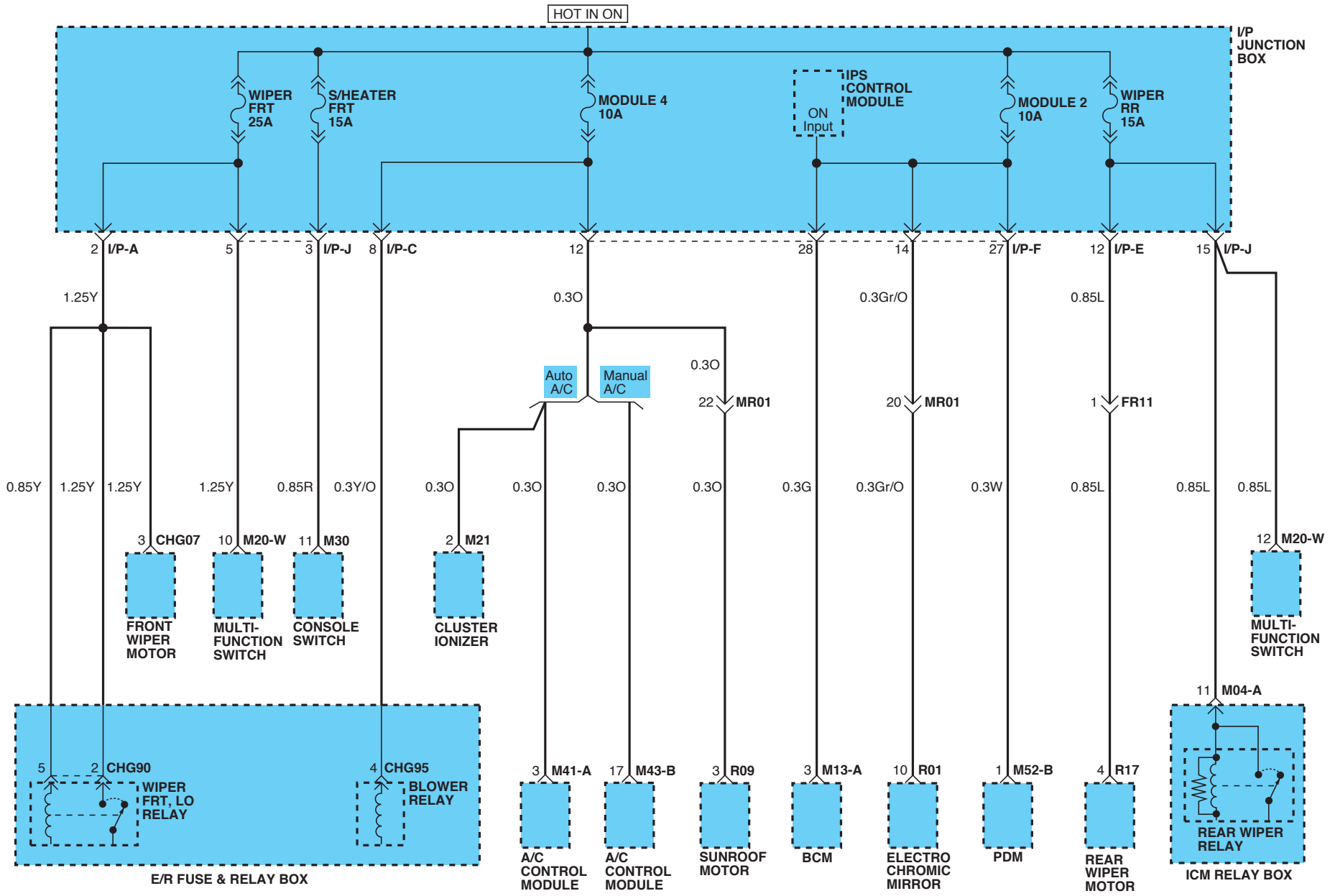
Passenger Compartment Fuse Details (1)



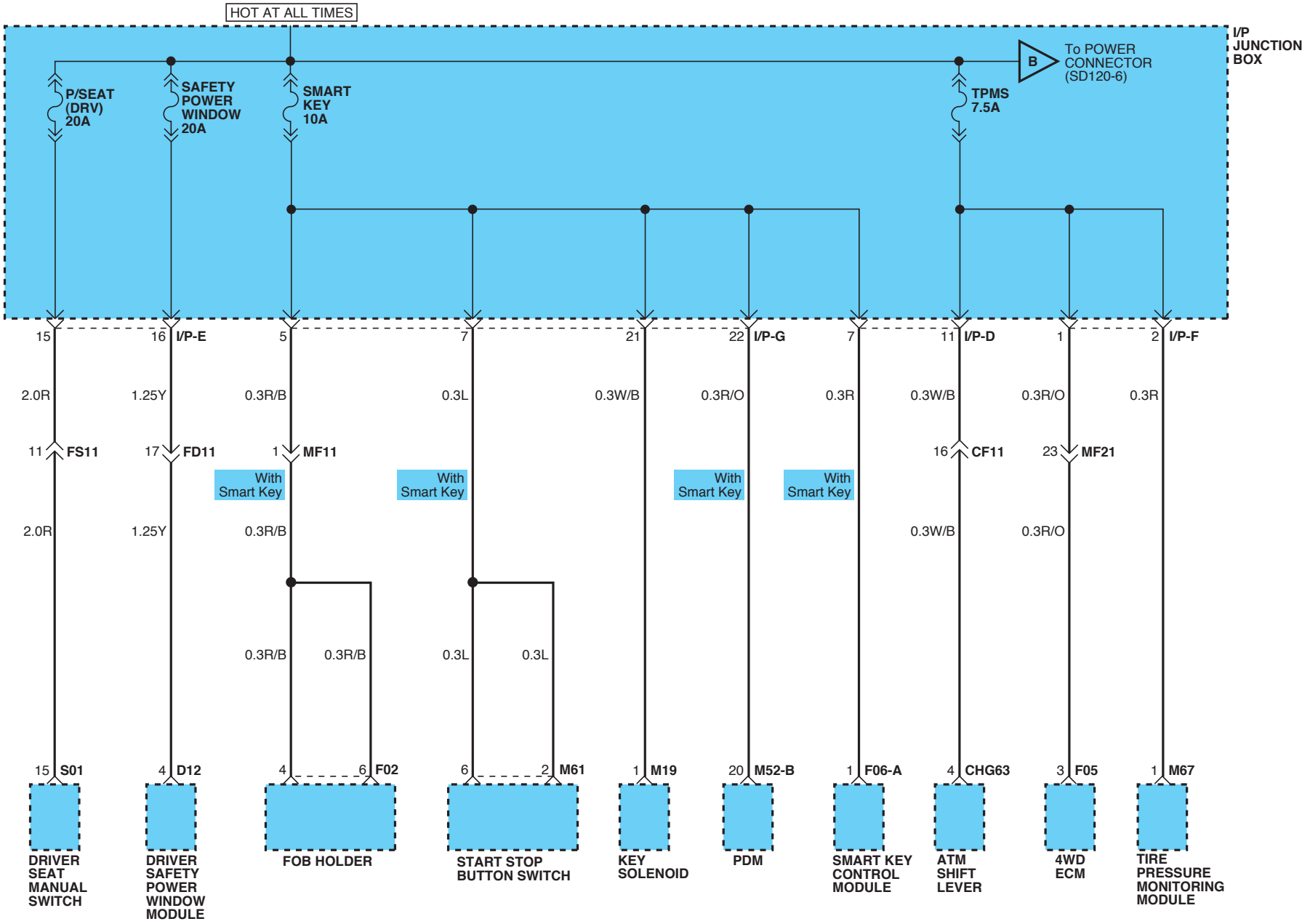

HOT IN ON OR START
I/P JUNCTION BOX
A
To B/UP LP 10A (SD120-3)
IGN 1 20A
MODULE 5 7.5A
A/BAG 10A
A/BAG IND 10A
MODULE 1 10A
IPS CONTROL MODULE
ACC/ ON Input
6 I/P-A
3
16 I/P-H
8 I/P-D
27
9
10
25
26 I/P-G
10
9 I/P-C
1.25R
0.3Br
0.3L
0.3L
0.3Y
0.3L/O
0.3Gr/O
0.3R
0.3Gr
0.3Br/O
0.3R/B
0.5W/B
See Power Distribution (SD110-5)
ESC
8 MC31
0.3R/B
0.3Br/B
20 MF31
16 MF51
0.3R/B
0.3Gr
0.3Gr
0.3Gr
0.3Br
0.3Br/B
0.3G
1 M69
TELLTALE LAMP
6 M04-A
2 M13-A
14 F06-A
9 M52-B
1 M02
1 F61
3 M15-B
7 M67
1 M17-B
4 M26
4 M27
12 M20-L
4 F05
3 CHG39
DBC RELAY
BCM
SMART KEY CONTROL MODULE
PDM
SRS CONTROL MODULE
PASSENGER OCCUPANT DETECTION SENSOR
INSTRU-MENT CLUSTER
TIRE PRESSURE MONITORING MODULE
EPS CONTROL MODULE
ICM RELAY BOX
ESC OFF SWITCH
DBC SWITCH
MULTI-FUNCTION SWITCH
4WD ECM
STOP LAMP SWITCH

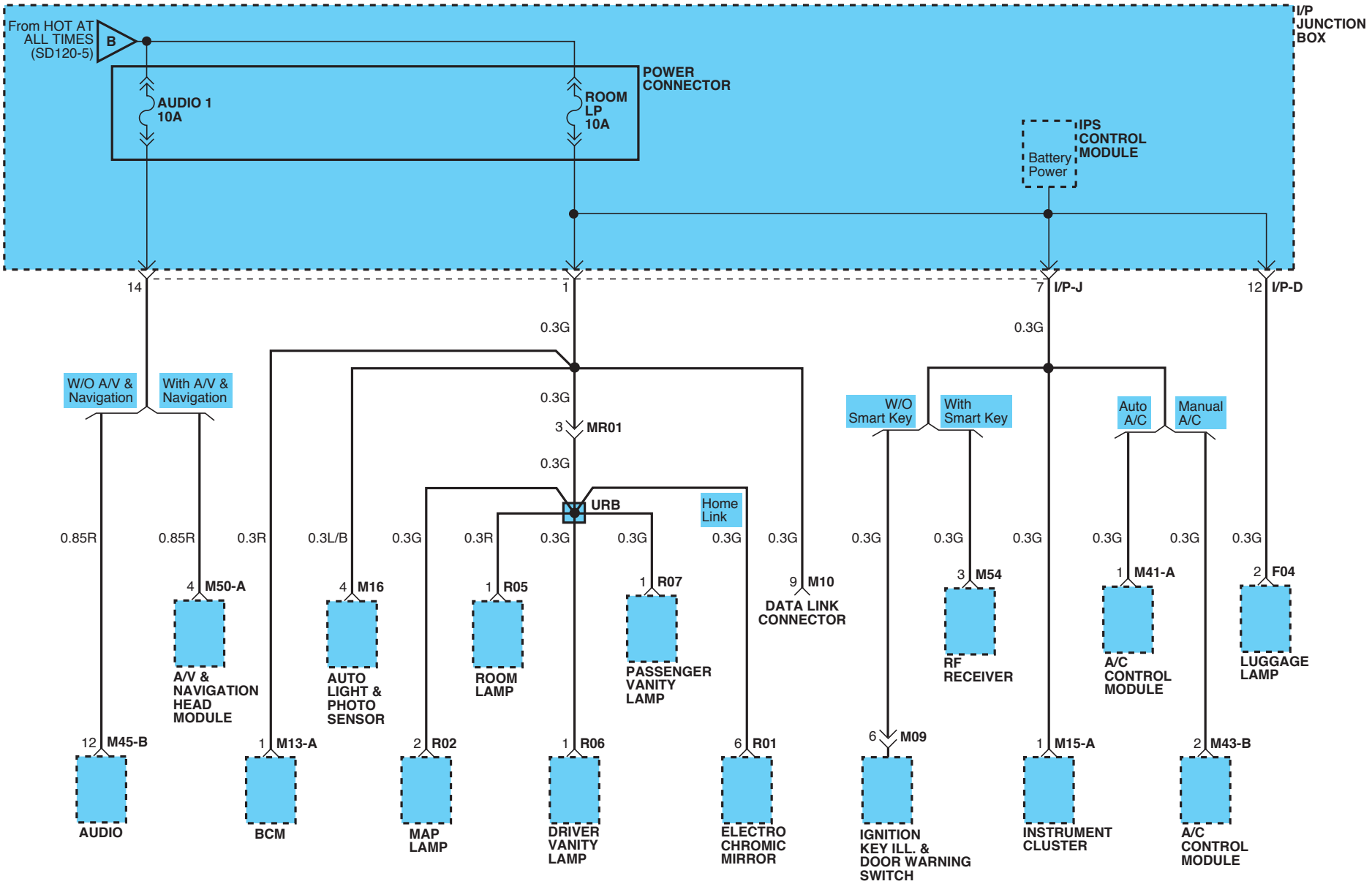
Passenger Compartment Fuse Details (3)

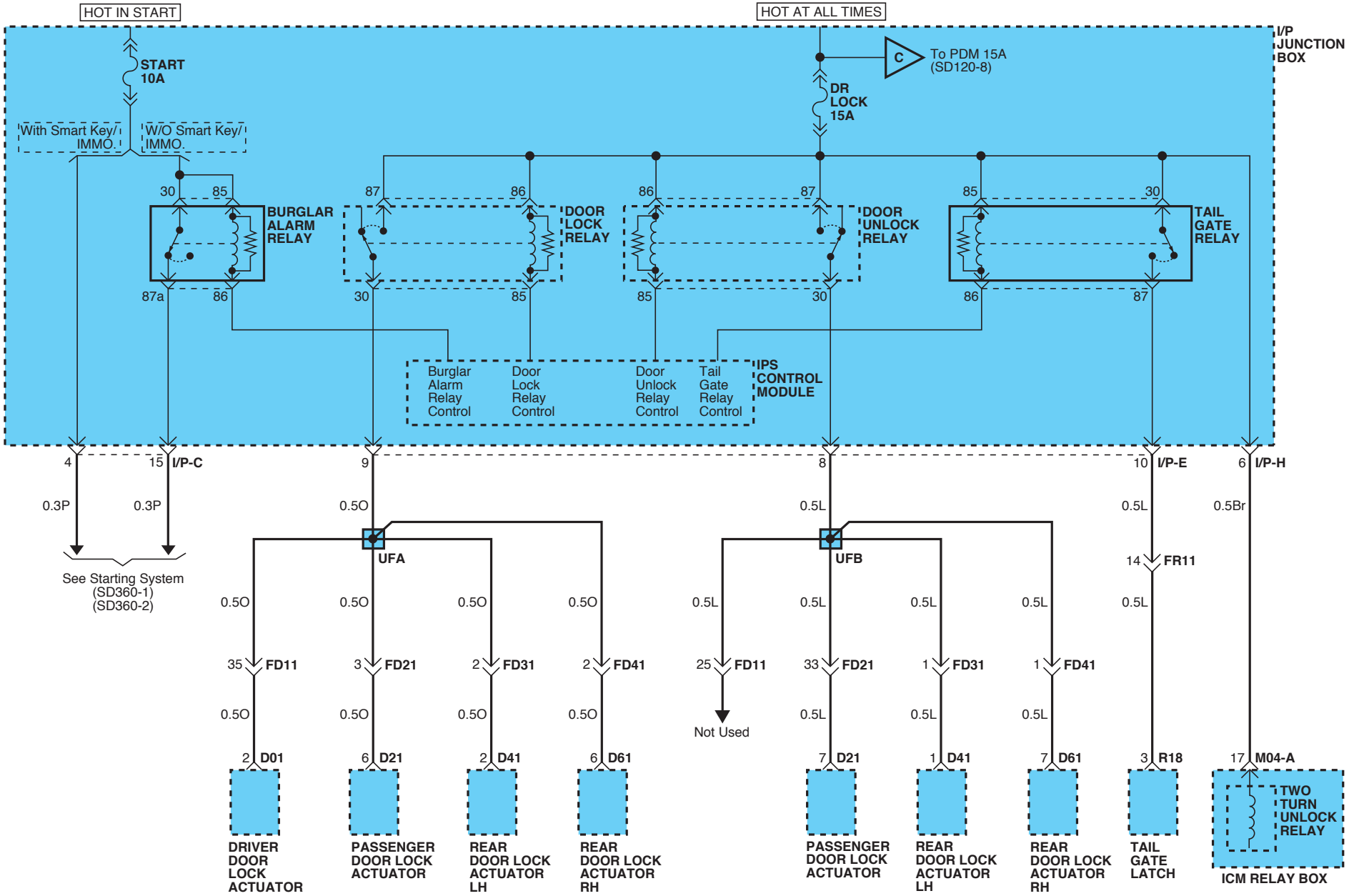


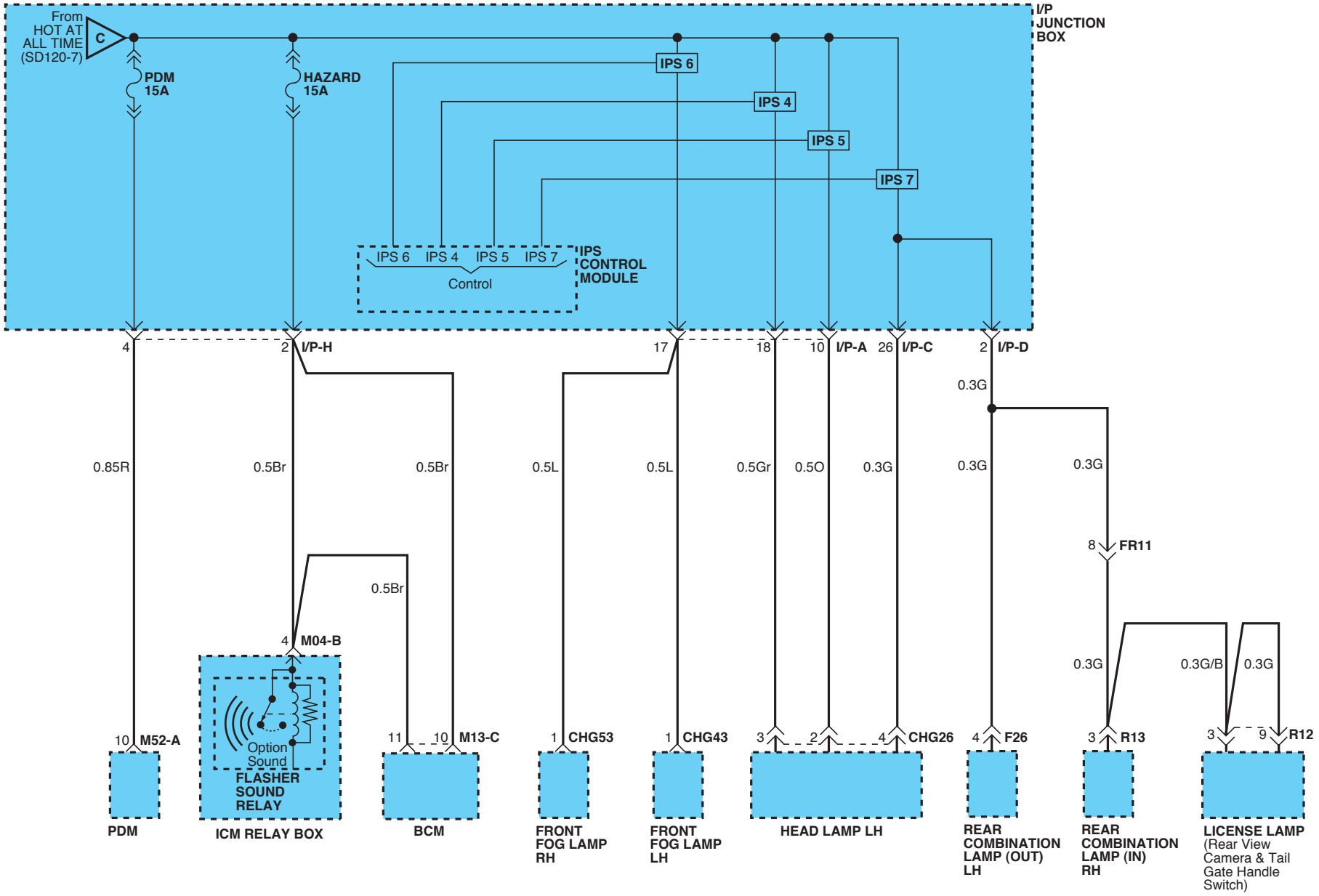

HOT IN ON
I/P JUNCTION BOX
WIPER FRT 25A
S/HEATER FRT 15A
MODULE 4 10A
IPS CONTROL MODULE
ON Input
MODULE 2 10A
WIPER RR 15A
2 I/P-A
5
3 I/P-J
8 I/P-C
12
28
14
27 I/P-F
12 I/P-E
15 I/P-J
1.25Y
0.3O
0.3Gr/O
0.85L
Auto A/C
Manual A/C
0.3O
22 MR01
20 MR01
1 FR11
0.85Y
1.25Y
1.25Y
1.25Y
0.85R
0.3Y/O
0.3O
0.3O
0.3O
0.3O
0.3G
0.3Gr/O
0.3W
0.85L
0.85L
0.85L
3 CHG07
10 M20-W
11 M30
2 M21
12 M20-W
FRONT WIPER MOTOR
MULTI-FUNCTION SWITCH
CONSOLE SWITCH
CLUSTER IONIZER
MULTI-FUNCTION SWITCH
11 M04-A
5 2 CHG90
WIPER FRT, LO RELAY
4 CHG95
BLOWER RELAY
E/R FUSE & RELAY BOX
3 M41-A
17 M43-B
3 R09
3 M13-A
10 R01
1 M52-B
4 R17
REAR WIPER RELAY
ICM RELAY BOX
A/C CONTROL MODULE
A/C CONTROL MODULE
SUNROOF MOTOR
BCM
ELECTRO CHROMIC MIRROR
PDM
REAR WIPER MOTOR

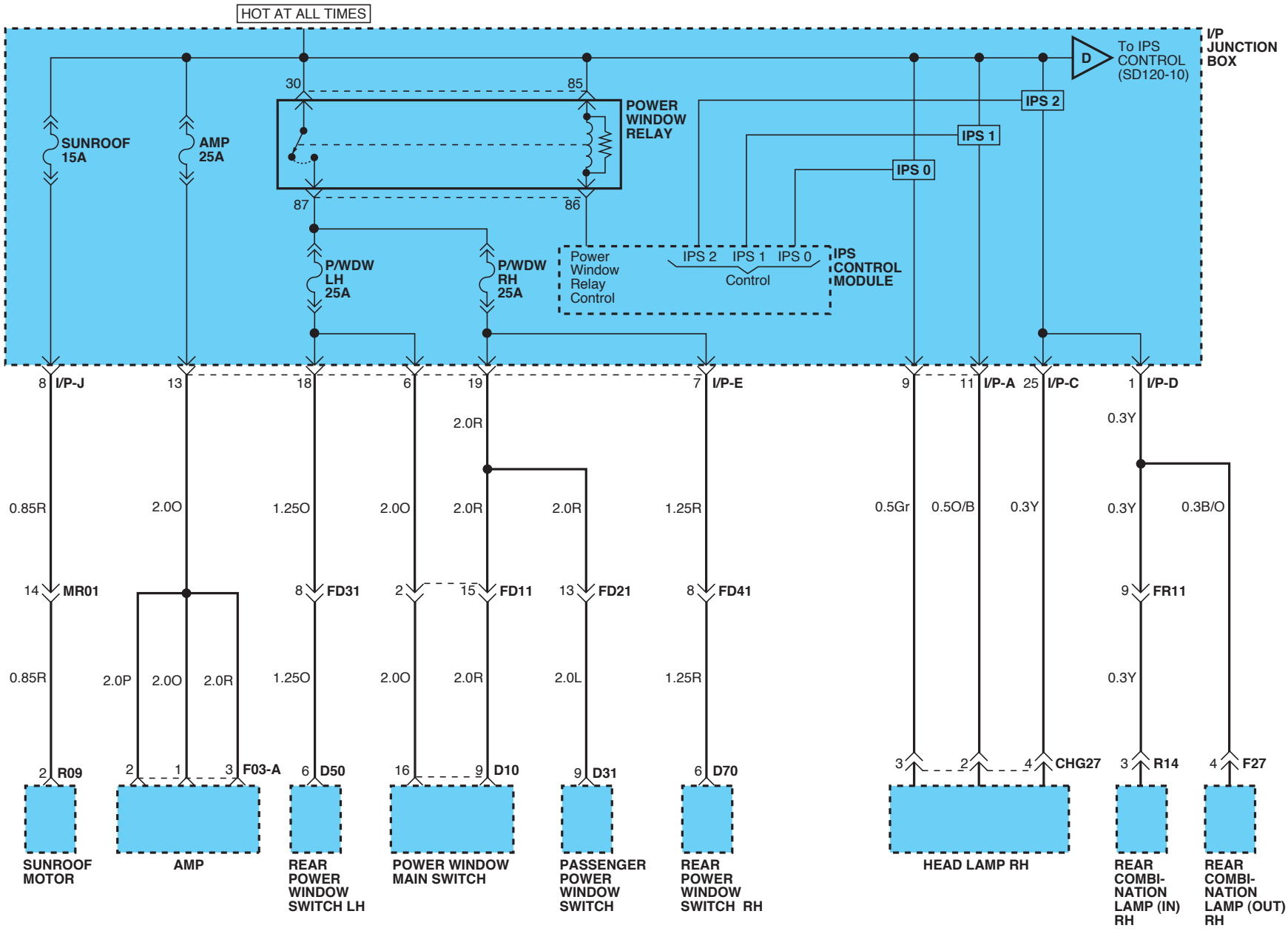
Passenger Compartment Fuse Details (5)

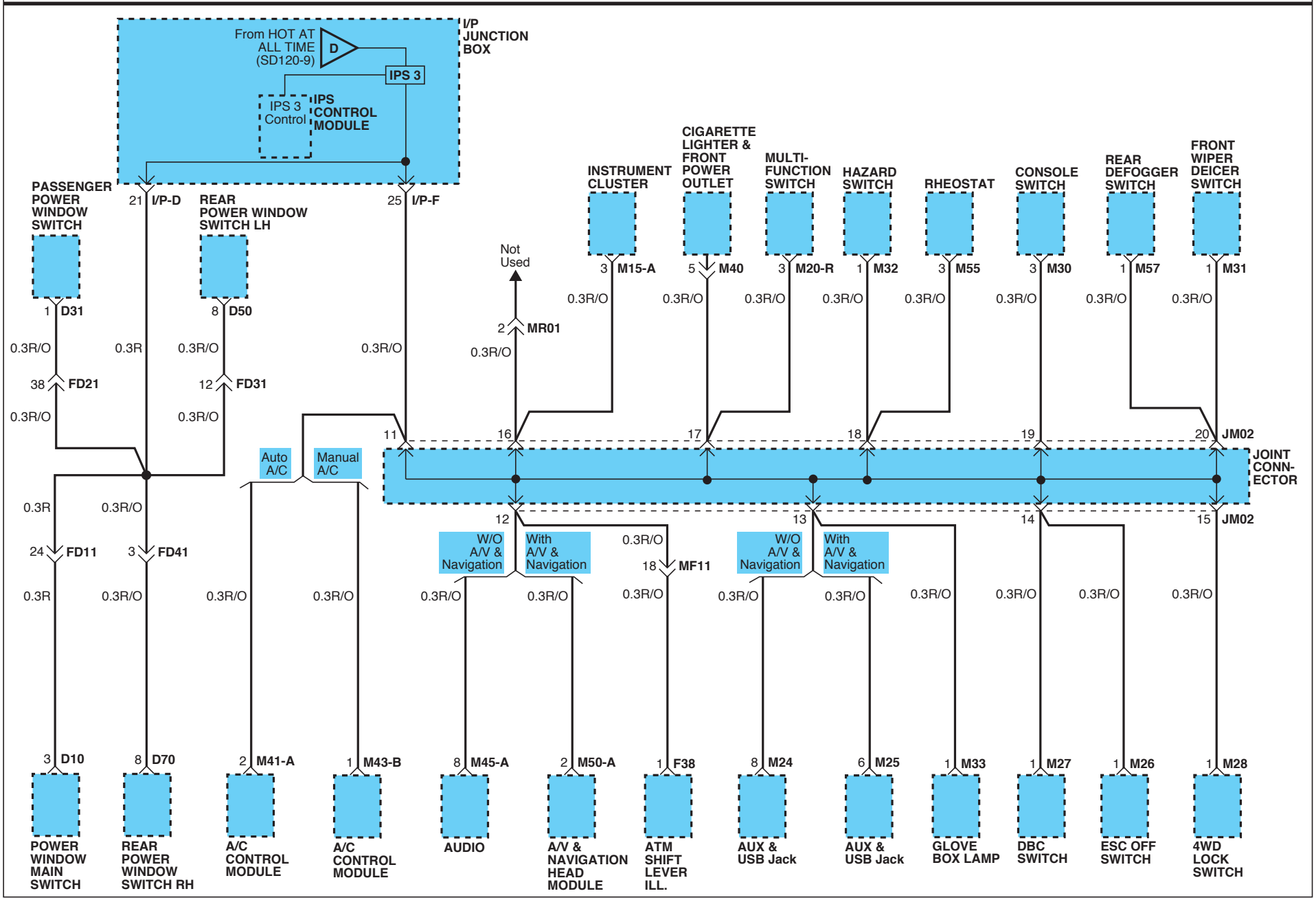


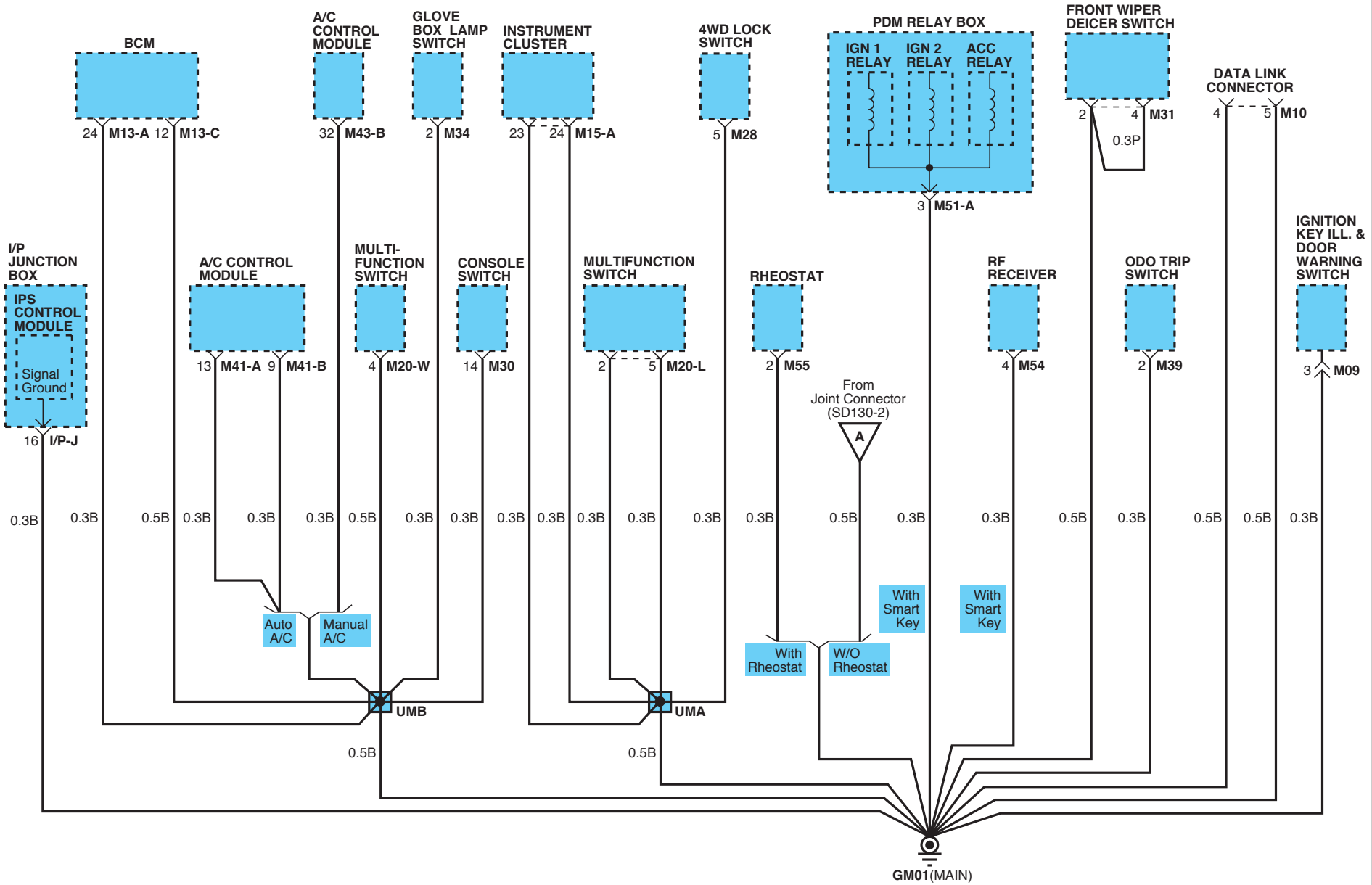

From HOT AT ALL TIMES (SD120-5)
B
AUDIO 1 10A
ROOM LP 10A
POWER CONNECTOR
I/P JUNCTION BOX
Battery Power
IPS CONTROL MODULE
14
1
7
I/P-J
12
I/P-D
0.3G
W/O A/V & Navigation
With A/V & Navigation
3
MR01
URB
Home Link
W/O Smart Key
With Smart Key
Auto A/C
Manual A/C
0.85R
0.3R
0.3L/B
0.3G
4
M50-A
A/V & NAVIGATION HEAD MODULE
M16
AUTO LIGHT & PHOTO SENSOR
R05
ROOM LAMP
R07
PASSENGER VANITY LAMP
9
M10
DATA LINK CONNECTOR
M54
RF RECEIVER
M41-A
A/C CONTROL MODULE
F04
LUGGAGE LAMP
12
M45-B
AUDIO
M13-A
BCM
R02
MAP LAMP
R06
DRIVER VANITY LAMP
6
R01
ELECTRO CHROMIC MIRROR
M09
IGNITION KEY ILL. & DOOR WARNING SWITCH
M15-A
INSTRUMENT CLUSTER
M43-B
A/C CONTROL MODULE

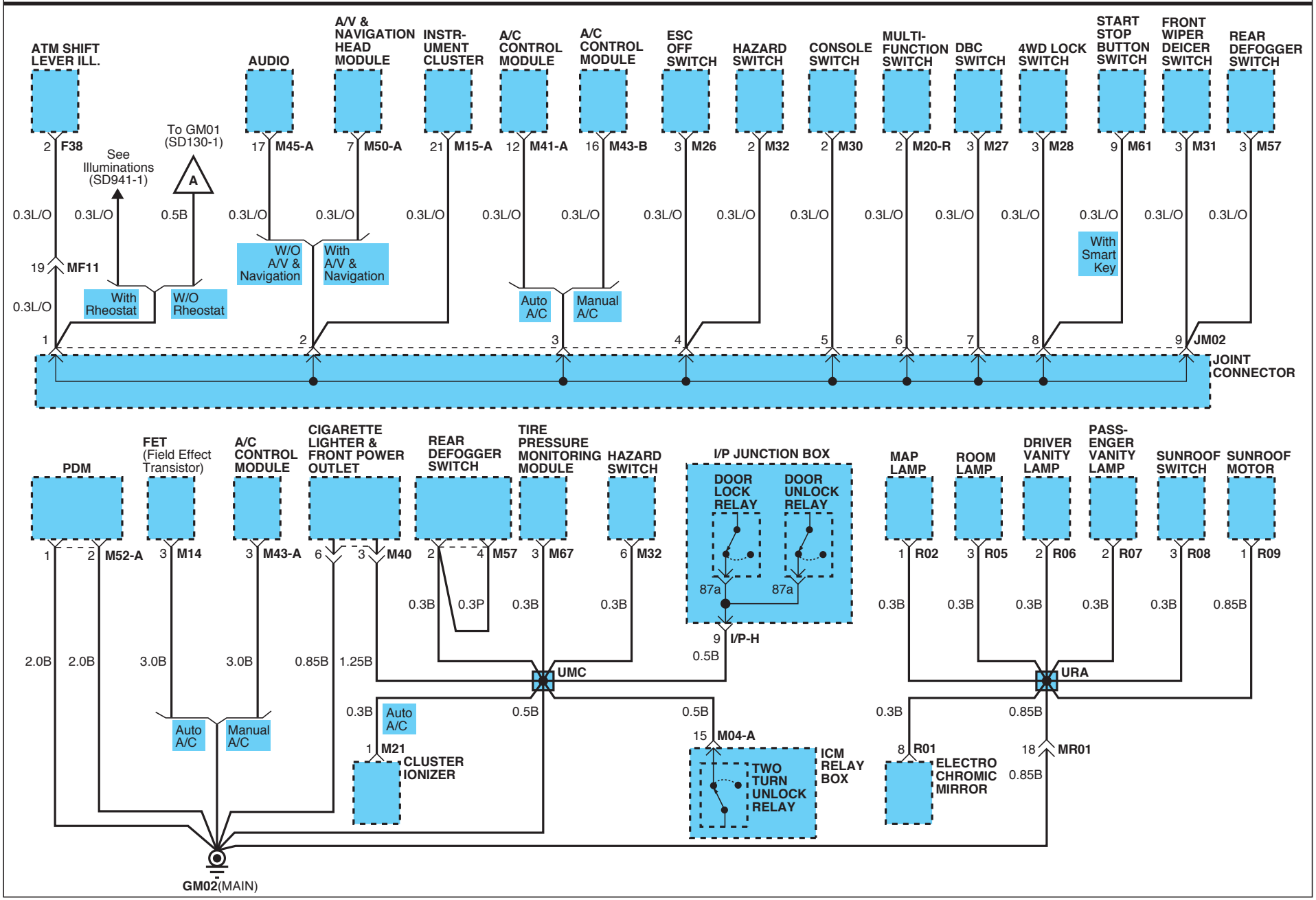

HOT IN START
HOT AT ALL TIMES
I/P JUNCTION BOX
START 10A
With Smart Key/ IMMO.
W/O Smart Key/ IMMO.
C
To PDM 15A (SD120-8)
DR LOCK 15A
BURGLAR ALARM RELAY
DOOR LOCK RELAY
DOOR UNLOCK RELAY
TAIL GATE RELAY
IPS CONTROL MODULE
Burglar Alarm Relay Control
Door Lock Relay Control
Door Unlock Relay Control
Tail Gate Relay Control
I/P-C
I/P-E
I/P-H
0.3P
0.5O
0.5L
0.5Br
See Starting System (SD360-1) (SD360-2)
UFA
UFB
FD11
FD21
FD31
FD41
FR11
Not Used
D01
D21
D41
D61
R18
M04-A
DRIVER DOOR LOCK ACTUATOR
PASSENGER DOOR LOCK ACTUATOR
REAR DOOR LOCK ACTUATOR LH
REAR DOOR LOCK ACTUATOR RH
TAIL GATE LATCH
TWO TURN UNLOCK RELAY
ICM RELAY BOX

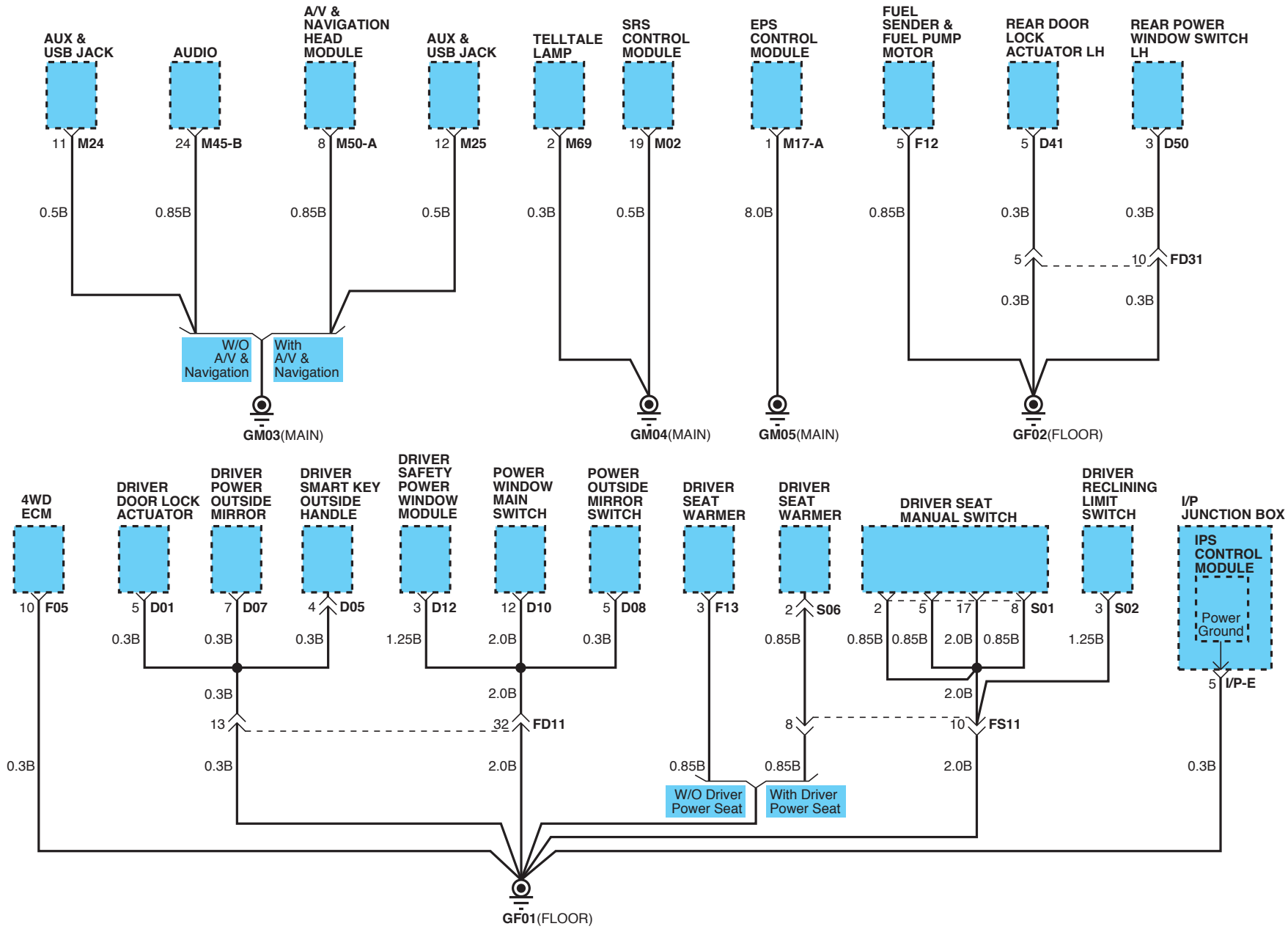

From HOT AT ALL TIME (SD120-7)
C
PDM 15A
HAZARD 15A
IPS 6
IPS 4
IPS 5
IPS 7
I/P JUNCTION BOX
IPS 6 IPS 4 IPS 5 IPS 7
Control
IPS CONTROL MODULE
4
2 I/P-H
17
18
10 I/P-A
26 I/P-C
2 I/P-D
0.3G
0.85R
0.5Br
0.5Br
0.5L
0.5L
0.5Gr
0.5O
0.3G
0.3G
0.3G
8 FR11
0.5Br
4 M04-B
0.3G
0.3G/B
0.3G
10 M52-A
Option
Sound
FLASHER SOUND RELAY
11 10 M13-C
1 CHG53
1 CHG43
3 2 4 CHG26
4 F26
3 R13
3 9 R12
PDM
ICM RELAY BOX
BCM
FRONT FOG LAMP RH
FRONT FOG LAMP LH
HEAD LAMP LH
REAR COMBINATION LAMP (OUT) LH
REAR COMBINATION LAMP (IN) RH
LICENSE LAMP (Rear View Camera & Tail Gate Handle Switch)

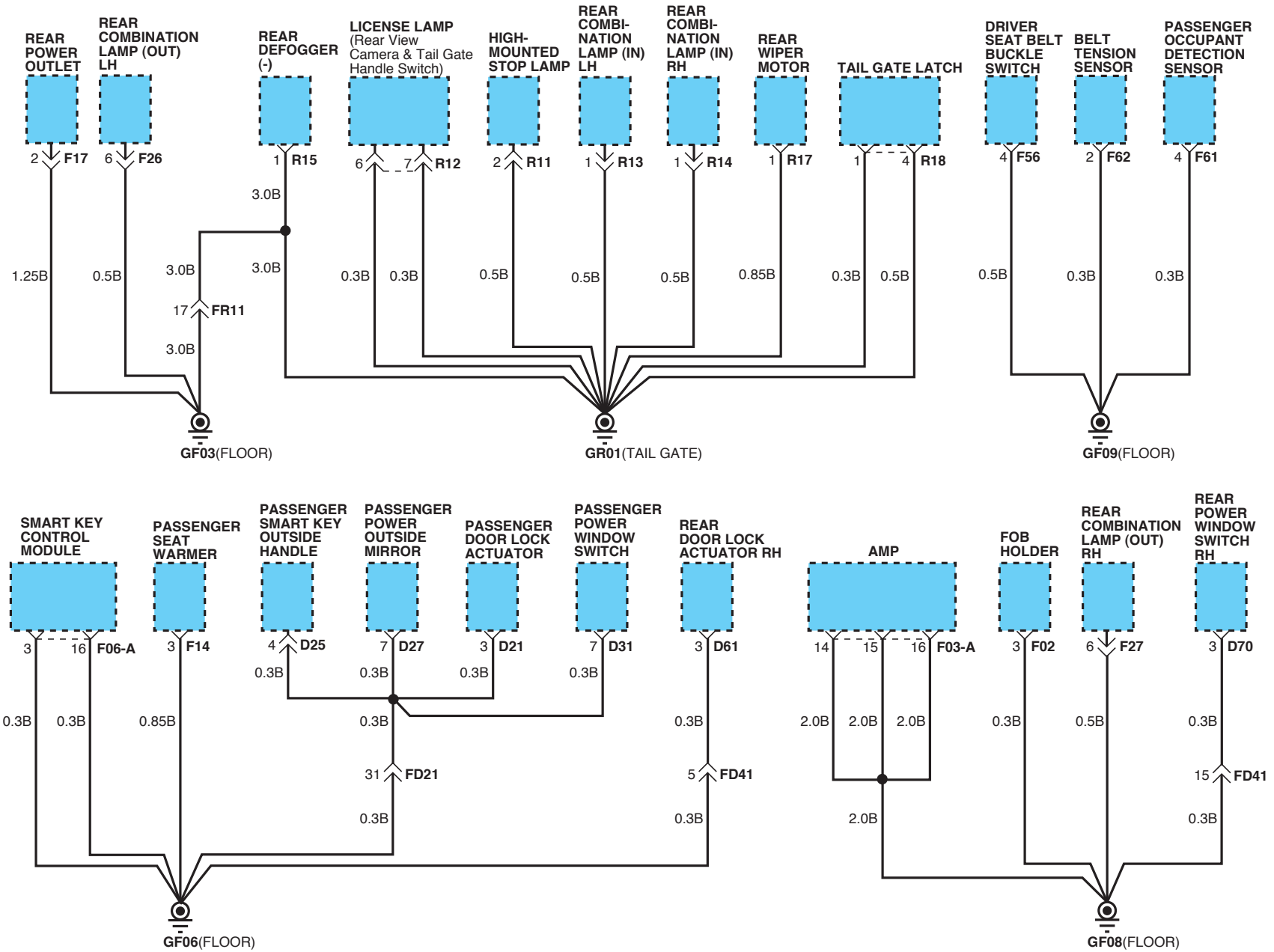

HOT AT ALL TIMES
I/P JUNCTION BOX
D
To IPS CONTROL (SD120-10)
SUNROOF 15A
AMP 25A
30
85
POWER WINDOW RELAY
87
86
IPS 2
IPS 1
IPS 0
P/WDW LH 25A
P/WDW RH 25A
Power Window Relay Control
IPS 2 IPS 1 IPS 0
Control
IPS CONTROL MODULE
8 I/P-J
13
18
6
19
7 I/P-E
9
11 I/P-A
25 I/P-C
1 I/P-D
0.85R
2.0O
1.25O
2.0O
2.0R
2.0R
1.25R
0.5Gr
0.5O/B
0.3Y
0.3Y
0.3B/O
0.3Y
0.3Y
14 MR01
8 FD31
2
15 FD11
13 FD21
8 FD41
9 FR11
0.85R
2.0P
2.0O
2.0R
1.25O
2.0O
2.0R
2.0L
1.25R
0.3Y
2 R09
2
1
3 F03-A
6 D50
16
9 D10
9 D31
6 D70
3
2
4 CHG27
3 R14
4 F27
SUNROOF MOTOR
AMP
REAR POWER WINDOW SWITCH LH
POWER WINDOW MAIN SWITCH
PASSENGER POWER WINDOW SWITCH
REAR POWER WINDOW SWITCH RH
HEAD LAMP RH
REAR COMBI-NATION LAMP (IN) RH
REAR COMBI-NATION LAMP (OUT) RH

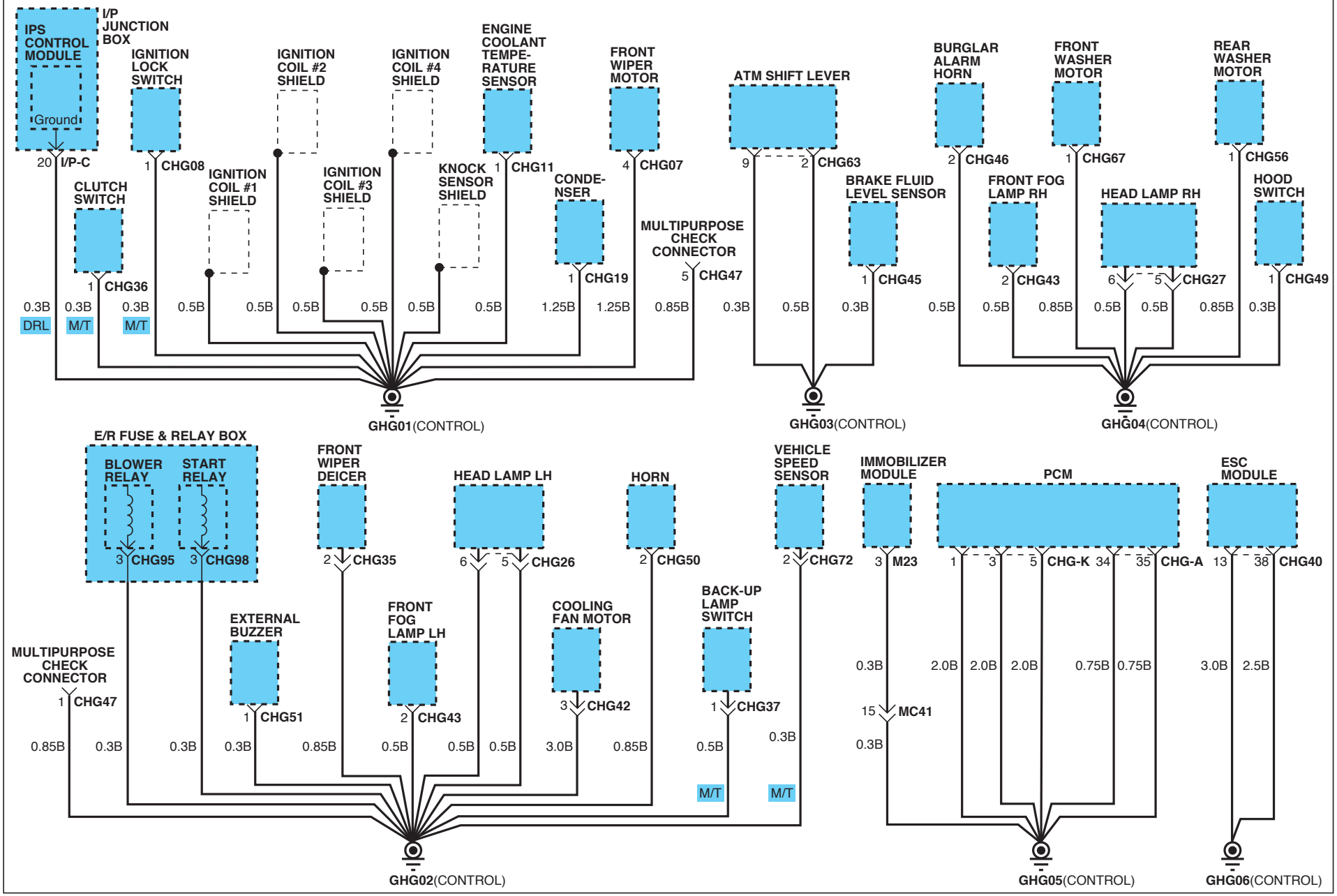

From HOT AT ALL TIME (SD120-9)
D
IPS 3
IPS 3 Control
IPS CONTROL MODULE
I/P JUNCTION BOX
PASSENGER POWER WINDOW SWITCH
21 I/P-D
REAR POWER WINDOW SWITCH LH
25 I/P-F
INSTRUMENT CLUSTER
CIGARETTE LIGHTER & FRONT POWER OUTLET
MULTI-FUNCTION SWITCH
HAZARD SWITCH
RHEOSTAT
CONSOLE SWITCH
REAR DEFOGGER SWITCH
FRONT WIPER DEICER SWITCH
Not Used
1 D31
8 D50
2 MR01
3 M15-A
5 M40
3 M20-R
1 M32
3 M55
3 M30
1 M57
1 M31
0.3R/O
0.3R
38 FD21
12 FD31
11
16
17
18
19
20 JM02
JOINT CONN-ECTOR
Auto A/C
Manual A/C
12
13
14
15 JM02
24 FD11
3 FD41
W/O A/V & Navigation
With A/V & Navigation
18 MF11
3 D10
8 D70
2 M41-A
1 M43-B
8 M45-A
2 M50-A
1 F38
8 M24
6 M25
1 M33
1 M27
1 M26
1 M28
POWER WINDOW MAIN SWITCH
REAR POWER WINDOW SWITCH RH
A/C CONTROL MODULE
A/C CONTROL MODULE
AUDIO
A/V & NAVIGATION HEAD MODULE
ATM SHIFT LEVER ILL.
AUX & USB Jack
AUX & USB Jack
GLOVE BOX LAMP
DBC SWITCH
ESC OFF SWITCH
4WD LOCK SWITCH

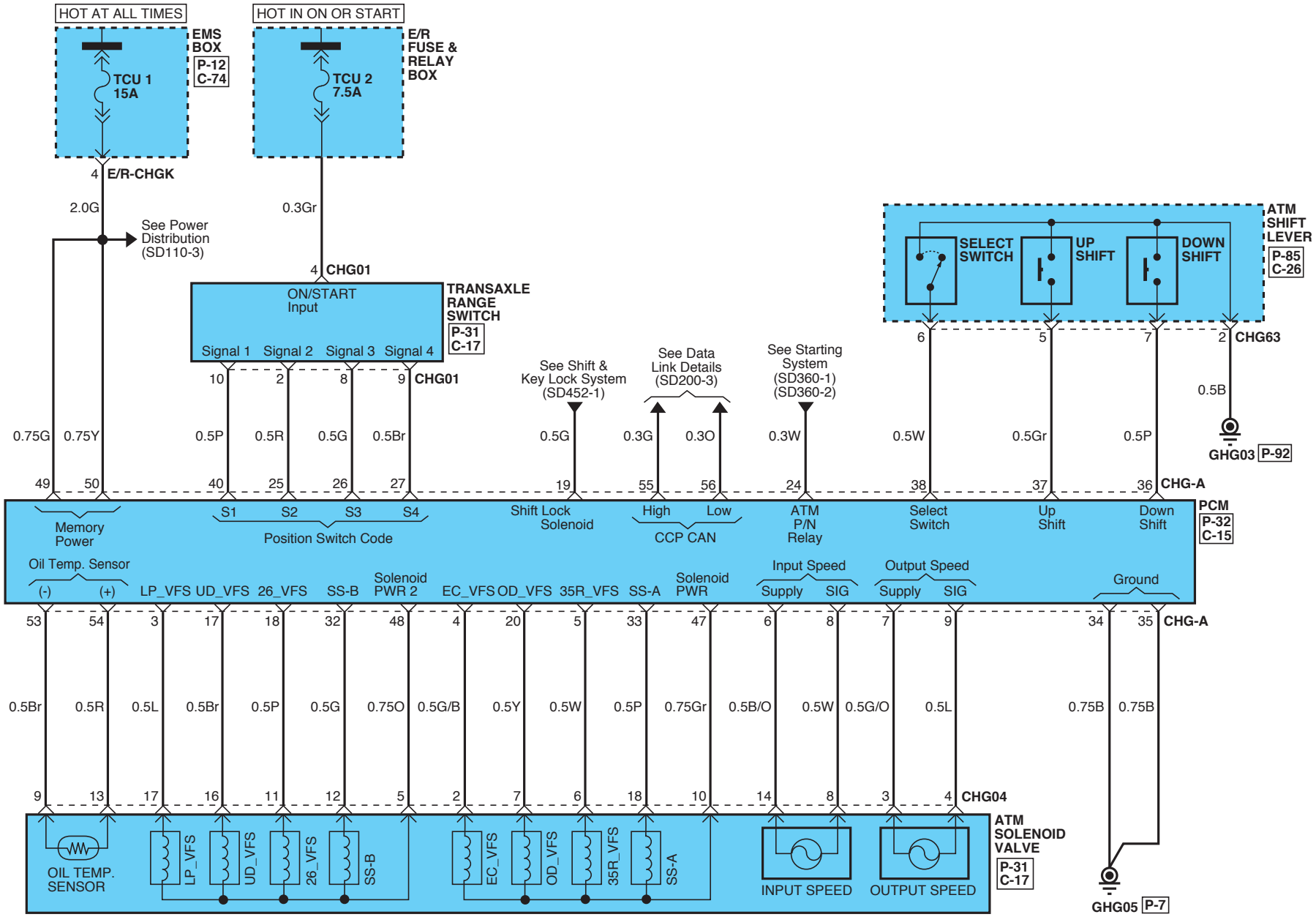

BCM
24 M13-A 12 M13-C
A/C CONTROL MODULE
32 M43-B
GLOVE BOX LAMP SWITCH
2 M34
INSTRUMENT CLUSTER
23 24 M15-A
4WD LOCK SWITCH
5 M28
PDM RELAY BOX
IGN 1 RELAY
IGN 2 RELAY
ACC RELAY
3 M51-A
FRONT WIPER DEICER SWITCH
2 4 M31
0.3P
DATA LINK CONNECTOR
4 5 M10
I/P JUNCTION BOX
IPS CONTROL MODULE
Signal Ground
16 I/P-J
A/C CONTROL MODULE
13 M41-A 9 M41-B
MULTI-FUNCTION SWITCH
4 M20-W
CONSOLE SWITCH
14 M30
MULTIFUNCTION SWITCH
2 5 M20-L
RHEOSTAT
2 M55
RF RECEIVER
4 M54
ODO TRIP SWITCH
2 M39
IGNITION KEY ILL. & DOOR WARNING SWITCH
3 M09
From Joint Connector (SD130-2)
A
0.3B
0.5B
Auto A/C
Manual A/C
With Smart Key
With Rheostat
W/O Rheostat
UMB
UMA
GM01(MAIN)


