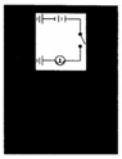
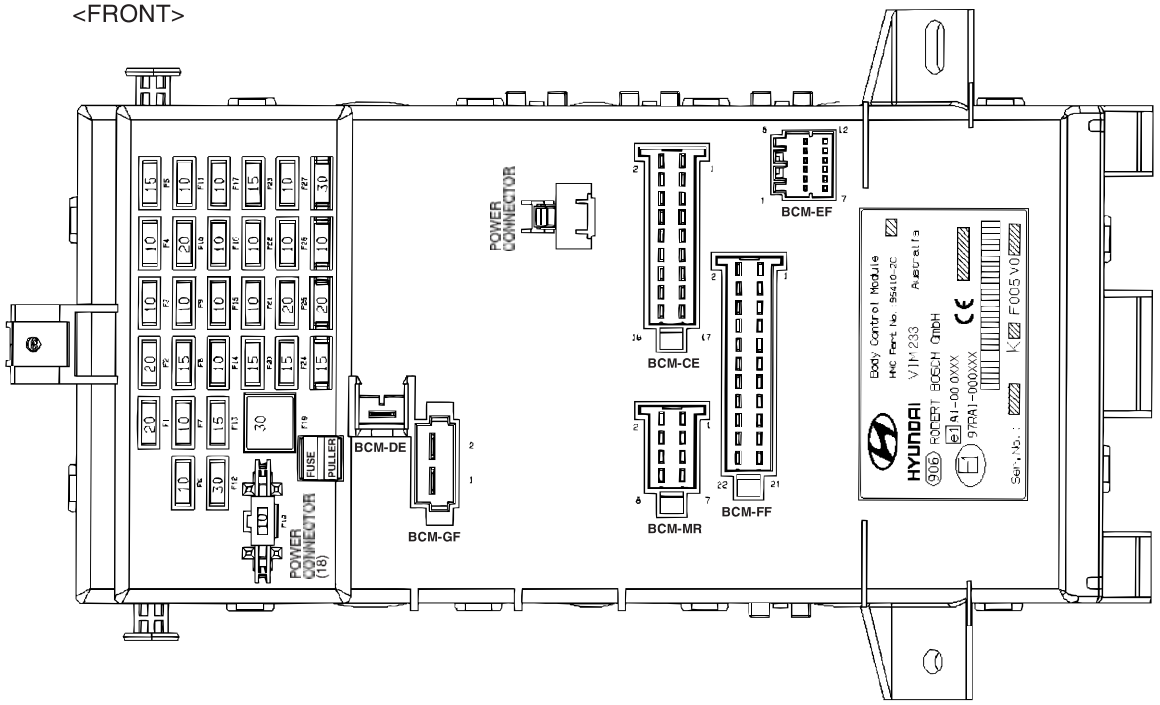
SCHEMATIC DIAGRAMS

AIR BAG SYSTEM (SRS) SD569-1
ANTI-LOCK BRAKE SYSTEM (ABS) SD588-1
AUDIO SYSTEM SD961-1
AUTO LIGHTS SD951-1
AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.0L) SD450-1
AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.7L) SD450-5
BACK-UP LAMPS SD926-1
BLOWER & A/C CONTROLS (AUTO) SD971-1
BLOWER & A/C CONTROLS (MANUAL) SD971-7
BODY CONTROL MODULE(BCM) SYSTEM SD950-1
BURGLAR ALARM HORN SYSTEM SD814-1
CHARGING SYSTEM SD373-1
COOLING SYSTEM SD253-1
COURTESY & LUGGAGE ROOM LAMPS SD929-1
CRUISE CONTROL SYSTEM SD964-1
DATA LINK DETAILS SD200-1
DAYTIME RUNNING LIGHTS SD958-1
DIGITAL CLOCK & CIGARETTE LIGHTER SD945-1
ELECTRO CHROME MIRROR SD851-1
ELECTRONIC STABILITY CONTROL(ESC) SYSTEM SD589-1
FRONT FOG LAMPS SD924-1
FRONT WIPER & WASHER SD981-1
FUSE & RELAY INFORMATION SD100-1
GROUND DISTRIBUTION SD130-1
HEAD LAMPS SD921-1
HORNS & TRUNK LID OPENER SD968-1
ILLUMINATIONS SD941-1
IMMOBILIZER CONTROL SYSTEM SD954-1
INDICATORS & GAUGES SD940-1
MFI CONTROL SYSTEM (2.0L) SD313-1
MFI CONTROL SYSTEM (2.7L) SD313-7
MULTI GAUGE UNIT SD944-1
PASSENGER COMPARTMENT FUSE DETAILS SD120-1
POWER DISTRIBUTION SD110-1
POWER DOOR LOCKS SD813-1
POWER OUTSIDE MIRRORS SD876-1
POWER WINDOWS SD824-1
REAR WINDOW & OUTSIDE MIRROR DEFOGGER SYSTEM SD879-1
REAR WIPER & WASHER SD982-1
SEAT WARMER SD889-1
STARTING SYSTEM SD360-1
STOP LAMPS SD927-1
SUNROOF SD816-1
TAIL, PARKING & LICENSE LAMPS SD928-1
TURN & HAZARD LAMPS SD925-1
VEHICLE SPEED SENSOR SD436-1



FUSE & RELAY INFORMATION (1) SD100-1

BODY CONTROL MODULE (BCM BOX)



N2GKG100A

FUSE & RELAY INFORMATION (2)

SD100-2

CIRCUIT		NO.	Amperages(A)	Circuit Protected
	FUSE	1	20A	Ignition coil (2.7L), Electronic chrome mirror
		2	20A	AMP
		3	10A	Back-up lamp switch, Transaxle range switch, Cruise control module, Stop lamp switch
		4	10A	Instrument cluster (A/BAG IND.)
		5	15A	SRS control module, Seat belt buckle switch
		6	10A	Mirror defogger
		7	10A	Hazard relay
		8	15A	Rear wiper motor, Rear intermittent wiper relay
		9	10A	Right tail lamps, Glove box lamp
		10	20A	Front wiper motor, Front wiper relay
		11	10A	Blower relay, Blower motor
		12	30A	Defogger relay
		13	15A	Stop lamp switch, Burglar alarm horn relay
		14	10A	Left tail lamps
		15	10A	A/C control module, Blower relay
		16	10A	ECM, Multi gauge unit, TCM, Vehicle speed sensor
		17	10A	Instrument cluster (Power), Pre-excitation resistor, DRL control module, Generator
		POWER CONNECTOR 18	10A	Room lamp, Clock, Audio, Data link connector, Multi gauge unit
		19	30A	Power window relay
		20	15A	Trunk lid switch
		21	10A	AQS sensor, Head lamp relay, DRL control module
		22	10A	-
		23	15A	Cigarette lighter, Outside mirror switch
		24	15A	Sunroof, Power door lock/ unlock relay
		25	20A	Seat warmer
		26	10A	ESC module, ABS control module
		27	10A	Audio, Digital clock

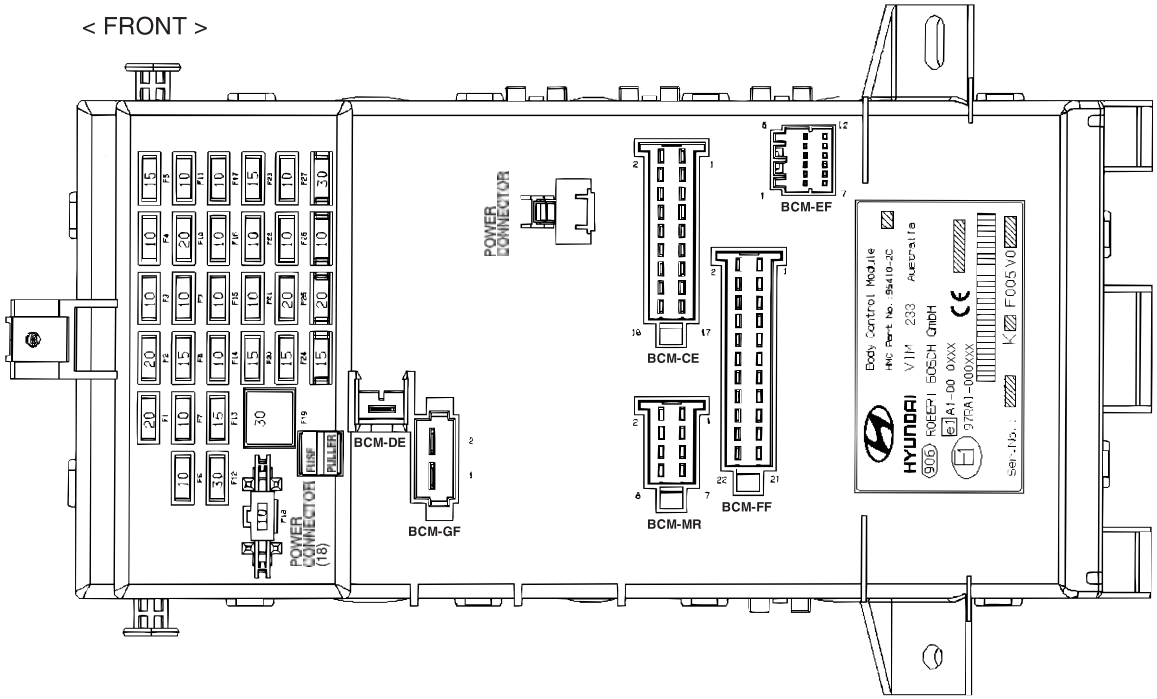
*** USE THE DESIGNATED FUSE ONLY**

N2GKG100B

FUSE & RELAY INFORMATION (3)

BODY CONTROL MODULE (BCM BOX)

< FRONT >



N2GKG100C

FUSE & RELAY INFORMATION (4)

CIRCUIT

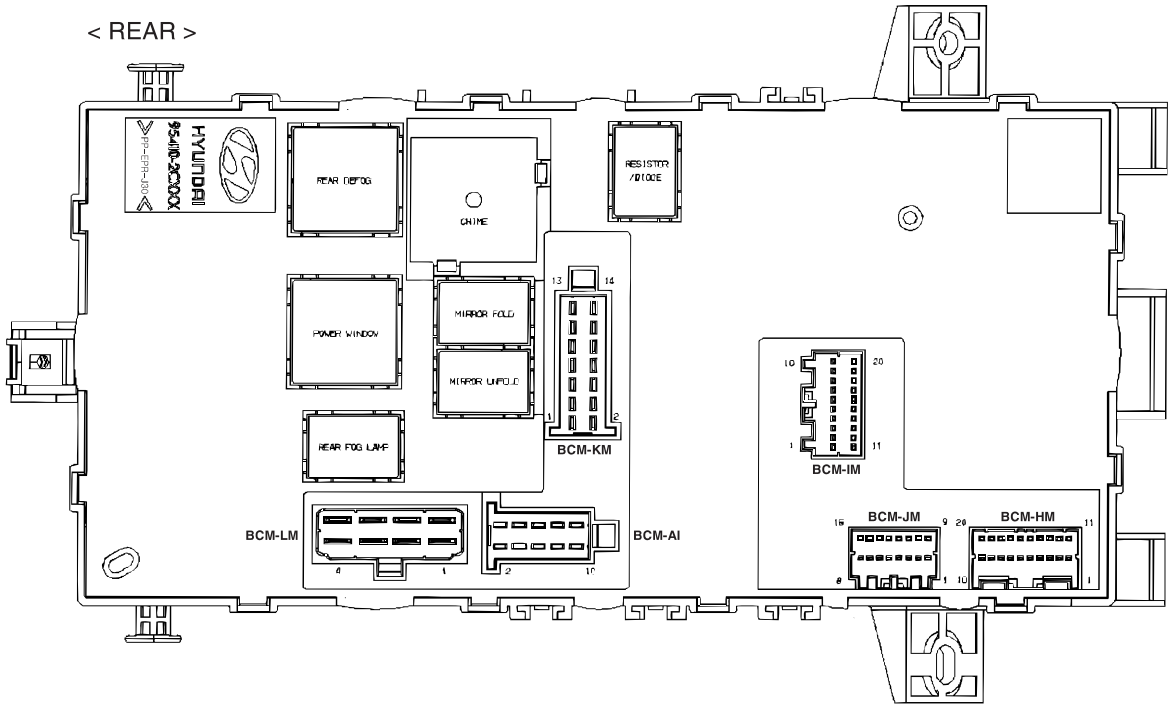
CONNECTOR NAME	PIN NO.	DESCRIPTION
BCM-CE	1	H/LP LOW BEAM
	2	DRL UNIT NO 12 (INT LP SOURCE)
	3	FR WIPER RLY
	4	FRT FOG RLY
	5	T/SIG FR
	6	DRL(TS)
	7	DRL UNIT (11)
	8	FR WIPER RLY-IG2
	9	T/SIG FL
	10	POSITION LP RH
	11	POSITION LP LH
	12	ABS, ESC (IG1)
	13	ALT 'L'
	14	IG2
	15	WIPER PARK OUTPUT
	16	WASHER MTR
	17	NC
	18	NC
BCM-DE	1	B+ 50A TAIL RLY
BCM-EF	1	ASS DR KEY UNLOCK SW
	2	T/GATE LOCK SW
	3	ASS DR LOCK SW
	4	ASS DR SW
	5	FOLDING SW
	6	T/GATE OPEN SW
	7	DRIVER DR KEY UNLOCK SW
	8	DRIVE DR LOCK SW
	9	DRIVE DR SW
	10	S/BELT SW
	11	NC
	12	NC

CONNECTOR NAME	PIN NO.	DESCRIPTION
BCM-FF	1	REAR FOG LAMP RLY
	2	BACK UP LP
	3	NC
	4	O S MIRR/NAVI
	5	TAIL LP RH
	6	DOOR LOCK FEED
	7	NC
	8	DOOR UNLOCK FEED
	9	NC
	10	TAIL LP LH
	11	4 DOOR SW
	12	MIRROR UNFOLD/ ASS DOOR UNLOCK FEED
	13	T/SIG RL
	14	NC
	15	LUGGAGE LP
	16	NC
	17	T/SIG RR
	18	AMP
	19	O/S MIRR HTR
	20	MIRROR FOLD
	21	RR WIPER MTR-IG2
	22	TAIL GATE OPEN SW
BCM-GF	1	RR HTD
	2	P/WDW SW
BCM-MR	1	S/ROOF-IG2
	2	ROOM LP B+
	3	ROOF LP DECAY CONTROL
	4	ECM
	5	NC
	6	S/ROOF & ROOM LP GND
	7	ECM(MIRROR)
	8	S/ROOF MTR (B+)

N2GKG100D

FUSE & RELAY INFORMATION (5)

BODY CONTROL MODULE (BCM BOX)



N2GKG100E

FUSE & RELAY INFORMATION (6)

CIRCUIT

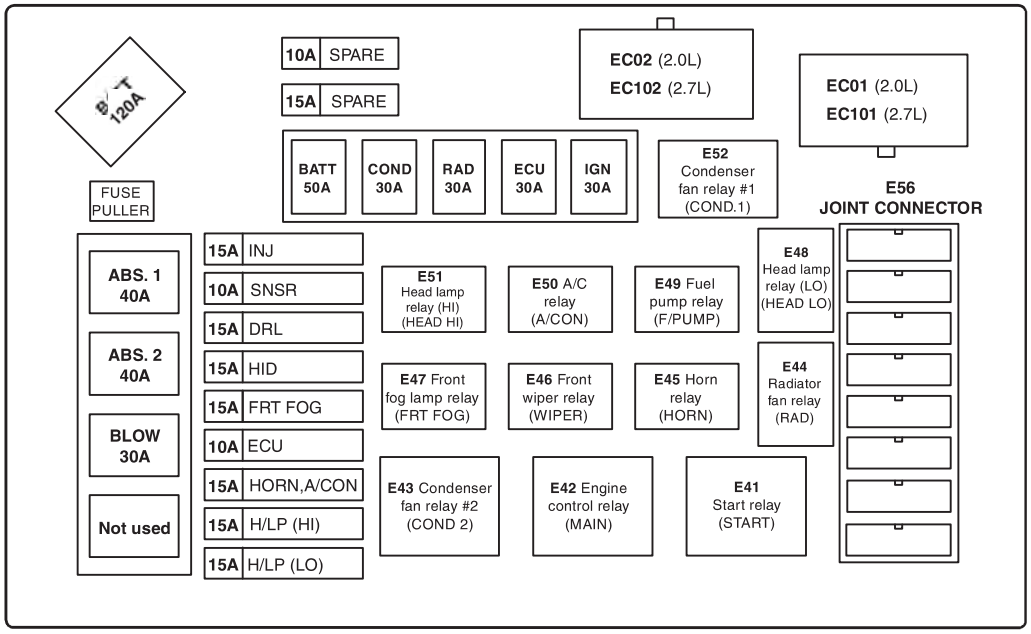
CONNECTOR NAME	PIN NO.	DESCRIPTION
BCM-AI	1	NC
	2	NC
	3	NC
	4	ESPS(IG1)
	5	SEAT BELT BUCKLE ASS
	6	SEAT BELT BUCKLE DRI
	7	CRASH SIG
	8	NC
	9	A/BAG(K-LINE)
	10	A/BAG WARN'G LAMP
BCM-HM	1	IMMO ANTENNA 1
	2	2 STAGE U_L GND
	3	T/SIG RIGHT SW
	4	DR WARN'G SW
	5	TAIL LP SW
	6	RR FOG SW
	7	CODE SAVE
	8	NC
	9	HOOD SW
	10	NC
	11	IMMO ANTENNA 2
	12	EXPORT GND
	13	T/SIG LEFT SW
	14	AUTO LIGHT SW
	15	NC
	16	H/LP SW
	17	FR FOG SW
	18	HAZARD SW
	19	RR DEFOG SW
	20	REAR FOG LAMP IND.
BCM-IM	1	A/CON SW
	2	CLUSTER BATT CHARGE
	3	NC
	4	ESC SW_IG1
	5	CLUSTER IG1
	6	CLUSTER IG1
	7	CLUSTER(T/SIG LP LH IND)
	8	ECU-IG1
	9	CLUSTER(T/SIG LP RH IND)
	10	RR HTD SW(FOR INDICATOR)
	11	CLUSTER(A/BAG IND)-IG1
	12	MUT-B+
	13	D/CLOCK-ACC
	14	IMMOBILIZER IND

CONNECTOR NAME	PIN NO.	DESCRIPTION
BCM-IM	15	EXT TAIL LAMP RH
	16	MUT(A/BAG K-LINE)
	17	A/CON MODULE-IG2
	18	A/LIGHT SNSR GND
	19	DIAGNOSIS & CODE SAVING
	20	IMMO W-LINE
BCM-JM	1	M/F INT T GND
	2	SIREN CONTROL
	3	KEY HOLE ILL.
	4	SPEED SIG
	5	ILL +
	6	CLUSTER(A/BAG WARN'G IND)
	7	DCT
	8	RR DR AJAR
	9	M/F INT
	10	M/F INT T
	11	A/LIGHT SIG
	12	S/BELT WARN'G IND
	13	OVER SPD GND(CLUSTER)
	14	NC
	15	A/LIGHT SUPPLY
	16	T/GATE OPEN IND
BCM-KM	1	CIGAR LIGHTER ACC
	2	WIPER LOW
	3	WIPER HIGH
	4	BACK-UP SW
	5	AUDIO-ACC
	6	M/F WASHER SW
	7	BACK UP SW
	8	START RELAY
	9	S/HTR IG2
	10	JOINT_MAIN_3 B+
	11	STOP(B+)
	12	IGN COIL
	13	NC
	14	WIPER PARK'G
BCM-LM	1	A/LIGHT GND
	2	NC
	3	BLR MTR
	4	IGN SW(IG1)
	5	GND2
	6	WIPER SW POWER
	7	IGN SW(ACC)
	8	IGN SW(IG2)

N2GKG100F

FUSE & RELAY INFORMATION (7)

E/R BOX



*** USE THE DESIGNATED FUSE ONLY**

N2GKG100G

FUSE & RELAY INFORMATION (8)

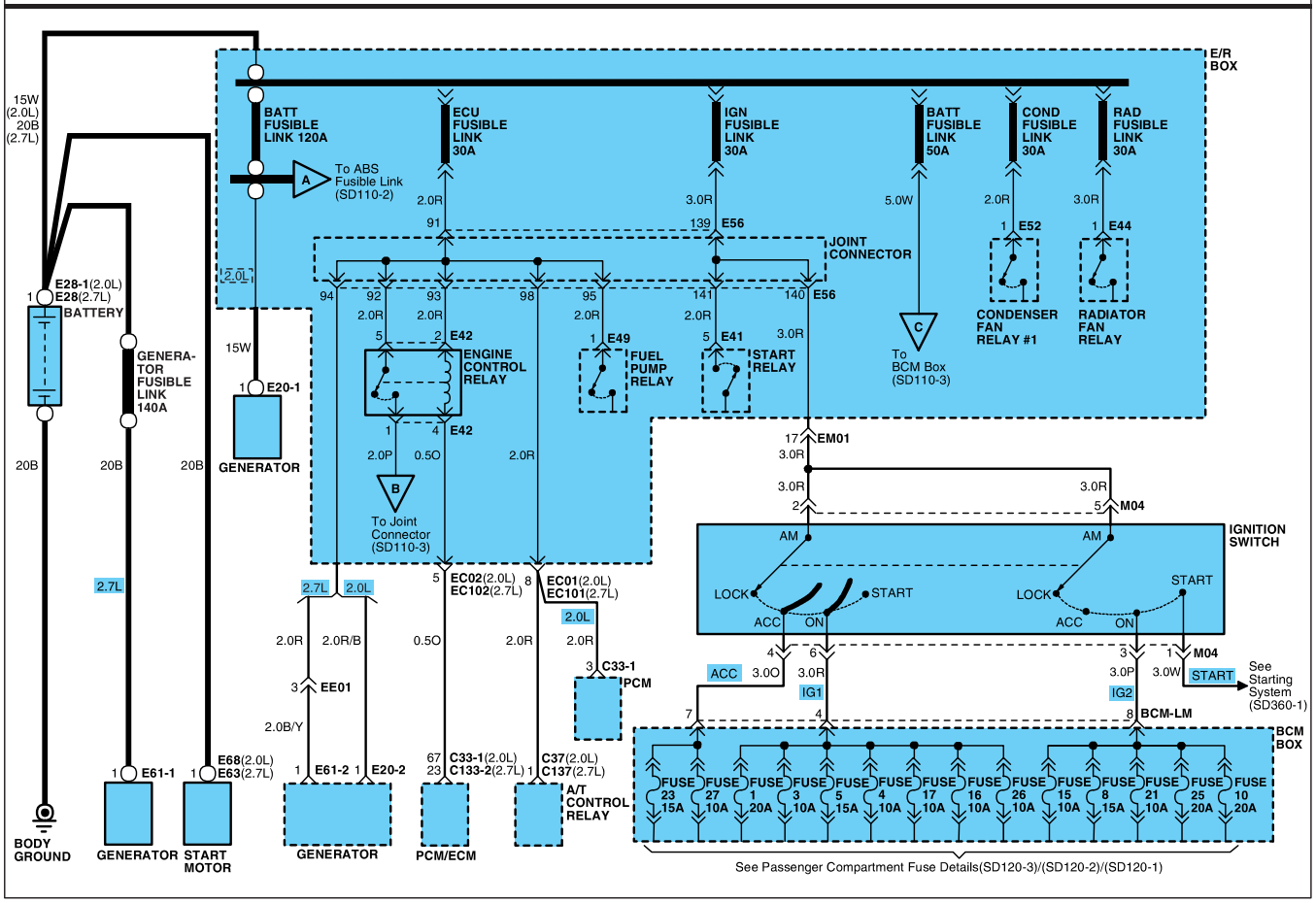
CIRCUIT

	NO.	Amperages(A)	Circuit Protected
FUSIBLE LINK	BATT	120A	Generator
	BATT	50A	BCM BOX (Tail lamp relay, Power connector, Fuse (2,7,12,13,19,20,24))
	COND	30A	Condenser fan relay
	RAD	30A	Radiator fan relay
	ECU	30A	Engine control relay, Fuel pump relay , A/T control relay, Generator, ECM (2.7L), PCM (2.0L)
	IGN	30A	Ignition switch, Start relay
	ABS. 1	40A	ABS control module, ESC module, ESC Air bleeding connector
	ABS. 2	40A	ABS control module, ESC module, ESC Air bleeding connector
	BLOW	30A	Blower relay
FUSE	INJ	15A	Injector
	SNSR	10A	Oxygen sensor, Camshaft position sensor, Crankshaft position sensor, Idle speed control actuator
	DRL	15A	DRL control module
	HID	15A	-
	FRT FOG	15A	Front fog lamp relay
	ECU	10A	TCM (2.7L), ECM (2.7L)
	HORN, A/CON	15A	Horn relay, A/C relay
	H/LP (HI)	15A	Head lamp relay (High)
	H/LP (LO)	15A	Head lamp relay (Low)

N2GKG100H

POWER DISTRIBUTION E05B6FF0

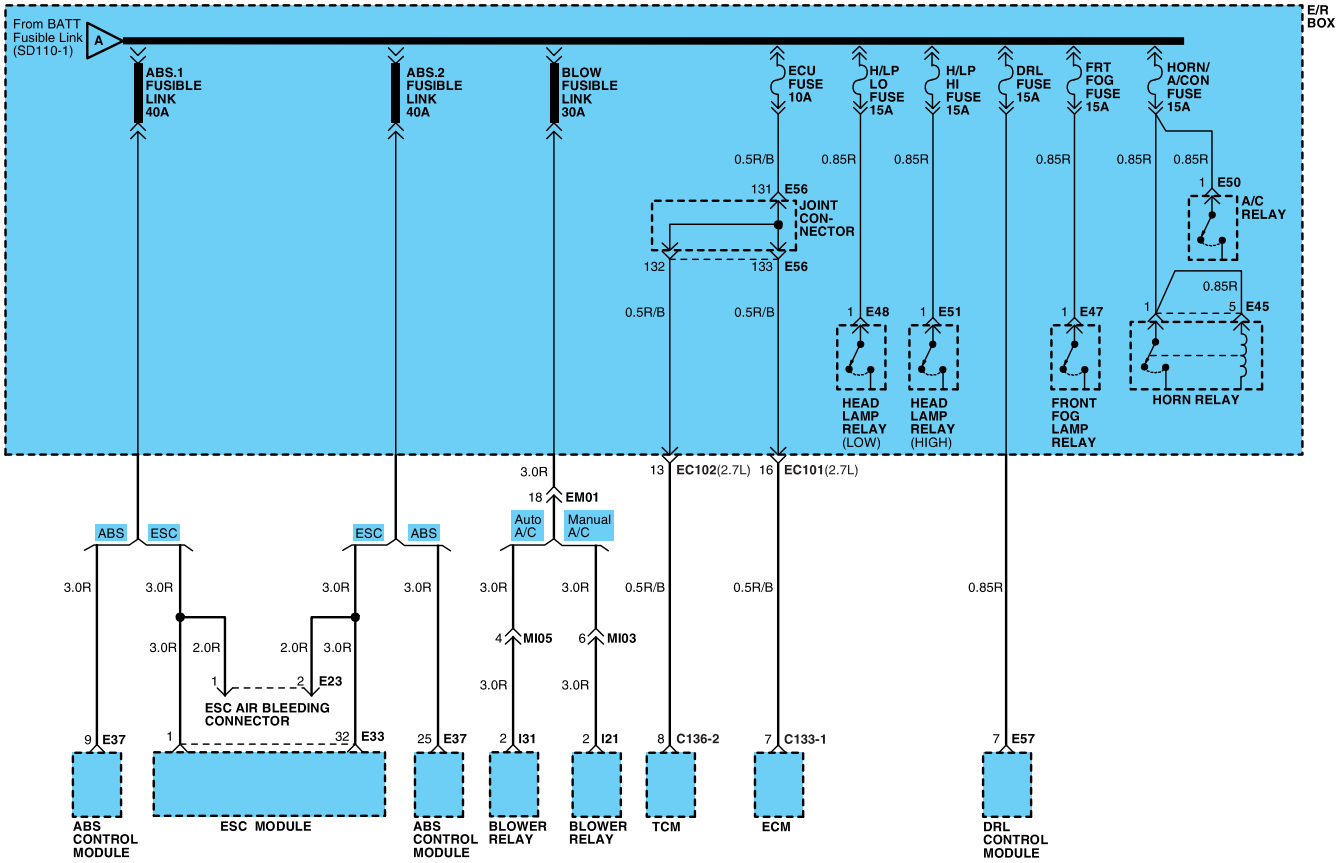
POWER DISTRIBUTION (1) SD110-1



N2GKG110A

POWER DISTRIBUTION (2)

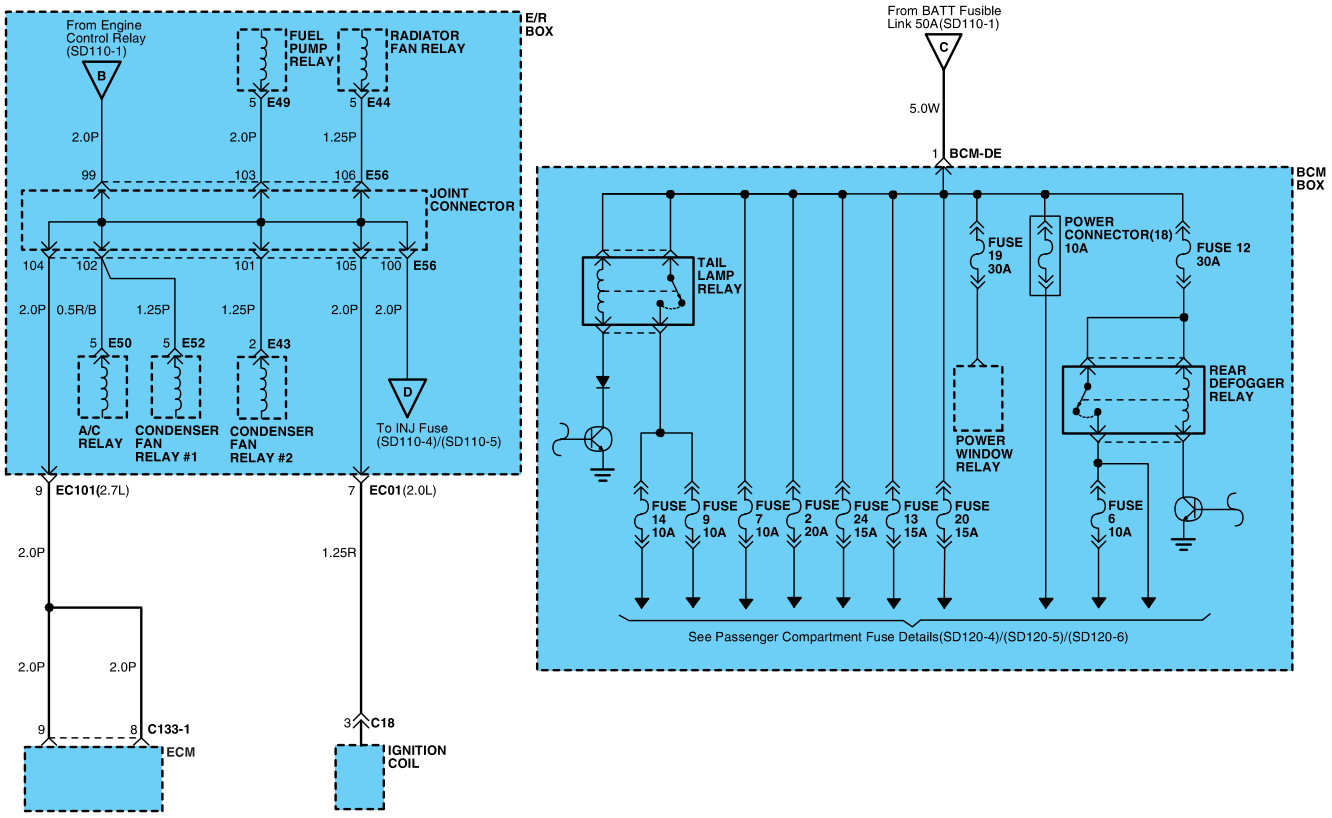
SD110-2



N2GKG110B

POWER DISTRIBUTION (3)

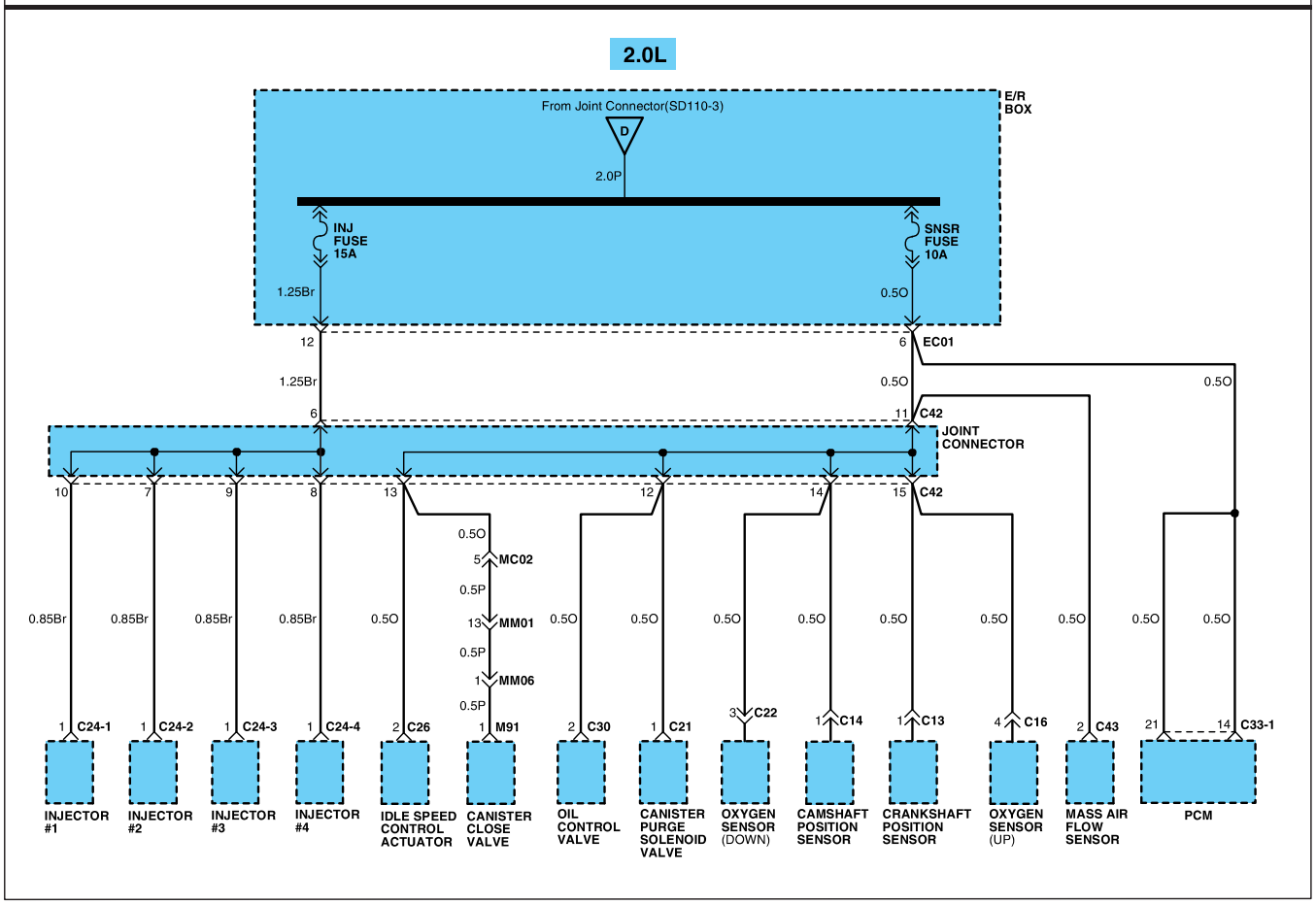
SD110-3



N2GKG110C

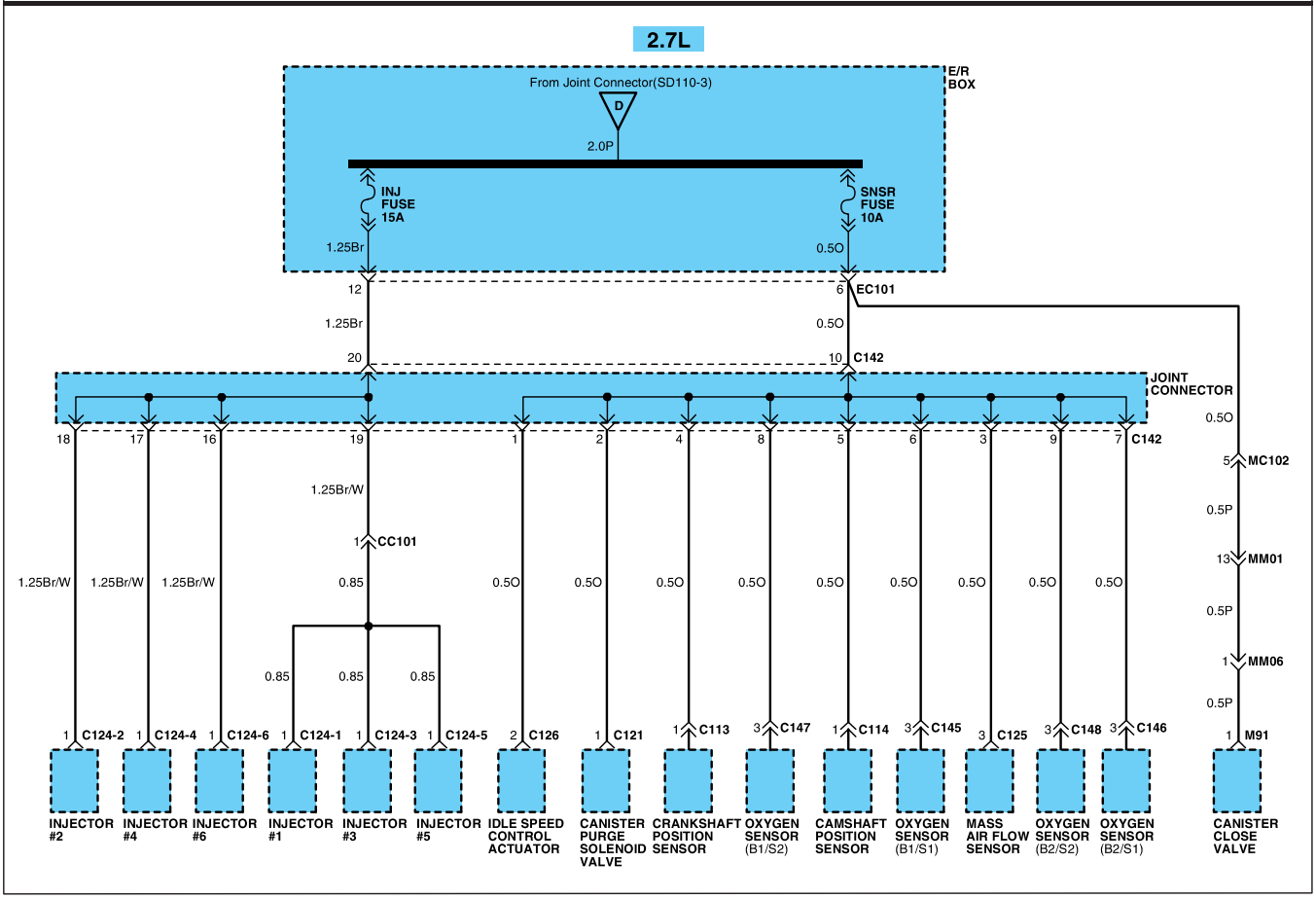
POWER DISTRIBUTION (4)

SD110-4



N2GKG110D

POWER DISTRIBUTION (5)



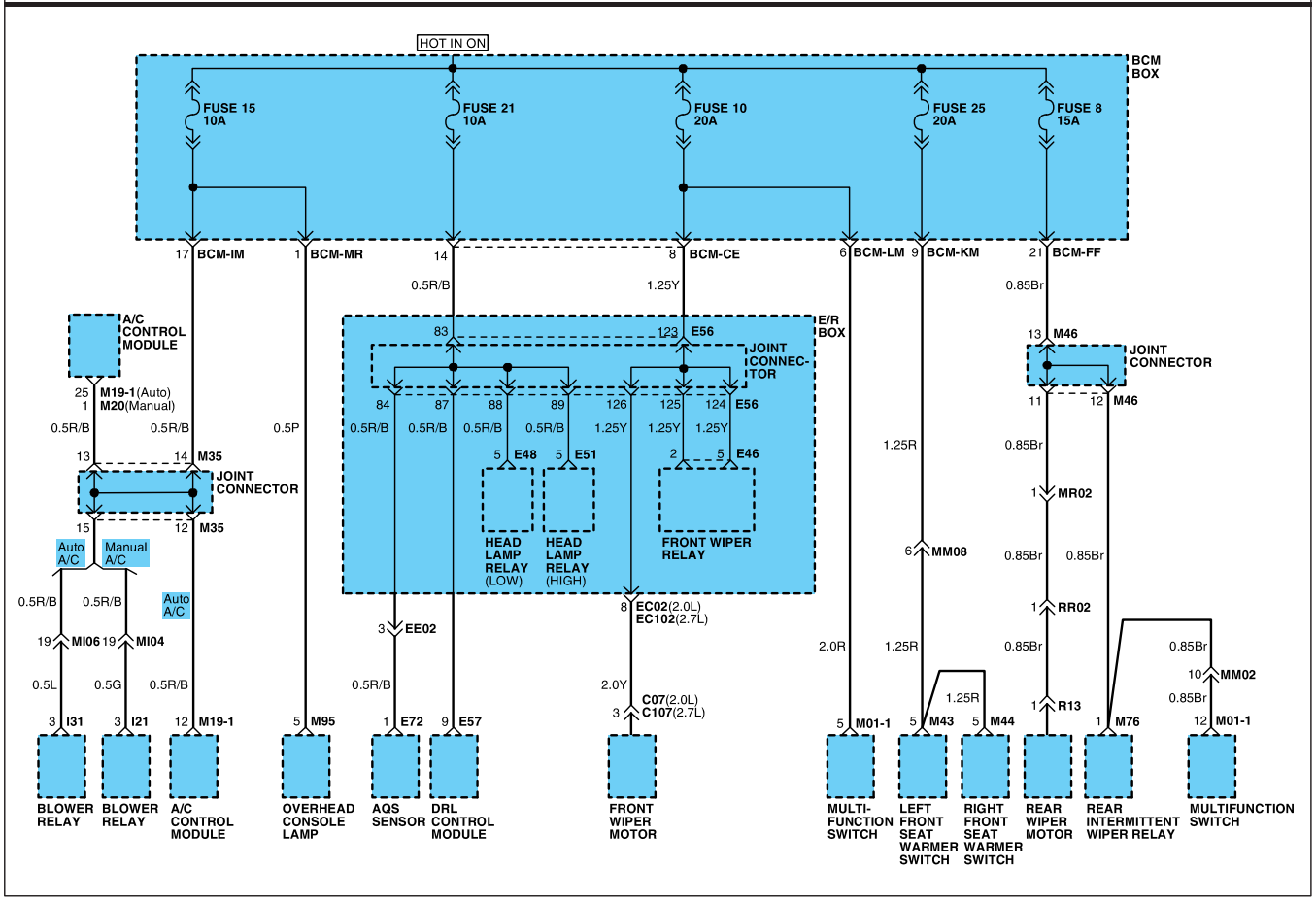
N2GKG110E

POWER DISTRIBUTION (6)

MEMO

PASSENGER COMPARTMENT FUSE DETAILS E128B8BA

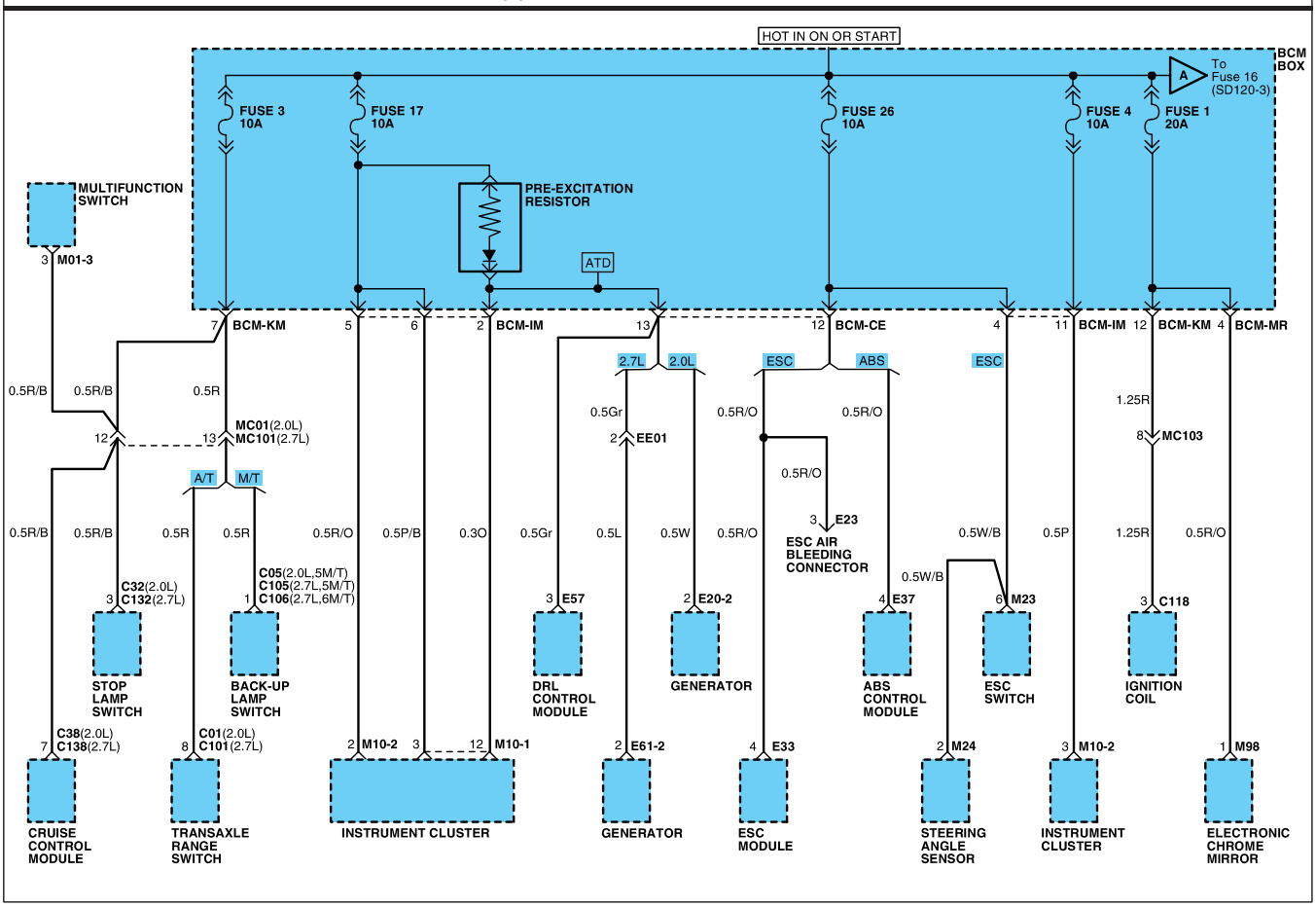
PASSENGER COMPARTMENT FUSE DETAILS (1) SD120-1



N2GKG120A

PASSENGER COMPARTMENT FUSE DETAILS

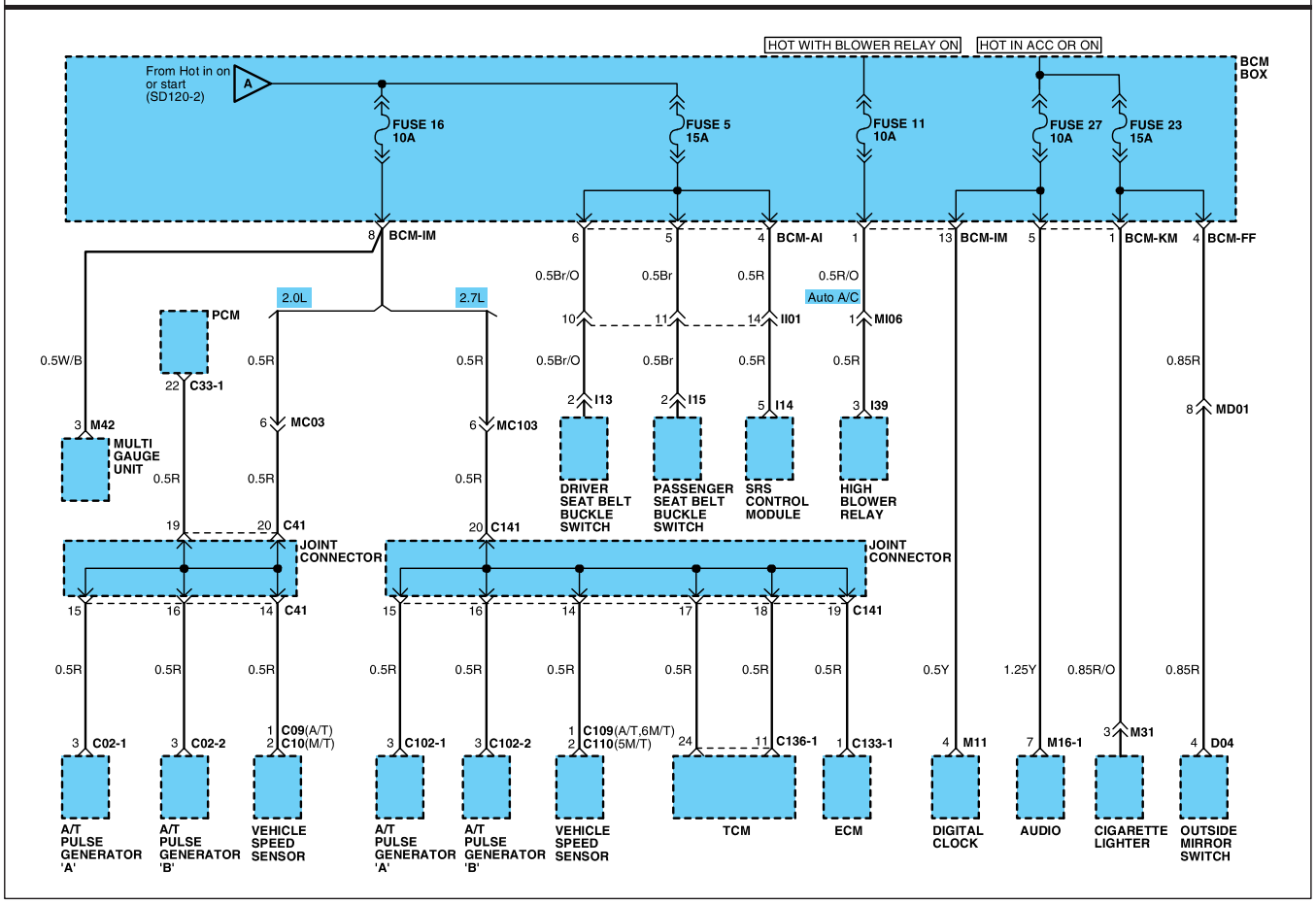
PASSENGER COMPARTMENT FUSE DETAILS (2) SD120-2



N2GKG120B

PASSENGER COMPARTMENT FUSE DETAILS (3)

