

Bluetooth system cannot communicate with the phone	Refer to IOP sheet
--	--------------------

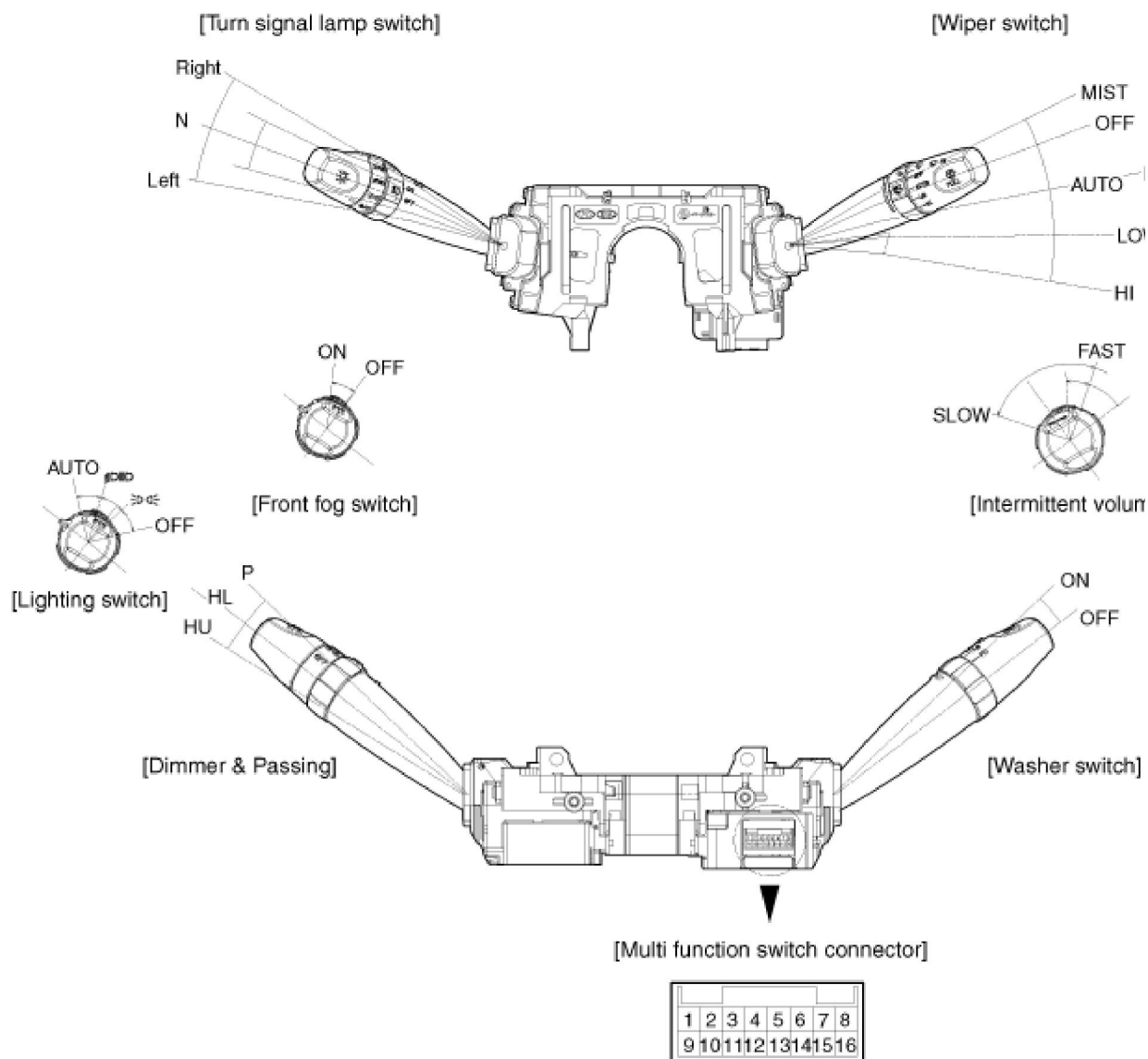
Body Electrical System > Multifunction Switch > Specifications

Specification

Items		Specifications
Rated voltage		DC 12V (Test voltage: 14.5V)
Operating temperature range		-30° C ~ +80° C (-22° F ~ 176° F)
Rated load (12V)	Lighting switch	0.4A (Relay load)
	Wiper switch	0.2A (Relay load)
	Washer switch	0.2A (Relay load)