ATM SHIFT LEVER ILL.
AUDIO
A/V & NAVIGATION HEAD MODULE
INSTR-UMENT CLUSTER
A/C CONTROL MODULE
A/C CONTROL MODULE
ESC OFF SWITCH
HAZARD SWITCH
CONSOLE SWITCH
MULTI-FUNCTION SWITCH
DBC SWITCH
4WD LOCK SWITCH
START STOP BUTTON SWITCH
FRONT WIPER DEICER SWITCH
REAR DEFOGGER SWITCH
2 F38
17 M45-A
7 M50-A
21 M15-A
12 M41-A
16 M43-B
3 M26
2 M32
2 M30
2 M20-R
3 M27
3 M28
9 M61
3 M31
3 M57
See Illuminations (SD941-1)
To GM01 (SD130-1)
A
0.3L/O
0.5B
19 MF11
With Rheostat
W/O Rheostat
W/O A/V & Navigation
With A/V & Navigation
Auto A/C
Manual A/C
With Smart Key
1
2
3
4
5
6
7
8
9
JM02
JOINT CONNECTOR
PDM
FET (Field Effect Transistor)
A/C CONTROL MODULE
CIGARETTE LIGHTER & FRONT POWER OUTLET
REAR DEFOGGER SWITCH
TIRE PRESSURE MONITORING MODULE
HAZARD SWITCH
I/P JUNCTION BOX
DOOR LOCK RELAY
DOOR UNLOCK RELAY
MAP LAMP
ROOM LAMP
DRIVER VANITY LAMP
PASS-ENGER VANITY LAMP
SUNROOF SWITCH
SUNROOF MOTOR
1 2 M52-A
3 M14
3 M43-A
6 3 M40
2 4 M57
3 M67
6 M32
87a
9 I/P-H
1 R02
3 R05
2 R06
2 R07
3 R08
1 R09
2.0B
3.0B
0.85B
1.25B
0.3B
0.3P
0.5B
UMC
URA
Auto A/C
Manual A/C
1 M21
CLUSTER IONIZER
15 M04-A
ICM RELAY BOX
TWO TURN UNLOCK RELAY
8 R01
ELECTRO CHROMIC MIRROR
18 MR01
GM02(MAIN)

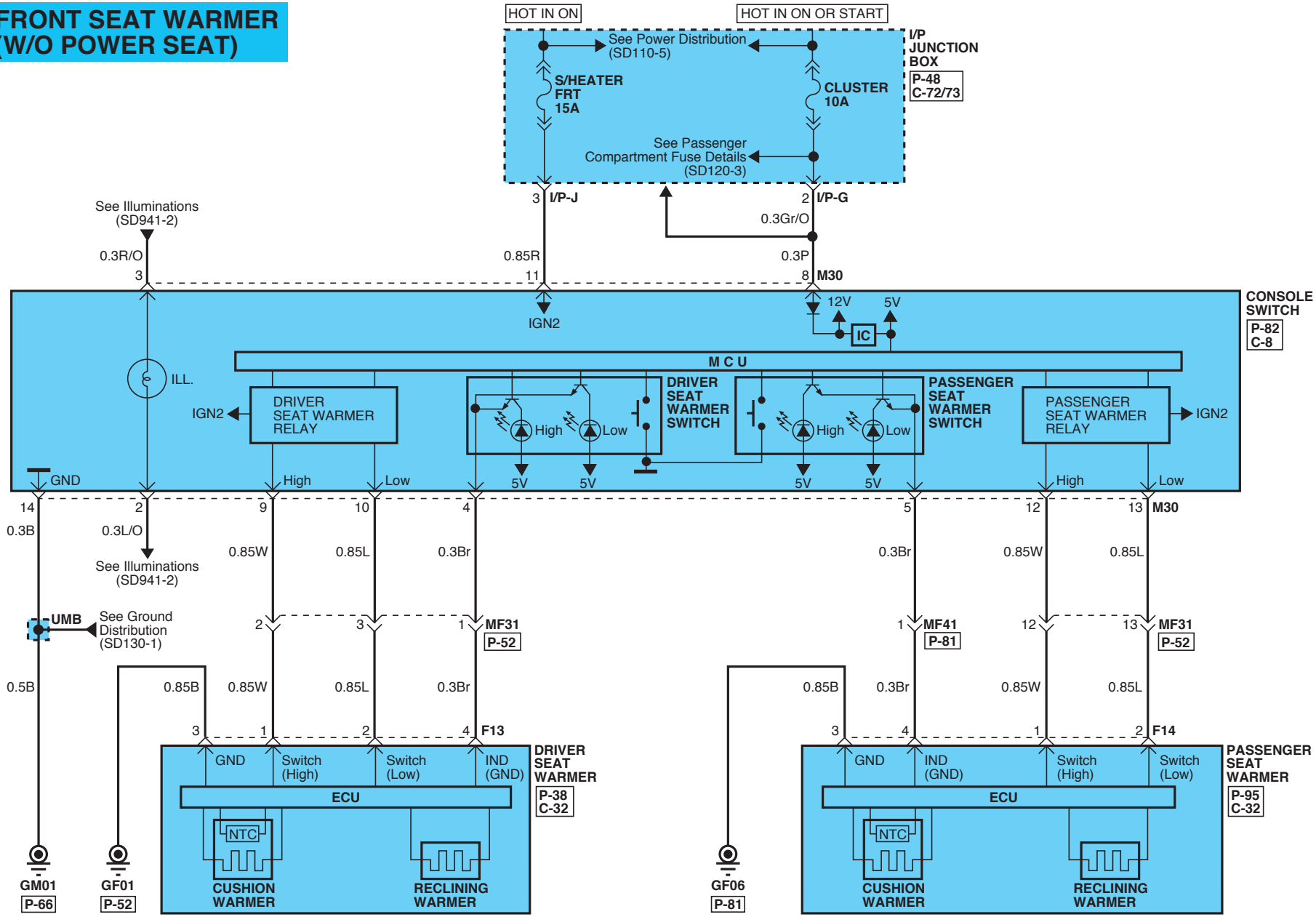

AUX & USB JACK
AUDIO
A/V & NAVIGATION HEAD MODULE
AUX & USB JACK
TELLTALE LAMP
SRS CONTROL MODULE
EPS CONTROL MODULE
FUEL SENDER & FUEL PUMP MOTOR
REAR DOOR LOCK ACTUATOR LH
REAR POWER WINDOW SWITCH LH
11 M24
24 M45-B
8 M50-A
12 M25
2 M69
19 M02
1 M17-A
5 F12
5 D41
3 D50
0.5B
0.85B
0.85B
0.5B
0.3B
0.5B
8.0B
0.85B
0.3B
0.3B
5
10 FD31
0.3B
0.3B
W/O A/V & Navigation
With A/V & Navigation
GM03(MAIN)
GM04(MAIN)
GM05(MAIN)
GF02(FLOOR)
4WD ECM
DRIVER DOOR LOCK ACTUATOR
DRIVER POWER OUTSIDE MIRROR
DRIVER SMART KEY OUTSIDE HANDLE
DRIVER SAFETY POWER WINDOW MODULE
POWER WINDOW MAIN SWITCH
POWER OUTSIDE MIRROR SWITCH
DRIVER SEAT WARMER
DRIVER SEAT WARMER
DRIVER SEAT MANUAL SWITCH
DRIVER RECLINING LIMIT SWITCH
I/P JUNCTION BOX
IPS CONTROL MODULE
Power Ground
10 F05
5 D01
7 D07
4 D05
3 D12
12 D10
5 D08
3 F13
2 S06
2 5 17 8 S01
3 S02
5 I/P-E
0.3B
0.3B
0.3B
1.25B
2.0B
0.3B
0.85B
0.85B 0.85B 2.0B 0.85B
1.25B
0.3B
2.0B
13
32 FD11
8
10 FS11
0.3B
0.3B
2.0B
0.85B
0.85B
2.0B
0.3B
W/O Driver Power Seat
With Driver Power Seat
GF01(FLOOR)


REAR POWER OUTLET
REAR COMBINATION LAMP (OUT) LH
REAR DEFOGGER (-)
LICENSE LAMP (Rear View Camera & Tail Gate Handle Switch)
HIGH-MOUNTED STOP LAMP
REAR COMBI-NATION LAMP (IN) LH
REAR COMBI-NATION LAMP (IN) RH
REAR WIPER MOTOR
TAIL GATE LATCH
DRIVER SEAT BELT BUCKLE SWITCH
BELT TENSION SENSOR
PASSENGER OCCUPANT DETECTION SENSOR
2 F17
6 F26
1 R15
6 7 R12
2 R11
1 R13
1 R14
1 R17
1 4 R18
4 F56
2 F62
4 F61
3.0B
1.25B
0.5B
3.0B
3.0B
17 FR11
3.0B
0.3B
0.3B
0.5B
0.5B
0.5B
0.85B
0.3B
0.5B
0.5B
0.3B
0.3B
GF03(FLOOR)
GR01(TAIL GATE)
GF09(FLOOR)
SMART KEY CONTROL MODULE
PASSENGER SEAT WARMER
PASSENGER SMART KEY OUTSIDE HANDLE
PASSENGER POWER OUTSIDE MIRROR
PASSENGER DOOR LOCK ACTUATOR
PASSENGER POWER WINDOW SWITCH
REAR DOOR LOCK ACTUATOR RH
AMP
FOB HOLDER
REAR COMBINATION LAMP (OUT) RH
REAR POWER WINDOW SWITCH RH
3 16 F06-A
3 F14
4 D25
7 D27
3 D21
7 D31
3 D61
14 15 16 F03-A
3 F02
6 F27
3 D70
0.3B
0.3B
0.85B
0.3B
0.3B
0.3B
0.3B
0.3B
0.3B
2.0B
2.0B
2.0B
0.3B
0.5B
0.3B
31 FD21
5 FD41
15 FD41
0.3B
0.3B
2.0B
0.3B
0.3B
GF06(FLOOR)
GF08(FLOOR)

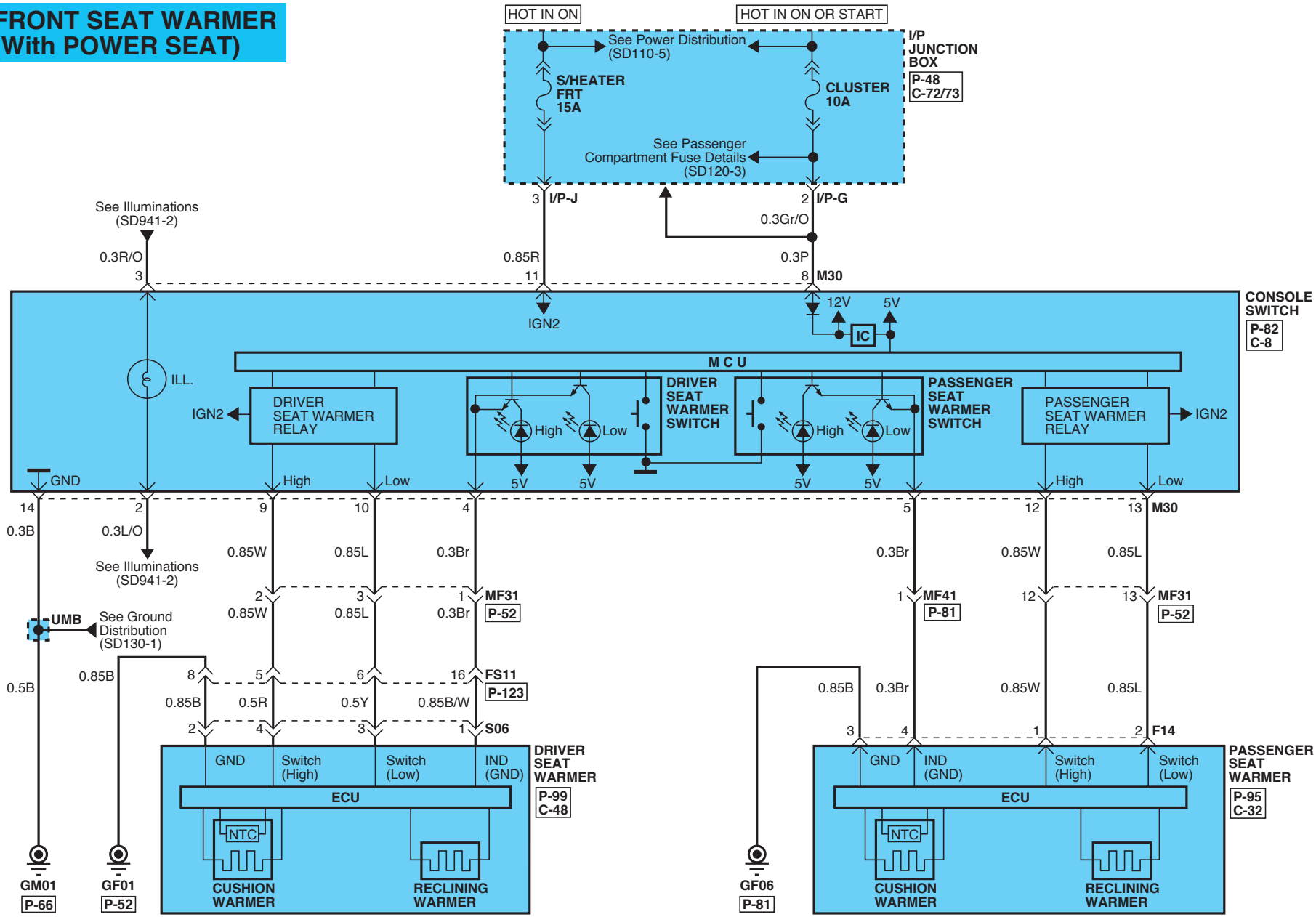

IPS CONTROL MODULE
Ground
I/P JUNCTION BOX
20 I/P-C
IGNITION LOCK SWITCH
1 CHG08
IGNITION COIL #2 SHIELD
IGNITION COIL #4 SHIELD
ENGINE COOLANT TEMPE-RATURE SENSOR
1 CHG11
FRONT WIPER MOTOR
4 CHG07
ATM SHIFT LEVER
9 2 CHG63
BURGLAR ALARM HORN
2 CHG46
FRONT WASHER MOTOR
1 CHG67
REAR WASHER MOTOR
1 CHG56
CLUTCH SWITCH
1 CHG36
IGNITION COIL #1 SHIELD
IGNITION COIL #3 SHIELD
KNOCK SENSOR SHIELD
CONDE-NSER
1 CHG19
MULTIPURPOSE CHECK CONNECTOR
5 CHG47
BRAKE FLUID LEVEL SENSOR
1 CHG45
FRONT FOG LAMP RH
2 CHG43
HEAD LAMP RH
6 5 CHG27
HOOD SWITCH
1 CHG49
0.3B DRL
0.3B M/T
0.3B M/T
0.5B
0.5B
0.5B
0.5B
0.5B
0.5B
1.25B
1.25B
0.85B
0.3B
0.5B
0.3B
0.5B
0.5B
0.85B
0.5B
0.5B
0.85B
0.3B
GHG01(CONTROL)
GHG03(CONTROL)
GHG04(CONTROL)
E/R FUSE & RELAY BOX
BLOWER RELAY
START RELAY
3 CHG95
3 CHG98
FRONT WIPER DEICER
2 CHG35
HEAD LAMP LH
6 5 CHG26
HORN
2 CHG50
VEHICLE SPEED SENSOR
2 CHG72
IMMOBILIZER MODULE
3 M23
PCM
1 3 5 CHG-K 34 35 CHG-A
ESC MODULE
13 38 CHG40
MULTIPURPOSE CHECK CONNECTOR
1 CHG47
EXTERNAL BUZZER
1 CHG51
FRONT FOG LAMP LH
2 CHG43
COOLING FAN MOTOR
3 CHG42
BACK-UP LAMP SWITCH
1 CHG37
0.85B
0.3B
0.3B
0.3B
0.85B
0.5B
0.5B
0.5B
3.0B
0.85B
0.5B
M/T
0.3B
M/T
0.3B
2.0B
2.0B
2.0B
0.75B
0.75B
15 MC41
0.3B
3.0B
2.5B
GHG02(CONTROL)
GHG05(CONTROL)
GHG06(CONTROL)


HOT AT ALL TIMES
HOT IN ON OR START
EMS BOX P-12 C-74
E/R FUSE & RELAY BOX
TCU 1 15A
TCU 2 7.5A
4 E/R-CHGK
2.0G
0.3Gr
See Power Distribution (SD110-3)
4 CHG01
TRANSAXLE RANGE SWITCH P-31 C-17
ON/START Input
Signal 1 Signal 2 Signal 3 Signal 4
10 2 8 9 CHG01
ATM SHIFT LEVER P-85 C-26
SELECT SWITCH
UP SHIFT
DOWN SHIFT
6 5 7 2 CHG63
0.5B
GHG03 P-92
See Shift & Key Lock System (SD452-1)
See Data Link Details (SD200-3)
See Starting System (SD360-1) (SD360-2)
0.75G 0.75Y 0.5P 0.5R 0.5G 0.5Br 0.5G 0.3G 0.3O 0.3W 0.5W 0.5Gr 0.5P
49 50 40 25 26 27 19 55 56 24 38 37 36 CHG-A
PCM P-32 C-15
Memory Power
S1 S2 S3 S4
Position Switch Code
Shift Lock Solenoid
High Low
CCP CAN
ATM P/N Relay
Select Switch
Up Shift
Down Shift
Oil Temp. Sensor
(-) (+)
LP_VFS UD_VFS 26_VFS SS-B
Solenoid PWR 2
EC_VFS OD_VFS 35R_VFS SS-A
Solenoid PWR
Input Speed
Supply SIG
Output Speed
Supply SIG
Ground
53 54 3 17 18 32 48 4 20 5 33 47 6 8 7 9 34 35 CHG-A
0.5Br 0.5R 0.5L 0.5Br 0.5P 0.5G 0.75O 0.5G/B 0.5Y 0.5W 0.5P 0.75Gr 0.5B/O 0.5W 0.5G/O 0.5L 0.75B 0.75B
9 13 17 16 11 12 5 2 7 6 18 10 14 8 3 4 CHG04
OIL TEMP. SENSOR
LP_VFS
UD_VFS
26_VFS
SS-B
EC_VFS
OD_VFS
35R_VFS
SS-A
INPUT SPEED
OUTPUT SPEED
ATM SOLENOID VALVE P-31 C-17
GHG05 P-7

FRONT SEAT WARMER (W/O POWER SEAT)

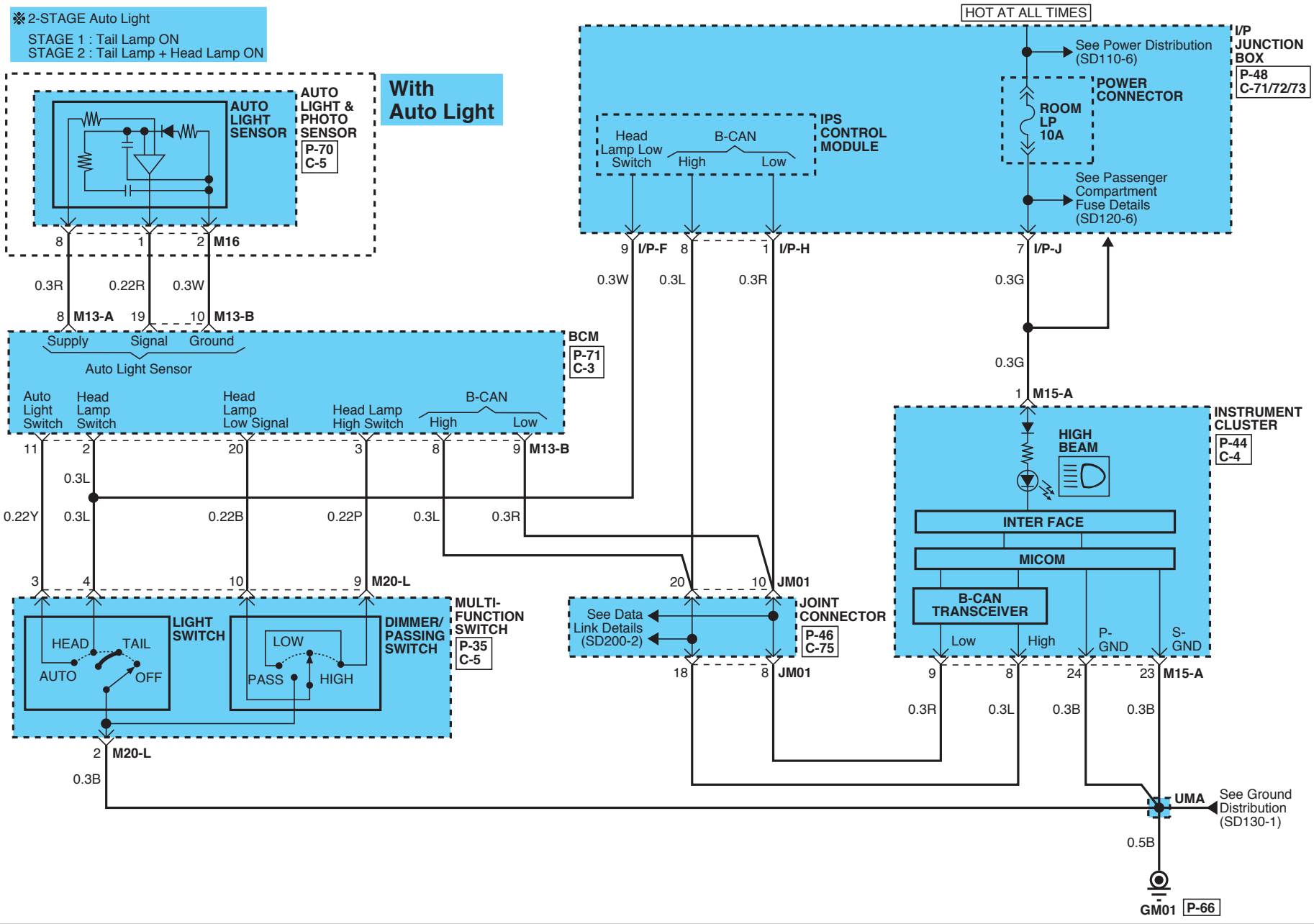


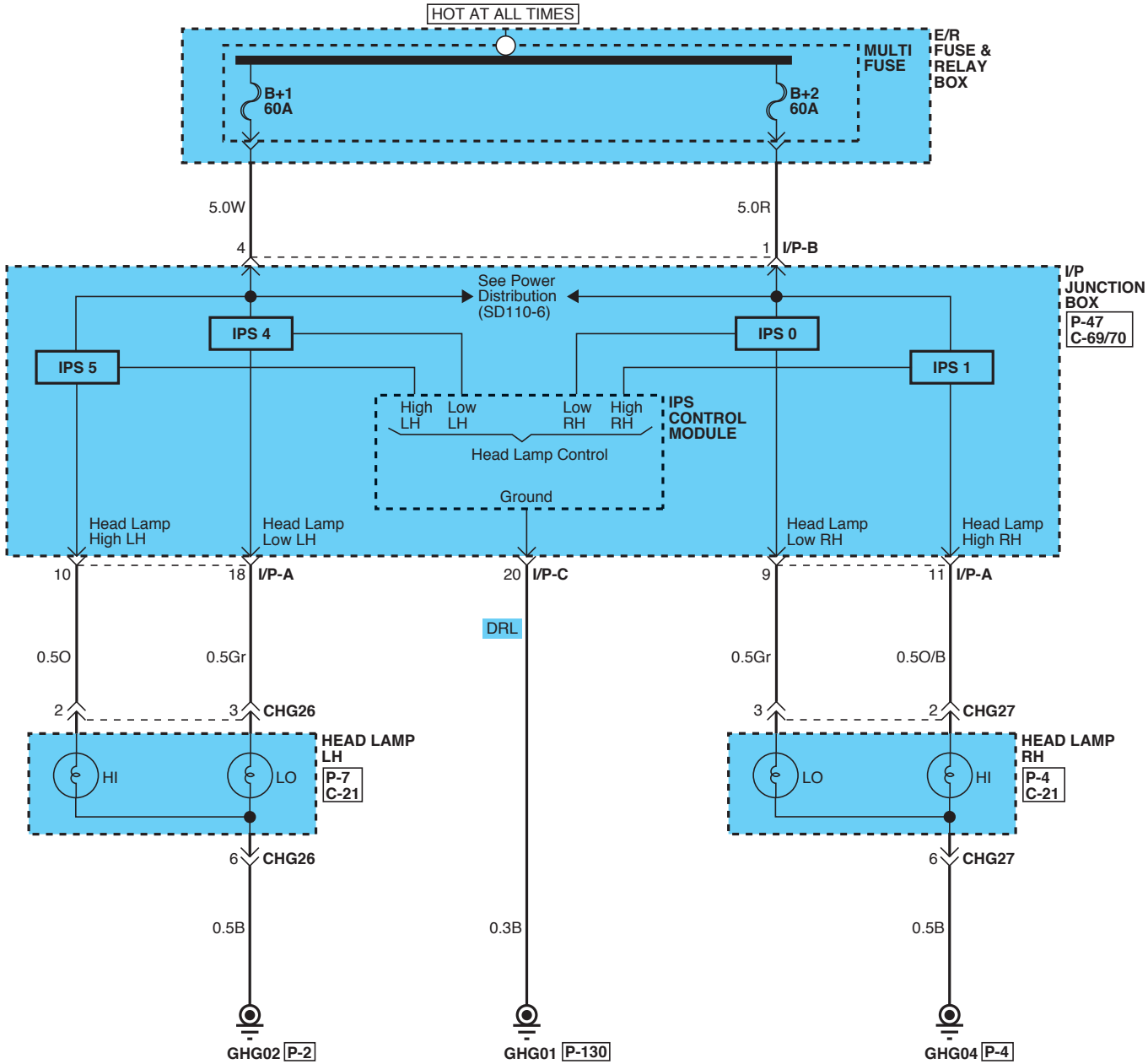
FRONT SEAT WARMER (With POWER SEAT)



Head Lamps (1)

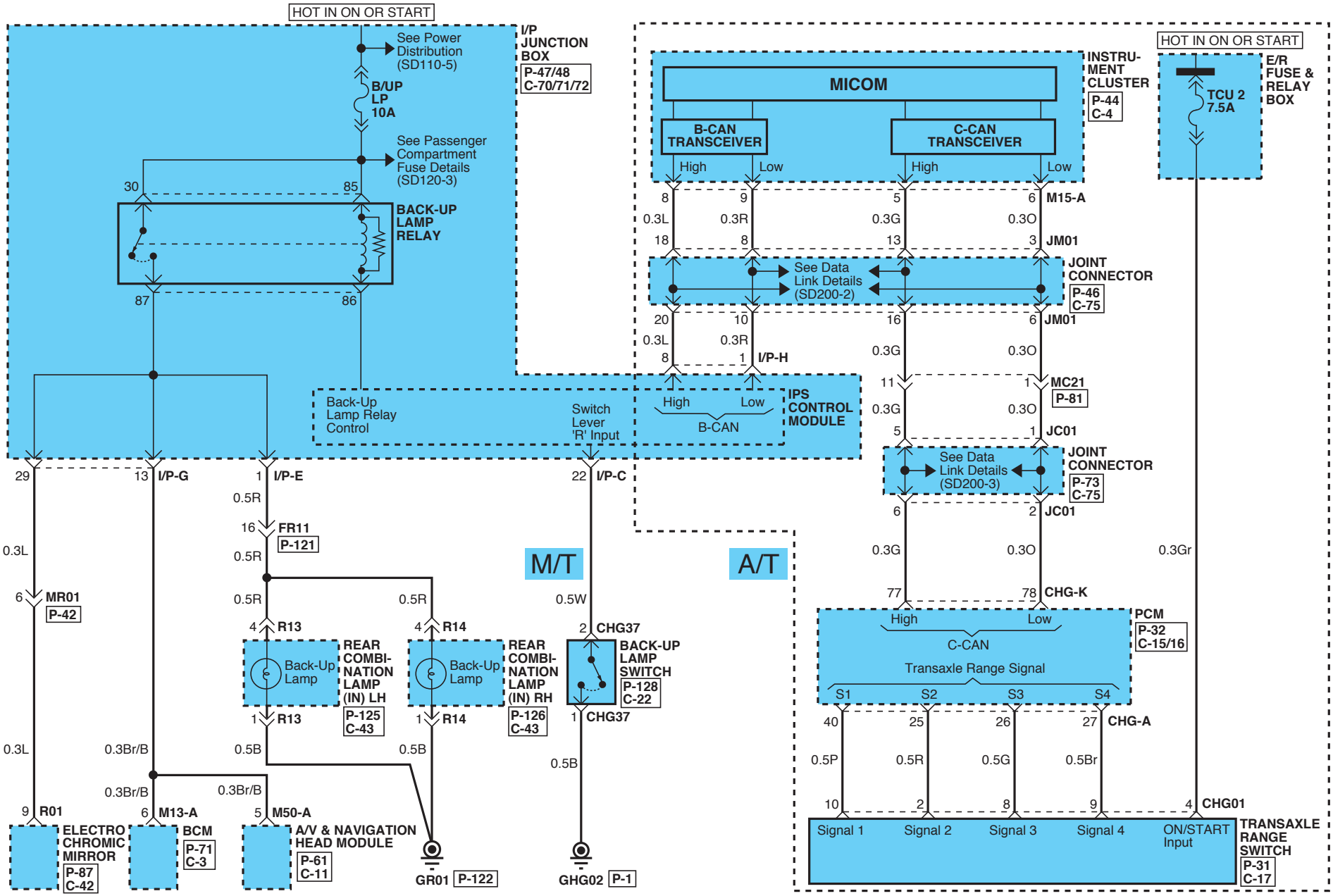
SD921-1



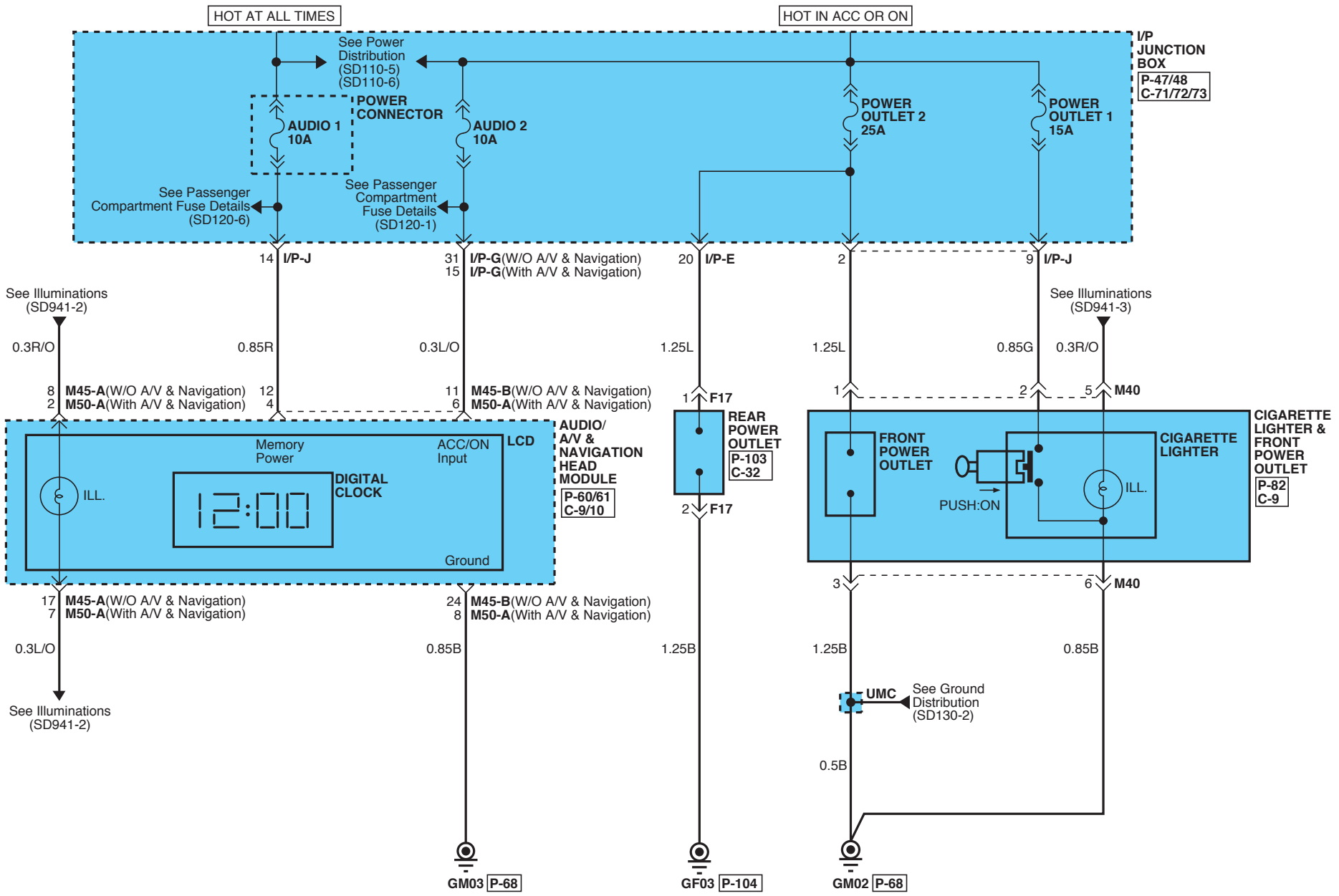

HOT AT ALL TIMES
E/R FUSE & RELAY BOX
MULTI FUSE
B+1 60A
B+2 60A
5.0W
5.0R
4
1
I/P-B
I/P JUNCTION BOX
P-47
C-69/70
See Power Distribution (SD110-6)
IPS 4
IPS 0
IPS 5
IPS 1
High LH
Low LH
Low RH
High RH
IPS CONTROL MODULE
Head Lamp Control
Ground
Head Lamp High LH
Head Lamp Low LH
Head Lamp Low RH
Head Lamp High RH
10
18
I/P-A
20
I/P-C
9
11
I/P-A
DRL
0.5O
0.5Gr
0.5Gr
0.5O/B
2
3
CHG26
3
2
CHG27
HEAD LAMP LH
P-7
C-21
HI
LO
LO
HI
HEAD LAMP RH
P-4
C-21
6
CHG26
6
CHG27
0.5B
0.3B
0.5B
GHG02
P-2
GHG01
P-130
GHG04
P-4

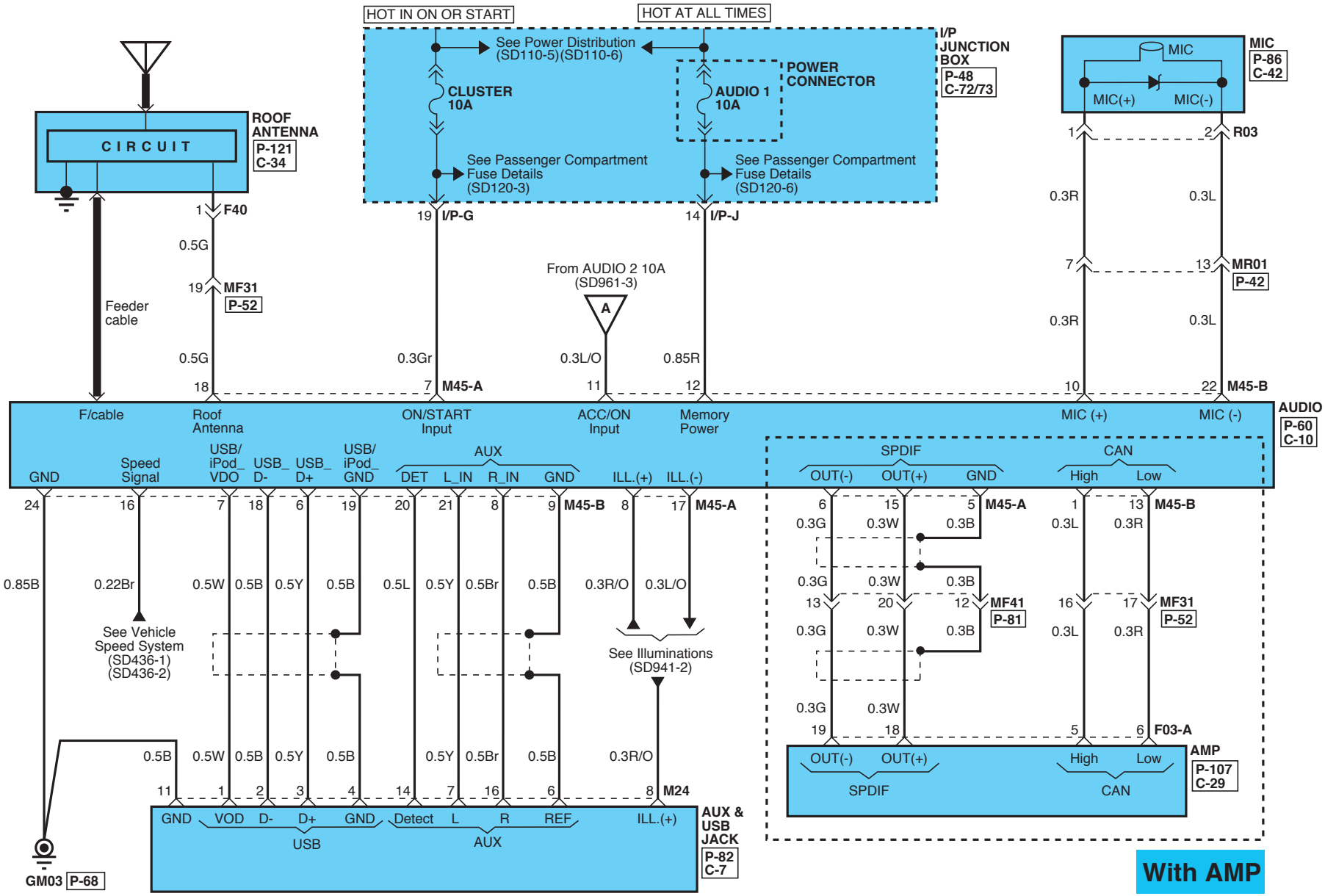
Back-Up Lamps (1)

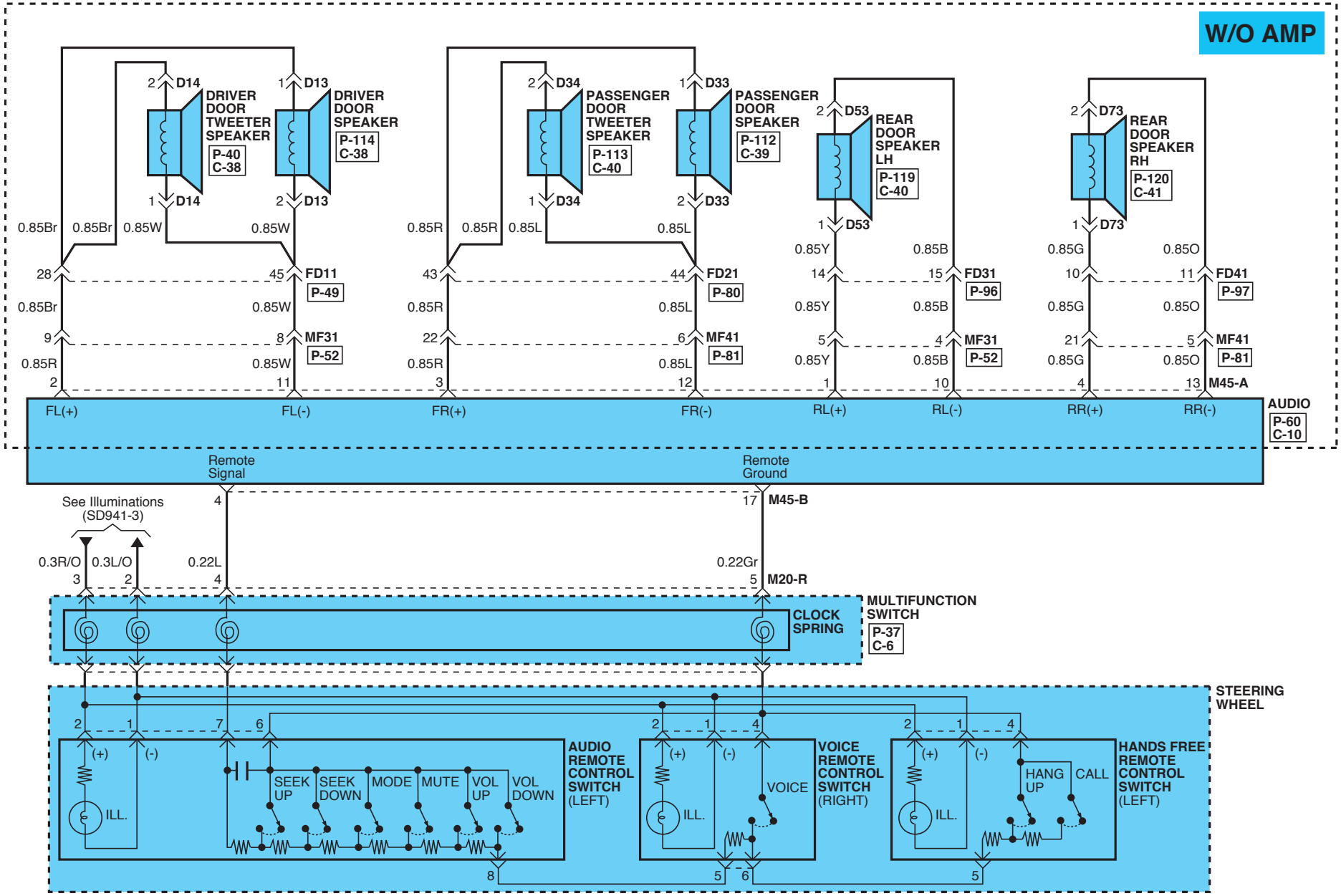
SD926-1

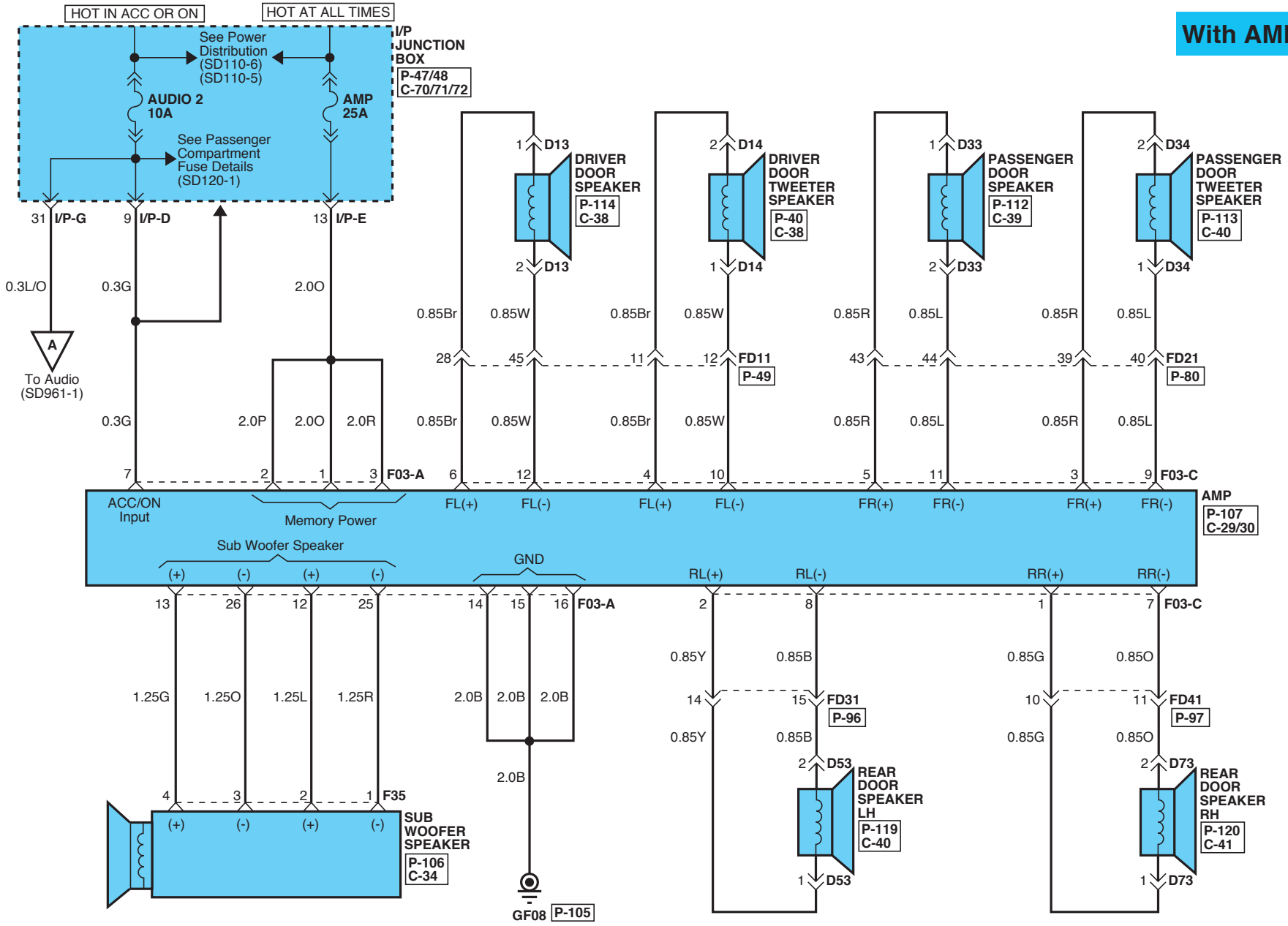


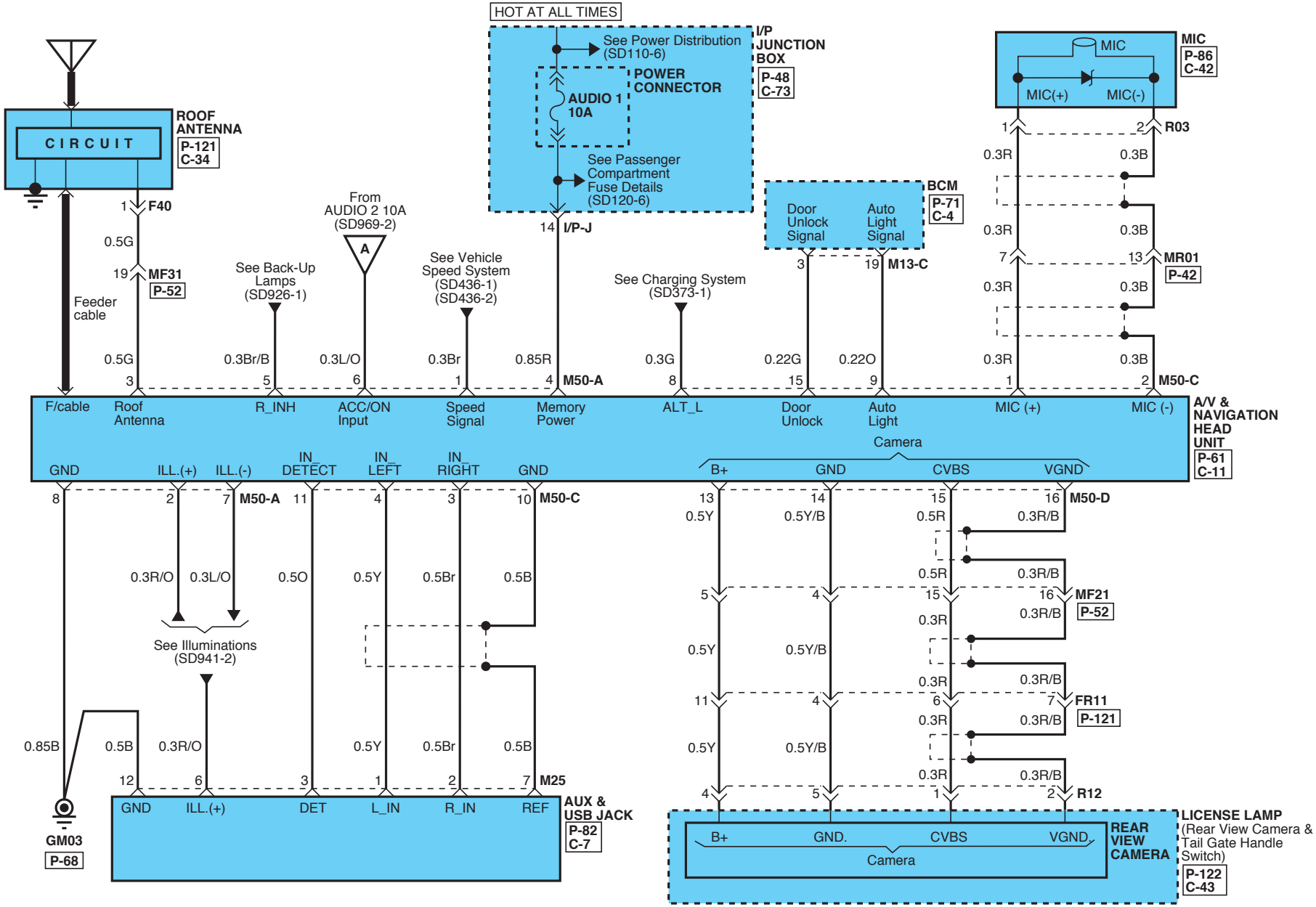
Clock & Cigarette Lighter (Power Outlet) System (1)

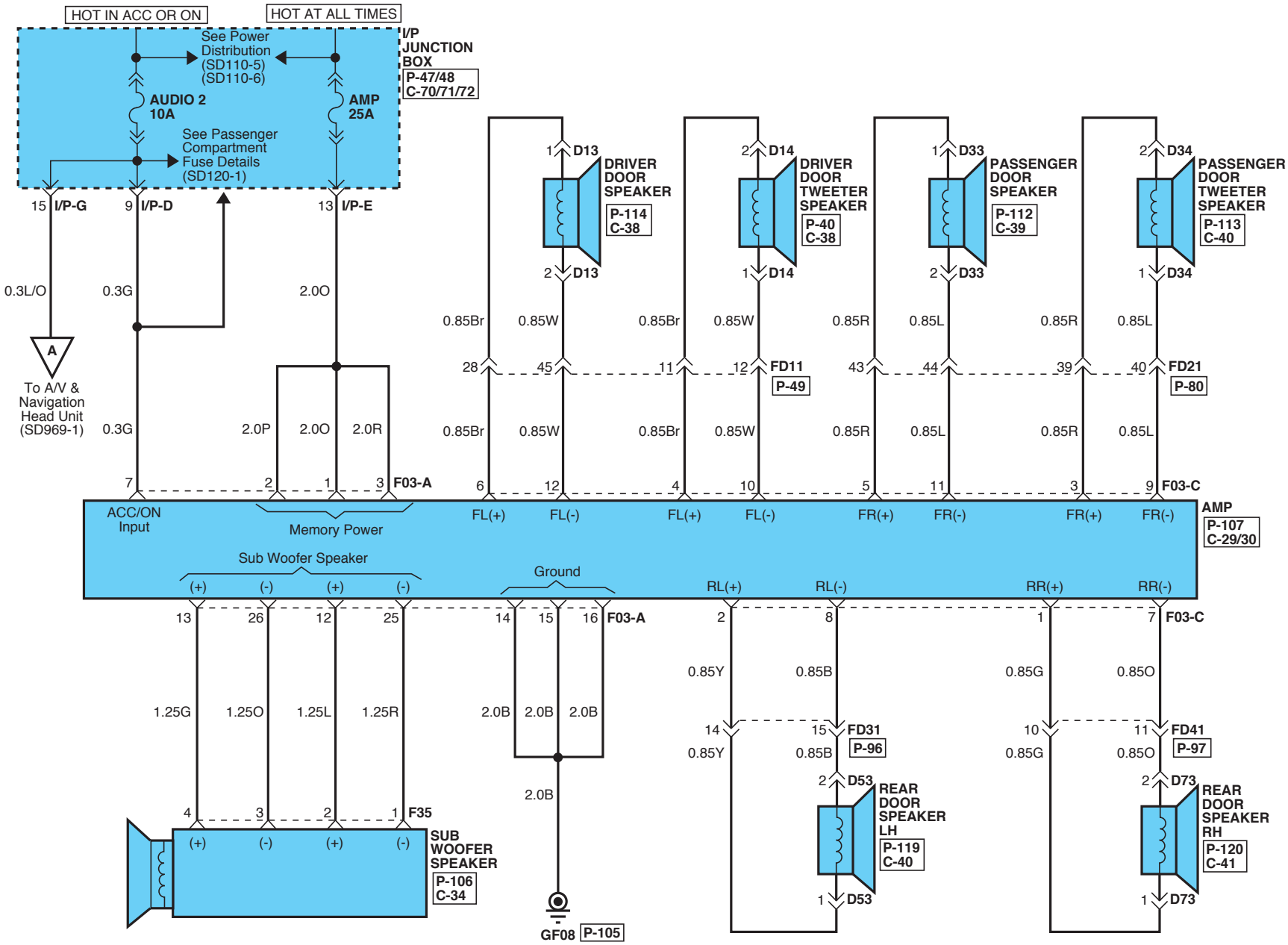


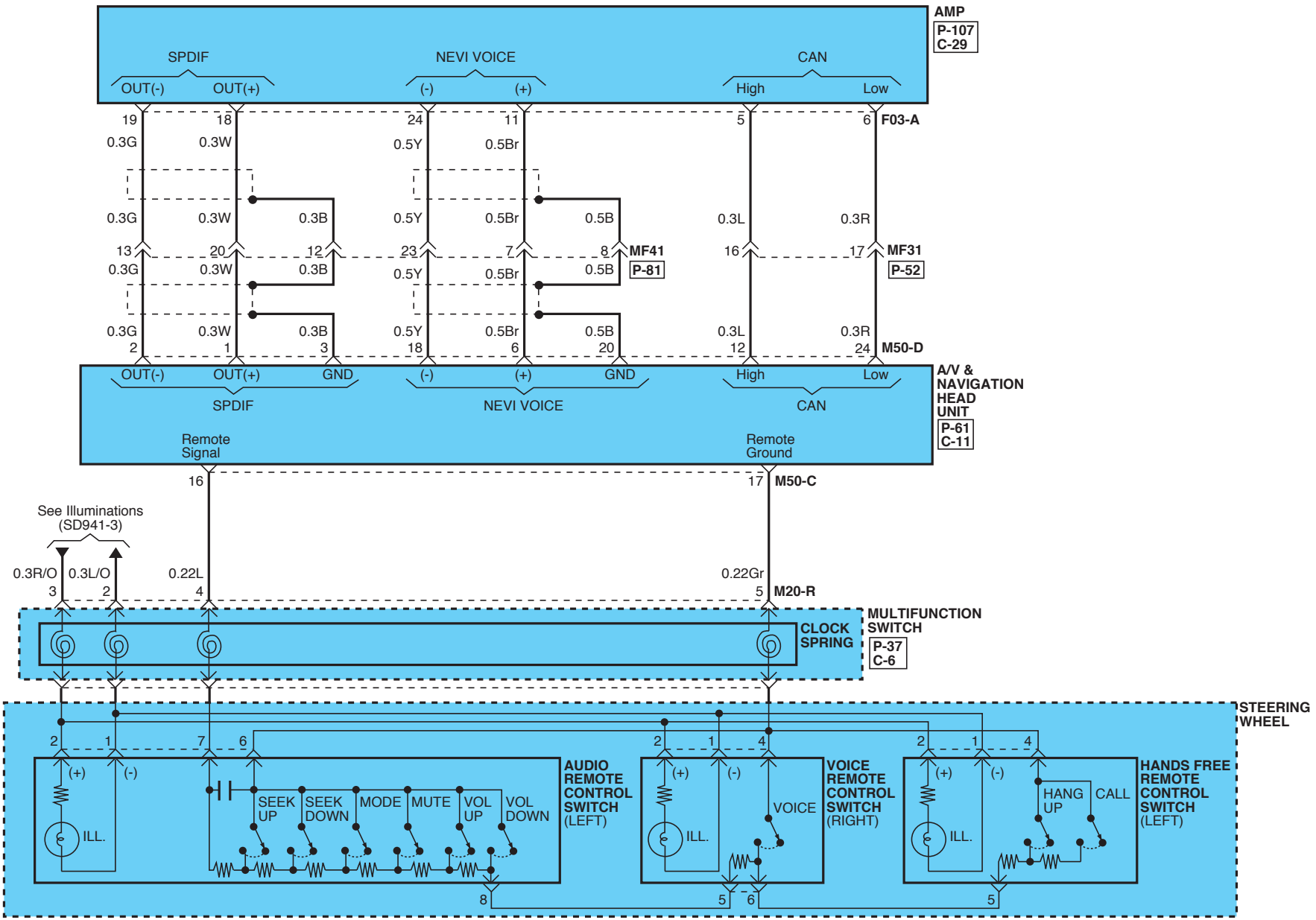

HOT IN ON OR START
HOT AT ALL TIMES
I/P JUNCTION BOX P-48 C-72/73
See Power Distribution (SD110-5)(SD110-6)
CLUSTER 10A
AUDIO 1 10A
POWER CONNECTOR
See Passenger Compartment Fuse Details (SD120-3)
See Passenger Compartment Fuse Details (SD120-6)
CIRCUIT
ROOF ANTENNA P-121 C-34
Feeder cable
1 F40
0.5G
19 MF31 P-52
0.5G
18
19 I/P-G
0.3Gr
7 M45-A
From AUDIO 2 10A (SD961-3)
A
0.3L/O
11
14 I/P-J
0.85R
12
MIC
P-86 C-42
MIC(+)
MIC(-)
1
2 R03
0.3R
0.3L
7
13 MR01 P-42
0.3R
0.3L
10
22 M45-B
F/cable
Roof Antenna
ON/START Input
ACC/ON Input
Memory Power
MIC (+)
MIC (-)
AUDIO P-60 C-10
GND
Speed Signal
USB/ iPod_ VDO
USB_ D-
USB_ D+
USB/ iPod_ GND
AUX
DET
L_IN
R_IN
GND
ILL.(+)
ILL.(-)
SPDIF
OUT(-)
OUT(+)
GND
CAN
High
Low
24
16
7
18
6
19
20
21
8
9 M45-B
8
17 M45-A
6
15
5 M45-A
1
13 M45-B
0.85B
0.22Br
0.5W
0.5B
0.5Y
0.5B
0.5L
0.5Y
0.5Br
0.5B
0.3R/O
0.3L/O
0.3G
0.3W
0.3B
0.3L
0.3R
See Vehicle Speed System (SD436-1) (SD436-2)
See Illuminations (SD941-2)
13
20
12 MF41 P-81
16
17 MF31 P-52
0.3G
0.3W
0.3B
0.3L
0.3R
0.3G
0.3W
19
18
5
6 F03-A
0.5B
0.5W
0.5B
0.5Y
0.5B
0.5Y
0.5Br
0.5B
0.3R/O
11
1
2
3
4
14
7
16
6
8 M24
GND
VOD
D-
D+
GND
USB
Detect
L
R
REF
AUX
ILL.(+)
AUX & USB JACK P-82 C-7
OUT(-)
OUT(+)
SPDIF
High
Low
CAN
AMP P-107 C-29
GM03 P-68
With AMP