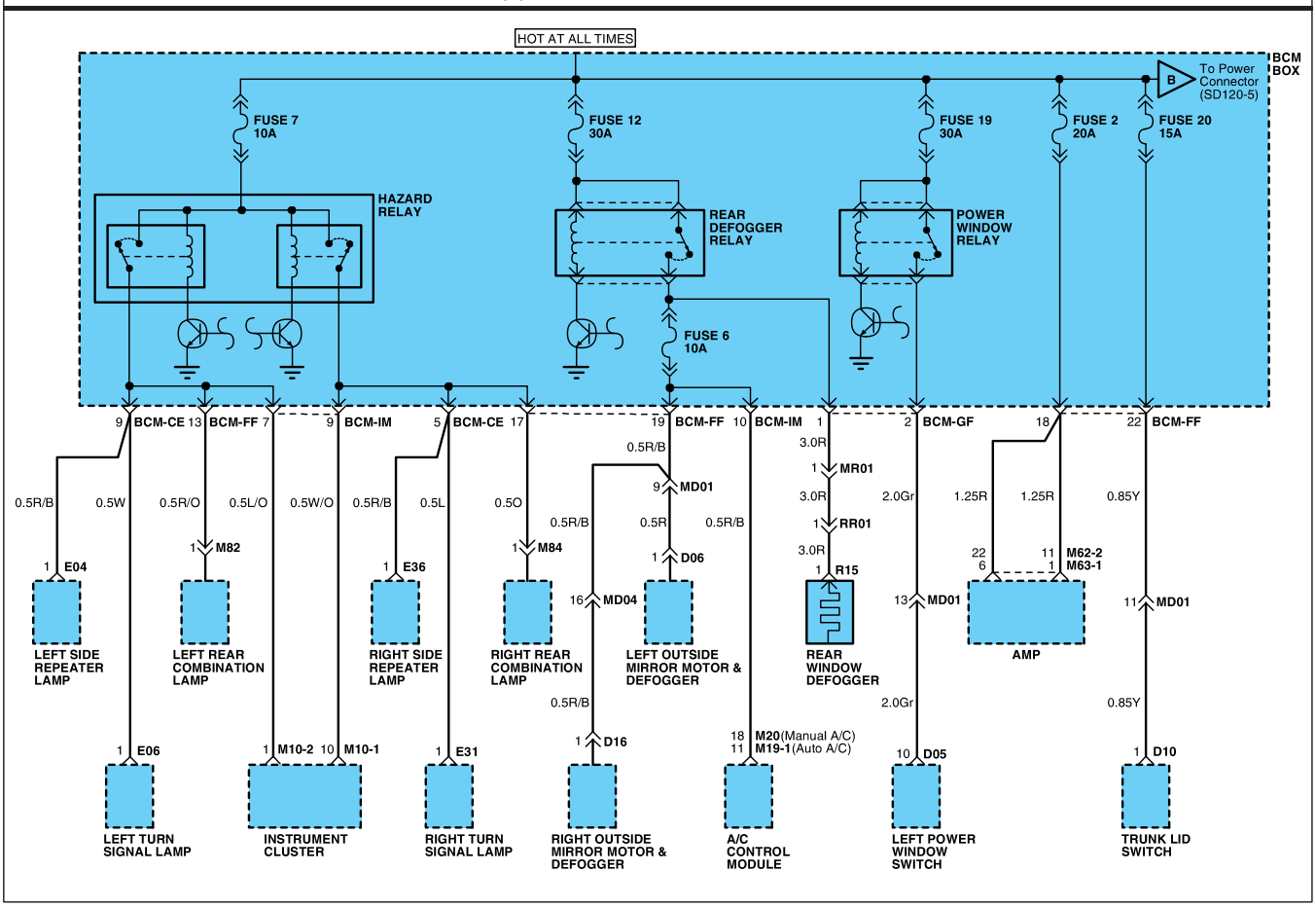
SD120-3



N2GKG120C

PASSENGER COMPARTMENT FUSE DETAILS (4)

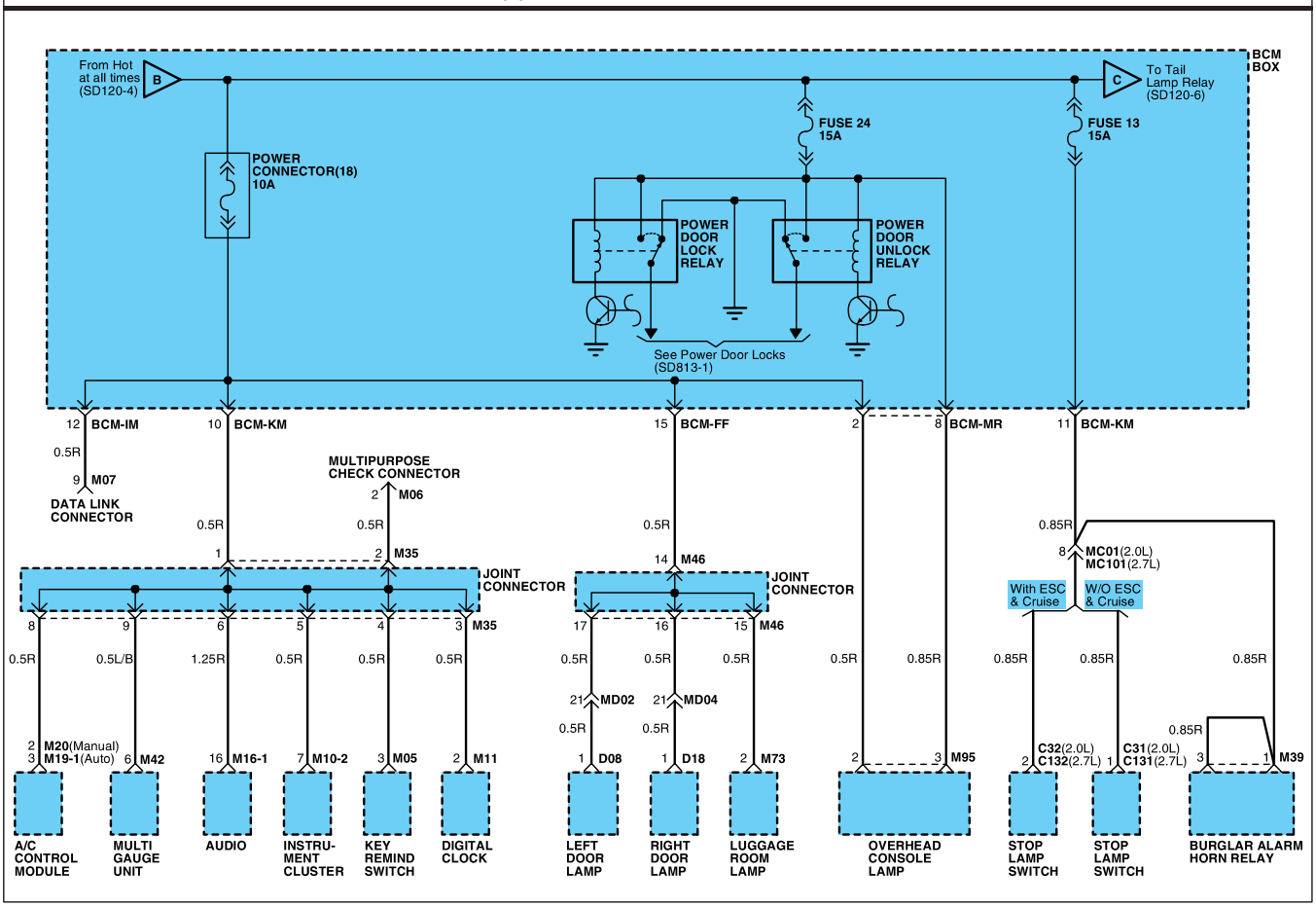
SD120-4



N2GKG120D

PASSENGER COMPARTMENT FUSE DETAILS (5)

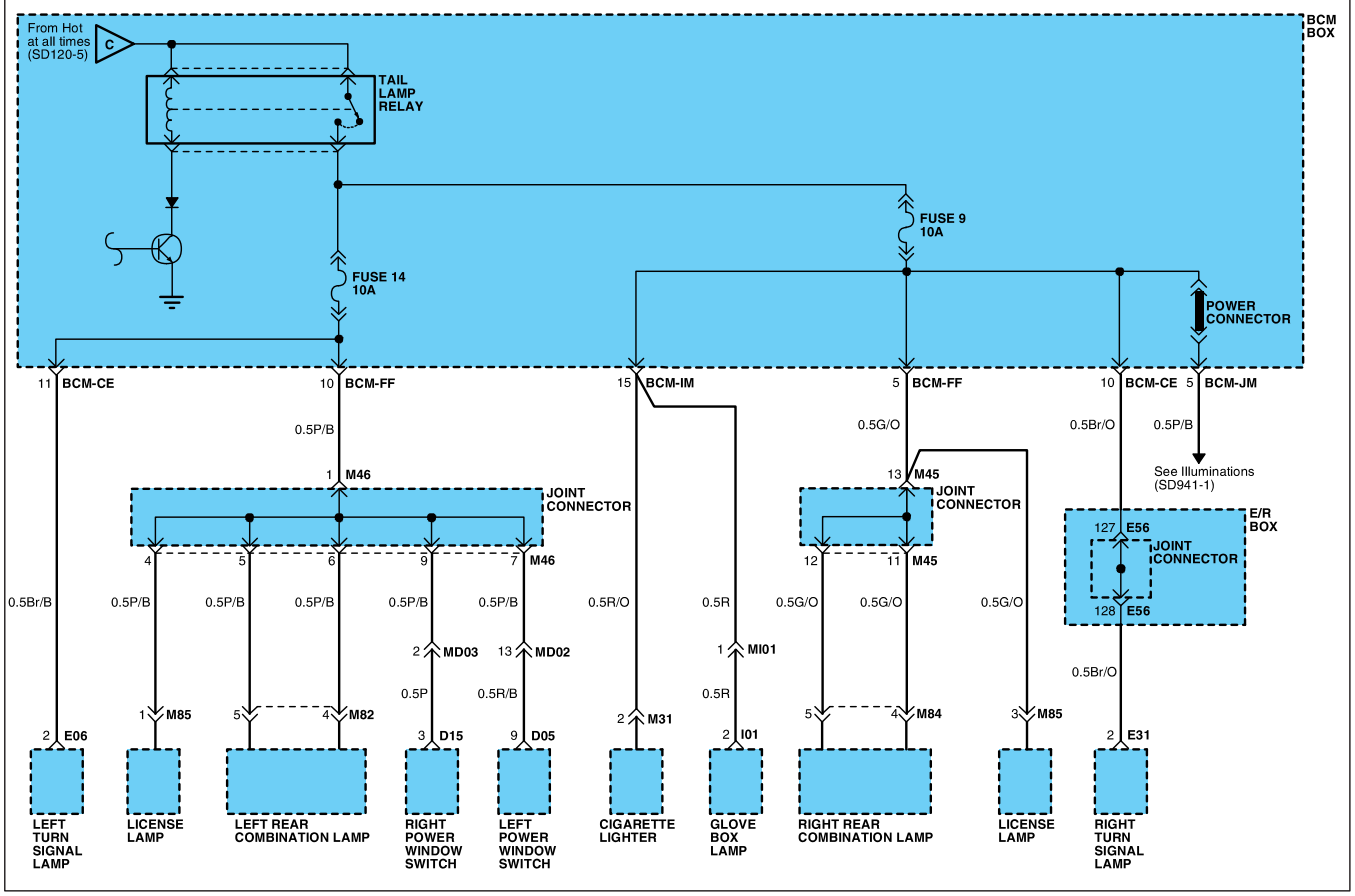
SD120-5



N2GKG120E

PASSENGER COMPARTMENT FUSE DETAILS (6)

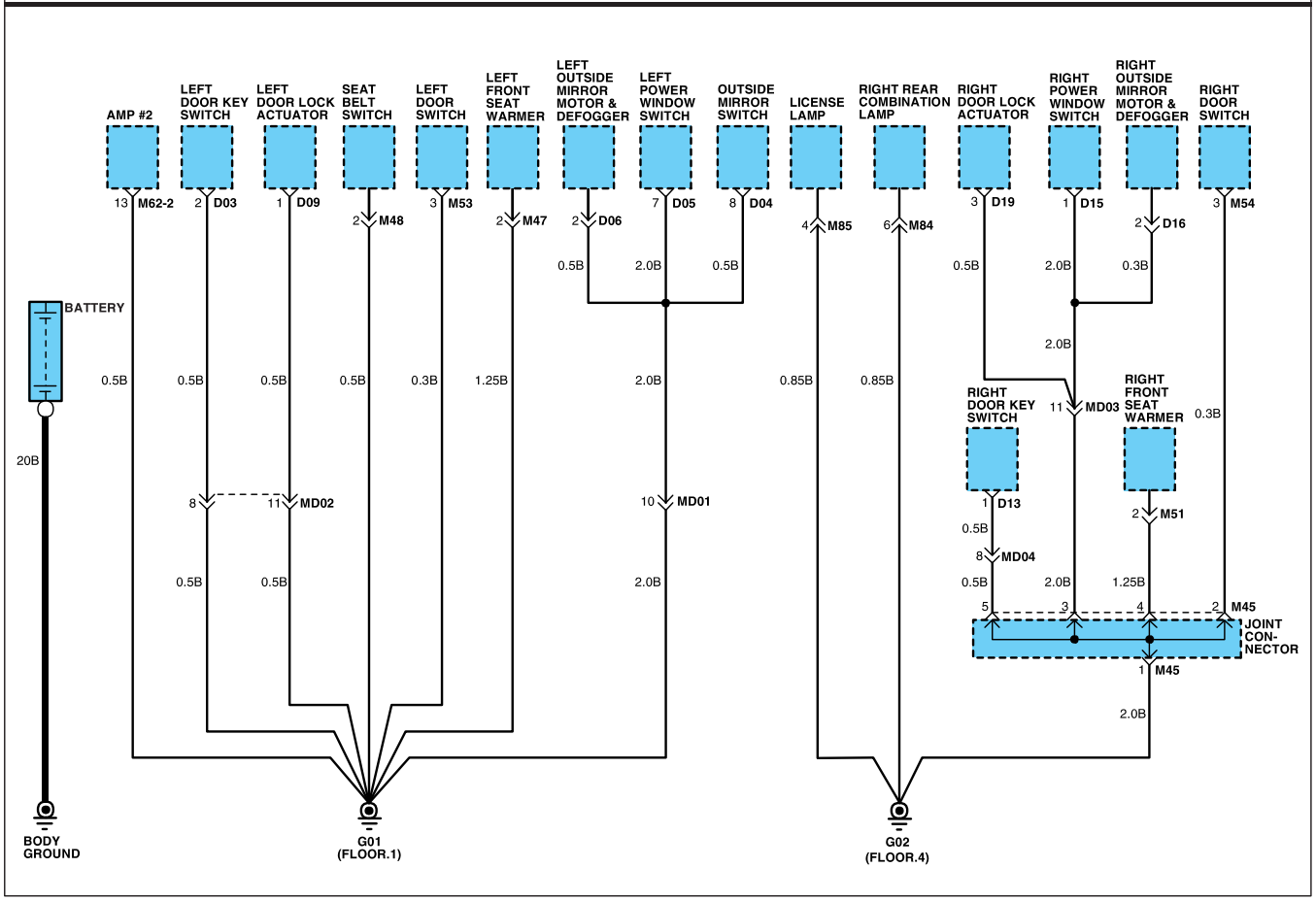
SD120-6



N2GKG120F

GROUND DISTRIBUTION E17F6470

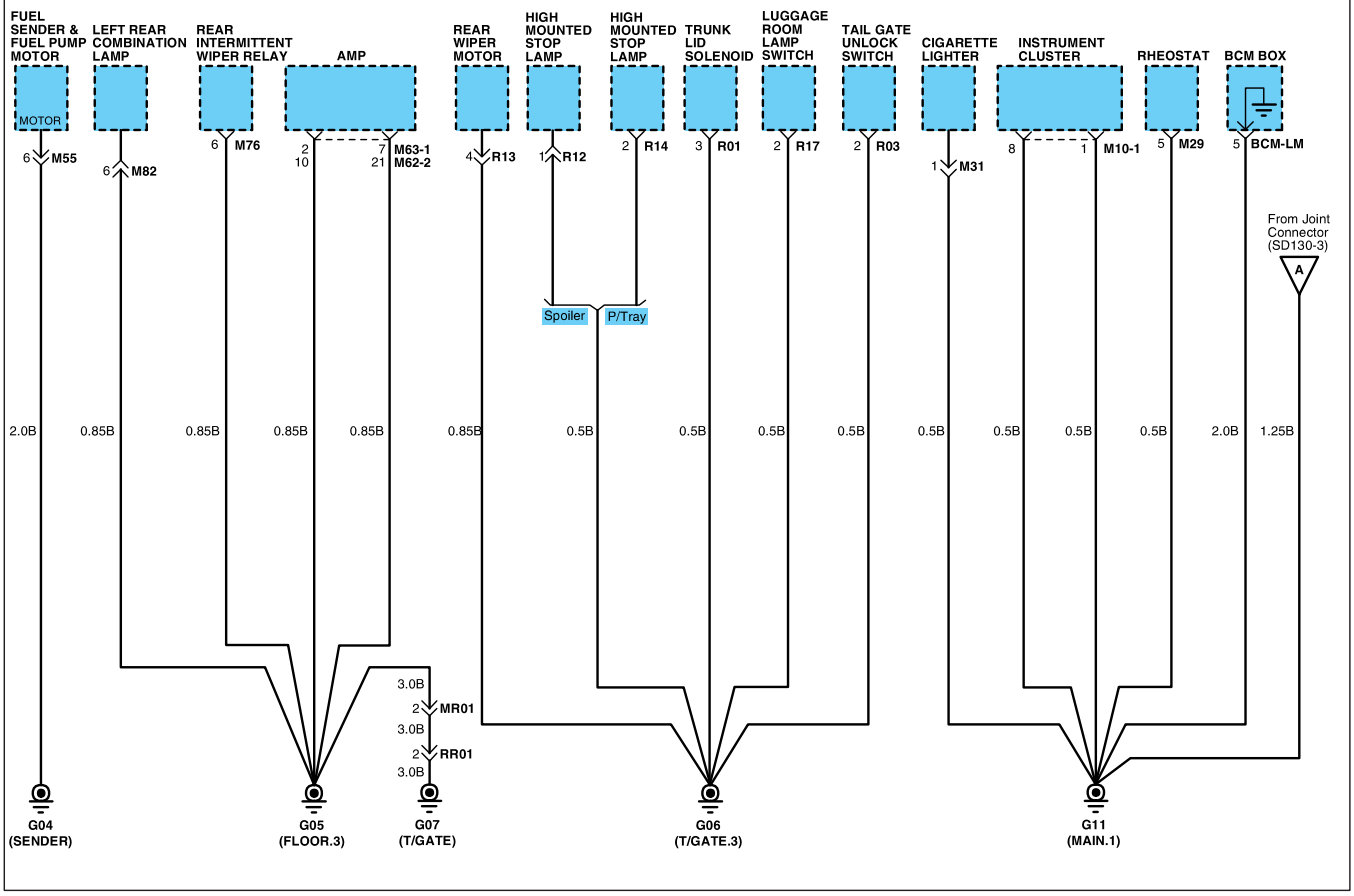
GROUND DISTRIBUTION (1) SD130-1



N2GKG130A

GROUND DISTRIBUTION

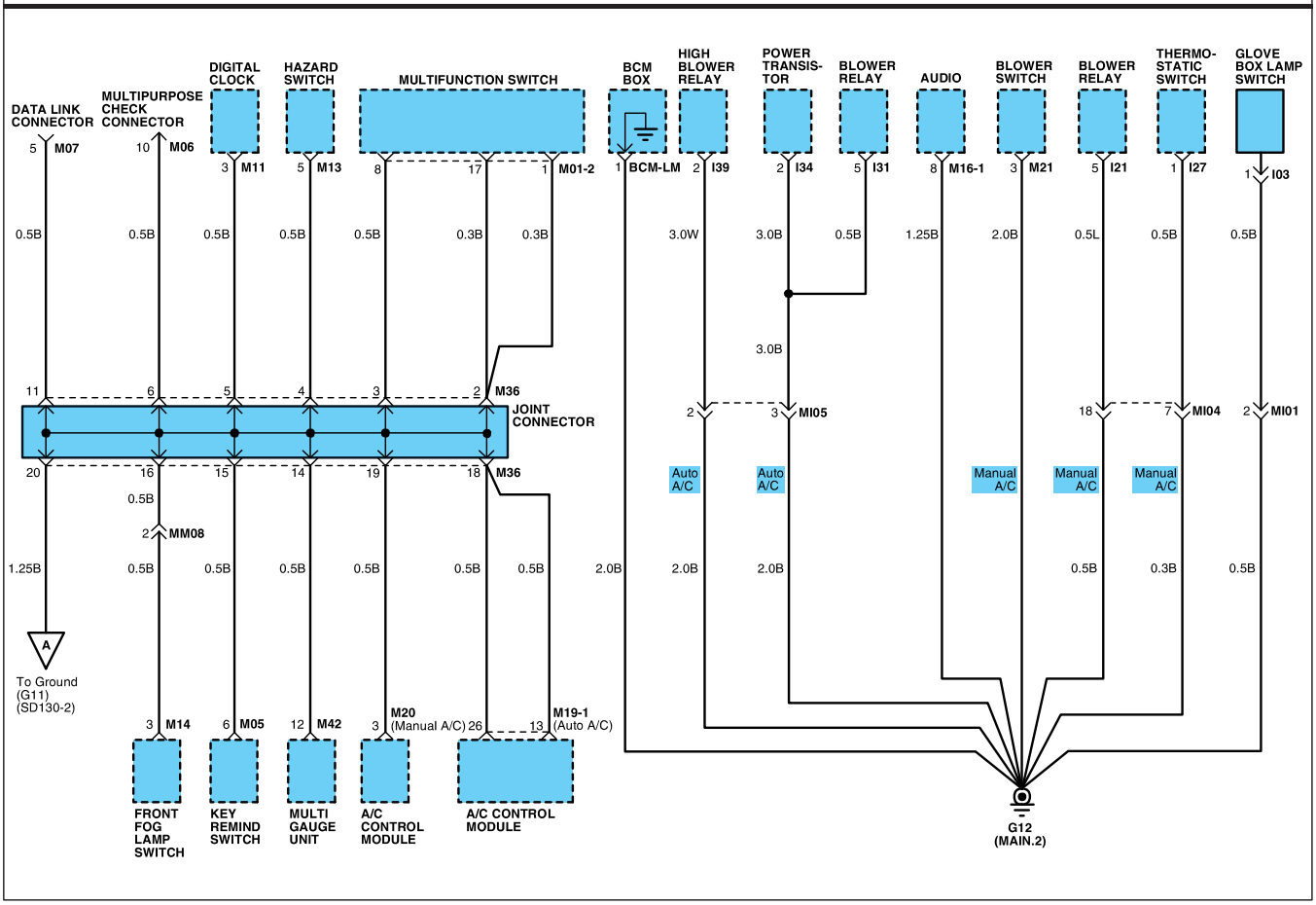
GROUND DISTRIBUTION (2) SD130-2



N2GKG130B

GROUND DISTRIBUTION

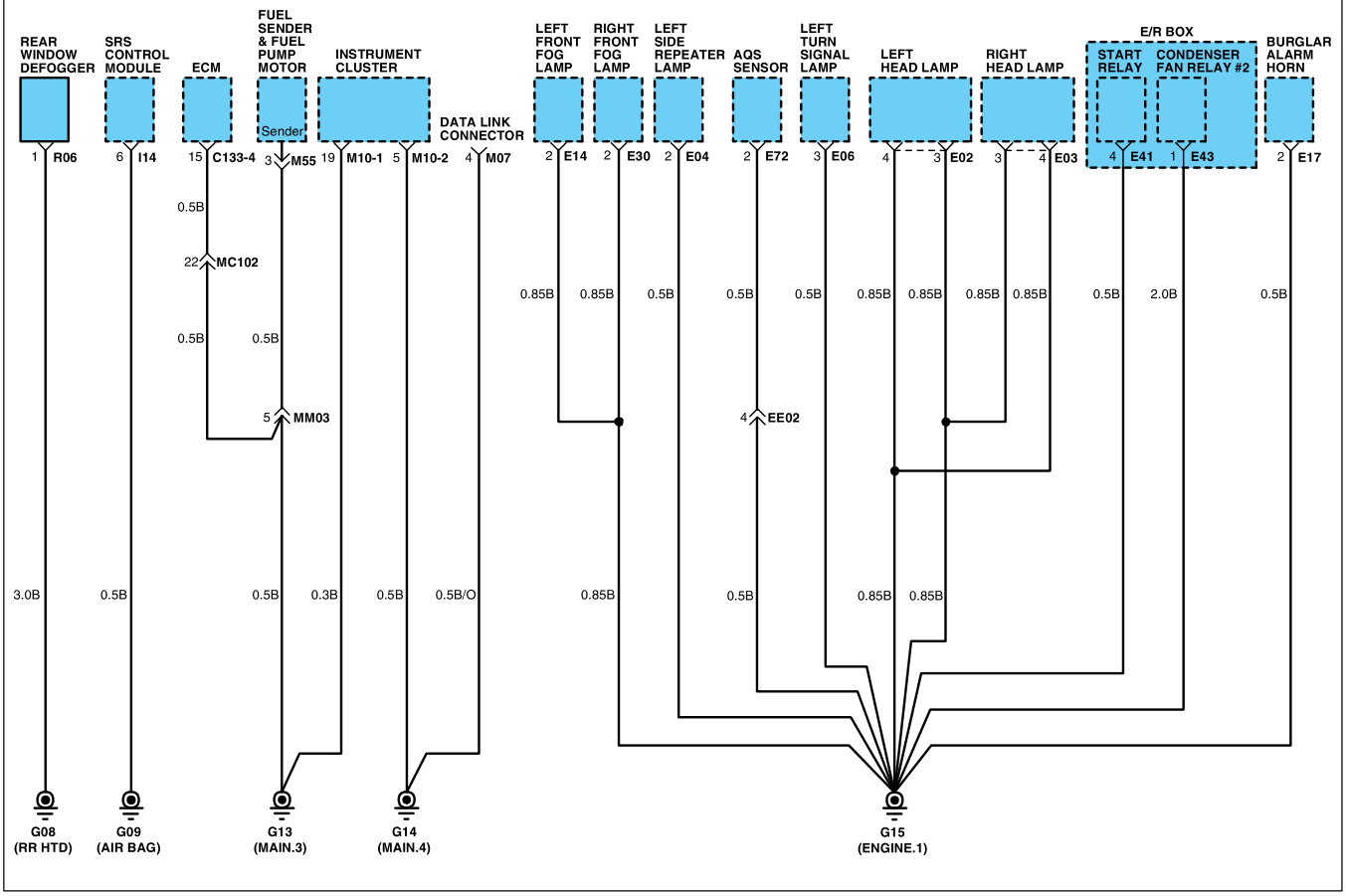
GROUND DISTRIBUTION (3) SD130-3



N2GKG130C

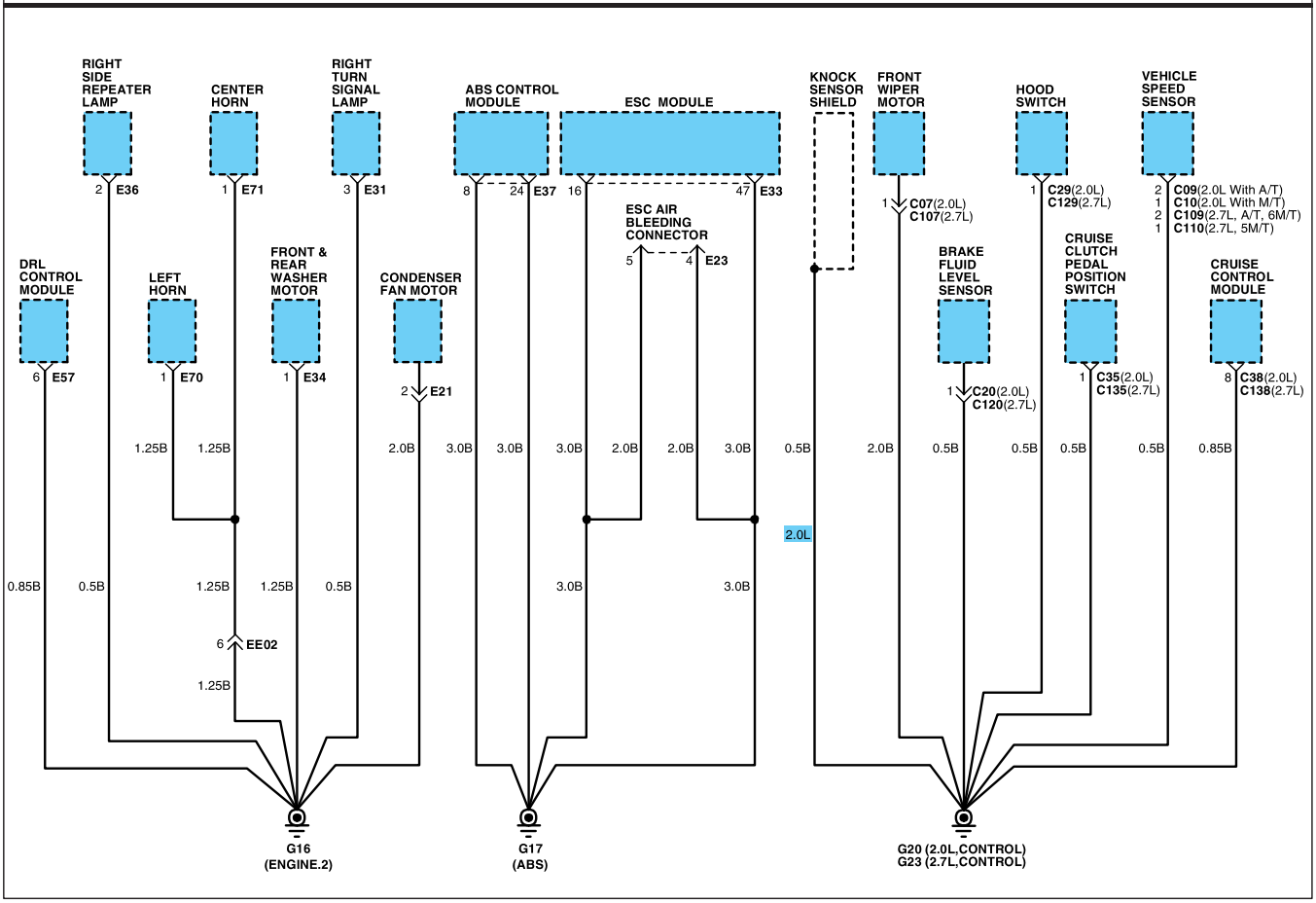
GROUND DISTRIBUTION

GROUND DISTRIBUTION (4) SD130-4



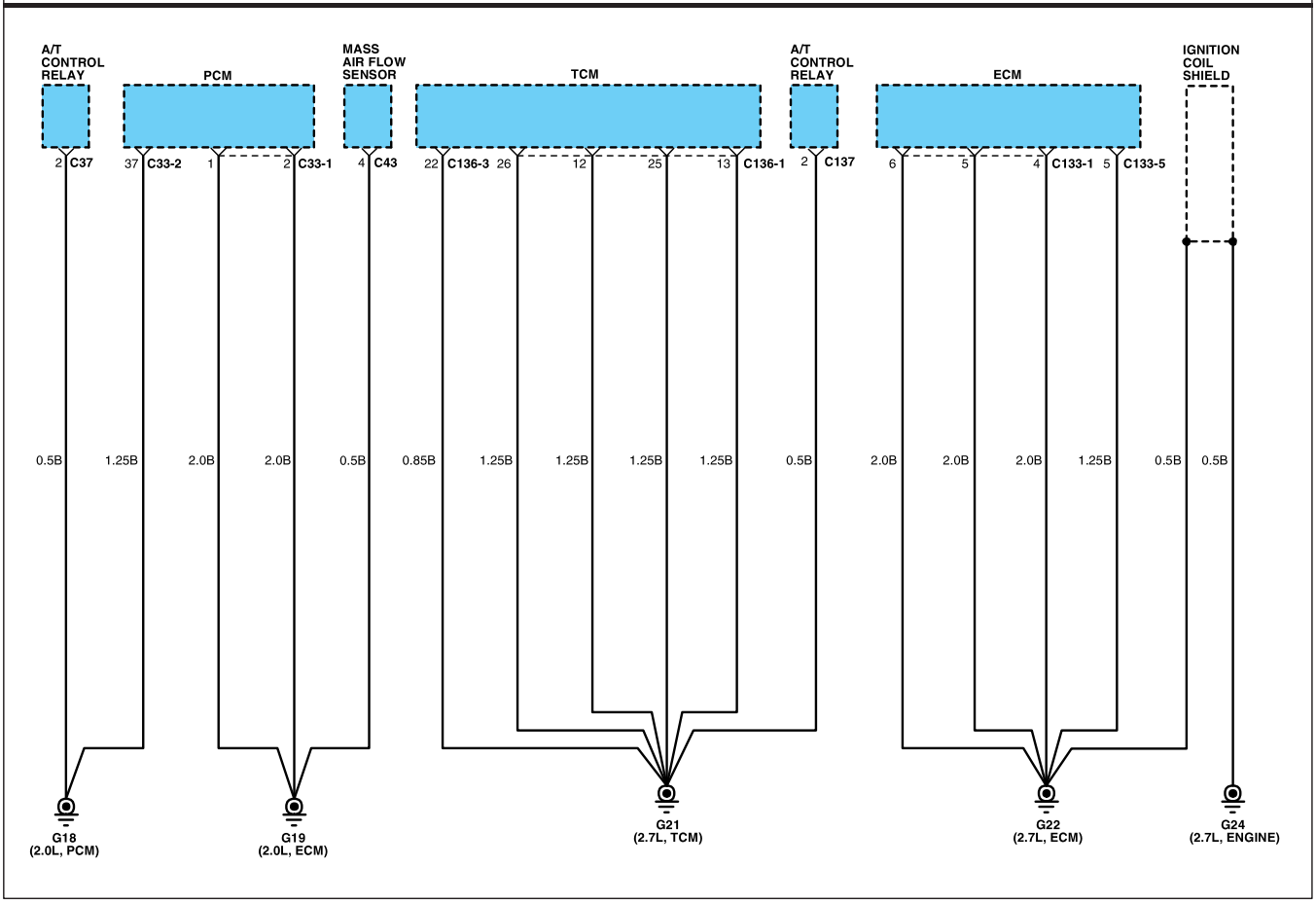
N2GKG130D

GROUND DISTRIBUTION (5)



N2GKG130E

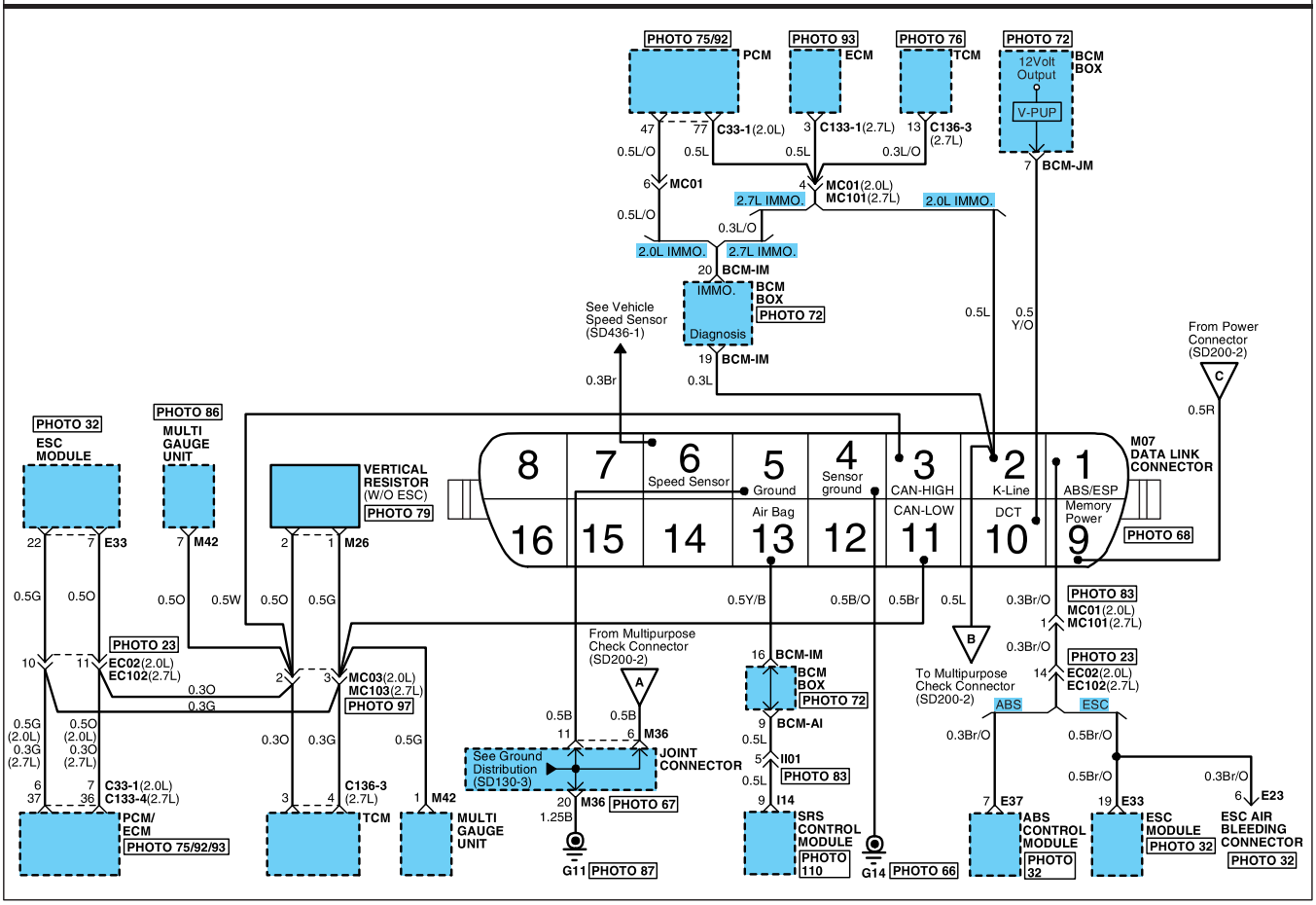
GROUND DISTRIBUTION (6)



N2GKG130F

DATA LINK DETAILS E5502A6E

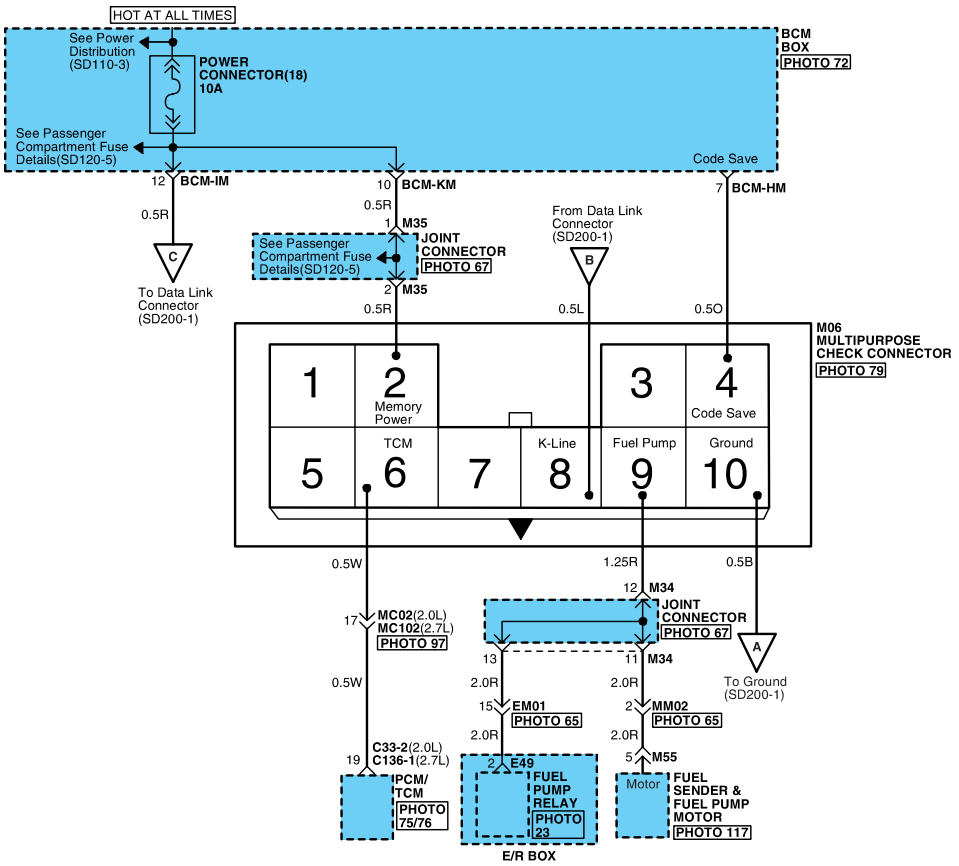
DATA LINK DETAILS (1) SD200-1



N2GKG200A

DATA LINK DETAILS (2)

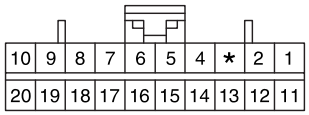
SD200-2



N2GKG200B

DATA LINK DETAILS (3)

BCM-IM

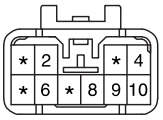


AMP_040M2_20F_B

E49

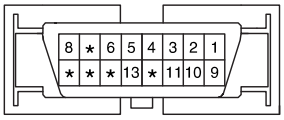
CR05F011

M06



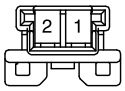
KET_090II_10M_W

M07



MLX_OBD11_16F_B_SIN

M26



AMP_CAN_02F_W

M55

KET_SWP_06F_W

BLANK

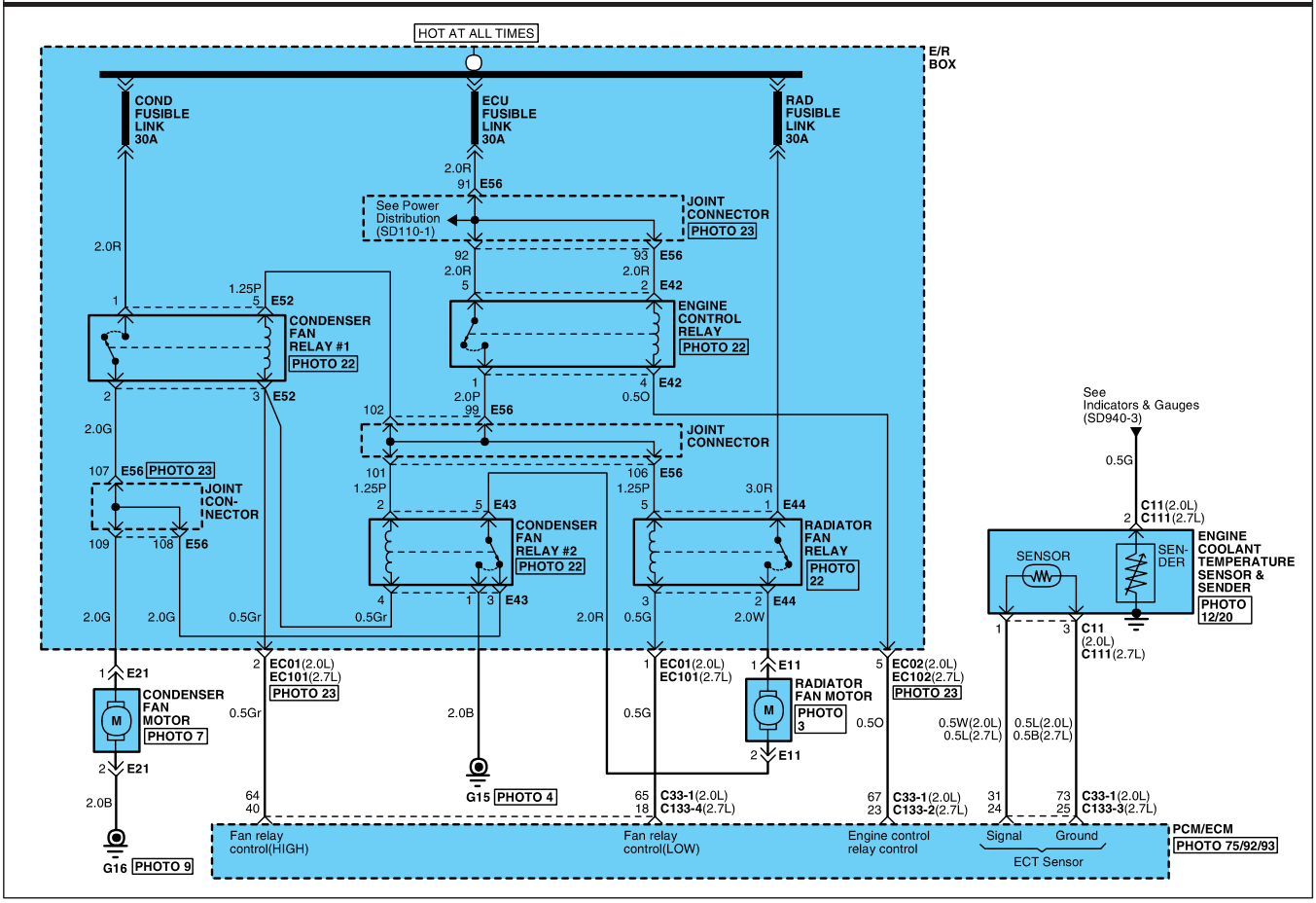
BLANK

N2GKG200C

DATA LINK DETAILS (4)

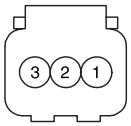
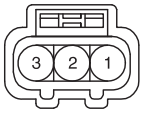
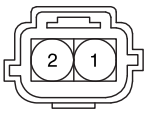
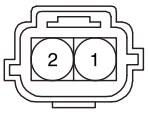
MEMO

COOLING SYSTEM (1) SD253-1



N2GKG253A

COOLING SYSTEM (2)

C11	C111	E11	E21
 KUM_WTS_03F_B	 KUM_62Z_03F_B_WTS	 KUM_WWP_02F_B	 KUM_WWP_02F_B
E42	**E43**	**E44**	**E52**
CR05F019	CR05F019	CR05F011	CR05F011

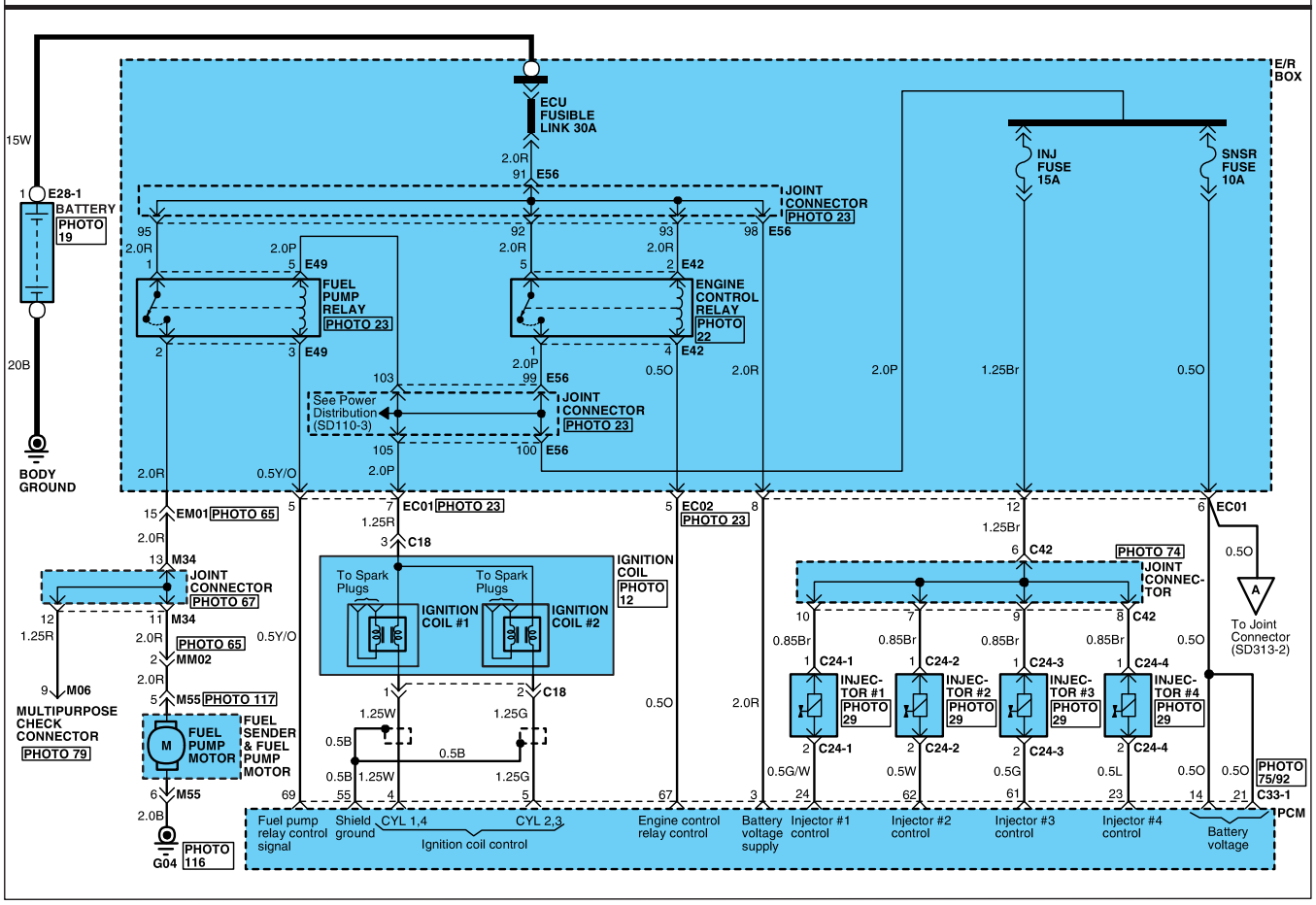
Circuit Description

The ECM (Engine Control Module) controls the operation of the radiator fan motor and the condenser fan motor through relay (radiator fan relay and condenser fan relays) control. The ECM monitors coolant temperature through engine coolant temperature sensor.

The module also monitors A/C operation through the A/C switch ON input and the A/C pressure switch input. Using these input signals, the module controls the coil of the appropriate relays (condenser fan relays and radiator fan relay) to provide optimal cooling fan operation.

