SECTION WCS
WARNING CHIME SYSTEM

CONTENTS

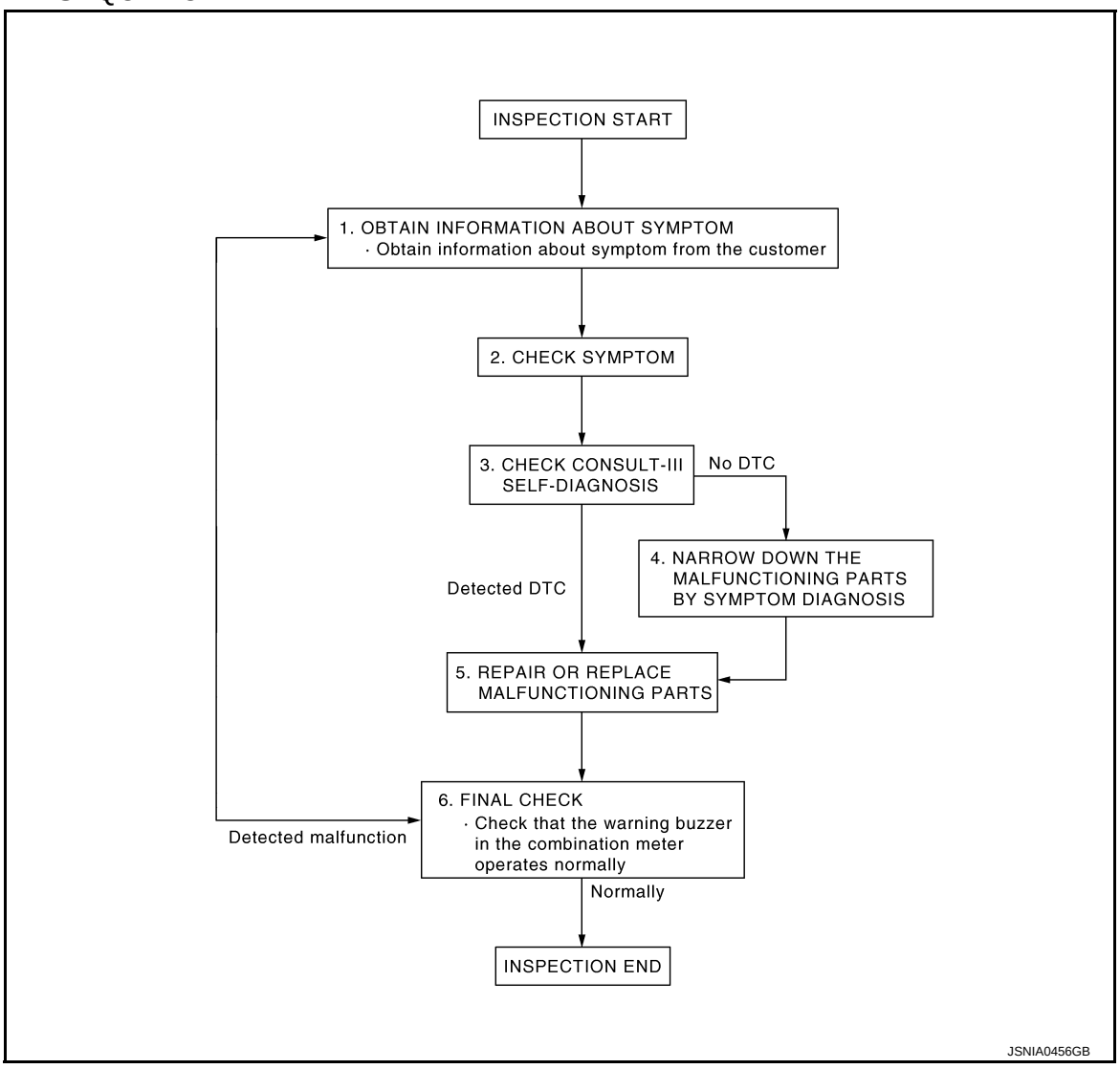
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000005524698

OVERALL SEQUENCE



DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred.

>> GO TO 2.

2.CHECK SYMPTOM

- Check the symptom based on the information obtained from the customer.
- Check that any other malfunctions are present.

>> GO TO 3.

3.CHECK CONSULT-III SELF-DIAGNOSIS RESULTS

Connect CONSULT-III and perform self-diagnosis. Refer to WCS-13, "CONSULT-III Function (METER/M&A)".

Are self-diagnosis results normal?

YES >> GO TO 4.
NO >> GO TO 5.

4. NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

5. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace malfunctioning parts.

NOTE:

If DTC is displayed, erase DTC after repair or replace malfunctioning parts.

>> GO TO 6.

6. FINAL CHECK

Check that the warning buzzer in the combination meter operates normally.

Does it operate normally?

YES >> INSPECTION END
NO >> GO TO 1.