W/O AMP
D14
DRIVER DOOR TWEETER SPEAKER
P-40
C-38
D13
DRIVER DOOR SPEAKER
P-114
C-38
D34
PASSENGER DOOR TWEETER SPEAKER
P-113
C-40
D33
PASSENGER DOOR SPEAKER
P-112
C-39
D53
REAR DOOR SPEAKER LH
P-119
C-40
D73
REAR DOOR SPEAKER RH
P-120
C-41
0.85Br 0.85Br 0.85W 0.85W
0.85R 0.85R 0.85L 0.85L
0.85Y 0.85B
0.85G 0.85O
FD11 P-49
FD21 P-80
FD31 P-96
FD41 P-97
MF31 P-52
MF41 P-81
M45-A
FL(+) FL(-) FR(+) FR(-) RL(+) RL(-) RR(+) RR(-)
AUDIO
P-60
C-10
Remote Signal
Remote Ground
M45-B
M20-R
See Illuminations (SD941-3)
0.3R/O 0.3L/O 0.22L 0.22Gr
MULTIFUNCTION SWITCH
P-37
C-6
CLOCK SPRING
STEERING WHEEL
AUDIO REMOTE CONTROL SWITCH (LEFT)
SEEK UP
SEEK DOWN
MODE
MUTE
VOL UP
VOL DOWN
ILL.
VOICE REMOTE CONTROL SWITCH (RIGHT)
VOICE
HANDS FREE REMOTE CONTROL SWITCH (LEFT)
HANG UP
CALL


With AMP
HOT IN ACC OR ON
HOT AT ALL TIMES
See Power Distribution (SD110-6) (SD110-5)
I/P JUNCTION BOX
P-47/48
C-70/71/72
AUDIO 2 10A
AMP 25A
See Passenger Compartment Fuse Details (SD120-1)
31 I/P-G
9 I/P-D
13 I/P-E
0.3L/O
0.3G
2.0O
A
To Audio (SD961-1)
D13 DRIVER DOOR SPEAKER P-114 C-38
D14 DRIVER DOOR TWEETER SPEAKER P-40 C-38
D33 PASSENGER DOOR SPEAKER P-112 C-39
D34 PASSENGER DOOR TWEETER SPEAKER P-113 C-40
0.85Br
0.85W
0.85R
0.85L
FD11 P-49
FD21 P-80
0.3G
2.0P
2.0O
2.0R
F03-A
F03-C
ACC/ON Input
Memory Power
FL(+)
FL(-)
FR(+)
FR(-)
AMP P-107 C-29/30
Sub Woofer Speaker
GND
RL(+)
RL(-)
RR(+)
RR(-)
1.25G
1.25O
1.25L
1.25R
2.0B
F35
SUB WOOFER SPEAKER P-106 C-34
GF08 P-105
0.85Y
0.85B
0.85G
0.85O
FD31 P-96
FD41 P-97
D53 REAR DOOR SPEAKER LH P-119 C-40
D73 REAR DOOR SPEAKER RH P-120 C-41

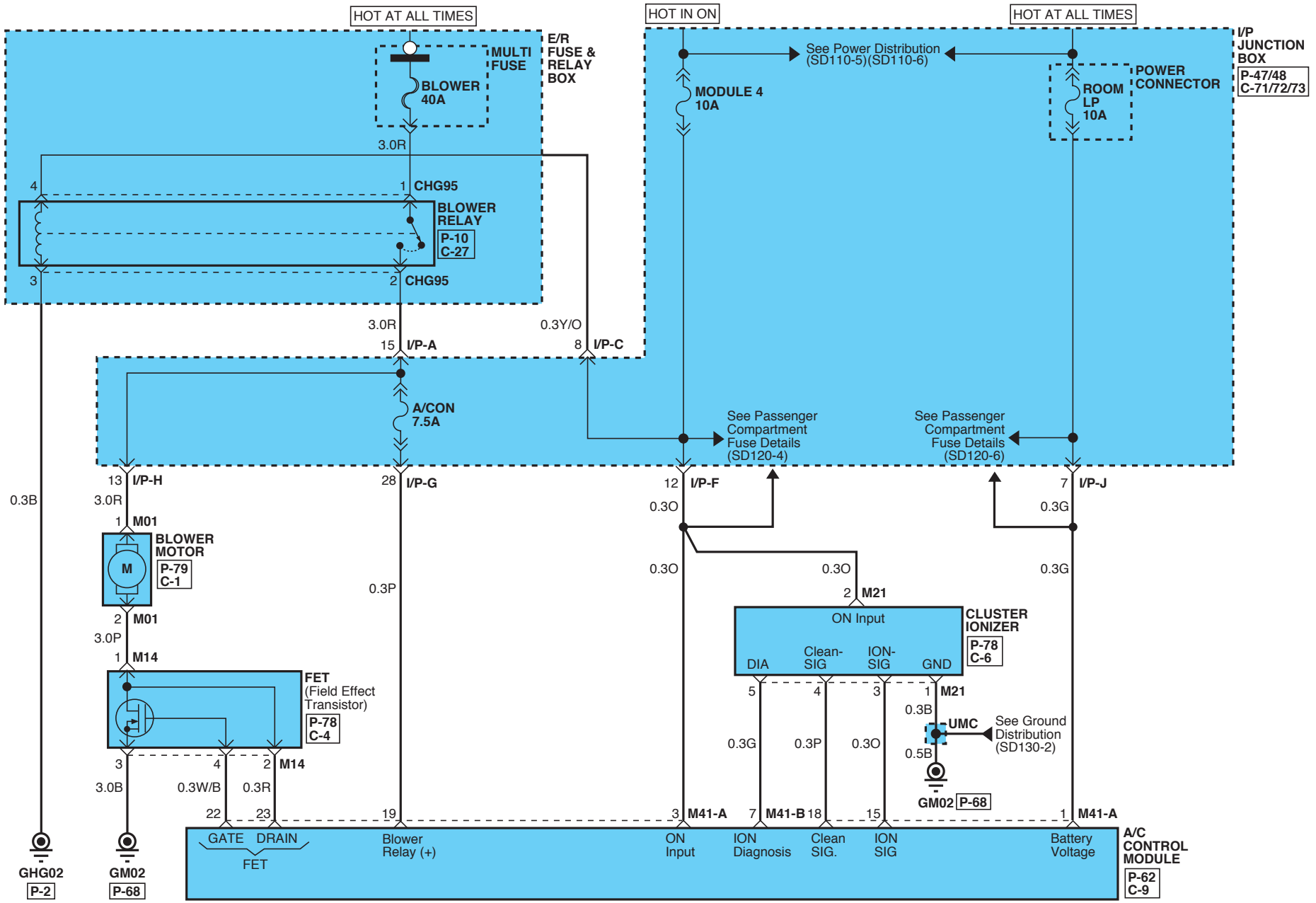

HOT AT ALL TIMES
See Power Distribution (SD110-6)
I/P JUNCTION BOX
P-48
C-73
POWER CONNECTOR
AUDIO 1 10A
See Passenger Compartment Fuse Details (SD120-6)
14 I/P-J
CIRCUIT
ROOF ANTENNA
P-121
C-34
1 F40
0.5G
19 MF31
P-52
Feeder cable
0.5G
3
F/cable
Roof Antenna
From AUDIO 2 10A (SD969-2)
A
0.3L/O
6
ACC/ON Input
See Back-Up Lamps (SD926-1)
0.3Br/B
5
R_INH
See Vehicle Speed System (SD436-1) (SD436-2)
0.3Br
1
Speed Signal
0.85R
4
Memory Power
M50-A
See Charging System (SD373-1)
0.3G
8
ALT_L
BCM
P-71
C-4
Door Unlock Signal
Auto Light Signal
0.22G
15
Door Unlock
0.22O
9
Auto Light
3
19 M13-C
MIC
P-86
C-42
MIC(+)
MIC(-)
1
2 R03
0.3R
0.3B
7
13 MR01
P-42
0.3R
0.3B
0.3R
0.3B
MIC (+)
MIC (-)
M50-C
A/V & NAVIGATION HEAD UNIT
P-61
C-11
GND
ILL.(+)
ILL.(-)
IN_ DETECT
IN_ LEFT
IN_ RIGHT
GND
8
2
7 M50-A
11
4
3
10 M50-C
0.3R/O
0.3L/O
0.5O
0.5Y
0.5Br
0.5B
See Illuminations (SD941-2)
0.85B
0.5B
0.3R/O
0.5Y
0.5Br
0.5B
12
6
3
1
2
7 M25
GM03
P-68
GND
ILL.(+)
DET
L_IN
R_IN
REF
AUX & USB JACK
P-82
C-7
Camera
B+
GND
CVBS
VGND
13
0.5Y
14
0.5Y/B
15
0.5R
16
0.3R/B
M50-D
0.5R
0.3R/B
5
0.5Y
4
0.5Y/B
15
16 MF21
P-52
0.3R
0.3R/B
0.3R
0.3R/B
11
0.5Y
4
0.5Y/B
6
7 FR11
P-121
0.3R
0.3R/B
0.3R
0.3R/B
4
5
1
2 R12
B+
GND.
CVBS
VGND
Camera
REAR VIEW CAMERA
LICENSE LAMP (Rear View Camera & Tail Gate Handle Switch)
P-122
C-43

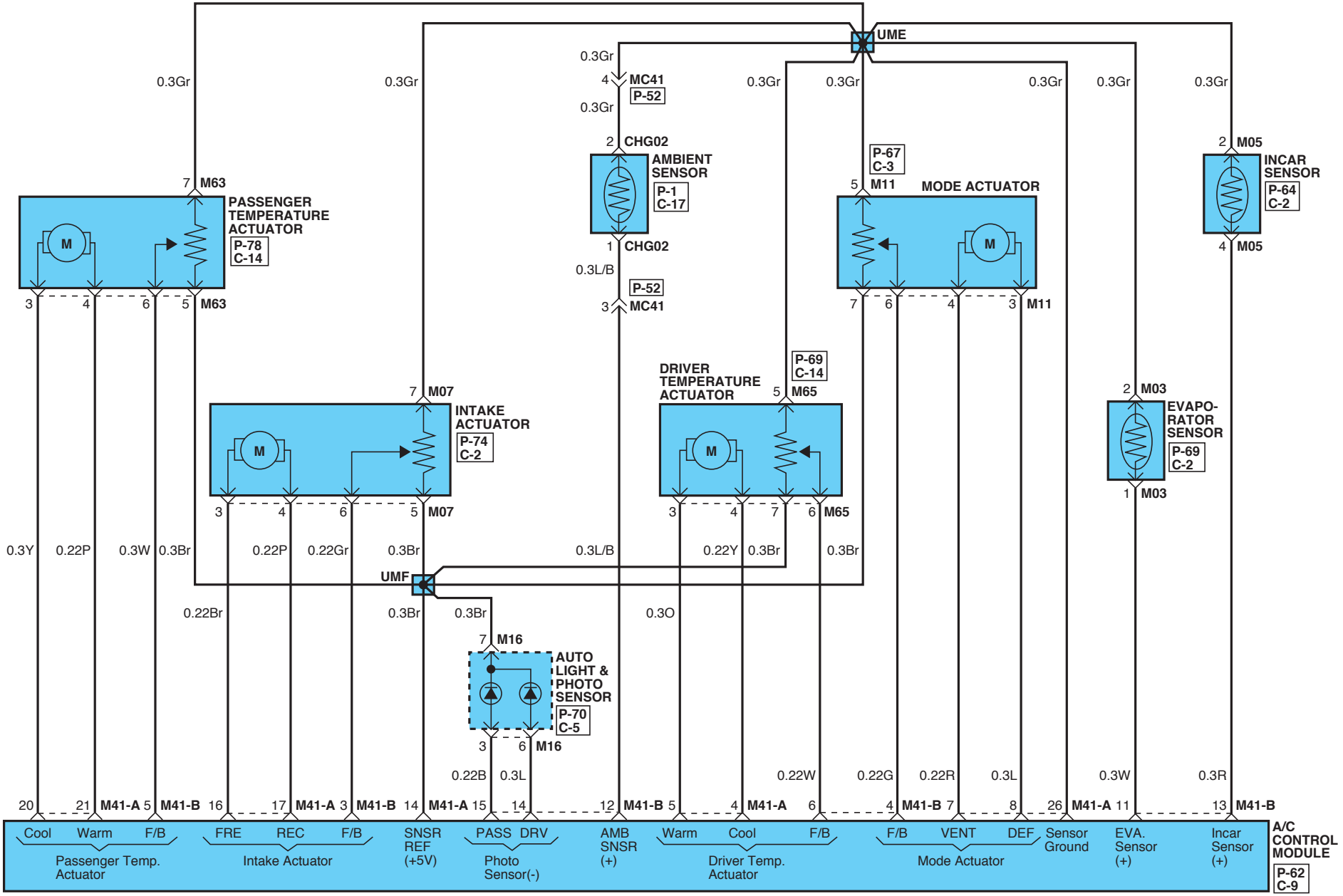

HOT IN ACC OR ON
HOT AT ALL TIMES
See Power Distribution (SD110-5) (SD110-6)
I/P JUNCTION BOX
P-47/48
C-70/71/72
AUDIO 2 10A
AMP 25A
See Passenger Compartment Fuse Details (SD120-1)
15 I/P-G
9 I/P-D
13 I/P-E
0.3L/O
0.3G
2.0O
A
To A/V & Navigation Head Unit (SD969-1)
0.3G
2.0P
2.0O
2.0R
7
2
1
3
F03-A
ACC/ON Input
Memory Power
1 D13
DRIVER DOOR SPEAKER
P-114
C-38
2 D13
2 D14
DRIVER DOOR TWEETER SPEAKER
P-40
C-38
1 D14
1 D33
PASSENGER DOOR SPEAKER
P-112
C-39
2 D33
2 D34
PASSENGER DOOR TWEETER SPEAKER
P-113
C-40
1 D34
0.85Br
0.85W
0.85Br
0.85W
0.85R
0.85L
0.85R
0.85L
28
45
11
12
FD11
P-49
43
44
39
40
FD21
P-80
0.85Br
0.85W
0.85Br
0.85W
0.85R
0.85L
0.85R
0.85L
6
12
4
10
5
11
3
9
F03-C
FL(+)
FL(-)
FL(+)
FL(-)
FR(+)
FR(-)
FR(+)
FR(-)
AMP
P-107
C-29/30
Sub Woofer Speaker
(+)
(-)
(+)
(-)
Ground
RL(+)
RL(-)
RR(+)
RR(-)
13
26
12
25
14
15
16
F03-A
2
8
1
7
F03-C
1.25G
1.25O
1.25L
1.25R
2.0B
2.0B
2.0B
0.85Y
0.85B
0.85G
0.85O
14
15
FD31
P-96
10
11
FD41
P-97
0.85Y
0.85B
0.85G
0.85O
2 D53
REAR DOOR SPEAKER LH
P-119
C-40
1 D53
2 D73
REAR DOOR SPEAKER RH
P-120
C-41
1 D73
4
3
2
1
F35
(+)
(-)
(+)
(-)
SUB WOOFER SPEAKER
P-106
C-34
2.0B
GF08
P-105

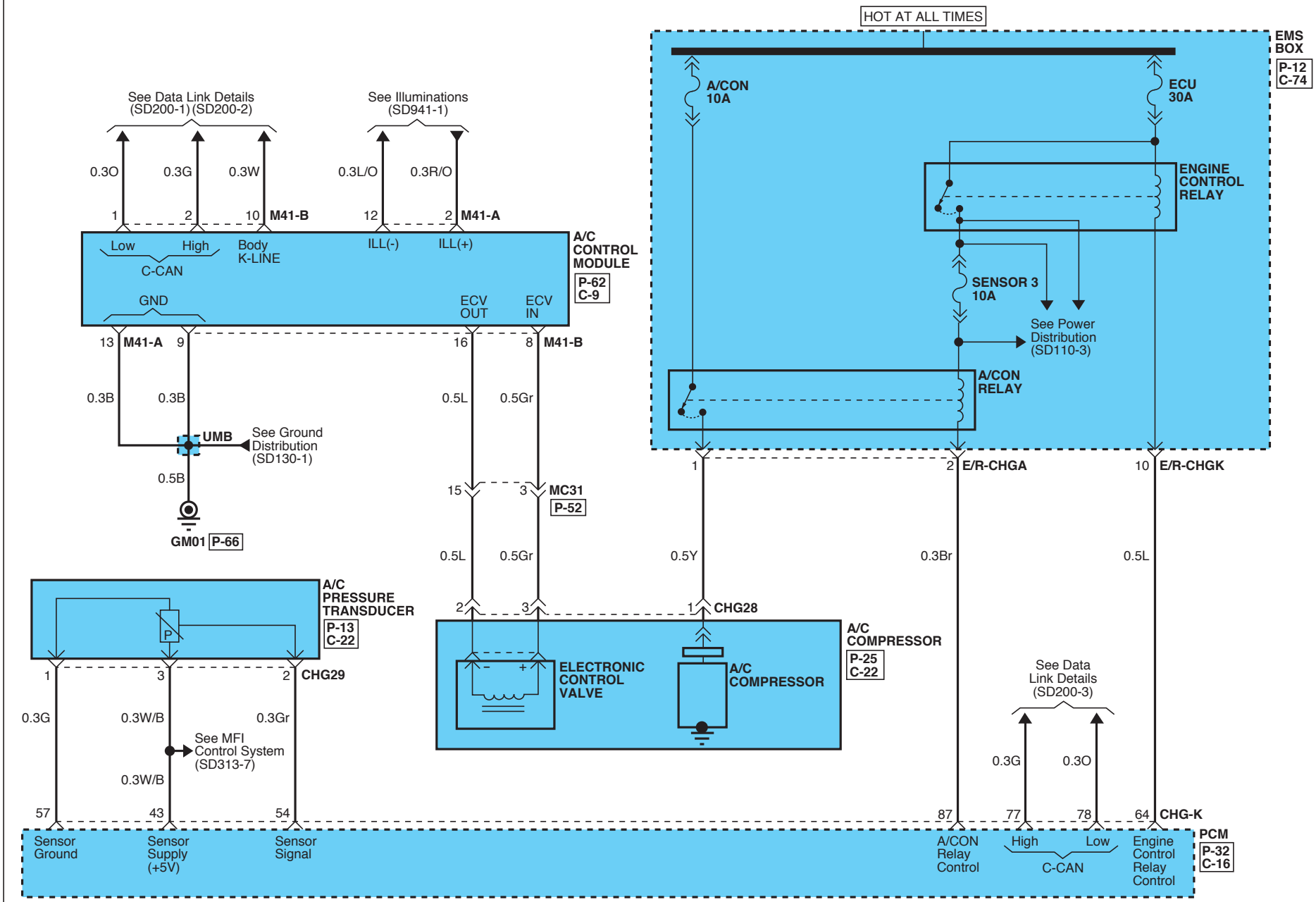

AMP
P-107
C-29
SPDIF
OUT(-)
OUT(+)
NEVI VOICE
(-)
(+)
CAN
High
Low
19
18
24
11
5
6
F03-A
0.3G
0.3W
0.5Y
0.5Br
0.3L
0.3R
0.3B
0.5B
13
20
12
23
7
8
MF41
P-81
16
17
MF31
P-52
2
1
3
18
6
20
12
24
M50-D
GND
A/V & NAVIGATION HEAD UNIT
P-61
C-11
Remote Signal
Remote Ground
16
17
M50-C
See Illuminations (SD941-3)
0.3R/O
0.3L/O
0.22L
0.22Gr
4
5
M20-R
MULTIFUNCTION SWITCH
CLOCK SPRING
P-37
C-6
STEERING WHEEL
7
ILL.
SEEK UP
SEEK DOWN
MODE
MUTE
VOL UP
VOL DOWN
AUDIO REMOTE CONTROL SWITCH (LEFT)
VOICE
VOICE REMOTE CONTROL SWITCH (RIGHT)
HANG UP
CALL
HANDS FREE REMOTE CONTROL SWITCH (LEFT)
8

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

SD971-1

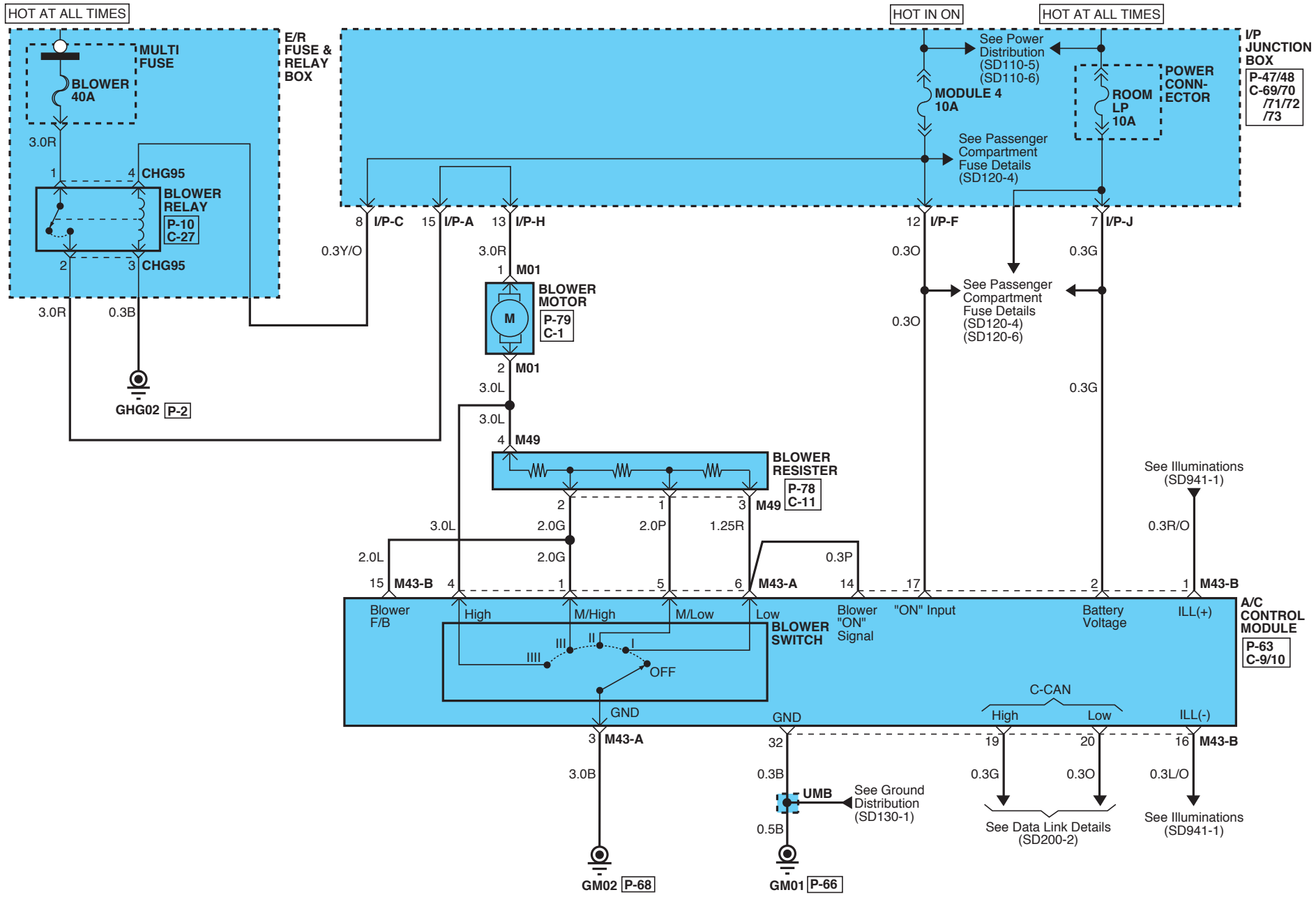


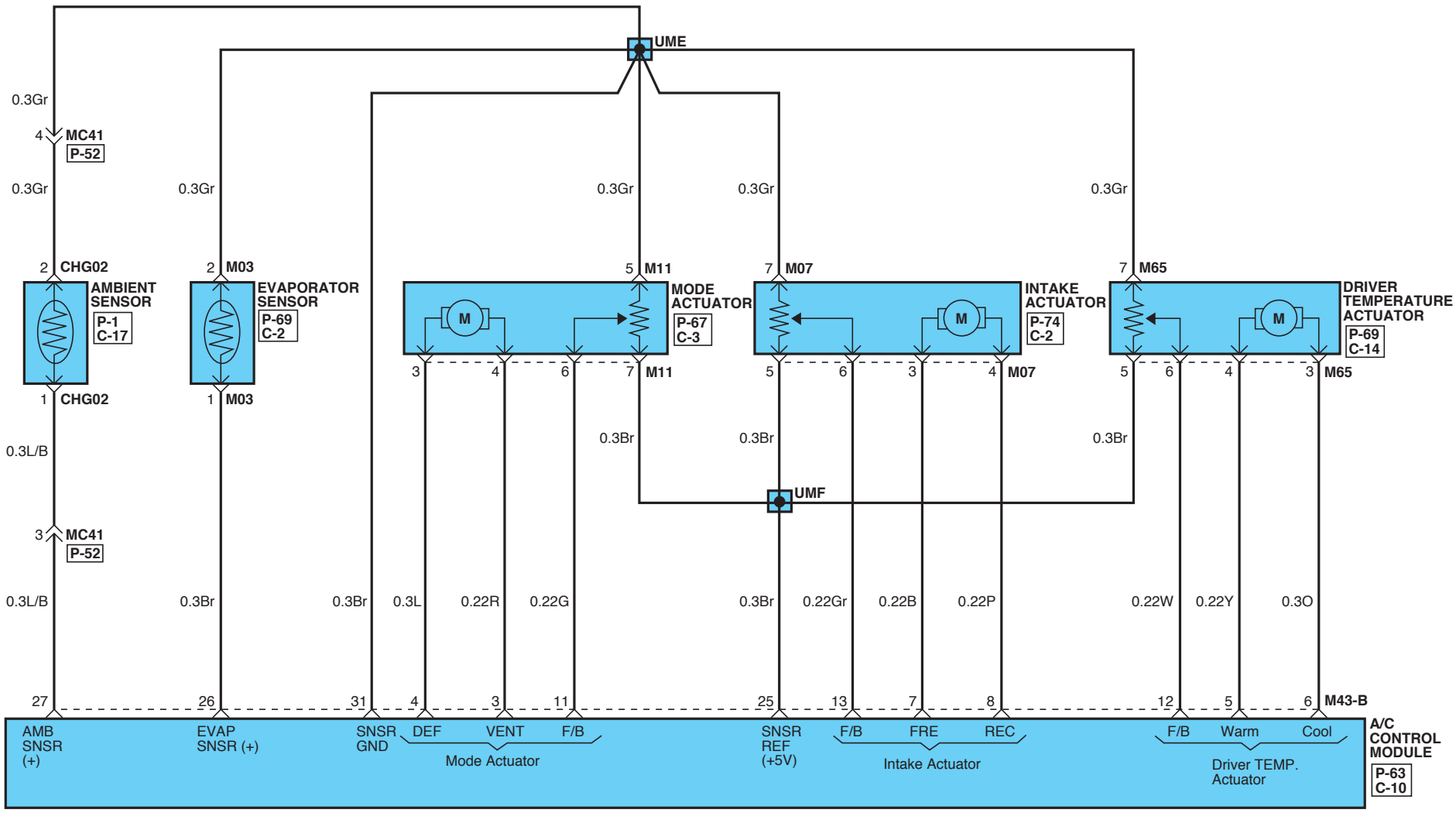

UME
0.3Gr
MC41
P-52
CHG02
AMBIENT SENSOR
P-1
C-17
0.3L/B
P-67
C-3
MODE ACTUATOR
M11
M05
INCAR SENSOR
P-64
C-2
M63
PASSENGER TEMPERATURE ACTUATOR
P-78
C-14
M07
INTAKE ACTUATOR
P-74
C-2
DRIVER TEMPERATURE ACTUATOR
P-69
C-14
M65
M03
EVAPO-RATOR SENSOR
P-69
C-2
UMF
M16
AUTO LIGHT & PHOTO SENSOR
P-70
C-5
0.3Y
0.22P
0.3W
0.3Br
0.22Gr
0.22Y
0.22Br
0.3O
0.22B
0.3L
0.22W
0.22G
0.22R
0.3R
Cool
Warm
F/B
FRE
REC
SNSR REF (+5V)
PASS
DRV
AMB SNSR (+)
VENT
DEF
Sensor Ground
EVA. Sensor (+)
Incar Sensor (+)
Passenger Temp. Actuator
Intake Actuator
Photo Sensor(-)
Driver Temp. Actuator
Mode Actuator
A/C CONTROL MODULE
P-62
C-9

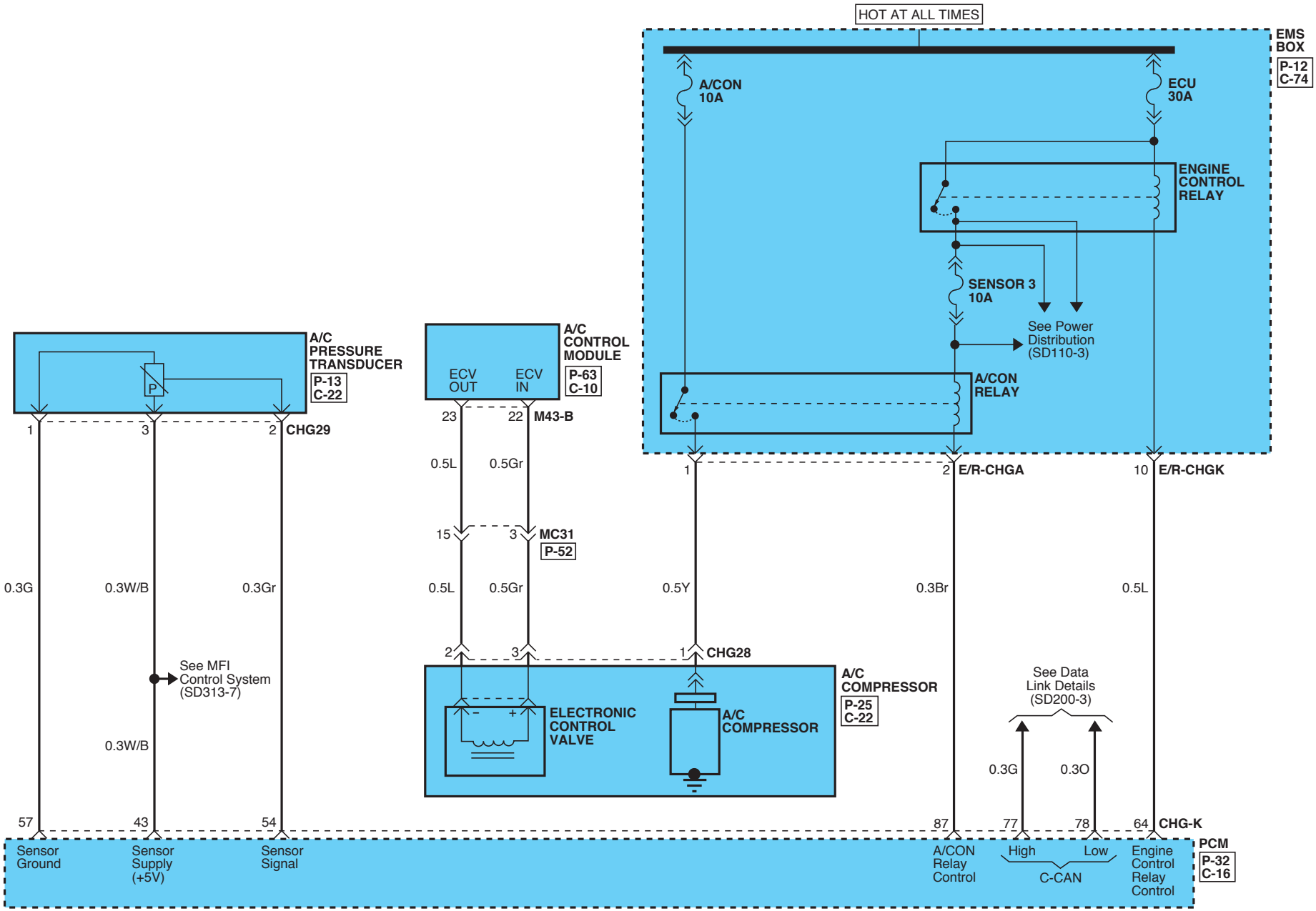

HOT AT ALL TIMES
EMS BOX
P-12
C-74
A/CON 10A
ECU 30A
ENGINE CONTROL RELAY
SENSOR 3 10A
See Power Distribution (SD110-3)
A/CON RELAY
See Data Link Details (SD200-1) (SD200-2)
See Illuminations (SD941-1)
0.3O
0.3G
0.3W
0.3L/O
0.3R/O
1
2
10
M41-B
12
2
M41-A
Low
High
C-CAN
Body K-LINE
ILL(-)
ILL(+)
A/C CONTROL MODULE
P-62
C-9
GND
ECV OUT
ECV IN
13
M41-A
9
16
8
M41-B
0.3B
0.3B
0.5L
0.5Gr
UMB
See Ground Distribution (SD130-1)
0.5B
GM01
P-66
15
3
MC31
P-52
0.5L
0.5Gr
0.5Y
0.3Br
0.5L
1
2
E/R-CHGA
10
E/R-CHGK
A/C PRESSURE TRANSDUCER
P-13
C-22
P
2
3
1
CHG28
ELECTRONIC CONTROL VALVE
A/C COMPRESSOR
A/C COMPRESSOR
P-25
C-22
1
3
2
CHG29
0.3G
0.3W/B
0.3Gr
See MFI Control System (SD313-7)
0.3W/B
See Data Link Details (SD200-3)
0.3G
0.3O
57
43
54
87
77
78
64
CHG-K
Sensor Ground
Sensor Supply (+5V)
Sensor Signal
A/CON Relay Control
High
Low
C-CAN
Engine Control Relay Control
PCM
P-32
C-16

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

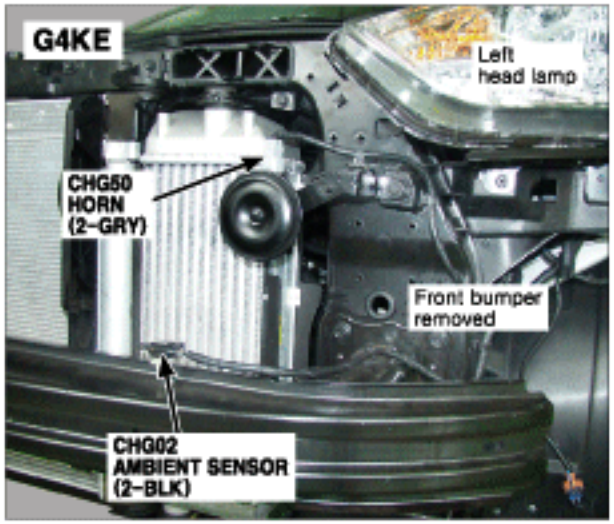
SD971-5



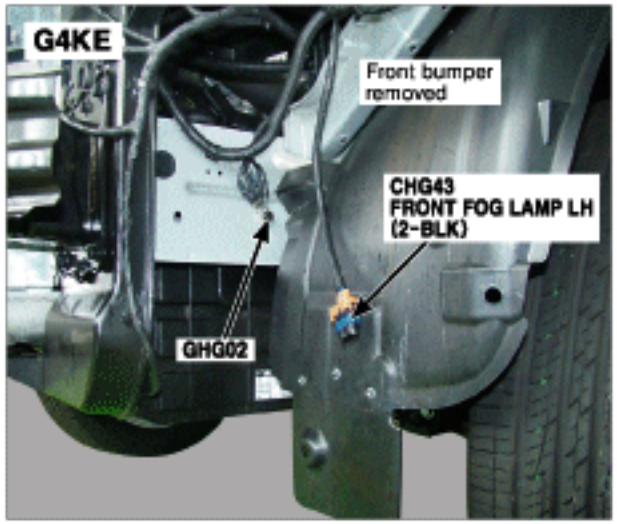

UME
0.3Gr
4 MC41
P-52
0.3Gr
0.3Gr
0.3Gr
0.3Gr
0.3Gr
2 CHG02
AMBIENT SENSOR
P-1
C-17
1 CHG02
2 M03
EVAPORATOR SENSOR
P-69
C-2
1 M03
5 M11
MODE ACTUATOR
P-67
C-3
3 4 6 7 M11
7 M07
INTAKE ACTUATOR
P-74
C-2
5 6 3 4 M07
7 M65
DRIVER TEMPERATURE ACTUATOR
P-69
C-14
5 6 4 3 M65
M
0.3Br
0.3Br
0.3Br
UMF
0.3L/B
3 MC41
P-52
0.3L/B
0.3Br
0.3Br
0.3L
0.22R
0.22G
0.3Br
0.22Gr
0.22B
0.22P
0.22W
0.22Y
0.3O
27
26
31
4
3
11
25
13
7
8
12
5
6
M43-B
AMB SNSR (+)
EVAP SNSR (+)
SNSR GND
DEF
VENT
F/B
Mode Actuator
SNSR REF (+5V)
F/B
FRE
REC
Intake Actuator
F/B
Warm
Cool
Driver TEMP. Actuator
A/C CONTROL MODULE
P-63
C-10


HOT AT ALL TIMES
EMS BOX
P-12
C-74
A/CON 10A
ECU 30A
ENGINE CONTROL RELAY
SENSOR 3 10A
See Power Distribution (SD110-3)
A/CON RELAY
A/C PRESSURE TRANSDUCER
P-13
C-22
P
A/C CONTROL MODULE
P-63
C-10
ECV OUT
ECV IN
23
22
M43-B
0.5L
0.5Gr
15
3
MC31
P-52
1
3
2
CHG29
0.3G
0.3W/B
0.3Gr
0.5L
0.5Gr
0.5Y
0.3Br
0.5L
2
3
1
CHG28
1
2
E/R-CHGA
10
E/R-CHGK
See MFI Control System (SD313-7)
0.3W/B
ELECTRONIC CONTROL VALVE
A/C COMPRESSOR
A/C COMPRESSOR
P-25
C-22
See Data Link Details (SD200-3)
0.3G
0.3O
57
43
54
87
77
78
64
CHG-K
Sensor Ground
Sensor Supply (+5V)
Sensor Signal
A/CON Relay Control
High
Low
C-CAN
Engine Control Relay Control
PCM
P-32
C-16