MFI CONTROL SYSTEM (2.0L) E876858F

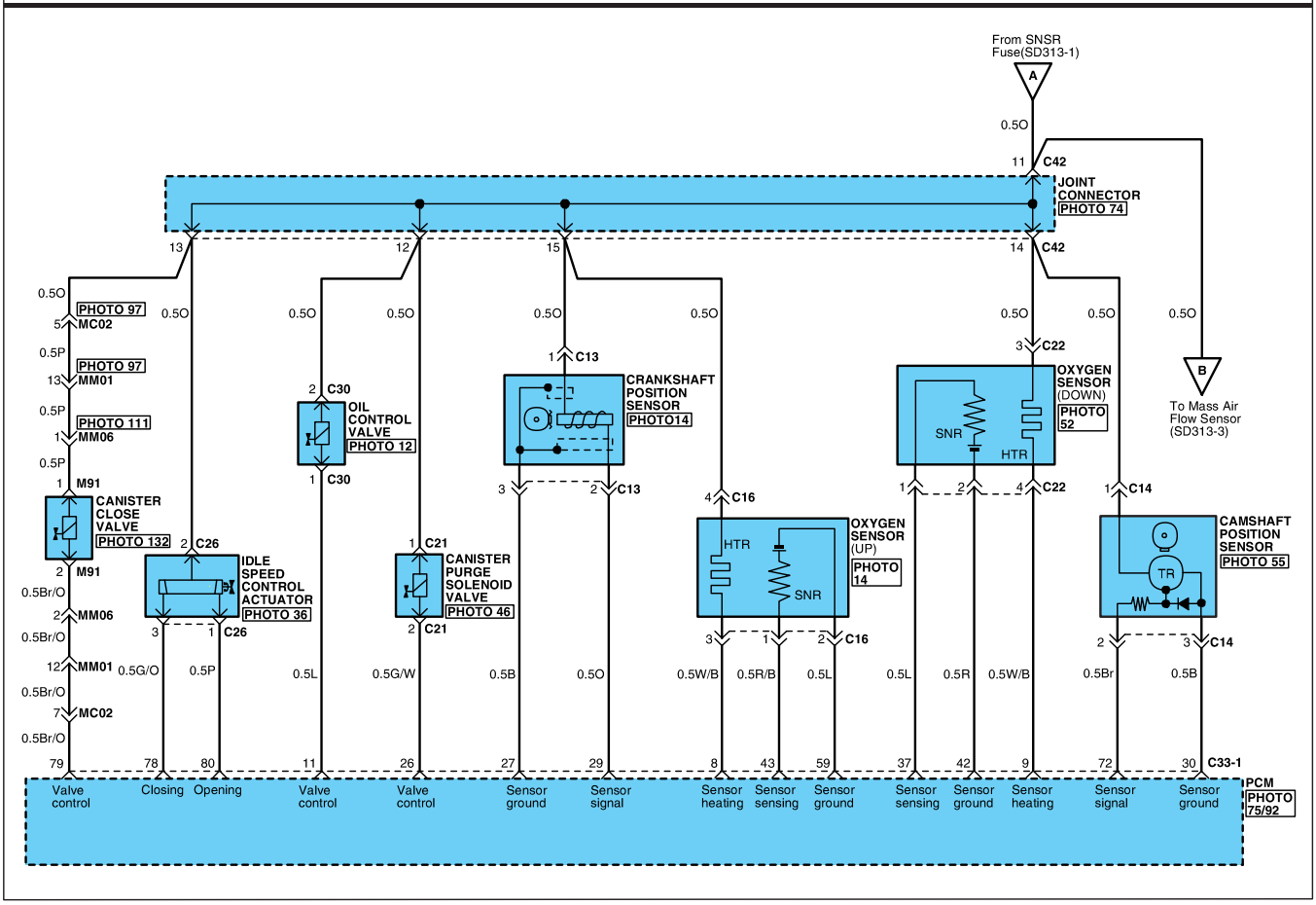
MFI CONTROL SYSTEM (2.0L) (1) SD313-1



N2GKG313A

MFI CONTROL SYSTEM (2.0L) (2)

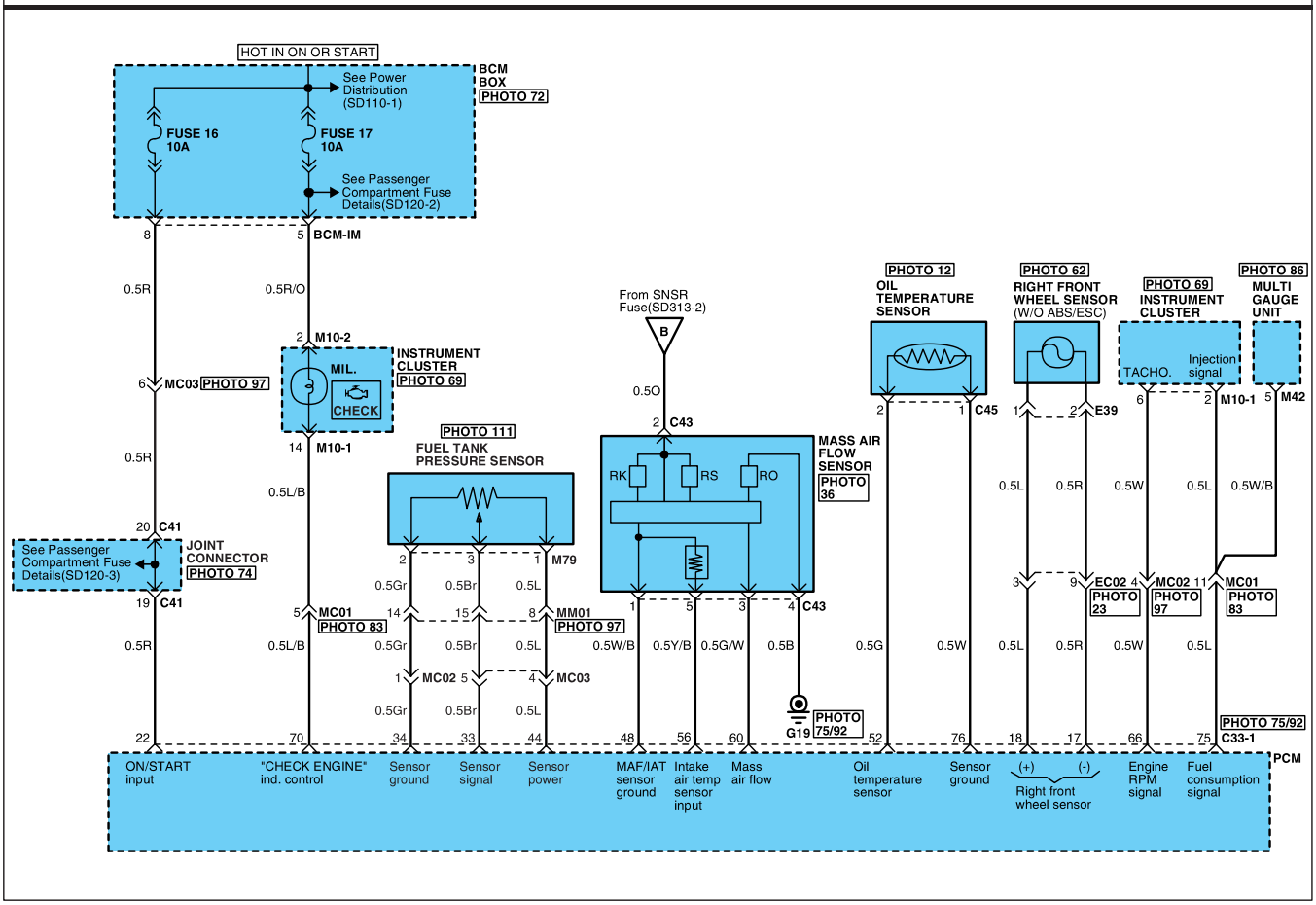
SD313-2



N2GKG313B

MFI CONTROL SYSTEM (2.0L) (3)

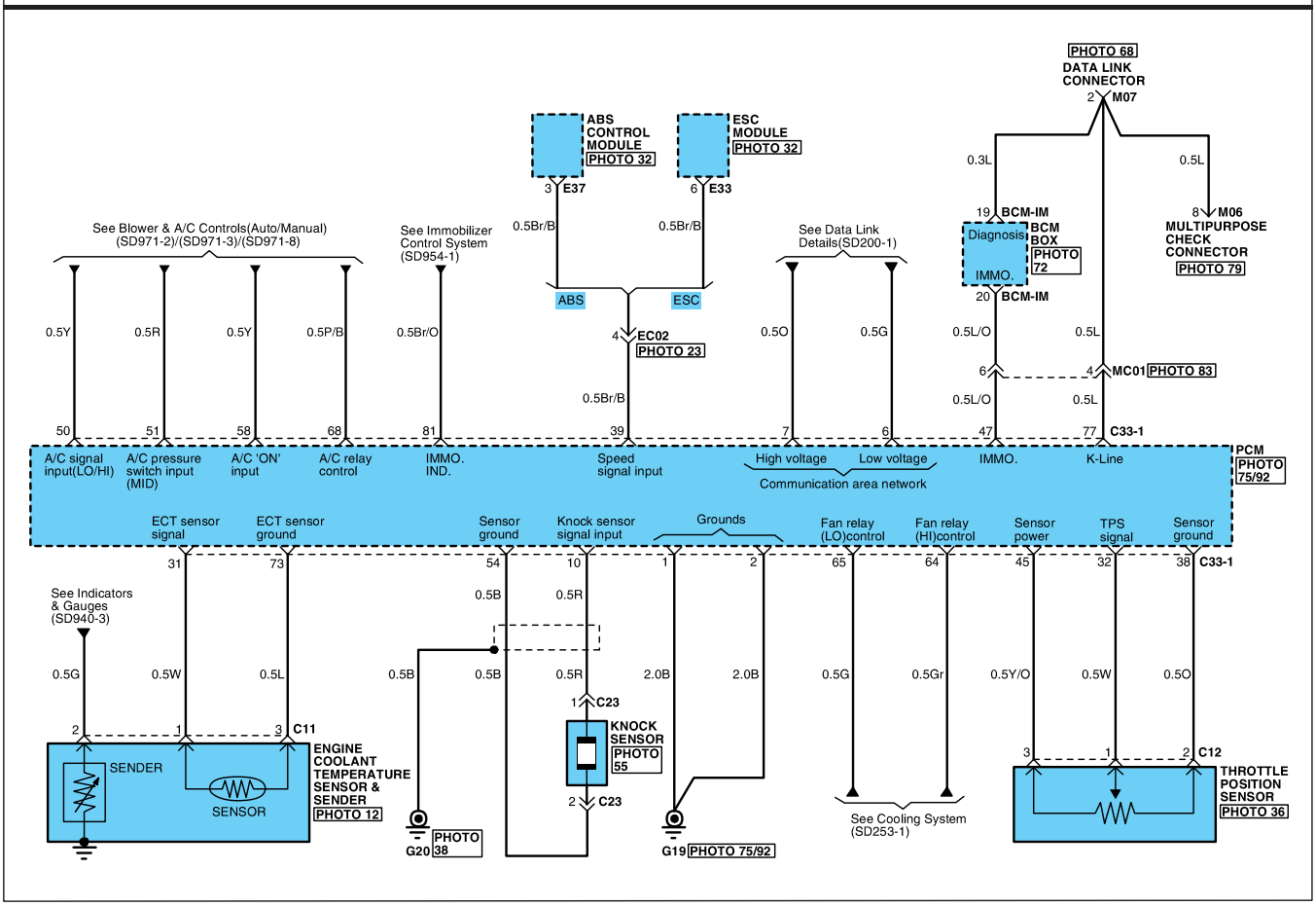
SD313-3



N2GKG313C

MFI CONTROL SYSTEM (2.0L) (4)

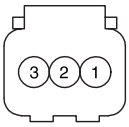
SD313-4



N2GKG313D

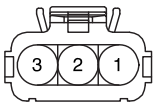
MFI CONTROL SYSTEM (2.0L) (5)

C11



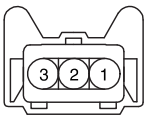
KUM_WTS_03F_B

C12



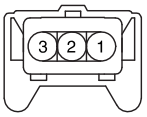
AMP_JPT_03F_B_BOSCH

C13



AMP_JPT_03F_Gr_R1

C14



AMP_JPT_03F_B_S1

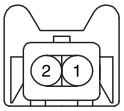
C16

AMP_EJWP_04F_B

C18

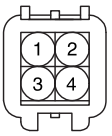
KET_090IIWP_03F_W

C21



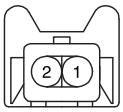
AMP_JPT_02F_B

C22



KUM_NMWP_04M_B

C23



AMP_JPT_02F_B

C24-1

KUM_NDWP_02F_Gr

C24-2

KUM_NDWP_02F_Gr

C24-3

KUM_NDWP_02F_Gr

C24-4

KUM_NDWP_02F_Gr

C26

BSH_ISA_03F_Gr

C30

KET_090WP_02F_B_L

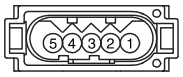
BLANK

C33-1

6	7	8	9	10	11	*	*	14	*	*	17	18	*	*	21	22	23	24	5	4
*	26	27	*	29	30	31	32	33	34	*	*	37	38	39	*	*	42	43	3	
44	45	*	47	48	*	50	51	52	*	54	55	56	*	58	59	60	61	62		
*	64	65	66	67	68	69	70	*	72	73	*	75	76	77	78	79	80	81	2	1

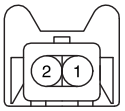
KET_ECU_81F_B_BOSCH

C43



KSP_VDACODEB_05F_B

C45



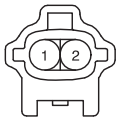
AMP_JPT_02F_B

N2GKG313E

MFI CONTROL SYSTEM (2.0L) (6)

SD313-6

E39



KET_090IIWP_02M_Gr

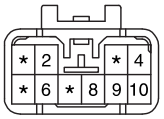
E42

CR05F019

E49

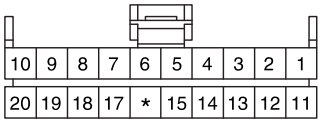
CR05F011

M06



KET_090II_10M_W

M10-1

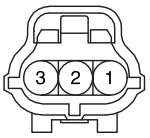


AMP_040M1_20F_B

M55

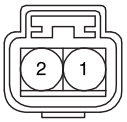
KET_SWP_06F_W

M79



AMP_EJWP_03F_B

M91

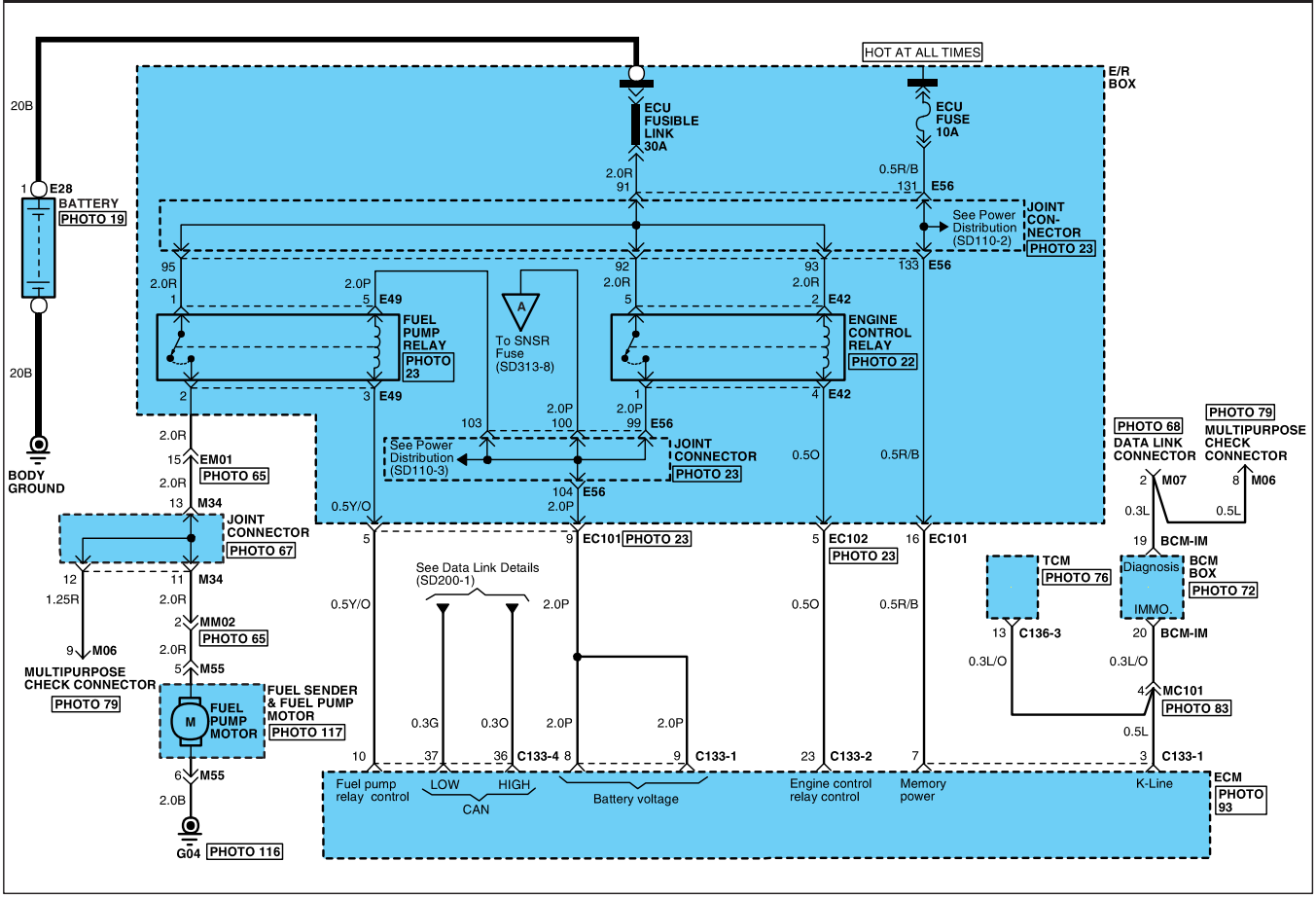


KUM_NMWP_02F_B

N2GKG313F

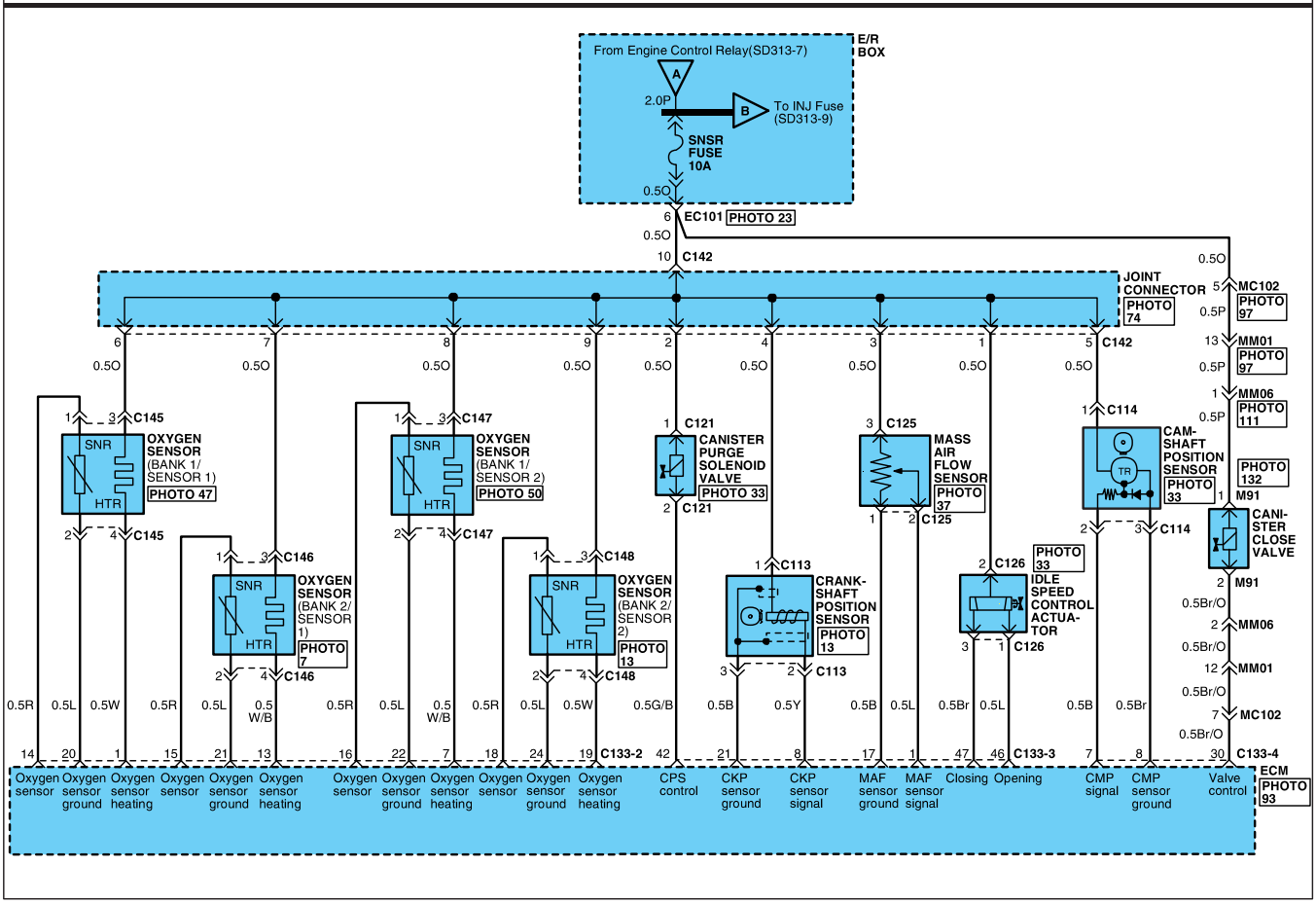
MFI CONTROL SYSTEM (2.7L) ED915CCC

MFI CONTROL SYSTEM (2.7L) (1) SD313-7



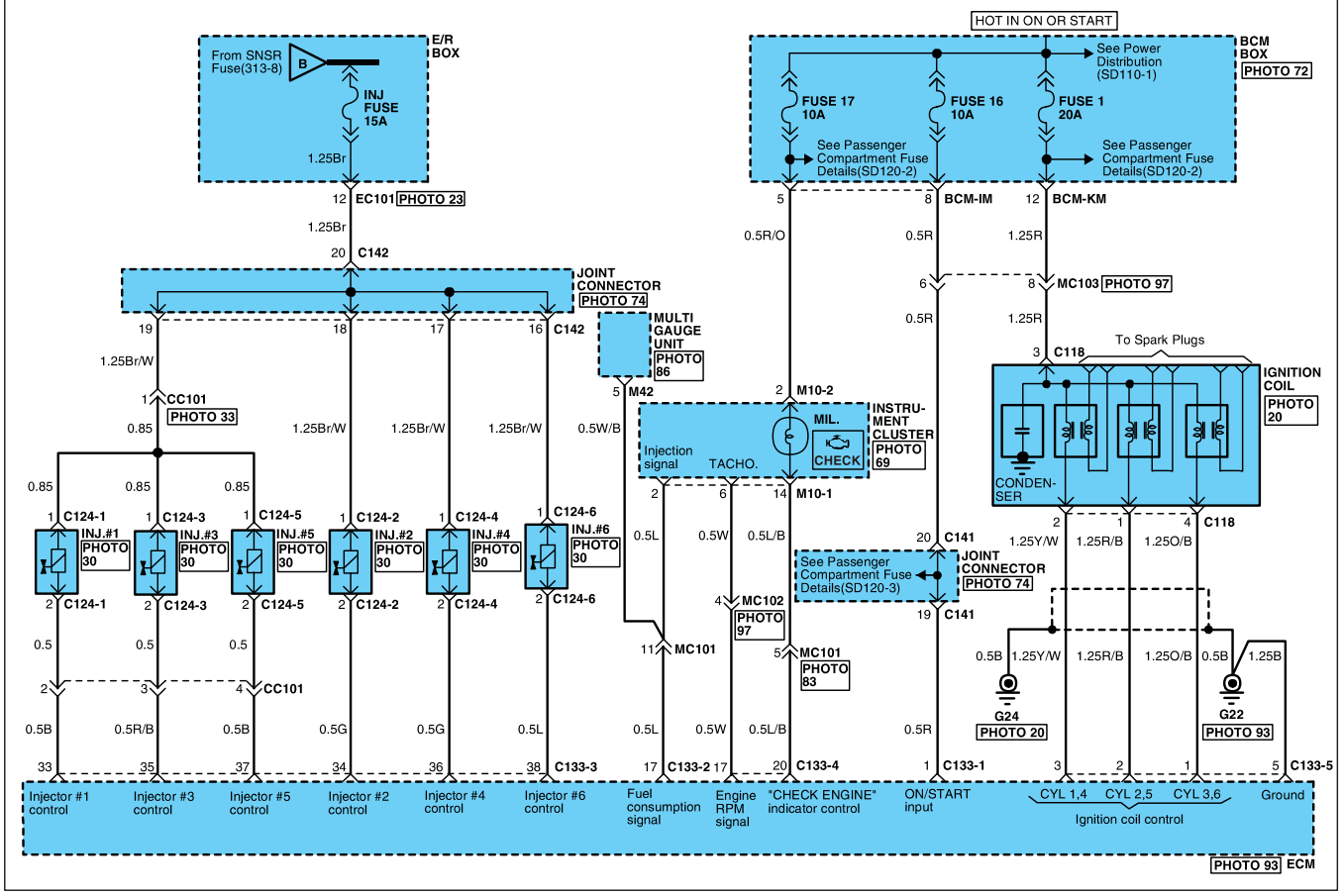
N2GKG313G

MFI CONTROL SYSTEM (2.7L) (2)



N2GKG313H

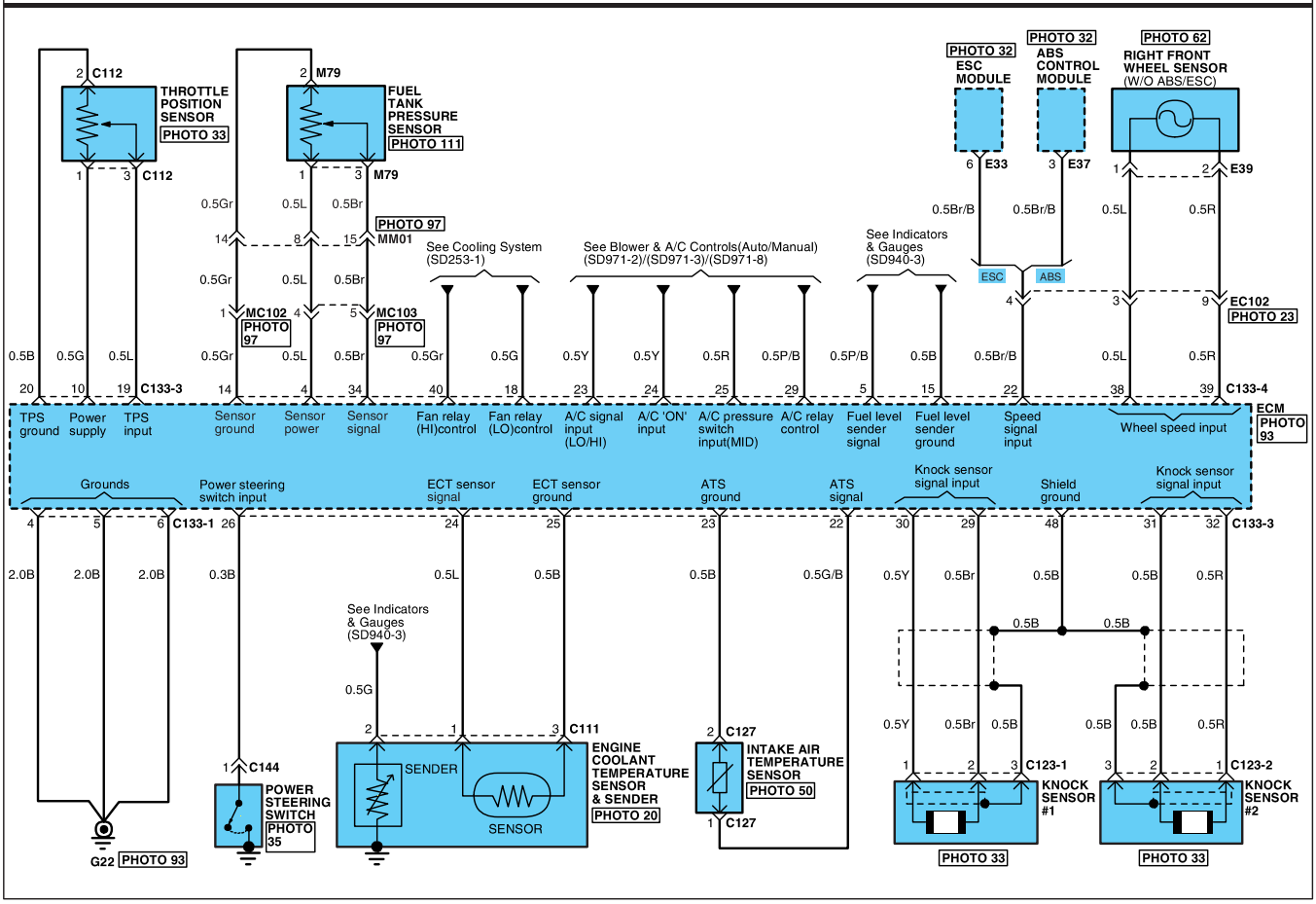
MFI CONTROL SYSTEM (2.7L) (3)



N2GKG313I

MFI CONTROL SYSTEM (2.7L) (4)

SD313-10

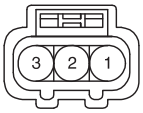


N2GKG313J

MFI CONTROL SYSTEM (2.7L) (5)

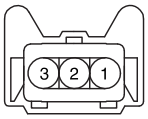
SD313-11

C111



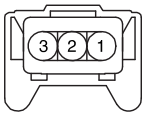
KUM_62Z_03F_B_WTS

C112



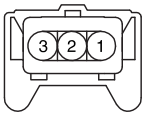
AMP_JPT_03F_Gr_R1

C113



AMP_JPT_03F_B_S2

C114



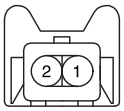
AMP_JPT_03F_G_S1

BLANK

C118

KUM_NMWP_04F_B

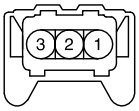
C121



AMP_JPT_02F_B

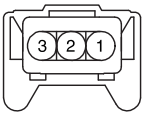
BLANK

C123-1



AMP_JPT_03F_Gr_R2

C123-2



AMP_JPT_03F_L_S2

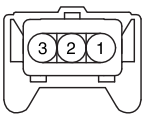
C124-1,3,5

KUM_NDWP_02F_Gr

C124-2,4,6

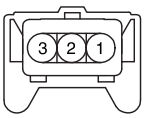
KUM_NDWP_02F_Gr

C125



AMP_JPT_03F_B_S1

C126

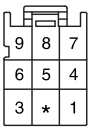


AMP_JPT_03F_B_S1

C127

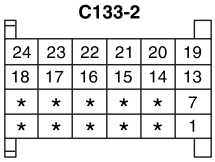
KYAAMP_JPT_02F_BEONGJIN

C133-1



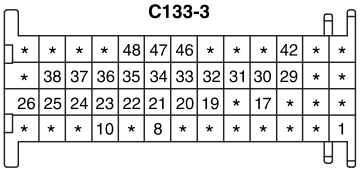
AMP_ECU_09F_B_134P

C133-2



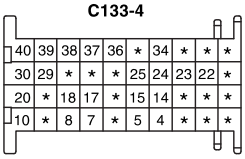
AMP_ECU_24F_B_134P

C133-3



AMP_ECU_52F_B_134P

C133-4

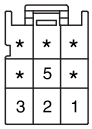


AMP_ECU_40F_B_134P

N2GKG313K

MFI CONTROL SYSTEM (2.7L) (6)

C133-5



AMP_ECU_09F_Gr_134P

C144

KET_156_01F_W_TML

C145,C146,C147,C148

KUM_NMWP_04F_Gr

E39

KET_090IIWP_02M_Gr

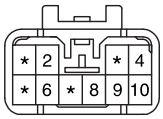
E42

CR05F019

E49

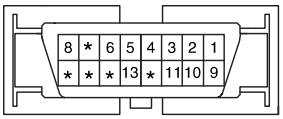
CR05F011

M06



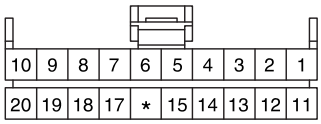
KET_090II_10M_W

M07



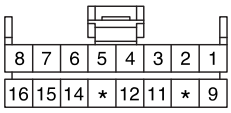
MLX_OBDII_16F_B_SIN

M10-1



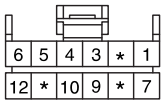
AMP_040M1_20F_B

M10-2



AMP_040M1_16F_B

M42

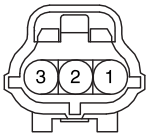


AMP_040M1_12F_B

M55

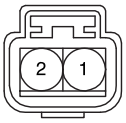
KET_SWP_06F_W

M79



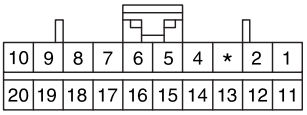
AMP_EJWP_03F_B

M91



KUM_NMWP_02F_B

BCM-IM



AMP_040M2_20F_B

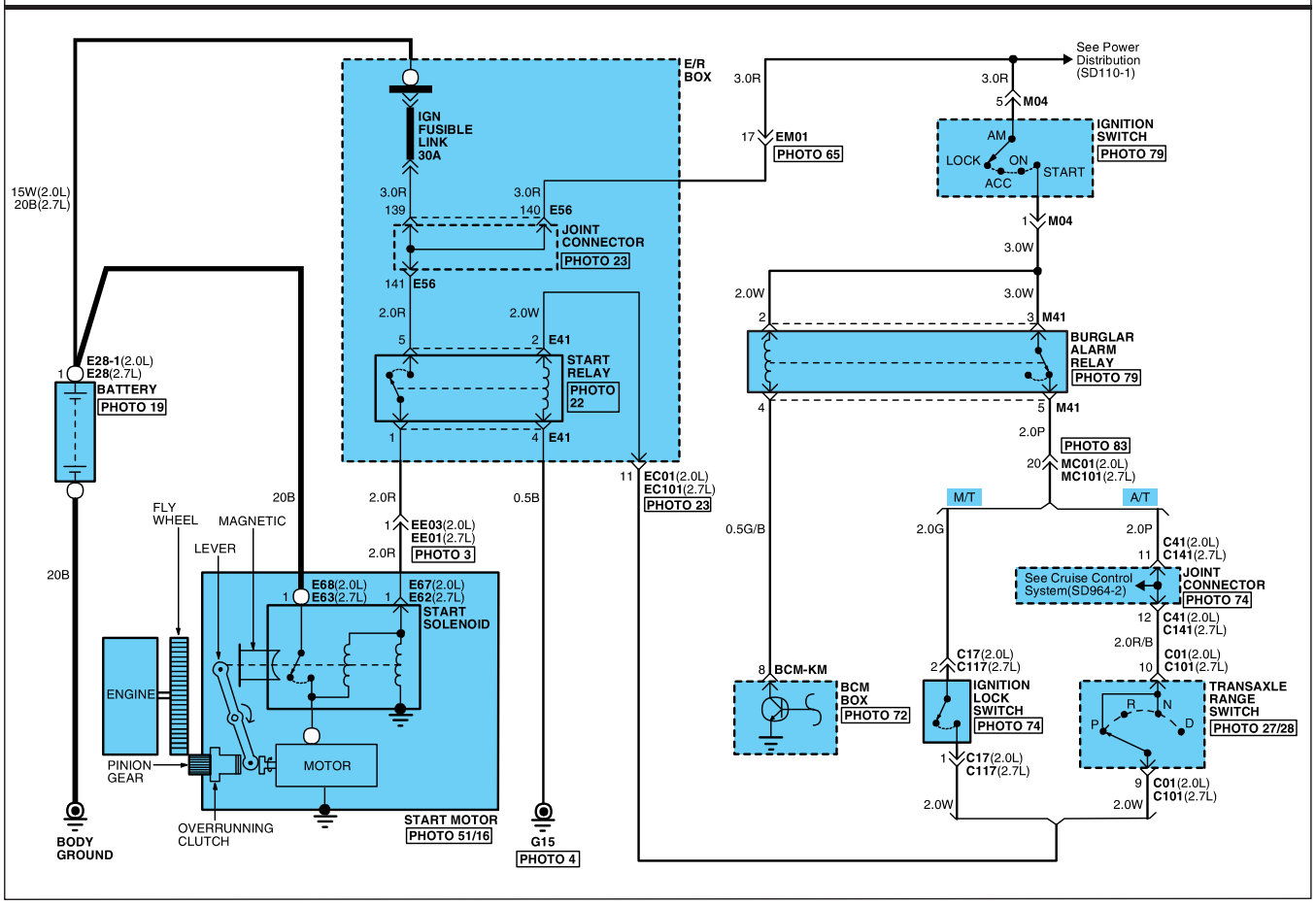
BLANK

Circuit Description

The Multiport Fuel Injection(MFI) control system is an electronic fuel metering system with fuel injectors near the inlet port of each cylinder. The amount of fuel injection is determind by the ECM according to engine speed and intake air -flow quantity measured. The emission control system includes the oxygen sensors and catalytic converters. The MFI's three major functions are air-fuel mixture idle speed, and ignition timing control. Refer to the shop manual, section FL for details.

STARTING SYSTEM EC885DD9

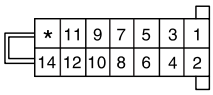
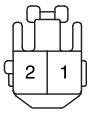
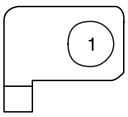
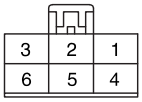
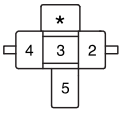
STARTING SYSTEM (1) SD360-1



N2GKG360A

STARTING SYSTEM (2)

SD360-2

BCM-KM	C01/C101	C17/C117	BLANK
 AMP_JPT_14F_B	KET_SSD_10F_B_A	 KET_090II_02F_W_L	
E28	**E28-1**	**E41**	**E62**
CR01F005	 CR01F051	CR05F019	CR01F006
E63,E68	**E67**	**M04**	**M41**
CR01F002	KET250_WP_1F	 KUM_DSD_06F_W	 KET_250_05F_B_RLY

Circuit Description

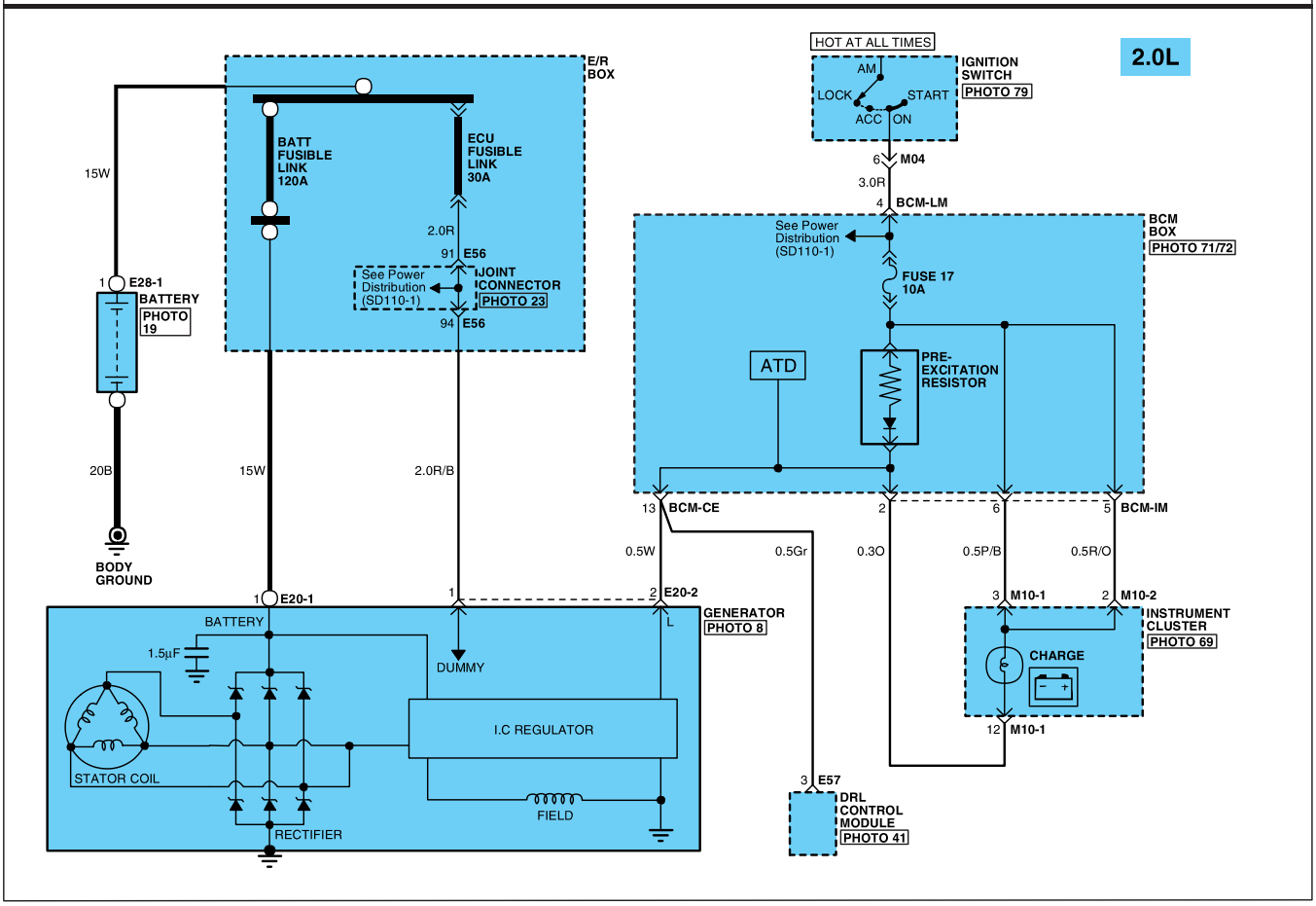
Battery voltage is applied at all times from the positive battery terminal to the ignition switch and the normally open start relay contacts. When the ignition switch is turned to START and the transaxle range switch (automatic transaxle) is in P/N position or the ignition lock switch (manual transaxle) is closed, battery voltage is applied through burglar alarm relay to the starter relay coils.

The start relay coils energize, the start relay contacts close, and battery voltage is applied to the starter solenoid. The motor engages to start the engine.

N2GKG360B

CHARGING SYSTEM E5841C60

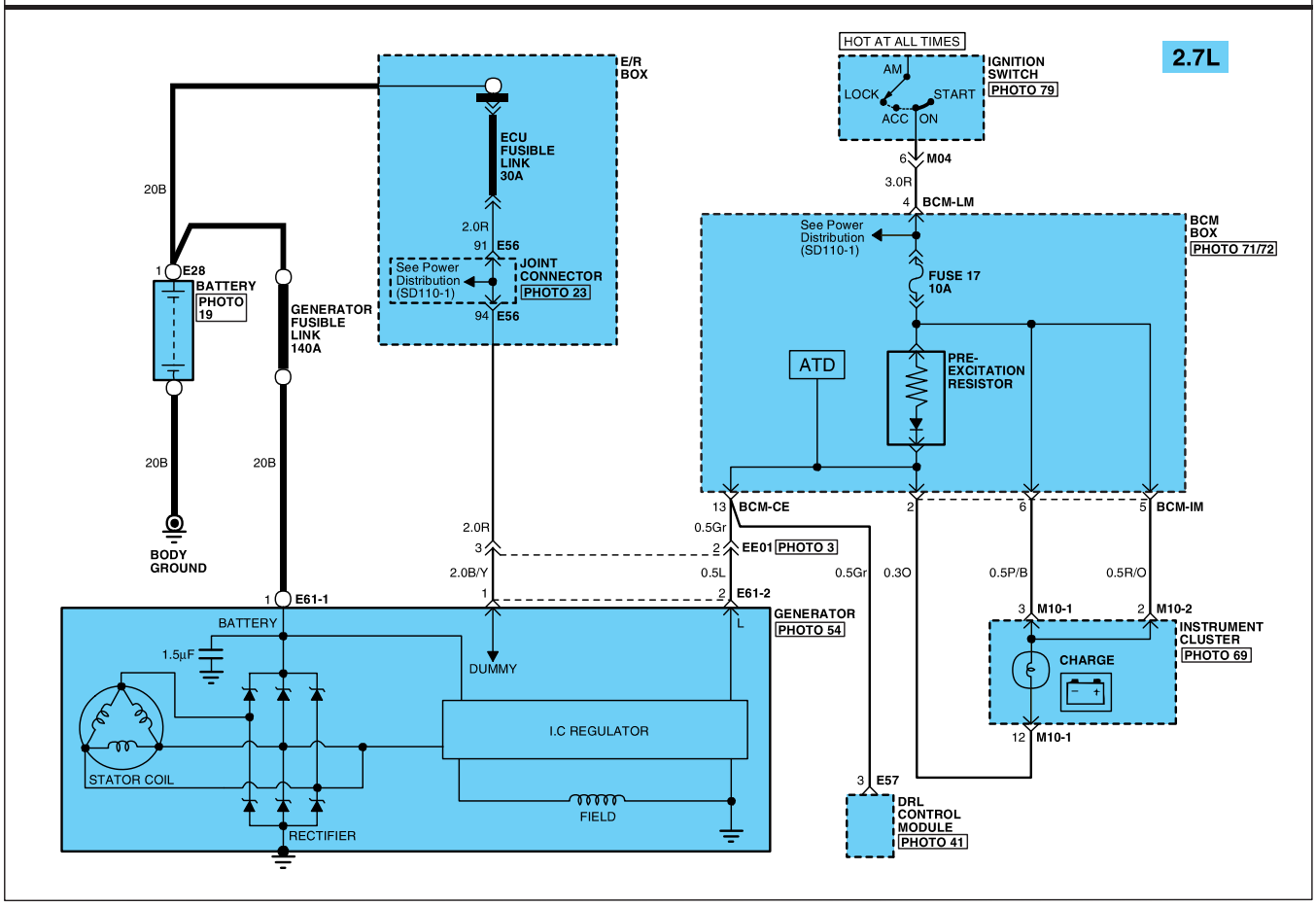
CHARGING SYSTEM (1) SD373-1



N2GKG373A

CHARGING SYSTEM (2)

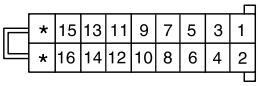
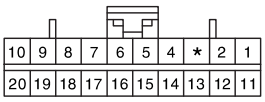
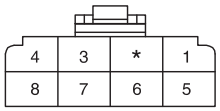
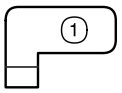
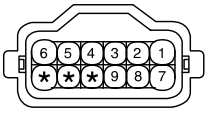
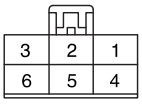
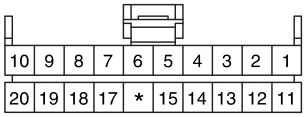
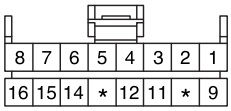
SD373-2



N2GKG373B

CHARGING SYSTEM (3)

SD373-3

BCM-CE	BCM-IM	BCM-LM	
 AMP_JPT_18F_B	 AMP_040M2_20F_B	 AMP_250_08F_W	BLANK
E20-1	E20-2	E28	E28-1
CR01F002	KET_58X_02F_B	CR01F005	 CR01F051
E57	E61-1	E61-2	M04
 KET_1809WP_12F_Gr	CR01F002	CR02F002	 KUM_DSD_06F_W
M10-1	M10-2	BLANK	BLANK
 AMP_040M1_20F_B	 AMP_040M1_16F_B		

N2GKG373C

CHARGING SYSTEM (4) SD373-4

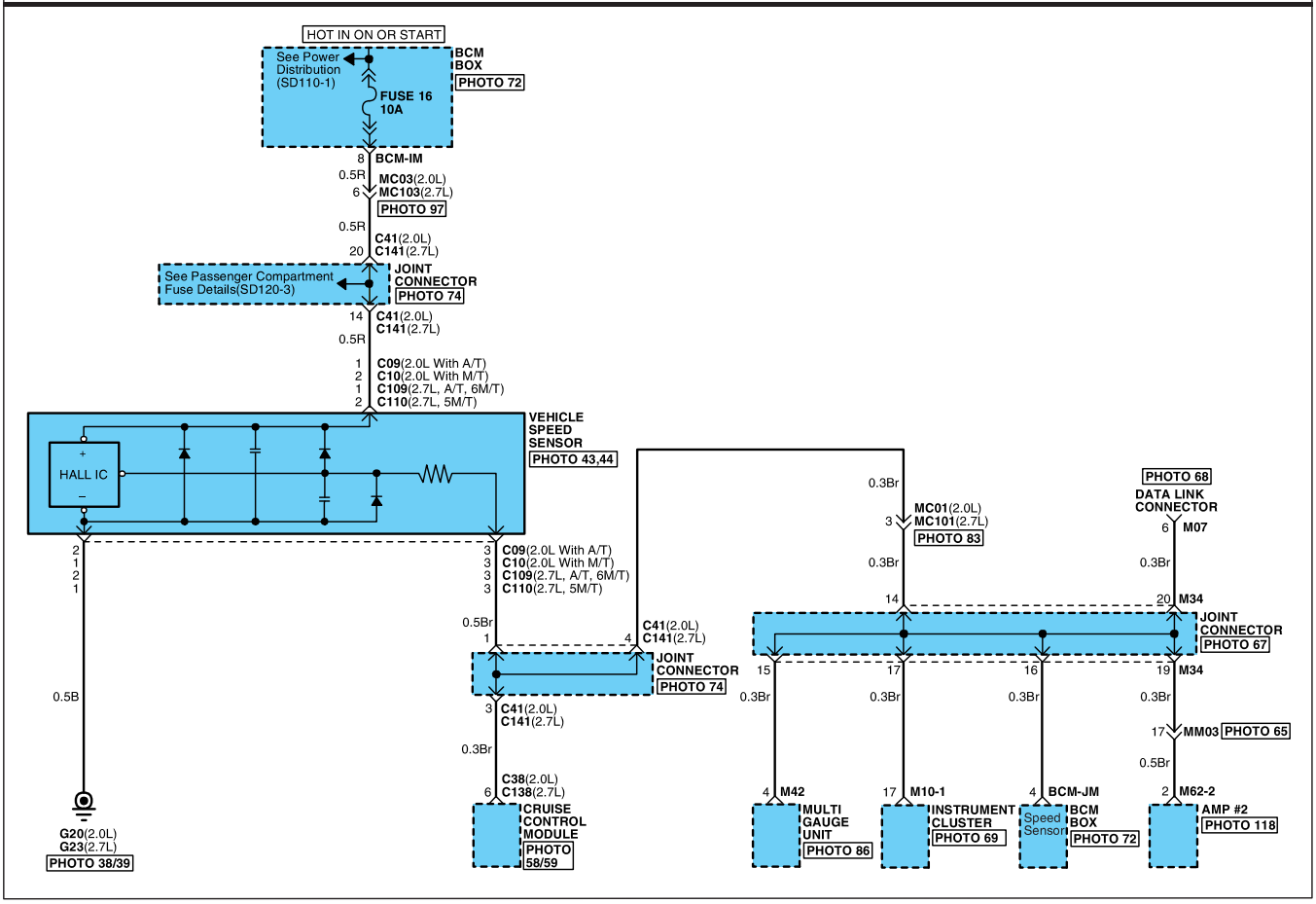
Circuit Description

The generator generates AC voltage in its windings as it is belt-driven by the engine. The rectifier converts this AC voltage to DC voltage. The voltage regulator, a component which is included in the generator frame, has a primary function of controlling the generator's output to meet electrical system requirements. The regulator also controls the charge warning lamp. Fuse 17 supplies battery voltage to the charge warning indicator. With the engine not running and the ignition switch in ON, terminal L of the regulator is grounded internally and the indicator lights up. A small amount of current provided by both the charge warning lamp and the pre-excitation resistor is used to "excite" the magnetic field windings to start the charging process.

With the engine running and the generator charging, terminal L voltage rises and the indicator goes out. If the generator fails to charge, terminal L remains below battery voltage and the indicator remains lit.