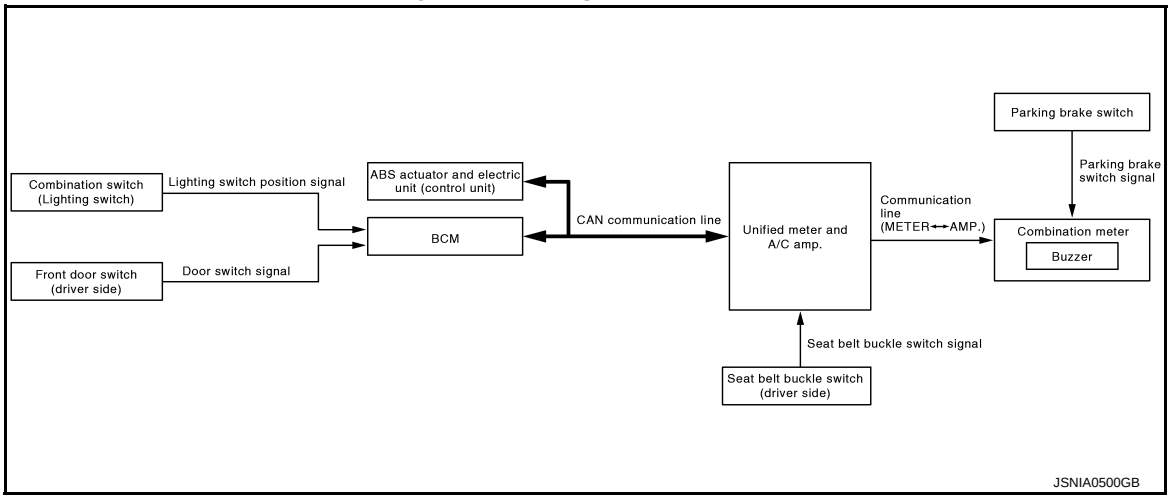
SYSTEM DESCRIPTION

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM : System Diagram

INFOID:0000000005524699

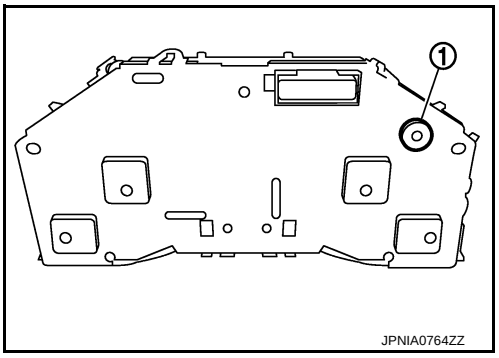


WARNING CHIME SYSTEM : System Description

INFOID:0000000005524700

COMBINATION METER

- The buzzer (1) for warning chime system is installed in the combination meter.
- The buzzer sounds when the combination meter receives buzzer output signal from each unit through unified meter and A/C amp.



UNIFIED METER AND A/C AMP.

The unified meter and A/C amp. transmits the buzzer output signal received from BCM with CAN communication line to the combination meter.

BCM

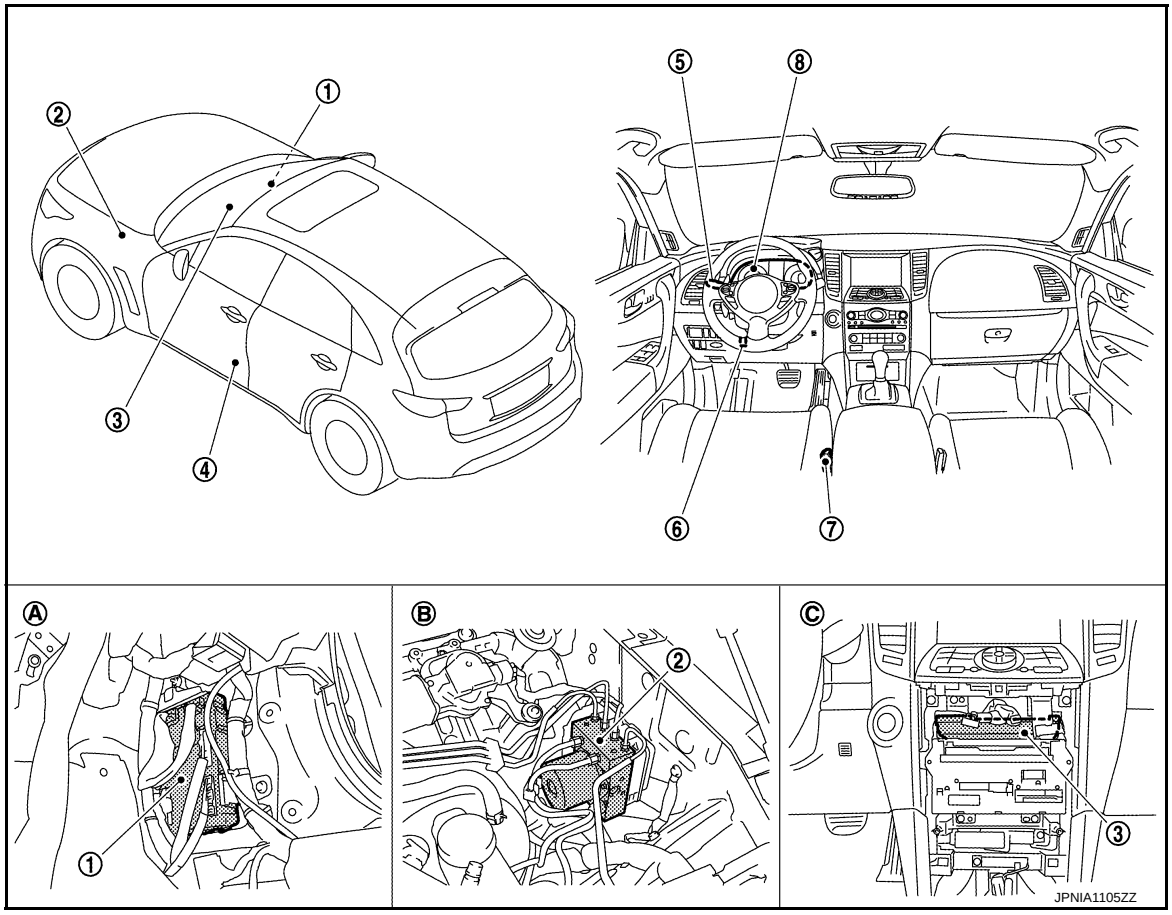
BCM receives signals from various units and transmits a buzzer output signal to the unified meter and A/C amp. with CAN communication line if it judges that the warning buzzer should be activated.