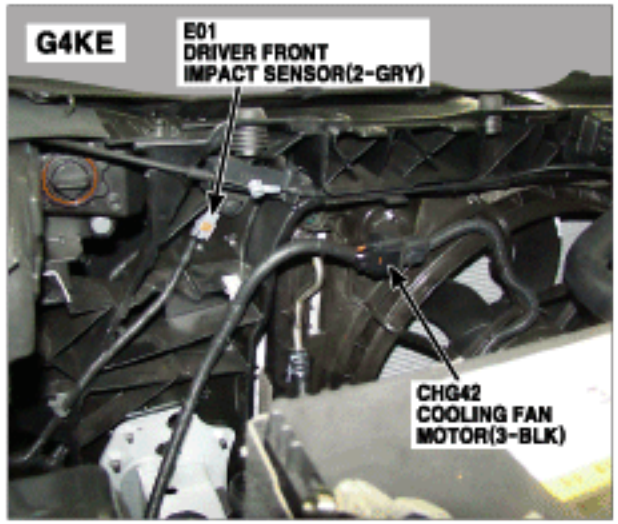
1. Left Side of Front End Module



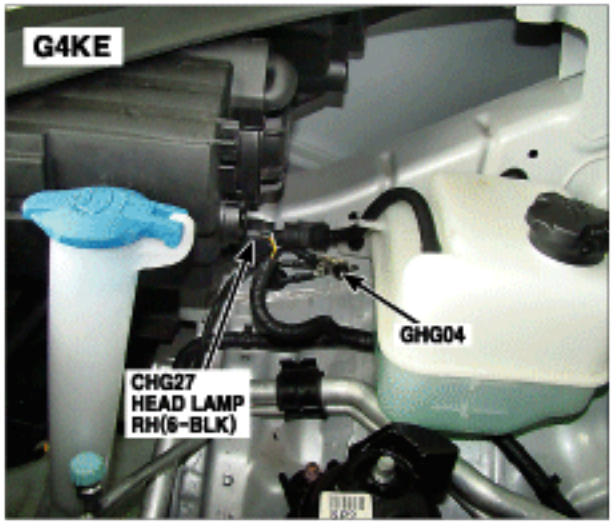
2. Left Side of Front End Module



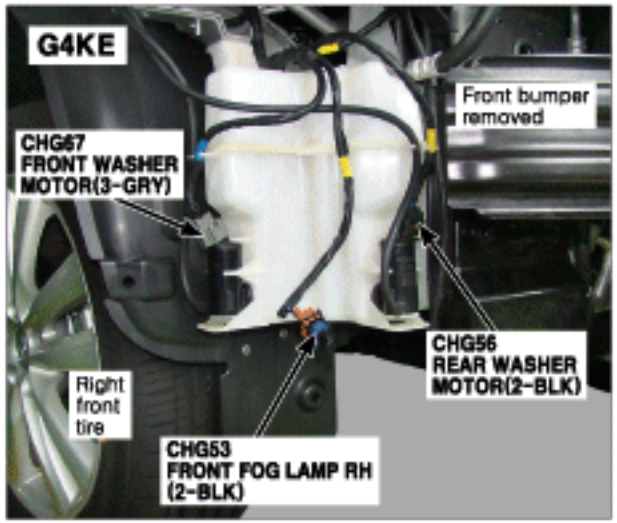
3. Left Front of Engine Room



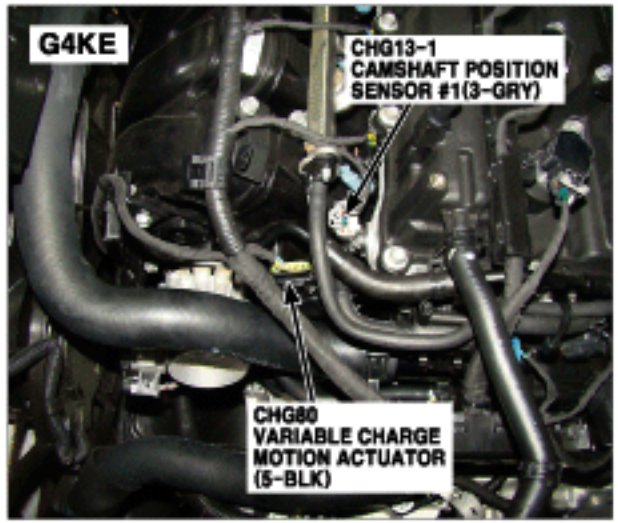
4. Left Front of Engine Room



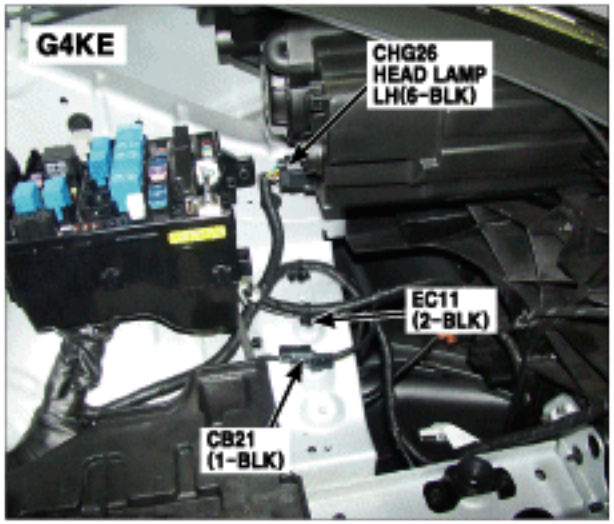
5. Right Side of Front End Module



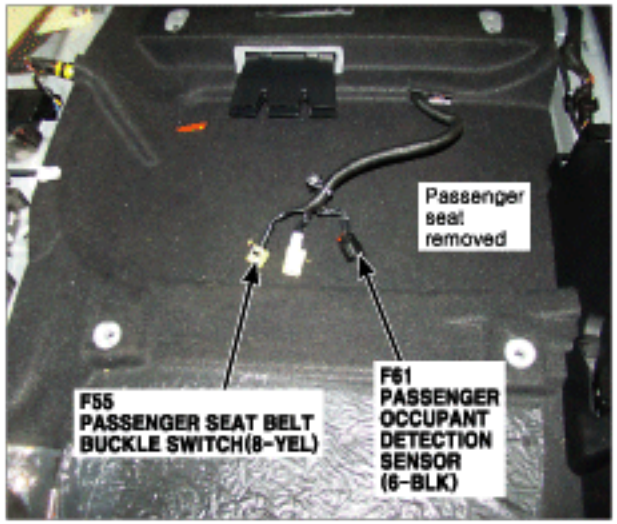
6. Left Front of Engine



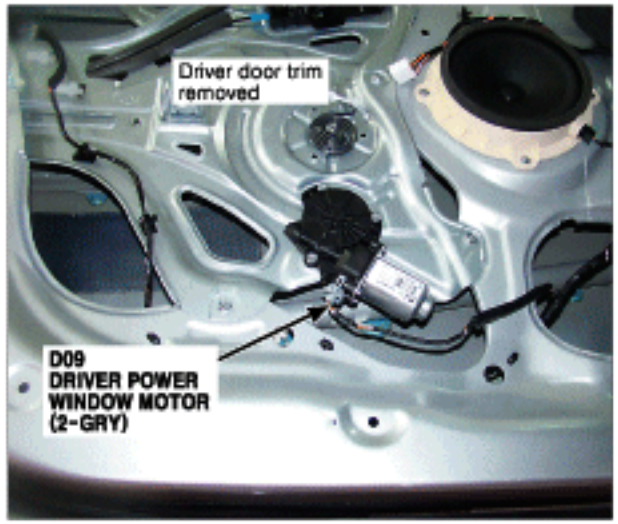
7. Left Front of Engine Room



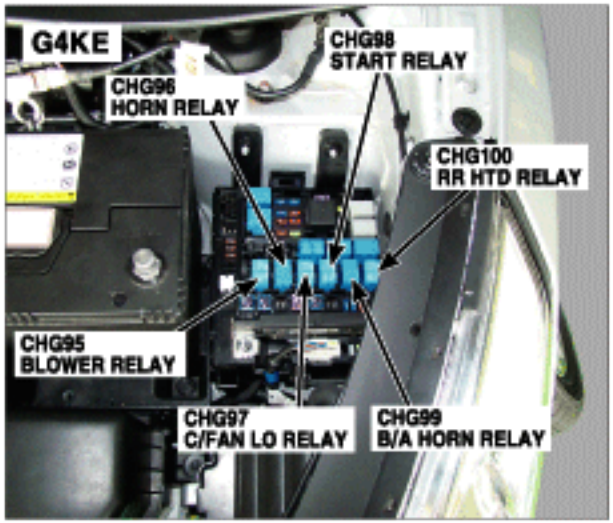
8. Under of Passenger Seat



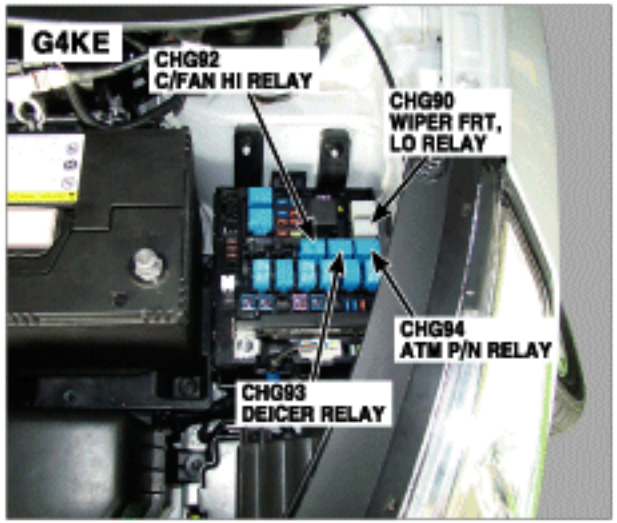
9. Driver Door



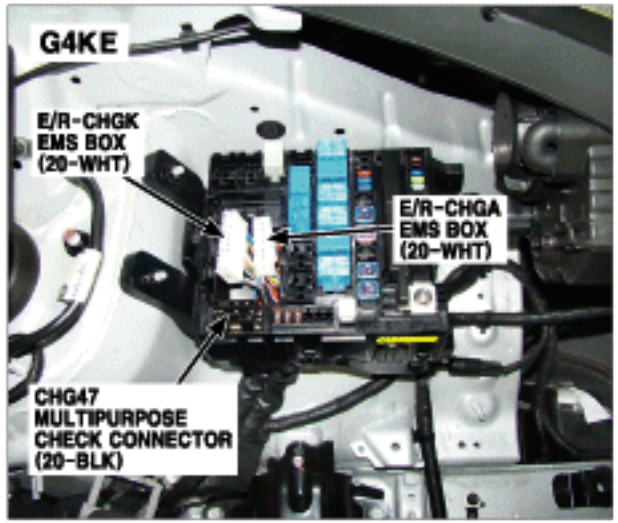
10. Left Side of Engine Room



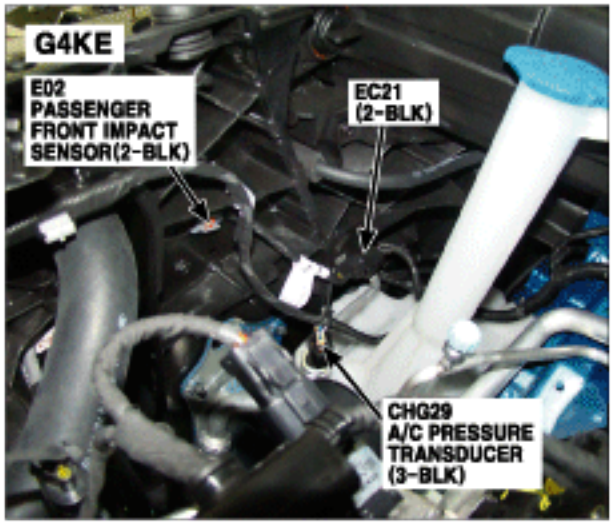
11. Left Side of Engine Room



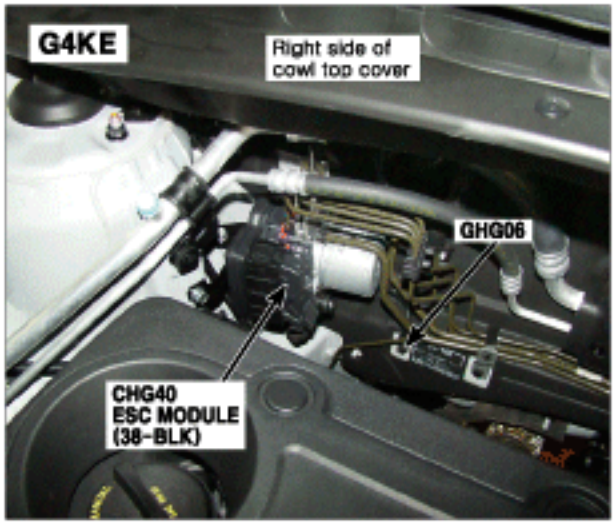
12. Left Side of Engine Room



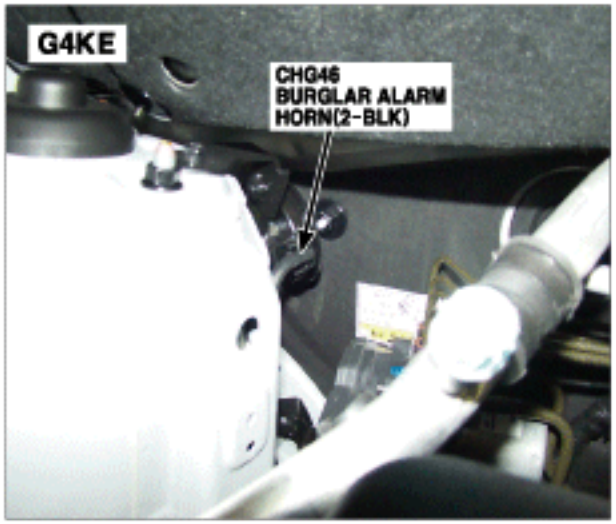
13. Right Front of Engine Room



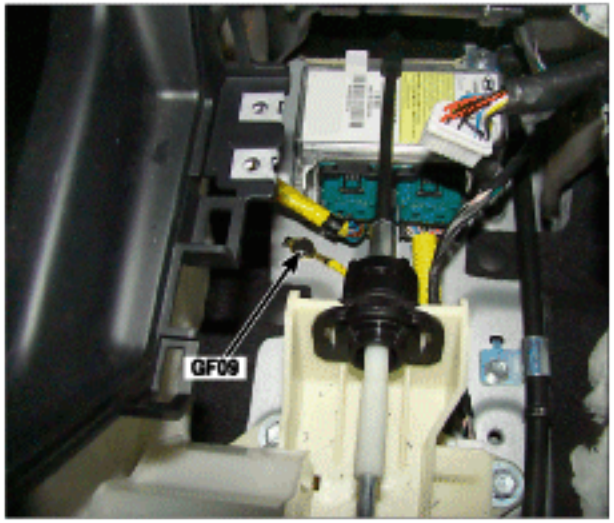
14. Right Rear of Engine Room



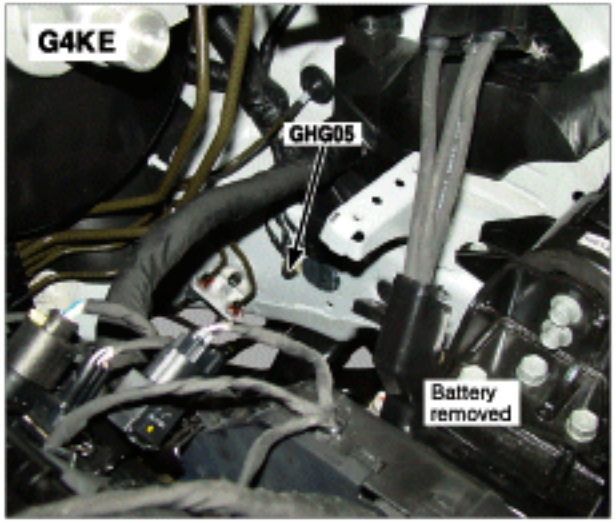
15. Right Rear of Engine Room



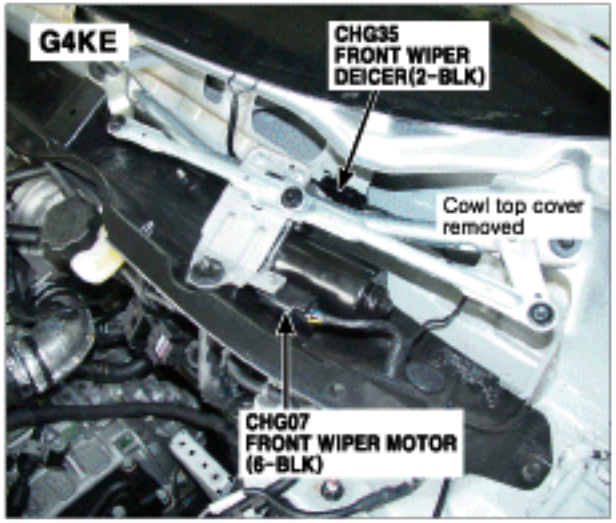
16. Under of Console



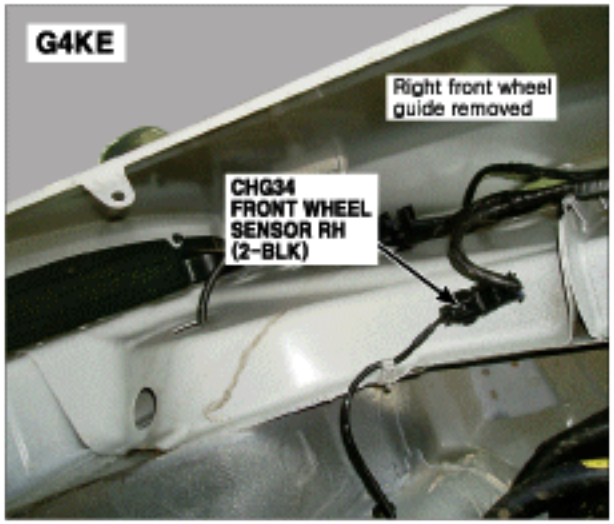
17. Left Rear of Engine Room



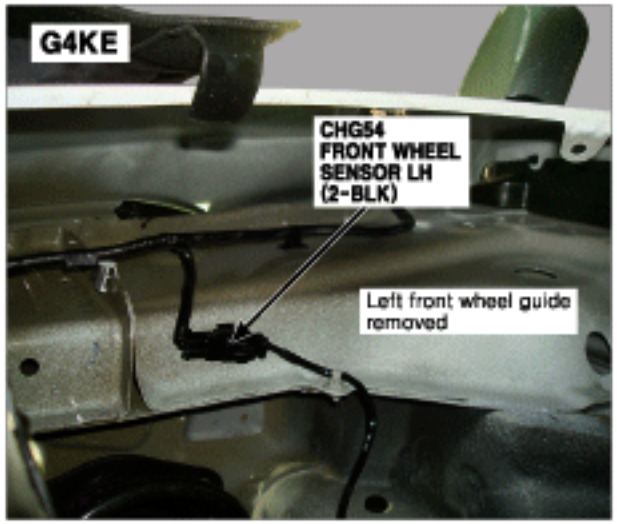
18. Left Side of Cowl Panel



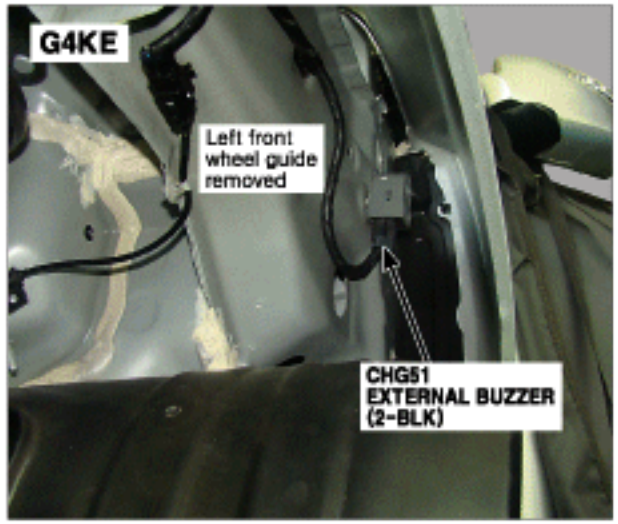
19. Right Front Wheel Housing



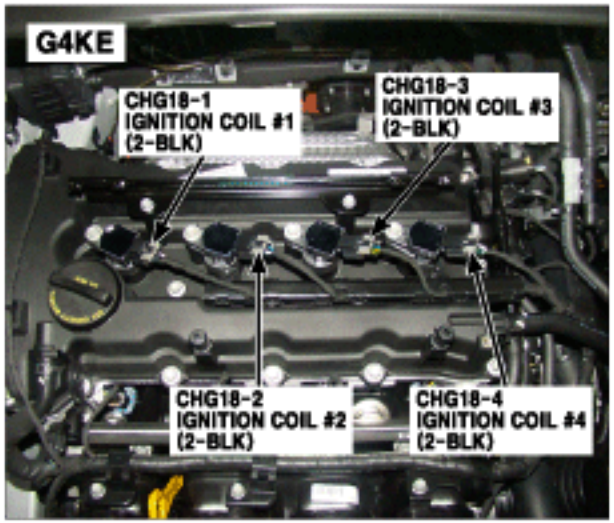
20. Left Front Wheel Housing



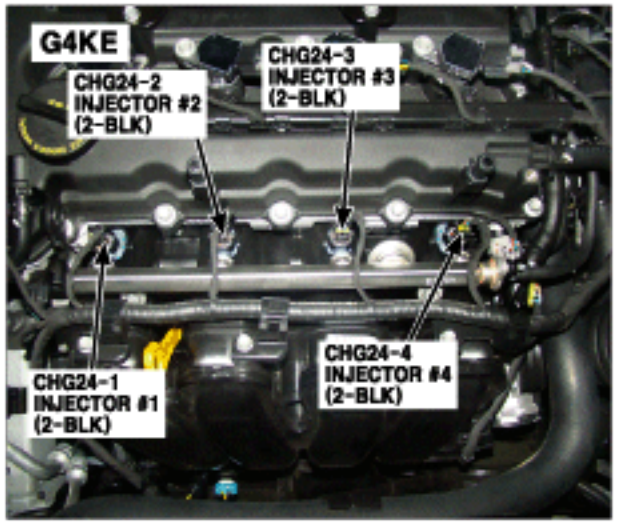
21. Left Front Wheel Housing



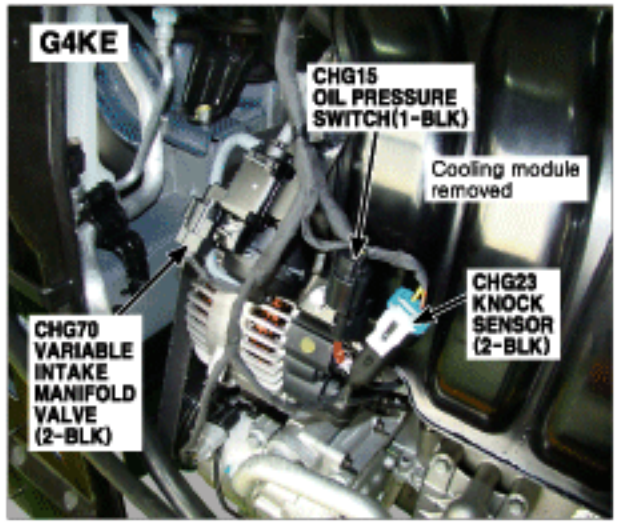
22. Top of Engine



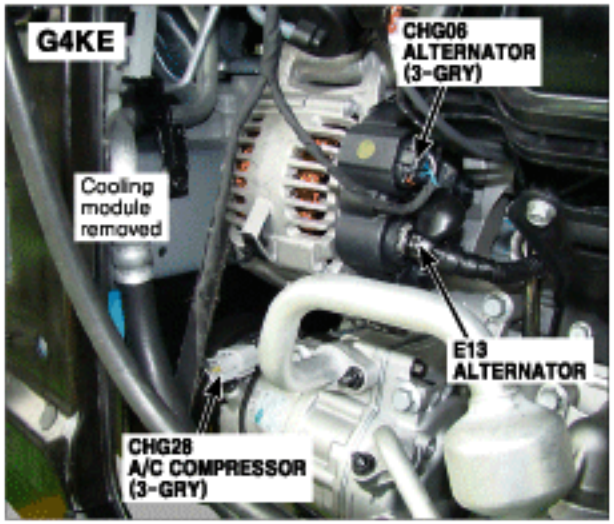
23. Top of Engine



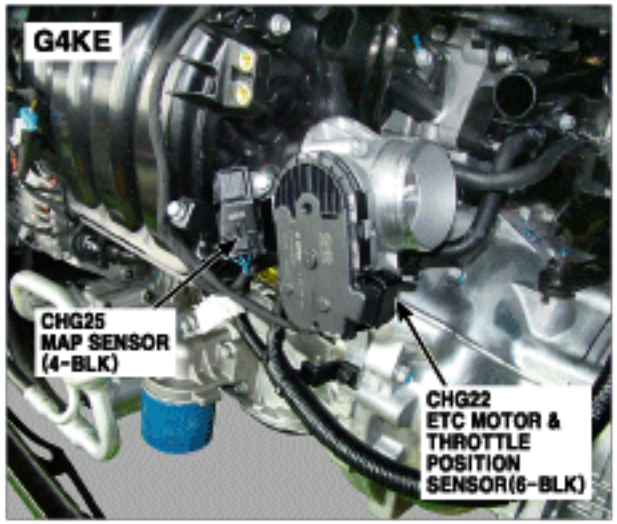
24. Right Front of Engine



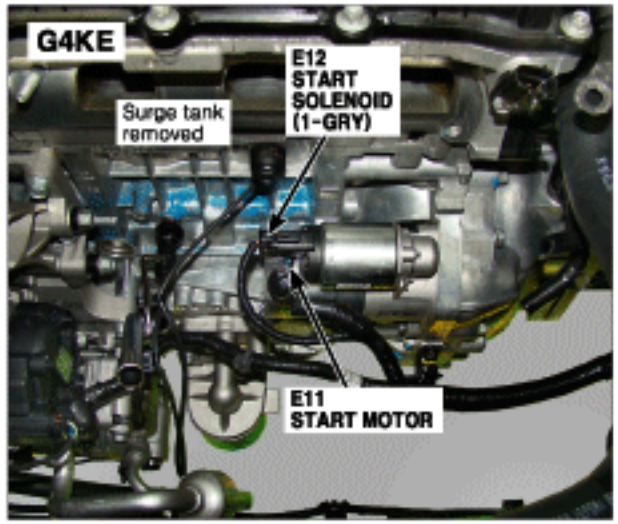
25. Right Front of Engine



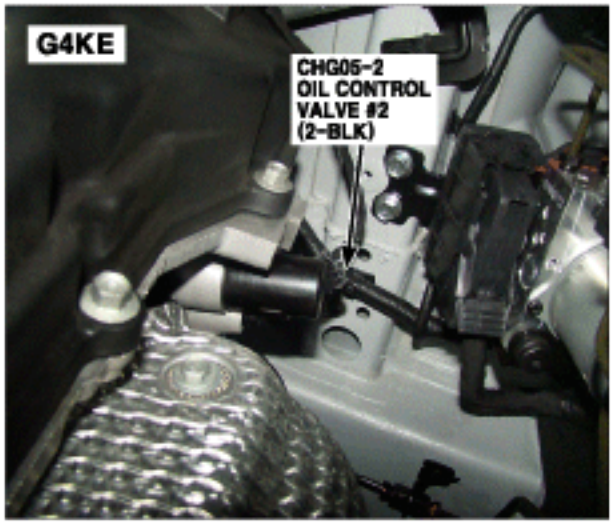
26. Left Front of Engine



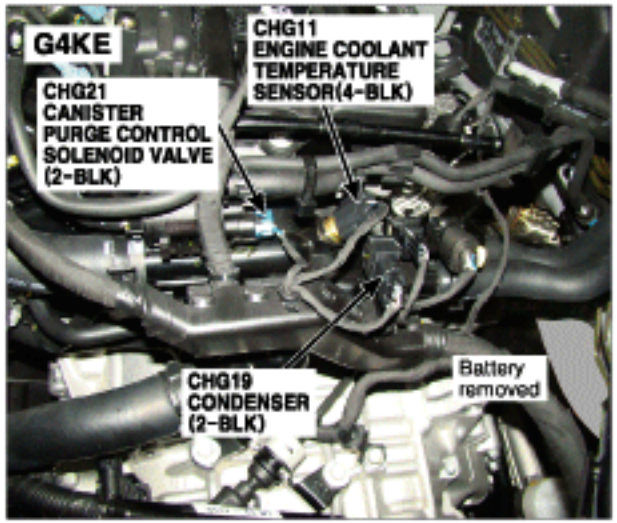
27. Front of Engine



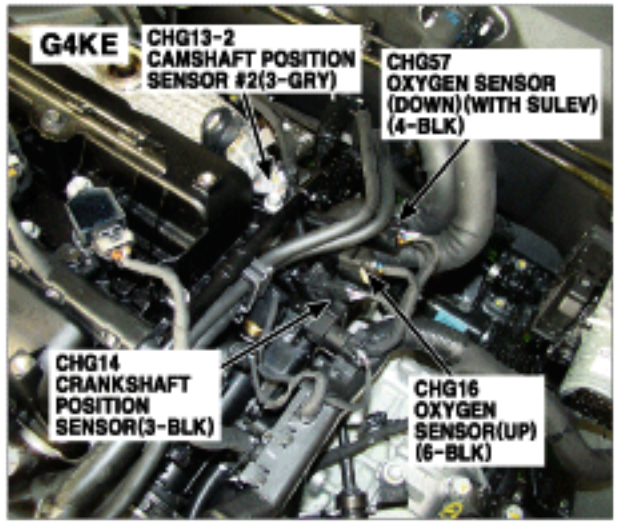
28. Rear of Engine



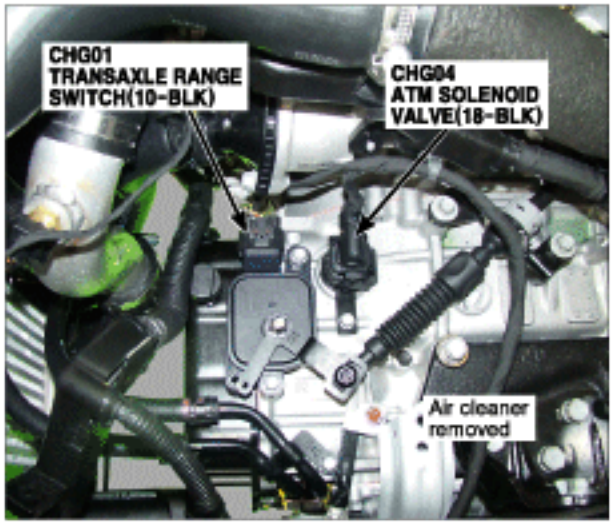
29. Left Side of Engine



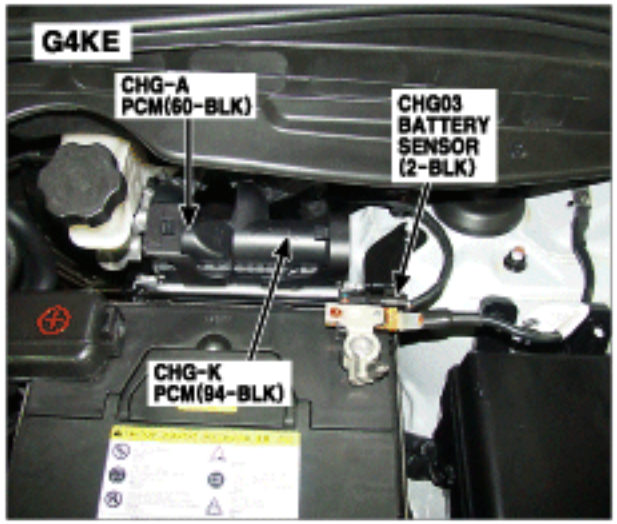
30. Left Side of Engine



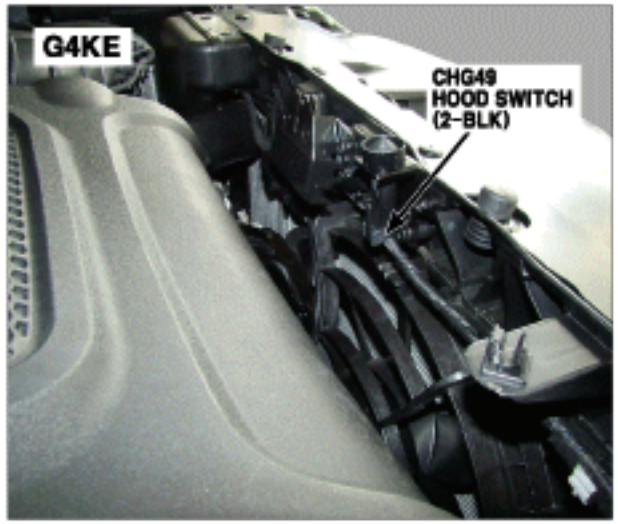
31. Top of Transaxle



32. Left Rear of Engine Room



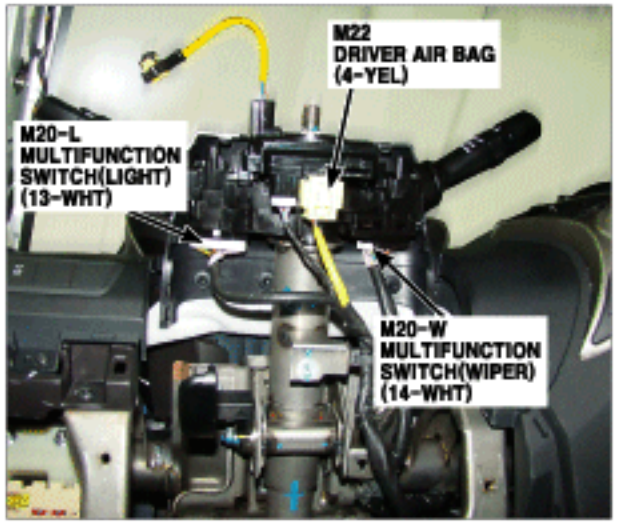
33. Front of Engine Room



34. Left Rear of Engine Room



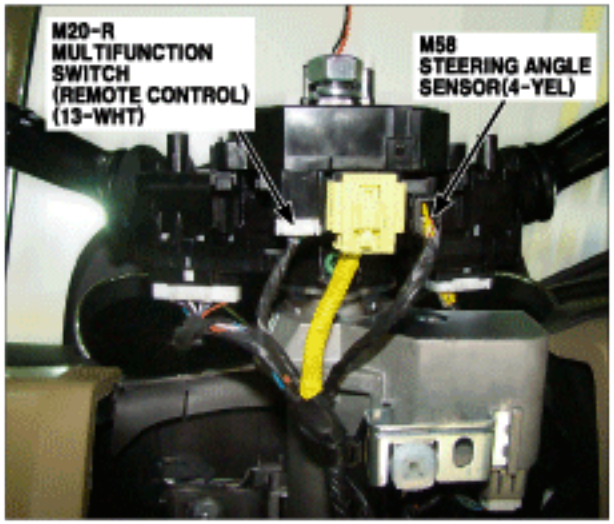
35. Steering Column



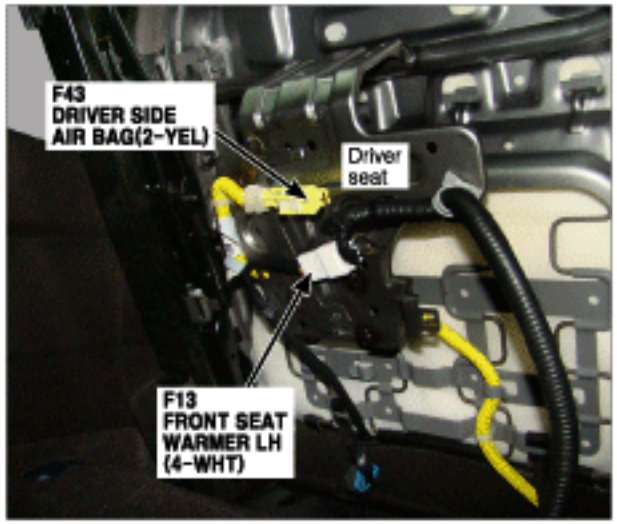
36. Right Front of Engine Room



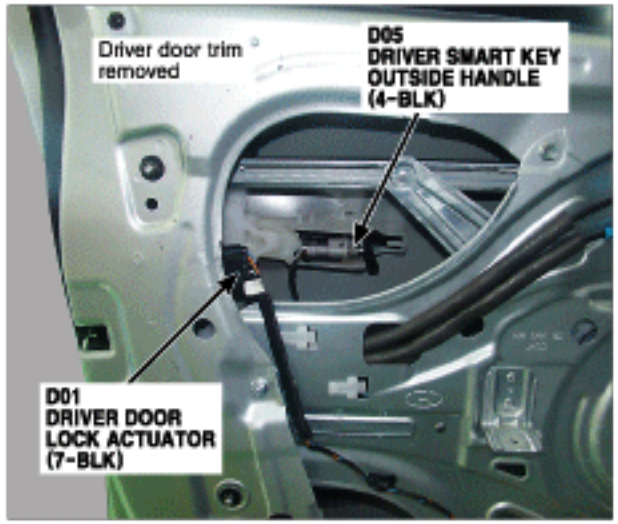
37. Steering Column



38. Under of Driver Seat



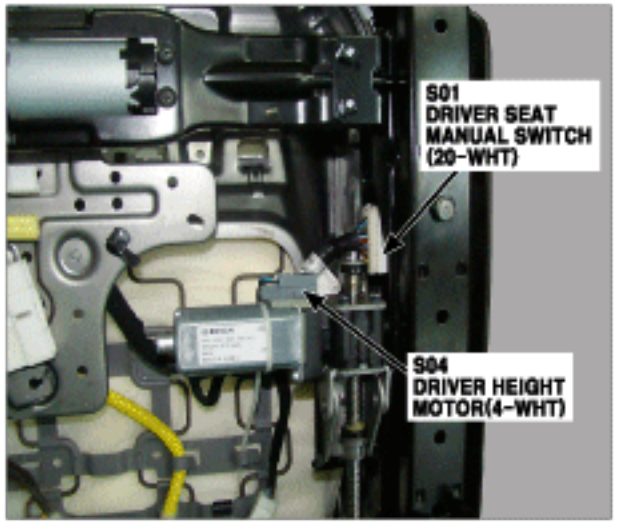
39. Driver Door



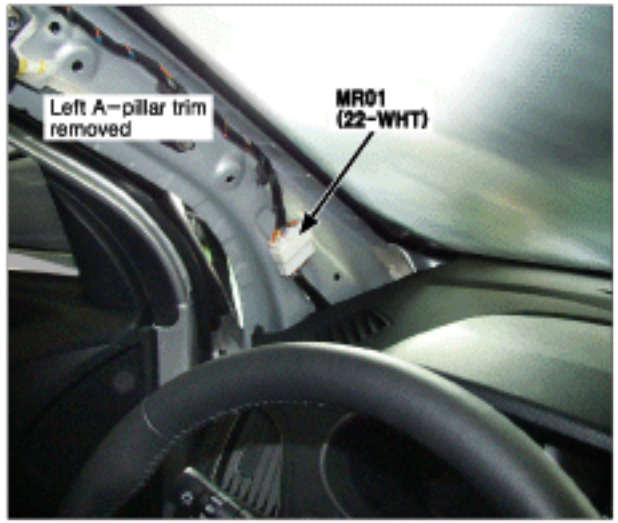
40. Driver Door



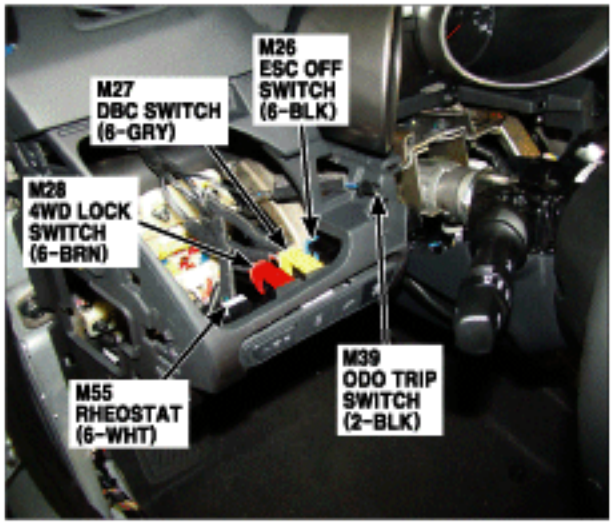
41. Under of Driver Seat



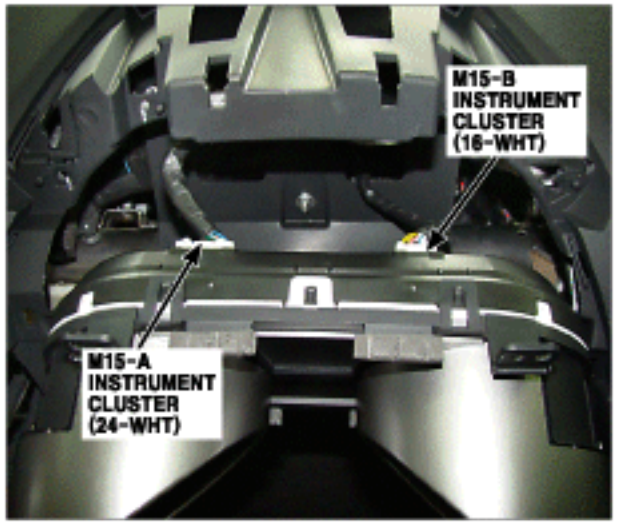
42. Left A-pillar



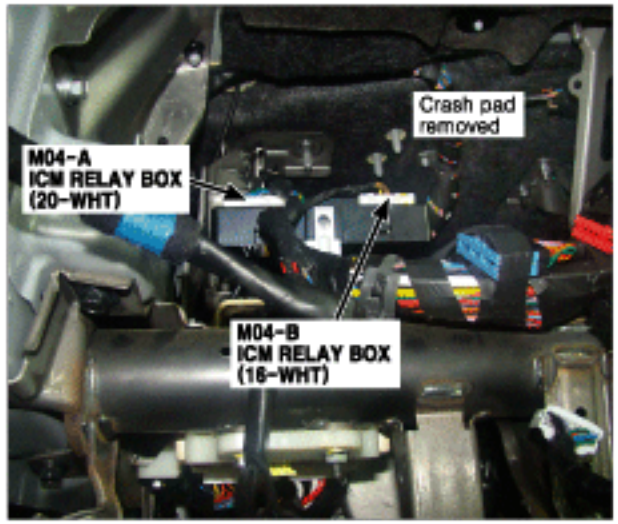
43. Left Side of Dash Panel



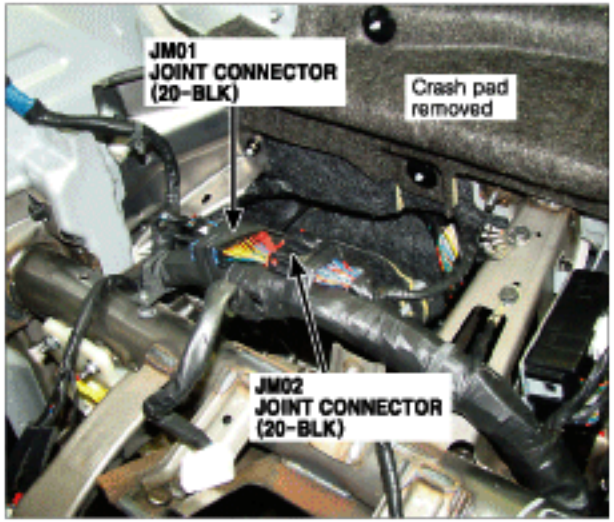
44. Instrument Cluster



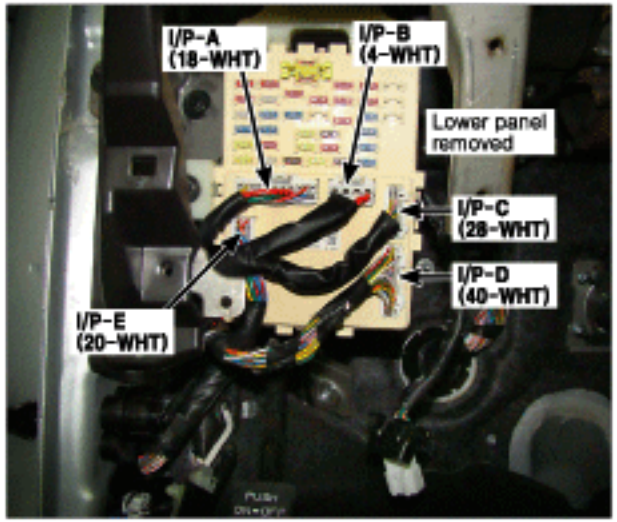
45. Left Top of Dash Panel



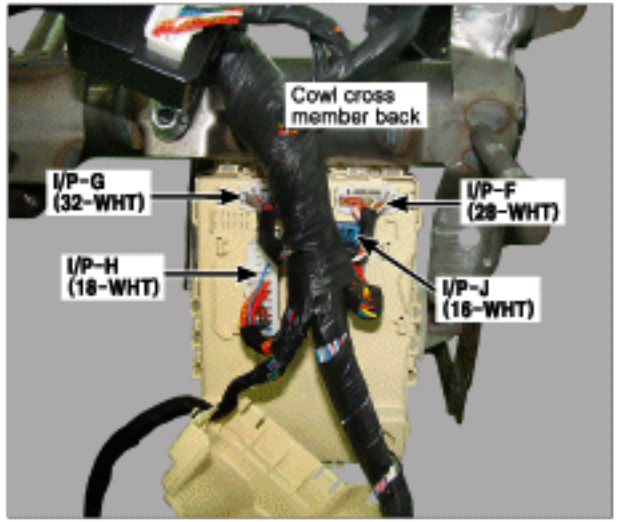
46. Left Top of Dash Panel



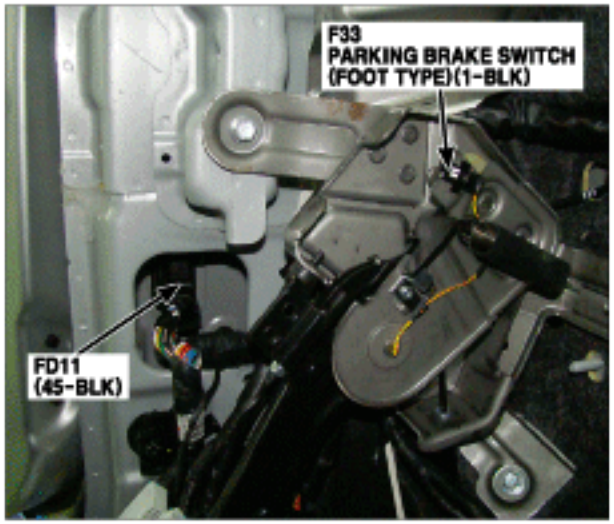
47. Left Side of Dash Panel



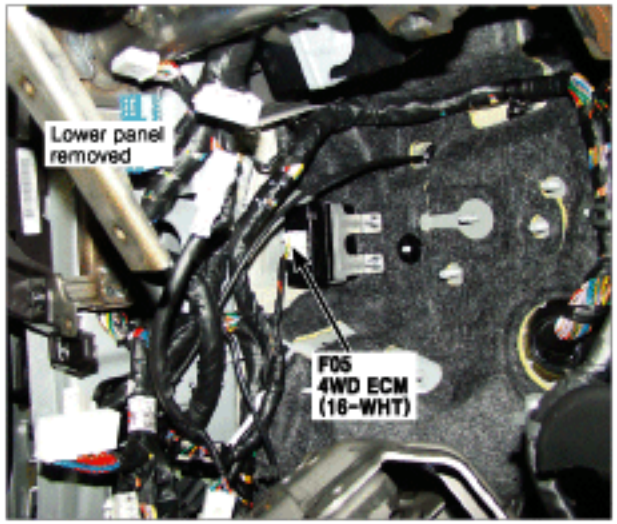
48. Left Side of Dash Panel



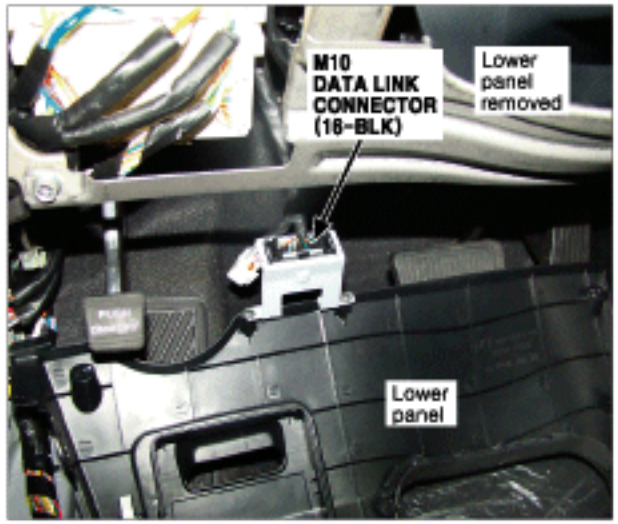
49. Under of Left A-pillar



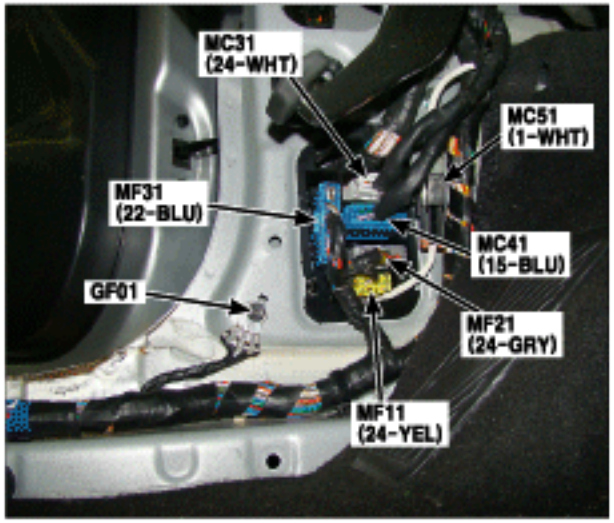
50. Under of Left A-pillar



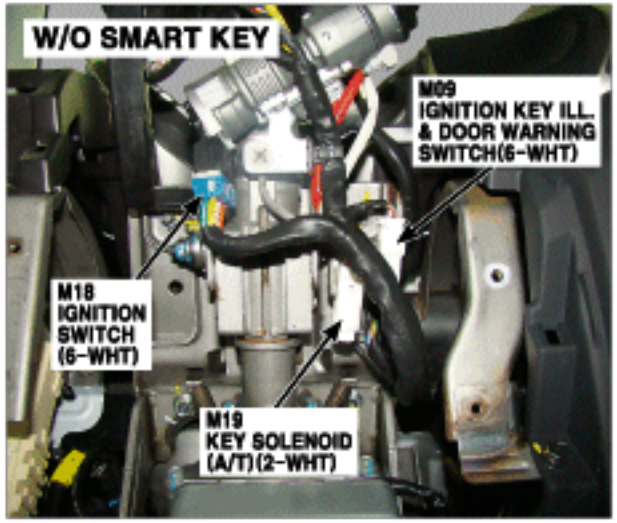
51. Dash Lower Panel



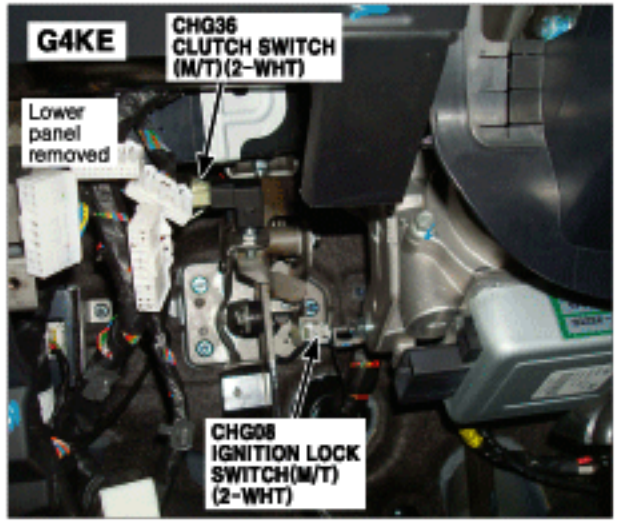
52. Under of Left A-pillar



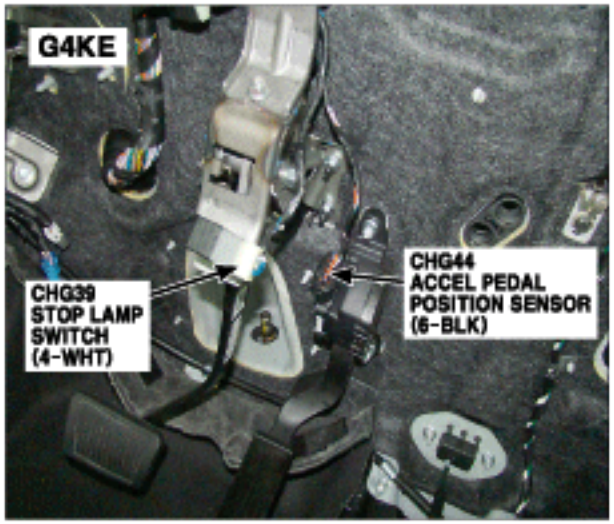
53. Steering Column



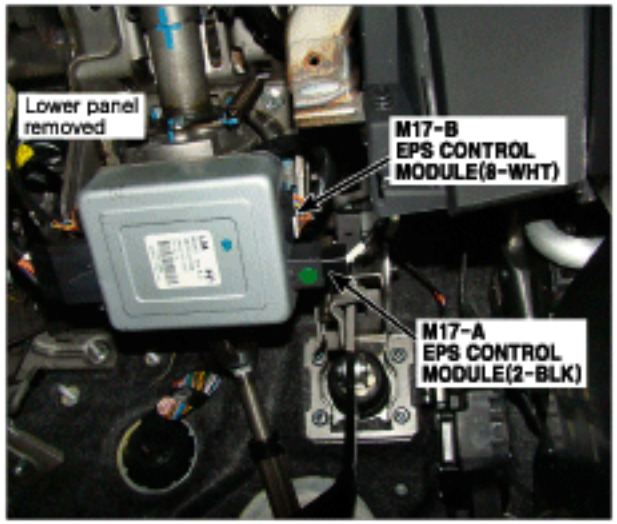
54. Left Under of Dash Panel



55. Left Under of Dash Panel



56. Steering Column



57. Center of Dash Panel



58. Center of Dash Panel



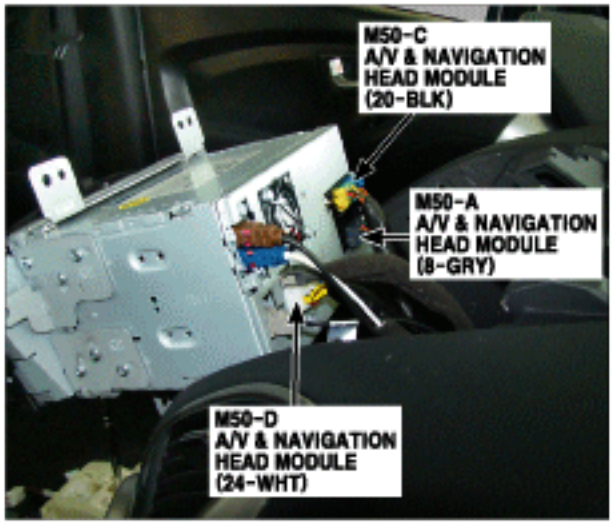
59. Center of Dash Panel



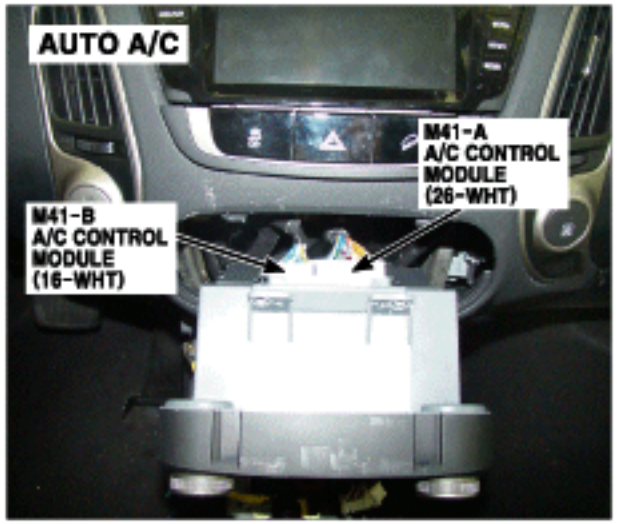
60. Center of Dash Panel



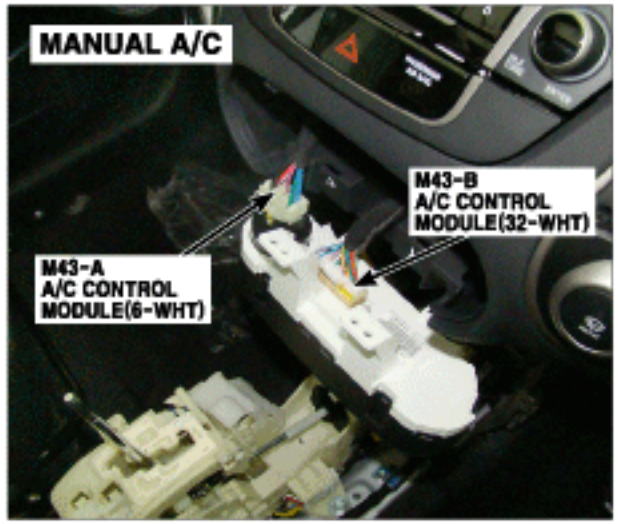
61. Center of Dash Panel



62. Center of Dash Panel



63. Center of Dash Panel



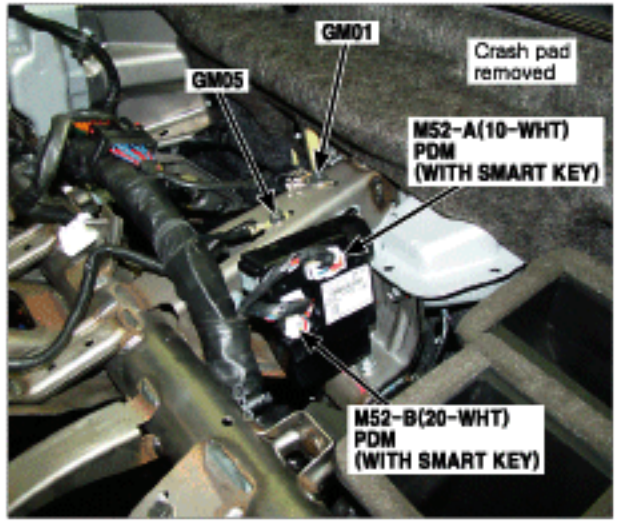
64. Center of Dash Panel



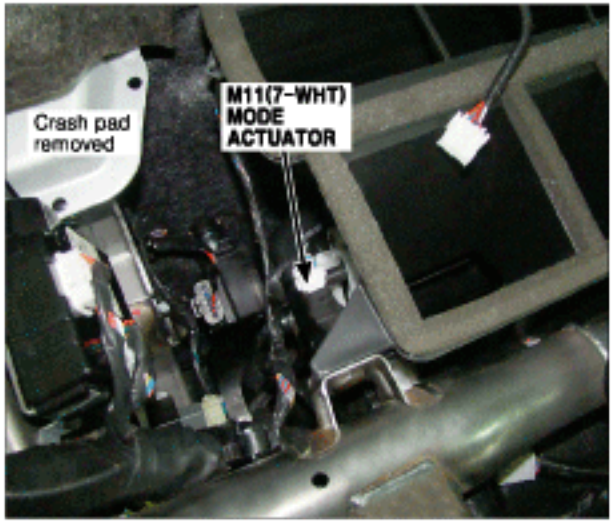
65. Left Top of Dash Panel



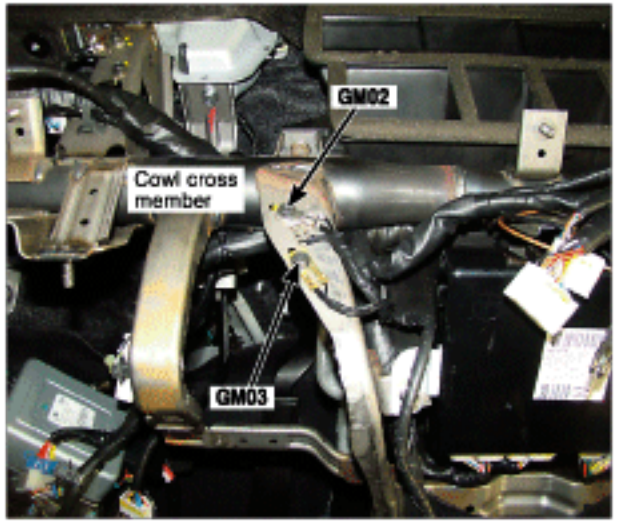
66. Left Top of Dash Panel



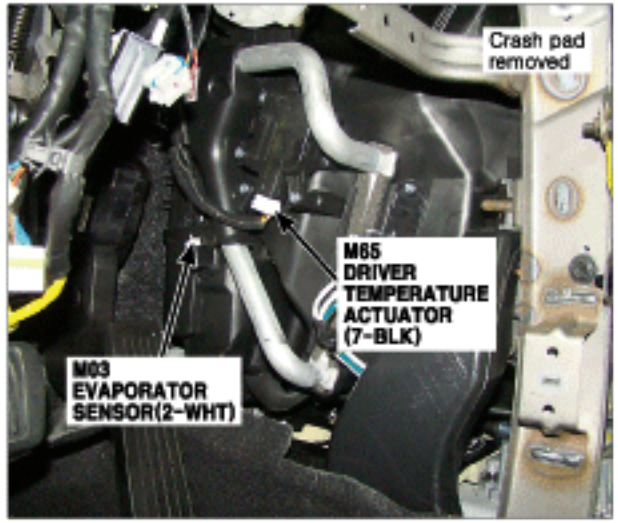
67. Center Top of Dash Panel



68. Center of Dash Panel



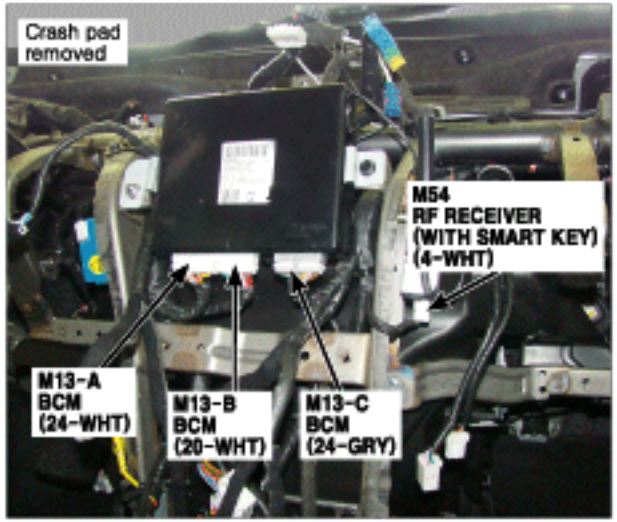
69. Center Under of Dash Panel



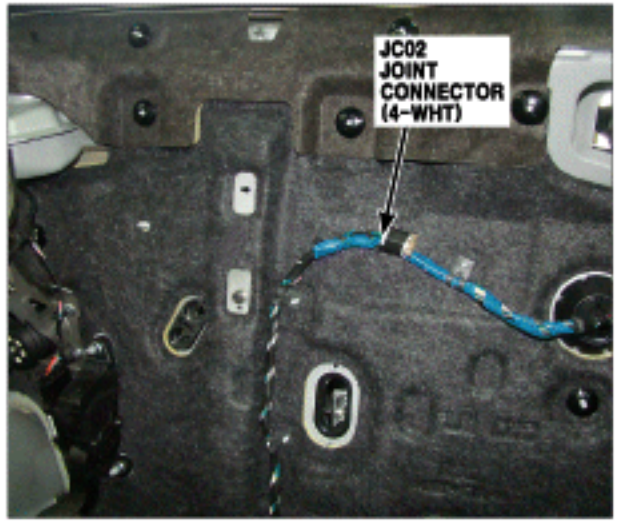
70. Center Top of Dash Panel



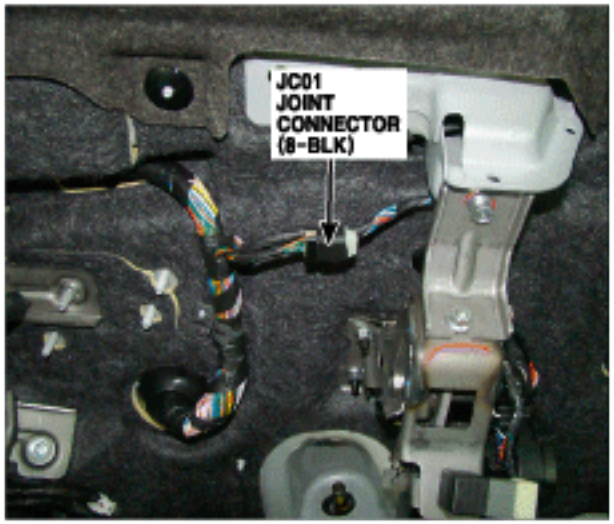
71. Center of Dash Panel



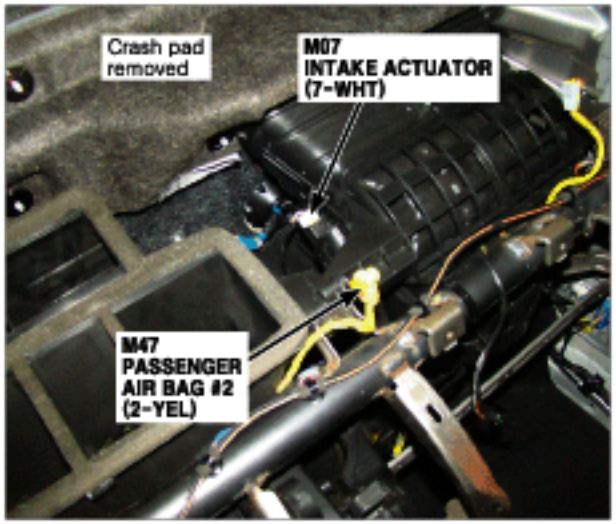
72. Center Rear of Dash Panel



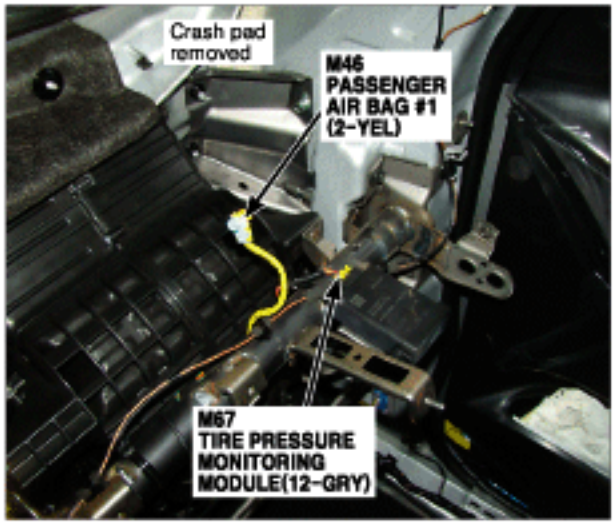
73. Left Rear of Dash Panel



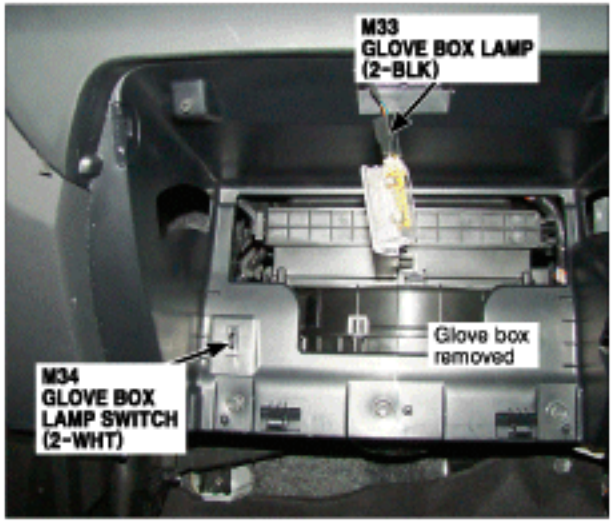
74. Center Top of Dash Panel



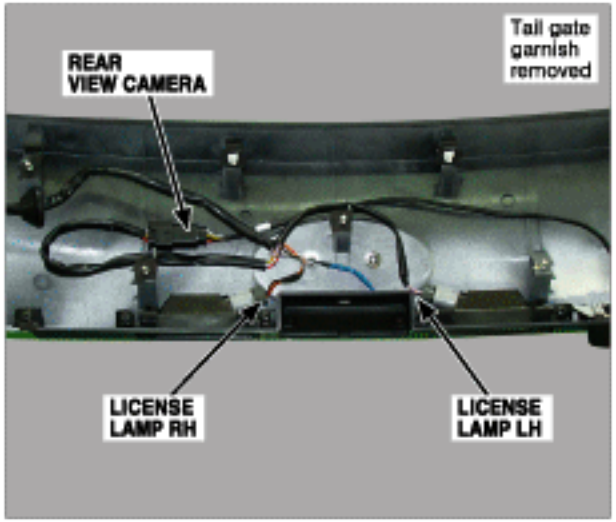
75. Right Top of Dash Panel



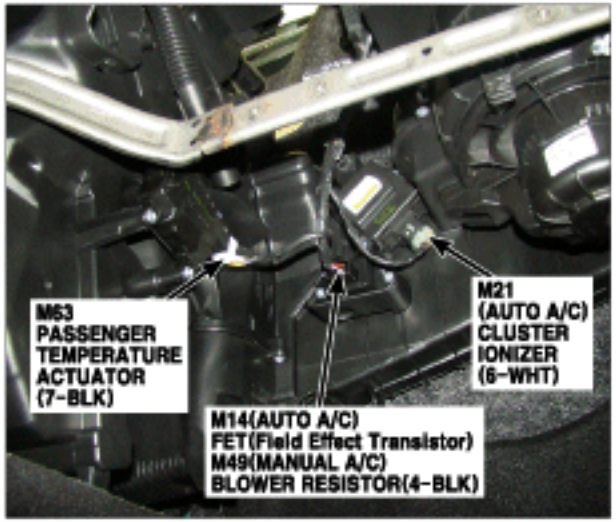
76. Inside of Glove Box



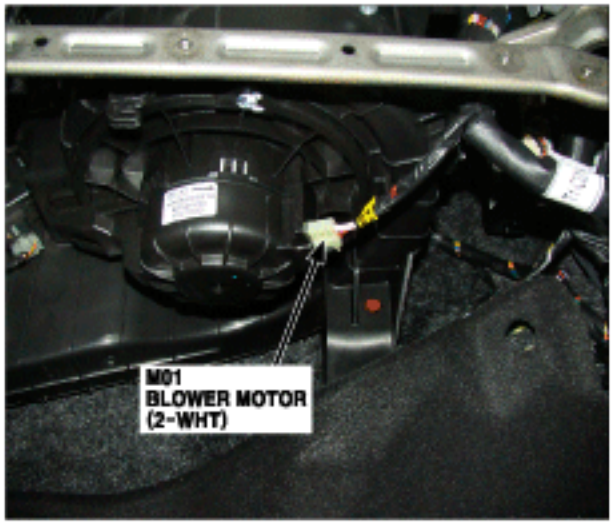
77. Tail gate garnish



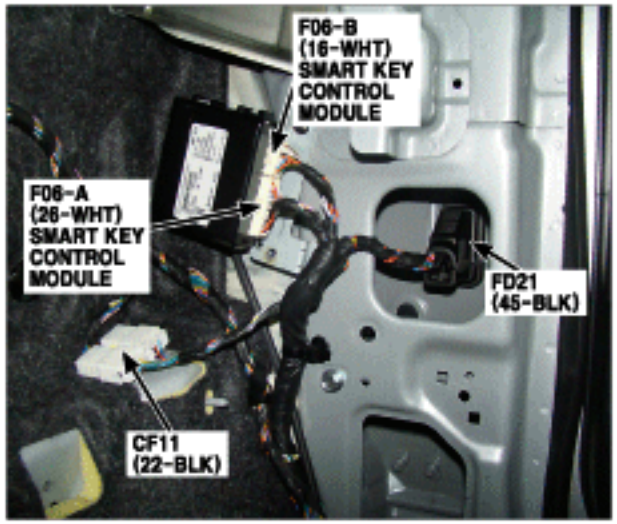
78. Center Under of Dash Panel



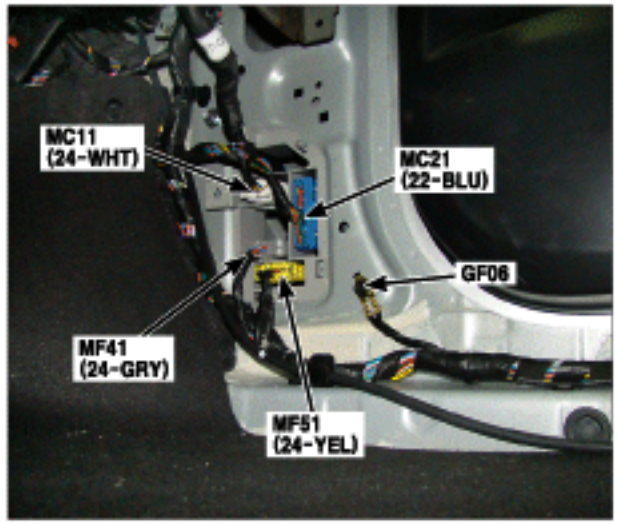
79. Right Under of Dash Panel



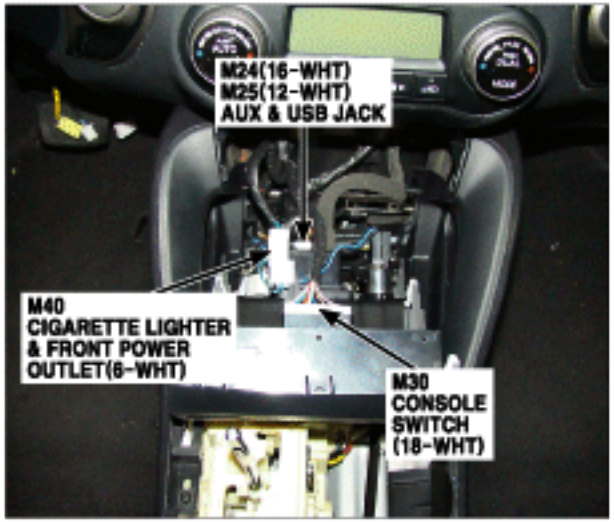
80. Under of Right A-pillar



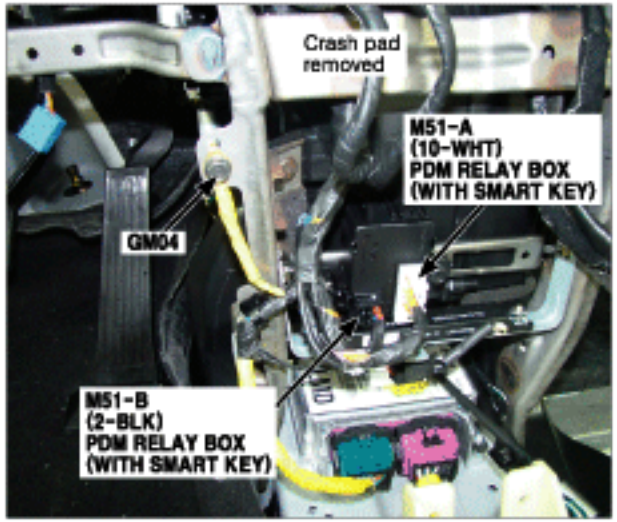
81. Under of Right A-pillar



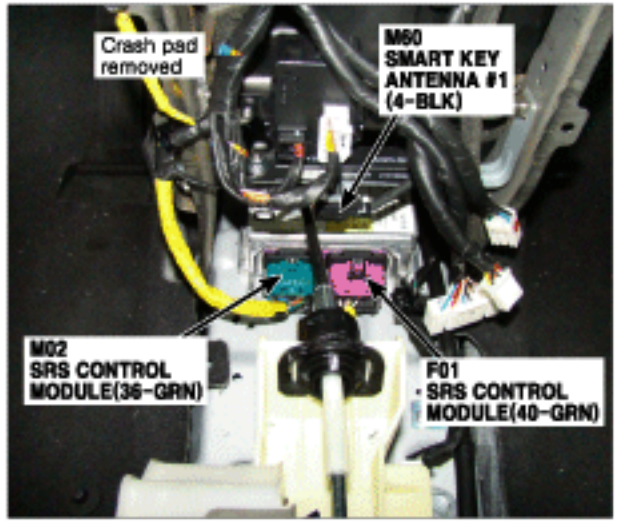
82. Front of Console



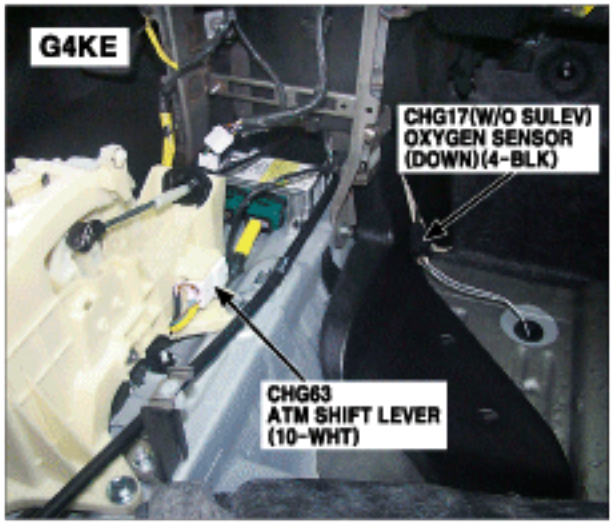
83. Center Under of Dash Panel



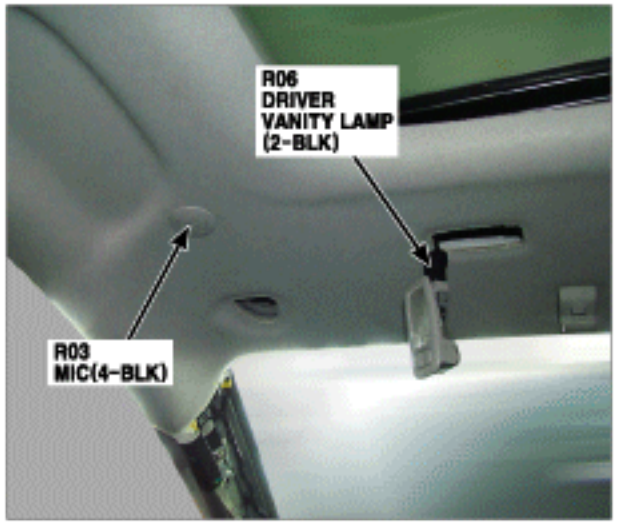
84. Center Under of Dash Panel



85. Center of Dash Panel



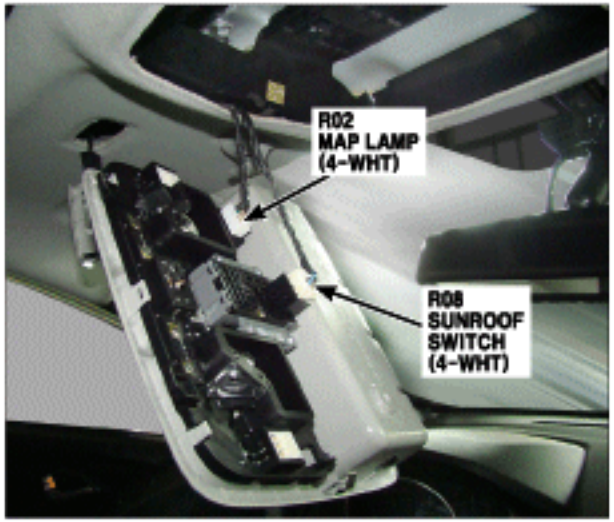
86. Left Front of Roof Trim



87. Windshield Glass



88. Front of Roof Trim



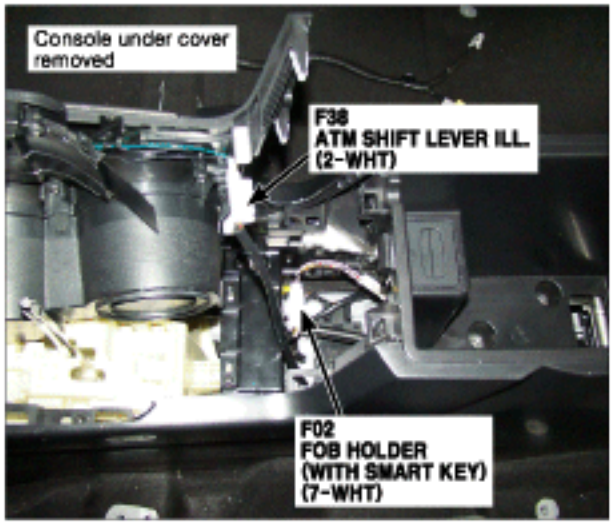
89. Right Front of Roof Trim



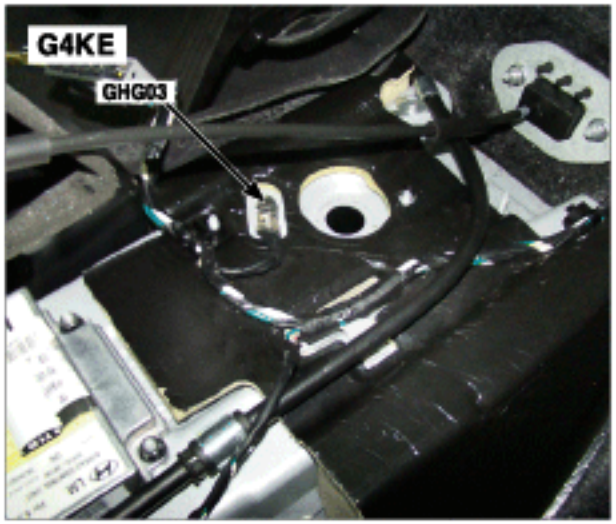
90. Center of Roof Trim



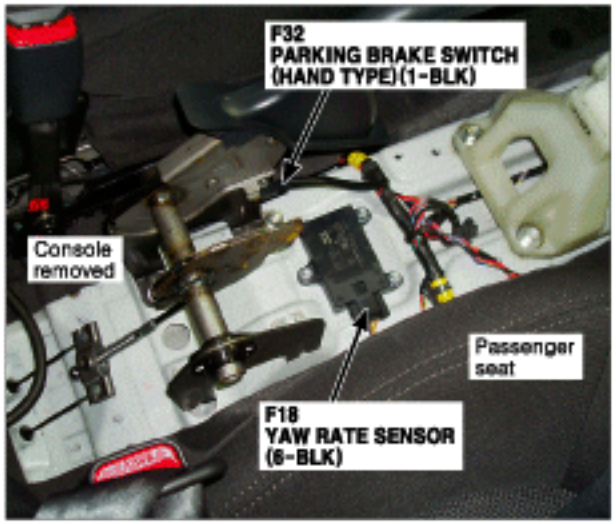
91. Center of Console



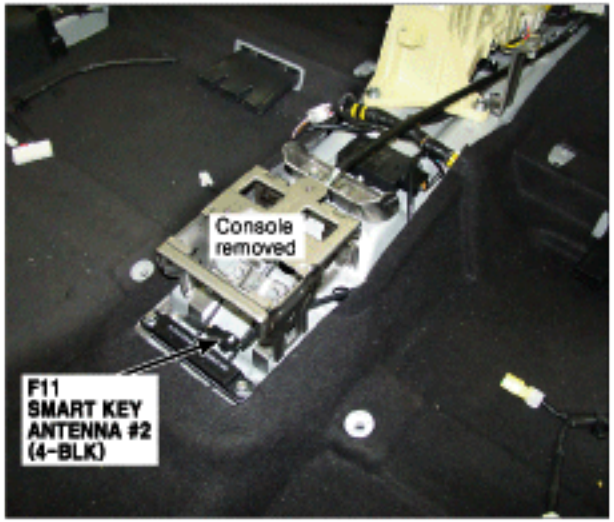
92. Center Under of Dash Panel



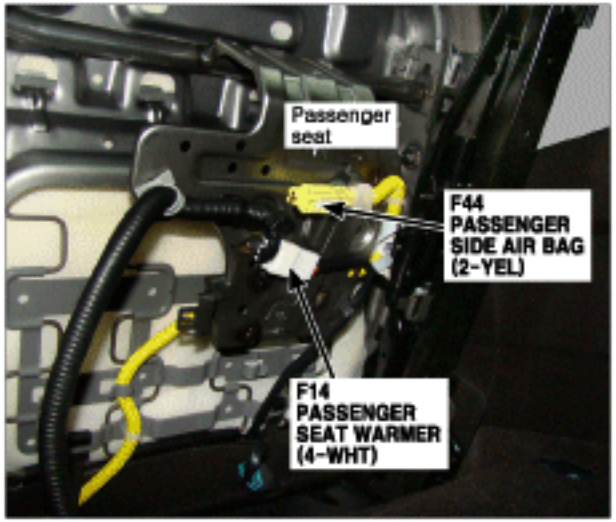
93. Center of Console



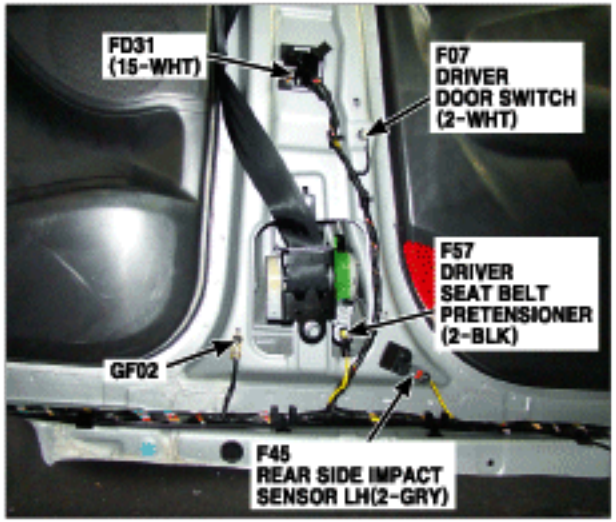
94. Rear of Console



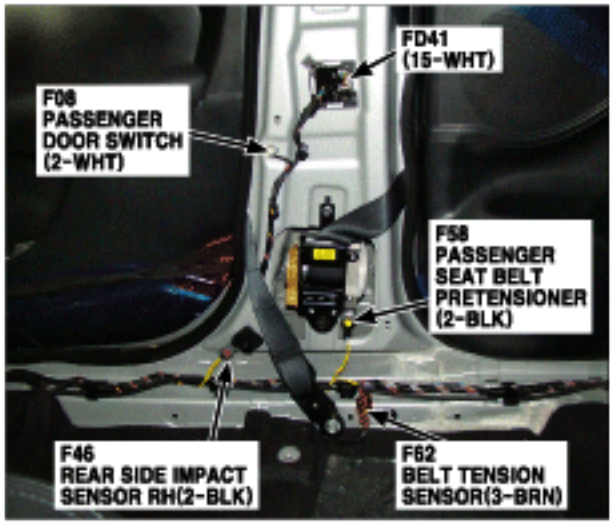
95. Under of Passenger Seat



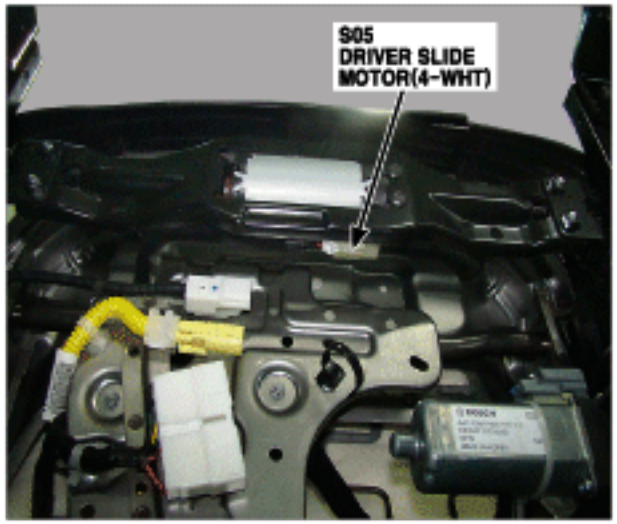
96. Left B-pillar



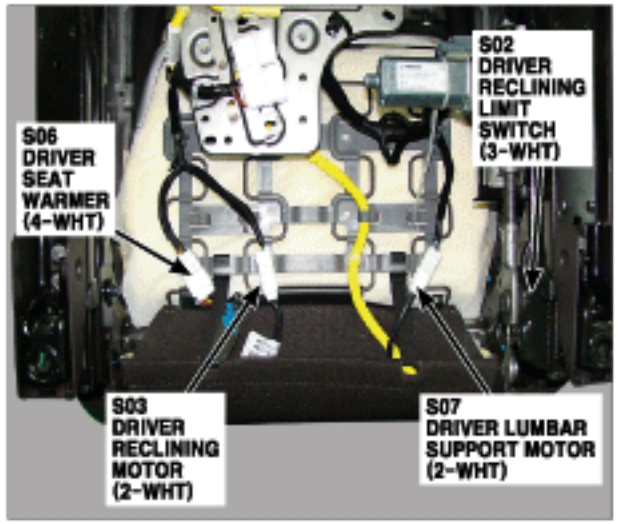
97. Right B-pillar



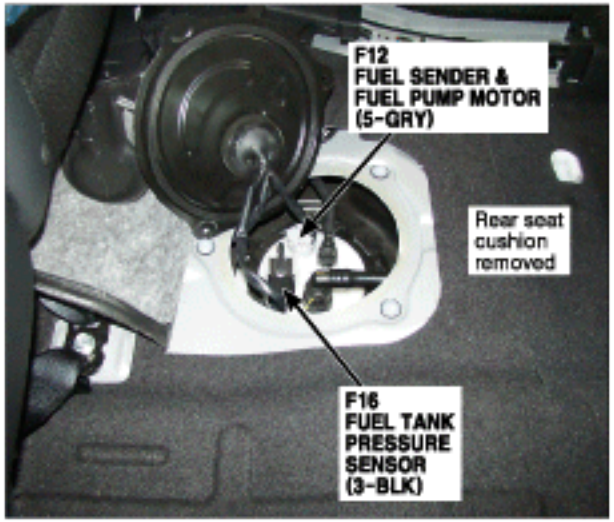
98. Under of driver seat



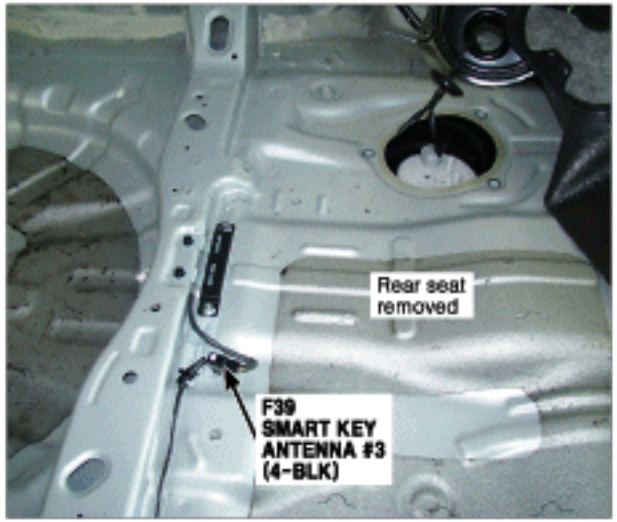
99. Under of driver seat



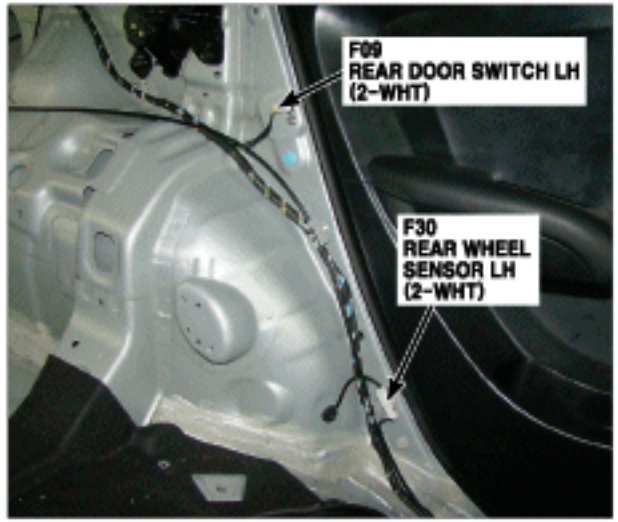
100. Left Side of Rear Seat Cushion



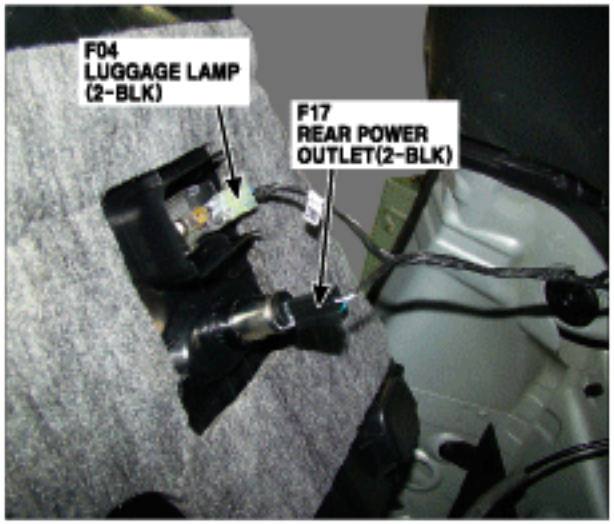
101. Under of Rear Seat Cushion



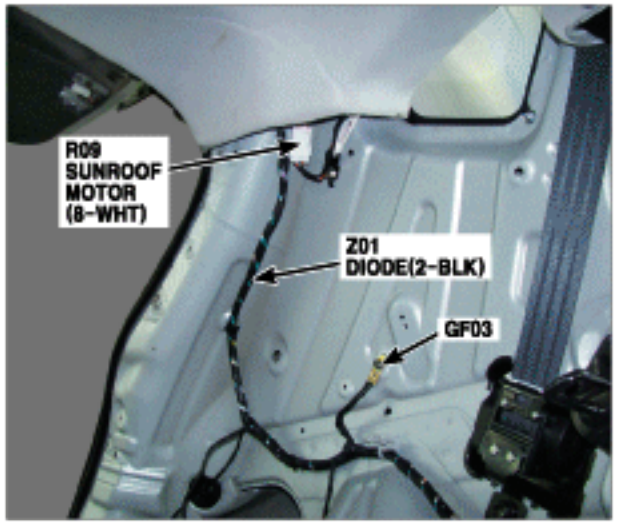
102. Under of Left C-pillar



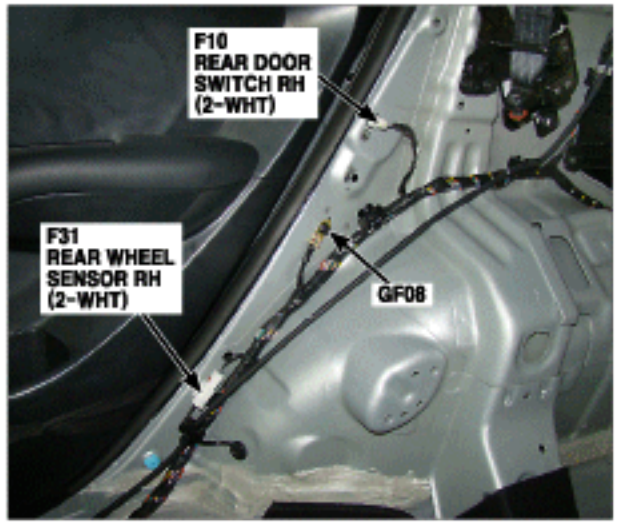
103. Left Side of Luggage Trim



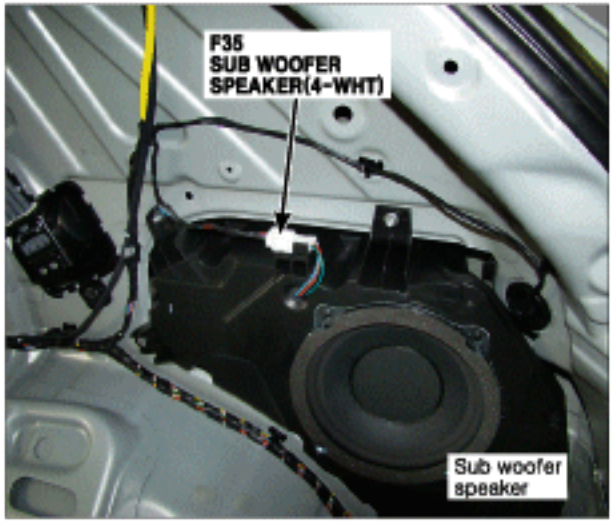
104. Left Side of Luggage Panel



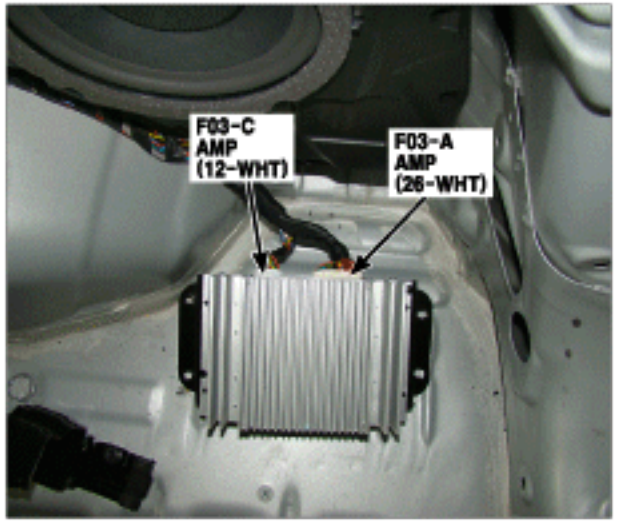
105. Under of Right C-pillar



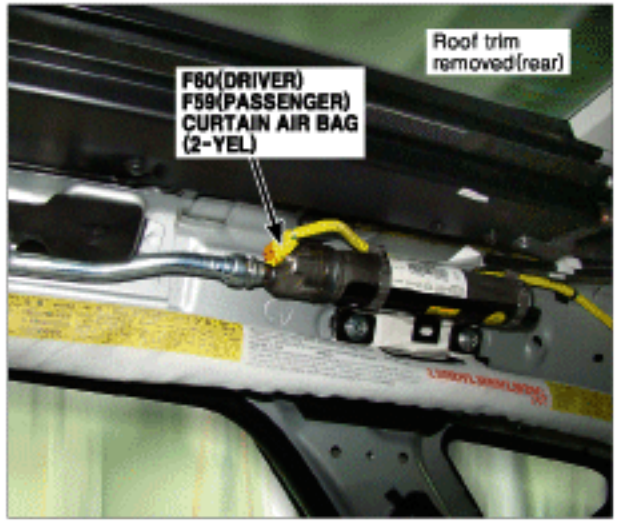
106. Right Side of Luggage Panel



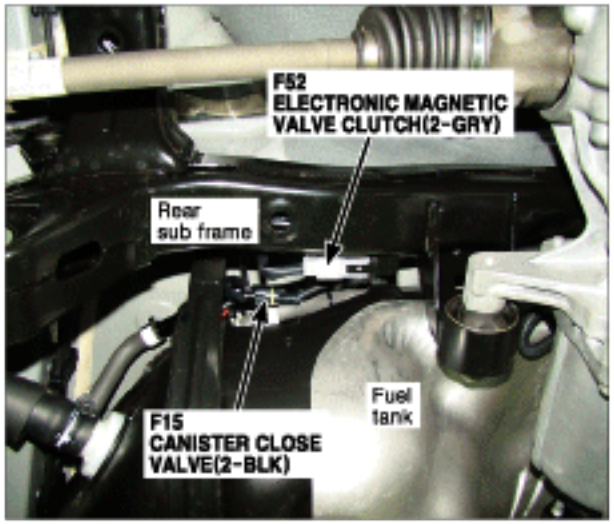
107. Right Under of Luggage Panel



108. Top of C-pillar



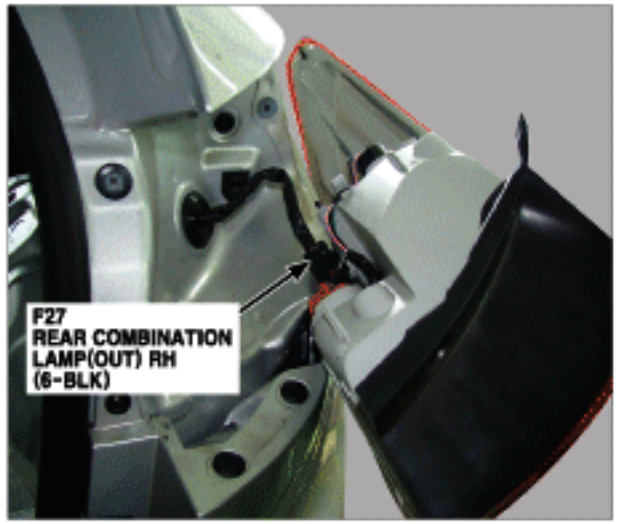
109. Rear of Fuel Tank



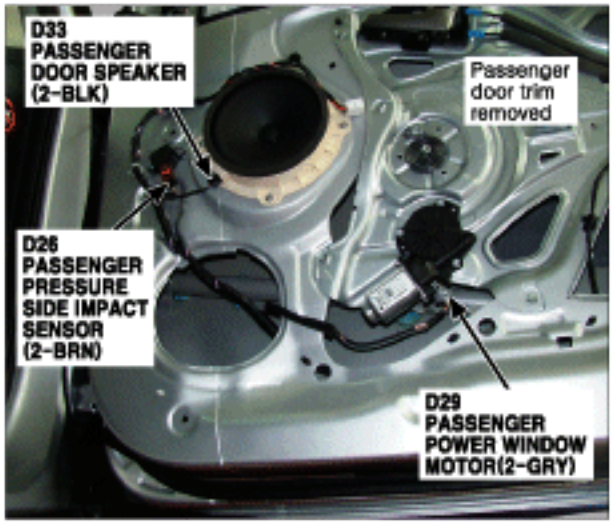
110. Left Side of Luggage Room



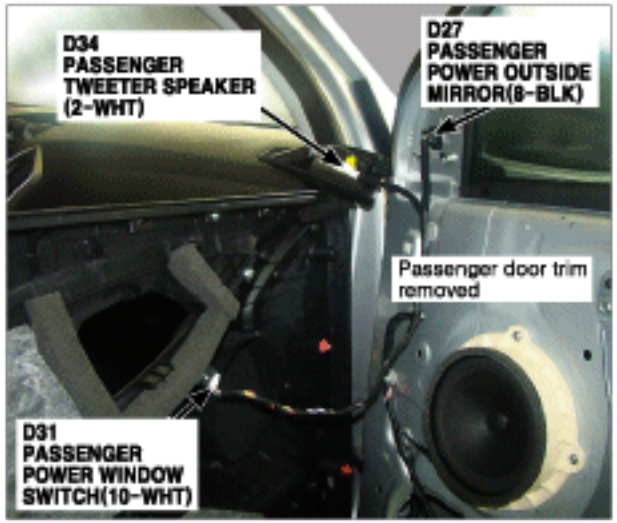
111. Right Side of Luggage Room



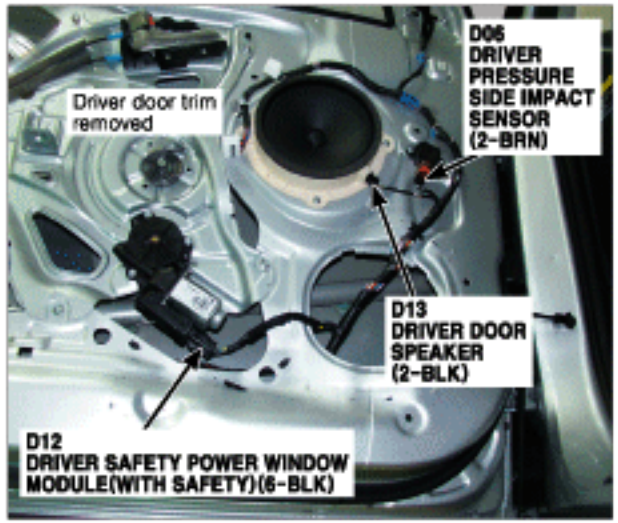
112. Passenger Door



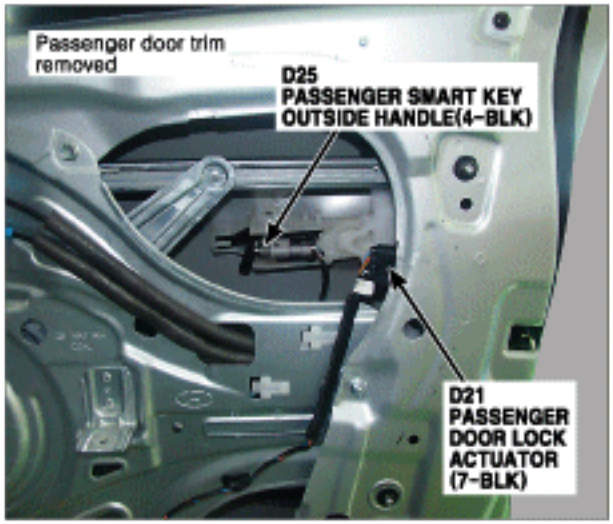
113. Passenger Door



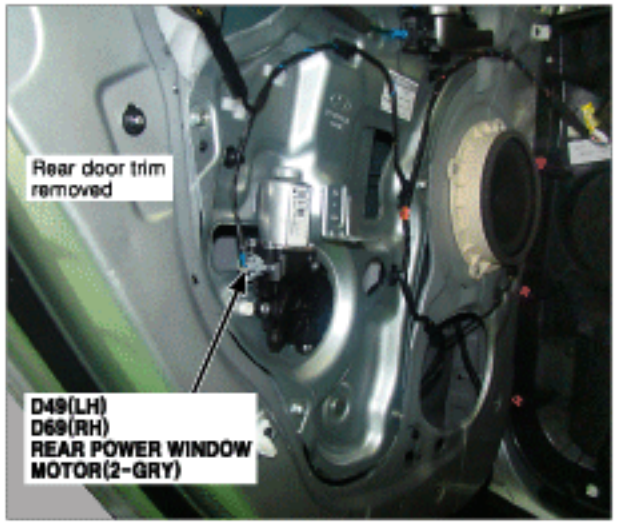
114. Driver Door



115. Passenger Door



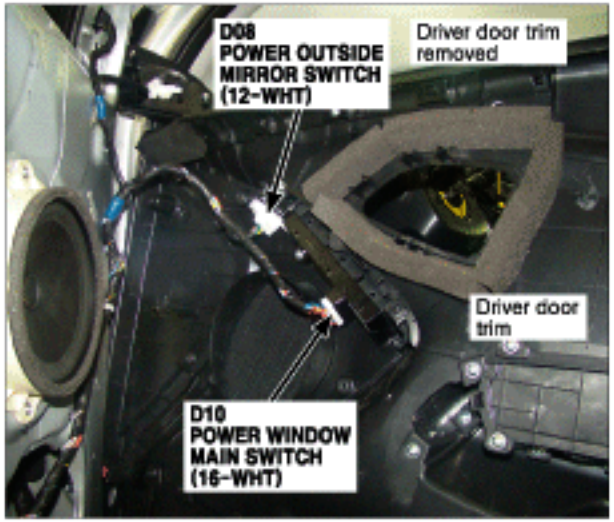
116. Rear Door



117. Rear Door



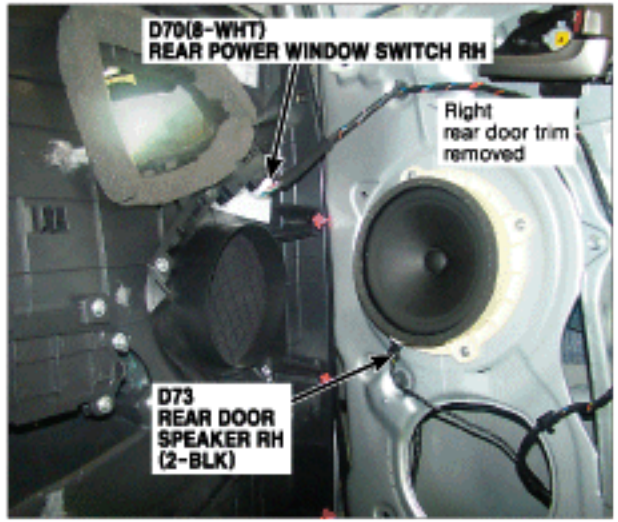
118. Driver Door Trim



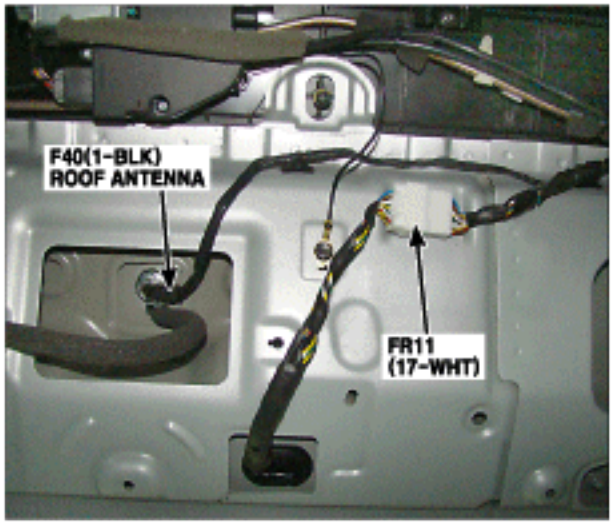
119. Left Side of Rear Door



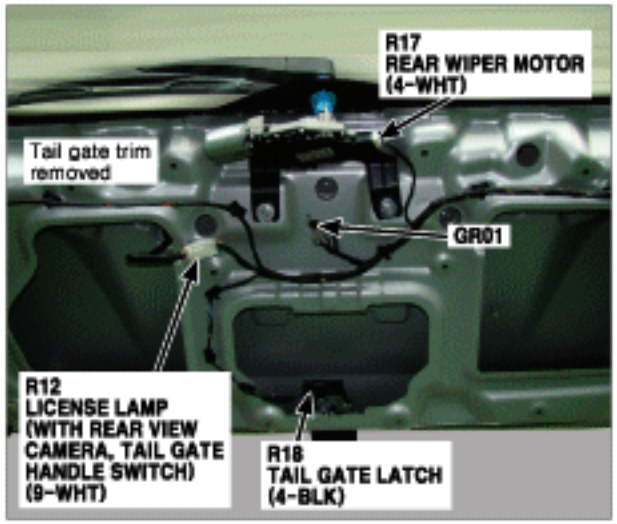
120. Right Side of Rear Door



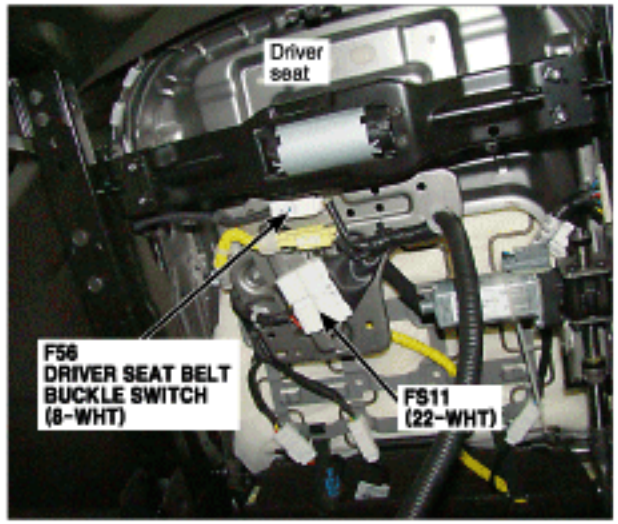
121. Rear of Roof Panel



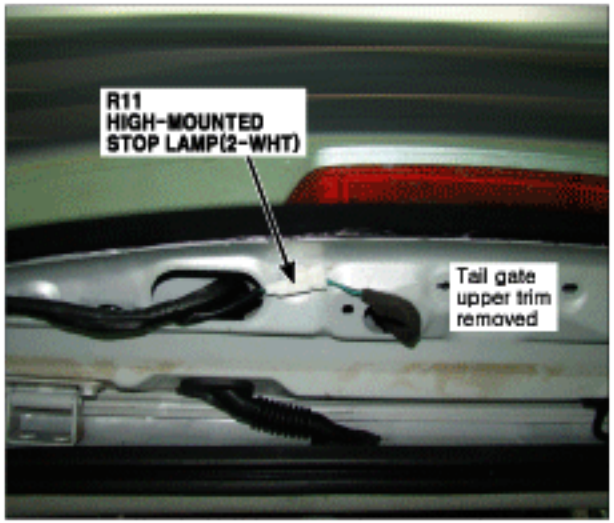
122. Tail Gate



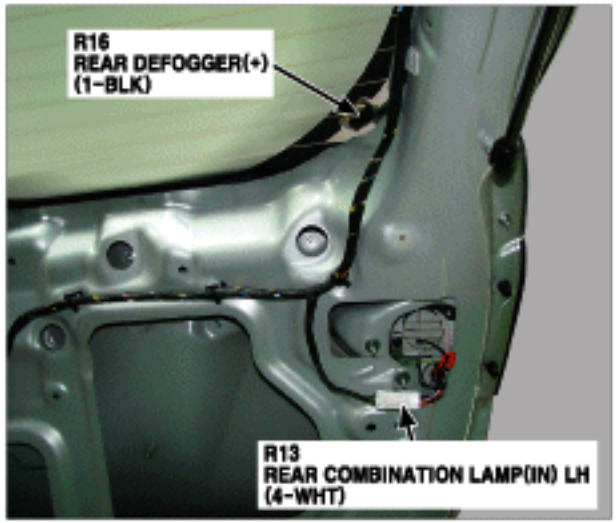
123. Under of Driver Seat



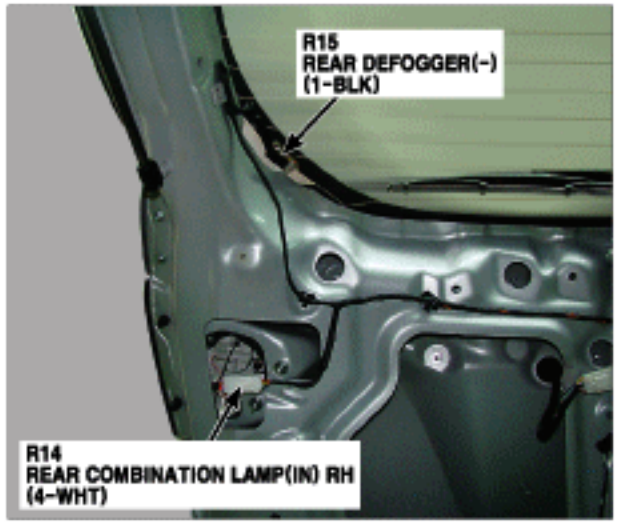
124. Top of Tail Gate



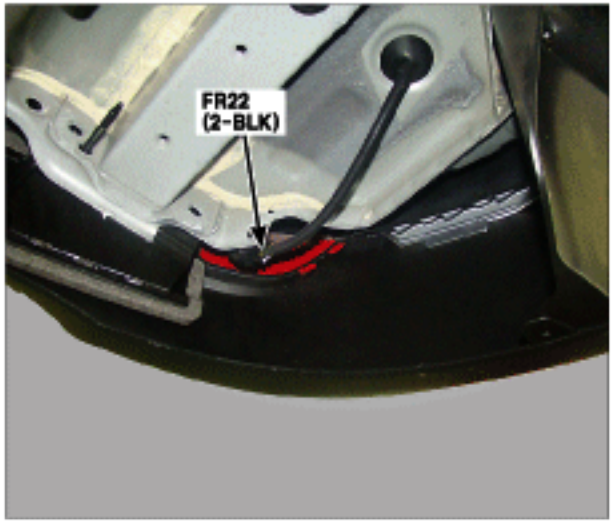
125. Left Side of Tail Gate



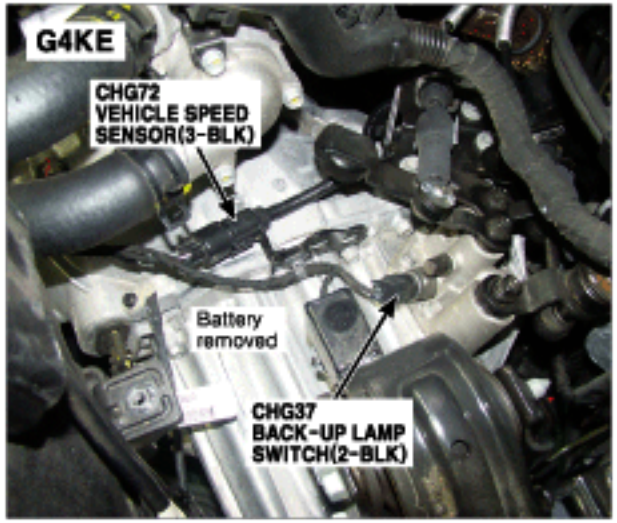
126. Right Side of Tail Gate