VEHICLE SPEED SENSOR E1458AFE

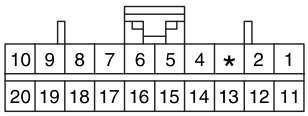
VEHICLE SPEED SENSOR (1) SD436-1



N2GKG436A

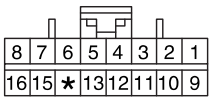
VEHICLE SPEED SENSOR (2)

BCM-IM



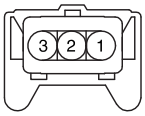
AMP_040M2_20F_B

BCM-JM



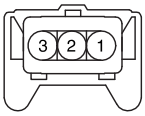
AMP_040M2_16F_B

C09



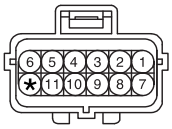
AMP_JPT_03F_B_S1

C10



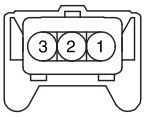
AMP_JPT_03F_B_S1

C38/C138



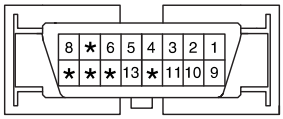
AMP_EJMP_12F_B

C109/C110



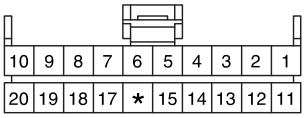
AMP_JPT_03F_B_S1

M07



MLX_OBDII_16F_B_SIN

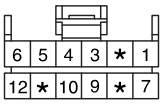
M10-1



AMP_040M1_20F_B

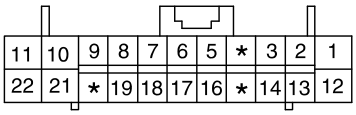
BLANK

M42



AMP_040M1_12F_B

M62-2



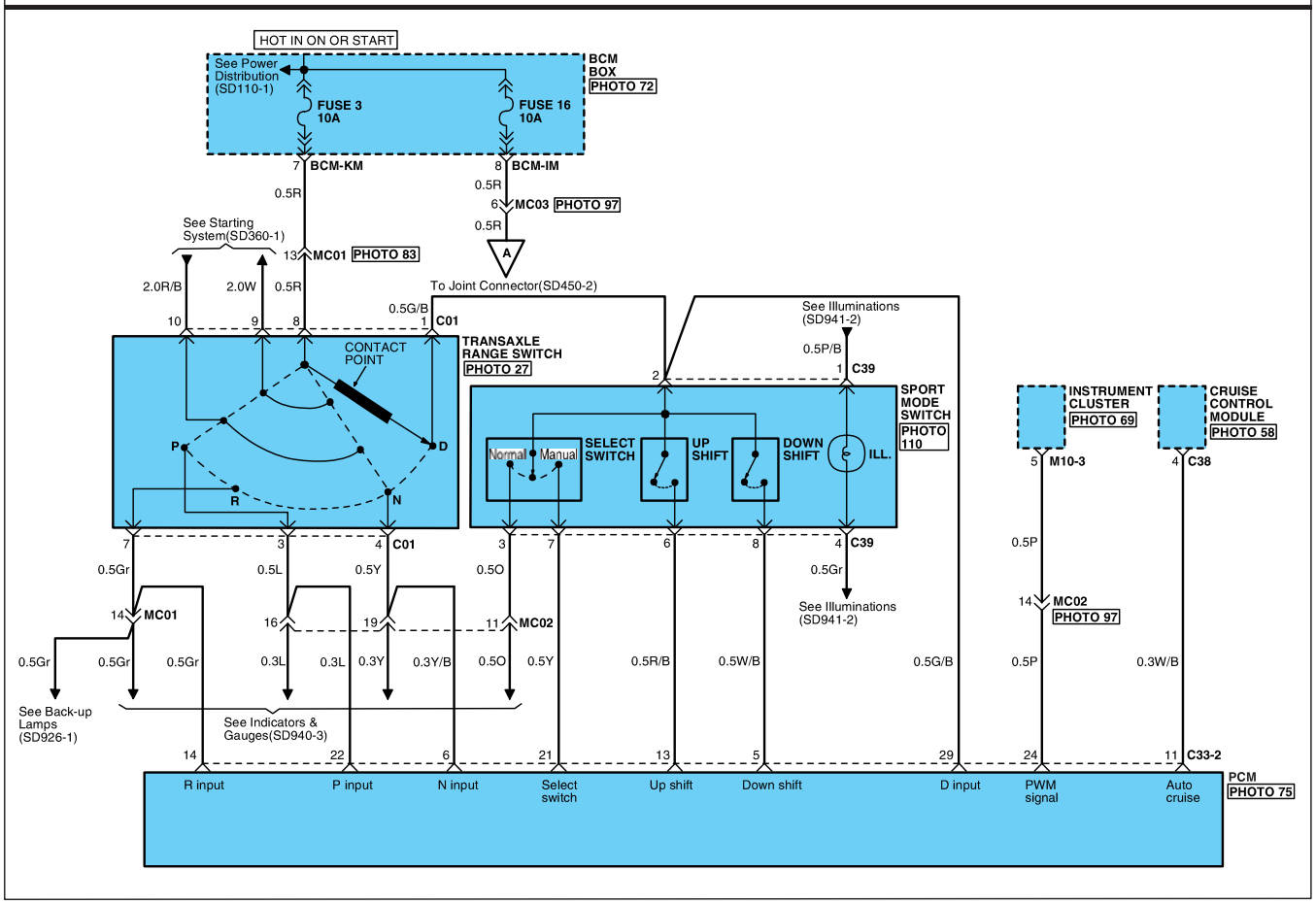
AMP_0407_22F_W_HD

Circuit Description

The vehicle speed sensor, located on the speedometer driven gear in the transaxle, generates pulse signals that indicate the vehicle s speed and provides signals to the control modules to calcaulate the vehicle speed.
The vehicle speed sensor (VSS) intermittently grounds the circuits. The number of pulses per minute increase/decrease with the speed of the car.

N2GKG436B

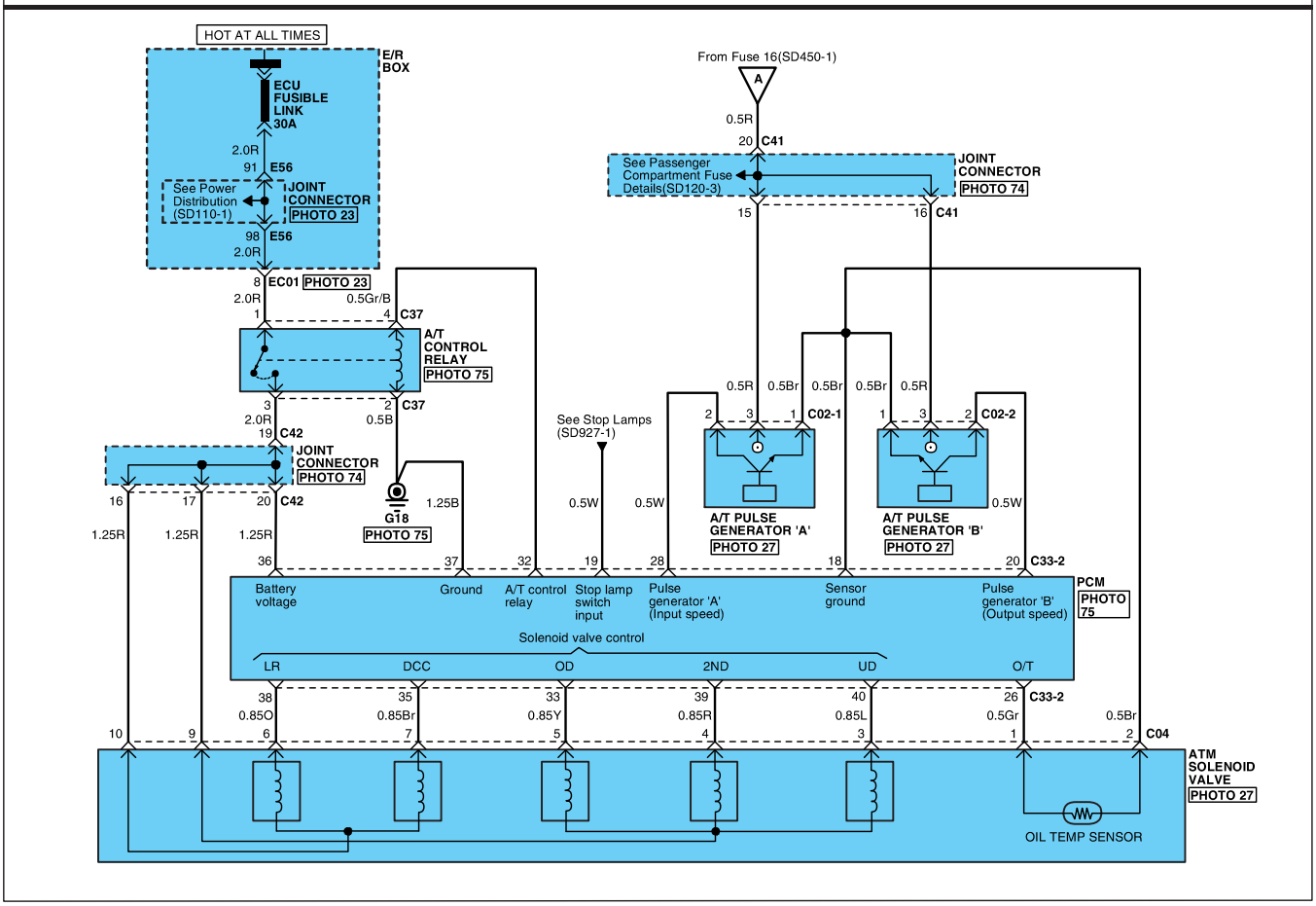
AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.0L) (1) SD450-1



N2GKG450A

AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.0L) (2)

SD450-2



N2GKG450B

AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.0L) (3)

C01

KET_SSD_10F_B_A

C02-1

KET_SSD_03F_B_A

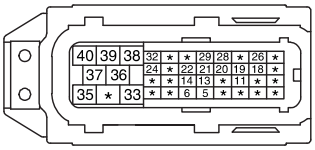
C02-2

KET_SSD_03F_Gr_B

C04

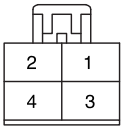
KET_SSD_10F_Gr_B

C33-2



KET_ECU_40F_B

C37

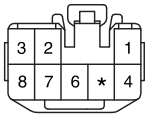


KUM_DSD_04F_B

C38

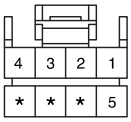
AMP_EJWP_12F_B

C39



KET_090II_08F_W

M10-3



AMP_040M1_08F_B

BLANK

BLANK

Circuit Description

The transaxle control module provides precise gear shift timing and torque converter lock-up by controlling the operation of the automatic transaxle solenoid valves (Low & reverse valve, damper clutch control valve, over-drive valve, 2nd valve and under-drive solenoid valve).
The transaxle control module operates these solenoid valves based on input signals from the various sensors (for instance, pulse generator #A,#B.

The transaxle control module has a built-in self diagnostic feature. Refer to the Shop Manual, section ATM, for details.

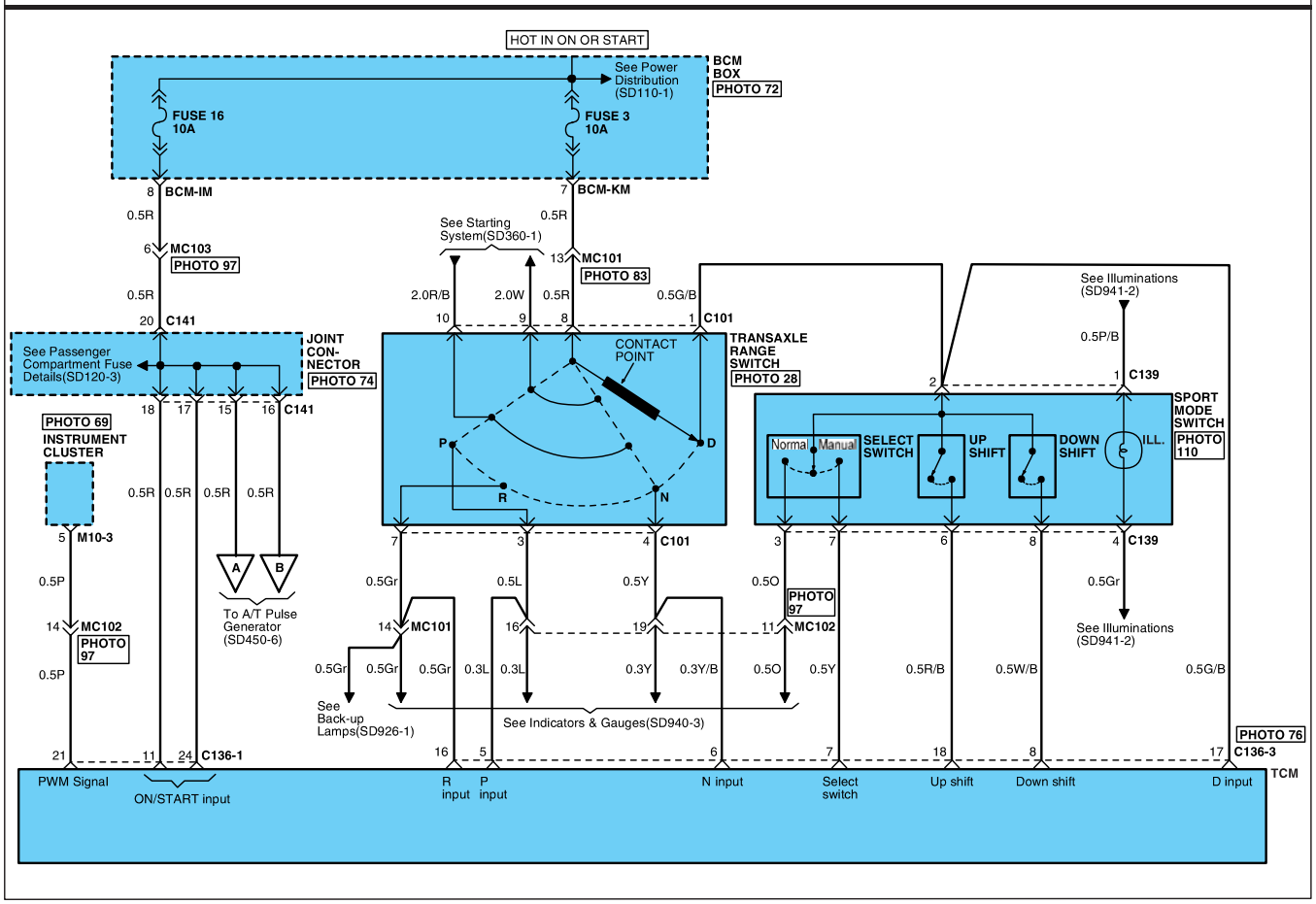
N2GKG450C

AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.0L) (4)

MEMO

N2GKG450D

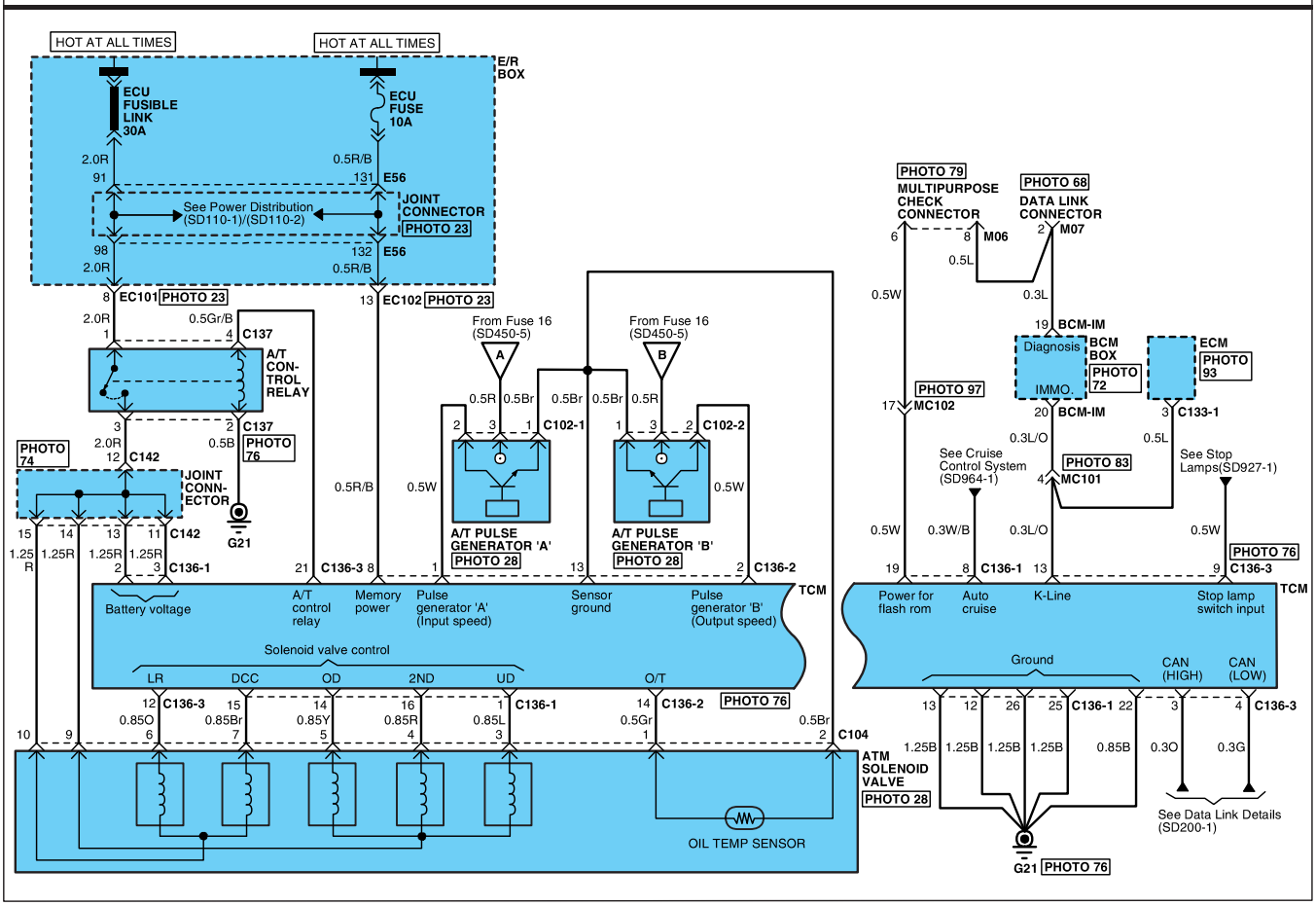
AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.7L) (1)



N2GKG450E

AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.7L) (2)

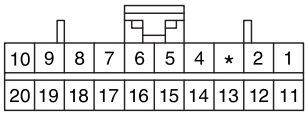
SD450-6



N2GKG450F

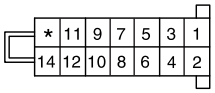
AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.7L) (3)

BCM-IM



AMP_040M2_20F_B

BCM-KM



AMP_JPT_14F_B

C101

KET_SSD_10F_B_A

C102-1

KET_SSD_03F_B_A

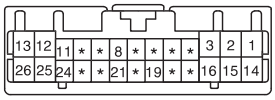
C102-2

KET_SSD_03F_Gr_B

C104

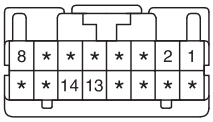
KET_SSD_10F_Gr_B

C136-1



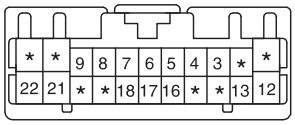
KET_0407_26F_W

C136-2



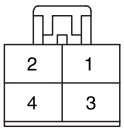
KET_0407_16F_W

C136-3



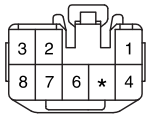
KET_0407_22F_W

C137



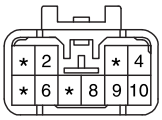
KUM_DSD_04F_B

C139



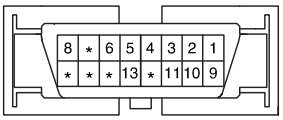
KET_090II_08F_W

M06



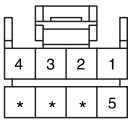
KET_090II_10M_W

M07



MLX_OBDII_16F_B_SIN

M10-3



AMP_040M1_08F_B

Circuit Description

The transaxle control module provides precise gear shift timing and torque converter lock-up by controlling the operation of the automatic transaxle solenoid valves (Low reverse valve, damper clutch control valve, over -drive valve, 2nd valve and under-drive solenoid valve). The transaxle control module operates these solenoid valves based on input signals from the various sensors (for instance, pulse generator #1,#2).

The transaxle control module has a built-in self diagnostic feature. Refer to the Shop Manual, section ATM, for details.

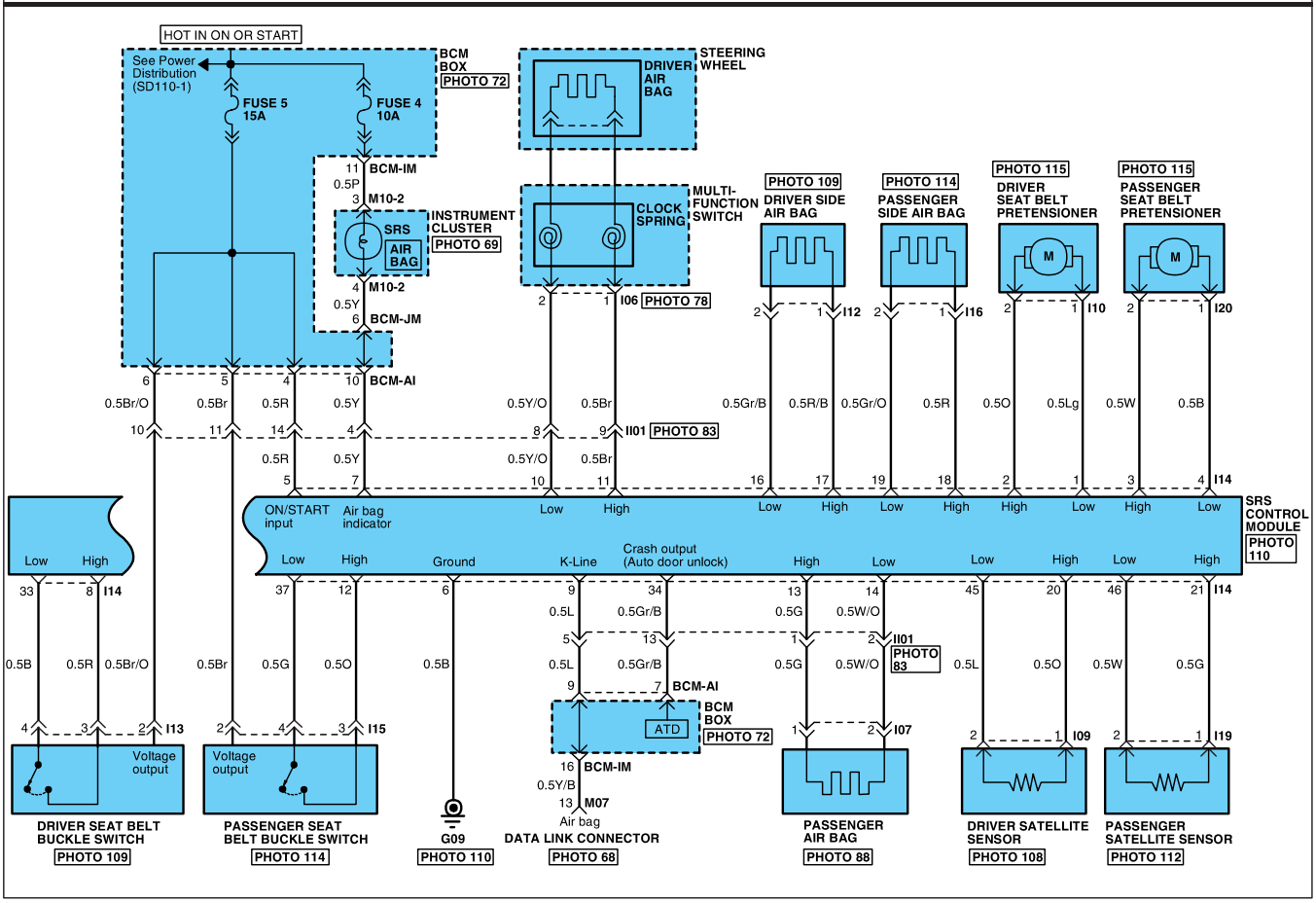
N2GKG450G

AUTOMATIC TRANSAXLE CONTROL SYSTEM (2.7L) (4)

MEMO

N2GKG450H

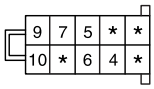
AIR BAG SYSTEM (SRS) (1) SD569-1



N2GKG569A

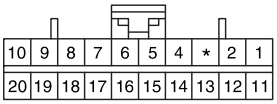
AIR BAG SYSTEM (SRS) (2) SD569-2

BCM-AI



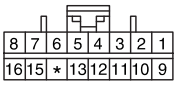
AMP_JPT_10F_B

BCM-IM



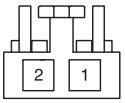
AMP_040M2_20F_B

BCM-JM



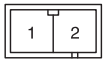
AMP_040M2_16F_B

I06



YAZ_DAB_02F_Y

I07

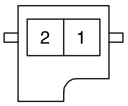


JAE_060_02M_Y_AB

I09,I19

PKD_GK_02F_B

I10, I20

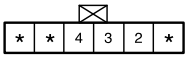


GNH_ABG_02F_Y

I12,I16

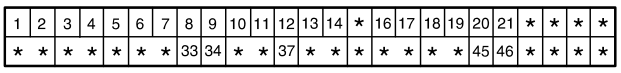
YAZ_040WP_02F_Y

I13,I15



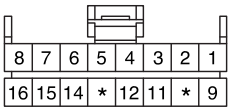
SIEMENS_SOCKET_06F_B

I14



ESPS_50F

M10-2



AMP_040M1_16F_B

Circuit Description

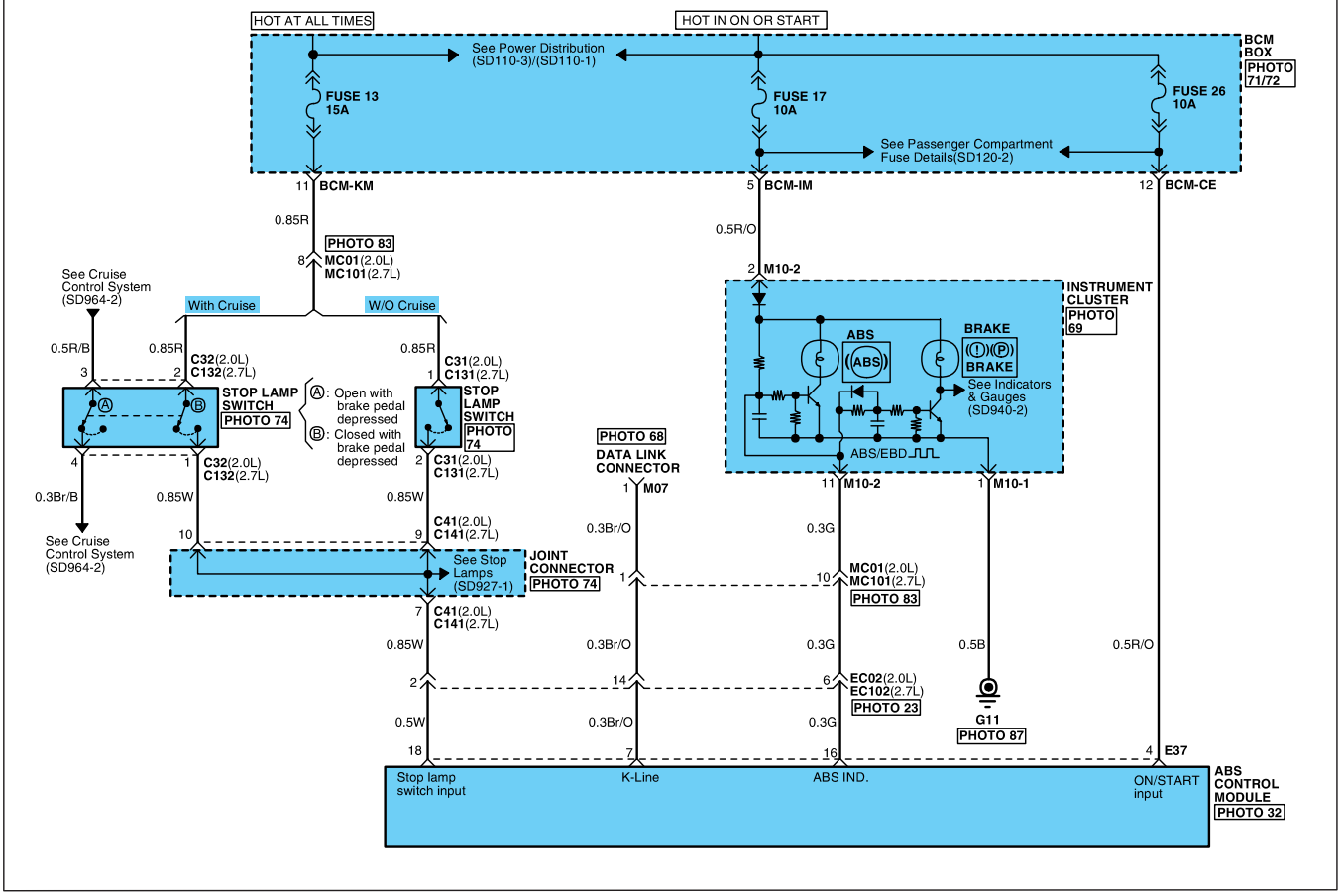
Only authorized service personnel should do work on or around the supplemental restraint system (SRS) components. Service personnel should read section 56a of the service manual carefully before starting work on the supplemental restraint system (SRS). The supplemental restraint system (SRS) is a safety device which when used in conjunction with the seat belts is designed to protect the driver and front seat passenger by deploying the air bags when the SRSCM receives a frontal impact exceeding a certain set limit.

With the ignition switch in ON or START, battery voltage is applied to the SRS control module from fuse 5 to the SRS indicator in the instrument cluster from fuse 4. When the ignition switch is turned ON, the SRS indicator in the instrument cluster will flash six times. If the SRS indicator does not flash six times, stays on or comes on while driving, the SRS is not working properly.

N2GKG569B

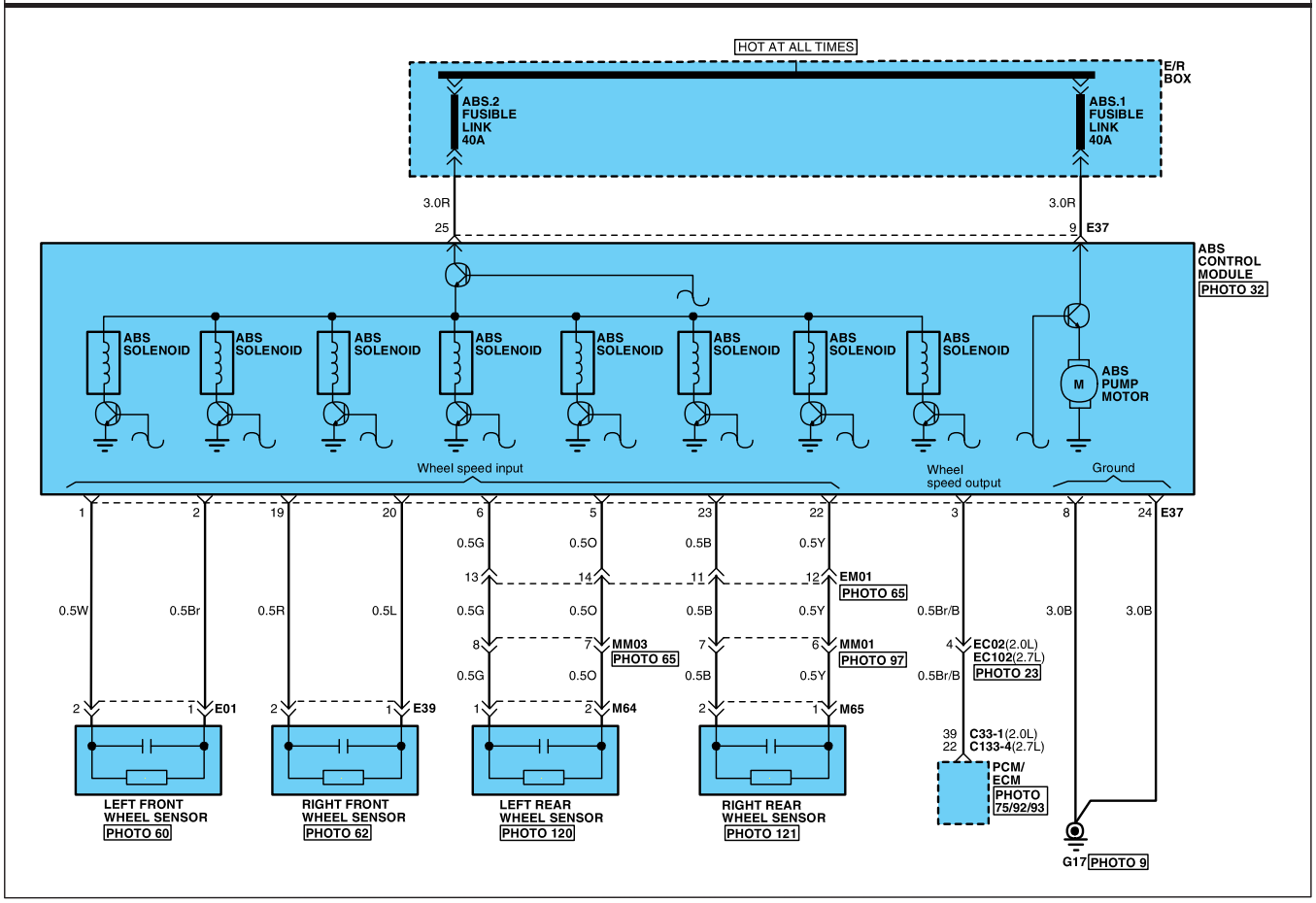
ANTI-LOCK BRAKE SYSTEM (ABS) E494DE11

ANTI-LOCK BRAKE SYSTEM (ABS) (1) SD588-1



N2GKG588A

ANTI-LOCK BRAKE SYSTEM (ABS) (2) SD588-2

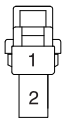


N2GKG588B

ANTI-LOCK BRAKE SYSTEM (ABS) (3)

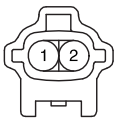
SD588-3

C31/C131



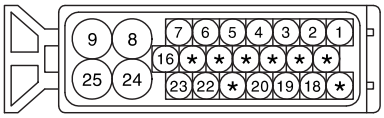
KET_250DL_02F_W

E01



KET_090IIWP_02M_Gr

E37

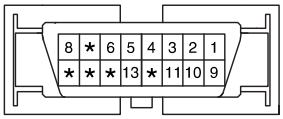


AMP_ABSWP_25F_B_GER

E39

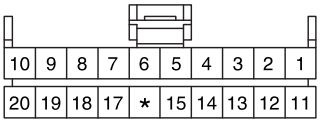
KET_090IIWP_02M_Gr

M07



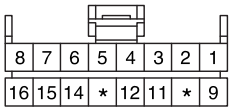
MLX_OBDII_16F_B_SIN

M10-1



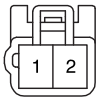
AMP_040M1_20F_B

M10-2



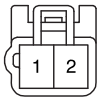
AMP_040M1_16F_B

M64



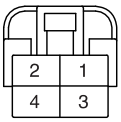
KET_090II_02M_W_R

M65



KET_090II_02M_W_R

C32/C132



KET_250DL_04F_W

BLANK

Circuit Description

ABS

The Anti-Lock Brake System (ABS) controls the hydraulic brake pressure of all four wheels during sudden braking and braking on hazardous road surfaces, preventing the wheels from locking. The ABS provides the following benefits:

(1) Enables steering around obstacles with a greater degree of certainty during panic braking.

(2) Enables stopping during panic braking while allowing stability and control even on curves.

In case a malfunction occurs in the anti-lock brake system, the system will operate as a normal brake system (fail-safe mode). A diagnosis function and fail-safe system have been included for serviceability.

N2GKG588C

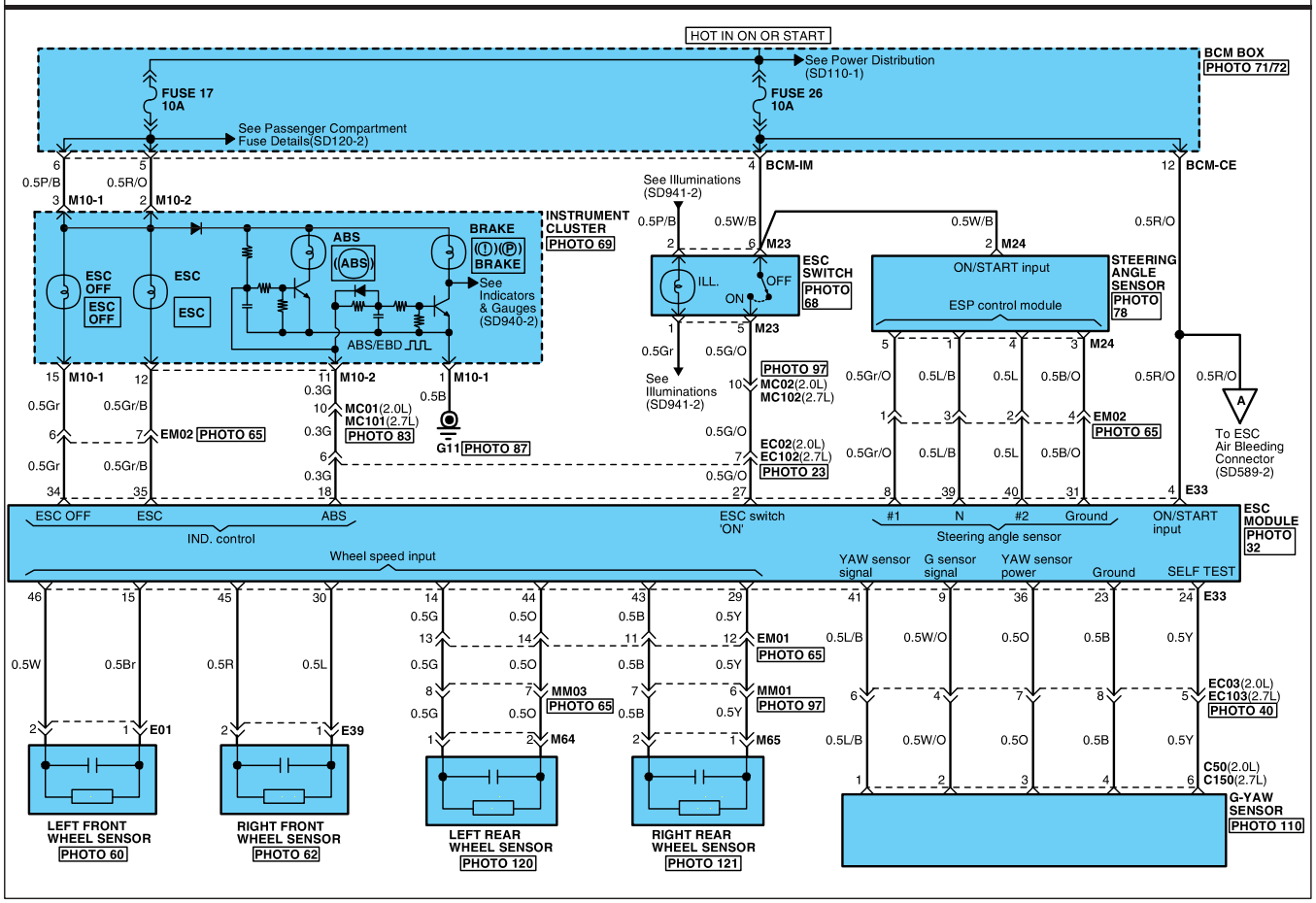
ANTI-LOCK BRAKE SYSTEM (ABS) (4)

MEMO

N2GKG588D

ELECTRONIC STABILITY CONTROL(ESC) SYSTEM E8CAB715

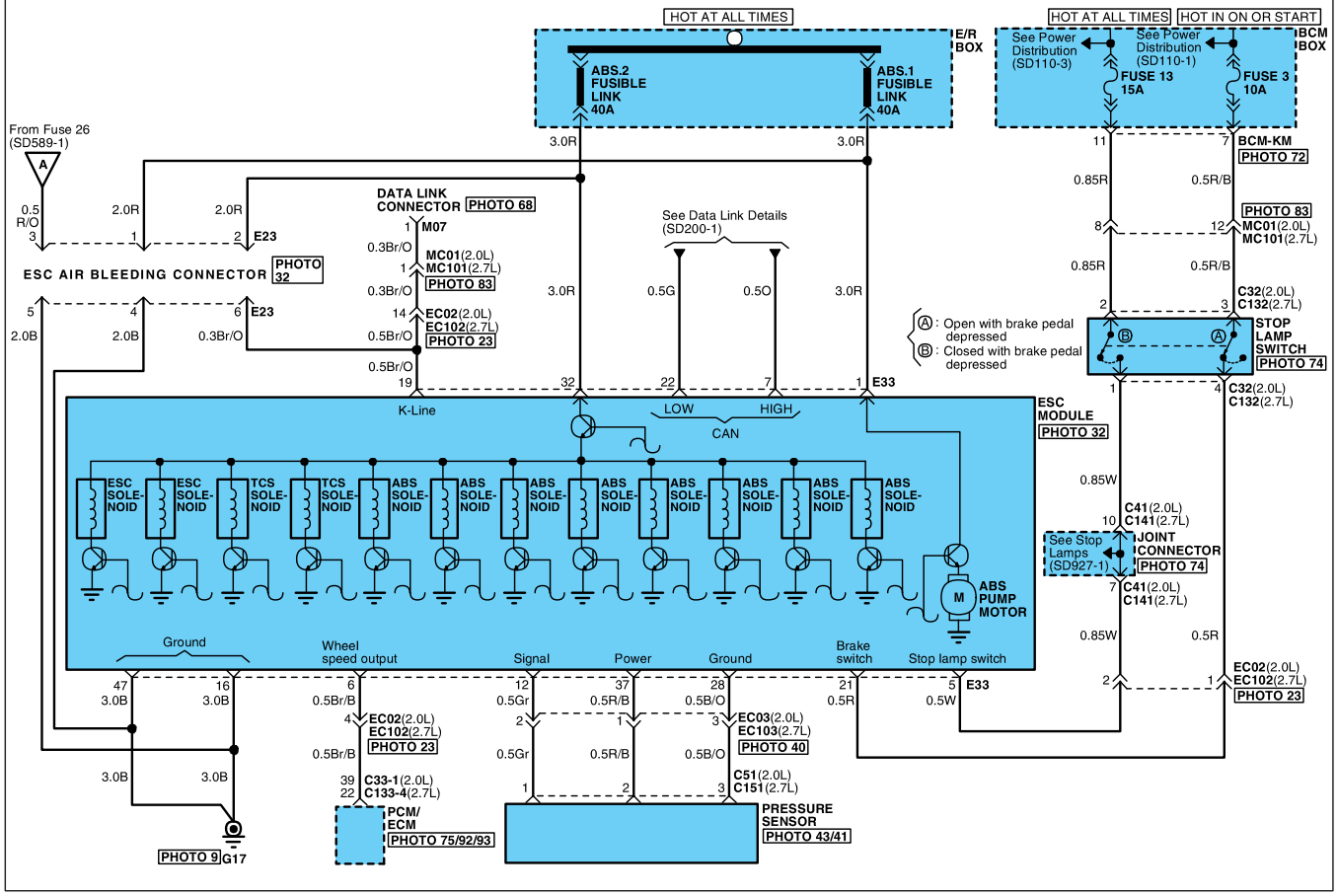
ELECTRONIC STABILITY CONTROL(ESC) SYSTEM (1) SD589-1



N2GKG589A

ELECTRONIC STABILITY CONTROL(ESC) SYSTEM (2)

SD589-2

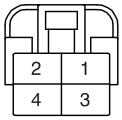


N2GKG589B

ELECTRONIC STABILITY CONTROL(ESC) SYSTEM (3)

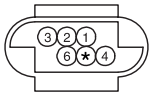
SD589-3

C32/C132



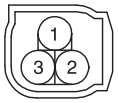
KET_250DL_04F_W

C50/C150



AMP_MQSWP_06F_GR_1

C51/C151

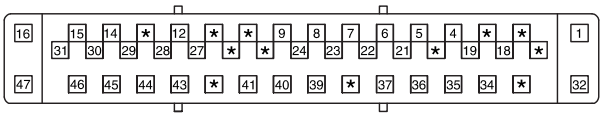


AMP_MQSWP_03F_GR_1

E01

KET_090IIWP_02M_Gr

E33

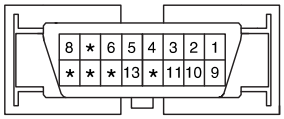


AMP_ESP_47F_L_UNIT

E39

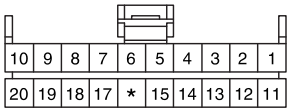
KET_090IIWP_02M_Gr

M07



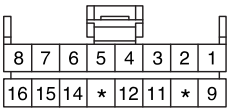
MLX_OBDII_16F_B_SIN

M10-1



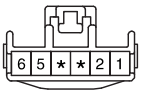
AMP_040M1_20F_B

M10-2



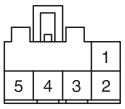
AMP_040M1_16F_B

M23



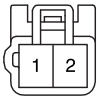
KET_090II_06F_B_SW

M24



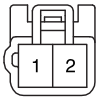
KUM_CDR_05F_W

M64



KET_090II_02M_W_R

M65



KET_090II_02M_W_R

E23

KET_090IIWP_06M_Gr

BLANK

N2GKG589C

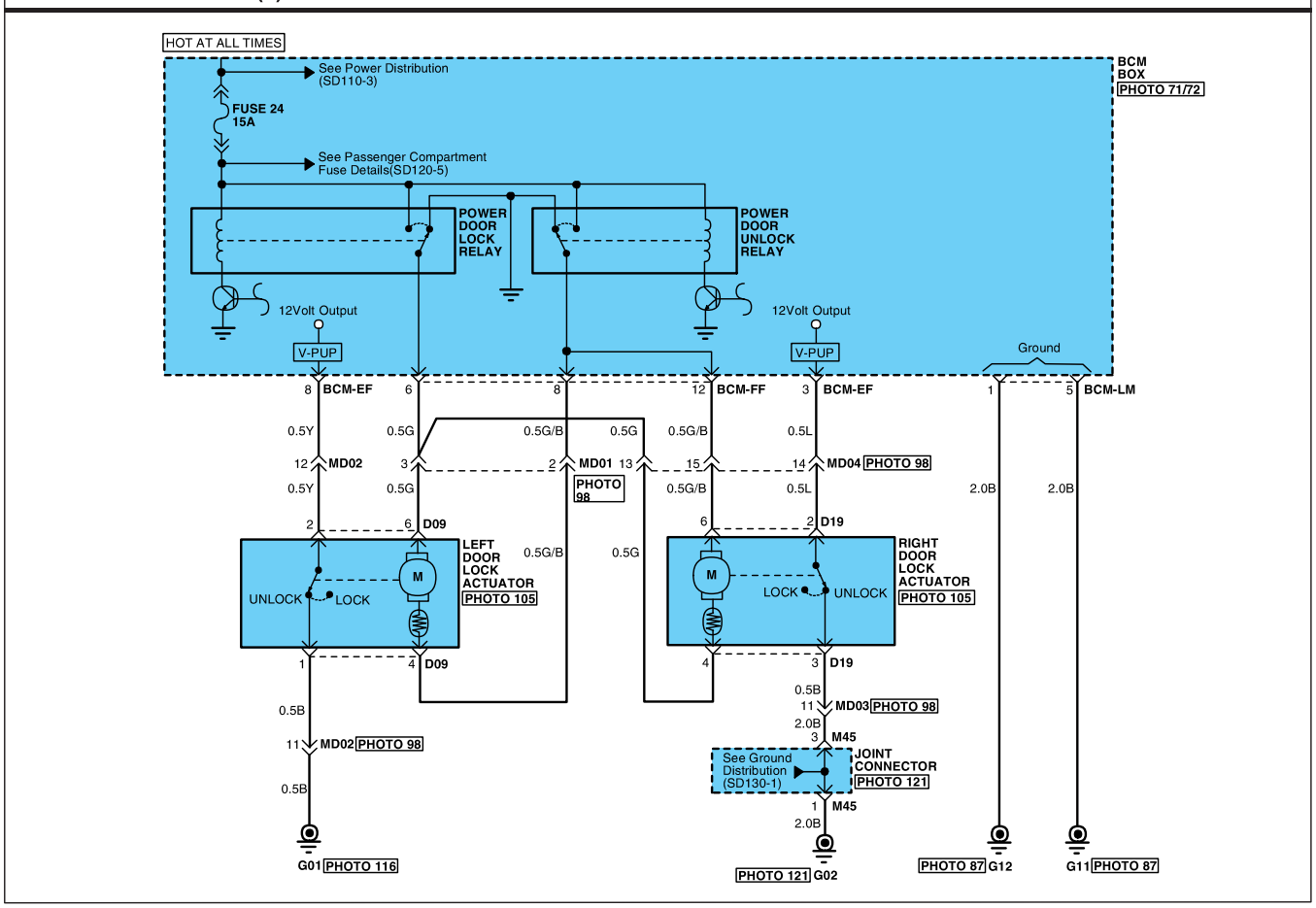
ELECTRONIC STABILITY CONTROL(ESC) SYSTEM (4) SD589-4

MEMO

N2GKG589D

POWER DOOR LOCKS E13429B9

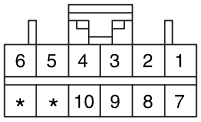
POWER DOOR LOCKS (1) SD813-1



N2GKG813A

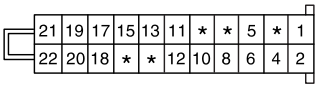
POWER DOOR LOCKS (2) SD813-2

BCM-EF



AMP_040M2_12F_B

BCM-FF



AMP_JPT_22F_B

D09

KET_SSD_06F_B

D19

KET_SSD_06F_B

Circuit Description

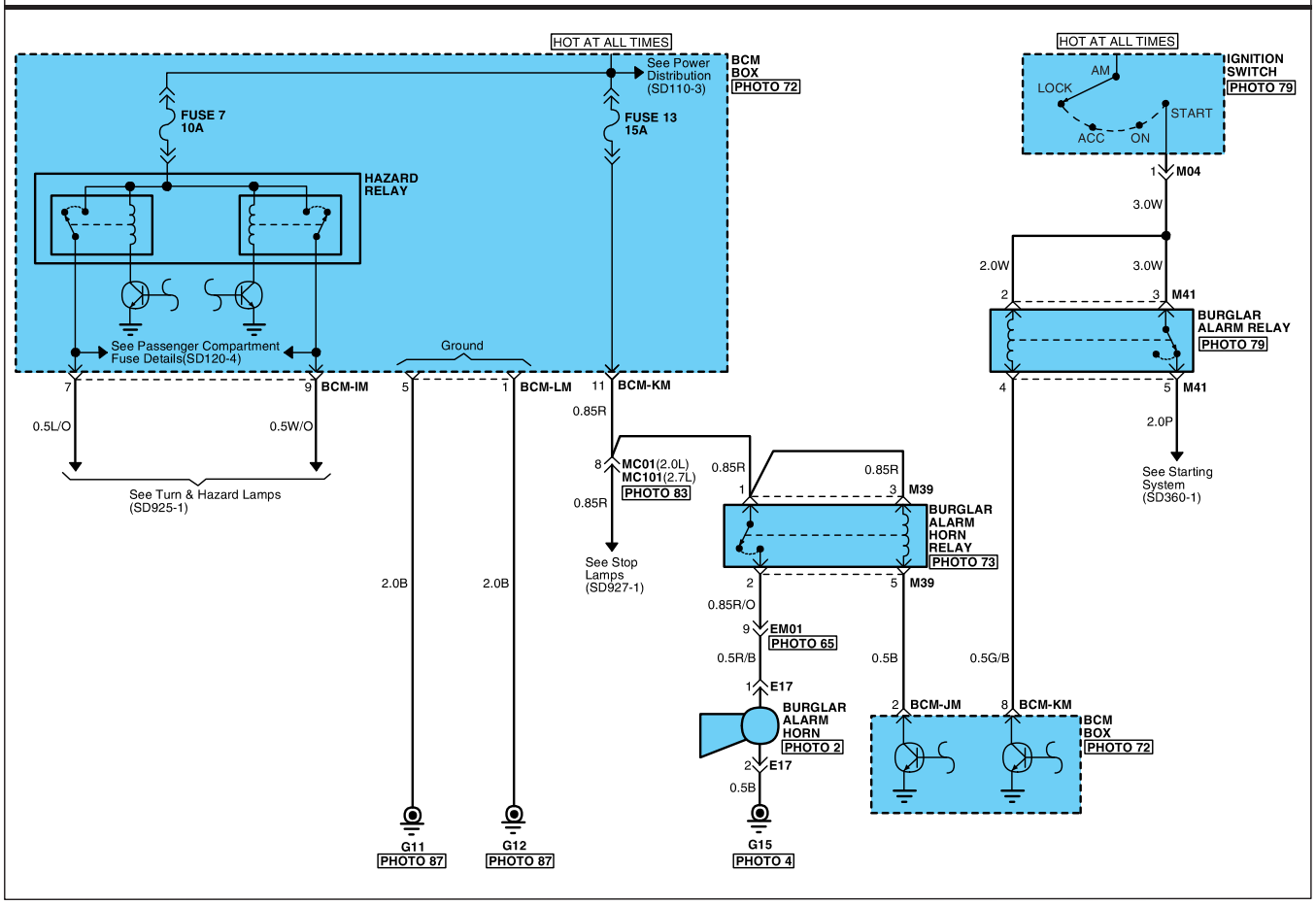
Battery voltage is applied at all times to the door lock relays and unlock relay. When locking the vehicle by using the door unlock switch in the left power window switch, the door unlock switch will provide a ground to the lock relay and the doors lock. When locking the doors by using the vehicle key or pushing down the lock knob, a signal will be sent to the body control module. The control module will then ground the relay according to the vehicle speed and the doors lock. The body control module also has an input from the ignition key switch. This input prevents the doors from accidentally being locked when exiting the vehicle with the ignition off and the key left in the ignition switch.