Body Electrical System > Multifunction Switch > Components and Components Location

Component Location

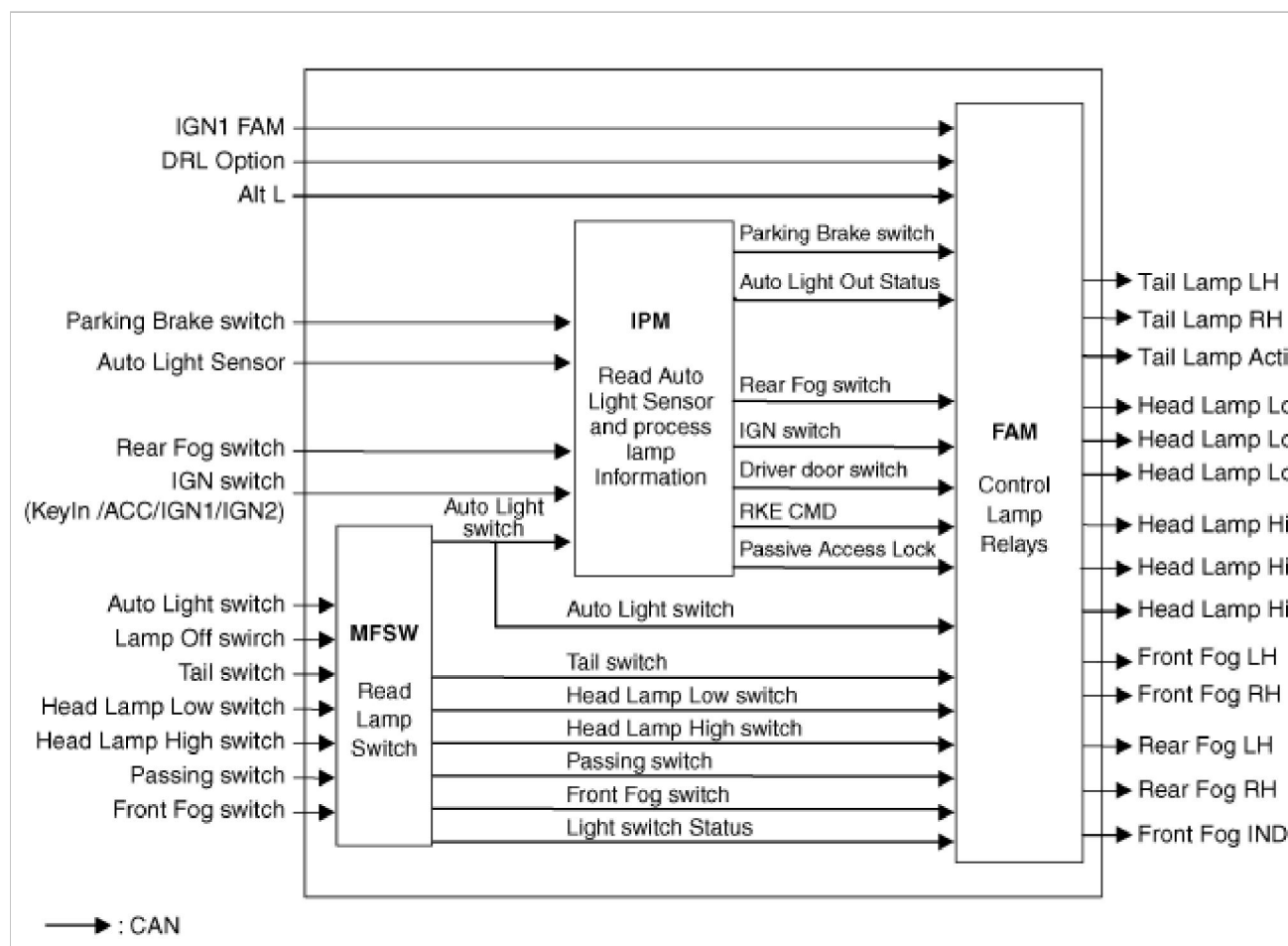


Circuit connection

Pin	Description	Pin	Description
1	Audio signal 2	9	Wiper
2	Audio GND 2	10	Head lamp
3	Audio signal 1	11	Washer
4	Audio GND 1	12	-
5	CAN High	13	-
6	CAN Low	14	Cruise GND
7	IGN 1	15	Cruise signal
8	B+	16	GND