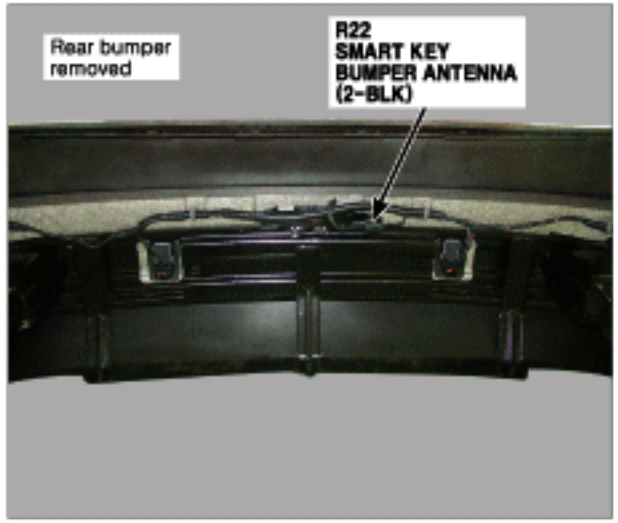
127. Left Under of Rear Bumper



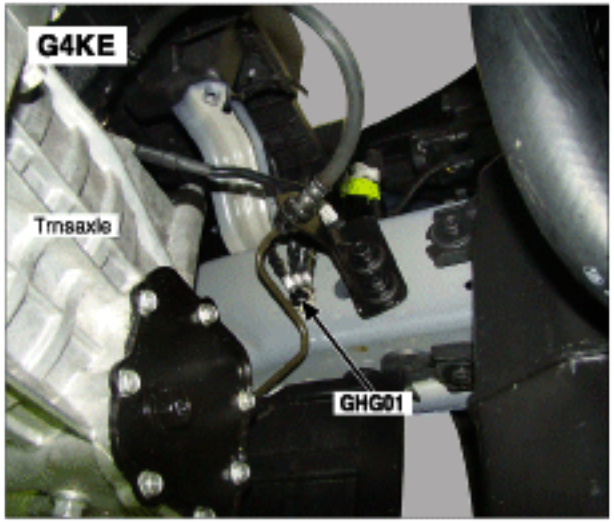
128. Top of Transaxle



129. Rear Bumper



130. Left Front of Engine Room



M01 Blower Motor

- 2 Female / White (KET_250_02F_W)



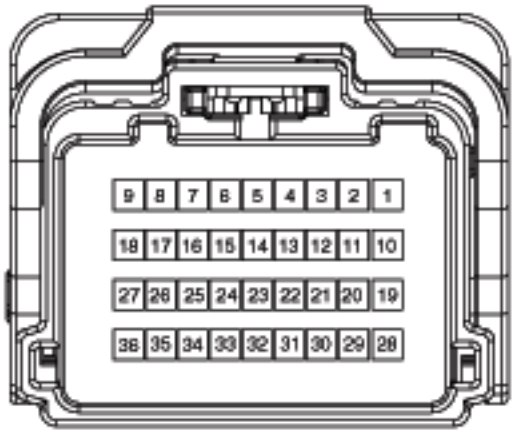
1. R E/R Fuse & Relay Box - Blower Relay

2. Auto A/C
   P FET (Field Effect Transistor)
   Manual A/C
   L Blower Switch, Blower Resistor

	Abbr.	Name	
	R	Red	
	O	Orange	
	Y	Yellow	
	G	Green	
	L	Blue	
	Br	Brown	
	B	Black	
	Gr	Gray	
	W	White	

M02 SRS Control Module

- 36 Female / Green (JST_WIC_36F_G)



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

M03 Evaporator Sensor

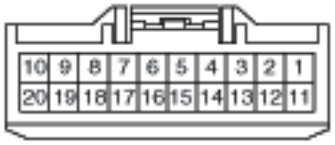
- 2 Female / White (AMP_070_02F_W)



1. Auto A/C W Manual A/C Br	A/C Control Module (Sensor +)	2. Gr	A/C Control Module (Sensor Ground)

M04-A ICM Relay Box

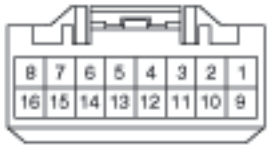
- 20 Female / White (AMP_090III_20F_W)



1. Br	Rear Wiper Relay (Rear Wiper Motor)	11. L	Rear Wiper Relay (I/P Junction Box - WIPER RR 15A)
2. W/B	Rear Wiper Relay (IPS Control Module)	12. W	Rear Wiper Relay (Rear Wiper Motor)
3. G	DBC Relay (ESC Module, High-Mounted Stop Lamp, Stop Lamp LH/RH)	13. –	–
4. –	–	14. –	–
5. W/B	DBC Relay (ESC Module)	15. B	Two Turn Unlock Relay (Ground (GM02))
6. Gr	DBC Relay (I/P Junction Box - MODULE 1 10A)	16. Y/B	Two Turn Unlock Relay (IPS Control Module)
7. G	DBC Relay (Stop Lamp Switch)	17. Br	Two Turn Unlock Relay (I/P Junction Box - DR LOCK 15A)
8. L	DBC Relay (E/R Fuse & Relay Box - STOP LP 10A)	18. G	Two Turn Unlock Relay (Door Lock Actuator)
9. –	–	19. –	–
10. –	–	20. –	–

M04-B ICM Relay Box

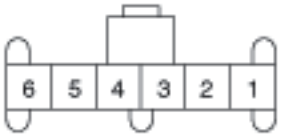
- 16 Female / White (AMP_090III_16F_W)



1. –	–	9. –	–
2. –	–	10. –	–
3. –	–	11. –	–
4. Br	Flasher Sound Relay (I/P Junction Box - HAZARD 15A)	12. –	–
		13. –	–
5. Y	Flasher Sound Relay (BCM)	14. –	–
6. –	–	15. –	–
7. –	–	16. –	–
8. –	–		

M05 Incar Sensor (Auto A/C)

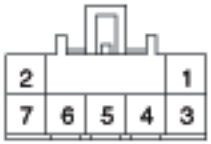
- 6 Female / White (KET_91A_06F_W)



1. –	–	4. R	A/C Control Module (Sensor +)
2. Gr	A/C Control Module (Sensor Ground)	5. –	–
3. –	–	6. –	–

M07 Intake Actuator

- 7 Female / White (KUM_CDR_07F_W)



1. –	–	5. Br	A/C Control Module (Vref)
2. –	–	6. Gr	A/C Control Module (F/B)
3. Auto A/C - Br / Manual A/C - 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)

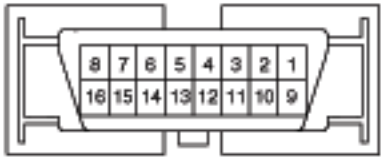
- 6 Male / White (KET_090II_06M_W)



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 - ROOM LP 10A

M10 Data Link Connector

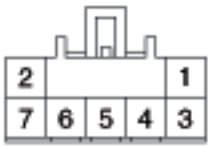
- 16 Female / Black (MLX_OBDII_16F_B_SIN)



1. –	–	9. G	I/P Junction Box - ROOM LP 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. –	–

M11 Mode Actuator

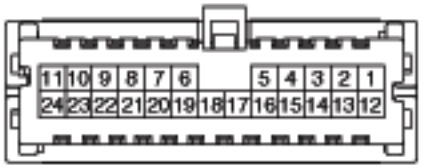
- 7 Female / White (KUM_CDR_07F_W)



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

M13-A BCM

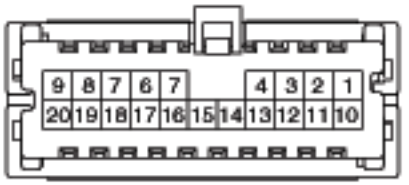
- 24 Female / White (KET_040III_24F_W)



1. R	I/P Junction Box - ROOM LP 10A	13. L/O	I/P Junction Box - AUDIO 2 10A
2. Br	I/P Junction Box - MODULE 5 7.5A	14. L	Rear Washer Switch
3. G	I/P Junction Box - MODULE 2 10A	15. G/B	Rear Wiper Switch
4. W	Turn Signal Switch LH	16. O	Rear Wiper - INT.
5. P	Turn Signal Switch RH	17. Br	Front Washer Switch
6. Br/B	Back-Up Signal	18. W/B	Front Wiper - INT.
7. G	SRS (Crash Unlock)	19. P	Front Wiper - Mist
8. R	Auto Light Sensor Power	20. Y/B	Front Wiper - INT. (Time)
9. –	–	21. P	Door Warning Switch - Input
10. –	–	22. Y	Tail Lamp Switch
11. Y	Hazard Switch	23. G/B	Key Inter Lock Switch
12. G	Alternator	24. B	Ground (GM01)

M13-B BCM

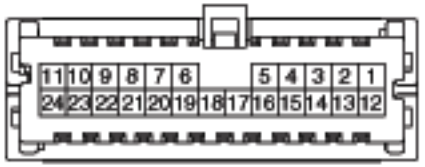
- 20 Female / White (KET_040III_20F_W)



1. –	–	11. Y	Auto Light Switch
2. L	Head Lamp Switch	12. O	Front Fog Lamp Switch
3. P	Head Lamp High Switch	13. –	–
4. –	–	14. W	Front Wiper Deicer Switch Input
5. W	Body K-Line	15. W	Rear Defogger Switch Input
6. –	–	16. –	–
7. –	–	17. –	–
8. L	B-CAN High	18. –	–
9. R	B-CAN Low	19. R	Auto Light Sensor Signal
10. W	Auto Light Ground	20. B	Head Lamp Signal

M13-C BCM

- 24 Female / Gray (KET_040III_24F_GR_B)



1. G	Safety Power Window	13. –	–
2. R/O	Security IND.	14. –	–
3. G	Door Unlock Signal	15. –	–
4. G/B	Key Solenoid	16. –	–
5. Br	Room Lamp Control	17. G	Key Hole ILL. Control
6. Gr	Turn/Hazard Lamp Output - FL	18. –	–
7. Y/B	Turn/Hazard Lamp Output - FR	19. O	A/V Tail Signal
8. W	Turn/Hazard Lamp Output - RL	20. Y	Flasher Sound Relay
9. P	Turn/Hazard Lamp Output - RR	21. O/B	Front Wiper Relay
10. Br	I/P Junction Box - HAZARD 15A	22. –	–
11. Br	I/P Junction Box - HAZARD 15A	23. –	–
12. B	Ground (GM01)	24. –	–

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

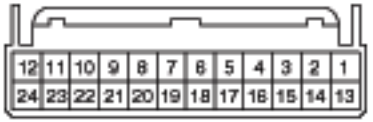
- 4 Female / Black (KET_250_04F_B)



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

M15-A Instrument Cluster

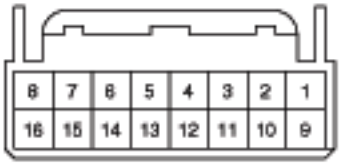
- 24 Female / White (KET_025_PCB_24F_W)



1. G	I/P Junction Box - ROOM LP 10A	13. L	Mode Switch
2. Gr/O	I/P Junction Box - CLUSTER 10A	14. L	Rheostat Up Switch
3. R/O	ILL. (+)	15. G	Rheostat Down Switch
4. –	–	16. O	Fuel Sender (+)
5. G	C-CAN High	17. Br	4 Pulse Output (A/T)
6. O	C-CAN Low	18. –	–
7. –	–	19. –	–
8. L	B-CAN High	20. –	–
9. R	B-CAN Low	21. L/O	ILL. (-)
10. –	–	22. B	Fuel Sender (-)
11. Br	Vehicle Speed Input (M/T)	23. B	Ground (GM01)
12. –	–	24. B	Ground (GM01)

M15-B Instrument Cluster

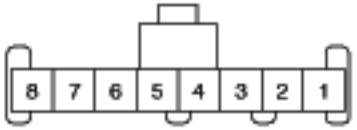
- 16 Female / White (AMP_025_16F_W)



1. –	–	9. G	Charge IND.
2. –	–	10. Gr	SRS (Air Bag IND.)
3. L/O	I/P Junction Box - A/BAG IND 10A	11. –	–
4. –	–	12. –	–
5. –	–	13. –	–
6. Br/O	W/O Smart Key - IMMO. IND. With Smart Key - Smart Key Control Module	14. Y/B	Check Engine IND.
		15. –	–
		16. –	–
7. –	–		
8. Y/B	Oil Pressure Switch		

M16 Auto Light & Photo Sensor

- 8 Female / White (KET_91A_08F_W)



1. R	Auto Light Sensor - Signal	5. R/O	BCM - Security IND.
2. W	Auto Light Sensor - Ground	6. L	Auto A/C - Sun (-) (Driver)
3. B	Auto A/C - Sun (-) (Passenger)	7. Br	Auto A/C Control Module - Vref
4. L/B	I/P Junction Box - ROOM LP 10A	8. R	Auto Light Sensor - Supply

M17-A EPS Control Module

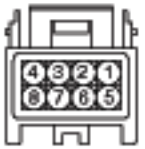
- 2 Female / Black (AMP_375_02F_B)



1. B	Ground (GM05)	2. R	E/R Fuse & Relay Box - MDPS 80A

M17-B EPS Control Module

- 8 Female / Black (PKD_MI064_08F_2)



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

M18 Ignition Switch (W/O Smart Key)

- 6 Female / White (KUM_DSD_06F_W)



1. R	E/R Fuse & Relay Box - IGN 2 40A	4. P	ON or START Output
2. L	ON Output	5. P	E/R Fuse & Relay Box - IGN 1 30A
3. G	START Output	6. W	ACC or ON Output

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

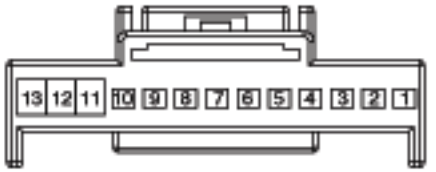
- 2 Female / White (KET_090III_02F_W_L)



1. W/B	I/P Junction Box - SMART KEY 10A	2. G/B	BCM

M20-L Multifunction Switch (Light)

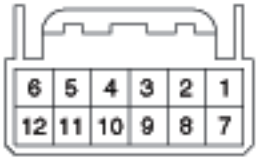
- 13 Female / White (KET_0409_13F_W)



1. Y	BCM - Tail Lamp Switch	8. –	–
2. B	Ground (GM01)	9. P	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. Br/O	I/P Junction Box - MODULE 1 10A
6. O	BCM - Front Fog Lamp Switch	13. P	BCM - Turn Signal Lamp Switch RH
7. –	–		

M20-R Multifunction Switch (Remote Control)

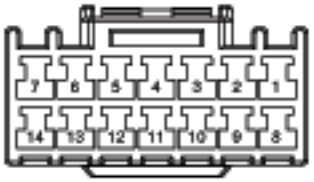
- 12 Female / White (AMP_025_12F_W)



1. –	–	7. –	–
2. L/O	ILL. (-)	8. –	–
3. R/O	ILL. (+)	9. –	–
4. L	Audio Remote Control	10. G	Cruise Control Switch Supply
5. Gr	Audio Remote Control Ground	11. L	Cruise Control Switch Signal
6. Gr	Horn Switch	12. B	Cruise Control Switch Ground

M20-W Multifunction Switch (Wiper)

- 14 Female / White (KET_N090III_14F_W)



1. P	BCM - Front Wiper Switch (Mist)	8. W/B	BCM - Front Wiper Switch (INT.)
2. Gr	E/R Fuse & Relay Box - WIPER FRT, LO Relay	9. P	Front Wiper Motor HI
		10. Y	I/P Junction Box - WIPER FRT 25A
3. G	Front Wiper Motor LO	11. Br	BCM - Front Washer Signal, Front Washer Motor
4. B	Ground (GM01)		
5. Y/B	BCM - Front Wiper Switch (INT. Time)	12. L	I/P Junction Box - WIPER RR 15A
		13. L	BCM - Rear Washer Switch
6. G/B	BCM - Rear Wiper Switch (ON)	14. –	–
7. O	BCM - Rear Wiper Switch (INT.)		