When you turn the driver's master switch assembly to the UNLOCK position, a path to ground is supplied to the unlock relay. Battery voltage is applied to the door lock actuators. The polarity of the voltage applied to the actuators is now reversed and the doors unlock.

N2GKG813B

BURGLAR ALARM HORN SYSTEM E58C2AFD

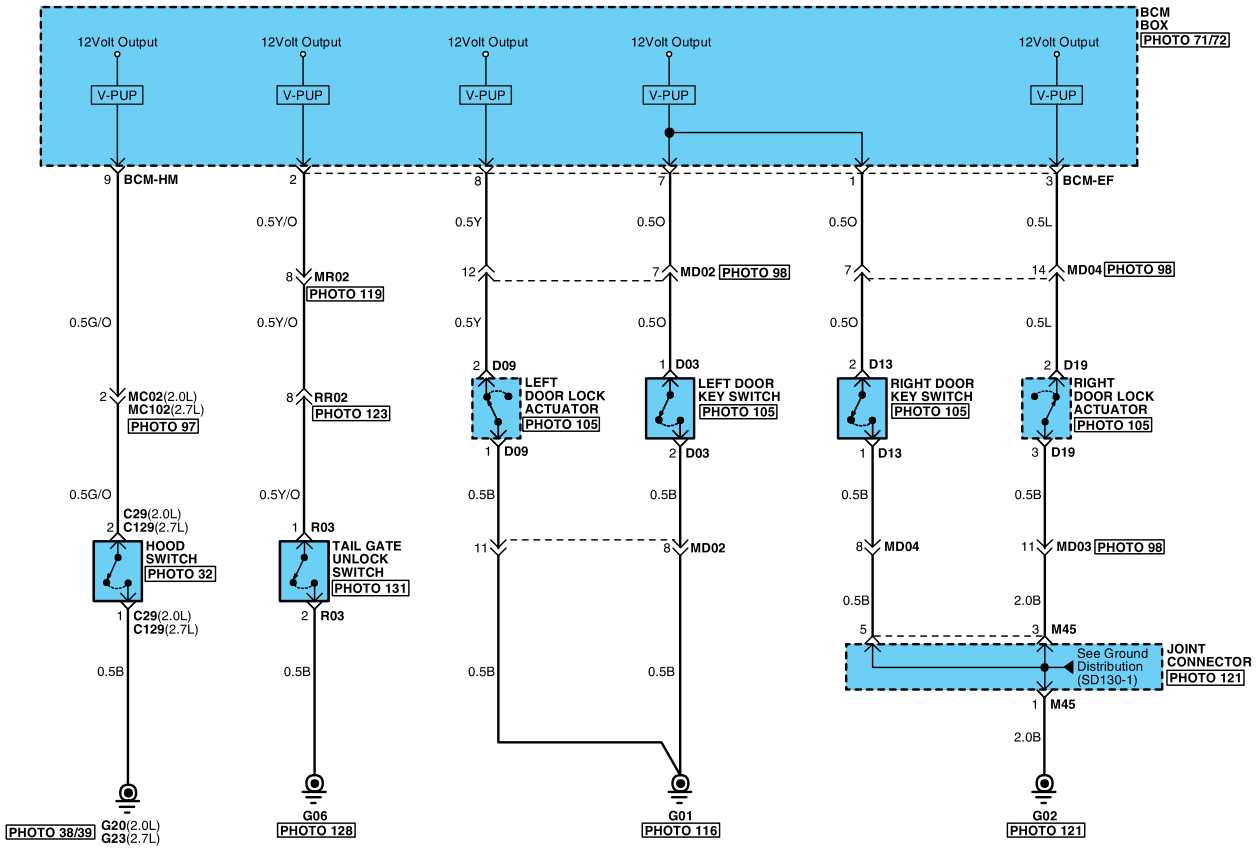
BURGLAR ALARM HORN SYSTEM (1) SD814-1



N2GKG814A

BURGLAR ALARM HORN SYSTEM (2)

SD814-2

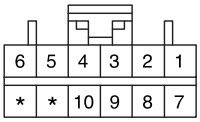


N2GKG814B

BURGLAR ALARM HORN SYSTEM (3)

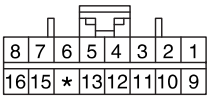
SD814-3

BCM-EF



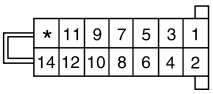
AMP_040M2_12F_B

BCM-JM



AMP_040M2_16F_B

BCM-KM



AMP_JPT_14F_B

C29/C129

KUM_NMWP_02F_B

D03,D13

KET_SSD_02F_B

D09

KET_SSD_06F_B

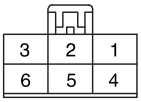
D19

KET_SSD_06F_B

E17

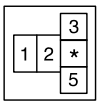
MLX_HORN_02F_B_FILT

M04



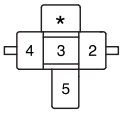
KUM_DSD_06F_W

M39



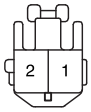
KET_ISO_MICRO_RLY

M41



KET_250_05F_B_RLY

R03



KET_090II_02F_Gr_T

Circuit Description

Battery voltage is applied at all times to the burglar alarm horn relay from the Fuse 13. BCM detects the left door lock actuator, right door lock actuator, tail gate unlock switch, and hood switch and sends a signal to the burglar alarm horn relay so as to operate the burglar alarm horn.

N2GKG814C

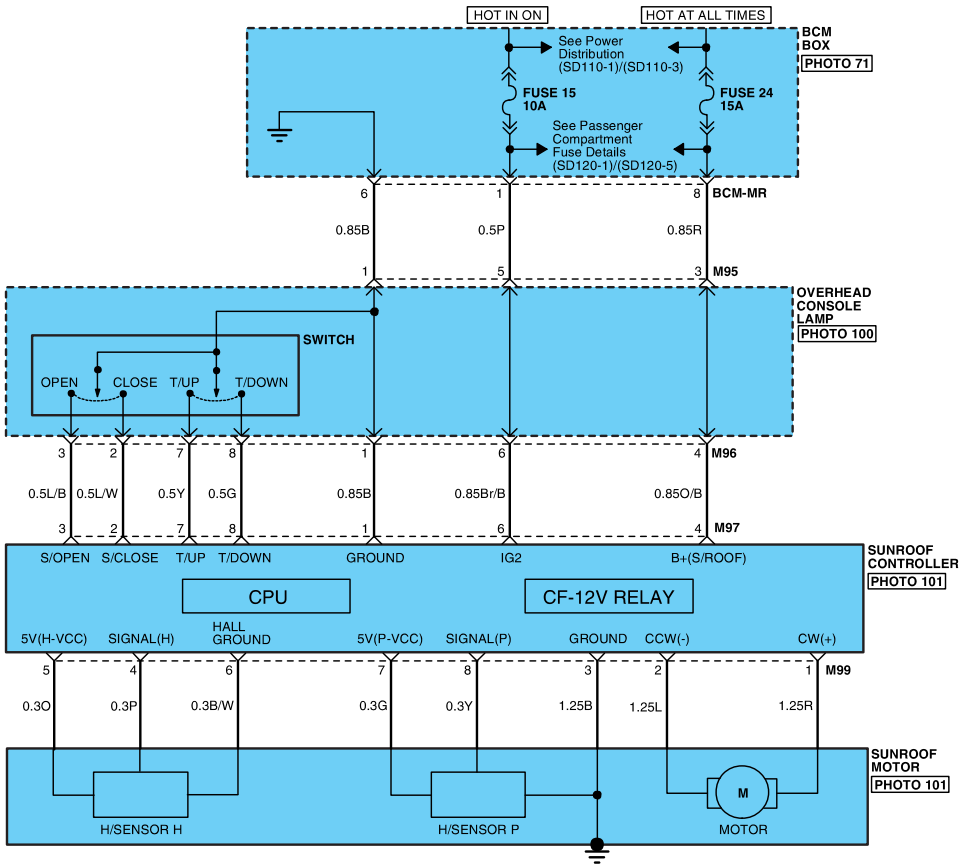
BURGLAR ALARM HORN SYSTEM (4)

MEMO

N2GKG814D

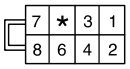
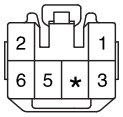
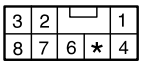
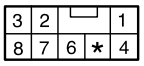
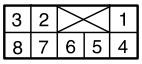
SUNROOF E1E49580

SUNROOF (1) SD816-1



N2GKG816A

SUNROOF (2) SD816-2

BCM-MR	M95	M96	M97
 AMP_JPT_08F_B	 KET_090II_06F_W	 CR08F001	 CR08F001
M99  CR08F027	BLANK	BLANK	BLANK

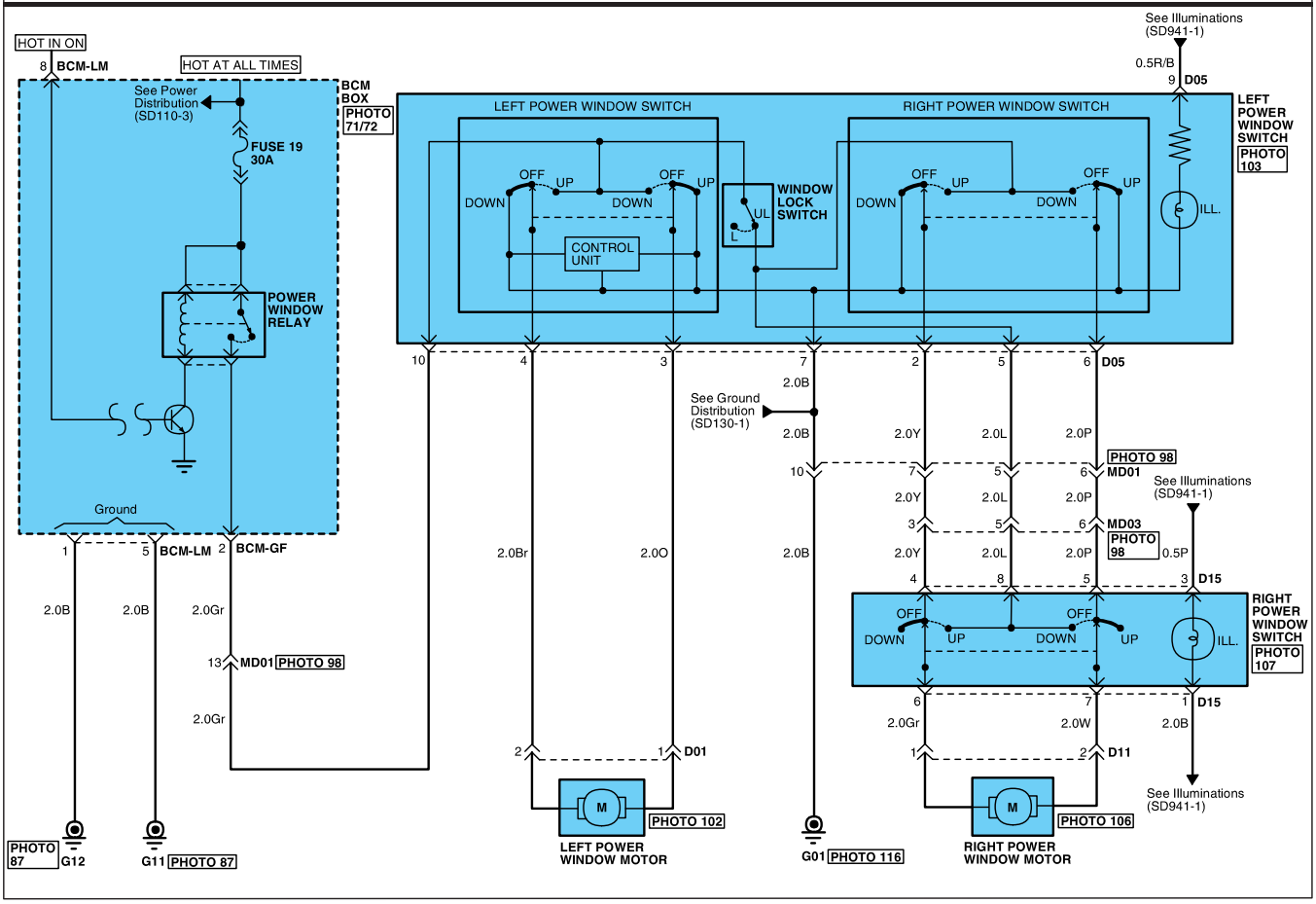
Circuit Description

Battery voltage is supplied at all times to the sunroof controller from fuse 24 and fuse 15 also supplies battery voltage when the ignition switch is in ON. Overhead console lamp contains open/close tilt up/tilt down switches and when one of them is depressed, sunroof motor is operated by CPU and relay of sunroof controller.

N2GKG816B

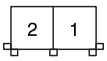
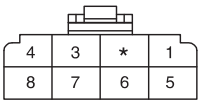
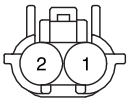
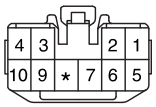
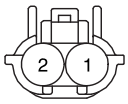
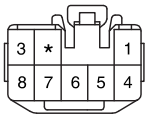
POWER WINDOWS E86B33F5

POWER WINDOWS (1) SD824-1



N2GKG824A

POWER WINDOWS (2) SD824-2

BCM-GF	BCM-LM	D01	D05
 AMP_SPT_02F_B	 AMP_250_08F_W	 KET_SWP_02F_B	 KET_090II_10F_W
D11	**D15**	**BLANK**	**BLANK**
 KET_SWP_02F_B	 KET_090II_08F_W		

Circuit Description

A permanent magnet motor operates each of the power windows. Each motor raises or lowers the glass when voltage is supplied to it. The direction the motor turns depends on the polarity of the supply voltage. The left power window switch controls all the power window motors. Each window switch controls only one of the power window motors. If the lock switch is depressed, the right power window cannot be controlled by their own window switches, but they can still be controlled from the left power window switch.

Left Power Window Switch Operation

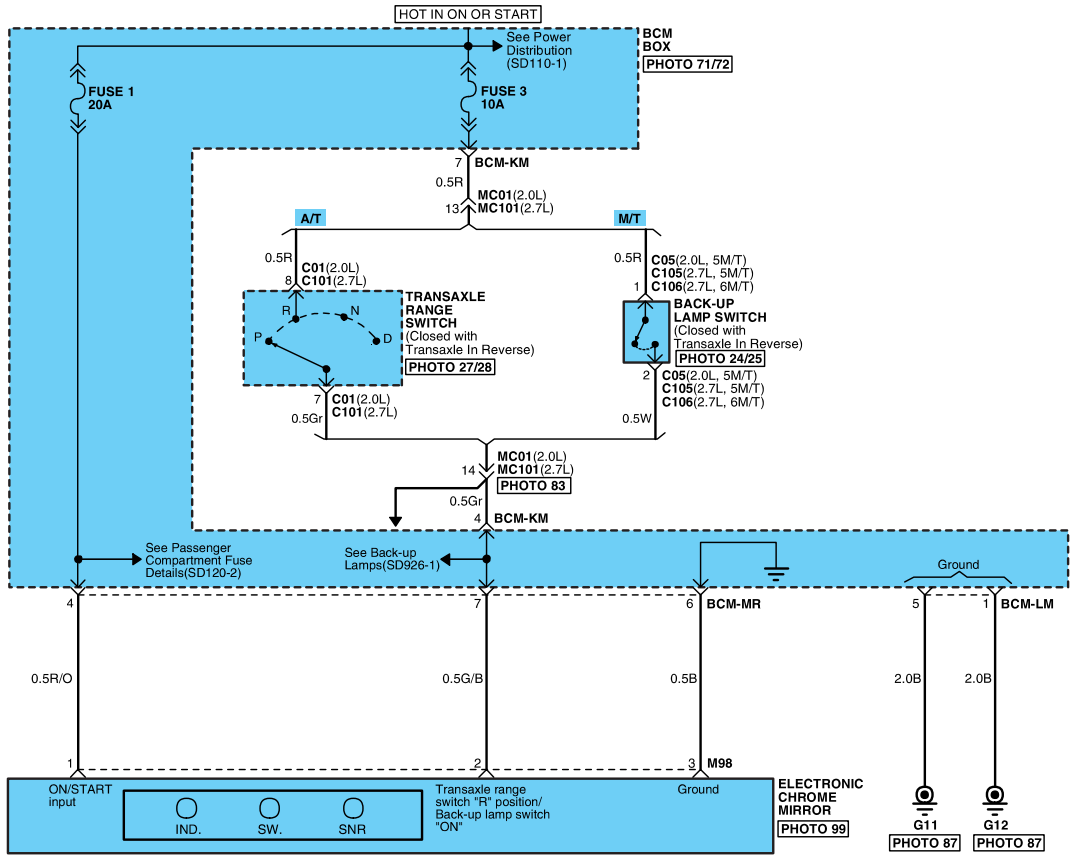
Battery voltage is applied to the coil and the contacts of the power window relay at all times. The coil of the relay is grounded through the body control module (BCM) anytime the ignition switch is ON. Battery voltage is then supplied to the left power window switch through the closed relay contacts. When any of the switches in the left power window are operated,battery voltage is applied to the power window motor. The power window motor is grounded through the opposite contact in the left power window switch. The power window motor runs to dirve the window.

Window Switch Operation

With the power window relay energized, battery voltage is supplied to the passenger window switches as long as the lock switch in the left power window switch is OFF (not depressed). When the passenger windows switch is operated, battery voltage is applied to one terminal of the power window motor. The other terminal is grounded through the opposite contact in the window switch and the main switch. The power window motor runs to drive the window.

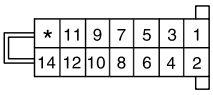
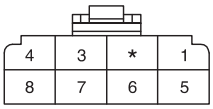
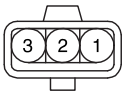
ELECTRO CHROME MIRROR EEB4D52F

ELECTRO CHROME MIRROR (1) SD851-1



N2GKG851A

ELECTRO CHROME MIRROR (2)

BCM-KM	BCM-LM	BCM-MR	C01
 AMP_JPT_14F_B	 AMP_250_08F_W	AMP_JPT_08F_B	KET_SSD_10F_B_A
C05	**C101**	**C105**	**C106**
KUM_NMWP_02F_B	KET_SSD_10F_B_A	KUM_NMWP_02F_B	YAZ_91RVWP_02F_B
M98	**BLANK**	**BLANK**	**BLANK**
 KET_TLCWP_03F_B			

Circuit Description

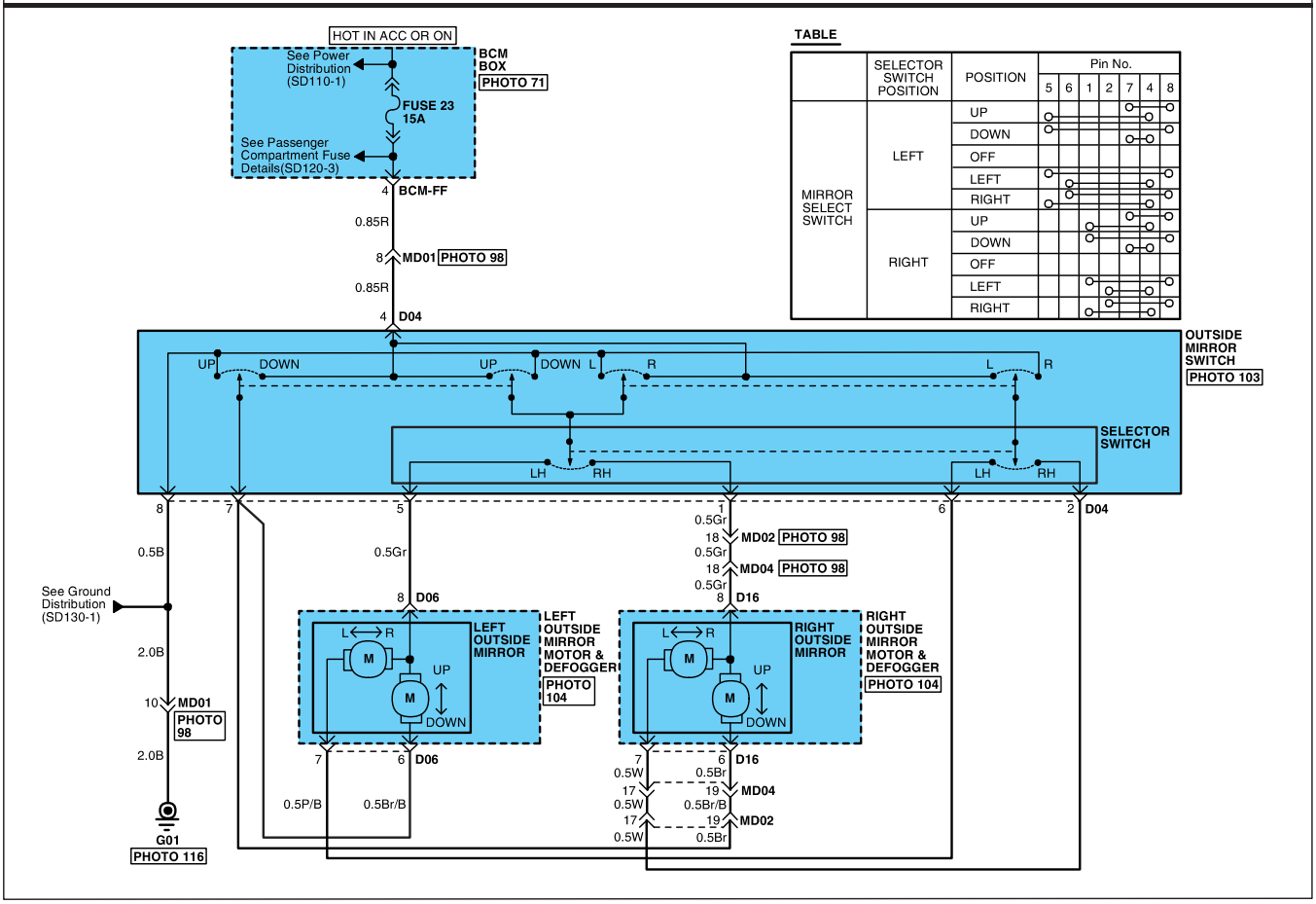
When the ignition switch in ON or START and the transaxle range switch is in R (auto-matic transaxle)/ back-up switch ON (manual transaxle), the electrical control mirror inactivates automatically to improve visibility backing up.

The electronic chrome mirror automatically controls the glare of the headlights from vehicles behind you in low-light situations.

N2GKG851B

POWER OUTSIDE MIRRORS E09DD460

POWER OUTSIDE MIRRORS (1) SD876-1

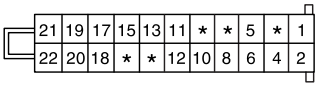
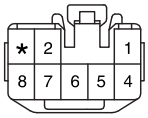
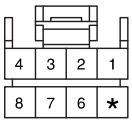
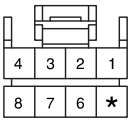


TABLE

	SELECTOR SWITCH POSITION	POSITION	Pin No. 5	6	1	2	7	4	8
MIRROR SELECT SWITCH	LEFT	UP	○				○	○	○
		DOWN	○				○	○	○
		OFF							
		LEFT	○	○				○	○
		RIGHT	○	○				○	○
	RIGHT	UP			○		○	○	○
		DOWN			○		○	○	○
		OFF							
		LEFT			○	○		○	○
		RIGHT			○	○		○	○

N2GKG876A

POWER OUTSIDE MIRRORS (2) SD876-2

BCM-FF	D04	D06	D16
			
AMP_JPT_22F_B	KET_090II_08F_W	AMP_040M1_08F_B	AMP_040M1_08F_B

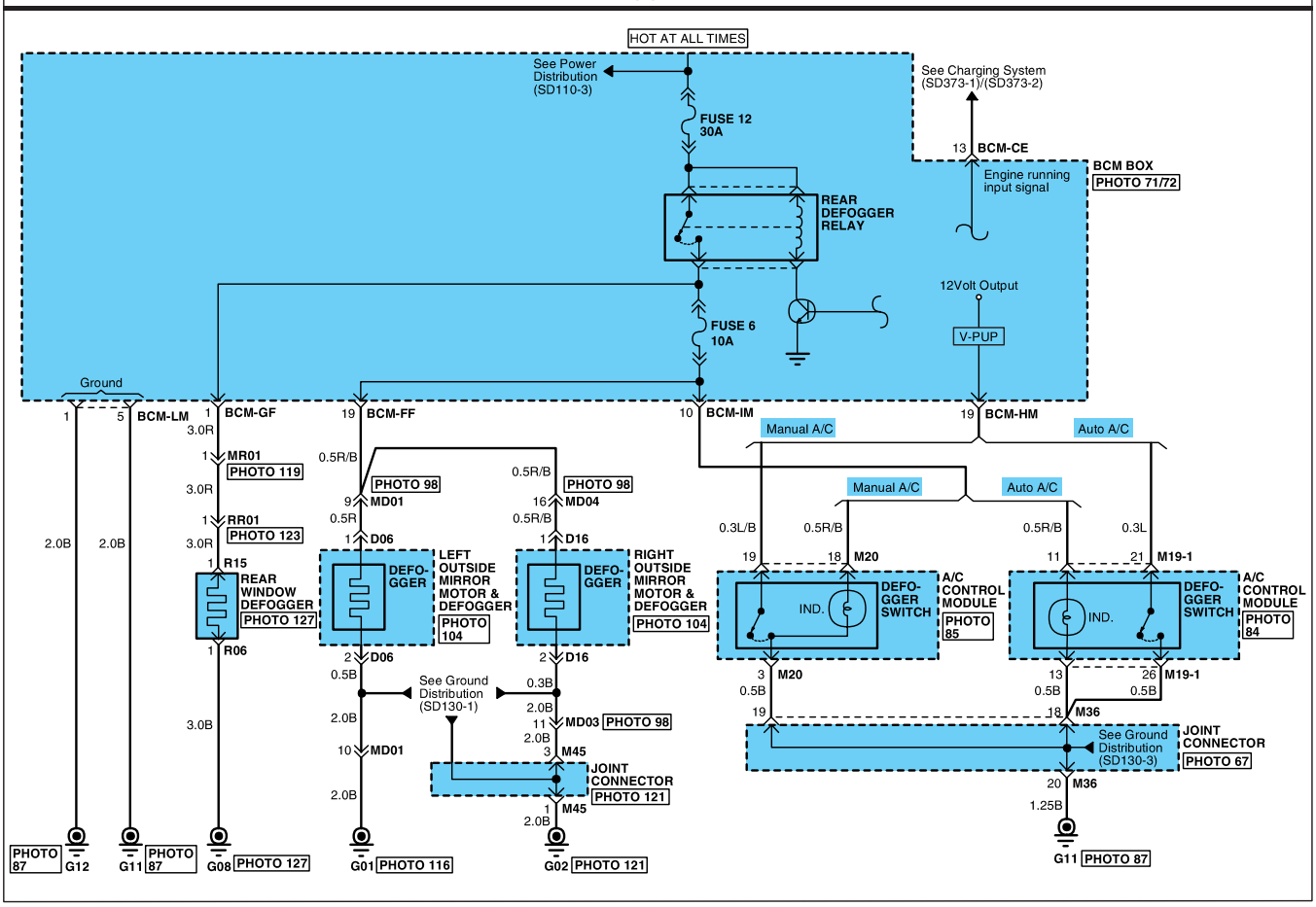
Circuit Description

The operation of th two outside mirrors is controlled by the power door mirror switch. Each mirror has two reversible motors: One motor moves the mirror up and down, the other motor moves the mirror left and right.
The master selector switch in the power door mirror control switch directs battery voltage to the right or left outside mirror.
With the ignition switch in ACC or IN, battery voltage is applied from fuse 23 to the power door mirror switch. With the master selector switch in LEFT and the up/down switch in UP, battery voltage is applied to the up contacts of the up/down switch and to the left power mirror up/down motor. Ground is provided to the up contacts of the up/down switch and the left power mirror up/down motor and the mirror goes up.
In the DOWN position, battery voltage and ground are applied to the opposite sides of the motor.

The left/right switch works similarly to the up/down switch. With the master selector switch in the RIGHT position, battery voltage and ground are applied to the right power mirror motors which operate in a similar way.

N2GKG876B

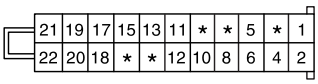
REAR WINDOW & OUTSIDE MIRROR DEFOGGER SYSTEM (1) SD879-1



N2GKG879A

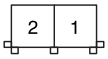
REAR WINDOW & OUTSIDE MIRROR DEFOGGER SYSTEM (2) SD879-2

BCM-FF



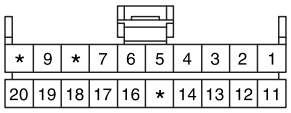
AMP_JPT_22F_B

BCM-GF



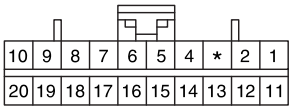
AMP_SPT_02F_B

BCM-HM



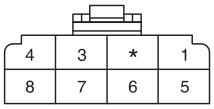
AMP_040M1_20F_B

BCM-IM



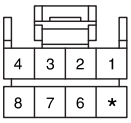
AMP_040M2_20F_B

BCM-LM



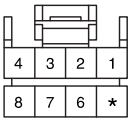
AMP_250_08F_W

D06



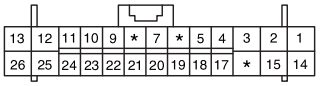
AMP_040M1_08F_B

D16



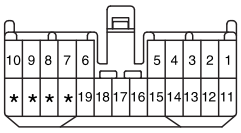
AMP_040M1_08F_B

M19-1



AMP_0407_26F_W_HD

M20



KET_050_23F_W

R06

CR01F006

R15

AMP_PLM1_01F_B

BLANK

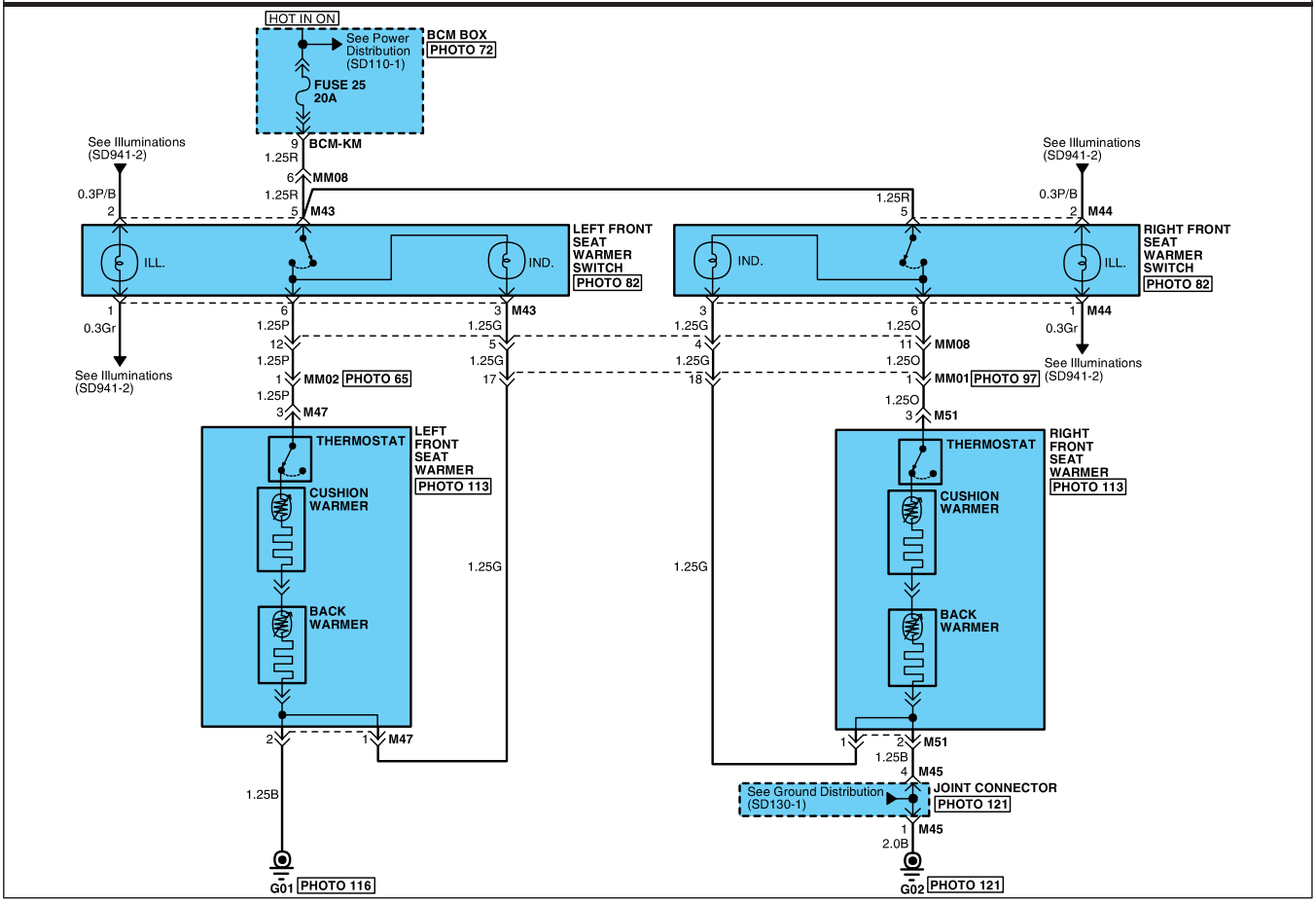
Circuit Description

The BCM controls the operation of the rear window defogger and outside mirror defogger through the defogger relay coil control. When the rear window defogger switch is depressed (ON) and the engine is running, the defogger relay coil is energized through the BCM for 20 minutes. Battery voltage is supplied to the rear window defogger through the defogger relay contacts.

N2GKG879B

SEAT WARMER E9483DAB

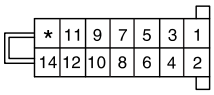
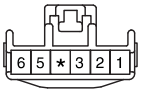
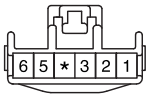
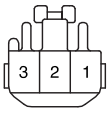
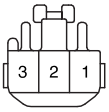
SEAT WARMER (1) SD889-1



N2GKG889A

SEAT WARMER (2)

SD889-2

BCM-KM	M43	M44	M47
 AMP_JPT_14F_B	 KET_090II_06F_B_SW	 KET_090II_06F_Y_SW	 KET_090II_03F_W
M51			
 KET_090II_03F_W	**BLANK**	**BLANK**	**BLANK**

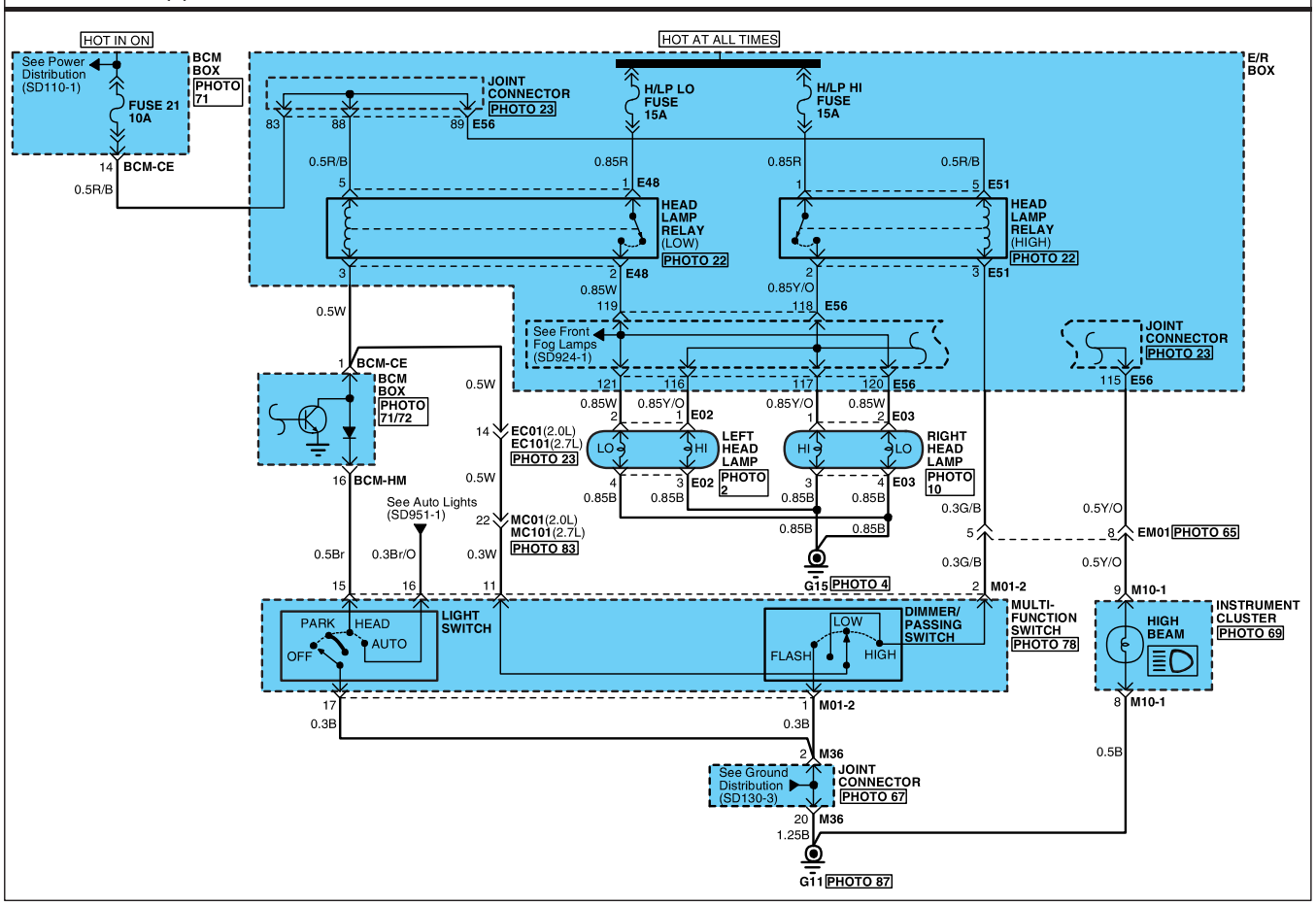
Circuit Description

Fuse 25 supplies battery voltage to the Left/Right front seat warmer when the ignition switch is "ON" and the Left/Right front seat warmer switches are pushed. When each seat warmer switch is pushed, battery voltage is supplied to the seat warmer and grounded through G01/G02.

N2GKG889B

HEAD LAMPS E3610FC4

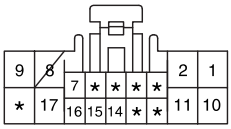
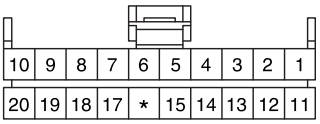
HEAD LAMPS (1) SD921-1



N2GKG921A

HEAD LAMPS (2) SD921-2

E02	E03	E48	E51
KUM_NMWP_04F_B	KUM_NMWP_04F_B	CR05F011	CR05F011

M01-2		M10-1	
 KET_0509_18F_W	BLANK	 AMP_040M1_20F_B	BLANK

Circuit Description

Low Beam Operation
With the ignition switch in ON, battery voltage is applied to the coil of the head lamp relays (low and high) from fuse 21. With the light switch in HEAD and the dimmer switch in low, ground is provided to the coil of the low head lamp relays through the light switch. Battery voltage from the head lamps fuse is then provided to the low beam head lamps through the closed contacts of the head lamp relay (low). The low beam head lamps light.

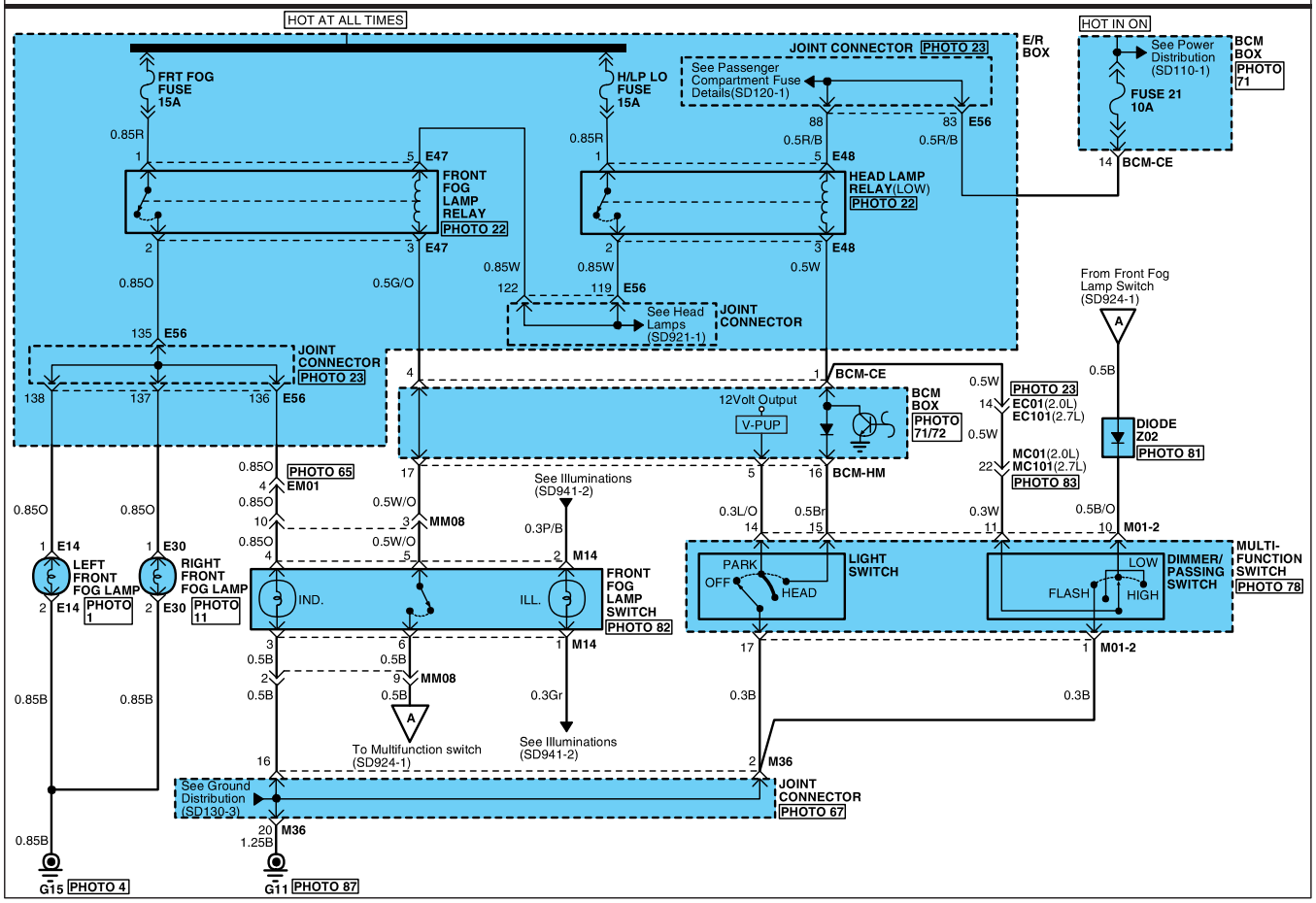
High Beam Operation
With the ignition switch in ON, battery voltage is applied to the coil of head lamp relays (low and high) through fuse 21. With the light switch in HEAD and the dimmer switch in high, ground is provided to the coil of the high head lamp relay through the light switch.

Battery voltage from the head lamp fuse is then provided to the high beam head lamps through the closed contacts of the head lamp relay (high). With the head lamp dimmer/passing switch in HIGH, ground is provided to the high beam head lamps through the head lamp dimmer/passing switch. Battery voltage is also provided to the high beam indicator in the instrument cluster.

Flash Operation
The flash feature works with the light switch in all positions (OFF,PARK or HEAD). With the light switch in OFF or PARK and the head lamp dimmer switch in FLASH, ground is provided to the high head lamps and the Low and High head lamp relays through the head lamp dimmer/passing switch. Battery voltage is applied to the high beam head lamp and the beam indicator, and the high beams and the high beam indicator light as long as the switch is held in the FLASH position.

FRONT FOG LAMPS E2C79A9D

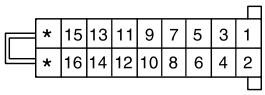
FRONT FOG LAMPS (1) SD924-1



N2GKG924A

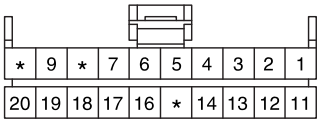
FRONT FOG LAMPS (2) SD924-2

BCM-CE



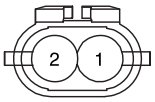
AMP_JPT_18F_B

BCM-HM



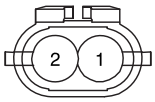
AMP_040M1_20F_B

E14



PKD_280WP_02F_Gr

E30



PKD_280WP_02F_Gr

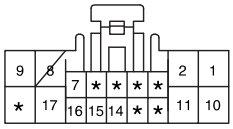
E47

CR05F011

E48

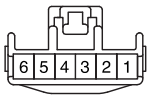
CR05F011

M01-2



KET_0509_18F_W

M14

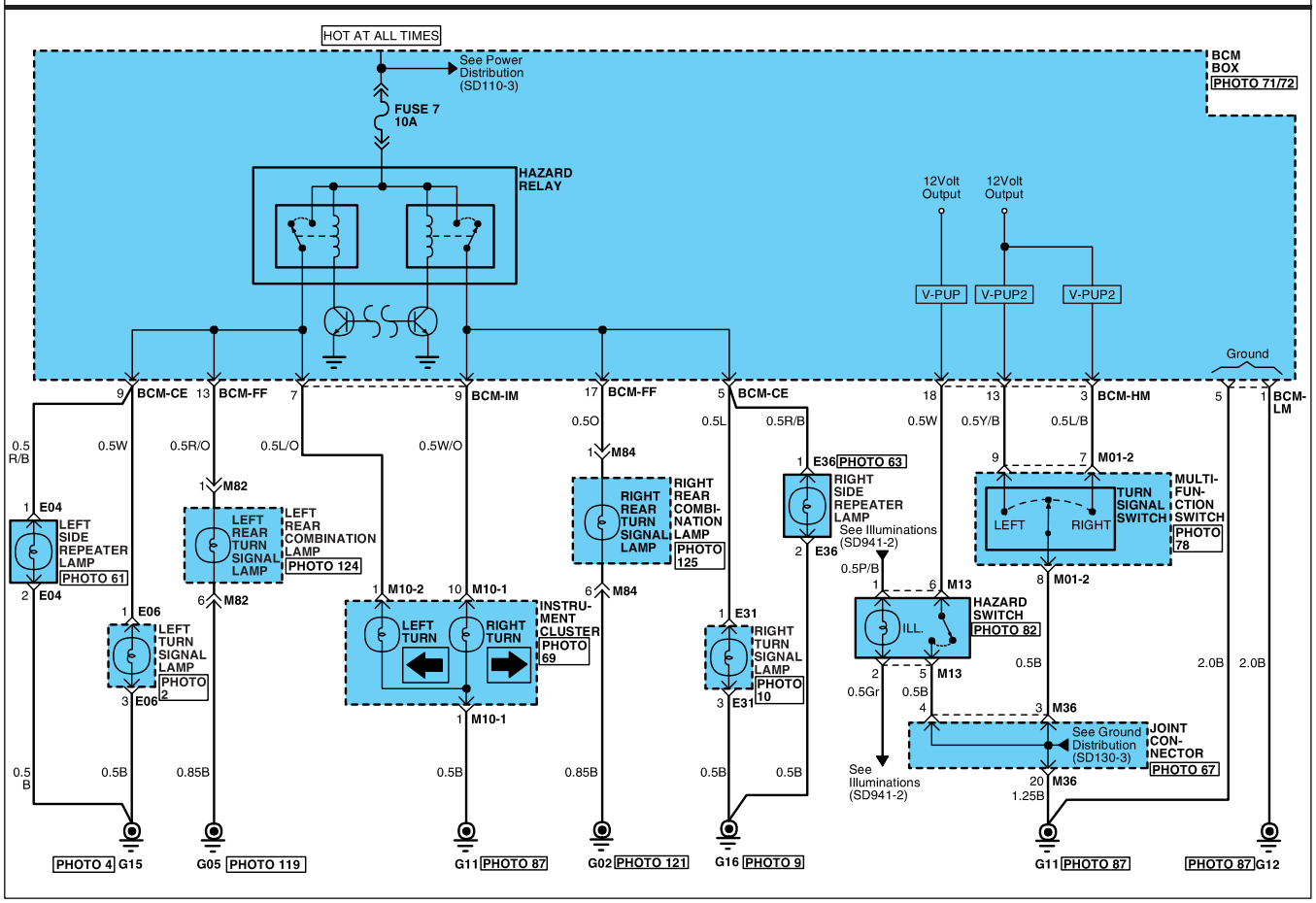


KET_090II_06F_W_SW

N2GKG924B

TURN & HAZARD LAMPS E486100E

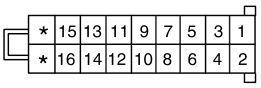
TURN & HAZARD LAMPS (1) SD925-1



N2GKG925A

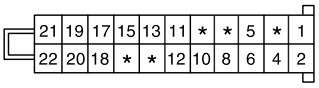
TURN & HAZARD LAMPS (2) SD925-2

BCM-CE



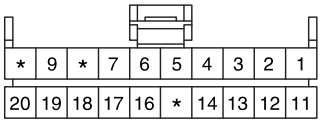
AMP_JPT_18F_B

BCM-FF



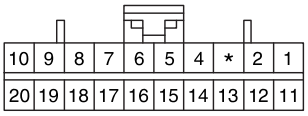
AMP_JPT_22F_B

BCM-HM



AMP_040M1_20F_B

BCM-IM

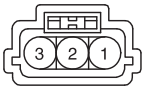


AMP_040M2_20F_B

E04

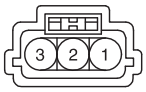
KUM_NMWP_02F_B

E06



KUM_NDWP_03F_Gr

E31

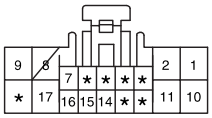


KUM_NDWP_03F_Gr

E36

KUM_NMWP_02F_B

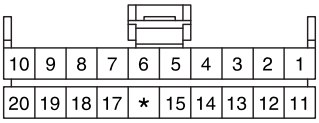
M01-2



KET_0509_18F_W

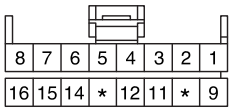
BLANK

M10-1



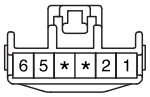
AMP_040M1_20F_B

M10-2



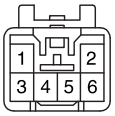
AMP_040M1_16F_B

M13



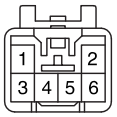
KET_090II_06F_G_SW

M82



KET_090II_06M_W

M84



KET_090II_06M_W

BLANK

Circuit Description

Turn Signal Lamps

With the hazard switch in OFF and ignition switch in ON or START, battery voltage is applied from fuse 7 to the hazard relay. The solid-state hazard relay senses the turn switch position through the coil control and alternately applies and removes battery voltage to the turn switch. Voltage is applied to the turn signal lamps and indicators dependent upon the turn switch position.