Body Electrical System > Multifunction Switch > Schematic Diagrams

Circuit Diagram



Body Electrical System > Multifunction Switch > Repair procedures

Inspection

1. Check BCM input/output specification of multifunction switch using the scan tool. If the specification is abnormal, replace the head lamp or wiper switch.
2. If diagnosis is required on the multifunction switch, select model and "BCM"

1. HYUNDAI VEHICLE DIAGNOSIS ▼	
MODEL :	GENESIS
SYSTEM :	MULTI MEDIA SYSTEM
HEAD UNIT	
01.	DIAGNOSTIC TROUBLE CODES
02.	READ VERIENT CODING
03.	WRITE VERIENT CODING
04.	ACTUATION TEST
05.	ALL UNIT SOFTWARE VERSION
06.	WAKE UP LINE TEST
07.	RING BREAK TEST
08.	XdB TEST

1. HYUNDAI VEHICLE DIAGNOSIS ▼	
MODEL : GENESIS	
SYSTEM : BODY CONTROL MODULE	
01. IPM(IN PANEL MODULE) -PIC	
02. IPM(IN PANEL MODULE) +PIC	
03. FAN(FRONT AREA MODULE)	
04. DDN(POWER WINDOW MAIN)	
05. ADN(POWER WINDOW ASSIST)	
06. CLU(CLUSTER)	
07. MFSW(MULTIFUNCTION SW)	
08. PSM(POWER SEAT)	

3. Select "Input/output monitoring".

1. HYUNDAI VEHICLE DIAGNOSIS	
MODEL : GENESIS	
SYSTEM : BODY CONTROL MODULE	
MFSW(MULTIFUNCTION SW)	
01. DIAGNOSTIC TROUBLE CODES	
02. INPUT/OUTPUT MONITORING	
03. FLIGHT RECORD	
04. SIMU-SCAN	
05. IDENTIFICATION CHECK	
06. DATA SETUP(UNIT CONU.)	

4. Check the input/output condition of "Lamp switch".

. INPUT/OUTPUT MONITORING	
01. POWER	
02. LAMP SWITCH	
03. WIPER SWITCH	
04. REMOTE CONTROL SWITCH	

1.11 CURRENT DATA		01/09
▲		
LEFT TURN SIGNAL LAMP1861OFF		
RIGHT TURN SIGNAL LAMP546OFF		
FRONT FOG LAMP SW	3418	OFF
LIGHT SW	3547	ON
TAIL LAMP SW	3548	OFF
HEAD LAMP LOW SW	1870	OFF
HEAD LAMP HIGH SW	3549	OFF
PASSING SW	0403	OFF
▼		
FIX	SCRN	FULL PART GRPH HELP

5. Check the input/output condition of "LAMPS".

1.11 CURRENT DATA		06/09
LEFT TURN SIGNAL LAMP	1861OFF	▲ ▼
RIGHT TURN SIGNAL LAMP	3546OFF	
FRONT FOG LAMP SW	3418OFF	
LIGHT SW	3547ON	
TAIL LAMP SW	3548OFF	
HEAD LAMP LOW SW	1870OFF	
HEAD LAMP HIGH SW	3549OFF	
PASSING SW	0483OFF	
FIX SCRN FULL PART GRPH HELP		

1.11 CURRENT DATA		07/09
LEFT TURN SIGNAL LAMP	1861OFF	▲ ▼
RIGHT TURN SIGNAL LAMP	3546OFF	
FRONT FOG LAMP SW	3418OFF	
LIGHT SW	3547ON	
TAIL LAMP SW	3548OFF	
HEAD LAMP LOW SW	1870OFF	
HEAD LAMP HIGH SW	3549OFF	
PASSING SW	0483OFF	
FIX SCRN FULL PART GRPH HELP		

1.11 CURRENT DATA		06/09
LEFT TURN SIGNAL LAMP	1861OFF	▲ ▼
RIGHT TURN SIGNAL LAMP	3546OFF	
FRONT FOG LAMP SW	3418OFF	
LIGHT SW	3547ON	
TAIL LAMP SW	3548OFF	
HEAD LAMP LOW SW	1870OFF	
HEAD LAMP HIGH SW	3549OFF	
PASSING SW	0483OFF	
FIX SCRN FULL PART GRPH HELP		