M21 Cluster Ionizer (Auto A/C)

- 6 Female / White (KET_090_06F_W)



1. B	Ground (GM02)	4. P	Clean Signal
2. O	I/P Junction Box - MODULE 4 10A	5. G	Ion Diagnosis
3. O	Ion Signal	6. –	–

M22 Driver Air Bag

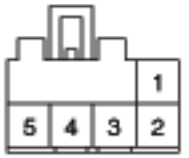
- 4 Female / Yellow (YAZ_040_04F_Y)



1. R	SRS - 1st Stage Low	3. L	SRS - 2nd Stage Low
2. L/O	SRS - 1st Stage High	4. G/B	SRS - 2nd Stage High

M23 Immobilizer Module (W/O Smart Key)

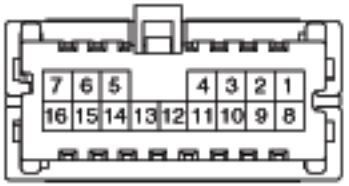
- 5 Female / White (KUM_CDR_05F_W)



1. Br	Antenna (+)	4. L	EMS Box - SENSOR 1 10A
2. W	Antenna (-)	5. L	PCM Data Line
3. B	Ground (GHG05)		

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

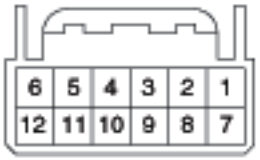
- 16 Female / White (KET_040III_16F_W)



1. W	USB/IPOD - VOD	9. –	–
2. B	USB - D (-)	10. –	–
3. Y	USB - D (+)	11. B	Ground (GM03)
4. B	USB/IPOD - GND	12. –	–
5. –	–	13. –	–
6. B	AUX - REF	14. L	AUX - DET
7. Y	AUX - L IN	15. –	–
8. R/O	ILL. (+)	16. Br	AUX - R IN

M25 AUX & USB Jack (With A/V & Navigation)

- 12 Female / White (AMP_025_12F_W)



1. Y	L IN	7. B	REF
2. Br	R IN	8. –	–
3. O	DET	9. –	–
4. –	–	10. –	–
5. –	–	11. –	–
6. R/O	ILL. (+)	12. B	Ground (GM03)

M26 ESC Off Switch

- 6 Female / Black (KET_090II_06F_B)



1. R/O	ILL. (+)	4. Gr	I/P Junction Box - MODULE 1 10A
2. –	–	5. O/B	ESC Module (ESC Off Switch 'ON')
3. L/O	ILL. (-)	6. –	–

M27 DBC Switch

- 6 Female / Gray (KET_090II_06F_Gr)



1. R/O	ILL. (+)	4. Gr	I/P Junction Box - MODULE 1 10A
2. –	–	5. O	ESC Module (DBC Switch 'ON')
3. L/O	ILL. (-)	6. –	–

M28 4WD Lock Switch

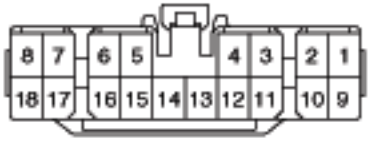
- 6 Female / Brown (KET_090III_06F_BR)



1. R/O	ILL. (+)	4. Y	4WD ECM
2. –	–	5. B	Ground (GM01)
3. L/O	ILL. (-)	6. –	–

M30 Console Switch

- 18 Female / White (KET_090II_18F_W)



1. –	–	11. R	I/P Junction Box - S/HEATER FRT 15A
2. L/O	ILL. (-)	12. W	Passenger Seat Warmer Relay (High)
3. R/O	ILL. (+)	13. L	Passenger Seat Warmer Relay (Low)
4. Br	Driver Seat Warmer Switch (IND, GND)	14. B	Ground (GM01)
5. Br	Passenger Seat Warmer Switch (IND, GND)	15. –	–
6. –	–	16. –	–
7. –	–	17. –	–
8. P	I/P Junction Box - CLUSTER 10A	18. –	–
9. W	Driver Seat Warmer Relay (High)		
10. L	Driver Seat Warmer Relay (Low)		

M31 Front Wiper Deicer Switch (W/O Smart Key)

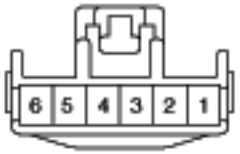
- 6 Female / White (KET_090III_06F_W)



1. R/O	ILL. (+)	4. P	Ground (GM01)
2. B	Ground (GM01)	5. W	BCM (Deicer Switch Input)
3. L/O	ILL. (-)	6. G	E/R Fuse & Relay Box - DEICER Relay

M32 Hazard Switch

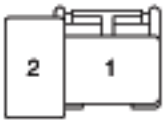
- 6 Female / White (KET_090II_06F_W_SW)



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

M33 Glove Box Lamp

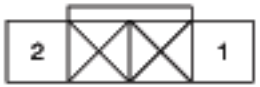
- 2 Female / Black (AMP_PLM2_02F_B)



1. R/O	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)

M39 ODO Trip Switch

- 2 Female / Black (AMP_040M1_02F_B)



1. L	Instrument Cluster - Mode Switch	2. B	Ground (GM01)

M40 Cigarette Lighter & Front Power Outlet

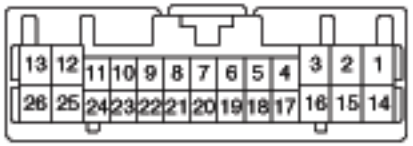
- 6 Female / White (KET_090III_06F_W)



1. L	I/P Junction Box - POWER OUTLET 2 25A	3. B	Ground (GM02)
2. G	I/P Junction Box - POWER OUTLET 1 15A	4. –	–
		5. R/O	ILL. (+)
		6. B	Ground (GM02)

M41-A A/C Control Module (Auto)

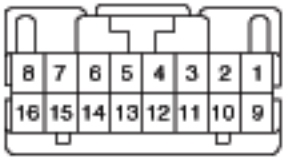
- 26 Female / White (KET_0407_26F_W)



1. G	I/P Junction Box - ROOM LP 10A	14. Br	Vref (+5V)
2. R/O	ILL. (+)	15. O	Cluster Ionizer Signal
3. O	I/P Junction Box - MODULE 4 10A	16. Br	Intake Actuator (FRE)
4. Y	Driver Temp. Actuator (Cool)	17. P	Intake Actuator (REC)
5. O	Driver Temp. Actuator (Warm)	18. P	Cluster Ionizer Clean Signal
6. –	–	19. P	I/P Junction Box - A/CON 7.5A
7. R	Mode Actuator (VENT)	20. Y	Passenger Temp. Actuator (Cool)
8. L	Mode Actuator (DEF)	21. P	Passenger Temp. Actuator (Warm)
9. –	–	22. W/B	FET (Gate)
10. –	–	23. R	FET (Drain)
11. –	–	24. –	–
12. L/O	ILL. (-)	25. –	–
13. B	Ground (GM01)	26. Gr	Sensor Ground

M41-B A/C Control Module (Auto)

- 16 Female / White (KET_0407_16F_W)



1. O	C-CAN Low	9. B	Ground (GM01)
2. G	C-CAN High	10. W	Body K-Line
3. Gr	Intake Actuator (F/B)	11. W	Evaporator Sensor (+)
4. G	Mode Actuator (F/B)	12. L/B	Ambient Sensor (+)
5. W	Passenger Temp. Actuator (F/B)	13. R	Incar Sensor (+)
6. W	Driver Temp. Actuator (F/B)	14. L	SUN (-) - Driver
7. G	Cluster Ionizer Diagnosis	15. B	SUN (-) - Passenger
8. Gr	ECV In	16. L	ECV Out

M43-A A/C Control Module (Manual)

- 6 Female / White (KET_250DL_06F_W)



1. G	Blower Switch (M/High)	4. L	Blower Switch (High)
2. –	–	5. P	Blower Switch (M/Low)
3. B	Ground (GM02)	6. R	Blower Switch (Low)

M43-B A/C Control Module (Manual)

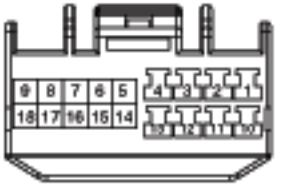
- 32 Female / White (KET_02509_32F_W)



1. R/O	ILL. (+)	17. O	I/P Junction Box - MODULE 4 10A
2. G	I/P Junction Box - ROOM LP 10A	18. –	–
3. R	Mode Actuator (VENT)	19. G	C-CAN High
4. L	Mode Actuator (DEF)	20. O	C-CAN Low
5. Y	Temp. Actuator (Cool)	21. –	–
6. O	Temp. Actuator (Warm)	22. Gr	ECV In
7. B	Intake Actuator (FRE)	23. L	ECV Out
8. P	Intake Actuator (REC)	24. –	–
9. –	–	25. Br	Vref (+5V)
10. –	–	26. Br	Evaporator Sensor (+)
11. G	Mode Actuator (F/B)	27. L/B	Ambient Sensor (+)
12. W	Temp. Actuator (F/B)	28. –	–
13. Gr	Intake Actuator (F/B)	29. –	–
14. P	Blower Motor "ON" Signal	30. –	–
15. L	Blower F/B	31. Gr	Sensor Ground
16. L/O	ILL (-)	32. B	Ground (GM01)

M45-A AUDIO

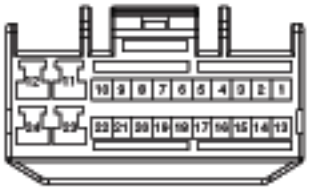
- 18 Female / White (KET_09025_18F_W)



1. Y	Rear Door Speaker LH (+)	10. B	Rear Door Speaker LH (-)
2. Br	Front Door Speaker LH (+)	11. W	Front Door Speaker LH (-)
3. R	Front Door Speaker RH (+)	12. L	Front Door Speaker RH (-)
4. G	Rear Door Speaker RH (+)	13. O	Rear Door Speaker RH (-)
5. B	SPDIF - Shield Ground	14. –	–
6. G	SPDIF - OUT (-)	15. W	SPDIF - OUT (+)
7. Gr	I/P Junction Box - CLUSTER 10A	16. –	–
8. R/O	ILL. (+)	17. L/O	ILL. (-)
9. –	–	18. G	Roof Antenna

M45-B AUDIO

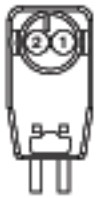
- 24 Female / White (KET_09025_24F_W)



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. Y	USB D (+)	18. B	USB D (-)
7. W	USB/iPOD - VDO	19. B	USB/iPOD - GND
8. Br	AUX R_IN	20. L	AUX DET
9. B	AUX GND	21. Y	AUX L_IN
10. R	MIC (+)	22. L	MIC (-)
11. L/O	I/P Junction Box - AUDIO 2 10A	23. –	–
12. R	I/P Junction Box - AUDIO 1 10A	24. B	Ground (GM03)

M46 Passenger Air Bag #1

- 2 Female / Yellow (FCI_AKII_02F_Y_II)



1. L	SRS Control Module (1st Stage High)	2. Br	SRS Control Module (1st Stage Low)

M47 Passenger Air Bag #2

- 2 Female / Yellow (FCI_AKII_02F_Y_III)



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

M49 Blower Resistor (Manual A/C)

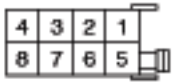
- 4 Female / Black (KET_250_04F_B)



1. P	Blower Switch (M/Low)	3. R	Blower Switch (Low)
2. G	Blower Switch (M/High)	4. L	Blower Motor

M50-A A/V Navigation Head Module

- 8 Female / Gray (AMP_AUDIO_08F_Gr_D2)



1. Br	Speed Signal	5. Br/B	Back-Up Signal
2. R/O	ILL. (+)	6. L/O	I/P Junction Box - AUDIO 2 10A
3. G	Roof Antenna	7. L/O	ILL. (-)
4. R	I/P Junction Box - AUDIO 1 10A	8. B	Ground (GM03)

M50-C A/V Navigation Head Module

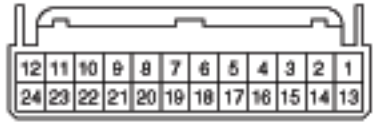
- 20 Female / Black (AMP_MTIII_20F_B)



1. R	MIC (+)	11. O	AUX DET
2. B	MIC (-)	12. –	–
3. Br	AUX R_IN	13. –	–
4. Y	AUX L_IN	14. –	–
5. –	–	15. G	Door Unlock Signal
6. –	–	16. L	Audio Remote Control
7. –	–	17. Gr	Audio Remote Control Ground
8. G	Engine Running Signal	18. –	–
9. O	Auto Light Signal	19. –	–
10. Y	AUX REF	20. –	–

M50-D A/V Navigation Head Module

- 24 Female / White (KET_025_PCB_24F_W)



1. W	SPDIF - OUT (+)	13. Y	Rear View Camera (B+)
2. G	SPDIF - OUT (-)	14. Y/B	Rear View Camera (GND)
3. B	SPDIF - Shield Ground	15. R	Rear View Camera (CVBS)
4. –	–	16. R/B	Rear View Camera (VGND)
5. –	–	17. –	–
6. Br	NEVI Voice (+)	18. Y	NEVI Voice (-)
7. –	–	19. –	–
8. –	–	20. B	NEVI Voice (GND)
9. –	–	21. –	–
10. –	–	22. –	–
11. –	–	23. –	–
12. L	CAN High	24. R	CAN Low

M51-A PDM Relay Box (With Smart Key)

- 10 Female / White (AMP_0925_10F_W)



1. P	PDM - ACC Relay Control	6. W	ACC Output
2. –	–	7. P	E/R Fuse & Relay Box - IGN 1 30A
3. B	Ground (GM01)	8. P	IGN1 Output
4. R	PDM - IGN2 Relay Control	9. –	–
5. –	–	10. W	PDM - IGN 1 Relay Control

M51-B PDM Relay Box (With Smart Key)

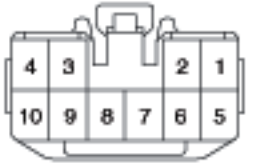
- 2 Female / Black (AMP_250JPT_02F_B)



1. L	IGN 2 Output	2. R	E/R Fuse & Relay Box - IGN 2 40A

M52-A PDM (With Smart Key)

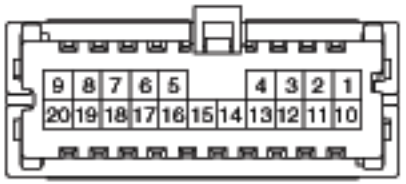
- 10 Female / White (KET_090III_10F_W)



1. B	Ground (GM02)	6. R	Start Relay Control
2. B	Ground (GM02)	7. W	IGN1 Relay Control
3. –	–	8. R	IGN2 Relay Control
4. –	–	9. P	ACC Relay Control
5. –	–	10. R	I/P Junction Box - PDM 15A

M52-B PDM (With Smart Key)

- 20 Female / White (KET_040III_20F_W)



1. W	I/P Junction Box - MODULE 2 10A	11. L	B-CAN High
2. Y/B	FOB Holder - IMMO. Clock	12. O/B	FOB In
3. W/B	FOB Holder - IMMO. Data	13. –	–
4. L/O	I/P Junction Box - AUDIO 2 10A	14. P	ESC (Wheel Speed Sensor Input)
5. –	–	15. R/B	Reverse (Start_EMS)
6. W	SSB SW1	16. W/B	F_RPM
7. B/O	SSB ILL. Ground	17. Y	SSB IND. Amber
8. G	SSB IND. Green	18. R/B	SSB ILL. Power
9. G	I/P Junction Box - MODULE 5 7.5A	19. P/B	FOB Holder ILL.
10. R	B-CAN Low	20. R/O	I/P Junction Box - SMART KEY 10A

M54 RF Receiver (With Smart Key)

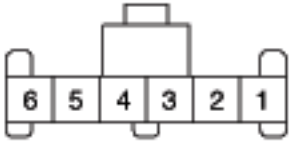
- 4 Female / White (KET_040III_04F_W)



1. O	RF_COM	3. G	I/P Junction Box - ROOM LP 10A
2. –	–	4. B	Ground (GM01)

M55 Rheostat

- 6 Female / White (KET_91A_06F_W)



1. L/O	ILL. (-)	4. L	Up Switch
2. B	Ground (GM01)	5. G	Down Switch
3. R/O	ILL. (+)	6. –	–

M57 Rear Defogger Switch

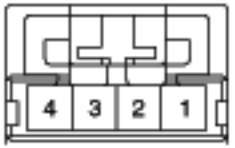
- 6 Female / White (KET_090III_06F_W)



1. R/O	ILL. (+)	4. P	Ground (GM02)
2. B	Ground (GM02)	5. W	BCM (Rear Defogger Switch Input), With Smart Key - Front Wiper Deicer SW Input
3. L/O	ILL. (-)	6. G	I/P Junction Box - HTD MIRR 7.5A

M60 Smart Key Antenna #1

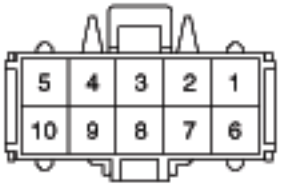
- 4 Female / Black (AMP_MQS_04F_B_040)



1. –	–	3. –	–
2. R	Smart Key Control Module (Interior Antenna #1 Signal)	4. L	Smart Key Control Module (Interior Antenna #1 Ground)

M61 Start Stop Button Switch (With Smart Key)

- 10 Female / Black (MLX_FIT_10F_B)



1. W	SSB SW1	6. L	I/P Junction Box - SMART KEY 10A
2. L	I/P Junction Box - SMART KEY 10A	7. L	SSB SW2
3. Y	SSB IND. Amber	8. G	SSB IND. Green
4. B/O	SSB ILL. Ground	9. L/O	ILL. (-)
5. R/B	SSB ILL. Power	10. –	–

M63 Passenger Temperature Actuator

- 7 Female / Black (KUM_CDR_07F_B)



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

M65 Driver Temperature Actuator

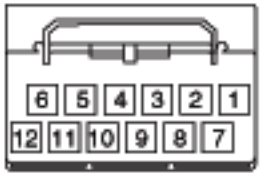
- 7 Female / Black (KUM_CDR_07F_B)



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)		

M67 Tire Pressure Monitoring Module

- 12 Female / Gray (JAE_TPMS_12F_Gr)



1. R	I/P Junction Box - TPMS 7.5A	7. Gr/O	I/P Junction Box - MODULE 1 10A
2. G	C-CAN High	8. O	C-CAN Low
3. B	Ground (GM02)	9. –	–
4. –	–	10. –	–
5. –	–	11. –	–
6. –	–	12. –	–

M69 Telltale Lamp

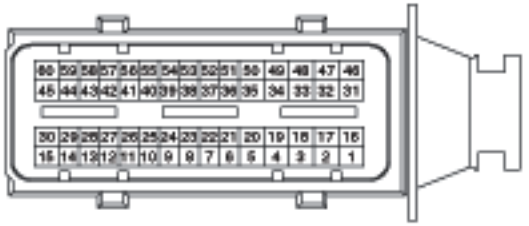
- 3 Female / Black (AMP_MQS_03F_B_1)



1. L	I/P Junction Box - A/BAG 10A	3. L	SRS Control Module
2. B	Ground (GM04)		

CHG-A PCM

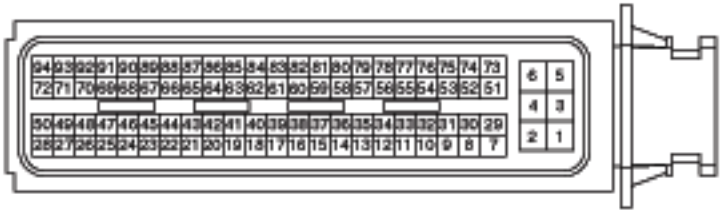
- 60 Female / Black (AMP_ECU_60F_B_R)



1. G	With Smart Key - IGN. Coil #4 Control W/O Smart Key - IGN. Coil #1 Control	21. –	–	41. –	–
2. B	Ignition Coil Shield Ground	22. –	–	42. –	–
3. L	A/T - LP_VFS	23. –	–	43. W	Clutch Switch
4. G/B	A/T - EC_VFS	24. W	With Smart Key - E/R Fuse & Relay Box (ATM P/N Relay) W/O Smart Key - E/R Fuse & Relay Box (Start Relay)	44. L/B	Brake Test Switch
5. W	A/T - 35R_VFS			45. L	VCM (DC Motor +1)
6. B/O	A/T - Input Speed Supply			46. R	With Smart Key - IGN. Coil #3 Control W/O Smart Key - IGN. Coil #2 Control
7. G/O	A/T - Output Speed Supply	25. R	A/T - Position Switch Code (S2)	47. Gr	A/T - Solenoid Power 1
8. W	A/T - Input Speed Signal	26. G	A/T - Position Switch Code (S3)	48. O	A/T - Solenoid Power 2
9. L	A/T - Output Speed Signal	27. Br	A/T - Position Switch Code (S4)	49. G	A/T - EMS Box - TCU 1 15A
10. –	–	28. A/T - P M/T - R/B	Start Overrun (PDM)	50. Y	A/T - EMS Box - TCU 1 15A
11. –	–			51. –	–
12. –	–			52. –	–
13. L	Wiper 'P' Input	29. G	Brake Light Switch	53. Br	A/T - Oil Temp. Sensor (-)
14. W	Electrical Load Signal From Alternator	30. L	Cruise Control Switch Signal	54. R	A/T - Oil Temp. Sensor (+)
15. B	Cruise Control Switch Ground	31. B	With Smart Key - IGN. Coil #1 Control W/O Smart Key - IGN. Coil #4 Control	55. G	A/T - CCP-CAN High
16. W	With Smart Key - IGN. Coil #2 Control W/O Smart Key - IGN. Coil #3 Control			56. O	A/T - CCP-CAN Low
		32. G	A/T - SS-B	57. –	–
17. Br	A/T - UD_VFS	33. P	A/T - SS-A	58. –	–
18. P	A/T - 26_VFS	34. B	A/T - Ground (GHG05)	59. –	–
19. G	A/T - Shift Lock Solenoid	35. B	A/T - Ground (GHG05)	60. G	VCM (DC Motor +2)
20. Y	A/T - OD_VFS	36. P	A/T - Down Shift		
		37. Gr	A/T - Up Shift		
		38. W	A/T - Select Switch		
		39. –	–		
		40. P	A/T - Position Switch Code (S1)		

CHG-K PCM

- 94 Female / Black (AMP_ECU_94F_B_R)



1. B	Ground (GHG05)	26. L	Injector #3 Control	51. G	EMS Box - SENSOR 4 15A	76. W	Battery Sensor (LIN)
2. P	E/R Fuse & Relay Box - ECU 2 7.5A	27. G	Injector #4 Control	52. G	FTPS (Signal)	77. G	C-CAN High
3. B	Ground (GHG05)	28. Gr	Injector #2 Control	53. G	IAT Sensor	78. O	C-CAN Low
4. W	EMS Box - Engine Control Relay	29. –	–	54. Gr	APT Signal	79. –	–
5. B	Ground (GHG05)	30. L	MAP Sensor Supply	55. –	–	80. P	TPS. 1 Signal
6. G	EMS Box - TCU 1 15A	31. L/O	MAF/MAP Sensor Signal	56. –	–	81. –	–
7. –	–	32. L	TPS. 2 Signal	57. G	APT Ground	82. O	APS. 1 Signal
8. –	–	33. W/B	ECTS Signal	58. –	–	83. R	CMPS #1 Ground
9. O	Fuel Tank Level Sender	34. Br	Knock Sensor Ground	59. W/B	TPS Ground	84.	
10. –	–	35. L/O	APS. 2 Signal	60. Gr	APS. 1 Supply	W/O SULEV	
11. –	–	36. L	APS. 2 Supply	61. Y	APS. 1 Ground	W	O2 Sensor (Down) Signal
12. Y	Knock Sensor Signal	37. W/B	CMPS #2 Ground	62. W	CMPS #1 Signal	With SULEV	
13. Br	APS. 2 Ground	38. –	–	63. Y	TPS Supply	W/B	O2 Sensor (Down) Signal
14. L	ECTS Ground	39. Gr	CKPS Ground	64. L	EMS Box - Engine Control Relay	85. P	O2 Sensor (Down) Ground
15. Y	CMPS #2 Signal	40. P	Vehicle Speed Sensor	65. O	E/R Fuse & Relay Box - C/Fan LO Relay	86. W/B	Engine Speed Signal
16. –	–	41. –	–			87. Br	EMS Box - A/CON Relay
17. P	CKPS Signal	42. P	O2 Sensor (Up) (V_RC)	66. G	CVVT Actuator Control Signal 1	88. Gr	E/R Fuse & Relay Box - C/Fan HI Relay
18. W	O2 Sensor (Up) (V_IP)	43. W/B	Sensor Supply	67. G	PCSV Control		
19. G	O2 Sensor (Up) (V_IN)	44. Y	VCM (F/B Sensor GND)	68. Y/B	CVVT Actuator Control Signal 2	89. –	–
20. O	O2 Sensor (Up) (V_G)	45. –	–	69. Br/O	IMMO. IND.	90. –	–
21. –	–	46. L	Alternator (COM)	70. P	EMS Box - F/Pump Relay	91. Gr	CCV Control
22. P	VCM (F/B Sensor Potentio-Meter)	47. –	–	71. W	ETC DC Motor 1	92. Y/B	Engine Check IND.
23. –	–	48. –	–	72. R	ETC DC Motor 2	93. G	O2 Sensor (Up) Heater
24. B	E/R Fuse & Relay Box - Start Relay	49. –	–	73. Br	FTPS (GND)	94. Y	O2 Sensor (Down) Heater
25. Br	Injector #1 Control	50. W	Variable Intake System	74. B	TMAP/TMAF Sensor Ground		
				75. L	IMMO. Data Line		

CHG01 Transaxle Range Switch

- 10 Female / Black (KET_0509WP_10F_B)



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

CHG03 Battery Senser

- 2 Female / Black (AMP_MCPWP_02F_B_A)



1. W	PCM (LIN)	2. R	E/R Fuse & Relay Box - B+ SENSOR 10A

CHG04 ATM Solenoid Valve

- 18 Female / Black (FCI_MULWP_18F_B_1)



1. –	–	10. Gr	PCM (Solenoid Power 1)
2. G/B	PCM (EC_VFS)	11. P	PCM (26_VFS)
3. G/O	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. B/O	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. G	PCM	2. W	EMS Box - Sensor 1 10A

CHG05-2 Oil Control Valve #2

- 2 Female / Black (KET_090WP_02F_B_L)



1. Y/B	PCM	2. W	EMS Box - Sensor 1 10A

CHG06 Alternator

- 3 Female / Gray (KET_090IIWP_03F_Gr_3)



1. L	PCM (COM)	3. W	PCM (FR)
2. G	Charge IND., Diode		

CHG07 Front Wiper Motor

- 6 Female / Black (KUM_NMWP_06F_B)



1. G	Front Wiper Switch (LO)	4. B	Ground (GHG01)
2. P	Front Wiper Switch (HI)	5. L	E/R Fuse & Relay Box - WIPER FRT, LO Relay
3. Y	I/P Junction Box - WIPER FRT 25A	6. –	–

CHG08 Ignition Lock Switch (M/T, W/O Smart Key)

- 2 Female / White (KET_090III_02F_W_L)



1. B	Ground (GHG01)	2. W	E/R Fuse & Relay Box - Start Relay

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_090IIWP_03F_GR_R)



1. G	EMS Box - SENSOR 1 10A	3. W	PCM (Sensor Signal)
2. R	PCM (Sensor Ground)		

CHG13-2 Camshaft Position Sensor #2

- 3 Female / Gray (SUM_090IIWP_03F_GR_R)



1. G	EMS Box - SENSOR 1 10A	3. Y	PCM (Sensor Signal)
2. W/B	PCM (Sensor Ground)		

CHG14 Crankshaft Position Sensor

- 3 Female / Black (AMP_JPT_03F_B_S2)



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

CHG15 Oil Pressure Switch

- 1 Female / Black (KUM_NMWP_01F_B)



1. Y/B	Oil Pressure IND.

CHG16 Oxygen Sensor (Up)

- 6 Female / Black (AMP_MTIIWP_06F_B)



1. O	Lambda Sensor (V_G)	4. P	EMS Box - SENSOR 4 15A
2. G	Lambda Sensor (V_N)	5. G	PCM (Heater Up Stream)
3. W	Lambda Sensor (V_IP)	6. P	Lambda Sensor (V_RC)

CHG17 Oxygen Sensor (Down) (W/O SULEV)

- 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 - SENSOR 4 15A

CHG18-1 Ignition Coil #1

- 2 Female / Black (KET_090WP_02F_B_L3)



With IMMO. / Smart Key		W/O IMMO. / Smart Key	
1. B	PCM	1. G	PCM
2. P	EMS Box - ECU 1 20A	2. P	EMS Box - ECU 1 20A

CHG18-2 Ignition Coil #2

- 2 Female / Black (KET_090WP_02F_B_L3)



With IMMO. / Smart Key		W/O IMMO. / Smart Key	
1. W	PCM	1. R	PCM
2. L	EMS Box - ECU 1 20A	2. L	EMS Box - ECU 1 20A

CHG18-3 Ignition Coil #3

- 2 Female / Black (KET_090WP_02F_B_L3)



With IMMO. / Smart Key		W/O IMMO. / Smart Key	
1. R	PCM	1. W	PCM
2. G	EMS Box - ECU 1 20A	2. G	EMS Box - ECU 1 20A

CHG18-4 Ignition Coil #4

- 2 Female / Black (KET_090WP_02F_B_L3)



With IMMO. / Smart Key		W/O IMMO. / Smart Key	
1. G	PCM	1. B	PCM
2. W	EMS Box - ECU 1 20A	2. W	EMS Box - ECU 1 20A

CHG19 Condenser

- 2 Female / Black (MLX_090CIGAR_02F_B)



1. B	Ground (GHG01)	2. O	EMS Box - ECU 1 20A

CHG21 Canister Purge Control Solenoid Valve

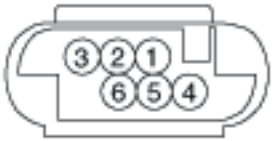
- 2 Female / Black (PKD_150WP_02F_B_1)



1. W	EMS Box - SENSOR 1 10A	2. G	PCM

CHG22 ETC Motor & Throttle Position Sensor

- 6 Female / Black (AMP_MQSWP_06F_B_1)



1. W/B	PCM (TPS Ground)	4. P	PCM (TPS 1 Signal)
2. Y	PCM (TPS Supply)	5. L	PCM (TPS 2 Signal)
3. W	PCM (ETC DC Motor 1)	6. R	PCM (ETC DC Motor 2)

CHG23 Knock Sensor

- 2 Female / Black (PKD_150WP_02F_B_1)



1. Br	PCM (Sensor Ground)	2. Y	PCM (Sensor Signal)

CHG24-1 Injector #1

- 2 Female / Black (KUM_NDWP_02F_B)



1. L	EMS Box - SENSOR 3 10A	2. Br	PCM

CHG24-2 Injector #2

- 2 Female / Black (KUM_NDWP_02F_B)



1. L/O	EMS Box - SENSOR 3 10A	2. Gr	PCM

CHG24-3 Injector #3

- 2 Female / Black (KUM_NDWP_02F_B)



1. P	EMS Box - SENSOR 3 10A	2. L	PCM

CHG24-4 Injector #4

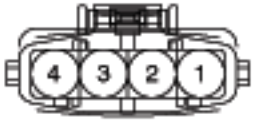
- 2 Female / Black (KUM_NDWP_02F_B)



1. O	EMS Box - SENSOR 3 10A	2. G	PCM

CHG25 MAP Sensor

- 4 Female / Black (AMP_JPT_04F_B_BOSH)



1. L/O	PCM (MAF/MAP Sensor Signal)	3. G	PCM (IAT Sensor)
2. L	PCM (MAP Sensor Supply)	4. B	PCM (TMAP/TMAF Sensor Ground)

CHG26 Head Lamp LH

- 6 Female / Black (KET_HEADLAMP_06F_B)



1. Y	BCM (Turn Lamp)	4. G	I/P Junction Box - IPS 7 (Tail Lamp)
2. O	I/P Junction Box - IPS 5 (Head Lamp High)	5. B	Ground (GHG02)
		6. B	Ground (GHG02)
3. Gr	I/P Junction Box - IPS 4 (Head Lamp Low)		

CHG27 Head Lamp RH

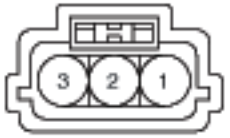
- 6 Female / Black (KET_HEADLAMP_06F_B)



1. W	BCM (Turn Lamp)	4. Y	I/P Junction Box - IPS 2 (Tail Lamp)
2. O/B	I/P Junction Box - IPS 1 (Head Lamp High)	5. B	Ground (GHG04)
		6. B	Ground (GHG04)
3. Gr	I/P Junction Box - IPS 0 (Head Lamp Low)		

CHG28 A/C Compressor

- 3 Female / Gray (KUM_NDWP_03F_Gr)



1. Y	EMS Box - A/CON Relay	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	PCM (Ground)	3. W/B	PCM (Supply)
2. Gr	PCM (Signal)		

CHG34 Front Wheel Sensor RH

- 2 Male / Black (KET_090IIWP_02M_B)



1. Br	ESC Module (SIG)	2. W	ESC Module (VCC)

CHG35 Front Wiper Deicer

- 2 Female / Black (KUM_NMWP_02F_B)



1. G	E/R Fuse & Relay Box - Deicer Relay	2. B	Ground (GHG02)

CHG36 Clutch Switch (M/T)

- 2 Female / White (KET_250DL_02F_W)



1. B	Ground (GHG01)	2. W	PCM
		W/B	With ESC - ESC Module

CHG37 Back-Up Lamp Switch (M/T)

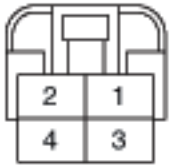
- 2 Female / Black (AMP_EJWP_02F_B)



1. B	Ground (GHG02)	2. W	IPS Control Module

CHG39 Stop Lamp Switch

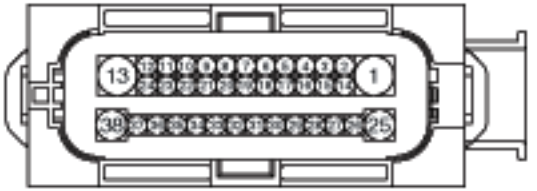
- 4 Female / White (KET_250DL_04F_W)



1. G	PCM, ESC Module, DBC Relay, Stop Lamp LH/RH, High-Mounted Stop Lamp, Smart Key Control Module	3. W/B	I/P Junction Box - MODULE 1 10A
2. L	E/R Fuse & Relay Box - STOP LP 10A	4. L/B	PCM, ESC Module

CHG40 ESC Module

- 38 Female / Black (AMP_ABS_38F_B_A)



1. W	Multi Fuse - ABS 1 40A	20. Y	Rear Wheel Sensor RH (SIG)
2. –	–	21. Br	Front Wheel Sensor RH (SIG)
3. –	–	22. Br/B	IPS Control Module - Parking Brake Switch
4. O	Yaw Rate Sensor (Power)	23. G	Stop Lamp Switch
5. –	–	24. B	Yaw Rate Sensor (CAN Low)
6. –	–	25. L	Multi Fuse - ABS 2 40A
7. –	–	26. G	C-CAN High
8. W/B	DBC Relay Control	27. –	–
9. L	Brake Switch	28. P	PCM (Wheel Speed Sensor Output FR)
10. O/B	ESC Off Switch 'ON'	29. Gr	E/R Fuse & Relay Box - ABS 7.5A
11. L/B	Yaw Rate Sensor (Ground)	30. –	–
12. Y	Yaw Rate Sensor (CAN High)	31. G	Front Wheel Sensor LH (SIG)
13. B	Ground (GHG06)	32. L	Rear Wheel Sensor LH (SIG)
14. O	C-CAN Low	33. B	Rear Wheel Sensor RH (VCC)
15. –	–	34. W	Front Wheel Sensor RH (VCC)
16. –	–	35. W/B	M/T - Clutch Switch
17. P	PDM (Wheel Speed Sensor Output RR)	36. G	DBC Relay 'ON' Signal
18. O	Front Wheel Sensor LH (VCC)	37. O	DBC Switch 'ON'
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 - C/FAN HI Relay	3. B	Ground (GHG02)
2. W	E/R Fuse & Relay Box - C/FAN LO Relay		

CHG43 Front Fog Lamp LH

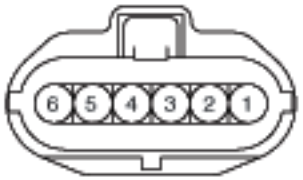
- 2 Female / Black (KET_110WP_02F_B)



1. L	I/P Junction Box - IPS 6	2. B	Ground (GHG02)

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 (GHG03)	2. Br/O	IPS Control Module - Brake Fluid Level

CHG46 Burglar Alarm Horn

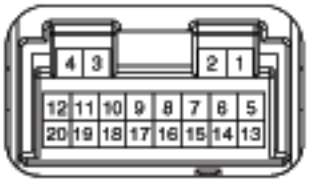
- 2 Female / Black (MLX_HORN_02F_B_FILT)



1. P	E/R Fuse & Relay Box - B/A Horn Relay	2. B	Ground (GHG04)

CHG47 Multipurpose Check Connector

- 20 Female / Black (LM_DIAGNOSIS_20F_B)



1. B	Ground (GHG02)	11. –	–
2. –	–	12. L	Multi Fuse - ABS 2 40A
3. –	–	13. –	–
4. L	Multi Fuse - ABS 1 40A	14. O	CCP-CAN Low
5. B	Ground (GHG01)	15. Gr	E/R Fuse & Relay Box - ABS 7.5A
6. G	CCP-CAN High	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_090IIWP_02F_B_ASM)



1. B	Ground (GHG04)	2. R	IPS Control Module

CHG50 Horn

- 2 Female / Gray (KUM_NDWP_02F_Gr)



1. G	E/R Fuse & Relay Box - Horn Relay	2. B	Ground (GHG02)

CHG51 External Buzzer

- 2 Female / Black (KET_090IIWP_02F_B_ASM)



1. B	Ground (GHG02)	2. P	Smart Key Control Module

CHG53 Front Fog Lamp RH

- 2 Female / Black (KET_110WP_02F_B)



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

CHG54 Front Wheel Sensor LH

- 2 Male / Black (KET_090IIWP_02M_B)



1. G	ESC Module (SIG)	2. O	ESC Module (VCC)

CHG56 Rear Washer Motor

- 2 Female / Black (KET_090WP_02F_B_SIDE)



1. B	Ground (GHG04)	2. L	Rear Washer Switch

CHG57 Oxygen Sensor (Down)(With SULEV)

- 4 Female / Black (KET_090IIWP_04F_B)



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

CHG63 ATM Shift Lever

- 10 Female / White (KET_090III_10F_W)



1. –	–	6. W	Select Switch
2. B	Ground (GHG03)	7. P	Down Shift
3. G/B	'P' Position Switch	8. –	–
4. W/B	I/P Junction Box - TPMS 7.5A	9. B	Ground (GHG03)
5. Gr	Up Shift	10. G	PCM (Shift Lock Solenoid)

CHG67 Front Washer Motor

- 3 Female / Gray (KET_090IIWP_03F_Gr)



1. B	Ground (GHG04)	3. –	–
2. B	Front Washer Switch		

CHG70 Variable Intake Manifold Valve

- 2 Female / Black (AMP_EJWP_02F_B)



1. Gr/B	EMS Box - SENSOR 1 10A	2. W	PCM

CHG72 Vehicle Speed Sensor (M/T)

- 3 Female / Black (KUM_NMWP_03F_B)



1. Gr	E/R Fuse & Relay Box - TCU 2 7.5A	3. Br	Vehicle Speed Output
2. B	Ground (GHG02)		

CHG80 Variable Charge Motion Actuator

- 5 Female / Black (AMP_JPT_05F_B_SFT)



1. Y	PCM (F/B Sensor GND)	4. G	PCM (DC Motor Output +2)
2. P	PCM (F/B Sensor Potenti-Meter)	5. L	PCM (DC Motor Output +1)
3. W/B	PCM (Sensor Supply)		

CHG90 WIPER FRT, LO Relay

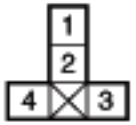
- 5 Female / N/A (CR05F011)



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

CHG92 C/FAN HI Relay

- 4 Female / N/A (CR04F086)



1. L	E/R Fuse & Relay Box - C/FAN 40A	3. Gr	PCM (Relay HI Control)
2. R	Cooling Fan Motor	4. Gr	E/R Fuse & Relay Box - C/FAN LO Relay

CHG93 Deicer Relay

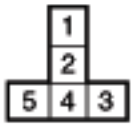
- 4 Female / N/A (CR04F086)



1. R	E/R Fuse & Relay Box - Deicer 15A	3. L	IPS Control Module
2. G	Front Wiper Deicer, Front Wiper Deicer Switch	4. L	E/R Fuse & Relay Box - Deicer 15A

CHG94 ATM P/N Relay (With Smart Key)

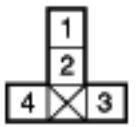
- 5 Female / N/A (CR05F011)



1. P	I/P Junction Box - START 10A, PCM (Start Overrun)	3. W/O	E/R Fuse & Relay Box - ECU 2 7.5A
2. P	E/R Fuse & Relay Box - Start Relay	4. –	–
		5. W	PCM (Relay Control)

CHG95 Blower Relay

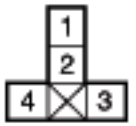
- 4 Female / N/A (CR04F086)



1. R	Multi Fuse - BLOWER 40A	3. B	Ground (GHG02)
2. R	Blower Motor, Auto A/C - I/P Junction Box - A/CON 7.5	4. Y/O	I/P Junction Box - MODULE 4 10A

CHG96 Horn Relay

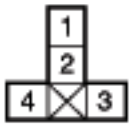
- 4 Female / N/A (CR04F086)



1. G	E/R Fuse & Relay Box - HORN 15A	3. Gr	Horn Switch
2. G	Horn	4. G	E/R Fuse & Relay Box - HORN 15A

CHG97 C/FAN LO Relay

- 4 Female / N/A (CR04F086)



1. L	E/R Fuse & Relay Box - C/FAN 40A	3. O	PCM (Relay LO Control)
2. W	Cooling Fan Motor	4. Gr	EMS Box - SENSOR 4 15A

CHG98 Start Relay

- 4 Female / N/A (CR04F086)



W/O Smart Key

1. R E/R Fuse & Relay Box - IGN 2 40A
2. R Start Solenoid
3. M/T, With Ignition Lock Switch
   W Ignition Lock Switch
   M/T, W/O Ignition Lock Switch
   B Ground (GHG02)
   A/T
   W PCM (Relay Control)
4. W/O B/Alarm
   P I/P Junction Box - START 10A
   With B/Alarm
   P I/P Junction Box - Burglar Alarm Relay

With Smart Key

1. R E/R Fuse & Relay Box - IGN 2 40A
2. R Start Solenoid
3. B Ground (GHG02), PCM (Start Overrun (GND))
4. M/T
   P I/P Junction Box - START 10A
   A/T
   P E/R Fuse & Relay Box - ATM P/N Relay
   R/B PDM (Start F/B Signal), PCM (M/T - Start Overrun)

CHG99 B/A Horn Relay

- 4 Female / N/A (CR04F086)



1. P Burglar Alarm Horn
2. P E/R Fuse & Relay Box - HORN 15A
3. W I/P Junction Box - IPS Control Module
4. P E/R Fuse & Relay Box - HORN 15A

CHG100 RR HTD Relay

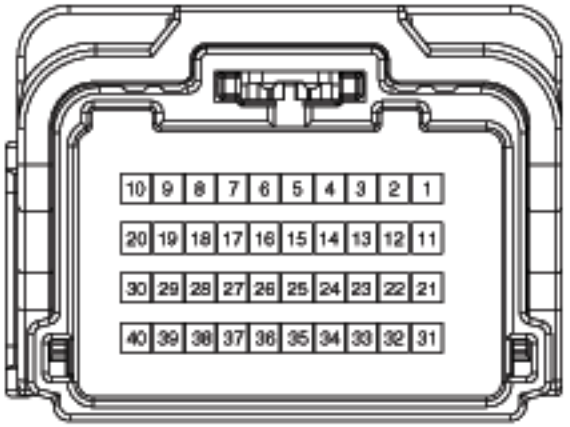
- 4 Female / N/A (CR04F086)



1. R E/R Fuse & Relay Box - RR HTD 40A
2. G I/P Junction Box (Rear Defogger Output)
3. G/O IPS Control Module
4. L E/R Fuse & Relay Box - DEICER 15A

F01 SRS Control Module

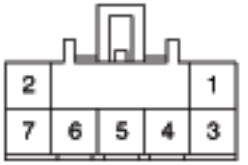
- 40 Female / Green (JST_WIC_40F_G)



1. B	Driver SIS (High)	21. R	Passenger SIS (High)
2. L	Rear SIS LH (High)	22. G	Rear SIS RH (High)
3. P/B	Driver S/Belt PT (High)	23. G/R	Driver CAB (High)
4. Gr	Driver S/Belt PT (Low)	24. W/B	Driver CAB (Low)
5. G/B	Driver SAB (High)	25. –	–
6. W/B	Driver SAB (Low)	26. –	–
7. –	–	27. –	–
8. –	–	28. –	–
9. –	–	29. L/O	Passenger S/Belt Buckle SW (High)
10. –	–	30. P/B	Passenger S/Belt Buckle SW (Low)
11. W	Driver SIS (Low)	31. L	Passenger SIS (Low)
12. O	Rear SIS LH (Low)	32. O	Rear SIS RH (Low)
13. L/O	Passenger S/Belt PT (High)	33. B	Passenger CAB (Low)
14. Y/B	Passenger S/Belt PT (Low)	34. R	Passenger CAB (High)
15. Br/B	Passenger SAB (High)	35. –	–
16. O/B	Passenger SAB (Low)	36. –	–
17. –	–	37. –	–
18. –	–	38. –	–
19. –	–	39. L	Driver S/Belt Buckle Switch (High)
20. –	–	40. P	Driver S/Belt Buckle Switch (Low)

F02 FOB Holder (With Smart Key)

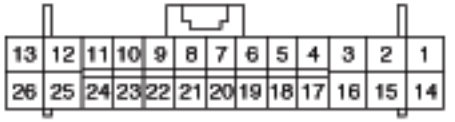
- 7 Female / White (KUM_CDR_07F_W)



1. Y/B	IMMO. Clock	5. W/B	IMMO. Data
2. P/B	Holder ILL. (-)	6. R/B	I/P Junction Box - SMART KEY 10A
3. B	Ground (GF06)	7. O/B	Key In SW
4. R/B	I/P Junction Box - SMART KEY 10A		

F03-A AMP

- 26 Female / White (AMP_0407_26F_W_HD)



1. O	I/P Junction Box - AMP 25A	14. B	Ground (GF06)
2. P	I/P Junction Box - AMP 25A	15. B	Ground (GF06)
3. R	I/P Junction Box - AMP 25A	16. B	Ground (GF06)
4. –	–	17. –	–
5. L	CAN - High	18. W	SPDIF OUT (+)
6. R	CAN - Low	19. G	SPDIF OUT (-)
7. G	I/P Junction Box - AUDIO 2 10A	20. –	–
8. –	–	21. –	–
9. –	–	22. –	–
10. –	–	23. –	–
11. Br	Audio (NEVI Voice (+))	24. Y	Audio (NEVI Voice (-))
12. L	Sub Woofer Speaker (+)	25. R	Sub Woofer Speaker (-)
13. G	Sub Woofer Speaker (+)	26. O	Sub Woofer Speaker (-)

F03-C AMP

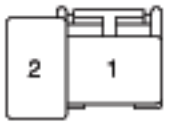
- 12 Female / White (AMP_0407_12F_W_070)



1. G	RR Speaker (+)	7. O	RR Speaker (-)
2. Y	RL Speaker (+)	8. B	RL Speaker (-)
3. R	FR Tweeter Speaker (+)	9. L	FR Tweeter Speaker (-)
4. Br	FL Tweeter Speaker (+)	10. W	FL Tweeter Speaker (-)
5. R	FR Speaker (+)	11. L	FR Speaker (-)
6. Br	FL Speaker (+)	12. W	FL Speaker (-)

F04 Luggage Lamp

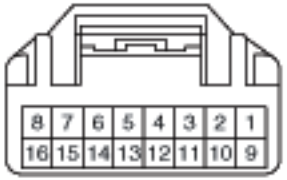
- 2 Female / Black (AMP_PLM2_02F_B)



1. W	Tail Gate Open Switch	2. G	I/P Junction Box - ROOM LP 10A

F05 4WD ECM

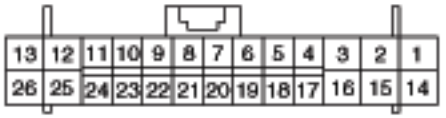
- 16 Female / White (YAZ_025_16F_W)



1. R	EMC (+)	9. B/O	EMC (-)
2. –	–	10. B	Ground (GF01)
3. R/O	I/P Junction Box - TPMS 7.5A	11. –	–
4. R/B	I/P Junction Box - MODULE 1 10A	12. –	–
5. G	C-CAN High	13. O	C-CAN Low
6. –	–	14. –	–
7. –	–	15. –	–
8. –	–	16. Y	4WD Lock Switch

F06-A Smart Key Control Module

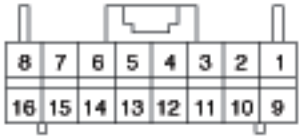
- 26 Female / White (AMP_0407_26F_W_HD)



1. R	I/P Junction Box - SMART KEY 10A	14. Br/B	I/P Junction Box - MODULE 5 7.5A
2. Br/O	IMMO. IND.	15. M/T	
3. B	Ground (GF06)	W/B	Ignition Lock Switch
4. –	–	A/T	
5. W	Tail Gate Handle Switch	G/B	'P' Position Switch
6. Gr/B	L_FL_DR_Lock/Unlock	16. B	Ground (GF06)
7. P	External Buzzer	17. –	–
8. G/O	ALT_L	18. –	–
9. W/O	I/P Junction Box - AUDIO 2 10A	19. –	–
10. L	B-CAN High	20. W/B	L_FR_DR_Lock/Unlock
11. R	B-CAN Low	21. –	–
12. –	–	22. W/O	Diag-K Line
13. O	RF Receiver(RF_COM)	23. L	Start Stop Button Switch (SSB SW 2)
		24. G/B	Stop Lamp Switch
		25. W/O	EMS_COM
		26. –	–

F06-B Smart Key Control Module

- 16 Female / White (AMP_0407_16F_W_040)



1. O	Interior Antenna #2 (Ground)	9. G	Interior Antenna #2
2. L	Interior Antenna #1 (Ground)	10. R	Interior Antenna #1
3. –	–	11. –	–
4. –	–	12. –	–
5. O	Tail Gate Antenna	13. L	Tail Gate Antenna (Ground)
6. B	Bumper Antenna	14. W	Bumper Antenna (Ground)
7. W	O_FR_DR_ANT	15. B	O_FR_DR_ANT_GND
8. Br	O_FL_DR_ANT	16. W	O_FL_DR_ANT_GND

F07 Driver Door Switch

- 2 Female / White (AMP_040M1_02F_W)



1. –	–	2. G/O	IPS Control Module

F08 Passenger Door Switch

- 2 Female / White (AMP_040M1_02F_W)



1. –	–	2. P/B	IPS Control Module

F09 Rear Door Switch LH

- 2 Female / White (AMP_040M1_02F_W)



1. –	–	2. Y/B	IPS Control Module

F10 Rear Door Switch RH

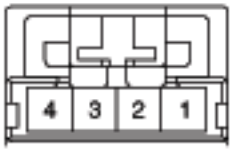
- 2 Female / White (AMP_040M1_02F_W)



1. –	–	2. Gr/B	IPS Control Module

F11 Smart Key Antenna #2

- 4 Female / Black (AMP_MQS_04F_B_040)



1. –	–	3. –	–
2. G	Smart Key Control Module (Interior Antenna #2 Signal)	4. O	Smart Key Control Module (Interior Antenna #2 GND)

F12 Fuel Sender & Fuel Pump Motor

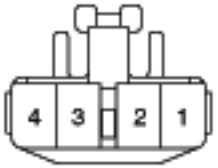
- 5 Female / Gray (KET_090IIWP_05F_Gr_2)



1. –	–	4. P	EMS Box - F/PUMP Relay
2. O	Instrument Cluster - Fuel Sender (+)	5. B	Ground (GF02)
3. B	Instrument Cluster - Fuel Sender (-)		

F13 Driver Seat Warmer

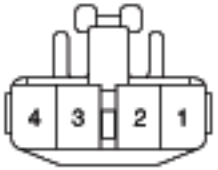
- 4 Female / White (KET_090III_04F_W)



1. W	Switch (High)	3. B	Ground (GF01)
2. L	Switch (Low)	4. Br	IND. Ground

F14 Passenger Seat Warmer

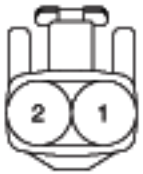
- 4 Female / White (KET_090III_04F_W)



1. W	Switch (High)	3. B	Ground (GF06)
2. L	Switch (Low)	4. Br	IND. Ground

F15 Canister Close Valve

- 2 Female / Black (KET_090IIWP_02F_B)



1. O/B	EMS Box - SENSOR 1 10A	2. Gr	PCM (CCV Control)

F16 Fuel Tank Pressure Sensor

- 3 Female / Black (AMP_090_03F_B_WP)



1. L	PCM (Sensor Supply)	3. G	PCM (FTPS Signal)
2. Br	PCM (FTPS Ground)		

F17 Rear Power Outlet

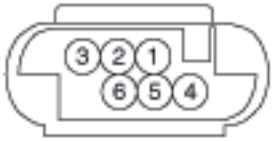
- 2 Female / Black (KET_2505_02F_B_CIGAR)



1. L	I/P Junction Box - POWER OUTLET 2 25A	2. B	Ground (GF03)

F18 Yaw Rate Sensor

- 6 Female / Black (AMP_MQSWP_06F_B_1)



1. B	ESC Module (CAN Low)	4. L/B	ESC Module (Ground)
2. Y	ESC Module (CAN High)	5. –	–
3. O	ESC Module (Power)	6. –	–

F26 Rear Combination Lamp (Out) LH

- 6 Female / Black (KET_SWP_06F_B)



1. W	BCM (Turn & Hazard Lamp)	4. G	I/P Junction Box - IPS 7
2. –	–	5. –	–
3. G/B	ICM Relay Box (DBC Relay)	6. B	Ground (GF03)

F27 Rear Combination Lamp (Out) RH

- 6 Female / Black (KET_SWP_06F_B)



1. P	BCM (Turn & Hazard Lamp)	4. B/O	I/P Junction Box - IPS 2
2. –	–	5. –	–
3. G/B	ICM Relay Box (DBC Relay)	6. B	Ground (GF06)

F30 Rear Wheel Sensor LH

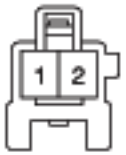
- 2 Male / White (KET_090III_02M_W_L_1)



1. L	ESC Module (SIG)	2. R	ESC Module (VCC)

F31 Rear Wheel Sensor RH

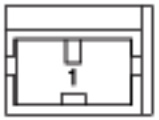
- 2 Male / White (KET_090III_02M_W_L_1)



1. Y	ESC Module (SIG)	2. B	ESC Module (VCC)

F32 Hand Parking Brake Switch (M/T)

- 1 Female / Black (AMP_PLM1_01F_B)



1. Gr/O	IPS Control Module - Parking Brake Switch

F33 Foot Parking Brake Switch (A/T)

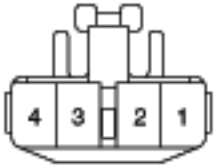
- 1 Male / Black (KET_250_01M_B)



1. Gr/O	IPS Control Module - Parking Brake Switch

F35 Sub Woofer Speaker

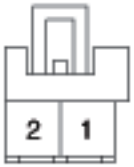
- 4 Female / White (KET_090III_04F_W)



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

F38 ATM Shift Lever ILL.