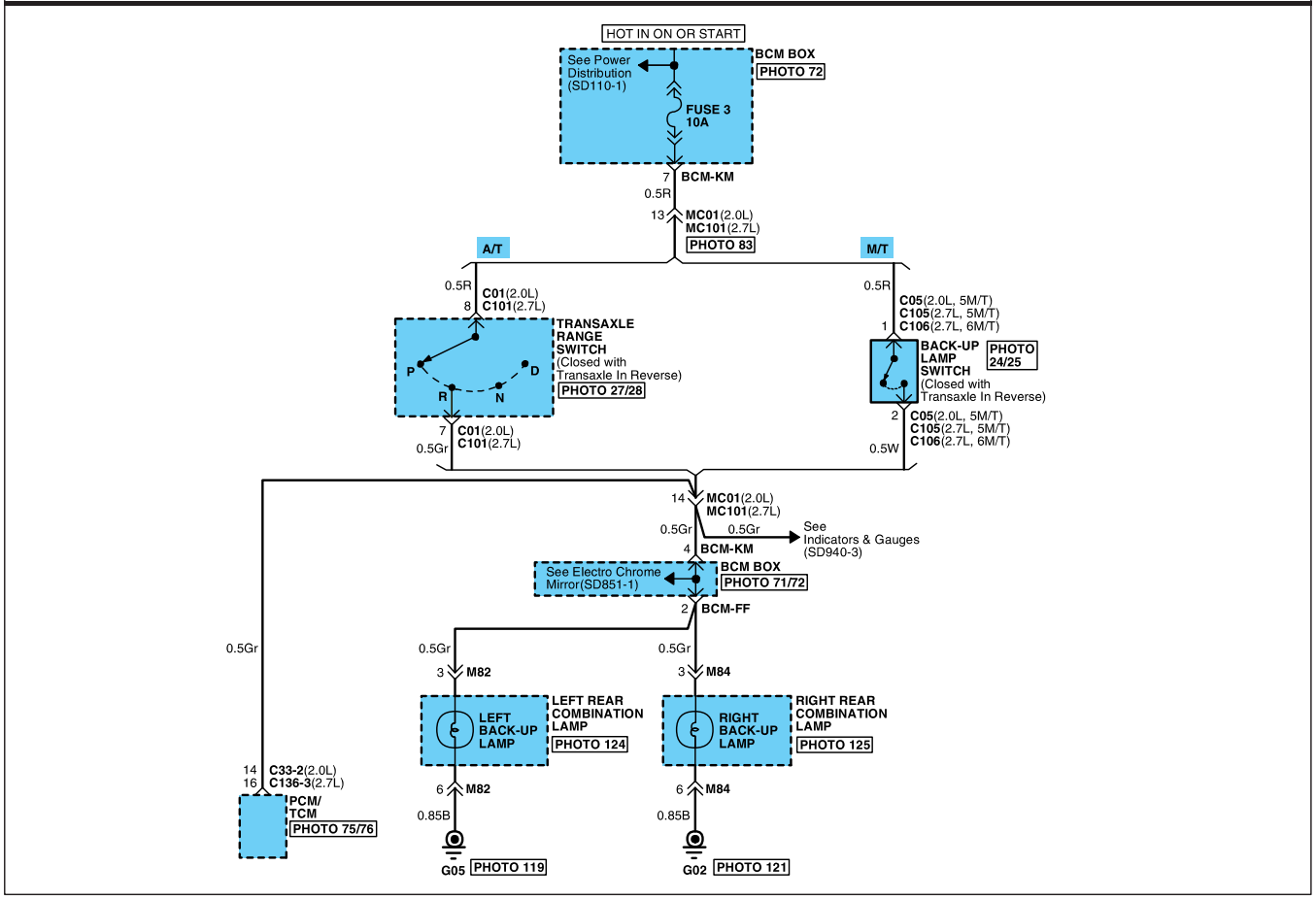
Hazard Lamps

With the hazard switch depressed (ON), battery voltage is applied from fuse 7 to the hazard relay. The soild -state hazard relay senses that the hazard switch is in the ON position and alternately applies and removes battery voltage to the turn signal lamps and both indicators at the same time.

N2GKG925B

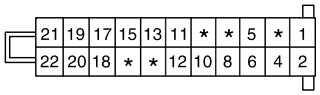
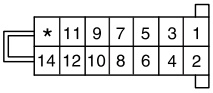
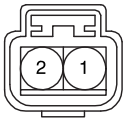
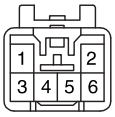
BACK-UP LAMPS E71EA587

BACK-UP LAMPS (1) SD926-1



N2GKG926A

BACK-UP LAMPS (2) SD926-2

BCM-FF	BCM-KM	C01/C101	C05
 AMP_JPT_22F_B	 AMP_JPT_14F_B	KET_SSD_10F_B_A	KUM_NMWP_02F_B
C105	**C106**	**M82**	**M84**
 KUM_NMWP_02F_B	YAZ_91RVWP_02F_B	 KET_090II_06M_W	KET_090II_06M_W

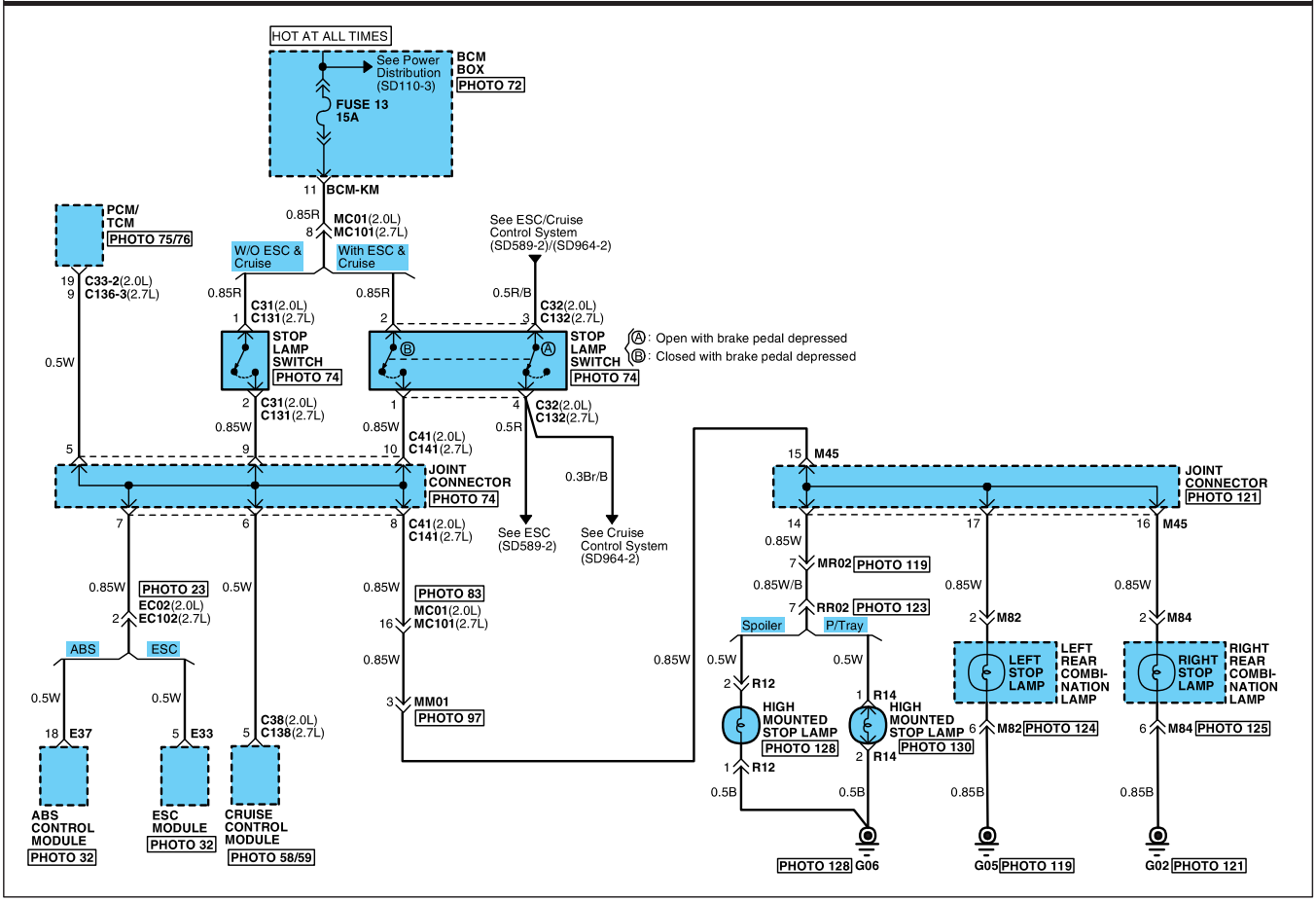
Circuit Description

With the ignition switch in ON or START, battery voltage is applied from fuse 3 to the back-up lamps switch (manual transaxle) or the transaxle range switch (automatic transaxle). With the transaxle in reverse, battery voltage is applied to the back-up lamps and the back-up lamps go on.

N2GKG926B

STOP LAMPS EE0E46F9

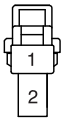
STOP LAMPS (1) SD927-1



N2GKG927A

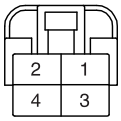
STOP LAMPS (2) SD927-2

C31/C131



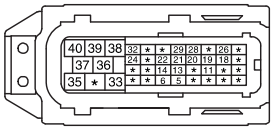
KET_250L_02F_W

C32/C132



KET_250DL_04F_W

C33-2

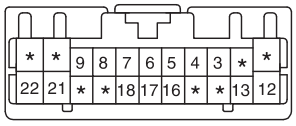


KET_ECU_40F_B

C38/C138

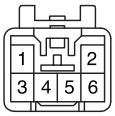
AMP_EJWP_12F_B

C136-3



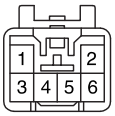
KET_0407_22F_W

M82



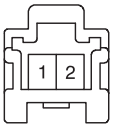
KET_090II_06M_W

M84



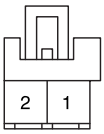
KET_090II_06M_W

R12



KET_070_02M_W

R14



KUM_CDR_02F_W

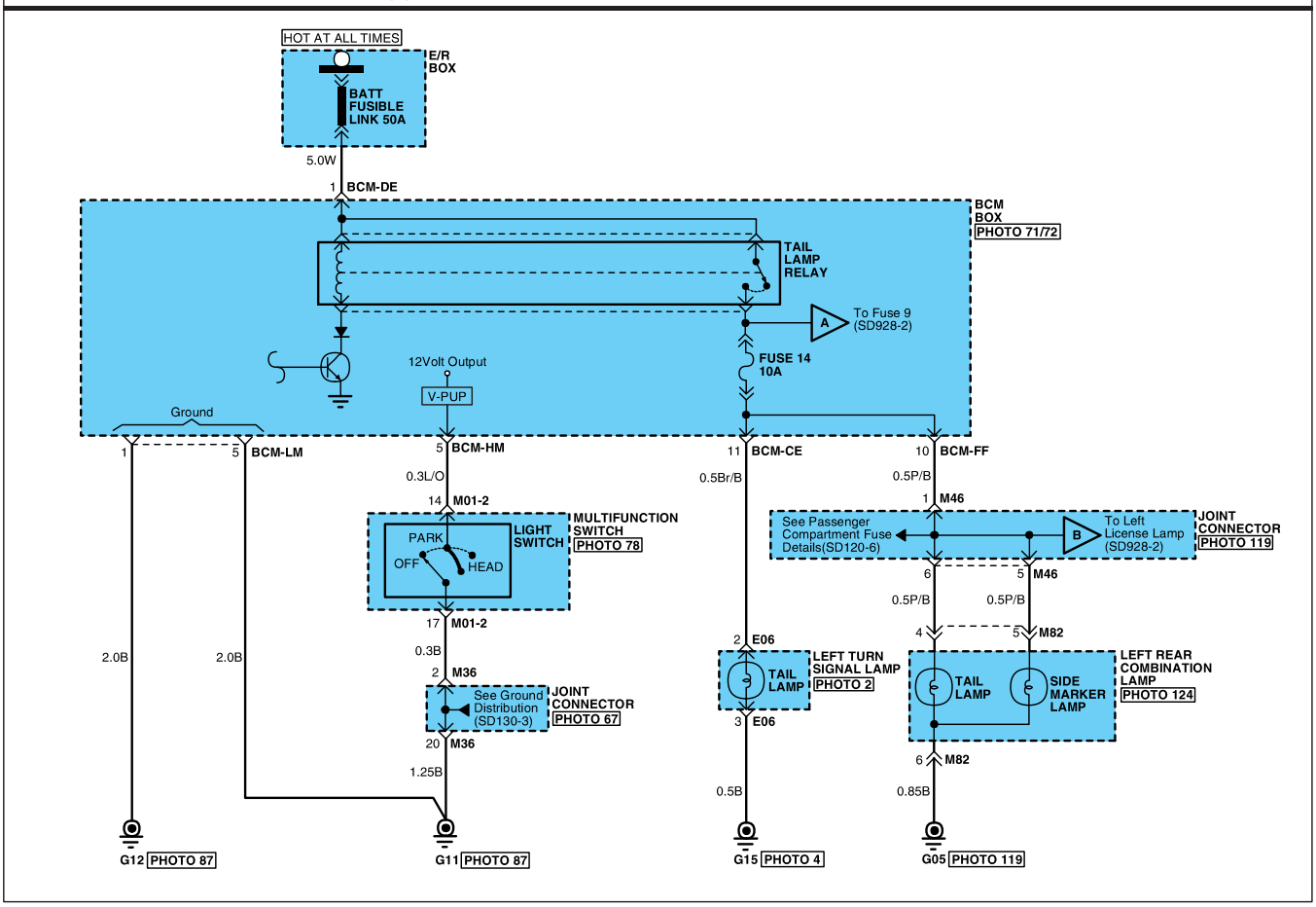
BLANK

BLANK

Circuit Description

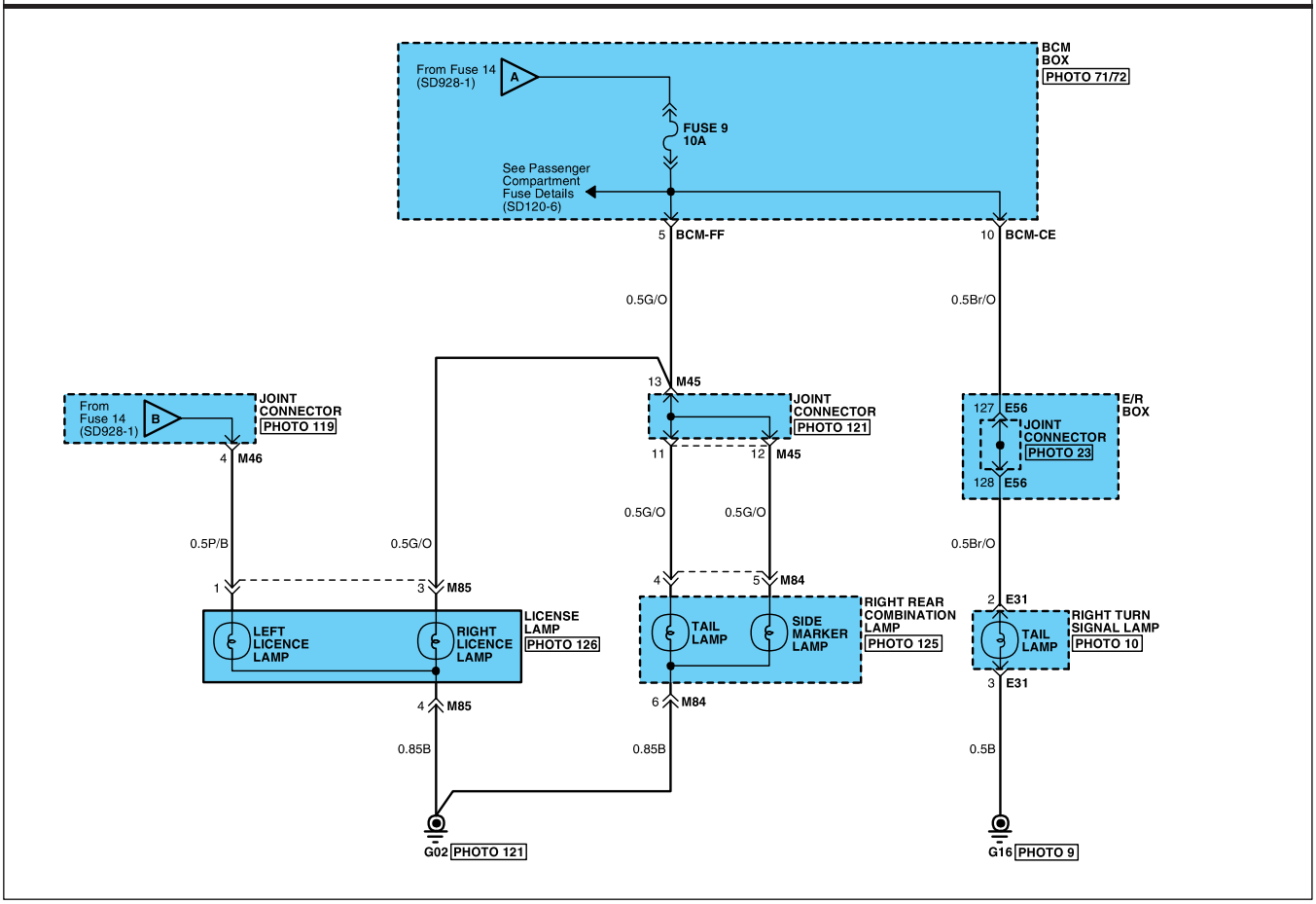
Battery voltage is applied to the stop lamp switch at all times from fuse 13. With the brake pedal depressed, the stop lamp switch is closed and battery voltage is applied to all the stop lamps (Left/Right stop lamps and high-mounted stop lamp) and the lamps go on.

TAIL, PARKING & LICENSE LAMPS (1) SD928-1



N2GKG928A

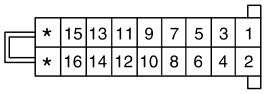
TAIL, PARKING & LICENSE LAMPS (2) SD928-2



N2GKG928B

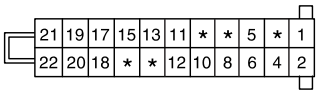
TAIL, PARKING & LICENSE LAMPS (3) SD928-3

BCM-CE



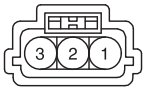
AMP_JPT_18F_B

BCM-FF



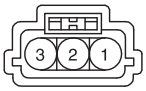
AMP_JPT_22F_B

E06



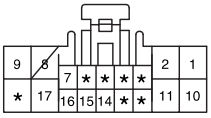
KUM_NDWP_03F_Gr

E31



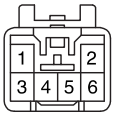
KUM_NDWP_03F_Gr

M01-2



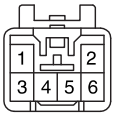
KET_0509_18F_W

M82



KET_090II_06M_W

M84



KET_090II_06M_W

M85

KET_090II_06M_W

Circuit Description

Battery voltage is applied at all times to the coil and contacts of the tail lamp relay from the BATT fusible link. With the light switch in the multifunction switch in PARK or HEAD position, the coil of the tail lamp relay is grounded through the light switch. Battery voltage from fuse 9 and fuse 14 is then provided to the lamps (Right/Left side marker lamps, Left/Right tail lamps, Left/Right park lamp and license lamps) through the tail lamp relay contact and all the lamps go on.

N2GKG928C

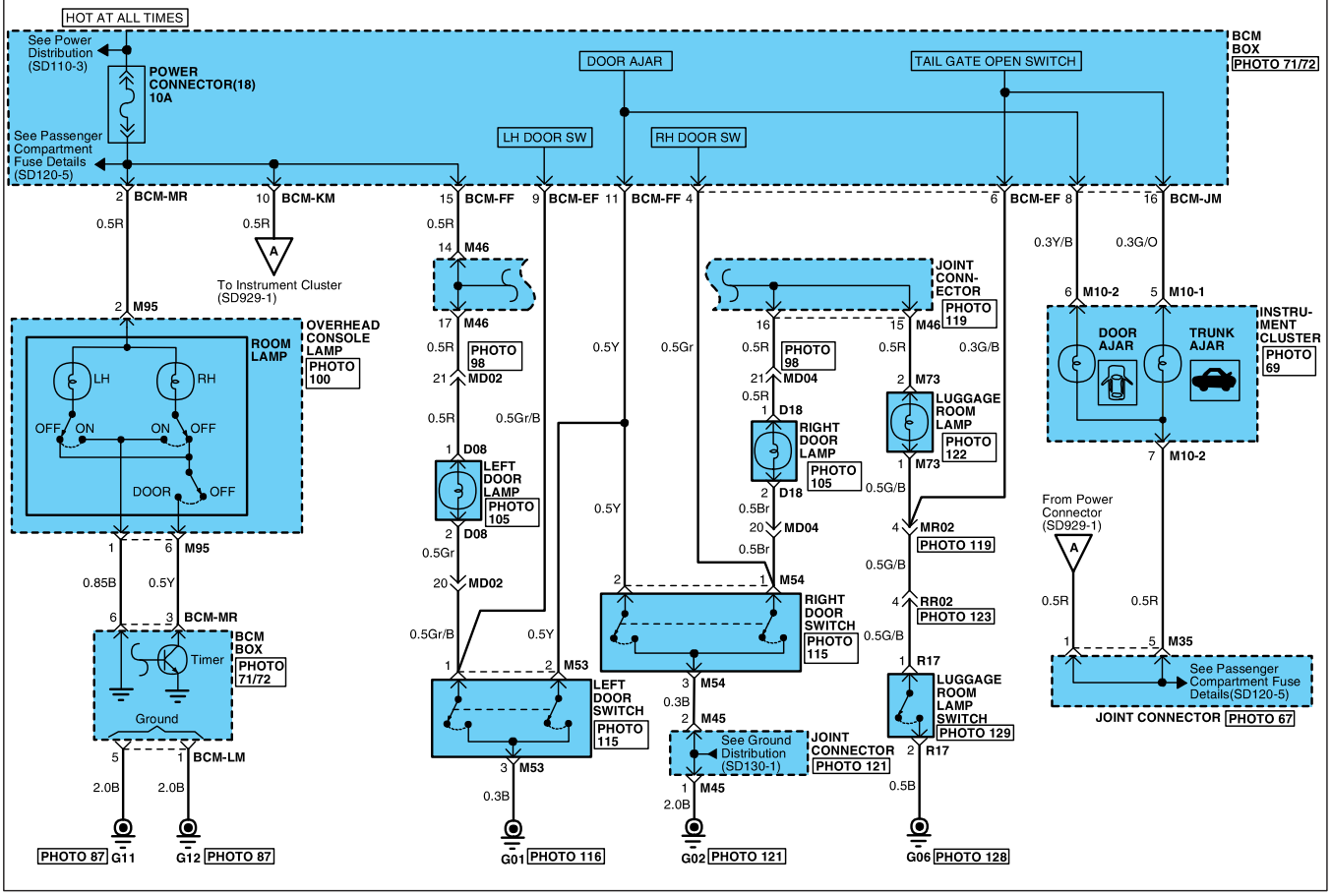
TAIL, PARKING & LICENSE LAMPS (4)

MEMO

N2GKG928D

COURTESY & LUGGAGE ROOM LAMPS EC945215

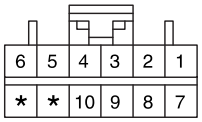
COURTESY & LUGGAGE ROOM LAMPS (1) SD929-1



N2GKG929A

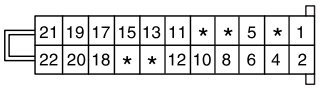
COURTESY & LUGGAGE ROOM LAMPS (2) SD929-2

BCM-EF



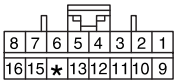
AMP_040M2_12F_B

BCM-FF



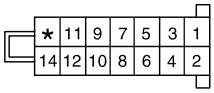
AMP_JPT_22F_B

BCM-JM



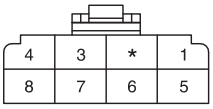
AMP_040M2_16F_B

BCM-KM



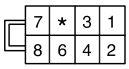
AMP_JPT_14F_B

BCM-LM



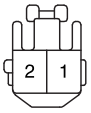
AMP_250_08F_W

BCM-MR



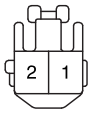
AMP_JPT_08F_B

D08



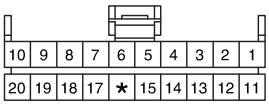
KET_090II_02F_W_L

D18



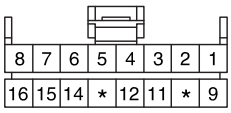
KET_090II_02F_W_L

M10-1



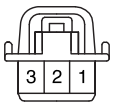
AMP_040M1_20F_B

M10-2



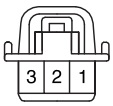
AMP_040M1_16F_B

M53



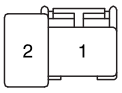
KET_62C_03F_W_DR

M54



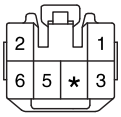
KET_62C_03F_W_DR

M73



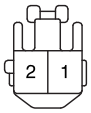
AMP_PLM2_02F_B

M95



KET_090II_06F_W

R17



KET_090II_02F_W_L

BLANK

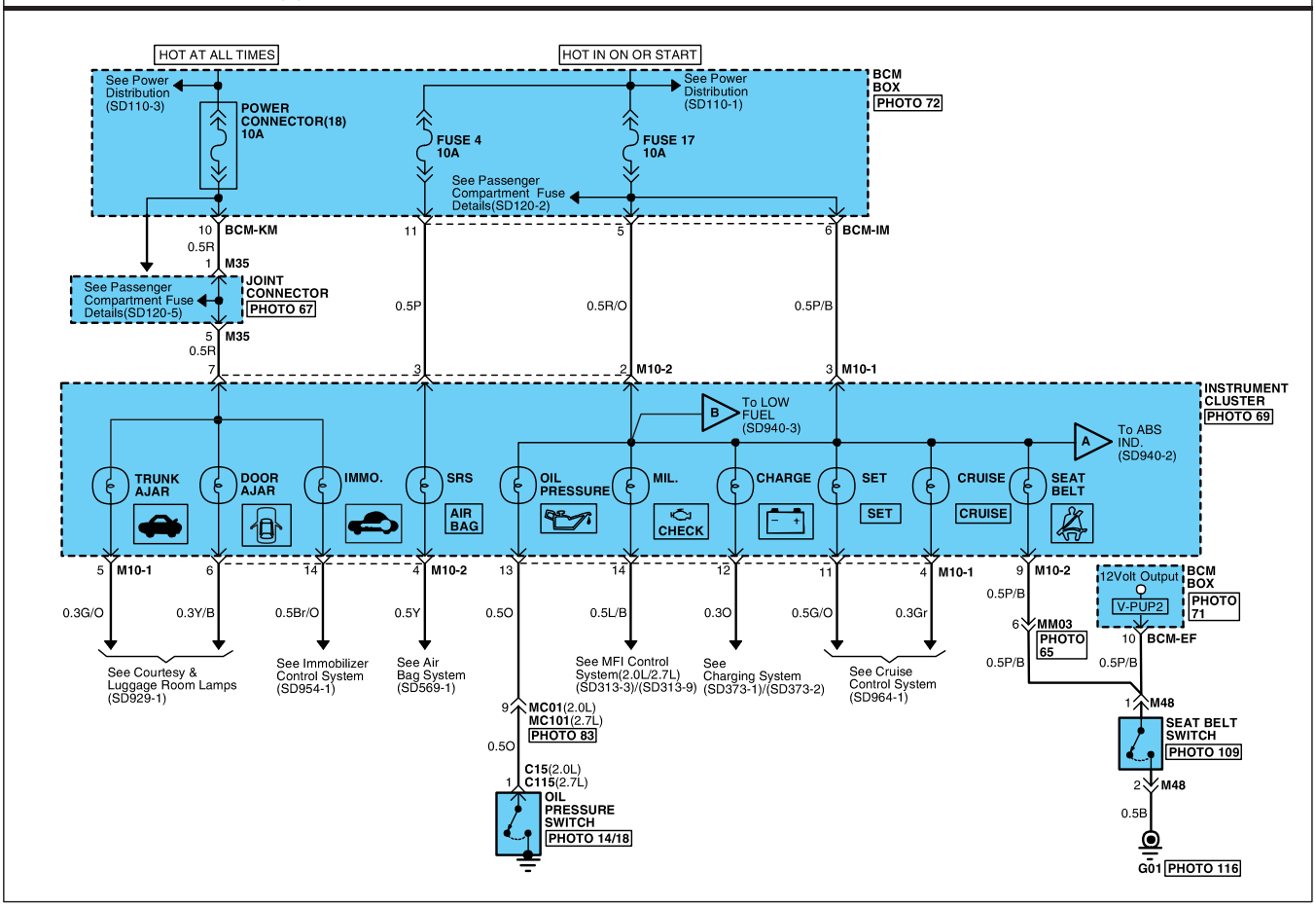
Circuit Description

Courtesy, Luggage Room Lamp
Battery voltage is applied at all times from power connector 18 to the room lamp, map lamps, door lamps, door ajar, trunk ajar warning indicators, and luggage lamp. When the appropriate switch (see schematic) is closed, a ground path is provided to the respective lamp, causing the lamp to go on.

The map lamps are not controlled by a door switch. They are turned on and off manually. The front room lamp can be controlled by the door switches or turned on manually, depending on the position of the front room lamp switch. The front room lamp can also be turned off so that it will not come on with the door opens.

N2GKG929B

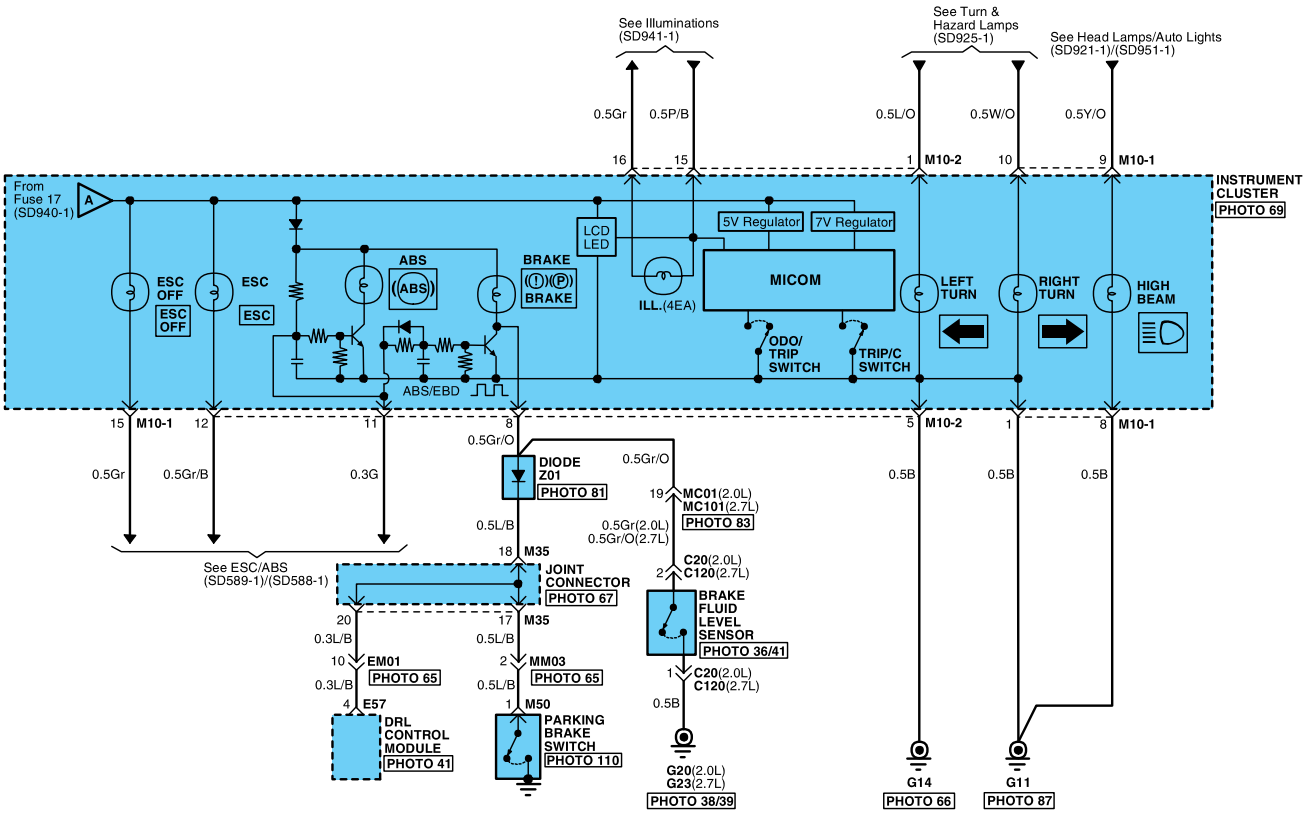
INDICATORS & GAUGES (1) SD940-1



N2GKG940A

INDICATORS & GAUGES (2)

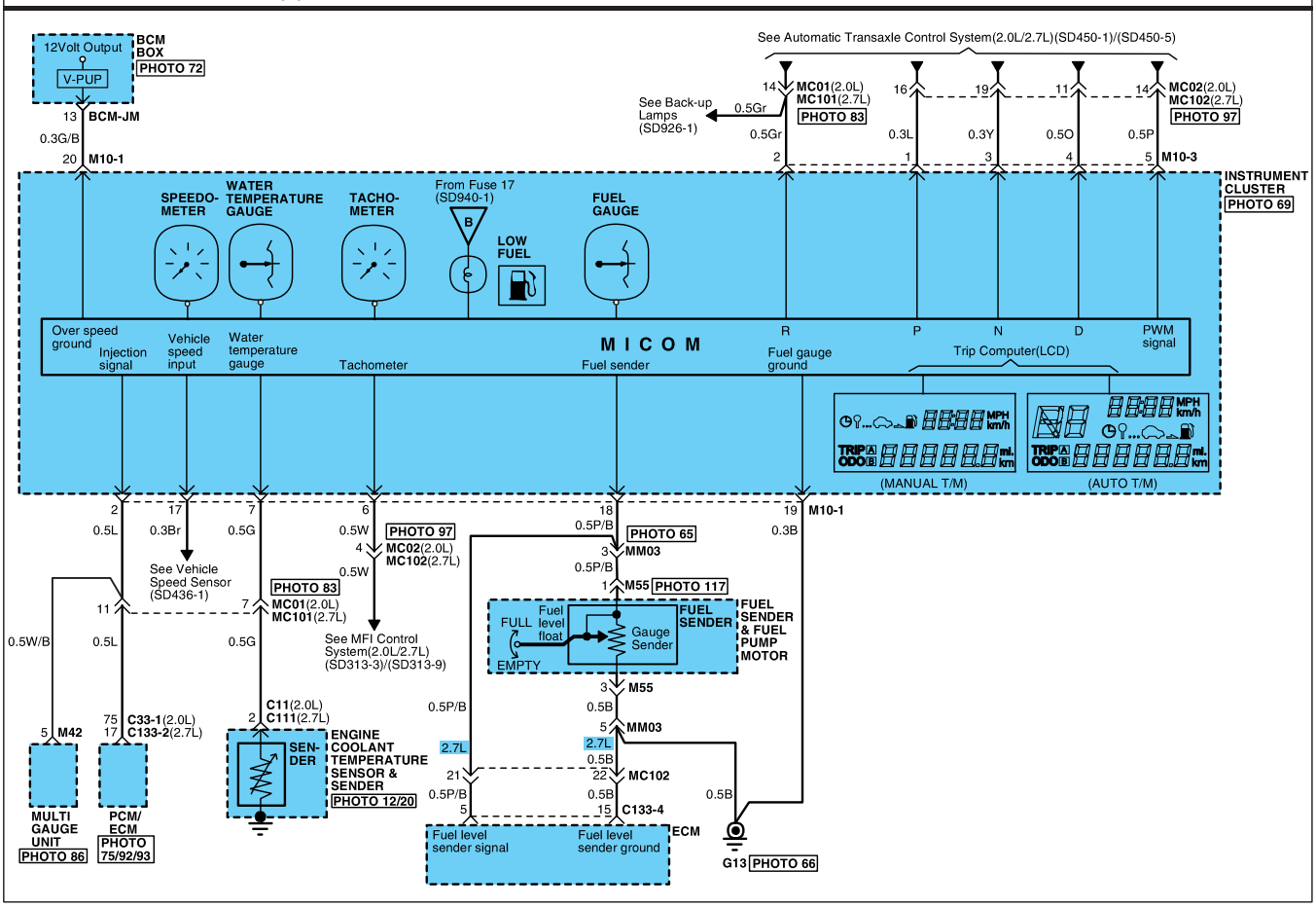
SD940-2



N2GKG940B

INDICATORS & GAUGES (3)

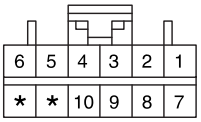
SD940-3



N2GKG940C

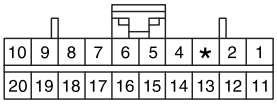
INDICATORS & GAUGES (4) SD940-4

BCM-EF



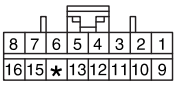
AMP_040M2_12F_B

BCM-IM



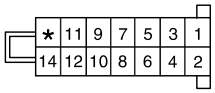
AMP_040M2_20F_B

BCM-JM



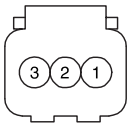
AMP_040M2_16F_B

BCM-KM



AMP_JPT_14F_B

C11

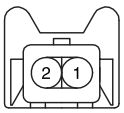


KUM_WTS_03F_B

C15

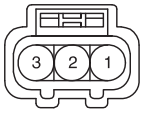
AMP_PLM2_01F_B

C20



AMP_JPT_02F_B

C111

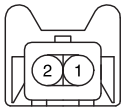


KUM_62Z_03F_B_WTS

C115

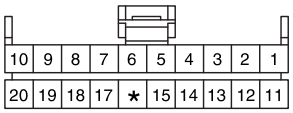
KUM_NMWP_01F_B

C120



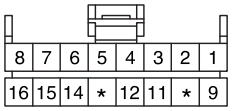
AMP_JPT_02F_B

M10-1



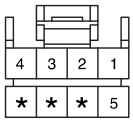
AMP_040M1_20F_B

M10-2



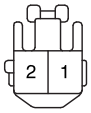
AMP_040M1_16F_B

M10-3



AMP_040M1_08F_B

M48

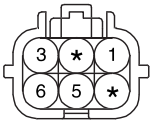


KET_090II_02F_W_L

M50

AMP_PLM1_01F_B

M55



KET_SWP_06F_W

N2GKG940D

INDICATORS & GAUGES (5) SD940-5

Circuit Description

The operation of individual indicators is stated below. For indicators not listed below (for instance, door ajar, seat belt, etc.), see the system indicated by the circuit schematic diagrams.

Oil Pressure Indicator

Battery voltage is applied to the indicator bulb from fuse 17 with the ignition in ON or START. When the oil pressure is low, the oil pressure switch closes, providing a ground for the indicator bulb. Due to the oil pressure not present when the engine is not running, and the ignition is ON, the pressure switch remains closed.

CHECK ENGINE Indicator

Battery voltage is applied to the indicator bulb from fuse 17 with the ignition in ON or START. The ground of the indicator is controlled by the engine control module. The control module will light the indicator when the engine is not running or when it detects a problem.

Speedometer

With the ignition switch in ON and START, the speedometer drive circuit receives pulses from the vehicle speed sensor. The pulse rate increases as the car accelerates. The frequency and duration of these input pulses are measured and displayed by the speedometer.

Tachometer

The tachometer displays engine speed in rpm. Voltage pulses are taken from the ignition system and sent to the tachometer by the ECM. The tachometer responds to the frequency of the voltage pulses, which vary according to engine speed.

Indicator Brake

When the ignition switch in ON or START, battery voltage is applied from fuse 17 to the brake warning light. When the brake is applied, the switch closes and provides a ground for the light. The brake warning light goes on to remind the driver that the parking brake is applied.If the brake fluid level is low, the brake fluid level switch closes and ground is provided to the circuit. The brake warning light lights to warn the driver of low brake fluid level in the brake master cylinder. (Note: Check brake pad wear before adding fluid.)

Fuel Gauge

The pointer of the fuel gauge is moved by the magnetic fields of two coils. The coils are at right angles to each other. Battery voltage is applied to the coils through fuse 17, generating the magnetic fields. The magnetic fields, controlled by the fuel gauge sender, causes the gauge needle to move. As the resistance in the sender varies, current through the gauge coils changes. The fuel gauge sender's resistance varies from about 95Ω at empty to 7Ω when full.

Engine Coolant Temperature Gauge

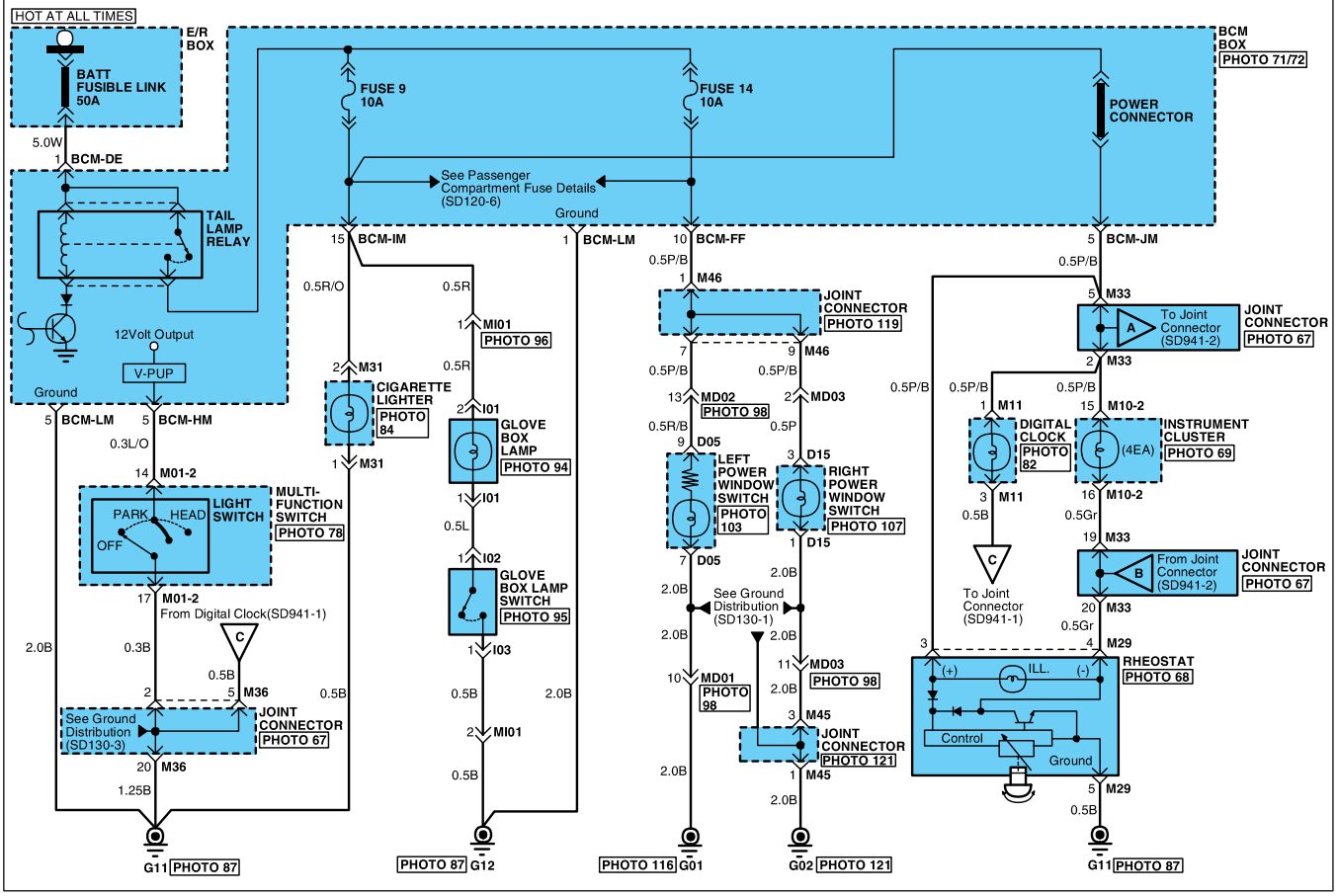
The pointer of the engine coolant temperature gauge is moved by the magnetic fields of two coils. The coils are at right angles to each other. Battery voltage is applied to the coils through fuse 17, generating the magnetic fields. The magnetic fields, controlled by the engine coolant temperature sender, cause the gauge needle to move. As the resistance in the sender varies, current through the gauge coils changes. The engine coolant temerature sender's resistance varies from about 157Ω at 55˚C to 24Ω at 110˚C.

INDICATORS & GAUGES (6)

MEMO

ILLUMINATIONS E6E60923

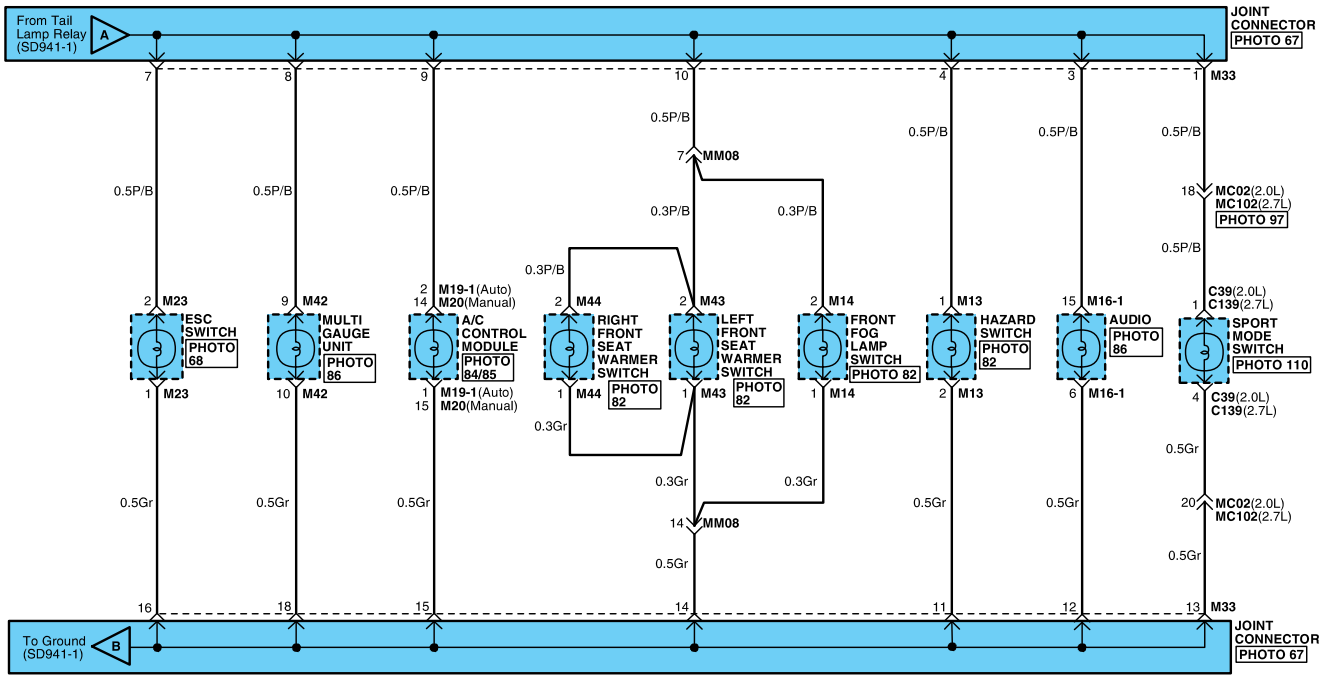
ILLUMINATIONS (1) SD941-1



N2GKG941A

ILLUMINATIONS (2)

SD941-2



N2GKG941B

ILLUMINATIONS (3)

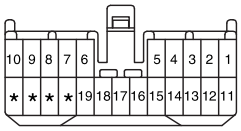
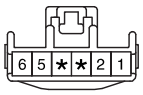
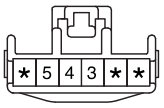
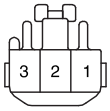
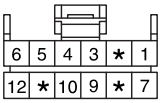
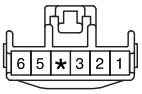
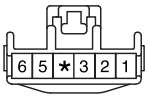
SD941-3

BCM-DE 1 AMP_250DL_01F_B	**BCM-FF** 21 19 17 15 13 11 * * 5 * 1 22 20 18 * * 12 10 8 6 4 2 AMP_JPT_22F_B	**BCM-HM** * 9 * 7 6 5 4 3 2 1 20 19 18 17 16 * 14 13 12 11 AMP_040M1_20F_B	**BCM-IM** 10 9 8 7 6 5 4 * 2 1 20 19 18 17 16 15 14 13 12 11 AMP_040M2_20F_B
BCM-JM 8 7 6 5 4 3 2 1 16 15 * 13 12 11 10 9 AMP_040M2_16F_B	**C39/C139** 3 2 1 8 7 6 * 4 KET_090II_08F_W	**D05** 4 3 2 1 10 9 * 7 6 5 KET_090II_10F_W	**D15** 3 * 1 8 7 6 5 4 KET_090II_08F_W
BLANK	**I01** 1 2 CR02F015	**I02,I03** 1 CR01F018	**M01-2** 9 8 7 * * * * 2 1 * 17 16 15 14 * * 11 10 KET_0509_18F_W
M10-2 8 7 6 5 4 3 2 1 16 15 14 * 12 11 * 9 AMP_040M1_16F_B	**M11** 4 3 2 1 KUM_AR_04F_W	**BLANK**	**M13** 6 5 * * 2 1 KET_090II_06F_G_SW
M14 6 5 4 3 2 1 KET_090II_06F_W_SW	**M16-1** 7 6 5 4 3 2 1 16 15 14 13 12 * 10 9 8 KUM_AR_16F_W	**BLANK**	**M19-1** 13 12 11 10 9 * 7 * 5 4 3 2 1 26 25 24 23 22 21 20 19 18 17 * 15 14 AMP_0407_26F_W_HD

N2GKG941C

ILLUMINATIONS (4)

SD941-4

M20	M23	M29	
 KET_050_23F_W	 KET_090II_06F_B_SW	 KET_090II_06F_L_SW	BLANK
M31	**M42**	**M43**	**M44**
 KET_090II_03F_W	 AMP_040M1_12F_B	 KET_090II_06F_B_SW	 KET_090II_06F_Y_SW

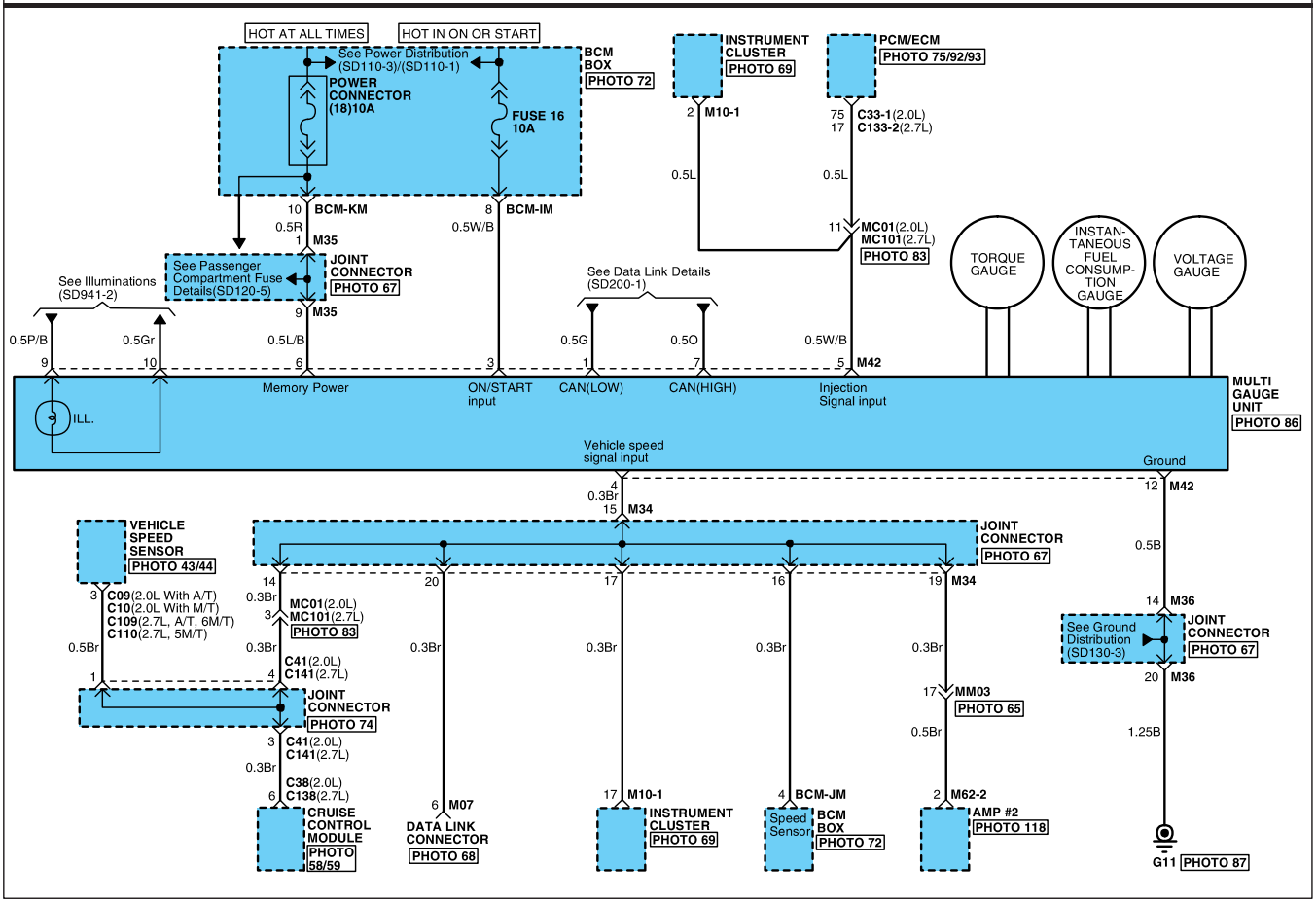
Circuit Description

Battery voltage is applied at all times to the coil and contacts of the tail lamp relay from the BATT fusible link. With the light switch (multifunction switch) in the PARK or HEAD position, ground is provided to the tail lamp relay coil through the light switch

Battery voltage from fuse 9 and fuse 14 is then proviided to the illumination lamps through the closed contact of the tail lamp relay. Ground is provided to the illumination lamps through the rheostat. The rheostat controls brightness of the illumination lamps.