. INPUT/OUTPUT MONITORING	
01. POWER	
02. LAMP SWITCH	
03. WIPER SWITCH	
04. REMOTE CONTROL SWITCH	

6. Check the input/output condition of "WIPER".

1.11 CURRENT DATA		07/08
WASHER SW	1861OFF	▲ ▼
WIPER INT SW	3546OFF	
WIPER LOW SW	3418OFF	
WIPER HIGH SW	3547OFF	
WIPER MIST SW	3548OFF	
WIPER AUTO SW	1870OFF	
WIPER SW	3549ON	
WIPER INT. MODE	0483STEP1	
FIX	SCRN	FULL
PART	GRPH	HELP

1.11 CURRENT DATA		04/08
WASHER SW	1861OFF	▲ ▼
WIPER INT SW	3546OFF	
WIPER LOW SW	3418OFF	
WIPER HIGH SW	3547OFF	
WIPER MIST SW	3548OFF	
WIPER AUTO SW	1870OFF	
WIPER SW	3549ON	
WIPER INT. MODE	0483STEP1	
FIX	SCRN	FULL
PART	GRPH	HELP

1.11 CURRENT DATA		02/08
WASHER SW	1861OFF	▲ ▼
WIPER INT SW	3546OFF	
WIPER LOW SW	3418OFF	
WIPER HIGH SW	3547OFF	
WIPER MIST SW	3548OFF	
WIPER AUTO SW	1870OFF	
WIPER SW	3549ON	
WIPER INT. MODE	0483STEP1	
FIX	SCRN	FULL
PART	GRPH	HELP

1.11 CURRENT DATA		01/08
WASHER SW	1861OFF	▲ ▼
WIPER INT SW	3546OFF	
WIPER LOW SW	3418OFF	
WIPER HIGH SW	3547OFF	
WIPER MIST SW	3548OFF	
WIPER AUTO SW	1870OFF	
WIPER SW	3549ON	
WIPER INT. MODE	0483STEP1	
FIX	SCRN	FULL
PART	GRPH	HELP

7. Check the input/output condition of "AUTO LIGHT".

1.11 CURRENT DATA		09/09
FRONT FOG LAMP SW	3418	OFF
LIGHT SW	3547	ON
TAIL LAMP SW	3548	OFF
HEAD LAMP LOW SW	1879	OFF
HEAD LAMP HIGH SW	3549	OFF
PASSING SW	0483	OFF
AUTO LIGHT SW	1872	OFF
LEFT TURN SIGNAL LAMP	1861	OFF

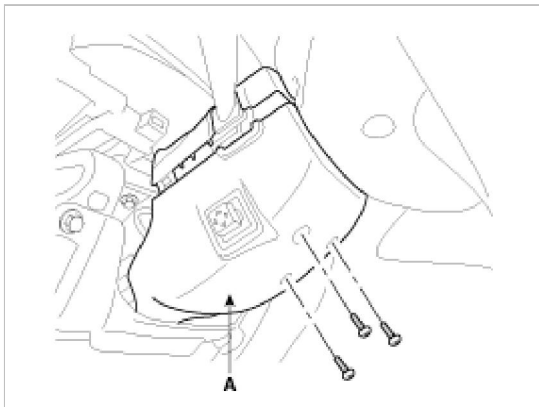
FIX SCRN FULL PART GRPH HELP

8. To check the DTC of the multifunction switch, select "DIAGNOSTIC TROUBLE CODES"

1. HYUNDAI VEHICLE DIAGNOSIS
MODEL : GENESIS
SYSTEM : BODY CONTROL MODULE
MFSW(MULTIFUNCTION SW)
01. DIAGNOSTIC TROUBLE CODES
02. INPUT/OUTPUT MONITORING
03. FLIGHT RECORD
04. SIMU-SCAN
05. IDENTIFICATION CHECK
06. DATA SETUP(UNIT CONV.)

Removal

1. Disconnect the negative (-) battery terminal.
2. Remove the steering column upper and lower shrouds (A) after removing 3 screws and connector.



3. Remove the multifunction switch (B) after disconnecting the connector(A).