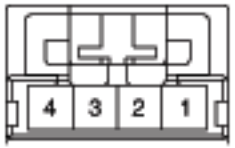
- 2 Female / White (KUM_CDR_02F_W)



1. R/O	ILL. (+)	2. L/O	ILL. (-)

F39 Smart Key Antenna #3

- 4 Female / Black (AMP_MQS_04F_B_040)



1. –	–	3. –	–
2. O	Smart Key Control Module (Tail Gate Antenna Signal)	4. L	Smart Key Control Module (Tail Gate Antenna Ground)

F40 Roof Antenna

- 1 Female / Black (AMP_PLM1_01F_B)



1. Y	Audio Antenna

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)

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 Rear Side Impact Sensor LH

- 2 Female / Dark Gray (FCI_PAEWP_02F_DGr_B)



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

F46 Rear Side Impact Sensor RH

- 2 Female / Dark Gray (FCI_PAEWP_02F_DGr_B)



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

F52 Electronic Magnetic Valve Clutch

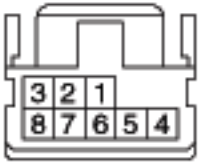
- 2 Female / Gray (KUM_NMWP_02F_Gr)



1. R	4WD ECM (+)	2. B/O	4WD ECM (-)

F55 Passenger Seat Belt Buckle Switch

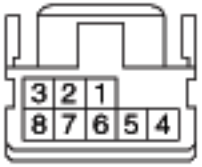
- 8 Female / Yellow (JST_HIC_08F_Y)



1. P/B	SRS Control Module (Low)	5. –	–
2. –	–	6. L/O	SRS Control Module (High)
3. –	–	7. –	–
4. –	–	8. –	–

F56 Driver Seat Belt Buckle Switch

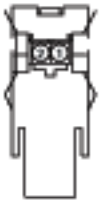
- 8 Female / Yellow (JST_HIC_08F_Y)



1. P	SRS Control Module (Low)	5. O	IPS Control Module (Warning)
2. –	–	6. L	SRS Control Module (High)
3. –	–	7. –	–
4. B	Ground(GF09)	8. –	–

F57 Driver Seat Belt Pretensioner

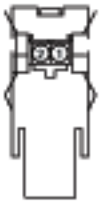
- 2 Female / Black (JST_SQS_02F_B)



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

F58 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)

F59 Passenger Curtain Air Bag

- 2 Female / Black (FCI_AKII_02F_B_I)



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

F60 Driver Curtain Air Bag

- 2 Female / Black (FCI_AKII_02F_B_I)



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

F61 Passenger Occupant Detection Sensor

- 6 Female / Black (MLX_ABAG_06F_B)



1. Y	I/P Junction Box - A/BAG 10A	4. B	Ground (GF09)
2. G	C-CAN High	5. L/B	BTS (Power)
3. O	C-CAN Low	6. Br/B	BTS (Signal)

F62 Belt Tension Sensor

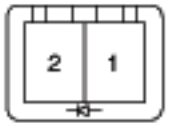
- 3 Female / N/A (EPC_E5706_03F)



1. L/B	PODS (Power)	3. Br/B	PODS (Signal)
2. B	Ground(GF09)		

Z01 Diode

- 2 Female / Black (KET_090_02F_B_DIODE)



1. W	Luggage Lamp	2. W/B	Tail Gate Open Switch

D01 Driver Door Lock Actuator

- 7 Female / Black (FCI_ACTRWP_07F_B)



1. G	ICM Relay Box (Two Turn Unlock Relay)	5. B	Ground (GF01)
2. O	I/P Junction Box (Door Lock Relay)	6. Gr	IPS Control Module (Door Lock/Unlock)
3. R	IPS Control Module (Key Lock)	7. –	–
4. P	IPS Control Module (Key Unlock)		

D05 Driver Smart Key Outside Handle

- 4 Male / Black (KET_SWP_04M_B)



1. Br	Smart Key Control Module (O_FL_DR_ANT)	3. W	Smart Key Control Module (O_FL_DR_ANT_GND)
2. Gr/B	Smart Key Control Module (L_FL_DR_Lock/Unlock)	4. B	Ground (GF01)

D06 Driver Pressure Side Impact Sensor

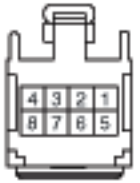
- 2 Female / Brown (FCI_PAEWP_02F_Br_C)



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

D07 Driver Power Outside Mirror

- 8 Female / Black (MLX_040_08F_B_A)



1. G/B	Outside Mirror Switch - Left (VL)	5. –	–
2. P	Outside Mirror Switch - Up/Down	6. –	–
3. Gr/B	Outside Mirror Switch - Left (HL)	7. B	Ground (GF01)
4. W	BCM - Turn Lamp Output RL	8. L/B	I/P Junction Box - HTD MIRR 7.5A

D08 Power Outside Mirror Switch

- 12 Female / White (AMP_0407_12F_W_070)



1. –	–	7. –	–
2. –	–	8. G/B	Outside Mirror Switch (VL)
3. –	–	9. Gr/B	Outside Mirror Switch (HL)
4. –	–	10. P	Up/Down Switch
5. B	Ground (GF01)	11. Gr	Outside Mirror Switch (HR)
6. G	I/P Junction Box - AUDIO 2 10A	12. G	Outside Mirror Switch (VR)

D09 Driver Power Window Motor (W/O Safety)

- 2 Female / Gray (FCI_SENSOR_02F_GR)



1. P	Driver Window Switch	2. W	Driver Window Switch

D10 Power Window Main Switch

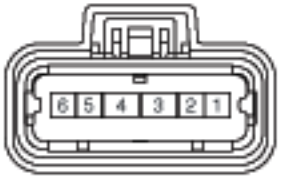
- 16 Female / White (KET_090III_16F_W)



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

D12 Driver Safety Power Window Module (With Safety)

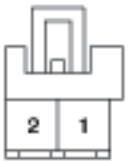
- 6 Female / Black (FCI_MINIWP_06F_B)



1. G	Driver Window Switch (Down)	4. Y	I/P Junction Box - SAFETY POWER WINDOW 20A
2. L	Driver Window Switch (Up)	5. W	Driver Window Switch (Auto)
3. B	Ground (GF01)	6. G	BCM

D13 Driver Door Speaker

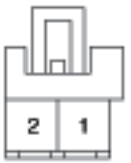
- 2 Female / Black (KUM_CDR_02F_B)



1. Br	Speaker (+)	2. W	Speaker (-)

D14 Driver Tweeter Speaker

- 2 Female / White (KUM_CDR_02F_W)



1. W	Speaker (-)	2. Br	Speaker (+)

D21 Passenger Door Lock Actuator

- 7 Female / Black (FCI_ACTRWP_07F_B)



1. –	–	5. Br	IPS Control Module (Key Lock)
2. W	IPS Control Module (Door Lock/Unlock)	6. O	I/P Junction Box (Door Lock Relay)
3. B	Ground (GF06)	7. L	I/P Junction Box (Door Unlock Relay)
4. G	IPS Control Module (Key Unlock)		

D25 Passenger Smart Key Outside Handle

- 4 Male / Black (KET_SWP_04M_B)



1. W	Smart Key Control Module (O_FR_DR_ANT)	3. B	Smart Key Control Module (O_FR_DR_ANT_GND)
2. W/B	Smart Key Control Module (L_FR_DR_Lock/Unlock)	4. B	Ground (GF06)

D26 Passenger Pressure Side Impact Sensor

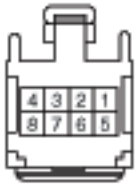
- 2 Female / Brown (FCI_PAEWP_02F_Br_C)



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

D27 Passenger Power Outside Mirror

- 8 Female / Black (MLX_040_08F_B_A)



1. G	Outside Mirror Switch - Right (VR)	5. –	–
2. P	Outside Mirror Switch - Up/Down	6. –	–
3. Gr	Outside Mirror Switch - Right (HR)	7. B	Ground (GF06)
4. P	BCM - Turn Lamp Output RR	8. L/B	I/P Junction Box - HTD MIRR 7.5A

D29 Passenger Power Window Motor

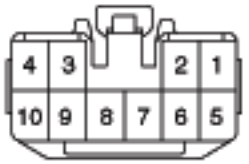
- 2 Female / Gray (FCI_SENSOR_02F_GR)



1. Br	Window Switch	2. P	Window Switch

D31 Passenger Power Window Switch

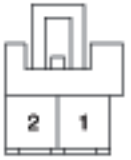
- 10 Female / White (KET_090III_20F_W)



1. R/O	ILL. (+)	6. Gr	Window Main Switch
2. –	–	7. B	Ground (GF06)
3. Gr/B	IPS Control Module (Door Unlock)	8. G	Window Main Switch
4. L/B	IPS Control Module (Door Lock)	9. L	I/P Junction Box - P/WDW RH 25A
5. P	Motor	10. Br	Motor

D33 Passenger Door Speaker

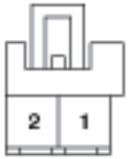
- 2 Female / Black (KUM_CDR_02F_B)



1. R	Speaker (+)	2. L	Speaker (-)

D34 Passenger Tweeter Speaker

- 2 Female / White (KUM_CDR_02F_W)



1. L	Speaker (-)	2. R	Speaker (+)

D41 Rear Door Lock Actuator LH

- 7 Female / Black (FCI_ACTRWP_07F_B)



1. L	I/P Junction Box (Door Unlock Relay)	5. B	Ground (GF02)
2. O	I/P Junction Box (Door Lock Relay)	6. Y	IPS Control Module (Door Lock/Unlock)
3. –	–		
4. –	–	7. –	–

D49 Rear Power Window Motor LH

- 2 Female / Gray (FCI_SENSOR_02F_GR)



1. L	Window Switch	2. G	Window Switch

D50 Rear Power Window Switch LH

- 8 Female / White (KET_090III_08F_W)



1. G	Motor	6. O	I/P Junction Box - P/WDW LH 25A
2. P	Window Main Switch	7. Br	Window Main Switch
3. B	Ground (GF02)	8. R/O	ILL. (+)
4. L	Motor		
5. –	–		

D53 Rear Door Speaker LH

- 2 Female / Black (KUM_CDR_02F_B)



1. Y	Speaker (+)	2. B	Speaker (-)

D61 Rear Door Lock Actuator RH

- 7 Female / Black (FCI_ACTRWP_07F_B)



1. –	–	5. –	–
2. Y	IPS Control Module (Door Lock/Unlock)	6. O	I/P Junction Box (Door Lock Relay)
3. B	Ground (GF06)	7. L	I/P Junction Box (Door Unlock Relay)
4. –	–		

D69 Rear Power Window Motor RH

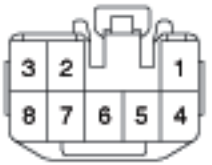
- 2 Female / Gray (FCI_SENSOR_02F_GR)



1. P	Window Switch	2. Br	Window Switch

D70 Rear Power Window Switch RH

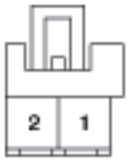
- 8 Female / White (KET_090III_08F_W)



1. Br	Motor	6. R	I/P Junction Box - P/WDW RH 25A
2. L	Window Main Switch	7. O	Window Main Switch
3. B	Ground (GF08)	8. R/O	ILL. (+)
4. P	Motor		
5. –	–		

D73 Rear Door Speaker RH

- 2 Female / Black (KUM_CDR_02F_B)



1. G	Speaker (+)	2. O	Speaker (-)

R01 Electro Chromic Mirror

- 10 Female / Black (SUM_025_10F_B)



1. Y/B	Rear View Camera (Video GND. (-))	6. G	I/P Junction Box - ROOM LP 10A (Home Link)
2. –	–		
3. Y	Rear View Camera (Video Power (+))	7. –	–
4. R/B	Rear View Camera (Video VGND.)	8. B	Ground (GM02)
5. R	Rear View Camera (Video In)	9. L	I/P Junction Box - Back-Up Lamp Relay
		10. Gr/O	I/P Junction Box - MODULE 2 10A

R02 Map Lamp

- 4 Female / White (AMP_090III_04F_W)



1. B	Ground (GM02)	3. Br/B	Room Lamp
2. G	I/P Junction Box - ROOM LP 10A	4. Br	BCM (Room Lamp Control)

R03 MIC

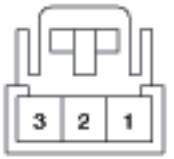
- 10 Male / Black (AMP_MQS_04M_B)



1. R	Audio (+)	3. –	–
2. B	Audio (-)	4. –	–

R05 Room Lamp

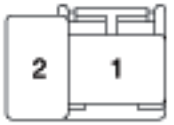
- 3 Female / White (AMP_070_03F_W_HOR)



1. R	I/P Junction Box - ROOM LP 10A	3. B	Ground (GM02)
2. Br/B	Map Lamp		

R06 Driver Vanity Lamp

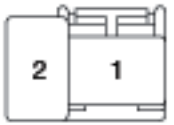
- 2 Female / Black (AMP_PLM2_02F_B_DL)



1. G	I/P Junction Box - ROOM LP 10A	2. B	Ground (GM02)

R07 Passenger Vanity Lamp

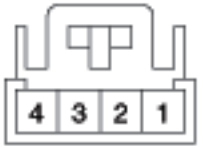
- 2 Female / Black (AMP_PLM2_02F_B_DL)



1. G	I/P Junction Box - ROOM LP 10A	2. B	Ground (GM02)

R08 Sunroof Switch

- 4 Female / White (AMP_070_04F_W)



1. Br/B	Close/Tilt Down Switch	3. B	Ground (GM02)
2. L	Tilt Up Switch	4. W	Open Switch

R09 Sunroof Motor

- 8 Female / White (AMP_090III_08F_W)



1. B	Ground (GM02)	5. W	Open
2. R	I/P Junction Box - SUNROOF 15A	6. L	Tilt Up
3. O	I/P Junction Box - MODULE 4 10A	7. –	–
4. Br/B	Close/Tilt Down	8. Br	Vehicle Speed Signal

R11 High-Mounted Stop Lamp

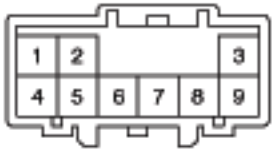
- 2 Male / White (KUM_CDR_02M_W)



1. G/B	DBC Relay	2. B	Ground (GR01)

R12 License Lamp (Rear View Camera & Tail Gate Handle Switch)

- 9 Male / White (KUM_CDR_09M_W)



1. R	Rear View Camera (CVBS)	6. B	Ground (GR01)
2. R/B	Rear View Camera (VGND)	7. B	Ground (GR01)
3. G/B	I/P Junction Box (IPS 7)	8. Y/B	Tail Gate Handle Switch
4. Y	Rear View Camera (B+)	9. G	I/P Junction Box - IPS 7
5. Y/B	Rear View Camera (GND)		

R13 Rear Combination Lamp (IN) LH

- 4 Female / White (KET_62C_04F_W)



1. B	Ground (GR01)	3. G	I/P Junction Box - IPS 7
2. –	–	4. R	I/P Junction Box - Back-Up Lamp Relay

R14 Rear Combination Lamp (IN) RH

- 4 Female / White (KET_62C_04F_W)



1. B	Ground (GR01)	3. Y	I/P Junction Box - IPS 2
2. –	–	4. R	I/P Junction Box - Back-Up Lamp Relay

R15 Rear Defogger (-)

- 1 Female / Black (AMP_PLM2_01F_B)



1. B	Ground (GF03 / GR01)

R16 Rear Defogger (+)

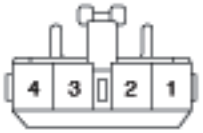
- 1 Female / Black (AMP_PLM2_01F_B)



1. G	E/R Fuse & Relay Box - RR HTD Relay

R17 Rear Wiper Motor

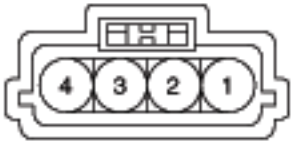
- 4 Female / White (KET_090III_04F_W)



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 - WIPER RR 15A

R18 Tail Gate Latch

- 4 Female / Black (KUM_NDWP_04F_B)



1. B	Ground (GR01)	3. L	I/P Junction Box - Tail Gate Relay
2. W	IPS Control Module, Luggage Lamp	4. B	Ground (GR01)

R22 **Smart Key Bumper Antenna**

- 2 Female / Black (AMP_EJWP_02F_B)



1. B	Smart Key Control Module (Bumper Antenna Signal)	2. W	Smart Key Control Module (Bumper Antenna Ground)

E01 **Driver Front Impact Sensor**

- 2 Female / Dark Gray (FCI_PAEWP_02F_DGr_B)



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

E02 **Passenger Front Impact Sensor**

- 2 Female / Dark Gray (FCI_PAEWP_02F_DGr_B)



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

E11 Start Motor

- 1 Female / N/A (CHT_919312B310_01F)



1. B	Battery Power

E12 Start Solenoid

- 1 Female / Gray (KET_58X_01F_Gr)



1. R	E/R Fuse & Relay Box - Start Relay

E13 Alternator

- 1 Female / N/A (TAE_919803K100_01F)



1. B	Battery & Battery Fuse Box - ALT 150A

S01 Driver Seat Manual Switch

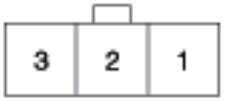
- 20 Female / N/A (AMP_070_20F)



1. Br	Driver Lumbar Support Switch (RR)	11. Y/R	Driver Reclining Switch (FR)
2. B	Ground (GF01)	12. Gr	Driver Reclining Limit Switch (FR)
3. L/R	Driver Slide Switch (FR)	13. G	Driver Reclining Switch (RR)
4. R/B	Driver Slide Switch (RR)	14. –	–
5. B	Ground (GF01)	15. R	I/P Junction Box - P/SEAT (DRV) 20A
6. G/R	Driver Height Switch (Down)		
7. L/Y	Driver Height Switch (Up)	16. L/W	Driver Lumbar Support Switch (FR)
8. B	Ground (GF01)	17. B	Ground (GF01)
9. –	–	18. –	–
10. Y	Driver Reclining Limit Switch (RR)	19. –	–
		20. –	–

S02 Driver Reclining Limit Switch

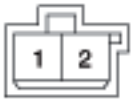
- 3 Female / N/A (KET_0902_03F)



1. Y	Seat Manual Switch (RR)	3. B	Ground (GF01)
2. Gr	Seat Manual Switch (FR)		

S03 Driver Reclining Motor

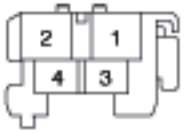
- 2 Male / N/A (KET_090II_02M)



1. G	Seat Manual Switch (RR)	2. Y/R	Seat Manual Switch (FR)

S04 Driver Height Motor

- 4 Female / N/A (AMP_JPMT_4F)



1. L/Y	Seat Manual Switch (Up)	3. –	–
2. G/R	Seat Manual Switch (Down)	4. –	–

S05 Driver Slide Motor

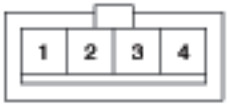
- 4 Female / N/A (KET_090-2_4F)



1. L/R	Seat Manual Switch (FR)	3. –	–
2. –	–	4. R/B	Seat Manual Switch (RR)

S06 Driver Seat Warmer (With Power Seat)

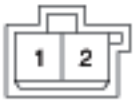
- 4 Male / N/A (KET_090-2_04M)



1. B/W	IND. (GND)	3. Y	Seat Switch (Low)
2. B	Ground (GF01)	4. R	Seat Switch (High)

S07 Driver Lumbar Support Motor

- 2 Male / N/A (KET_090II_02M)



1. Br	Seat Manual Switch (RR)	2. L/W	Seat Manual Switch (FR)

CB21 Control To Battery Harness Connection

- 1 Male / Black (KUM_NMWP_01M_B)



1. R	E/R Fuse & Relay Box (Start Relay)

- 1 Female / Black (KUM_NMWP_01F_B)



1. R	Start Solenoid

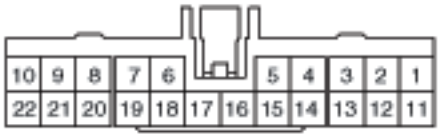
CF11 Floor To Control Harness Connection

- 22 Male / White (KET_090III_22M_W)



1. –	–
2. G	ICM Relay Box (DBC Relay)
3. W/B	Ignition Lock Switch (M/T)
4. Y	ESC Module (Yaw Rate Sensor - CAN (High))
5. B	ESC Module (RR VCC)
6. Y	ESC Module (RR SIG)
7. R	ESC Module (RL VCC)
8. L	ESC Module (RL SIG)
9. G/B	Stop Lamp Switch
10. –	–
11. –	–
12. L/B	ESC Module (Yaw Rate Sensor - Ground)
13. O	ESC Module (Yaw Rate Sensor - Power)
14. B	ESC Module (Yaw Rate Sensor - CAN (Low))
15. G/B	ATM Shift Lever ('P' Position Switch)
16. W/B	ATM Shift Lever (Shift Lock Solenoid)
17. Gr	PCM (CCV Control)
18. O/B	EMS Box - SENSOR 1 10A
19. P	External Buzzer
20. G	PCM (FTPS Signal)
21. Br	PCM (FTPS Ground)
22. L	PCM (Sensor Supply)

- 22 Female / White (KET_090III_22F_B)



1. –	–
2. G/B	High-Mounted Stop Lamp, Stop Lamp LH/RH
3. W/B	M/T - Smart Key Control Module (Ignition Lock Switch)
4. Y	Yaw Rate Sensor (CAN - High)
5. B	Rear Wheel Sensor RH (VCC)
6. Y	Rear Wheel Sensor RH (SIG)
7. R	Rear Wheel Sensor LH (VCC)
8. L	Rear Wheel Sensor LH (SIG)
9. G/B	Smart Key Control Module (Stop)
10. –	–
11. –	–
12. L/B	Yaw Rate Sensor (Ground)
13. O	Yaw Rate Sensor (Power)
14. B	Yaw Rate Sensor (CAN - Low)
15. G/B	A/T - BCM, Smart Key Control Module
16. W/B	I/P Junction Box - TPMS 7.5A
17. Gr	Canister Close Valve (Control)
18. O/B	Canister Close Valve (Power)
19. P	Smart Key Control Module (External Buzzer)
20. G	FTPS (Signal)
21. Br	FTPS (Ground)
22. L	FTPS (Supply)

EC11 Control To Front End Module Harness Connection

- 2 Female / Black (KUM_NMWP_02F_B)



1. Br	Driver Front Impact Sensor (High)	2. W	Driver Front Impact Sensor (Low)

- 2 Male / Black (KUM_NMWP_02M_B)



1. Br	SRS - Driver FIS (High)	2. W	SRS - Driver FIS (Low)

EC21 Front End Module Harness To Control Connection

- 2 Male / Black (KUM_NMWP_02M_B)



1. L	Passenger Front Impact Sensor (High)	2. O	Passenger Front Impact Sensor (Low)

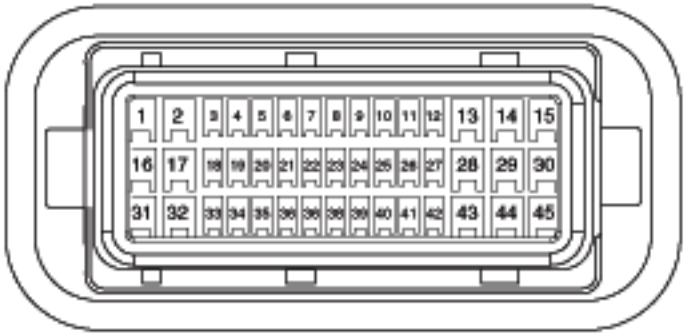
- 2 Female / Black (KUM_NMWP_02F_B)



1. L	SRS - Passenger FIS (High)	2. O	SRS - Passenger FIS (Low)

FD11 Floor To Driver Door Harness Connection

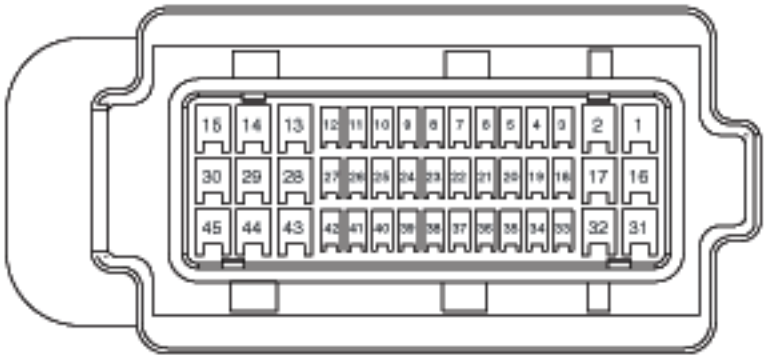
- 45 Male / Black (KET_HYBRID_45M_B)



1. G	Passenger Power Window Switch	
2. O	I/P Junction Box - P/WDW LH 25A	
3. –	–	
4. P	Passenger Power Outside Mirror	
5. G	I/P Junction Box - AUDIO 2 10A	
6. B	SRS - Driver SIS (High)	
7. W	SRS - Driver SIS (Low)	
8. –	–	
9. –	–	
10. –	–	
11. Br	With AMP - AMP (FL (+))	
12. W	With AMP - AMP (FL (-))	
13. B	Ground (GF01)	
14. L/B	I/P Junction Box - HTD MIRR 7.5A	
15. R	I/P Junction Box - P/WDW RH 25A	
16. L	Rear Power Window Switch RH	
17. Y	I/P Junction Box - SAFETY POWER WINDOW 20A	
18. G	Passenger Power Outside Mirror	
19. Gr/B	IPS Control Module (Door Unlock Switch)	
20. L/B	IPS Control Module (Door Lock Switch)	
21. G	ICM Relay Box (Two Turn Unlock Relay)	
22. Gr	IPS Control Module (Driver Door Lock/Unlock Signal)	
23. Gr/B	Smart Key Control Module (L_FR_DR_Lock/Unlock)	
24. R	I/P Junction Box - IPS 3 (ILL.)	
25. –	–	
26. –	–	
27. –	–	
28. W/O AMP		
Br	Audio - FL (+)	
With AMP		
Br	AMP - FL (+)	
29. Gr	Passenger Power Window Switch	
30. Br	Rear P/WDW Switch LH	
31. W	BCM (Turn & Hazard Lamp Output RL)	
32. B	Ground (GF01)	
33. P	IPS Control Module (Driver Door Key Unlock Signal)	
34. R	IPS Control Module (Driver Door Key Lock Signal)	
35. O	I/P Junction Box (Door Lock Relay)	
36. Gr	Passenger Power Outside Mirror	
37. –	–	
38. W	Smart Key Control Module (O_FL_DR_ANT_GND)	
39. Br	Smart Key Control Module (O_FL_DR_ANT)	
40. G	BCM (Safety Power Window)	
41. –	–	
42. –	–	
43. P	Rear Power Window Switch LH	
44. O	Rear Power Window Switch RH	
45. W/O AMP		
W	Audio - FL (-)	
With AMP		
W	AMP - FL (-)	

FD11 Floor To Driver Door Harness Connection (cont'd)

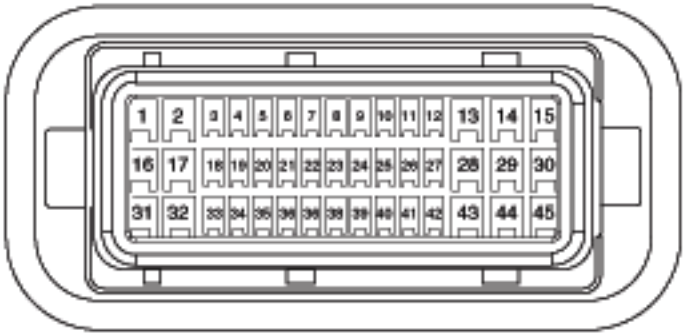
- 45 Female / Black (KET_HYBRID_45F_B)



1. G	Power Window Main Switch (Passenger Window Switch)
2. O	With Safety - Window Switch (RL B+) W/O Safety - Window Switch (Driver, RL B+)
3. –	–
4. P	Power Outside Mirror Switch (Up/Down)
5. G	Power Outside Mirror Switch (ACC)
6. B	Driver Side Impact Sensor (High)
7. W	Driver Side Impact Sensor (Low)
8. –	–
9. –	–
10. –	–
11. Br	With AMP - Driver Door Tweeter Speaker (+)
12. W	With AMP - Driver Door Tweeter Speaker (-)
13. B	Ground - Driver Door Lock Actuator, Driver Smart Key Outside Handle, Driver Power Outside Mirror
14. L/B	Driver Power Outside Mirror (Defogger)
15. R	Power Window Main Switch - Window Switch (Passenger B+, RR B+)
16. L	Power Window Main Switch (RR)
17. Y	Safety Power Window Module (B+)
18. G	Power Outside Mirror Switch (VR)
19. Gr/B	Power Window Main Switch (Door Switch (Unlock))
20. L/B	Power Window Main Switch (Door Switch (Lock))
21. G	Driver Door Lock Actuator (Actuator)
22. Gr	Driver Door Lock Actuator (Door Lock/Unlock)
23. Gr/B	Driver Smart Key Outside Handle (Lock Switch)
24. R	Power Window Main Switch (ILL. +)
25. –	–
26. –	–
27. –	–
28. Br	Driver Door Speaker (+), W/O AMP - Driver Door Tweeter Speaker (+)
29. Gr	Power Window Main Switch (Passenger Window Switch)
30. Br	Power Window Main Switch (RL)
31. W	Driver Power Outside Mirror (Turn Lamp)
32. B	Ground - Power Window Main Switch, Safety Power Window Module, Power Outside Mirror Switch
33. P	Driver Door Lock Actuator (Key Unlock)
34. R	Driver Door Lock Actuator (Key Lock)
35. O	Driver Door Lock Actuator (Actuator)
36. Gr	Power Outside Mirror Switch (HR)
37. –	–
38. W	Driver Smart Key Outside Handle (Antenna -)
39. Br	Driver Smart Key Outside Handle (Antenna +)
40. G	Safety Power Window Module (COM)
41. –	–
42. –	–
43. P	Power Window Main Switch (RL)
44. O	Power Window Main Switch (RR)
45. W	Driver Door Speaker (-), W/O AMP - Driver Tweeter Door Speaker (-)

FD21 Floor To Passenger Door Harness Connection

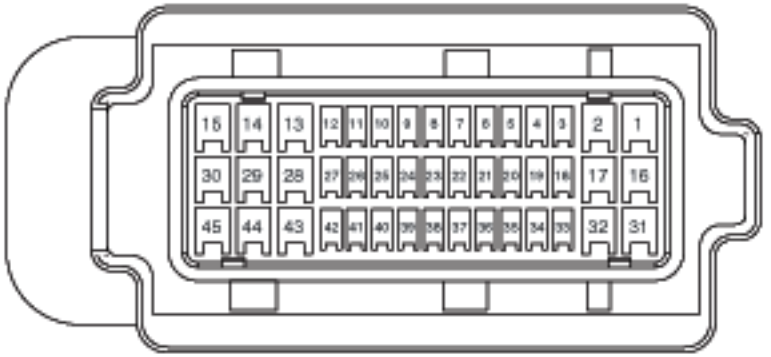
- 45 Male / Black (KET_HYBRID_45M_B)



1. -	-	18. -	-	28. Gr	Power Outside Mirror Switch (HR)	39. R	With AMP - AMP (FR (+))
2. -	-	19. -	-	29. P	Power Outside Mirror Switch (Up/Down)	40. L	With AMP - AMP (FR (-))
3. O	I/P Junction Box (Door Lock Relay)	20. Br	IPS Control Module (Passenger Door Key Lock Signal)	30. -	-	41. R	SRS - Passenger SIS (High)
4. -	-	21. G	IPS Control Module (Passenger Door Key Unlock Signal)	31. B	Ground (GF06)	42. L	SRS - Passenger SIS (Low)
5. -	-	22. -	-	32. P	BCM (Turn & Hazard Lamp Output RR)	43. W/O AMP	
6. -	-	23. B	Smart Key Control Module (O_FR_DR_ANT_GND)	33. L	I/P Junction Box (Door Unlock Relay)	R	Audio - FR (+)
7. -	-	24. W/B	Smart Key Control Module (L_FR_DR_Lock/Unlock)	34. -	-	With AMP	
8. -	-	25. W	IPS Control Module (Passenger Door Lock/Unlock Signal)	35. Gr/B	IPS Control Module (Door Unlock Switch)	R	AMP - FR (+)
9. -	-	26. -	-	36. L/B	IPS Control Module (Door Lock Switch)	44. W/O AMP	
10. -	-	27. W	Smart Key Control Module (O_FR_DR_ANT)	37. -	-	L	Audio - FR (-)
11. -	-			38. R/O	I/P Junction Box - IPS 3 (ILL_)	With AMP	
12. -	-					L	AMP - FR (-)
13. R	I/P Junction Box - P/WDW RH 25A					45. -	-
14. Gr	Power Window Main Switch (Passenger Window Switch)						
15. G	Power Window Main Switch (Passenger Window Switch)						
16. L/B	I/P Junction Box - HTD MIRR 7.5A						
17. G	Power Outside Mirror Switch (VR)						

FD21 Floor To Passenger Door Harness Connection (cont'd)

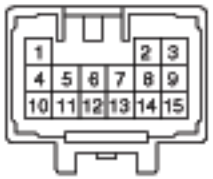
- 45 Female / Black (KET_HYBRID_45F_B)



1. –	–	16. L/B	Passenger Power Outside Mirror (Defogger)	31. B	Ground - Passenger Power Window Switch, Passenger Door Lock Actuator, Passenger Power Outside Mirror, Passenger Smart Key Outside Handle	41. R	Passenger Side Impact Sensor (High)
2. –	–	17. G	Passenger Power Outside Mirror			42. L	Passenger Side Impact Sensor (Low)
3. O	Passenger Door Lock Actuator (Actuator)	18. –	–			43. R	Passenger Door Speaker (+), W/O AMP - Passenger Door Tweeter Speaker (+)
4. –	–	19. –	–	32. P	Passenger Power Outside Mirror (Turn Lamp)		
5. –	–	20. Br	Passenger Door Lock Actuator (Key Lock)	33. L	Passenger Door Lock Actuator (Actuator)	44. L	Passenger Door Speaker (-), W/O AMP - Passenger Door Tweeter Speaker (-)
6. –	–	21. G	Passenger Door Lock Actuator (Key Unlock)	34. –	–		
7. –	–	22. –	–	35. Gr/B	Passenger Power Window Switch (Door Switch (Unlock))	45. –	–
8. –	–	23. B	Passenger Smart Key Outside Handle (Antenna -)	36. L/B	Passenger Power Window Switch (Door Switch (Lock))		
9. –	–	24. W/B	Passenger Smart Key Outside Handle (Lock Switch)	37. –	–		
10. –	–	25. W	Passenger Door Lock Actuator (Door Lock/Unlock)	38. R/O	Passenger Power Window Switch (ILL. +)		
11. –	–	26. –	–	39. R	With AMP - Passenger Door Tweeter Speaker (+)		
12. –	–	27. W	Passenger Smart Key Outside Handle (Antenna +)	40. L	With AMP - Passenger Door Tweeter Speaker (-)		
13. L	Passenger Power Window Switch (B+)	28. Gr	Passenger Power Outside Mirror				
14. Y	Passenger Power Window Switch	29. P	Passenger Power Outside Mirror				
15. G	Passenger Power Window Switch	30. –	–				

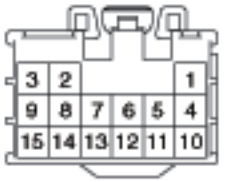
FD31 Floor To Rear Door LH Harness Connection

- 15 Male / White (KET_090III_15M_W)



1. L	I/P Junction Box (Door Unlock Relay)	9. Br	Power Window Main Switch (Rear Window Switch LH)
2. O	I/P Junction Box (Door Lock Relay)	10. B	Ground (GF02)
3. –	–	11. P	Power Window Main Switch (Rear Window Switch LH)
4. Y	IPS Control Module (Rear Door LH Lock/Unlock Signal)	12. R/O	I/P Junction Box - IPS 3 (ILL.)
5. B	Ground (GF02)	13. –	–
6. –	–	14. Y	Audio / AMP - RL (+)
7. –	–	15. B	Audio / AMP - RL (-)
8. O	I/P Junction Box - P/WDW LH 25A		

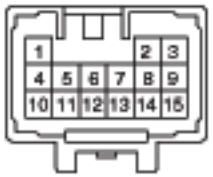
- 15 Female / White (KET_090III_15F_W)



1. L	Rear Door Lock Actuator LH	9. Br	Rear Power Window Switch LH
2. O	Rear Door Lock Actuator LH	10. B	Rear Power Window Switch LH (ILL. -)
3. –	–	11. P	Rear Power Window Switch LH
4. Y	Rear Door Lock Actuator LH (Lock/Unlock Switch)	12. R/O	Rear Power Window Switch LH (ILL. +)
5. B	Rear Door Lock Actuator LH (Lock/Unlock Switch Ground)	13. –	–
6. –	–	14. Y	Rear Door Speaker LH (+)
7. –	–	15. B	Rear Door Speaker LH (-)
8. O	Rear Power Window Switch LH (B+)		

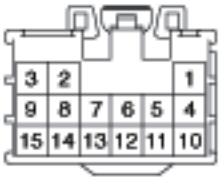
FD41 Floor To Rear Door RH Harness Connection

- 15 Male / White (KET_090III_15M_W)



1. L	I/P Junction Box (Door Unlock Relay)	9. O	Power Window Main Switch (Rear Window Switch RH)
2. O	I/P Junction Box (Door Lock Relay)	10. G	Audio / AMP - RR (+)
3. R/O	I/P Junction Box - IPS 3 (ILL.)	11. O	Audio / AMP - RR (-)
4. Y	IPS Control Module (Rear Door RH Lock/Unlock Signal)	12. –	–
5. B	Ground (GF06)	13. –	–
6. L	Power Window Main Switch (Rear Window Switch RH)	14. –	–
7. –	–	15. B	Ground (GF06)
8. R	I/P Junction Box - P/WDW RH 25A		

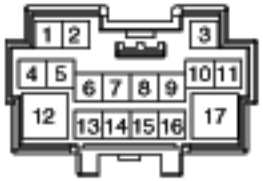
- 15 Female / White (KET_090III_15F_W)



1. L	Rear Door Lock Actuator RH	9. O	Rear Power Window Switch RH
2. O	Rear Door Lock Actuator RH	10. G	Rear Door Speaker RH (+)
3. R/O	Rear Power Window Switch RH (ILL. +)	11. O	Rear Door Speaker RH (-)
4. Y	Rear Door Lock Actuator RH	12. –	–
5. B	Rear Door Lock Actuator RH	13. –	–
6. L	Rear Power Window Switch RH	14. –	–
7. –	–	15. B	Rear Power Window Switch RH (ILL. -)
8. R	Rear Power Window Switch RH (B+)		

FR11 Floor To Tail Gate Harness Connection

- 17 Male / White (KET_HYB1809_17M_W)



1. L I/P Junction Box - WIPER RR 15A
2. Br ICM Relay Box (Rear Wiper Relay)
3. W ICM Relay Box (Rear Wiper Relay)
4. W/O A/V & Navigation
   Y/B Electro Chromic Mirror (Video GND. -)
   With A/V & Navigation
   Y/B A/V & Navigation Head Module (Video GND. -)
5. – –
6. W/O A/V & Navigation
   R Electro Chromic Mirror (Video In)
   With A/V & Navigation
   R A/V & Navigation Head Module (Video In)
7. W/O A/V & Navigation
   R/B Electro Chromic Mirror (Video VGND.)
   With A/V & Navigation
   R/B A/V & Navigation Head Module (Video VGND.)
8. G IPS Control Module - IPS 7
9. Y IPS Control Module - IPS 2
10. G/B ICM Relay Box (DBC Relay)
11. W/O A/V & Navigation
    Y Electro Chromic Mirror (Video PWR. +)
    With A/V & Navigation
    Y A/V & Navigation Head Module (Video PWR. +)
12. G E/R Fuse & Relay Box (RR HTD Relay)
13. Y/B Smart Key Control Module (Tail Gate)
14. L I/P Junction Box (Tail Gate Relay)
15. W IPS Control Module (Tail Gate Open Switch), Luggage Lamp
16. R I/P Junction Box (Back-Up Lamp Relay)
17. B Ground (GF03)

- 17 Female / White (KET_HYB1809_17F_W)



1. L Rear Wiper Motor
2. Br Rear Wiper Motor
3. W Rear Wiper Motor
4. Y/B License Lamp (Rear View Camera - GND.)
5. – –
6. R License Lamp (Rear View Camera - CVBS)
7. R/B License Lamp (Rear View Camera - VGND.)
8. G Tail Lamp LH, License Lamp
9. Y Tail Lamp RH
10. G/B High-Mounted Stop Lamp
11. Y License Lamp (Rear View Camera - B+)
12. G Rear Defogger (+)
13. Y/B License Lamp (Tail Gate Handle Switch)
14. L Tail Gate Latch
15. W Tail Gate Latch (Tail Gate Open Switch)
16. R Back-Up Lamp LH/RH
17. B Rear Defogger (-)

FR22 Floor To Bumper Harness Connection

- 2 Male / Black (KUM_NMWP_02M_B)



1. B	Smart Key Control Module (Bumper ANT)	2. W	Smart Key Control Module (Bumper ANT GND)

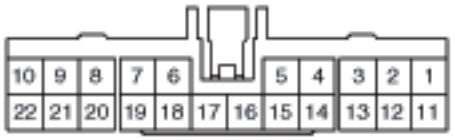
- 2 Female / Black (KUM_NMWP_02F_B)



1. B	Smart Key Bump Antenna (Bumper ANT)	2. W	Smart Key Bump Antenna (Bumper ANT GND)

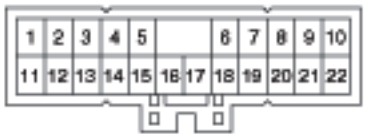
FS11 Floor To Driver Seat Harness Connection

- 22 Female / White (KET_090III_22F_W)



1. –	–	12. –	–
2. –	–	13. –	–
3. –	–	14. –	–
4. –	–	15. –	–
5. W	Console Switch (Driver Seat Warmer Relay - High)	16. Br	Console Switch (Driver Seat Warmer Switch)
6. L	Console Switch (Driver Seat Warmer Relay - Low)	17. –	–
7. –	–	18. –	–
8. B	Ground (GF01)	19. –	–
9. –	–	20. –	–
10. B	Ground (GF01)	21. –	–
11. R	I/P Junction Box - P/SEAT (DRV) 20A	22. –	–

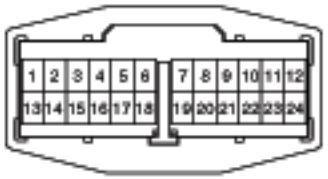
- 22 Male / White (KET_090-2_22M_W)



1. –	–	12. –	–
2. –	–	13. –	–
3. –	–	14. –	–
4. –	–	15. –	–
5. R	Driver Seat Warmer (Switch - High)	16. B/W	Driver Seat Warmer (IND. - GND)
6. Y	Driver Seat Warmer (Switch - Low)	17. –	–
7. –	–	18. –	–
8. B	Driver Seat Warmer (GND)	19. –	–
9. –	–	20. –	–
10. B	Driver Seat Manual Switch (GND), Driver Reclining Limit Switch (GND)	21. –	–
11. R	Driver Seat Manual Switch (B+)	22. –	–

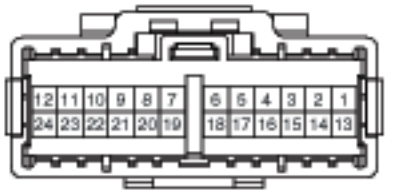
MC11 Main To Control Harness Connection

- 24 Male / White (KUM_HSC_24M_W)



1. –	–	13. G	Cruise Remote Control Switch (Supply)
2. –	–	14. –	–
3. –	–	15. –	–
4. W/B	PDM	16. –	–
5. –	–	17. O/B	ESC Off Switch
6. M/T Br	Vehicle Speed Signal	18. P	PDM
7. L	SRS - Passenger FIS (High)	19. O	SRS - Passenger FIS (Low)
8. –	–	20. O	DBC Switch
9. –	–	21. –	–
10. –	–	22. –	–
11. B	Cruise Remote Control Switch (Ground)	23. –	–
12. L	Cruise Remote Control Switch (Signal)	24. –	–

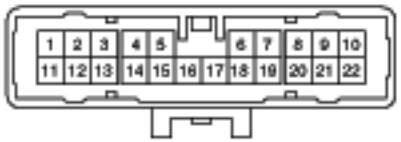
- 24 Female / White (KUM_HSC_24F_W)



1. –	–	13. G	E/R Fuse & Relay Box - ECU 2 7.5A
2. –	–	14. –	–
3. –	–	15. –	–
4. W/B	PCM (Engine Speed Signal)	16. –	–
5. –	–	17. O	ESC Module (ESC Off Switch 'ON')
6. M/T Br	Vehicle Speed Sensor	18. P	ESC Module (Wheel Speed Sensor Output (RR))
7. L	Passenger Front Impact Sensor (High)	19. O	Passenger Front Impact Sensor (Low)
8. –	–	20. O	ESC Module (DBC Switch 'ON')
9. –	–	21. –	–
10. –	–	22. –	–
11. B	PCM (Cruise Control Switch Ground)	23. –	–
12. L	PCM (Cruise Control Switch Signal)	24. –	–

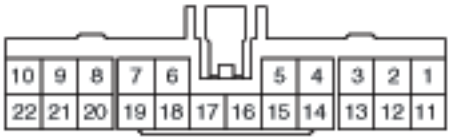
MC21 Main To Control Harness Connection

- 22 Male / Blue (KET_090III_22M_L)



1. O	C-CAN (Low) (Data Link Connector)	12. –	–
2. –	–	13. –	–
3. –	–	14. B	Front Washer Switch
4. –	–	15. L	Rear Washer Switch, BCM
5. –	–	16. O	Instrument Cluster (Fuel Sender)
6. G	ICM Relay Box (DBC Relay)	17. –	–
7. –	–	18. –	–
8. –	–	19. W/B	ICM Relay Box (DBC Relay)
9. –	–	20. –	–
10. –	–	21. Br/O	Instrument Cluster (IMMO. IND.)
11. G	C-CAN (High) (Data Link Connector)	22. –	–

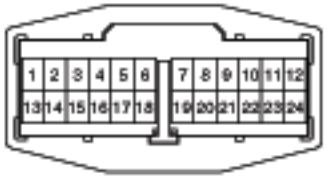
- 22 Female / Blue (KET_090III_22F_L)



1. O	C-CAN (Low) (ESC Module, PCM, Multipurpose Check Connector)	12. –	–
2. –	–	13. –	–
3. –	–	14. B	Front Washer Motor
4. –	–	15. L	Rear Washer Motor
5. –	–	16. O	PCM (Fuel Tank Level Sender)
6. G	ESC Module, High-Mounted Stop Lamp, Stop Lamp LH/RH	17. –	–
7. –	–	18. –	–
8. –	–	19. W/B	ESC Module
9. –	–	20. –	–
10. –	–	21. Br/O	PCM (IMMO. IND.)
11. G	C-CAN (High) (ESC Module, PCM, Multipurpose Check Connector)	22. –	–

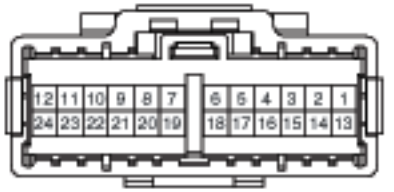
MC31 Main To Control Harness Connection

- 24 Male / White (KUM_HSC_24M_W)



1. –	–	13. –	–
2. R/B	PDM (Start Feedback Signal)	14. –	–
3. Gr	A/C Control Module (ECV IN)	15. L	A/C Control Module (ECV OUT)
4. Y/B	Instrument Cluster (Check Engine IND.)	16. –	–
		17. O/B	BCM (Wiper Relay (Low) Control)
5. –	–	18. –	–
6. G	ICM Relay Box (DBC Relay)	19. –	–
7. Y/B	Instrument Cluster (Oil Pressure IND.)	20. Gr	Multifunction Switch (Horn Switch)
		21. –	–
8. R/B	4WD ECM (ON/START Input)	22. –	–
9. W	Data Link Connector (Body K-Line)	23. –	–
10. –	–	24. –	–
11. Br	SRS - Driver FIS (High)		
12. W	SRS - Driver FIS (Low)		

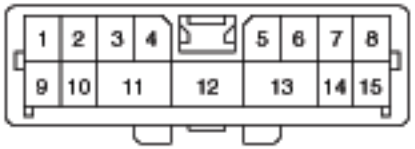
- 24 Female / White (KUM_HSC_24F_W)



1. –	–	12. W	Driver Front Impact Sensor (Low)
2. R/B	E/R Fuse & Relay Box (Start Relay), M/T - PCM (Start Overrun (PDM))	13. –	–
		14. –	–
		15. L	A/C Compressor (Electrical Control Valve (-))
3. Gr	A/C Compressor (Electrical Control Valve (+))	16. –	–
4. Y/B	PCM (Check Engine IND.)	17. O/B	E/R Fuse & Relay Box (Wiper FRT, LO Relay)
5. –	–		
6. G	Stop Lamp Switch, ESC Module	18. –	–
7. Y/B	Oil Pressure Switch	19. –	–
8. R/B	I/P Junction Box - MODULE 1 10A	20. Gr	E/R Fuse & Relay Box (Horn Relay)
9. W	Multipurpose Check Connector (Body K-Line)	21. –	–
		22. –	–
10. –	–	23. –	–
11. Br	Driver Front Impact Sensor (High)	24. –	–

MC41 Main To Control Harness Connection

- 15 Male / Blue (AMP_0725_15M_L)



1. With Smart Key			8. L	Immobilizer Module	
W/O	Smart Key Control Module		9. –	–	
W/O Smart Key			10. L	ICM Relay Box (DBC Relay)	
L	Immobilizer Module		11. R	With Smart Key -	
2. G	Front Wiper Deicer Switch (IND.)			PDM Relay Box (IGN2 Relay)	
3. L/B	A/C Control Module			W/O Smart Key - Ignition Switch	
	(Ambient Sensor (+))		12. With Smart Key		
4. Gr	A/C Control Module		P	PDM Relay Box (IGN1 Relay)	
	(Sensor Ground)		13. –	–	
5. Gr	Front Wiper Switch		14. G	Front Wiper Switch (Low)	
6. P	Fuel Pump Motor		15. B	Immobilizer Module	
7. P	Front Wiper Switch (High)				

- 15 Female / Blue (AMP_0725_15F_L)



1. L	PCM (IMMO. Data Line)	8. L	EMS Box - SENSOR 10A
2. G	E/R Fuse & Relay Box	9. –	–
	(Deicer Relay)	10. L	E/R Fuse & Relay Box -
3. L/B	Ambient Sensor		STOP LP 10A
4. Gr	Ambient Sensor	11. R	E/R Fuse & Relay Box - IGN 2 40A
5. Gr	E/R Fuse & Relay Box	12. P	E/R Fuse & Relay Box - IGN 1 30A
	(Wiper FRT, LO Relay)	13. –	–
6. P	EMS Box	14. G	Front Wiper Motor (Low)
	(F/Pump Relay)	15. B	Ground (GHG05)
7. P	Front Wiper Motor (High)		

MC51 Main To Control Harness Connection

- 1 Male / White (KET_58L_01M_W)- 1 Female / White (KET_58L_01F_W)



1. R	E/R Fuse & Relay Box - MDPS 80A

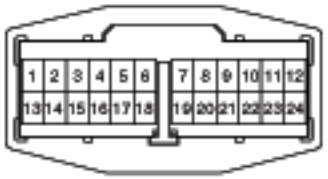
- 1 Female / White (KET_58L_01F_W)



1. R	EPS Control (Battery Power)

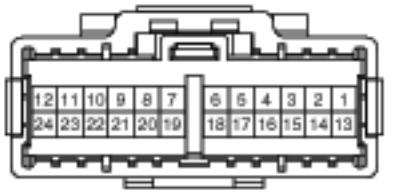
MF11 Main To Floor Harness Connection

- 24 Male / Yellow (KUM_HSC_24M_Y)



1. R/B	I/P Junction Box - SMART KEY 10A	13. –	–
2. –	–	14. –	–
3. W/B	PDM (IMMO. Data)	15. –	–
4. Y/B	PDM (IMMO. Clock)	16. –	–
5. P/B	PDM (Holder ILL.)	17. –	–
6. O/B	PDM (Fob In)	18. R/O	ATM Shift Lever (ILL. +)
7. –	–	19. L/O	ATM Shift Lever (ILL. -)
8. –	–	20. W/B	ICM Relay Box (Rear Wiper Relay)
9. O	C-CAN (Low) (Data Link Connector)	21. O	Instrument Cluster (Fuel Sender +)
		22. B	Instrument Cluster (Fuel Sender -)
10. G	C-CAN (HI) (Data Link Connector)	23. –	–
		24. –	–
11. –	–		
12. –	–		

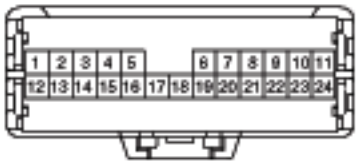
- 24 Female / Yellow (KUM_HSC_24F_Y)



1. R/B	Fob Holder	13. –	–
2. –	–	14. –	–
3. W/B	Fob Holder (IMMO. Data)	15. –	–
4. Y/B	Fob Holder (IMMO. Clock)	16. –	–
5. P/B	Fob Holder (ILL. -)	17. –	–
6. O/B	Fob Holder (Fob In)	18. R/O	ATM Shift Lever ILL. (ILL. +)
7. –	–	19. L/O	ATM Shift Lever ILL. (ILL. -)
8. –	–	20. W/B	IPS Control Module (Rear Wiper Relay Control)
9. O	PODS (C-CAN Low)		
10. G	PODS (C-CAN HI)	21. O	Fuel Sender (+)
11. –	–	22. B	Fuel Sender (-)
12. –	–	23. –	–
		24. –	–

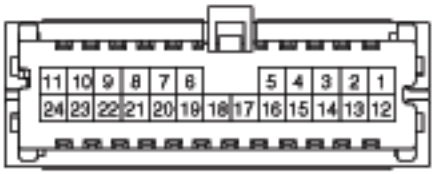
MF21 Main To Floor Harness Connection

- 24 Male / Gray (KET_040III_24M_GR)



1. –
2. –
3. –
4. W/O A/V & Navigation
   Y/B Electro Chromic Mirror (Video GND. -)
   With A/V & Navigation
   Y/B A/V & Navigation Head Module (Video GND. -)
5. W/O A/V & Navigation
   Y Electro Chromic Mirror (Video PWR. +)
   With A/V & Navigation
   Y A/V & Navigation Head Module (Video PWR. +)
6. G BCM (Safety Power Window Module)
7. O C-CAN (Low) (Data Link Connector)
8. –
9. –
10. G ICM Relay Box (Two Turn Unlock Relay)
11. –
12. –
13. –
14. –
15. W/O A/V & Navigation
    R Electro Chromic Mirror (Video In)
    With A/V & Navigation
    R A/V & Navigation Head Module (Video In)
16. W/O A/V & Navigation
    R/B Electro Chromic Mirror (Video VGND.)
    With A/V & Navigation
    R/B A/V & Navigation Head Module (Video VGND.)
17. –
18. –
19. Y 4WD Lock Switch
20. G C-CAN (High) (Data Link Connector)
21. –
22. –
23. R/O I/P Junction Box - TPMS 7.5A
24. –

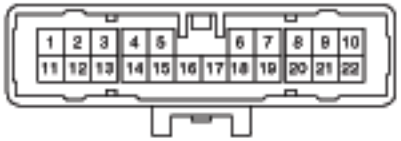
- 24 Female / Gray (KET_040III_24F_GR)



1. –
2. –
3. –
4. Y/B License Lamp (Rear View Camera - GND.)
5. Y License Lamp (Rear View Camera - B+)
6. G Safety Power Window Module (COM)
7. O 4WD ECM (C-CAN (Low))
8. –
9. –
10. G Door Lock Actuator's
11. –
12. –
13. –
14. –
15. R License Lamp (Rear View Camera - CVBS)
16. R/B License Lamp (Rear View Camera - VGND.)
17. –
18. –
19. Y 4WD ECM (4WD Lock Switch)
20. G 4WD ECM (C-CAN (High))
21. –
22. –
23. R/O 4WD ECM (B+)
24. –

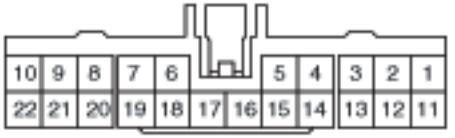
MF31 Main To Floor Harness Connection

- 22 Male / Blue (KET_090III_22M_L)



1. Br	Console Switch (Driver Seat Warmer Switch)	
2. W	Console Switch (Driver Seat Warmer Relay - High)	
3. L	Console Switch (Driver Seat Warmer Relay - Low)	
4. B	Audio (Rear LH Speaker -)	
5. Y	Audio (Rear LH Speaker +)	
6. –	–	
7. –	–	
8. W	Audio (Front LH Speaker -)	
9. Br	Audio (Front LH Speaker +)	
10. –	–	
11. –	–	
12. W	Console Switch (Pass. Seat Warmer Relay - High)	
13. L	Console Switch (Pass. Seat Warmer Relay - Low)	
14. Br	ICM Relay Box (Rear Wiper Relay)	
15. W	ICM Relay Box (Rear Wiper Relay)	
16. W/O A/V & Navigation		
	L	Audio (CAN - High)
With A/V & Navigation		
	L	A/V & Navigation Head Module (CAN - High)
17. W/O A/V & Navigation		
	R	Audio (CAN - Low)
With A/V & Navigation		
	R	A/V & Navigation Head Module (CAN - High)
18. –	–	
19. W/O A/V & Navigation		
	G	Audio (Antenna)
With A/V & Navigation		
	G	A/V & Navigation Head Module (Antenna)
20. R/B	I/P Junction Box - MODULE 1 10A	
21. P	EMS Box (F/Pump Relay)	
22. –	–	

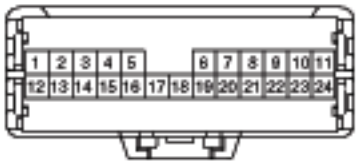
- 22 Female / Blue (KET_090III_22F_L)



1. Br	Driver Seat Warmer (IND. - GND)
2. W	Driver Seat Warmer (Switch - High)
3. L	Driver Seat Warmer (Switch - Low)
4. B	Rear Door Speaker LH (-)
5. Y	Rear Door Speaker LH (+)
6. –	–
7. –	–
8. W	Driver Door Speaker (-), Driver Door Tweeter Speaker (-)
9. Br	Driver Door Speaker (+), Driver Door Tweeter Speaker (+)
10. –	–
11. –	–
12. W	Passenger Seat Warmer (Switch - High)
13. L	Passenger Seat Warmer (Switch - Low)
14. Br	Rear Wiper Motor
15. W	Rear Wiper Motor
16. L	AMP (CAN - High)
17. R	AMP (CAN - Low)
18. –	–
19. G	Roof Antenna
20. R/B	4WD ECM (ON/START Input)
21. P	Fuel Pump Motor
22. –	–

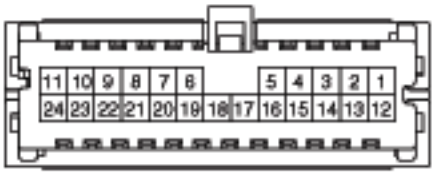
MF41 Main To Floor Harness Connection

- 24 Male / Gray (KET_040III_24M_GR)



1. Br — Console Switch (Passenger Seat Warmer Switch)
2. – —
3. R — Instrument Cluster (B-CAN (Low))
4. Br/O — Instrument Cluster (IMMO. IND.)
5. O — Audio (Rear RH Speaker -)
6. L — Audio (Front RH Speaker -)
7. With A/V & Navigation
   - Br — A/V & Navigation Head Module (NEVI Voice (+))
8. With A/V & Navigation
   - B — A/V & Navigation Head Module (NEVI Voice - Shield GND)
9. – —
10. – —
11. W/O — Data Link Connector (Body K-Line)
12. B — Audio (SPDIF - Shield GND)
13. W/O A/V & Navigation
    - G — Audio (SPDIF - OUT (-))
    - With A/V & Navigation
      - G — A/V & Navigation Head Module (SPDIF - OUT (-))
14. – —
15. – —
16. – —
17. G/B — BCM (Key Inter Lock Switch)
18. – —
19. L — Instrument Cluster (B-CAN (High))
20. W/O A/V & Navigation
    - W — Audio (SPDIF - OUT (+))
    - With A/V & Navigation
      - W — A/V & Navigation Head Module (SPDIF - OUT (+))
21. G — Audio (Rear RH Speaker +)
22. R — Audio (Front RH Speaker +)
23. With A/V & Navigation
    - Y — A/V & Navigation Head Module (NEVI Voice (-))
24. W/O PCM (IMMO. Data Line)

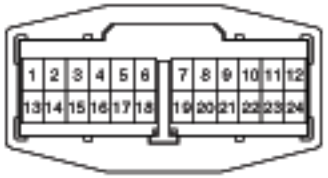
- 24 Female / Gray (KET_040III_24F_GR)



1. Br — Passenger Seat Warmer (IND. - GND)
2. – —
3. R — Smart Key Control Module (B-CAN (Low))
4. Br/O — Smart Key Control Module
5. O — Rear Door Speaker RH (-)
6. L — Passenger Door Speaker (-), Passenger Door Tweeter Speaker (-)
7. Br — AMP (NEVI Voice (+))
8. B — AMP (NEVI Voice - Shield GND)
9. – —
10. – —
11. W/O — Smart Key Control Module (Body K-Line)
12. B — AMP (SPDIF - Shield GND)
13. G — AMP (SPDIF - OUT (-))
14. – —
15. – —
16. – —
17. G/B — ATM Shift Lever ('P' Position Switch)
18. – —
19. L — Smart Key Control Module (B-CAN (High))
20. W — AMP (SPDIF - OUT (+))
21. G — Rear Door Speaker RH (+)
22. R — Passenger Door Speaker (+), Passenger Door Tweeter Speaker (+)
23. Y — AMP (NEVI Voice (-))
24. W/O — Smart Key Control Module

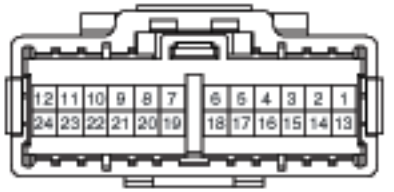
MF51 Main To Floor Harness Connection

- 24 Male / Yellow (KUM_HSC_24M_Y)



1. –	–	13. –	–
2. –	–	14. –	–
3. L	Start Stop Button Switch (SW2)	15. –	–
4. –	–	16. Br/B	I/P Junction Box - MODULE 5 7.5A
5. –	–	17. –	–
6. –	–	18. –	–
7. –	–	19. O	RF Receiver (Data)
8. R	Smart Key Antenna #1	20. –	–
9. –	–	21. L	Smart Key Antenna #1 (GND)
10. –	–	22. –	–
11. –	–	23. –	–
12. –	–	24. –	–

- 24 Female / Yellow (KUM_HSC_24F_Y)



1. –	–	13. –	–
2. –	–	14. –	–
3. L	Smart Key Control Module (SSB SW2)	15. –	–
		16. Br/B	Smart Key Control Module (ON/START Input)
4. –	–	17. –	–
5. –	–	18. –	–
6. –	–	19. O	Smart Key Control Module (RF_COM)
7. –	–	20. –	–
8. R	Smart Key Control Module (Interior_ANT1)	21. L	Smart Key Control Module (Interior_ANT1_GND)
9. –	–	22. –	–
10. –	–	23. –	–
11. –	–	24. –	–
12. –	–		

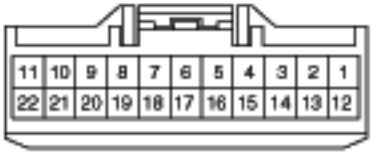
MR01 Main To Roof Harness Connection

- 22 Male / White (AMP_090III_22M_W)



1. Br		BCM (Room Lamp Control)
2. R/O		ILL. (+)
3. G		I/P Junction Box - ROOM LP 10A
4. Y/B		License Lamp (Rear View Camera - GND.)
5. Y		License Lamp (Rear View Camera - B+)
6. L		I/P Junction Box - Back-Up Lamp Relay
7. W/O A/V & Navigation		
	R	AUDIO (MIC +)
With A/V & Navigation		
	R	A/V & Navigation Head Module (MIC +)
8. –		–
9. –		–
10. –		–
11. –		–
12. –		–
13. W/O A/V & Navigation		
	L	AUDIO (MIC -)
With A/V & Navigation		
	B	A/V & Navigation Head Module (MIC -)
14. R		I/P Junction Box - SUNROOF 15A
15. R		License Lamp (Rear View Camera - CVBS)
16. R/B		License Lamp (Rear View Camera - VGND.)
17. Br		Vehicle Speed Signal
18. B		Ground (GM02)
19. –		–
20. Gr/O		I/P Junction Box - MODULE 2 10A
21. –		–
22. O		I/P Junction Box - MODULE 4 10A

- 22 Female / White (AMP_090II_22F_W)



1. Br		Map Lamp
2. –		Not Used
3. G		B+ Electro Chromic Mirror, Map Lamp, Driver/Passenger Vanity Lamp, Room Lamp
4. W/O Y/B		A/V & Navigation Electro Chromic Mirror (Video GND. -)
5. W/O Y		A/V & Navigation Electro Chromic Mirror (Video PWR. +)
6. L		Electro Chromic Mirror (Back-up Signal)
7. R		MIC (+)
8. –		–
9. –		–
10. –		–
11. –		–
12. –		–
13. W/O A/V & Navigation		
	L	AUDIO (MIC -)
With A/V & Navigation		
	B	A/V & Navigation Head Module (MIC -)
14. R		Sunroof Motor (B+)
15. W/O A/V & Navigation		
	R	Electro Chromic Mirror (Video In)
16. W/O A/V & Navigation		
	R/B	Electro Chromic Mirror (Video VGND.)
17. Br		Sunroof Motor (Vehicle Speed)
18. B		Ground - Electro Chromic Mirror, Sunroof Switch, Sunroof Motor, Map Lamp, Room Lamp, Driver/Passenger Vanity Lamp
19. –		–
20. Gr/O		Electro Chromic Mirror (ON Input)
21. –		–
22. O		Sunroof Motor (IG2)

I/P-A I/P Junction Box

- 18 Female / White (AMP_0925_18F_W)



1. –	–	8. -	-
2. Y	WIPER FRT 25A - Front Wiper Motor, E/R Fuse & Relay Box (WIPER FRT, LO Relay)	9. Gr	IPS 0 - Head Lamp RH (LO)
		10. O	IPS 5 - Head Lamp LH (HI)
		11. O/B	IPS 1 - Head Lamp RH (HI)
3. –	–	12. –	–
4. –	–	13. –	–
5. –	–	14. G	E/R Fuse & Relay Box (RR HTD Relay)
6. R	IGN 1 20A (ON/START Output)- E/R Fuse & Relay Box (ECU 2 7.5A / ABS 7.5 / TCU 2 7.5)	15. R	E/R Fuse & Relay Box (Blower Relay)
		16. –	–
7. R	Not Used	17. L	IPS 6 - Front Fog Lamp LH/RH
		18. Gr	IPS 4 - Head Lamp LH (LO)

I/P-B I/P Junction Box

- 4 Female / White (AMP_250_04F_W_SPT)



1. R	Multi Fuse - B+2 60A	3. R	Multi Fuse - B+3 60A
2. –	–	4. W	Multi Fuse - B+1 60A

I/P-C I/P Junction Box

- 28 Female / White (AMP_025_28F_W)