MULTI GAUGE UNIT EC0FB49C

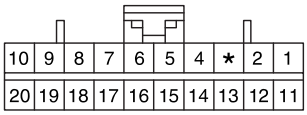
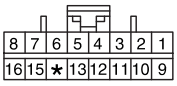
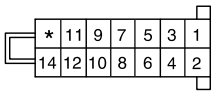
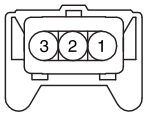
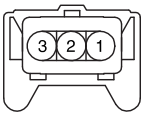
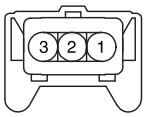
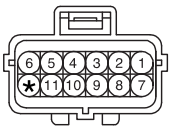
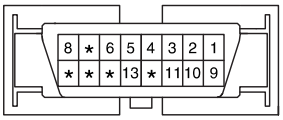
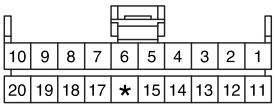
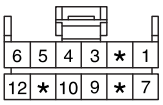
MULTI GAUGE UNIT (1) SD944-1



N2GKG944A

MULTI GAUGE UNIT (2)

SD944-2

BCM-IM	BCM-JM	BCM-KM	BLANK
 AMP_040M2_20F_B	 AMP_040M2_16F_B	 AMP_JPT_14F_B	
C09	**C10**	**C109/C110**	**C38/C138**
 AMP_JPT_03F_B_S1	 AMP_JPT_03F_B_S1	 AMP_JPT_03F_B_S1	 AMP_EJMP_12F_B
M07	**M10-1**	**M42**	**BLANK**
 MLX_OBDII_16F_B_SIN	 AMP_040M1_20F_B	 AMP_040M1_12F_B	

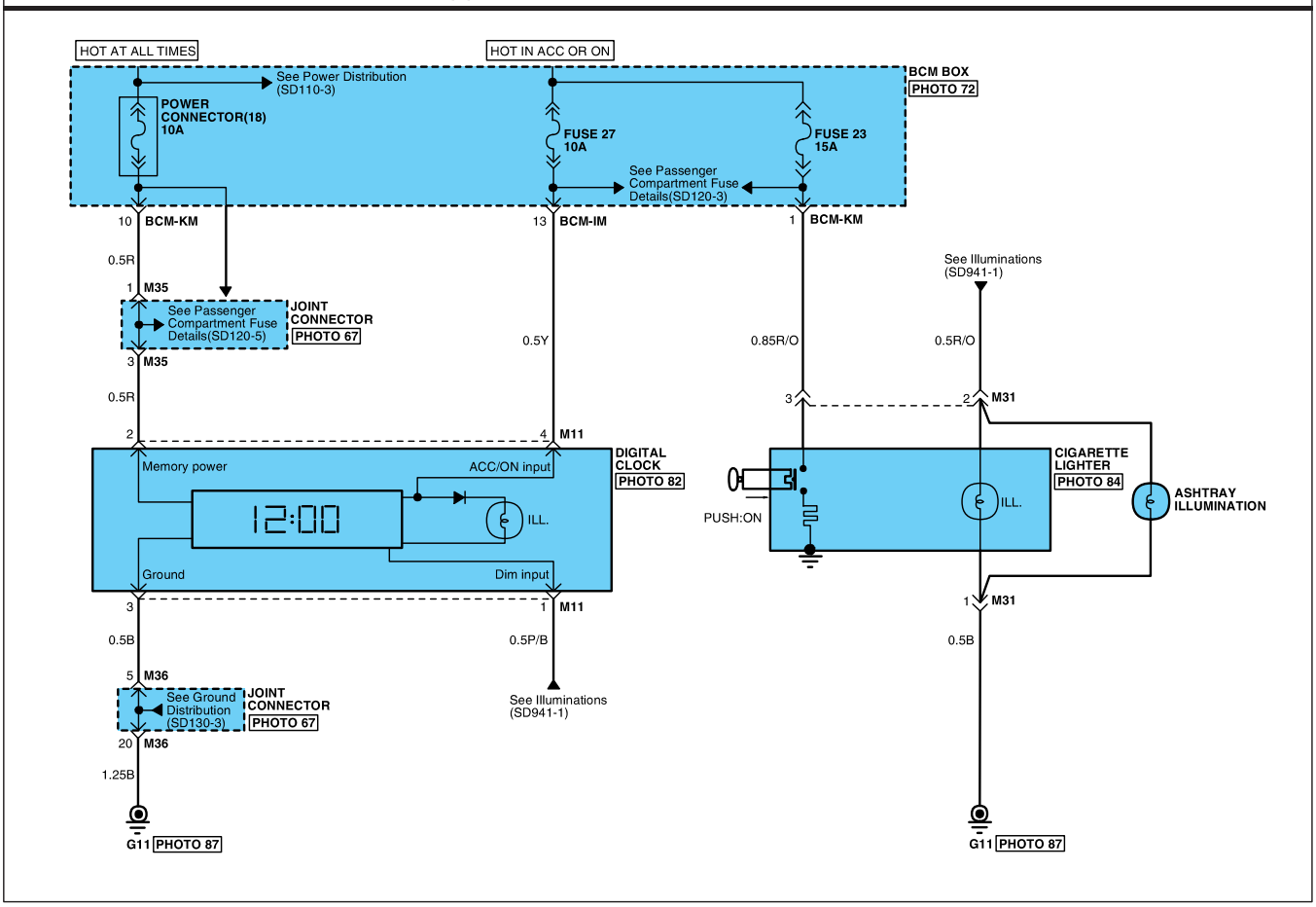
Circuit Description

Battery voltage is supplied at all times to the power connector (18). Fuse 16 also supplies battery voltage when the ignition switch is ON/START.
ECM, TCM, VSS, Injection signals are input to the multi gauge unit, and it displays torque, voltage, instantaneous fuel consumption.

N2GKG944B

DIGITAL CLOCK & CIGARETTE LIGHTER E10FCD81

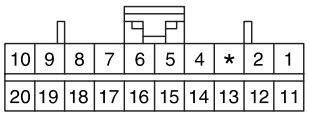
DIGITAL CLOCK & CIGARETTE LIGHTER (1) SD945-1



N2GKG945A

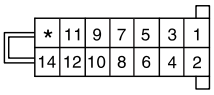
DIGITAL CLOCK & CIGARETTE LIGHTER (2) SD945-2

BCM-IM



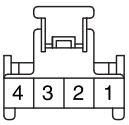
AMP_040M2_20F_B

BCM-KM



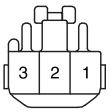
AMP_JPT_14F_B

M11



KUM_AR_04F_W

M31



KET_090II_03F_W

Circuit Description

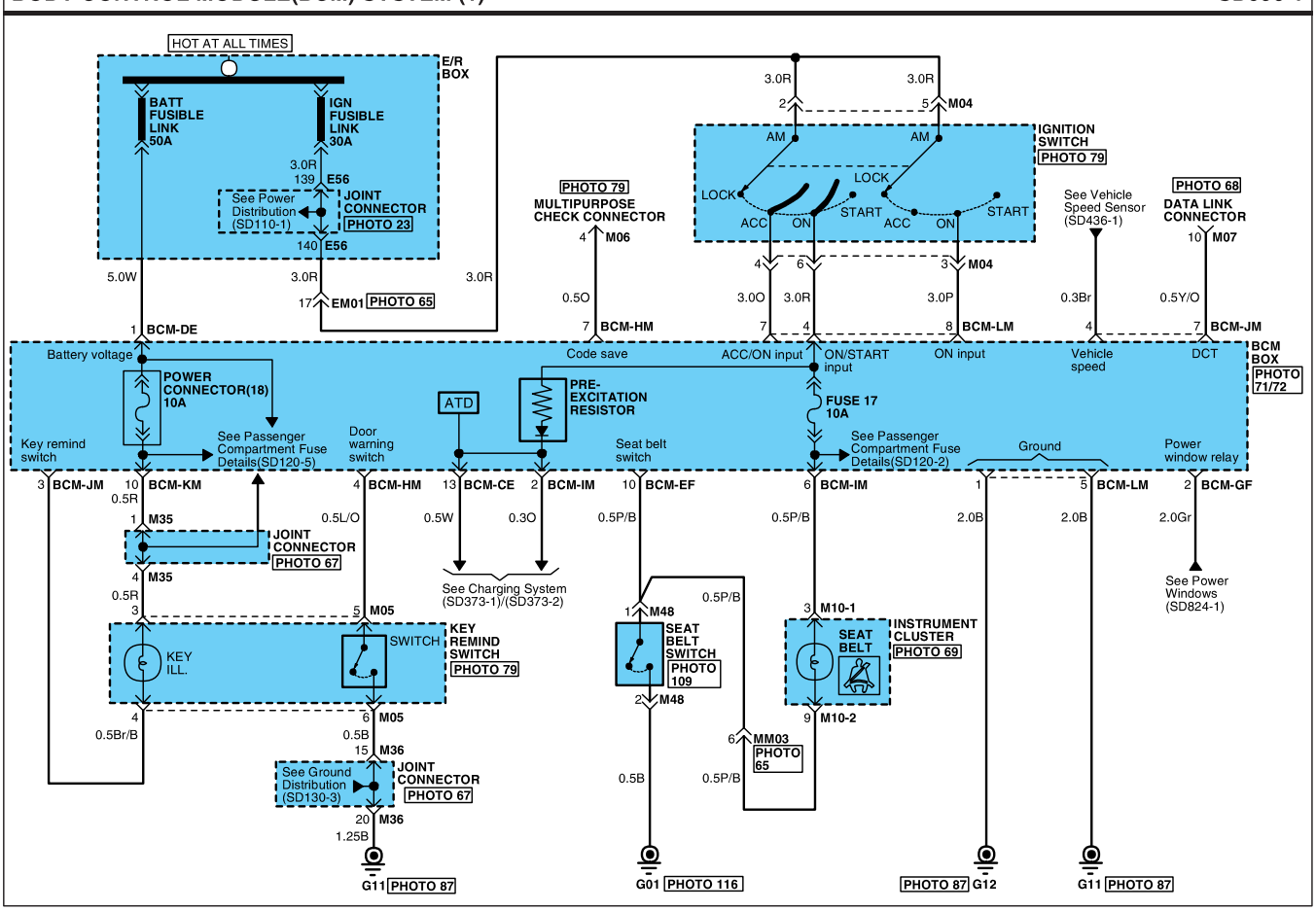
Battery voltage is applied at all times to the digital clock from power connector (18) to provide clock memory. With the ignition switch in ACC or ON, battery voltage is applied to the clock through fuse 27. The digital clock lights up and displays the time.

With the ignition switch in ACC or ON, battery voltage is applied from fuse 23 to the cigarette lighter. When you depress (push) the lighter, the lighter element completes the circuit to ground. When the element becomes sufficiently heated, it is spring-released and the circuit opens.

N2GKG945B

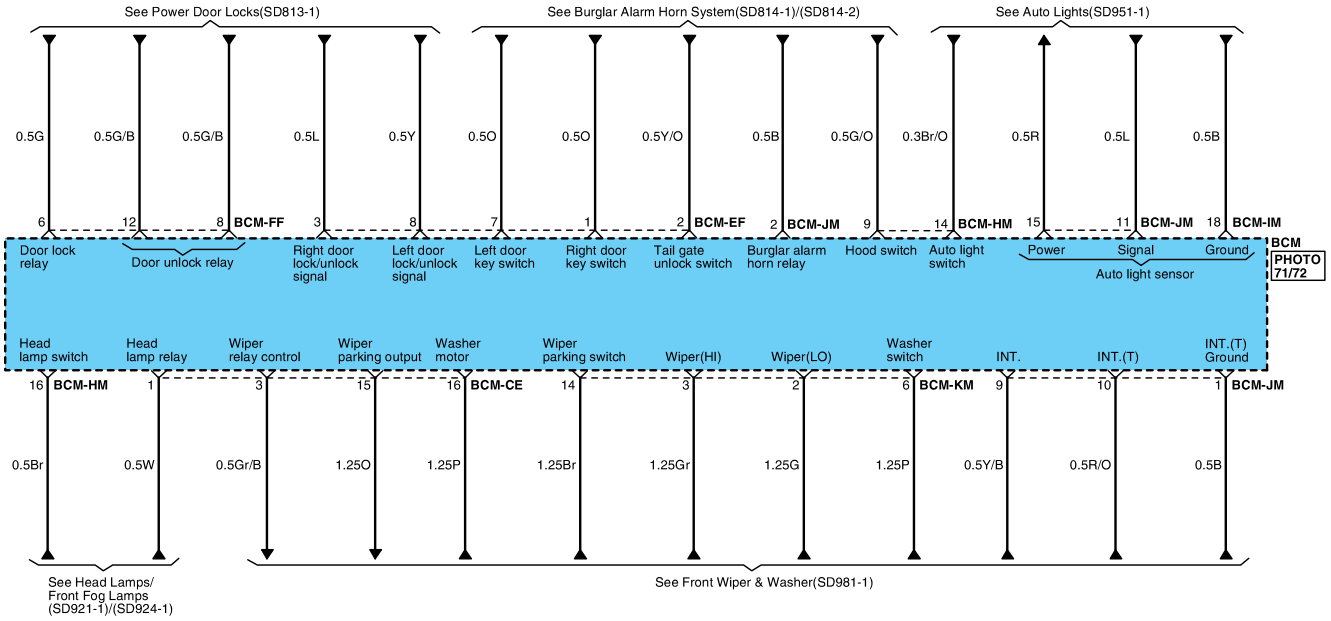
BODY CONTROL MODULE(BCM) SYSTEM E1FBDEBA

BODY CONTROL MODULE(BCM) SYSTEM (1) SD950-1



N2GKG950A

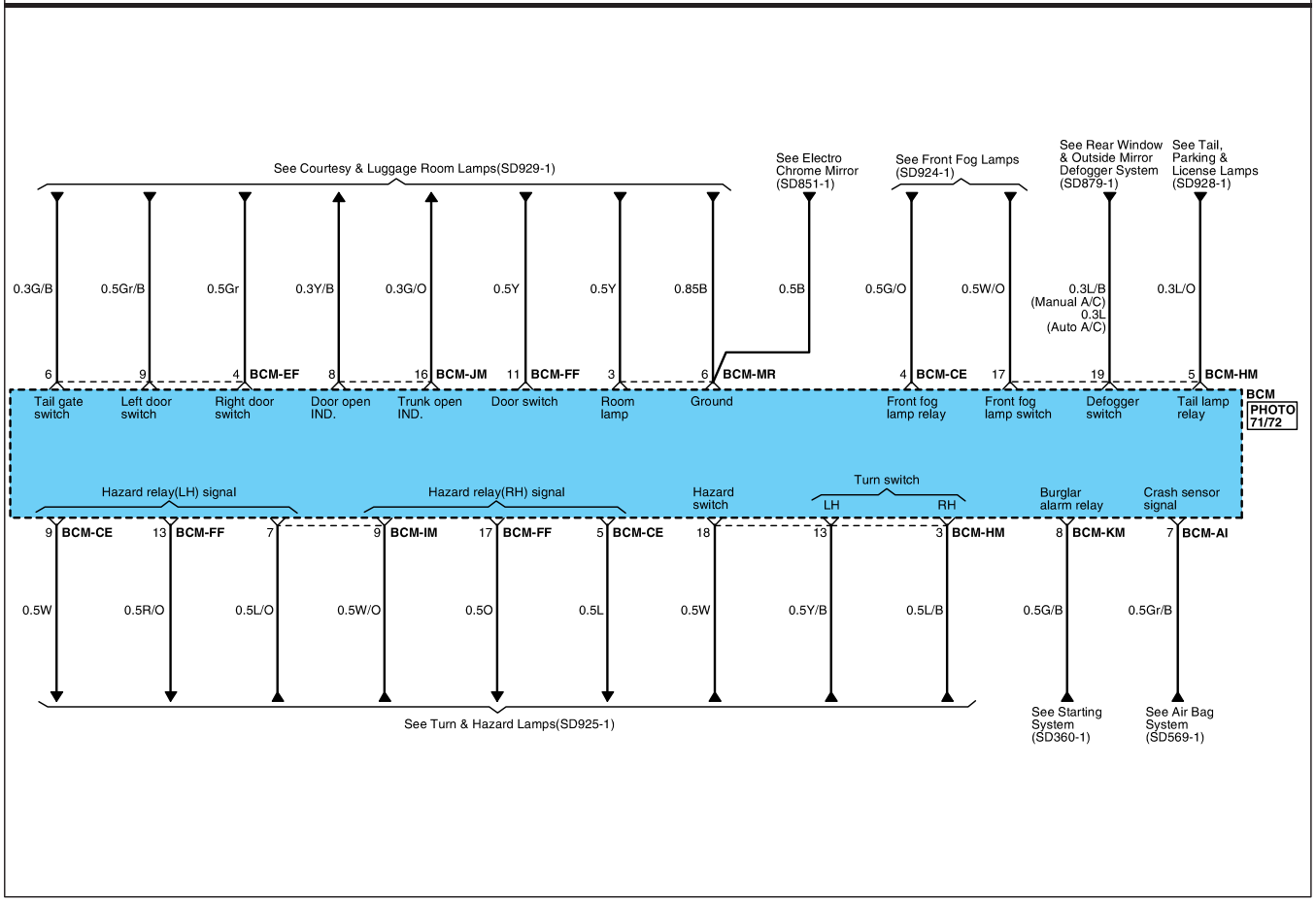
BODY CONTROL MODULE(BCM) SYSTEM (2) SD950-2



N2GKG950B

BODY CONTROL MODULE(BCM) SYSTEM (3)

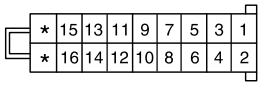
SD950-3



N2GKG950C

BODY CONTROL MODULE(BCM) SYSTEM (4) SD950-4

BCM-CE

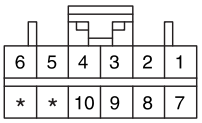


AMP_JPT_18F_B

BCM-DE

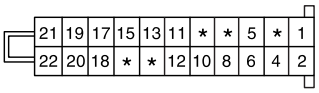
AMP_250DL_01F_B

BCM-EF



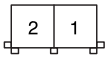
AMP_040M2_12F_B

BCM-FF



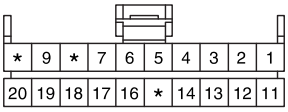
AMP_JPT_22F_B

BCM-GF



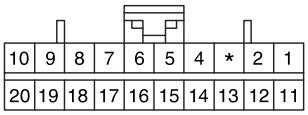
AMP_SPT_02F_B

BCM-HM



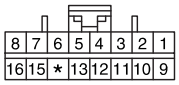
AMP_040M1_20F_B

BCM-IM



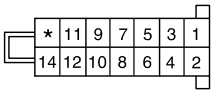
AMP_040M2_20F_B

BCM-JM



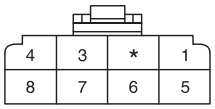
AMP_040M2_16F_B

BCM-KM



AMP_JPT_14F_B

BCM-LM

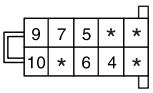


AMP_250_08F_W

BCM-MR

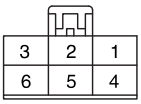
AMP_JPT_08F_B

BCM-AI



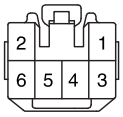
AMP_JPT_10F_B

M04



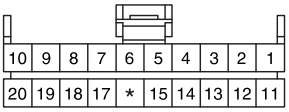
KUM_DSD_06F_W

M05



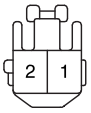
KET_090II_06F_W

M10-1



AMP_040M1_20F_B

M48

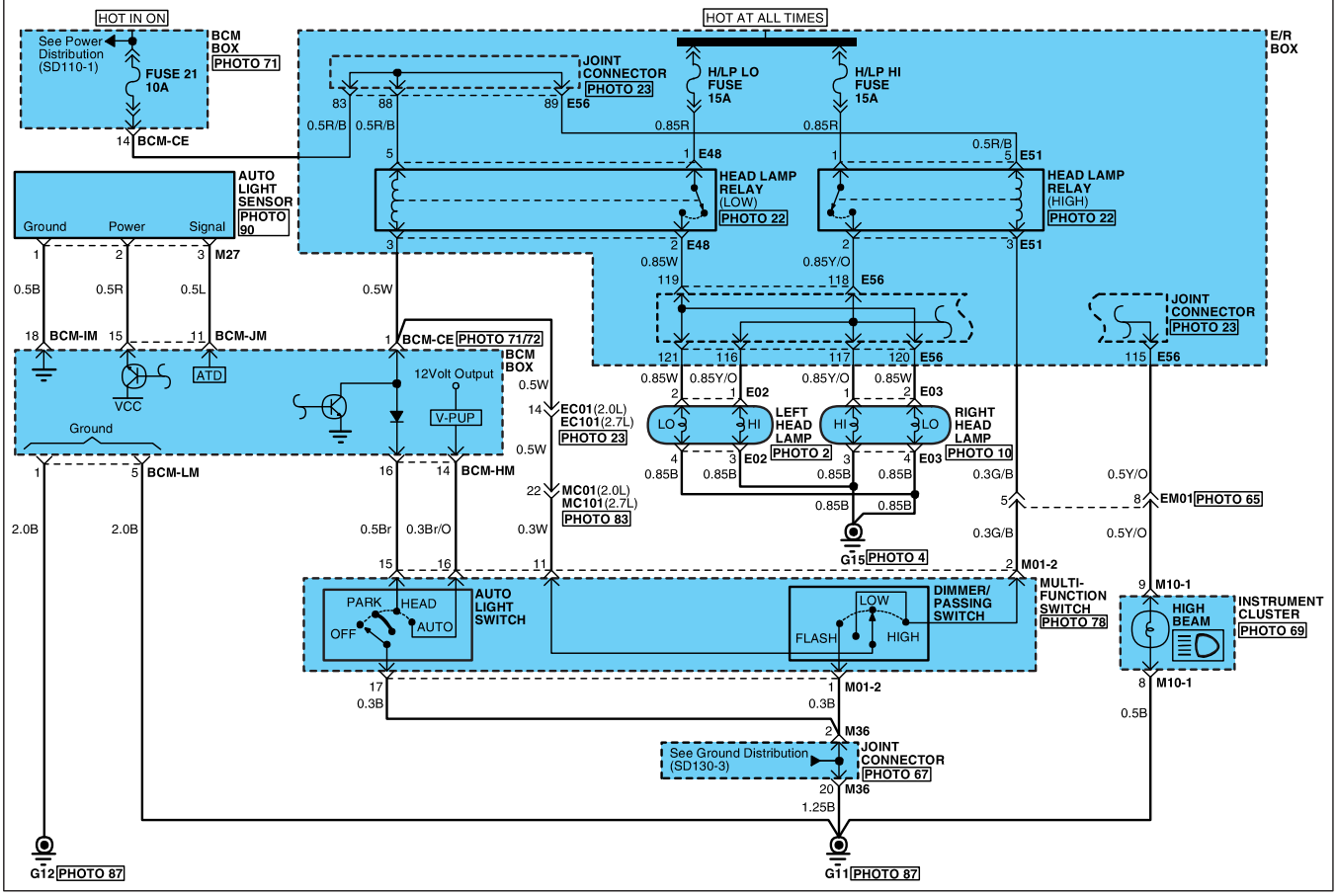


KET_090II_02F_W_L

N2GKG950D

AUTO LIGHTS E9C1C6E8

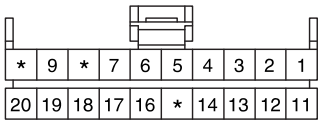
AUTO LIGHTS (1) SD951-1



N2GKG951A

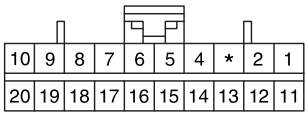
AUTO LIGHTS (2) SD951-2

BCM-HM



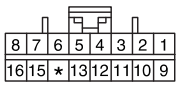
AMP_040M1_20F_B

BCM-IM



AMP_040M2_20F_B

BCM-JM



AMP_040M2_16F_B

E02

KUM_NMWP_04F_B

E03

KUM_NMWP_04F_B

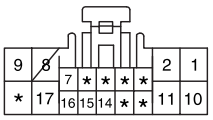
E48

CR05F011

E51

CR05F011

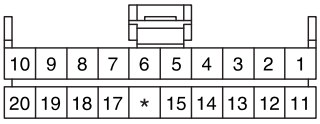
M01-2



KET_0509_18F_W

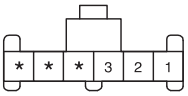
BLANK

M10-1



AMP_040M1_20F_B

M27



KET_91A_06F_W

BLANK

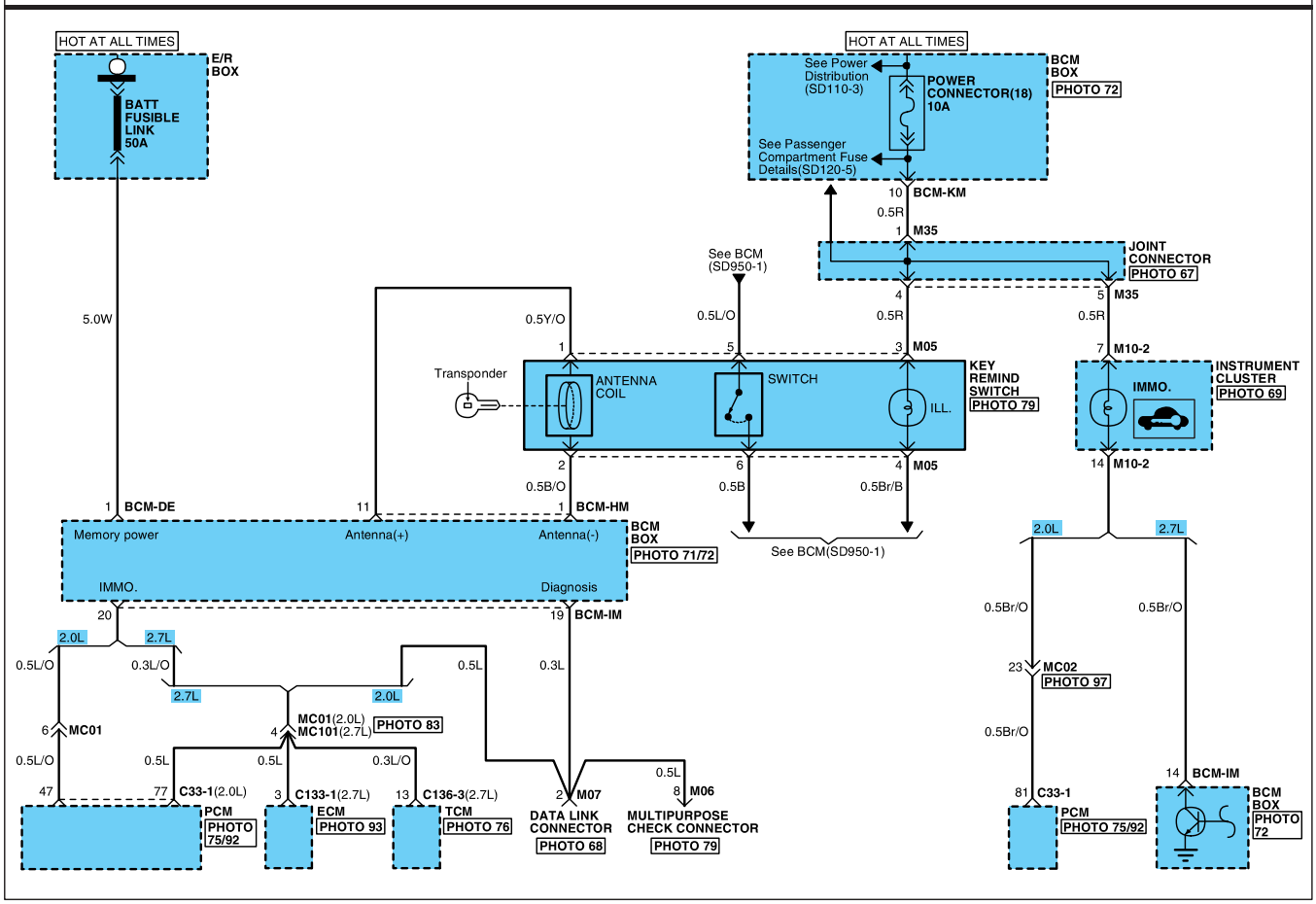
Circuit Description

For the visibility of driver, the auto light sensor controls automatically the head lamps and tail lamps through relay coil control. When the light switch in AUTO and the auto light sensor detect low intensity of illumination, ground is provided to the head lamp relays through auto light sensor. Battery voltage is supplied to the head lamps through head lamp fuses and head lamp relays(high/ low) contact.

Auto light sensor sends output signals to the BCM and the BCM controls the tail lamp relay. Of course, the head lamps and tail lamps can be controlled independently by using light switch and dimmer/passing switch.

N2GKG951B

IMMOBILIZER CONTROL SYSTEM (1) SD954-1



N2GKG954A

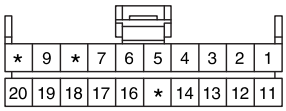
IMMOBILIZER CONTROL SYSTEM (2)

SD954-2

BCM-DE

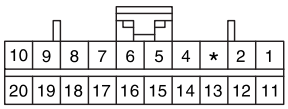
AMP_250DL_01F_B

BCM-HM



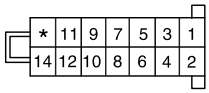
AMP_040M1_20F_B

BCM-IM



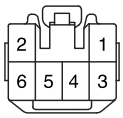
AMP_040M2_20F_B

BCM-KM



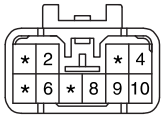
AMP_JPT_14F_B

M05



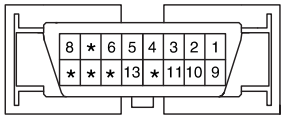
KET_090II_06F_W

M06



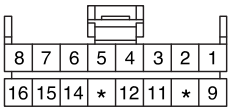
KET_090II_10M_W

M07



MLX_OBDII_16F_B_SIN

M10-2

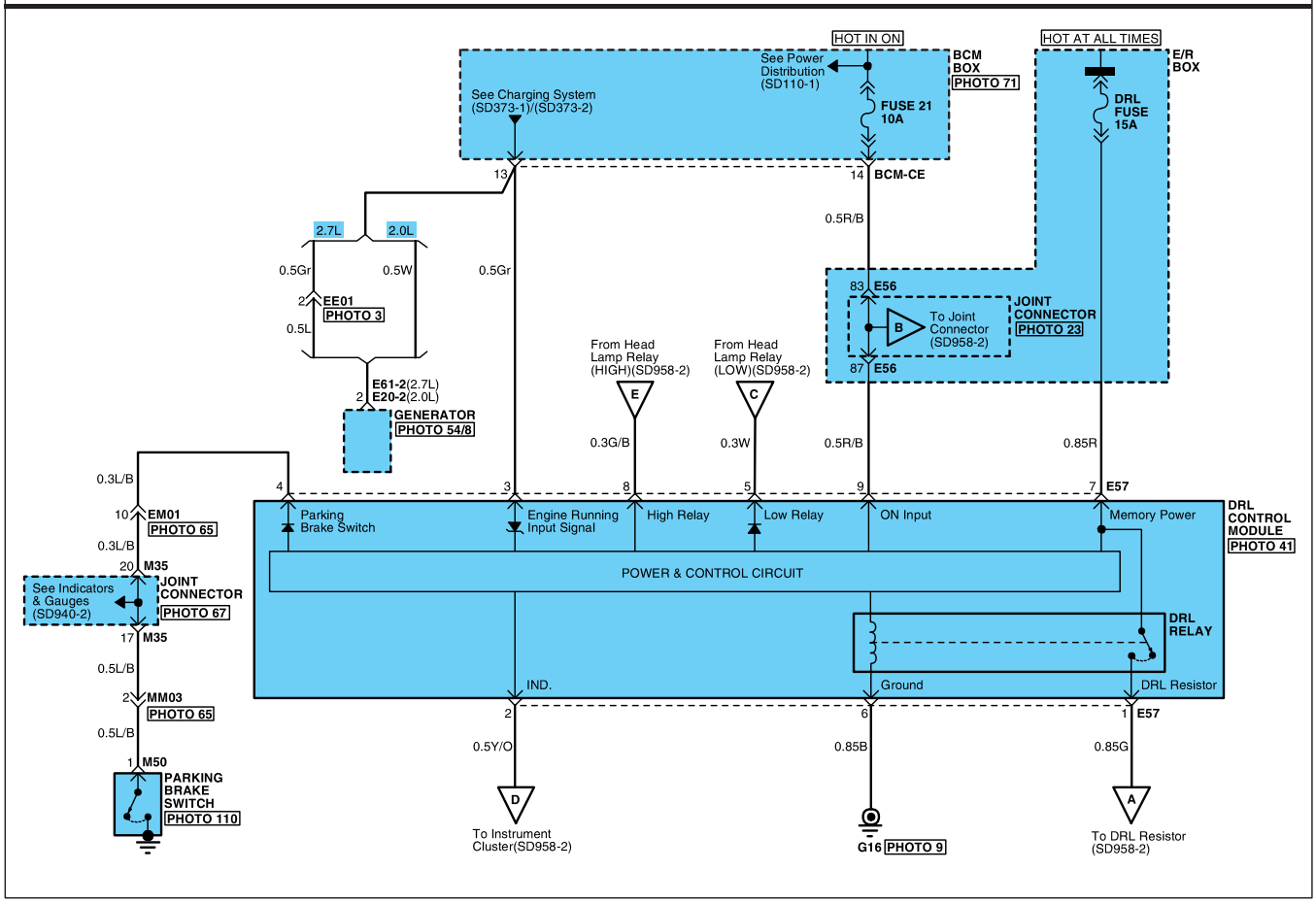


AMP_040M1_16F_B

N2GKG954B

DAYTIME RUNNING LIGHTS EBCD4BBA

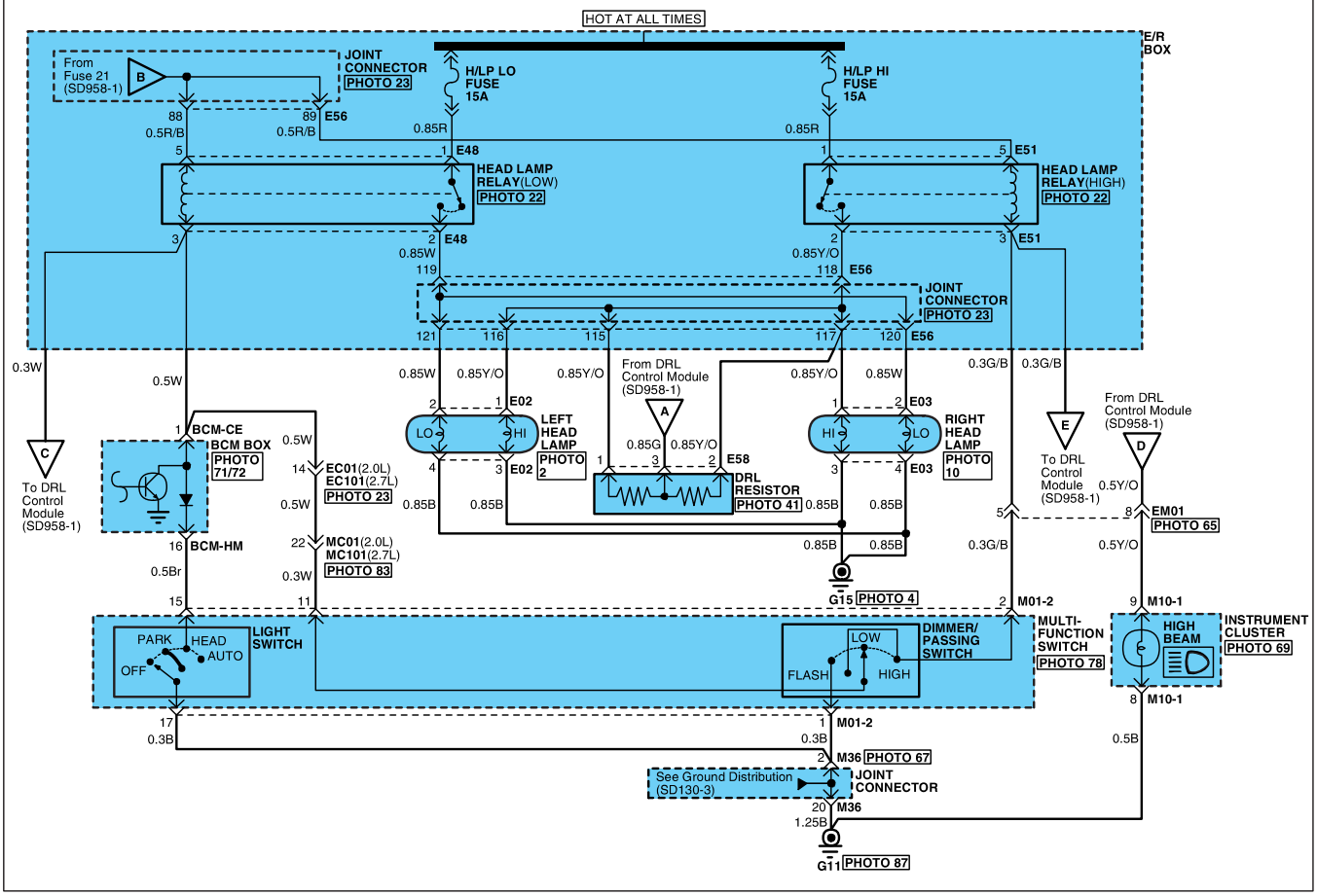
DAYTIME RUNNING LIGHTS (1) SD958-1



N2GKG958A

DAYTIME RUNNING LIGHTS (2)

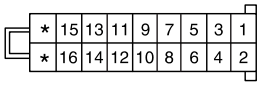
SD958-2



N2GKG958B

DAYTIME RUNNING LIGHTS (3) SD958-3

BCM-CE



AMP_JPT_18F_B

E02

KUM_NMWP_04F_B

E03

KUM_NMWP_04F_B

E20-2

KET_58X_02F_B

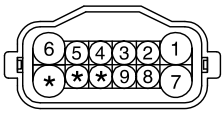
E48

CR05F011

E51

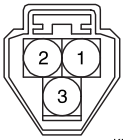
CR05F011

E57



KET_1809WP_12F_Gr

E58

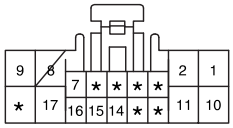


KUM_NMWP_03F_B

E61-2

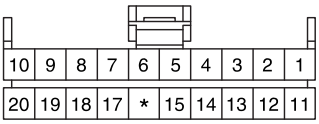
CR02F002

M01-2



KET_0509_18F_W

M10-1



AMP_040M1_20F_B

M50

AMP_PLM1_01F_B

Circuit Description

For the visibility and safty of drivers, the daytime running light will turn on automatically when the engine is running. Under this condition, the head lamps will illuminate with a minimal amount of load on the charging system.
As the DRL control module detects the generator running signals (engine running signal), the DRL control module controls the operation of the high beam head lamps through DRL relay coil control. Battery voltage from fusible link (BATT) is then provided to the low beam head lamps through the DRL relay contact.

In addition to the DRL relay control, the DRL control module controls the tail relay (built in to the DRL control module) coil. Battery voltage is applied to the closed contact of the tail lamp relay and the interior illumination lamps turn on. When the DRL module detects the engine runing OFF signal, the DRL control module turns the lights off. When the DRL module detects the light switch ON (PARK or HEAD) signal, the DRL control module stops it's functions.

N2GKG958C

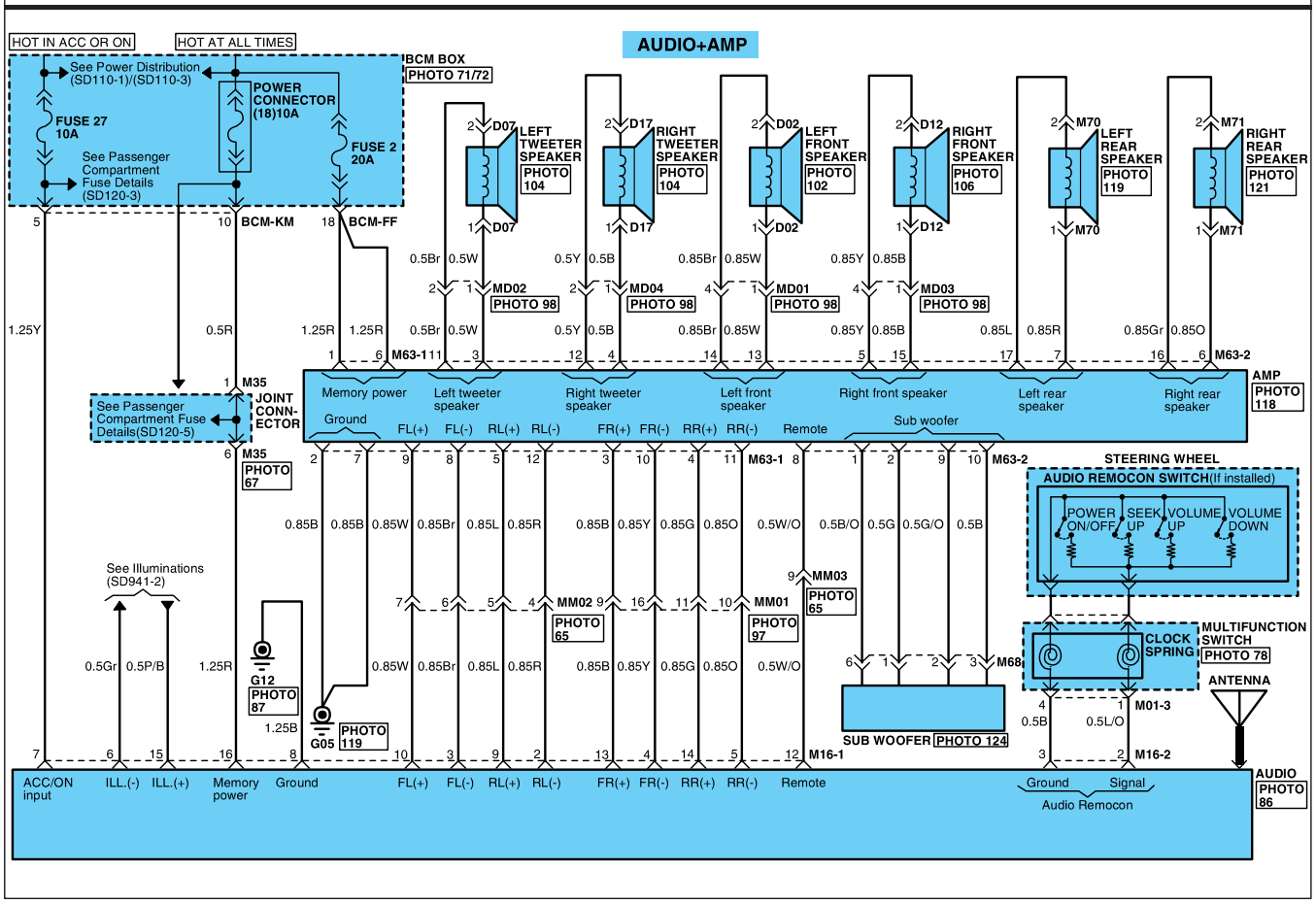
DAYTIME RUNNING LIGHTS (4) SD958-4

MEMO

N2GKG958D

AUDIO SYSTEM E3B73703

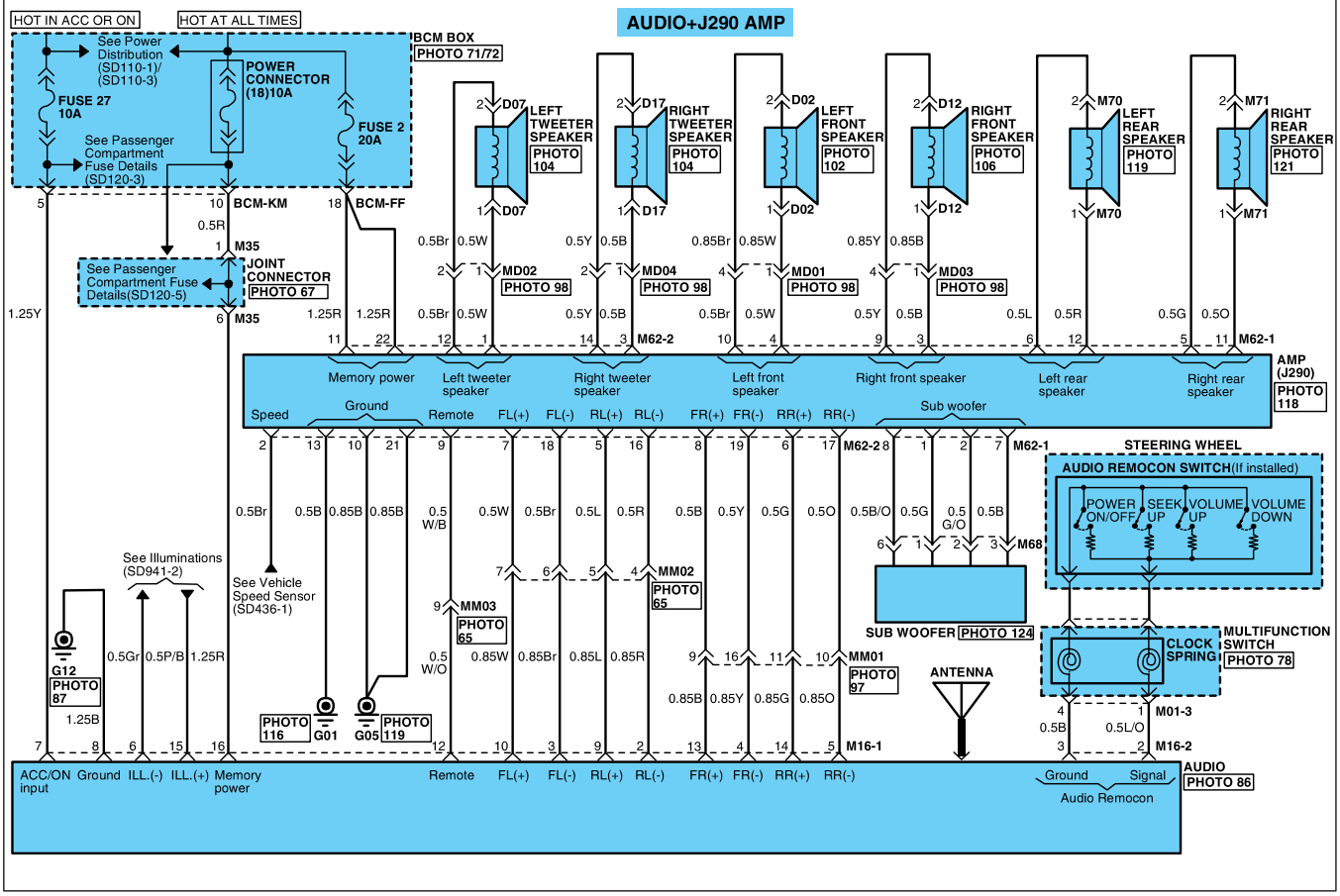
AUDIO SYSTEM (1) SD961-1



N2GKG961A

AUDIO SYSTEM (2)

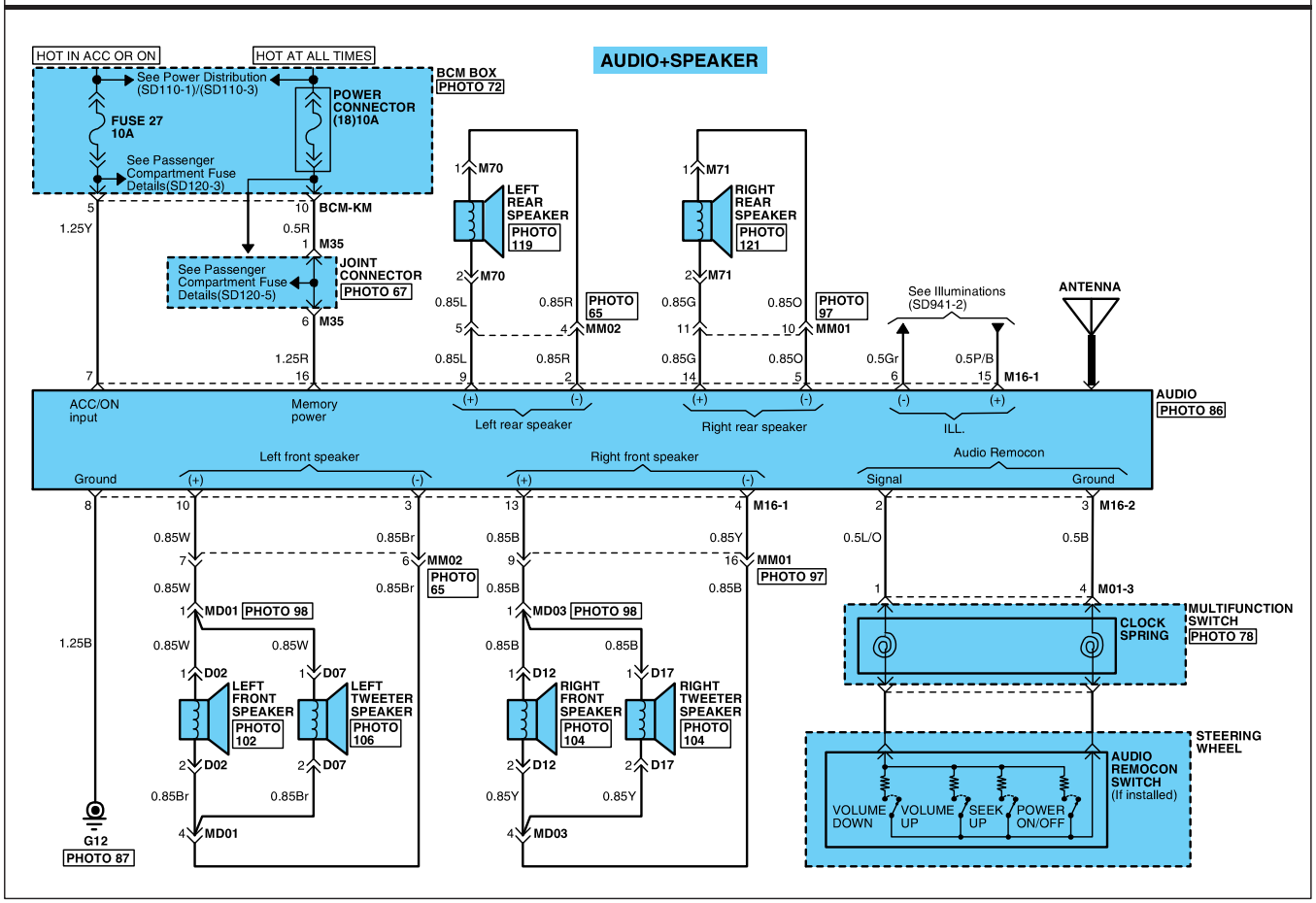
SD961-2



N2GKG961B

AUDIO SYSTEM (3)

SD961-3

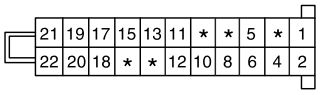


N2GKG961C

AUDIO SYSTEM (4)

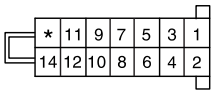
SD961-4

BCM-FF



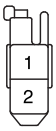
AMP_JPT_22F_B

BCM-KM



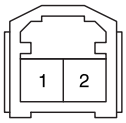
AMP_JPT_14F_B

D02



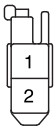
KET_090II_02F_W_SPK

D07



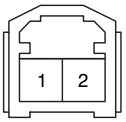
AMP_070_02M_W

D12



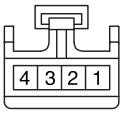
KET_090II_02F_W_SPK

D17



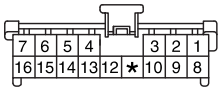
AMP_070_02M_W

M01-3



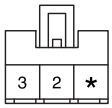
FUR_FA_04F_B_AB

M16-1



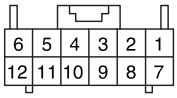
KUM_AR_16F_W

M16-2



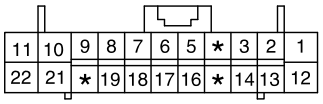
KUM_CDR_03F_W

M62-1



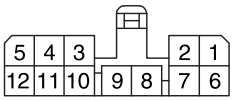
AMP_0407_12F_W_070

M62-2



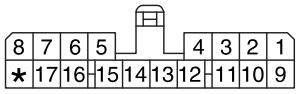
AMP_0407_22F_W_HD

M63-1



AMP_070_12F_W

M63-2

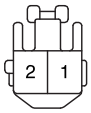


AMP_070_18F_W

M68

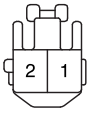
KET_090II_06M_W

M70



KET_090II_02F_W_L

M71

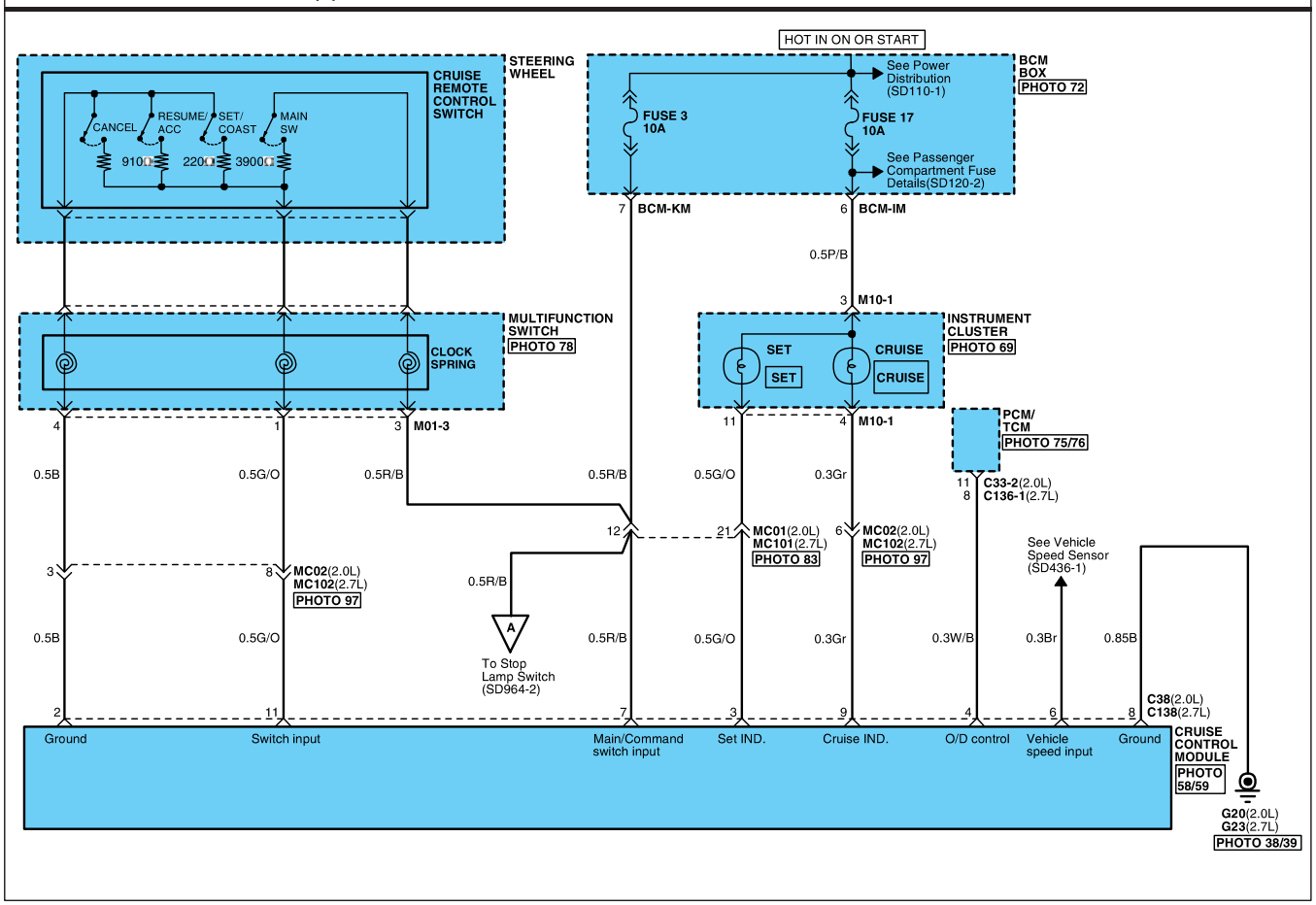


KET_090II_02F_W_L

N2GKG961D

CRUISE CONTROL SYSTEM E882651E

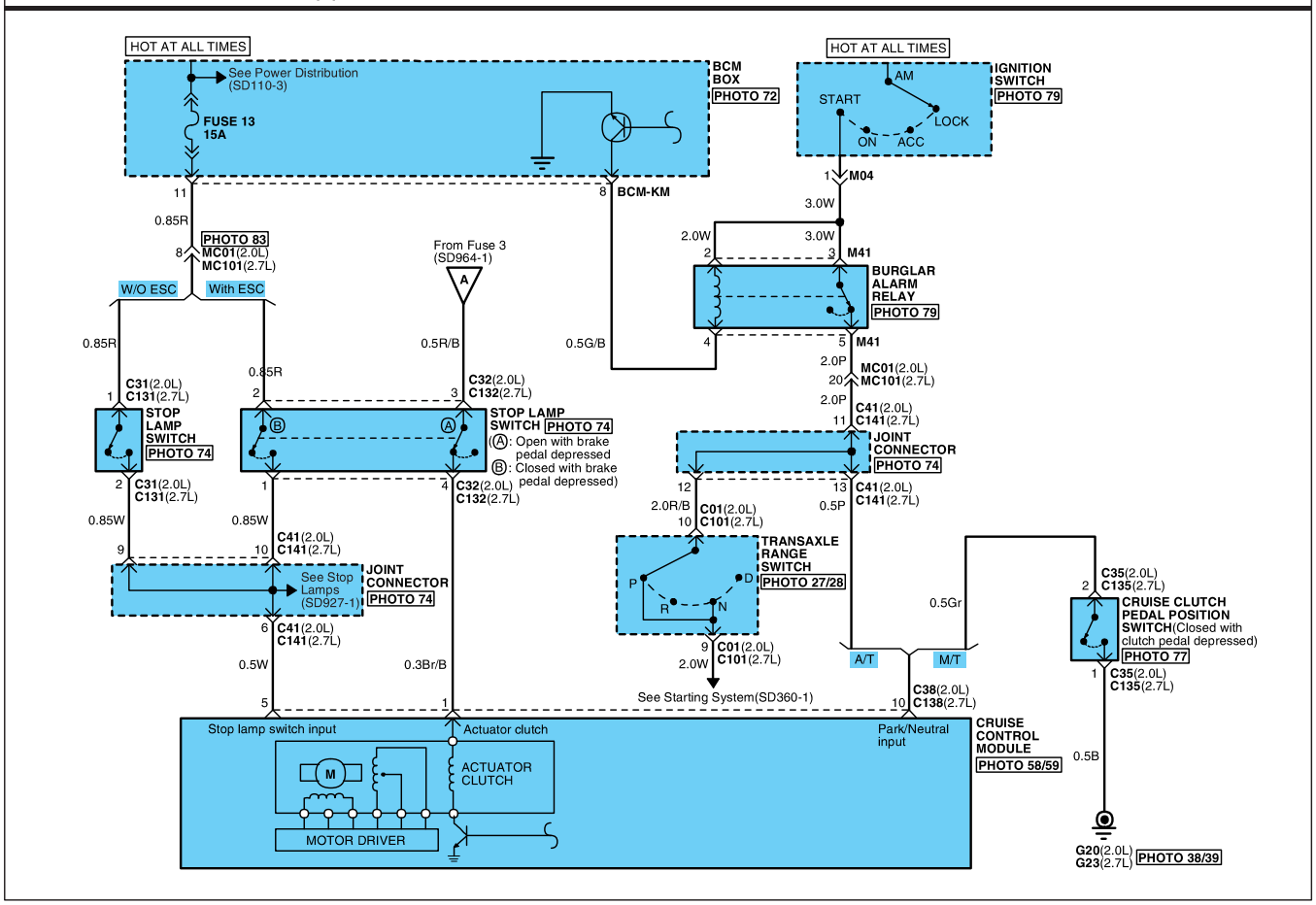
CRUISE CONTROL SYSTEM (1) SD964-1



N2GKG964A

CRUISE CONTROL SYSTEM (2)

SD964-2

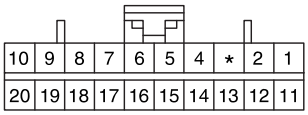


N2GKG964B

CRUISE CONTROL SYSTEM (3)

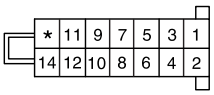
SD964-3

BCM-IM



AMP_040M2_20F_B

BCM-KM

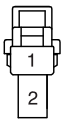


AMP_JPT_14F_B

C01/C101

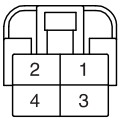
KET_SSD_10F_B_A

C31/C131



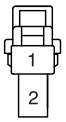
KET_250DL_02F_W

C32/C132



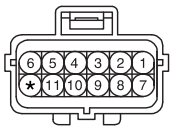
KET_250DL_04F_W

C35/C135



KET_250DL_02F_W

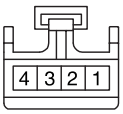
C38/C138



AMP_EJWP_12F_B

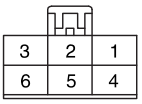
BLANK

M01-3



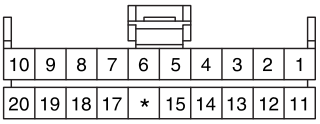
FUR_FA_04F_B_AB

M04



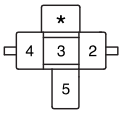
KUM_DSD_06F_W

M10-1



AMP_040M1_20F_B

M41



KET_250_05F_B_RLY

Circuit Description

The cruise control system uses mechanical and electrical devices to maintain vehicle speed at a driver selected setting. The cruise control module receives signals from the cruise control main switch, the stop lamp switch, the cruise control switch, transaxle range switch (A/T), cruise clutch pedal position switch (M/T) and the vehicle speed sensor, The cruise control module sends signals to the cruise control actuator and the transaxle control module (A/T).

With cruise engaged, the cruise control module sends a signal to the transaxle control module that prevents the transaxle from continuously downshifting and upshifting to maintain the set vehicle speed when going up a long grade or hill. The cruise control module incorporates a self diagnostic feature.

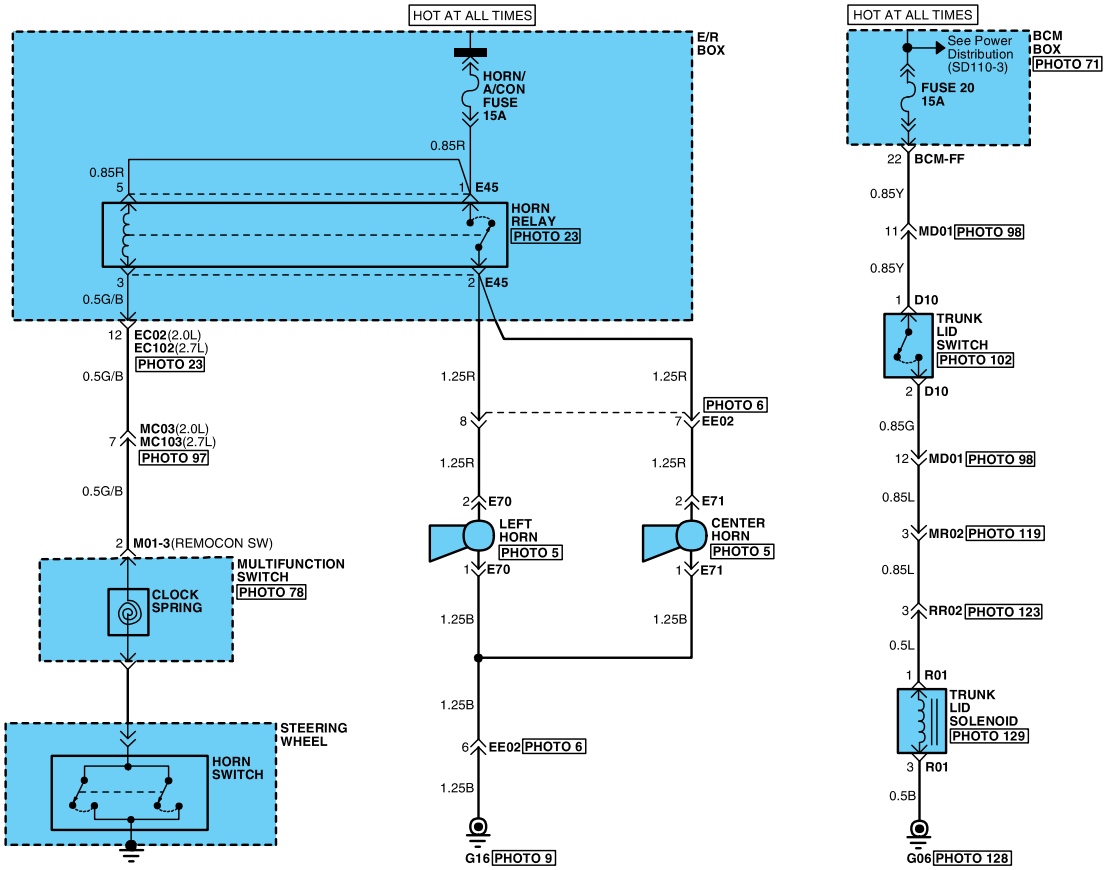
N2GKG964C

CRUISE CONTROL SYSTEM (4)

MEMO

N2GKG964D

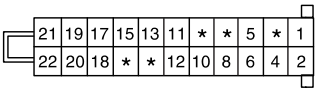
HORNS & TRUNK LID OPENER (1) SD968-1



N2GKG968A

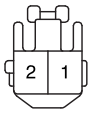
HORNS & TRUNK LID OPENER (2) SD968-2

BCM-FF



AMP_JPT_22F_B

D10

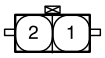


KET_090II_02F_W_L

E45

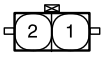
CR05F011

E70



CR02F091

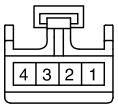
E71



CR02F091

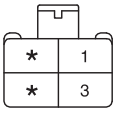
BLANK

M01-3



FUR_FA_04F_B_AB

R01



KET_250_04F_B

Circuit Description

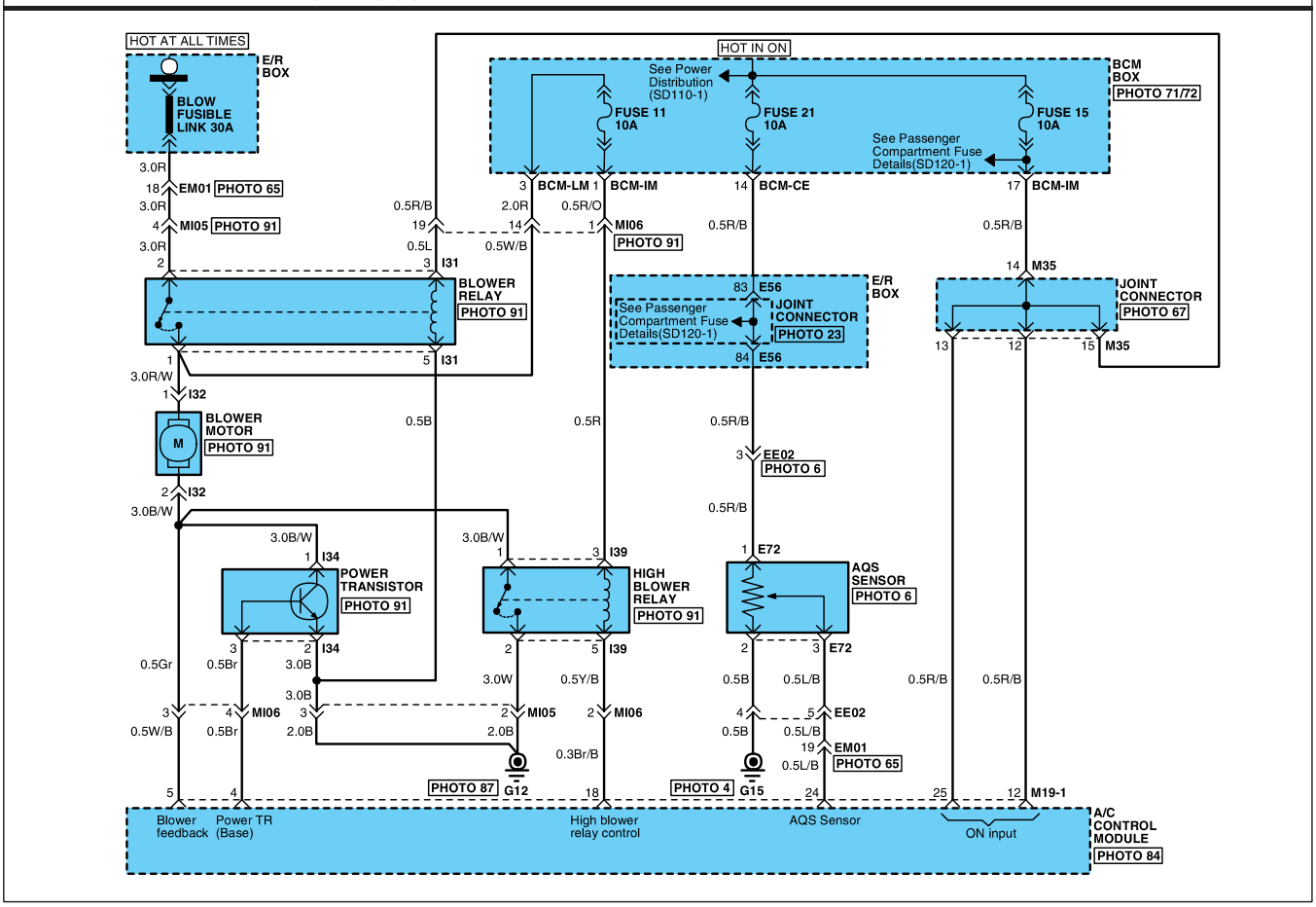
Battery voltage is applied at all times to both the coil and the contacts of the horn relay. With the horn switch depressed, ground is provided to the coil of the horn relay through the horn switch. The relay contacts closely and applys battery voltage to the horns. And then sounding the horns.

Battery voltage is supplied at all times to the trunk lid switch through fuse 20. When the trunk lid switch is pushed (ON), current is applied to the trunk lid solenoid. The trunk lid are opened.

N2GKG968B

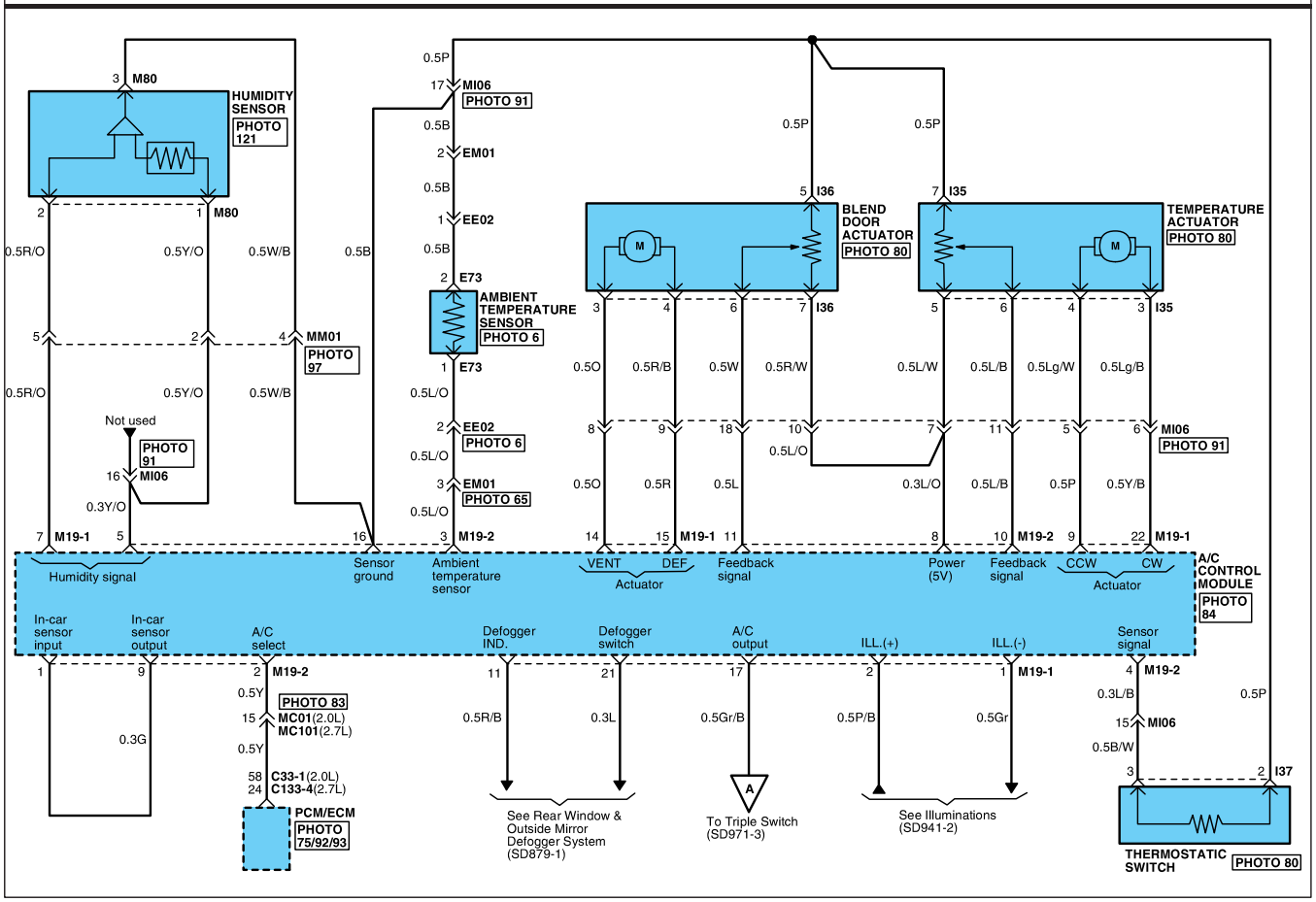
BLOWER & A/C CONTROLS (AUTO) E034DDD5

BLOWER & A/C CONTROLS (AUTO) (1) SD971-1



N2GKG971A

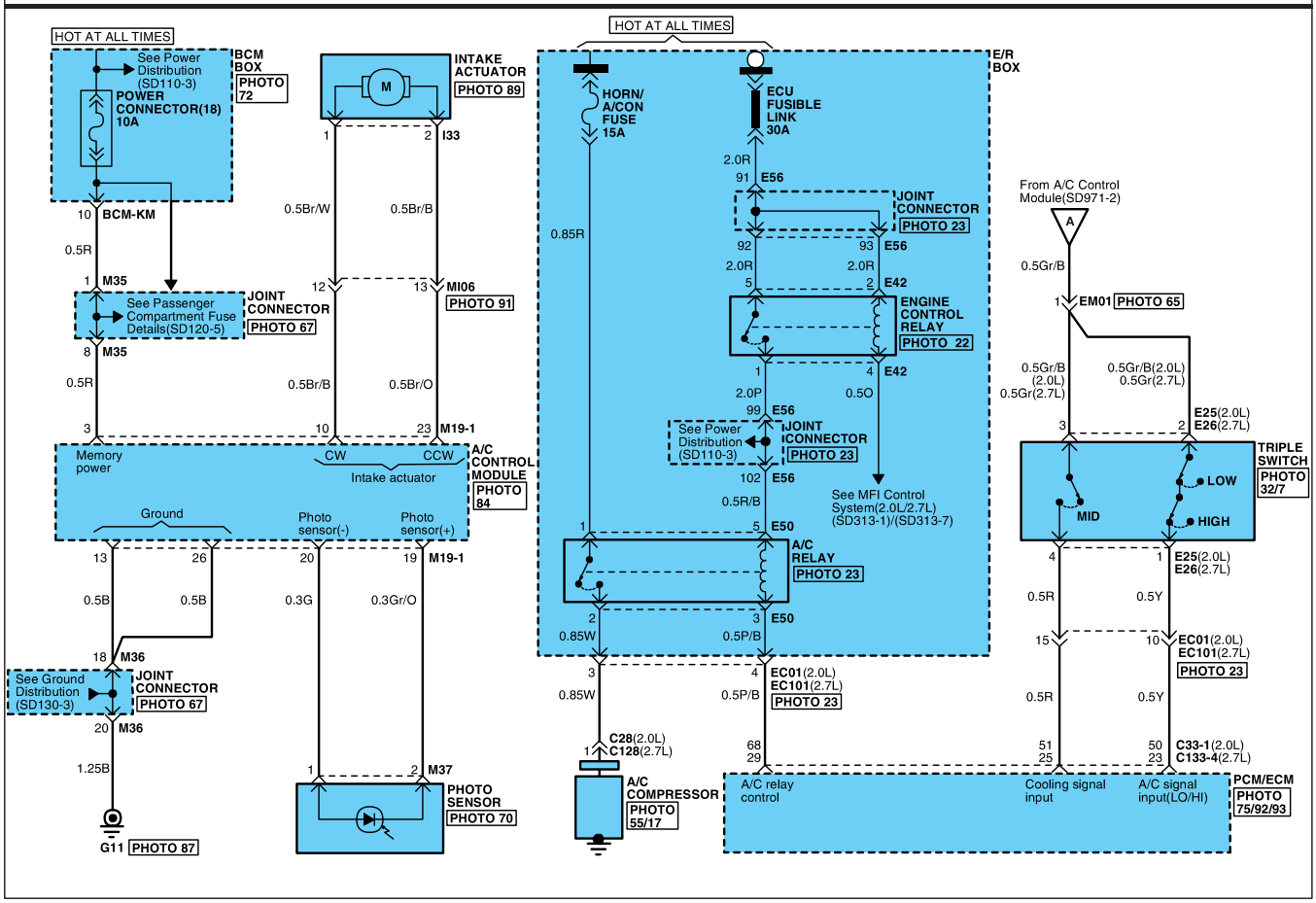
BLOWER & A/C CONTROLS (AUTO) (2) SD971-2



N2GKG971B

BLOWER & A/C CONTROLS (AUTO) (3)

SD971-3

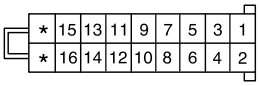


N2GKG971C

BLOWER & A/C CONTROLS (AUTO) (4)

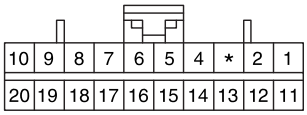
SD971-4

BCM-CE



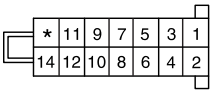
AMP_JPT_18F_B

BCM-IM



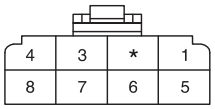
AMP_040M2_20F_B

BCM-KM



AMP_JPT_14F_B

BCM-LM

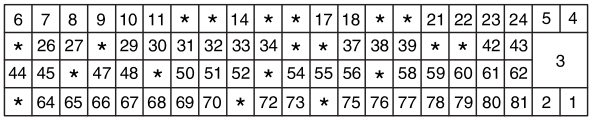


AMP_250_08F_W

C28

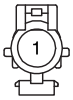
KUM_NMWP_01F_B

C33-1



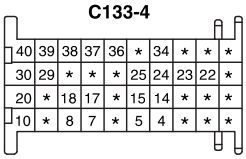
KET_ECU_81F_B_BOSCH

C128



KET_SWP_01F_B

C133-4



AMP_ECU_40F_B_134P

E25

AMP_EJWP_04F_B

E26

AMP_EJWP_04F_B

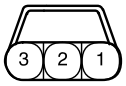
E42

CR05F019

E50

CR05F011

E72

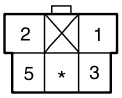


CR03F070

E73

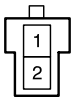
CR02F001

I31



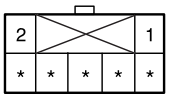
CR05F026

I32



CR02M042

I33

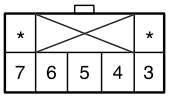


CR07F011

I34

CR03F005

I35

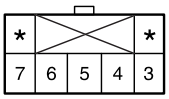


CR07F011

N2GKG971D

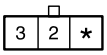
BLOWER & A/C CONTROLS (AUTO) (5) SD971-5

I36



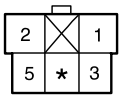
CR07F011

I37



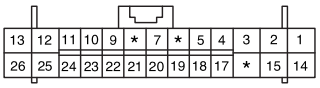
CR03F040

I39



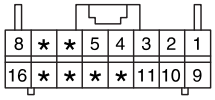
CR05F026

M19-1



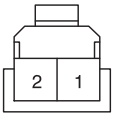
AMP_0407_26F_W_HD

M19-2



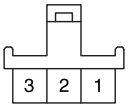
AMP_0407_16F_W_040

M37



AMP_070_02F_W

M80



KET_070_03F_W

BLANK

Circuit Description

The A/C control module receives inputs from the A/C sensors (for instance,photo sensor, thermostatic switch humidity sensor, ambient sensor, etc.) and controls the function of the air conditioning system.

The A/C control module and various sensors provide accurate control of the air mixture using blend door actuator, temperature actuator and intake actuator under all operating conditions. The function of the power transistor is that of the blower resistor in manual A/C

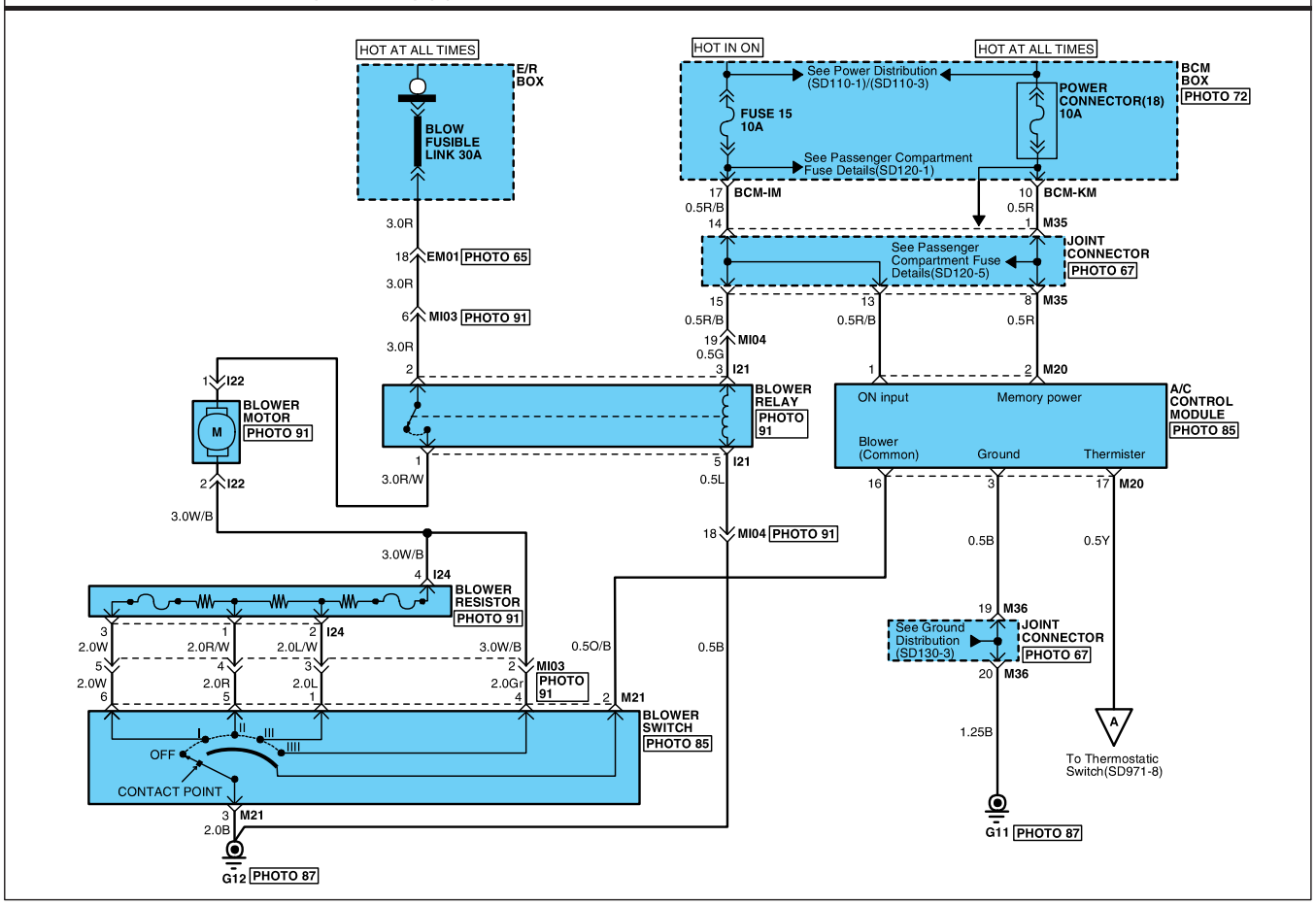
N2GKG971E

BLOWER & A/C CONTROLS (AUTO) (6)	SD971-6

MEMO

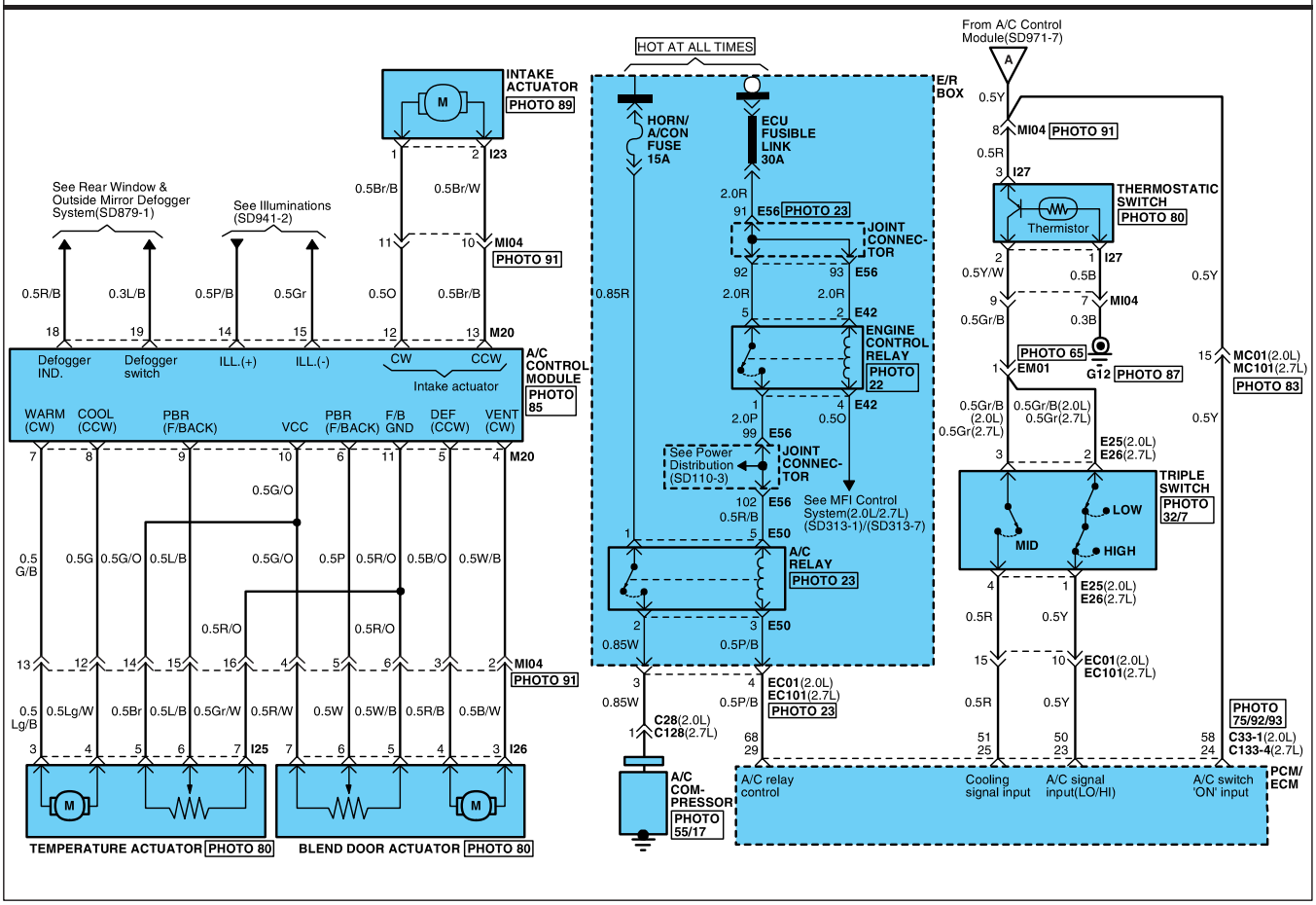
N2GKG971F

BLOWER & A/C CONTROLS (MANUAL) (1) SD971-7



N2GKG971G

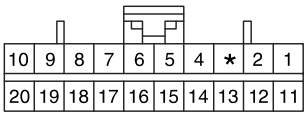
BLOWER & A/C CONTROLS (MANUAL) (2) SD971-8



N2GKG971H

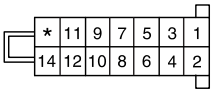
BLOWER & A/C CONTROLS (MANUAL) (3)

BCM-IM



AMP_040M2_20F_B

BCM-KM



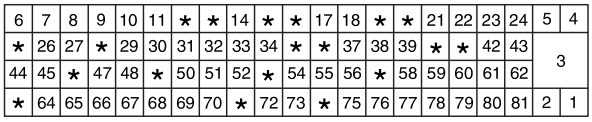
AMP_JPT_14F_B

BLANK

C28

KUM_NMWP_01F_B

C33-1

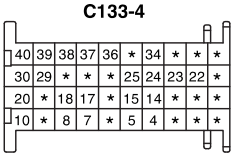


KET_ECU_81F_B_BOSCH

C128

KET_SWP_01F_B

C133-4



AMP_ECU_40F_B_134P

BLANK

E25

AMP_EJWP_04F_B

E26

AMP_EJWP_04F_B

E42

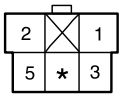
CR05F019

E50

CR05F011

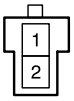
BLANK

I21



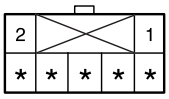
CR05F026

I22



CR02M042

I23

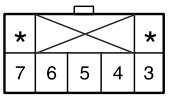


CR07F011

I24

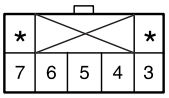
CR04F001

I25



CR07F011

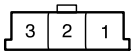
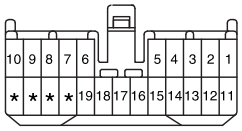
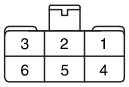
I26



CR07F011

N2GKG971I

BLOWER & A/C CONTROLS (MANUAL) (4) SD971-10

I27	M20	M21	
 CR03F011	 KET_050_23F_W	 KET_250_06F_W	BLANK

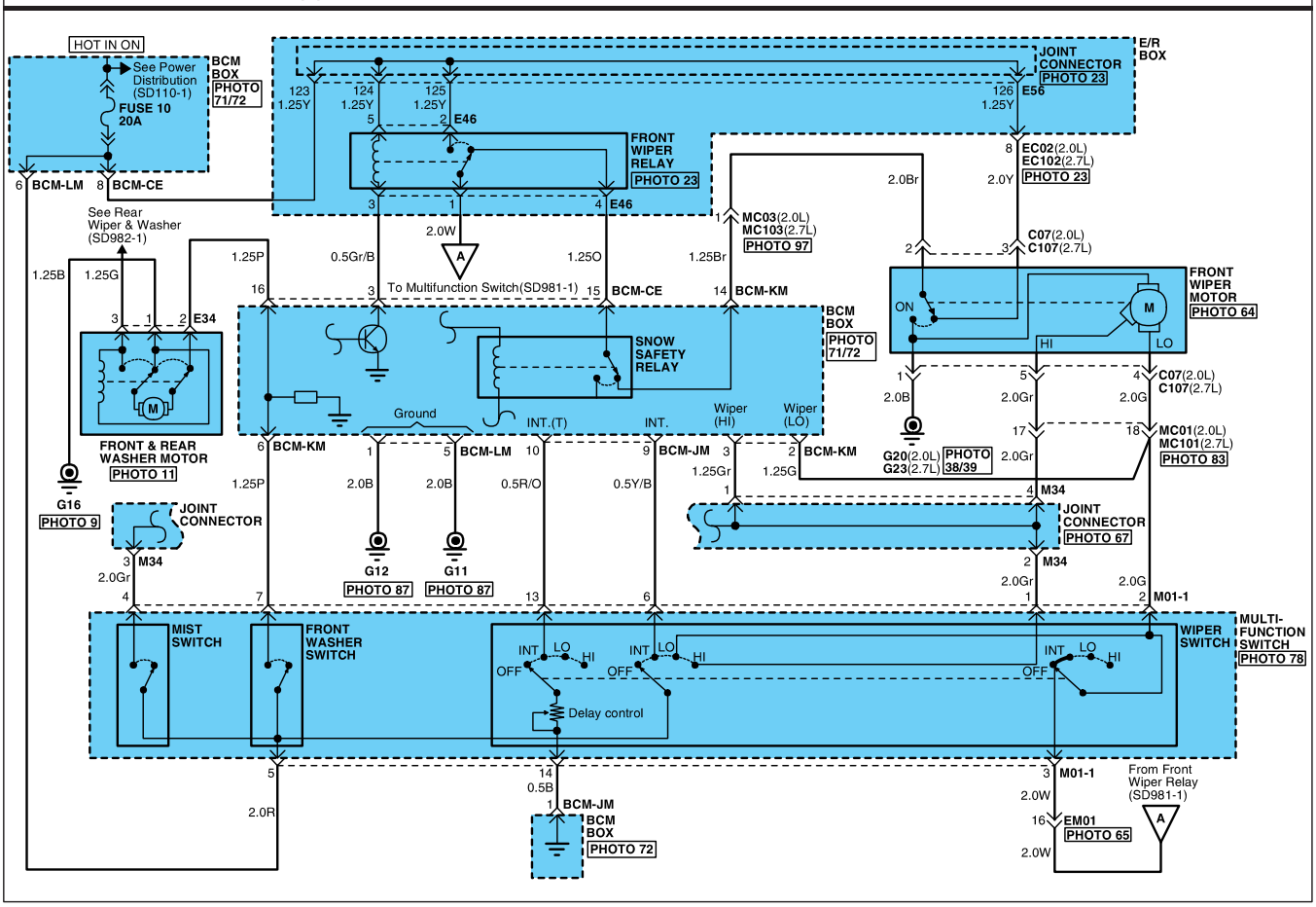
Circuit Description

Blower control
With the ignition switch in ON and the blower switch in any position except OFF, the blower relay coil energizes and the blower relay contact closes.
Battery voltage is then applied to the blower motor through the closed contacts of the blower relay and then ground is provided to the blower motor through the blower resistor and the blower switch. As the blower switch is moved from OFF to HI, resistance of the resistors (built in to the blower resistor) will decrease and battery voltage applied to the blower motor will increase. This will increase the blower motor speed. When the blower switch is in HI, all of the resistors are by passed and the maximum voltage is now applied to the blower motor so that it runs at the highest speed.

A/C control
With the ignition switch in ON and the blower switch in any position except OFF, the blower relay coil energizes and the blower relay contact closes.
Battery voltage is then applied to the blower motor through the closed contacts of the blower relay and then ground is provided to the blower motor through the blower resistor and the blower switch. Battery voltage is applied to A/C switch through the fuse 15. With the A/C switch in ON, the Engine Control Module (ECM) will ground the coil of the A/C control relay after a short delay to adjust idle speed. Battery voltage will then be applied to the compressor magnetic clutch from the A/C fuse through the closed contacts of the A/C relay. The A/C compressor runs. Refer to the shop manual, section HA for details.

N2GKG971J

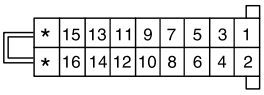
FRONT WIPER & WASHER (1) SD981-1



N2GKG981A

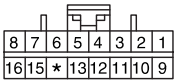
FRONT WIPER & WASHER (2) SD981-2

BCM-CE



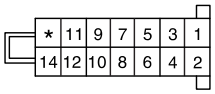
AMP_JPT_18F_B

BCM-JM



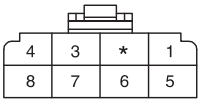
AMP_040M2_16F_B

BCM-KM



AMP_JPT_14F_B

BCM-LM



AMP_250_08F_W

C07/C107

KUM_NDWP_05F_B

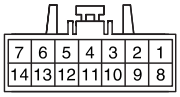
E34

KET_090IIWP_03F_W

E46

CR05F011

M01-1



KET_090II_14F_W_SW

Circuit Description

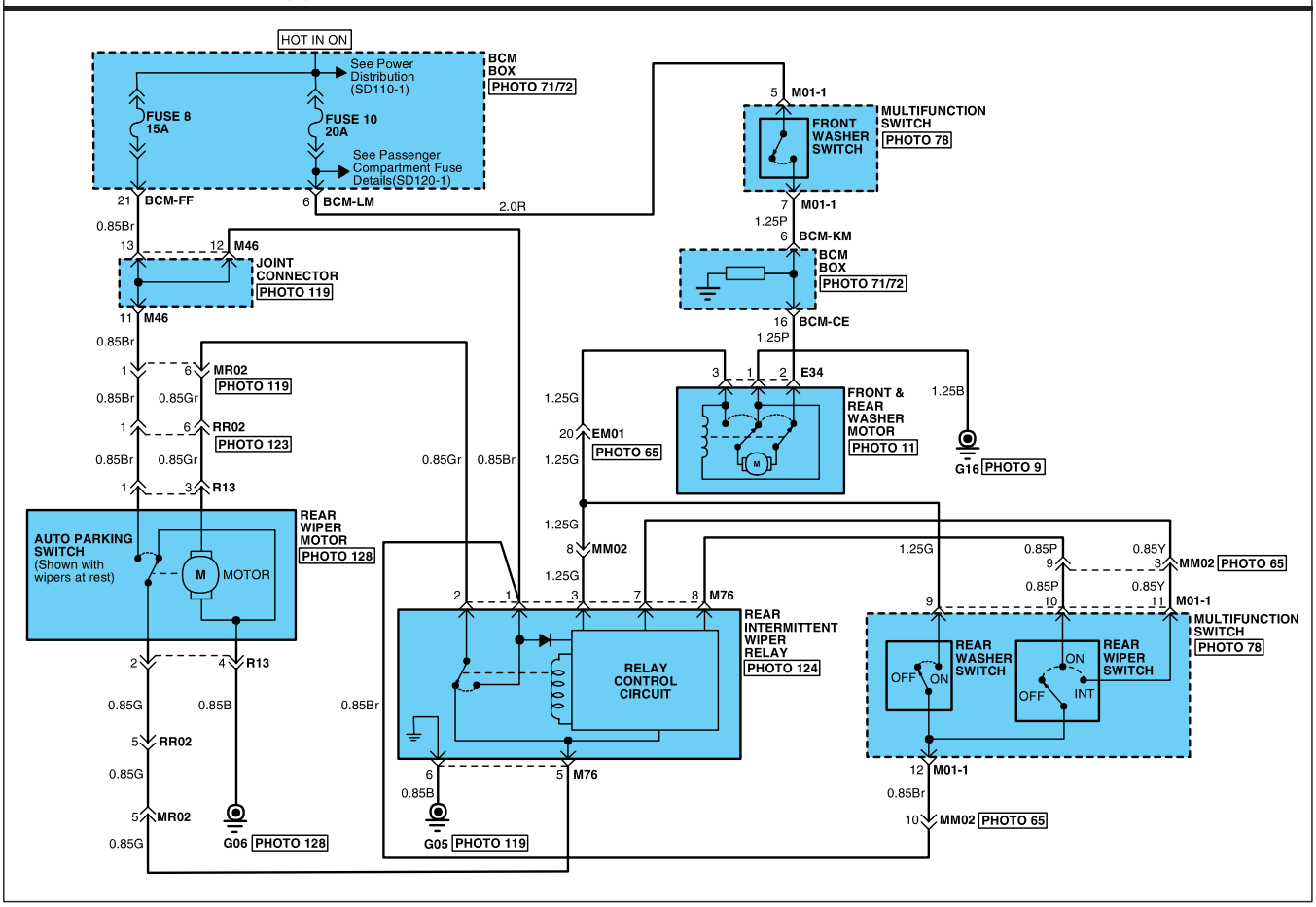
Wiper Operation
Battery voltage is suppled to the wiper switch from the fuse 10 when the ignition switch is turned on. When the wiper switch is in Low or High position, the battery voltage is grounded at G20(2.0L) or G23(2.7L) through the wiper motor.

Intermittent Operation
When the wiper switch is in INT and ignition switch is in ON, the wiper relay coil is energized through BCM. The voltage is grounded at G20(2.0L) or G23(2.7L) through the INT position of the wiper switch and the low position of the wiper motor.

Washer Operation
Battery voltage is supplied to the washer switch from the fuse 10, when the ignition switch is turned on. When the washer switch is in ON, the battery voltage is grounded at G16 through the washer motor.

N2GKG981B

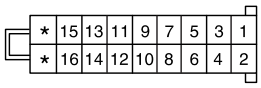
REAR WIPER & WASHER (1) SD982-1



N2GKG982A

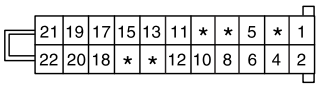
REAR WIPER & WASHER (2) SD982-2

BCM-CE



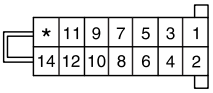
AMP_JPT_18F_B

BCM-FF



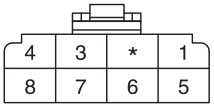
AMP_JPT_22F_B

BCM-KM



AMP_JPT_14F_B

BCM-LM

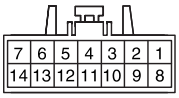


AMP_250_08F_W

E34

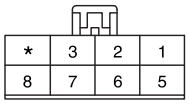
KET_090IIWP_03F_W

M01-1



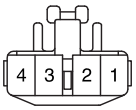
KET_090II_14F_W_SW

M76



KUM_DSD_08F_W

R13



KET_090II_04F_W

Circuit Description

All functions of the rear wiper and washer circuits are controlled by the position of the rear wiper and washer switch in the multifunction switch.

Rear Wiper Operation

The rear wiper switch has 3 positions(OFF, ON and INT).
Based on these switch position signals, the rear intermittent wiper motor controls the operation of the wiper motor through a relay coil.

1. When the ON position is selected, the rear window wiper operates continuously.
2. When the INT position is selected, the wiper operates intermittently.

Rear washer Operation

When the WASHER position is selected, the rear intermittent wiper motor controls the operation of the washer motor through a relay coil.
The rear wiper operates serveral times after the washer fluid sprays on to the rear window.

N2GKG982B