1. – –
2. – –
3. – –
4. W/O Smart Key
   P With IMMO. - E/R Fuse & Relay Box (Start Relay)
   With Smart Key
   P M/T - E/R Fuse & Relay Box (Start Relay)
   A/T - E/R Fuse & Relay Box (ATM P/N Relay)
5. – –
6. – –
7. G Charge IND., Diode - Alternator (L)
8. Y/O Fuse MODULE 4 10A - E/R Fuse & Relay Box (Blower Relay)
9. W/B MODULE 1 10A - Stop Lamp Switch
10. R/B MODULE 1 10A - 4WD ECM
11. – –
12. – –
13. W IPS Control Module (Burglar Alarm Horn Relay Control) - E/R Fuse & Relay Box (B/A HORN Relay)
14. G/O IPS Control Module (Rear Defogger Relay Control) - E/R Fuse & Relay Box (RR HTD Relay)
15. W/O Smart Key
    P W/O IMMO. - E/R Fuse & Relay Box (Start Relay)
16. – –
17. – –
18. Y BCM (Turn & Hazard Lamp Output) - Head Lamp LH
19. W BCM (Turn & Hazard Lamp Output) - Head Lamp RH
20. B Ground (GHG01)
21. R IPS Control Module - Hood Switch
22. W IPS Control Module - Back-Up Lamp Switch
23. Br/O IPS Control Module - Brake Fluid Level Sensor
24. – –
25. Y IPS 2 - Head Lamp RH
26. G IPS 7 - Head Lamp LH
27. Br/B IPS Control Module - ESC Module (Parking Brake)
28. L IPS Control Module (Deicer Relay Control) - E/R Fuse & Relay Box (Deicer Relay)

I/P-D I/P Junction Box

- 40 Female / White (AMP_025_40F_W)



1. Y IPS 2 (Tail) - Rear Combination Lamp (Out) RH, Rear Combination Lamp (IN) RH
2. G IPS 7 (Tail) - License Lamp, Rear Combination Lamp (Out) LH, Rear Combination Lamp (IN) LH
3. G/O CLUSTER 10A - Smart Key Control Module (ALT - L)
4. – –
5. W BCM (Turn & Hazard Lamp Output) - Rear Combination Lamp (Out) LH, Driver Power Outside Mirror
6. – –
7. R SMART KEY 10A - Smart Key Control Module
8. Y A/BAG 10A - Passenger Occupant Detection Sensor
9. G AUDIO 2 10A - AMP, Smart Key Control Module, Power Outside Mirror Switch
10. P BCM (Turn & Hazard Lamp Output) - Rear Combination Lamp (Out) RH, Passenger Power Outside Mirror
11. W/B TPMS 7.5A - ATM Shift Lever
12. G ROOM LP 10A - Luggage Lamp
13. – –
14. – –
15. – –
16. – –
17. O IPS Control Module - Driver Seat Belt Buckle Switch
18. – –
19. Y/B IPS Control Module - Rear Door Switch LH
20. Gr/O IPS Control Module - Parking Brake Switch
21. R IPS 3 (ILL.) - P/WDW Main Switch, Passenger Power Window Switch, Rear Power Window Switch LH/RH
22. – –
23. W/B IPS Control Module - ICM Relay Box (Rear Wiper Relay Control)
24. G/O IPS Control Module - Driver Door Switch
25. P/B IPS Control Module - Passenger Door Switch
26. Gr/B IPS Control Module - Rear Door Switch RH
27. Y IPS Control Module - Rear Door RH Lock/Unlock Signal
28. P IPS Control Module - Driver Door Key Unlock Signal
29. Br IPS Control Module - Passenger Door Key Lock Signal
30. G IPS Control Module - Passenger Door Key Unlock Signal
31. Gr IPS Control Module - Driver Door Lock/Unlock Signal
32. W IPS Control Module - Passenger Door Lock/Unlock Signal
33. Y IPS Control Module - Rear Door LH Lock/Unlock Signal
34. R IPS Control Module - Driver Door Key Lock Signal
35. Y/B IPS Control Module - Smart Key Control Module, Tail Gate Handle Switch
36. Gr/B IPS Control Module - Door Unlock Switch
37. L/B IPS Control Module - Door Lock Switch
38. – –
39. W IPS Control Module - Tail Gate Open Switch
40. – –

I/P-E I/P Junction Box

- 20 Female / White (AMP_0925_20F_W)



1. R	Back-Up Lamp Relay - Rear Combination Lamp (IN) LH/RH	11. L/B	HTD MIRR 7.5A - Driver/Passenger Power Outside Mirror (Defogger)
2. –	–	12. L	WIPER RR 15A - Rear Wiper Motor
3. –	–	13. O	AMP 25A - AMP
4. –	–	14. G	E/R Fuse & Relay Box (RR HTD Relay) - Rear Defogger (+)
5. B	Ground (GF01)	15. R	P/SEAT (DRV) 20A - Driver Seat Manual Switch
6. O	P/WDW LH 25A - Power Window Main Switch	16. Y	SAFETY POWER WIDOW 20A - Safety Power Window Module
7. R	P/WDW RH 25A - Rear Power Window Switch RH	17. –	–
8. L	Door Unlock Relay - Passenger/Rear LH/Rear RH Door Lock Actuator	18. O	P/WDW LH 25A - Rear Power Window Switch LH
9. O	Door Lock Relay - Driver/Passenger Rear LH/Rear RH Door Lock Actuator	19. R	P/WDW RH 25A - Power Window Main Switch, Passenger Power Window Switch
10. L	Tail Gate Relay - Tail Gate Latch	20. L	POWER OUTLET 2 25A - Rear Power Outlet

I/P-F I/P Junction Box

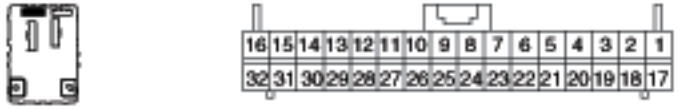
- 28 Female / White (AMP_025_28F_W)



1. R/O	TPMS 7.5A - 4WD ECM	13. –	–
2. R	TPMS 7.5A - Tire Pressure Monitoring Module	14. Gr/O	MODULE 2 10A - Electro Chromic Mirror
3. –	–	15. –	–
4. W	BCM - Turn/Hazard Lamp Output (RL)	16. P	BCM - Turn/Hazard Lamp Output (RR)
5. –	–	17. –	–
6. Gr	BCM - Turn/Hazard Lamp Output (FL)	18. –	–
7. Y/B	BCM - Turn/Hazard Lamp Output (FR)	19. –	–
8. Y/B	IPS Control Module - Two Turn Unlock Relay	20. –	–
9. W	IPS Control Module - Head Lamp Low Switch	21. –	–
10. –	–	22. –	–
11. –	–	23. –	–
12. O	MODULE 4 10A - A/C Control Module, Cluster Ionizer, Sunroof Motor	24. G	HTD MIRR 7.5A - Rear Defogger Switch
		25. R/O	IPS 3 - Illuminations
		26. –	–
		27. W	MODULE 2 10A - PDM
		28. G	MODULE 2 10A - BCM

I/P-G I/P Junction Box

- 32 Female / White (AMP_025_32F_W)



1. –	–	17. –	–
2. Gr/O	CLUSTER 10A - Instrument Cluster (IND.), Console Switch	18. –	–
3. –	–	19. Gr	CLUSTER 10A - Audio
4. –	–	20. –	–
5. R/B	SMART KEY 10A - Fob Holder	21. W/B	SMART KEY 10A - Key Solenoid
6. –	–	22. R/O	SMART KEY 10A - PDM
7. L	SMART KEY 10A - Start Stop Button Switch	23. G	CLUSTER 10A - A/V & Navigation Head Module
8. G	Charge IND., ALT (L)	24. G	BCM, ALT (L)
9. Gr/O	MODULE 1 10A - Tire Pressure Monitoring Module	25. Gr	MODULE 1 10A - ESC Off Switch, DBC Switch, ICM Relay Box (DBC Relay)
10. R	MODULE 1 10A - EPS Control Module	26. Br/O	MODULE 1 10A - Multifunction Switch (Turn Signal Lamp Switch)
11. –	–	27. L/O	A/BAG IND 10A - Instrument Cluster (Air Bag IND.)
12. –	–	28. P	A/CON 7.5A - A/C Control Module
13. Br/B	Back-Up Lamp Relay - BCM, A/V & Navigation Head Module	29. L	Back-Up Lamp Relay - Electro Chromic Mirror
14. –	–	30. –	–
15. L/O	AUDIO 2 10A - A/V & Navigation Head Module	31. L/O	AUDIO 2 10A - Audio
16. L/O	AUDIO 2 10A - BCM, PDM	32. –	–

I/P-H I/P Junction Box

- 18 Female / White (AMP_0925_18F_W)



1. R	IPS Control Module - B-CAN (Low)	9. B	Ground (GM02)
2. Br	HAZARD 15A - ICM Relay Box (Flasher Sound Relay), BCM	10. –	–
		11. –	–
		12. –	–
3. Br	Module 7.5 - BCM, PDM, Smart Key Control Module	13. R	E/R Fuse & Relay Box (Blower Relay) - Blower Motor
		14. P	ON/START Input
4. R	PDM 15A - PDM	15. –	–
5. –	–	16. L	A/BAG 10A - SRS Control Module, Telltale Lamp
6. Br	DR LOCK 15A- ICM Relay Box (Two Turn Unlock Relay)	17. –	–
7. –	–	18. –	–
8. L	IPS Control Module - B-CAN (High)		

I/P-J I/P Junction Box

- 16 Female / White (AMP_0925_16F_W)

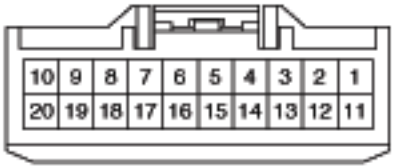




1. G ROOM LP 10A - Auto Light & Photo Sensor, Data Link Connector, Map Lamp, Room Lamp, Driver/Passenger Vanity Lamp, Electro Chromic Mirror
2. L POWER OUTLET 2 25A - Cigarette Lighter & Front Power Outlet
3. R S/HEATER FRT 15A - Console Switch
4. – –
5. Y WIPER FRT 25A - Multifunction Switch (Front Wiper)
6. – –
7. G ROOM LP 10A - Ignition Key ILL. & Door Warning Switch, A/C Control Module, RF Receiver, Instrument Cluster
8. R SUNROOF 15A - Sunroof Motor
9. G POWER OUTLET 1 15A - Cigarette Lighter & Front Power Outlet
10. – –
11. W ACC/ON Input
12. With Smart Key
    R START Input
    W/O Smart Key
    G START Input
13. L ON Input
14. R
    With A/V Navigation
    A/V Navigation Head Module
    W/O A/V Navigation
    Audio
15. L WIPER RR 15A - Multifunction Switch (Rear Wiper), ICM Relay Box (Rear Wiper Relay)
16. B Ground (GM01)

E/R-CHGA EMS Box

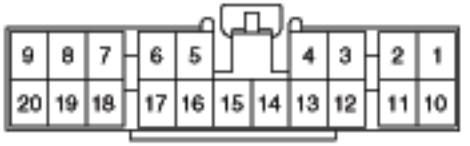
- 20 Female / White (AMP_090III_20F_W)



1. Y	A/C Compressor	11. –	–
2. Br	PCM (A/C Relay)	12. L	Injector #1
3. O	Injector #4	13. P	Injector #3
4. –	–	14. –	–
5. W	Ignition Coil #4	15. L/O	Injector #2
6. –	–	16. –	–
7. L	Ignition Coil #2	17. –	–
8. P	Ignition Coil #1	18. O	Condenser
9. G	Ignition Coil #3	19. –	–
10. –	–	20. W	PCM (Engine Control Relay 'ON' Input)

E/R-CHGK EMS Box

- 20 Female / White (KET_090III_20F_W)



1. L	Immobilizer Module	11. –	–
O/B	Canister Close Valve	12. W	Oil Control Valve #1/2
2. G	Camshaft Position Sensor #1/2, Canister Purge Control Solenoid Valve	13. –	–
		14. Gr	E/R Fuse & Relay Box - Engine Control Relay (C/Fan LO Relay)
3. Gr/B	Variable Intake Manifold Valve, Crankshaft Position Sensor	15. P	Oxygen Sensor (Up)
4. G	PCM (B+)	16. W/O SULEV	
5. W/O SULEV		O	Oxygen Sensor (Down)
O	Oxygen Sensor (Down)	17. G	PCM (Engine Control Relay 'ON' Input)
6. –	–	18. –	–
7. –	–	19. –	–
8. –	–	20. P	PCM (F/Pump Relay)
9. P	Fuel Pump Motor		
10. L	PCM (Engine Control Relay Control)		

E/R-EMS EMS Box

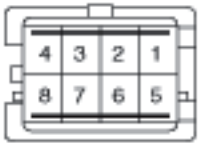
- 1 Female / N/A (CR01F070)



1. R	Multi Fuse - EMS 40A

JC01 Joint Connector

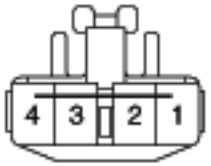
- 8 Female / Black (KET_070_08F_B_JCH)
- C-CAN Communication Line



1. O	Low - Data Link Connector	5. G	High - Data Link Connector
2. O	Low - PCM	6. G	High - PCM
3. O	Low - Multipurpose Check Connector	7. G	High - Multipurpose Check Connector
4. –	–	8. –	–

JC02 Joint Connector

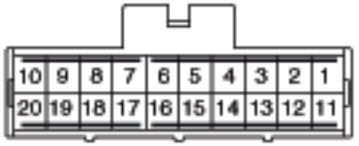
- 4 Female / White (KET_090II_04F_W)
- Stop Lamp



1. G	ICM Relay Box - DBC Relay	3. G/B	Smart Key Control Module
2. G	PCM	G	ESC Module
		4. G	Stop Lamp Switch

JM01 Joint Connector

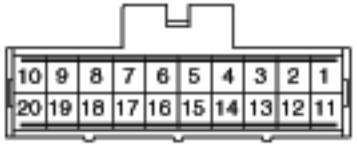
- 20 Female / Black (KET_090II_20F_B_JCH)
- B-CAN & C-CAN Communication Line



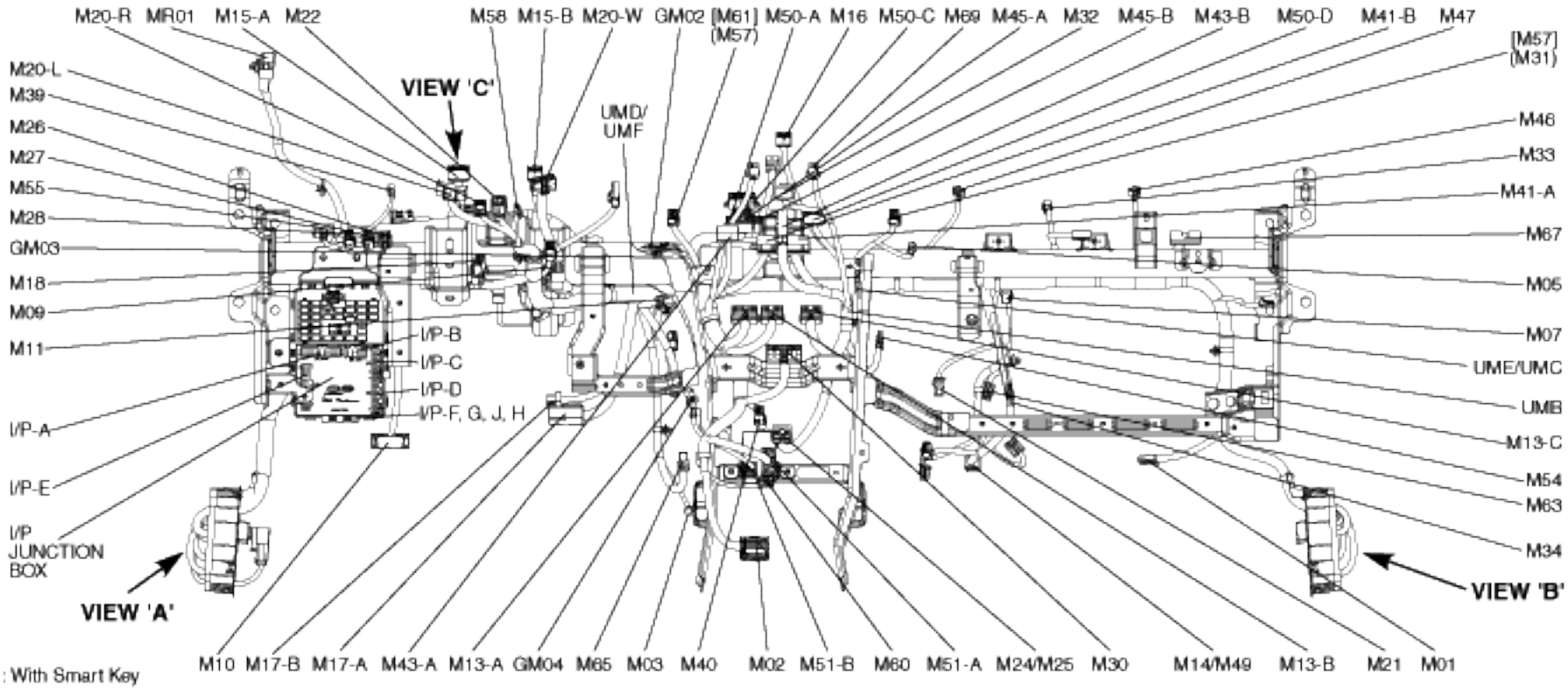
1. O	C-CAN (Low) - A/C Control Module, Tire Pressure Monitoring Module	11. G	C-CAN (High) - A/C Control Module, Tire Pressure Monitoring Module
2. O	C-CAN (Low) - 4WD ECM, Data Link Connector	12. G	C-CAN (High) - 4WD ECM, Data Link Connector
3. O	C-CAN (Low) - Instrument Cluster, EPS Control Module	13. G	C-CAN (High) - Instrument Cluster, EPS Control Module
4. –	–	14. –	–
5. O	C-CAN (Low) - SRS Control Module	15. G	C-CAN (High) - SRS Control Module
6. O	C-CAN (Low) - PCM ESC Module, PODS, Multipurpose Check Connector	16. G	C-CAN (High) - PCM ESC Module, PODS, Multipurpose Check Connector
7. –	–	17. –	–
8. R	B-CAN (Low) - Instrument Cluster	18. L	B-CAN (High) - Instrument Cluster
9. R	B-CAN (Low) - PDM, Smart Key Control Module	19. L	B-CAN (High) - PDM, Smart Key Control Module
10. R	B-CAN (Low) - IPS Control Module, BCM	20. L	B-CAN (High) - IPS Control Module, BCM

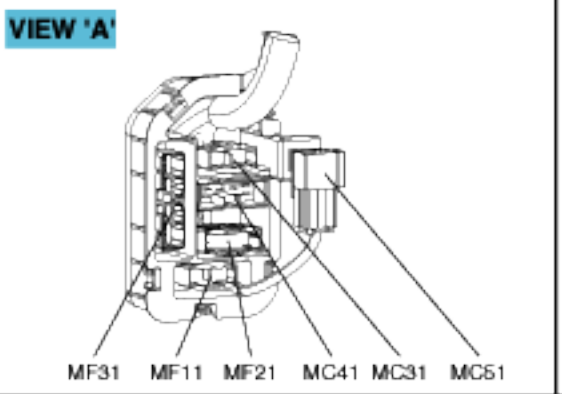
JM02 Joint Connector

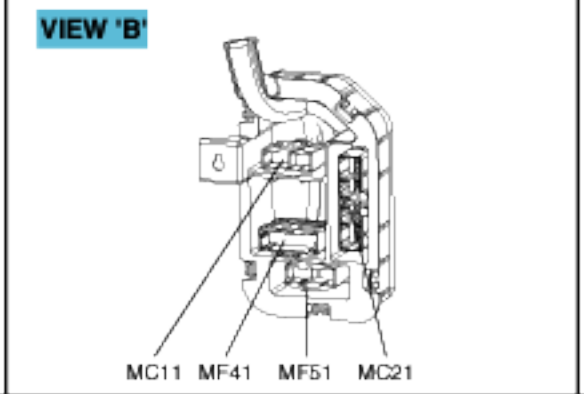
- 20 Female / Black (KET_090II_20F_B_JCH)
- Pin No. 1 ~ 10 : Rheostat ILL. (-) or Ground (GM01)
- Pin No. 11 ~ 20 : I/P Junction Box (IPS 3 Control)

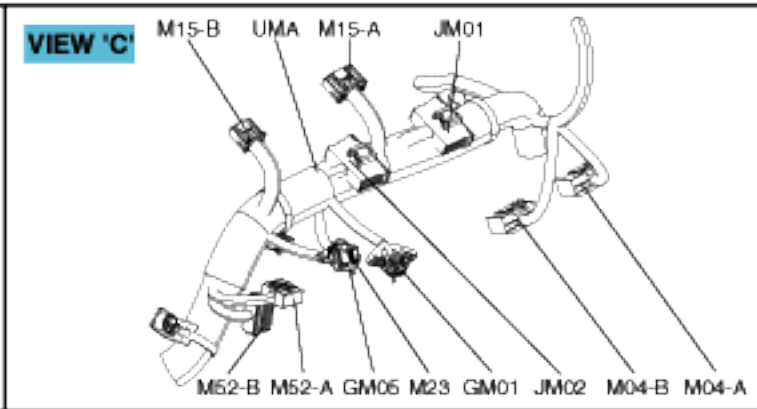


1. L/O ATM Shift Lever ILL.
   With Rheostat
   L/O ILL. (-)
   W/O Rheostat
   B Ground (GM01)
2. L/O Instrument Cluster,
   With A/V Navigation
   A/V Navigation Head Module
   W/O A/V Navigation
   Audio
3. L/O A/C Control Module
4. L/O ESC Off Switch, Hazard Switch
5. L/O Console Switch
6. L/O Multifunction Switch (Remote Control)
7. L/O DBC Switch
8. L/O 4WD Lock Switch, Start Stop Button Switch
9. L/O Front Wiper Deicer Switch, Rear Defogger Switch
10. – –
11. R/O I/P Junction Box (IPS 3), A/C Control Module
12. R/O ATM Shift Lever ILL.,
    With A/V Navigation
    A/V Navigation Head Module
    W/O A/V Navigation
    Audio
13. R/O AUX & USB Jack, Glove Box Lamp
14. R/O DBC Switch, ESC Off Switch
15. R/O 4WD Lock Switch
16. R/O Instrument Cluster
17. R/O Multifunction Switch (Remote Control), Cigarette Lighter & Front Power Outlet
18. R/O Hazard Switch, Rheostat
19. R/O Console Switch
20. R/O Front Wiper Deicer Switch, Rear Defogger Switch


M20-R MR01 M15-A M22
M58 M15-B M20-W GM02 [M61] (M57) M50-A M16 M50-C M69 M45-A M32 M45-B M43-B M50-D M41-B M47
[M57] (M31)
M20-L
M39
M26
M27
M55
M28
GM03
M18
M09
M11
I/P-A
I/P-E
I/P JUNCTION BOX
VIEW 'A'
VIEW 'C'
UMD/ UMF
I/P-B
I/P-C
I/P-D
I/P-F, G, J, H
M46
M33
M41-A
M67
M05
M07
UME/UMC
UMB
M13-C
M54
M63
M34
VIEW 'B'
M10 M17-B M17-A M43-A M13-A GM04 M65 M03 M40 M02 M51-B M60 M51-A M24/M25 M30 M14/M49 M13-B M21 M01
[ ] : With Smart Key
( ) : W/O Smart Key

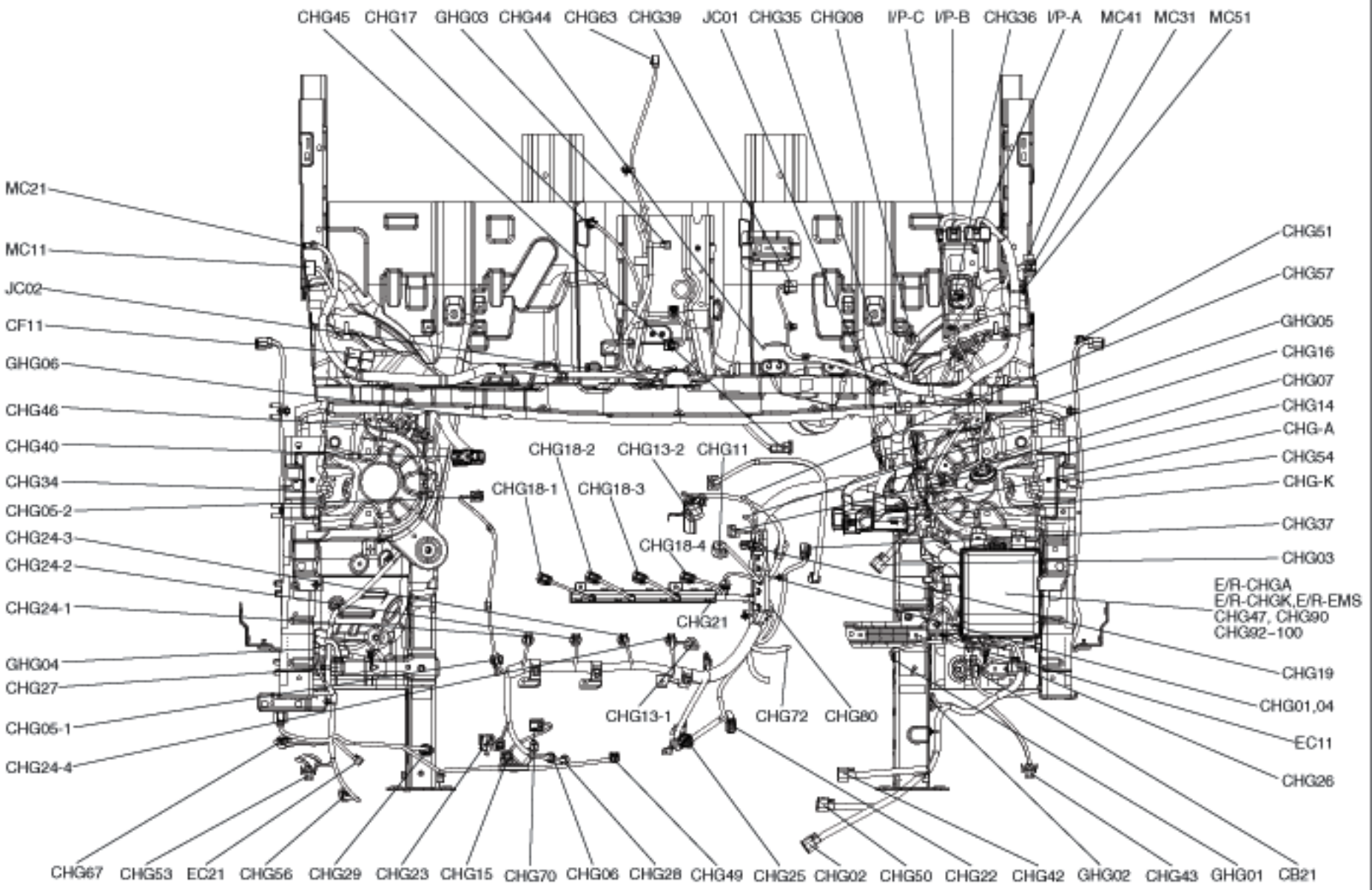

VIEW 'A'
MF31 MF11 MF21 MC41 MC31 MC51


VIEW 'B'
MC11 MF41 MF51 MC21


VIEW 'C'
M15-B UMA M15-A JM01
M52-B M52-A GM05 M23 GM01 JM02 M04-B M04-A

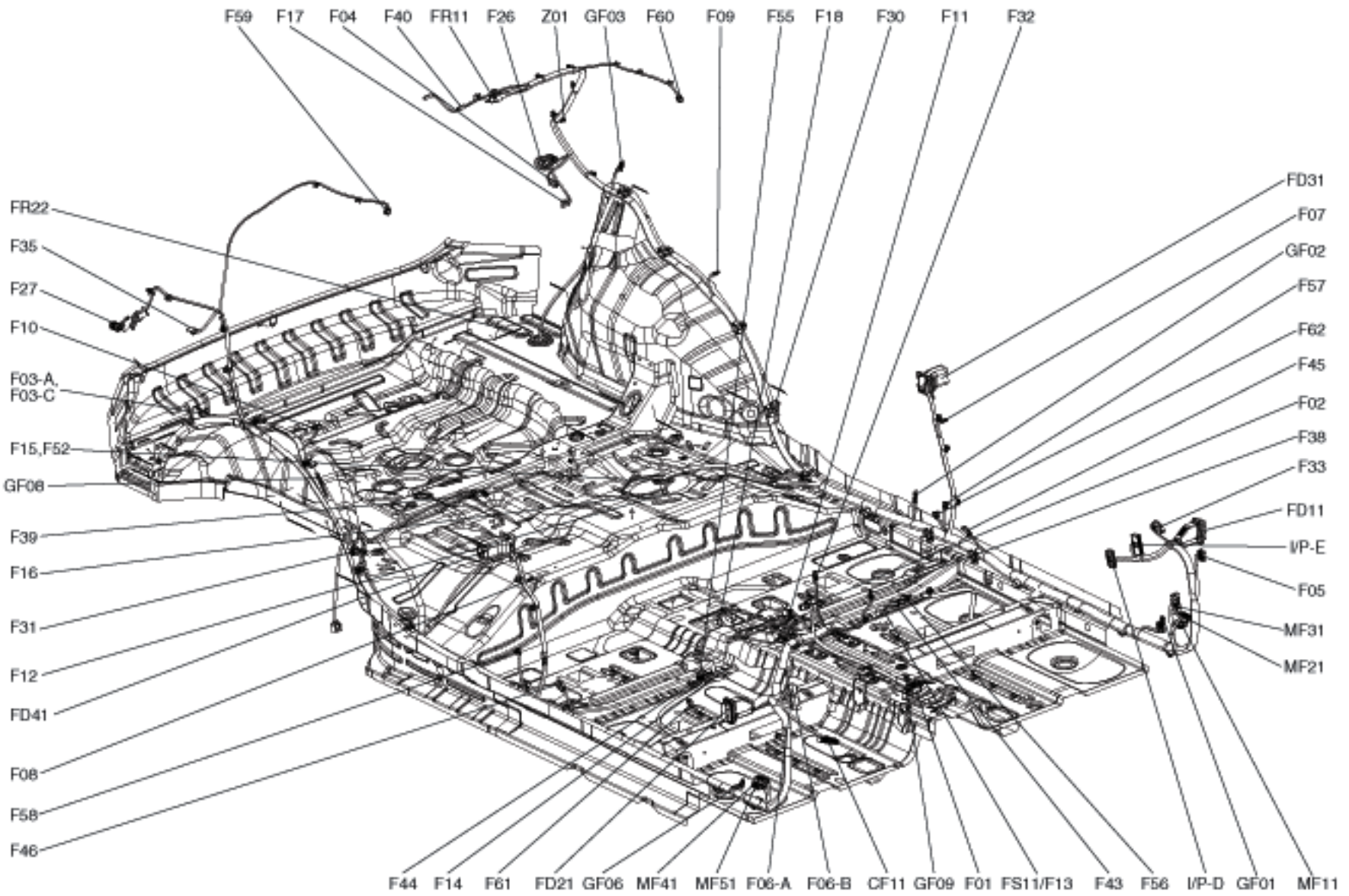
MAIN HARNESS

M01	Blower Motor
M02	SRS Control Module
M03	Evaporator Sensor
M04-A	ICM Relay Box
M04-B	ICM Relay Box
M05	Active Incar Sensor
M07	Intake Actuator
M09	Ignition Key ILL. & Door Warning Switch (W/O Smart Key)
M10	Data Link Connector
M11	Mode Actuator
M13-A	BCM
M13-B	BCM
M13-C	BCM
M14	FET(Field Effect Transistor)
M15-A	Instrument Cluster
M15-B	Instrument Cluster
M16	Auto Light & Photo Sensor
M17-A	EPS Control Module
M17-B	EPS Control Module
M18	Ignition Switch
M19	Key Solenoid (W/O Smart Key & A/T)
M20-L	Multifunction Switch (Light)
M20-W	Multifunction Switch (Wiper)
M20-R	Multifunction Switch (Remote Control)
M21	Cluster Ionizer (Auto A/C)
M22	Driver Air Bag
M23	Immobilizer Module (W/O Smart Key)
M24	AUX & USB Jack (Audio)
M25	AUX & USB Jack (A/V & Navigation Head)
M26	ESC Off Switch
M27	DBC Switch
M28	4WD Lock Switch
M30	Console Switch
M31	Front Wiper Deicer Switch
M32	Hazard Switch
M33	Glove Box Lamp
M34	Glove Box Lamp Switch
M39	ODO Trip Switch
M40	Cigarette Lighter & Front Power Outlet
M41-A	A/C Control Module (Auto A/C)
M41-B	A/C Control Module (Auto A/C)
M43-A	A/C Control Module (Manual A/C)
M43-B	A/C Control Module (Manual A/C)
M45-A	Audio
M45-B	Audio
M46	Passenger Air Bag #1
M47	Passenger Air Bag #2
M49	Blower Resistor
M50-A	A/V & Navigation Head Module
M50-C	A/V & Navigation Head Module
M50-D	A/V & Navigation Head Module
M51-A	PDM Relay Box (With Smart Key)
M51-B	PDM Relay Box (With Smart Key)
M52-A	PDM (With Smart Key)
M52-B	PDM (With Smart Key)
M54	RF Receiver (With Smart Key)
M55	Rheostat
M57	Rear Defogger Switch
M60	Smart Key Antenna #1
M61	Start Stop Button Switch (With Smart Key)
M63	Passenger Temperature Actuator
M65	Driver Temperature Actuator
M67	Tire Pressure Monitoring Module
M69	Telltale Lamp
JM01	Joint Connector
JM02	Joint Connector
I/P-F	Connection With I/P Junction Box
I/P-G	Connection With I/P Junction Box
I/P-H	Connection With I/P Junction Box
I/P-J	Connection With I/P Junction Box
MC11	Connection With Control Harness
MC21	Connection With Control Harness
MC31	Connection With Control Harness
MC41	Connection With Control Harness
MC51	Connection With Control Harness
MF11	Connection With Floor Harness
MF21	Connection With Floor Harness
MF31	Connection With Floor Harness
MF41	Connection With Floor Harness
MF51	Connection With Floor Harness
MR01	Connection With Roof Harness
GM01	Ground
GM02	Ground
GM03	Ground
GM04	Ground
GM05	Ground
UMA	Joint Point
UMB	Joint Point
UMC	Joint Point
UMD	Joint Point
UME	Joint Point
UMF	Joint Point


CHG45
CHG17
GHG03
CHG44
CHG63
CHG39
JC01
CHG35
CHG08
I/P-C
I/P-B
CHG36
I/P-A
MC41
MC31
MC51
MC21
MC11
JC02
CF11
GHG06
CHG46
CHG40
CHG34
CHG05-2
CHG24-3
CHG24-2
CHG24-1
GHG04
CHG27
CHG05-1
CHG24-4
CHG18-2
CHG13-2
CHG11
CHG18-1
CHG18-3
CHG18-4
CHG21
CHG13-1
CHG72
CHG80
CHG51
CHG57
GHG05
CHG16
CHG07
CHG14
CHG-A
CHG54
CHG-K
CHG37
CHG03
E/R-CHGA
E/R-CHGK,E/R-EMS
CHG47, CHG90
CHG92~100
CHG19
CHG01,04
EC11
CHG26
CHG67
CHG53
EC21
CHG56
CHG29
CHG23
CHG15
CHG70
CHG06
CHG28
CHG49
CHG25
CHG02
CHG50
CHG22
CHG42
GHG02
CHG43
GHG01
CB21

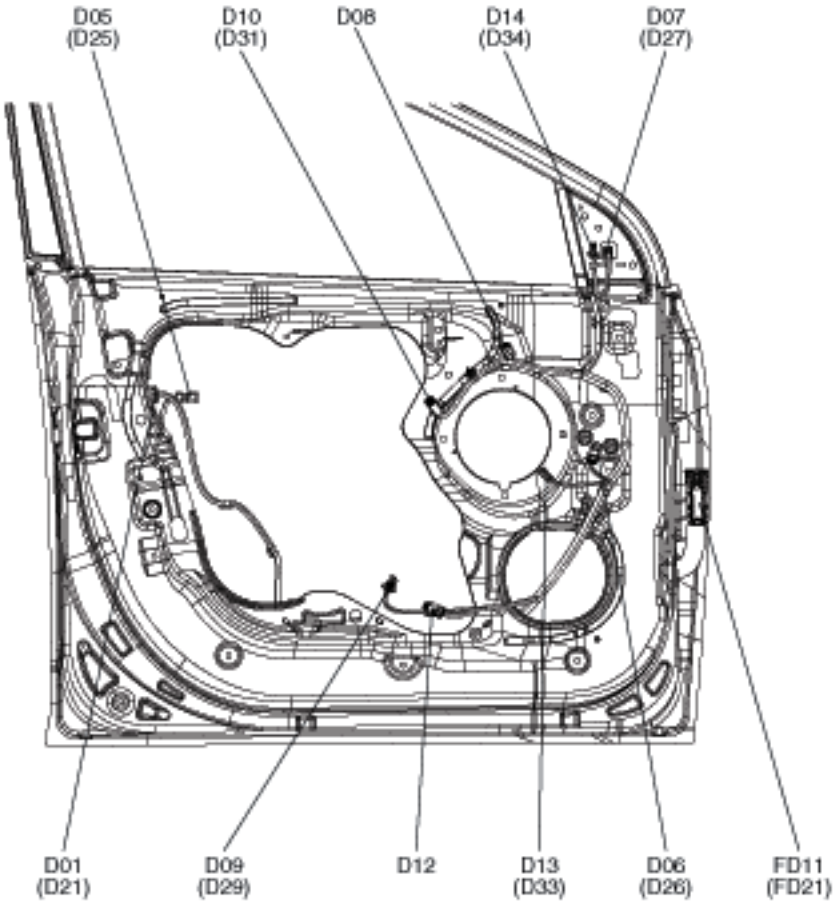
CONTROL HARNESS

CHG-A	PCM
CHG-K	PCM
CHG01	Transaxle Range Switch
CHG02	Ambient Sensor
CHG03	Battery Sensor
CHG04	ATM Solenoid Valve
CHG05-1	Oil Control Valve #1
CHG05-2	Oil Control Valve#2
CHG06	Alternator
CHG07	Front Wiper Motor
CHG08	Ignition Lock Switch (M/T)
CHG11	Engine Coolant Temperature Sensor
CHG13-1	Camshaft Position Sensor #1
CHG13-2	Camshaft Position Sensor #2
CHG14	Crankshaft Position Sensor
CHG15	Oil Pressure Switch
CHG16	Oxygen Sensor (Up)
CHG17	Oxygen Sensor (Down) (W/O SULEV)
CHG18-1	Ignition Coil #1
CHG18-2	Ignition Coil #2
CHG18-3	Ignition Coil #3
CHG18-4	Ignition Coil #4
CHG19	Condenser
CHG21	Canister Purge Control Solenoid Valve
CHG22	ETC Motor & Throttle Position Sensor
CHG23	Knock Sensor
CHG24-1	Injector #1
CHG24-2	Injector #2
CHG24-3	Injector #3
CHG24-4	Injector #4
CHG25	MAP Sensor
CHG26	Head Lamp RH
CHG27	Head Lamp RH
CHG28	A/C Compressor
CHG29	A/C Pressure Transducer
CHG34	Front Wheel Sensor RH
CHG35	Front Wiper Deicer
CHG36	Clutch Switch (M/T)
CHG37	Back-Up Lamp Switch (M/T)
CHG39	Stop Lamp Switch
CHG40	ESC Module
CHG42	Cooling Fan Motor
CHG43	Front Fog Lamp LH
CHG44	Accel Pedal Position Sensor
CHG45	Brake Fluid Level Sensor
CHG46	Burglar Alarm Horn
CHG47	Multipurpose Check Connector
CHG49	Hood Switch
CHG50	Horn
CHG51	External Buzzer
CHG53	Front Fog Lamp RH
CHG54	Front Wheel Sensor LH
CHG56	Rear Washer Motor
CHG57	Oxygen Sensor (Down) (With SULEV)
CHG63	ATM Shift Lever
CHG67	Front Washer Motor
CHG70	Variable Intake Manifold Valve
CHG72	Vehicle Speed Sensor (M/T)
CHG80	Variable Charge Motion Actuator
CHG90	Front Wiper (Low) Relay
CHG92	Cooling Fan (High) Relay
CHG93	Front Wiper Deicer Relay
CHG94	ATM P/N Relay
CHG95	Blower Relay
CHG96	Horn Relay
CHG97	Cooling Fan (Low) Relay
CHG98	Start Relay
CHG99	Burglar Alarm Horn Relay
CHG100	Rear Defogger Relay
JC01	Joint Connector
JC02	Joint Connector
I/P-A	Connection With I/P Junction Box
I/P-B	Connection With I/P Junction Box
I/P-C	Connection With I/P Junction Box
E/R-CHGA	EMS Box
E/R-CHGK	EMS Box
E/R-EMS	Connection With EMS Box
CB21	Connection With Battery Harness
CF11	Connection With Floor Harness
EC11	Connection With Front End Module Harness
EC21	Connection With Front End Module Harness
MC11	Connection With Main Harness
MC21	Connection With Main Harness
MC31	Connection With Main Harness
MC41	Connection With Main Harness
MC51	Connection With Main Harness
GHG01	Ground
GHG02	Ground
GHG03	Ground
GHG04	Ground
GHG05	Ground
GHG06	Ground


F59
F17
F04
F40
FR11
F26
Z01
GF03
F60
F09
F55
F18
F30
F11
F32
FR22
F35
F27
F10
F03-A,
F03-C
F15,F52
GF08
F39
F16
F31
F12
FD41
F08
F58
F46
FD31
F07
GF02
F57
F62
F45
F02
F38
F33
FD11
I/P-E
F05
MF31
MF21
F44
F14
F61
FD21
GF06
MF41
MF51
F06-A
F06-B
CF11
GF09
F01
FS11/F13
F43
F56
I/P-D
GF01
MF11

FLOOR HARNESS

F01	SRS Control Module
F02	Fob Holder (With Smart Key)
F03-A	AMP
F03-C	AMP
F04	Luggage Lamp
F05	4WD ECM
F06-A	Smart Key Control Module
F06-B	Smart Key Control Module
F07	Driver Door Switch
F08	Passenger Door Switch
F09	Rear Door Switch LH
F10	Rear Door Switch RH
F11	Smart Key Antenna #2
F12	Fuel Sender & Fuel Pump Motor
F13	Driver Seat Warmer
F14	Passenger Seat Warmer
F15	Canister Close Valve
F16	Fuel Tank Pressure Sensor
F17	Rear Power Outlet
F18	Yaw Rate Sensor
F26	Rear Combination Lamp (Out) LH
F27	Rear Combination Lamp (Out) RH
F30	Rear Wheel Sensor LH
F31	Rear Wheel Sensor RH
F32	Hand Parking Brake Switch(M/T)
F33	Foot Parking Brake Switch(A/T)
F35	Sub Woofer Speaker
F38	ATM Shift Lever Ill.
F39	Smart Key Antenna #3
F40	Roof Antenna
F43	Driver Side Air Bag
F44	Passenger Side Air Bag
F45	Rear Pressure Side Impact Sensor LH
F46	Rear Side Impact Sensor RH
F52	Electronic Magnetic Valve Clutch
F55	Passenger Seat Belt Buckle Switch
F56	Driver Seat Belt Buckle Switch
F57	Driver Seat Belt Pretensioner
F58	Passenger Seat Belt Pretensioner
F59	Passenger Curtain Air Bag
F60	Driver Curtain Air Bag
F61	Passenger Occupant Detection Sensor
F62	Belt Tension Sensor
CF11	Connection With Control Harness
FD11	Connection With Door Harness
FD21	Connection With Door Harness
FD31	Connection With Door Harness
FD41	Connection With Door Harness
FR11	Connection With Tail Gate Harness
FR22	Connection With Rear Bumper Harness
FS11	Connection With Driver Seat Harness
I/P-D	Connection With I/P Junction Box
I/P-E	Connection With I/P Junction Box
MF11	Connection With Main Harness
MF21	Connection With Main Harness
MF31	Connection With Main Harness
MF41	Connection With Main Harness
MF51	Connection With Main Harness
GF01	Ground
GF02	Ground
GF03	Ground
GF06	Ground
GF08	Ground
GF09	Ground
Z01	Diode
UFA	Joint Point
UFB	Joint Point



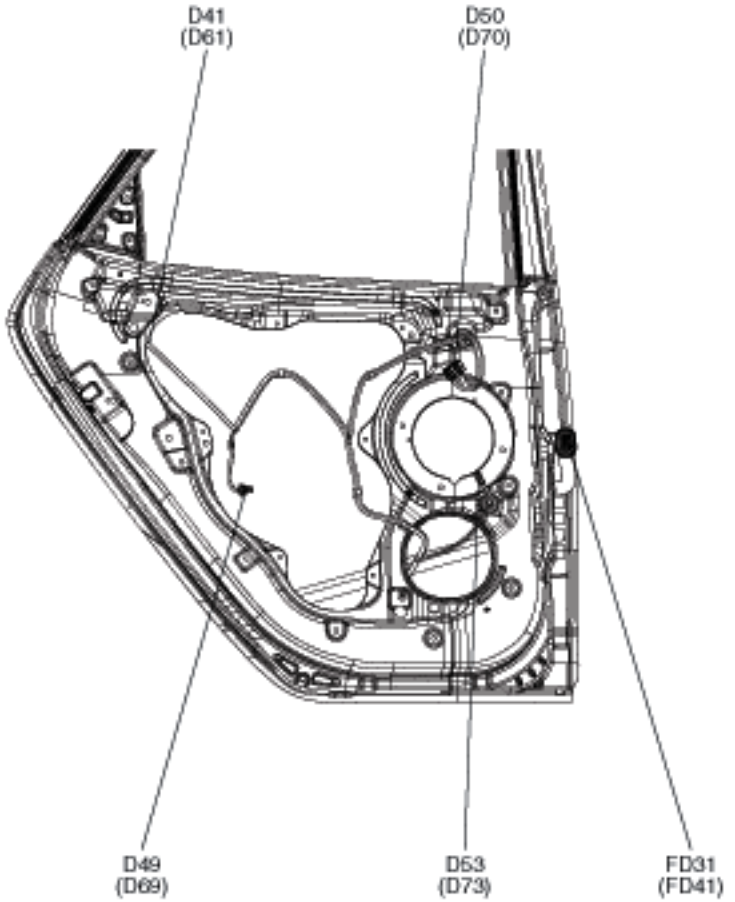
DRIVER DOOR HARNESS

D01	Driver Door Lock Actuator
D05	Driver Smart Key Outside Handle
D06	Driver Pressure Side Impact Sensor
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
D13	Driver Door Speaker
D14	Driver Door Tweeter Speaker
FD11	Connection With Floor Harness

PASSENGER DOOR HARNESS

D21	Passenger Door Lock Actuator
D25	Passenger Smart Key Outside Handle
D26	Passenger Pressure Side Impact Sensor
D27	Passenger Power Outside Mirror
D29	Passenger Power Window Motor
D31	Passenger Power Window Switch
D33	Passenger Door Speaker
D34	Passenger Door Tweeter Speaker
FD21	Connection With Floor Harness

( ) : Passenger



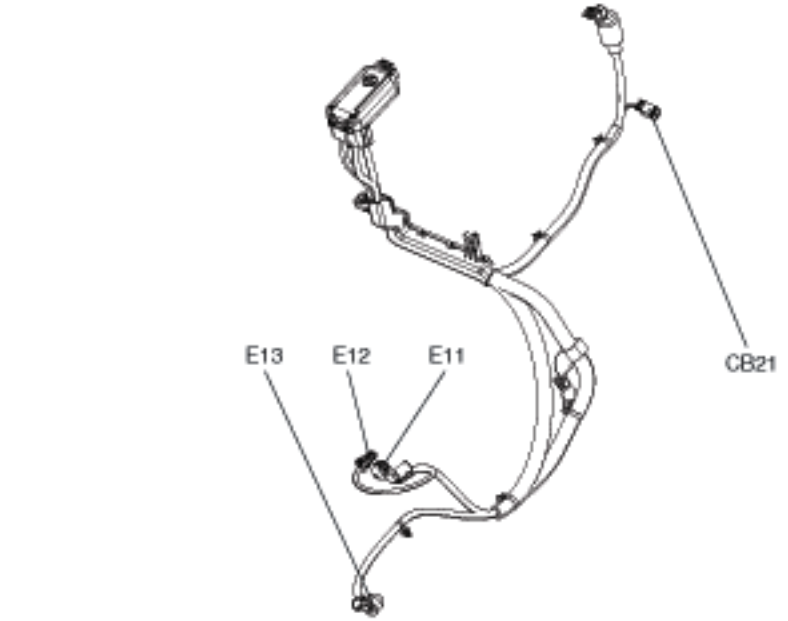
REAR DOOR LH HARNESS

D41	Rear Door Lock Actuator LH
D49	Rear Power Window Motor LH
D50	Rear Power Window Switch LH
D53	Rear Door Speaker LH
FD31	Connection with Floor harness

REAR DOOR RH HARNESS

D61	Rear Door Lock Actuator RH
D69	Rear Power Window Motor RH
D70	Rear Power Window Switch RH
D73	Rear Door Speaker RH
FD41	Connection with Floor harness

( ) : RH



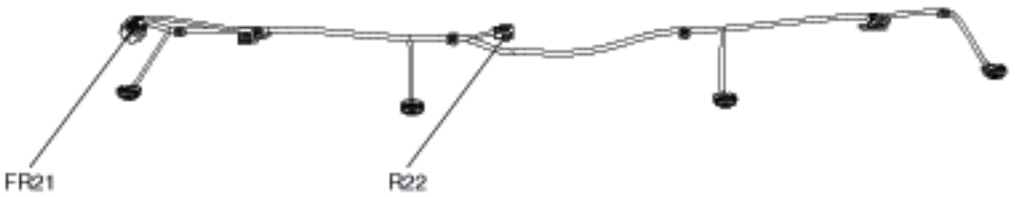
BATTERY HARNESS

E11	Start Motor
E12	Start Solenoid
E13	Alternator
CB21	Connection with Control harness



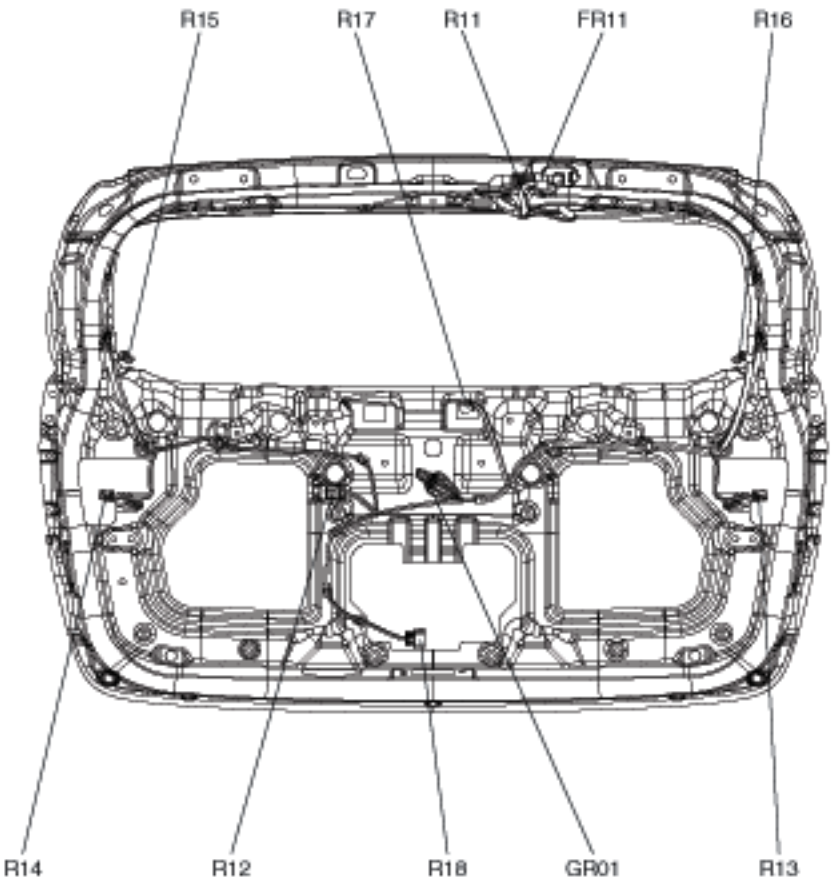
FRONT END MODULE HARNESS

E01	Driver Front Impact Sensor
E02	Passenger Front Impact Sensor
EC11	Connection with Control harness
EC21	Connection with Control harness



REAR BUMPER HARNESS

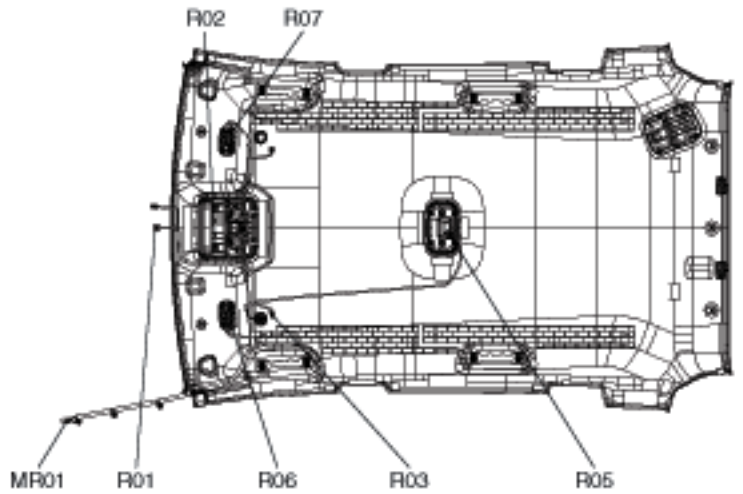
R22	Smart Key Bumper Antenna
FR22	Connection with FLOOR harness



TAIL GATE HARNESS

R11	High-Mounted Stop Lamp
R12	License Lamp (Rear View Camera, Tail Gate Handle Switch)
R13	Rear Combination Lamp (In) LH
R14	Rear Combination Lamp (In) RH
R15	Rear Defogger (-)
R16	Rear Defogger (+)
R17	Rear Wiper Motor
R18	Tail Gate Latch
FR11	Connection With Floor harness
GR01	Ground

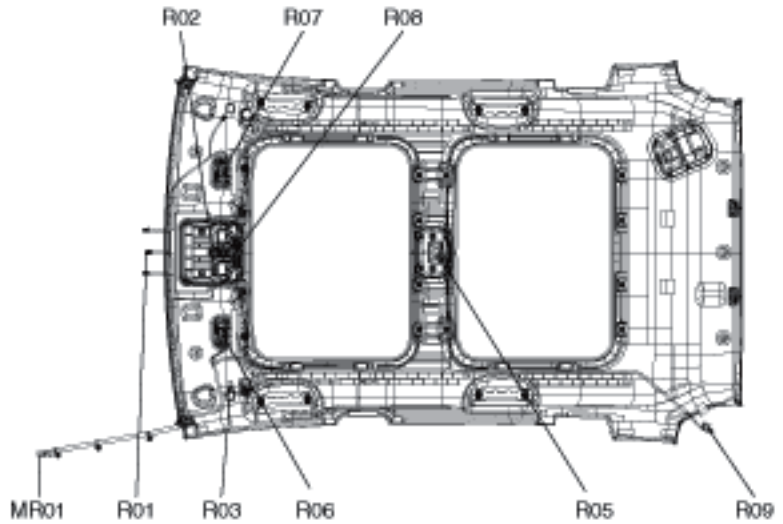
W/O Sunroof

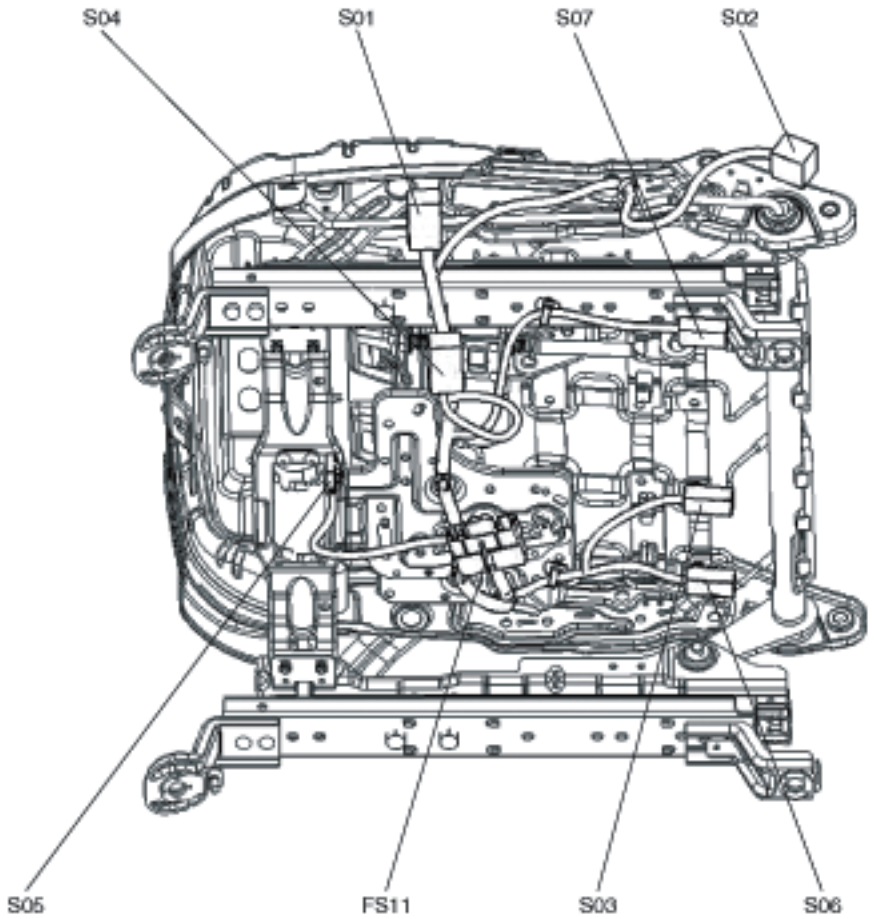


ROOF HARNESS

R01	Electro Chromic Mirror
R02	Map Lamp
R03	MIC
R05	Room Lamp
R06	Driver Vanity Lamp
R07	Passenger Vanity Lamp
R08	Sunroof Switch
R09	Sunroof Motor
MR01	Connection With Main Harness
URA	Joint Point
URB	Joint Point

With Sunroof





SEAT HARNESS

S01	Driver Seat Manual Switch
S02	Driver Reclining Limit Switch
S03	Driver Reclining Motor
S04	Front Height Motor
S05	Driver Slide Motor
S06	Driver Seat Warmer
S07	Driver Lumbar Support Switch
FS11	Connection With Floor Harness