BCM warning function list

Warning functions	Signal name
Light reminder warning chime	• Lighting switch position signal • Door switch signal
Seat belt warning chime	Seat belt buckle switch signal

WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000005524701



1. BCM
2. ABS actuator and electric unit (control unit)
3. Unified meter and A/C amp.
4. Front door switch (driver side)
5. Combination switch (Lighting switch)
6. Parking brake switch
7. Seat belt buckle switch (driver side)
8. Combination meter
- A. Dash side lower (passenger side)
- B. Hoodledge cover (LH)
- C. Behind cluster lid C

WARNING CHIME SYSTEM : Component Description

INFOID:0000000005524702

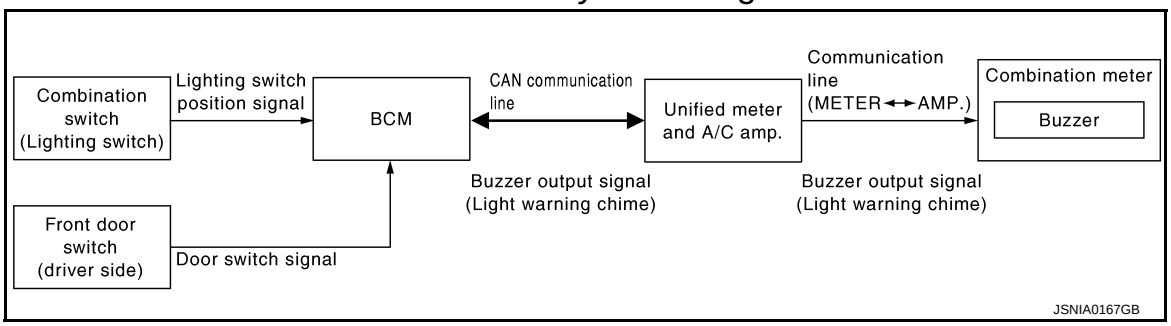
Unit	Description
Combination meter	• Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer. • Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. with CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.
Unified meter and A/C amp.	• Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM with CAN communication line. • Receives a buzzer output signal from BCM with CAN communication line and transmits it to the combination meter by means of communication line.
BCM	Transmits signals provided by various units and switches to the unified meter and A/C amp. with CAN communication line.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to unified meter and A/C amp. with CAN communication line.
Seat belt buckle switch (driver side)	Transmits the seat belt buckle switch signal to the unified meter and A/C amp.

Unit	Description
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the door switch signal to BCM.
Parking brake switch	Transmits the parking brake switch signal to the combination meter.

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME : System Diagram

INFOID:0000000005524703



LIGHT REMINDER WARNING CHIME : System Description

INFOID:0000000005524704

DESCRIPTION

With ignition switch in OFF or ACC position, driver door open, and lighting switch in 1ST or 2ND position, the light reminder warning chime will sound.

- BCM detects ignition switch in OFF or ACC position, front door switch (driver side) ON, and lighting switch in 1ST or 2ND position. And then transmits buzzer output signal (light reminder warning chime) to unified meter and A/C amp. with CAN communication line.
- Unified meter and A/C amp. transmits buzzer output signal (light reminder warning chime) to combination meter with communication line.
- When combination meter receives buzzer output signal (light reminder warning chime), it sounds the buzzer.

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Lighting switch is at 1st or 2nd position
- Ignition switch is at OFF or ACC
- Front door switch (driver side) is ON

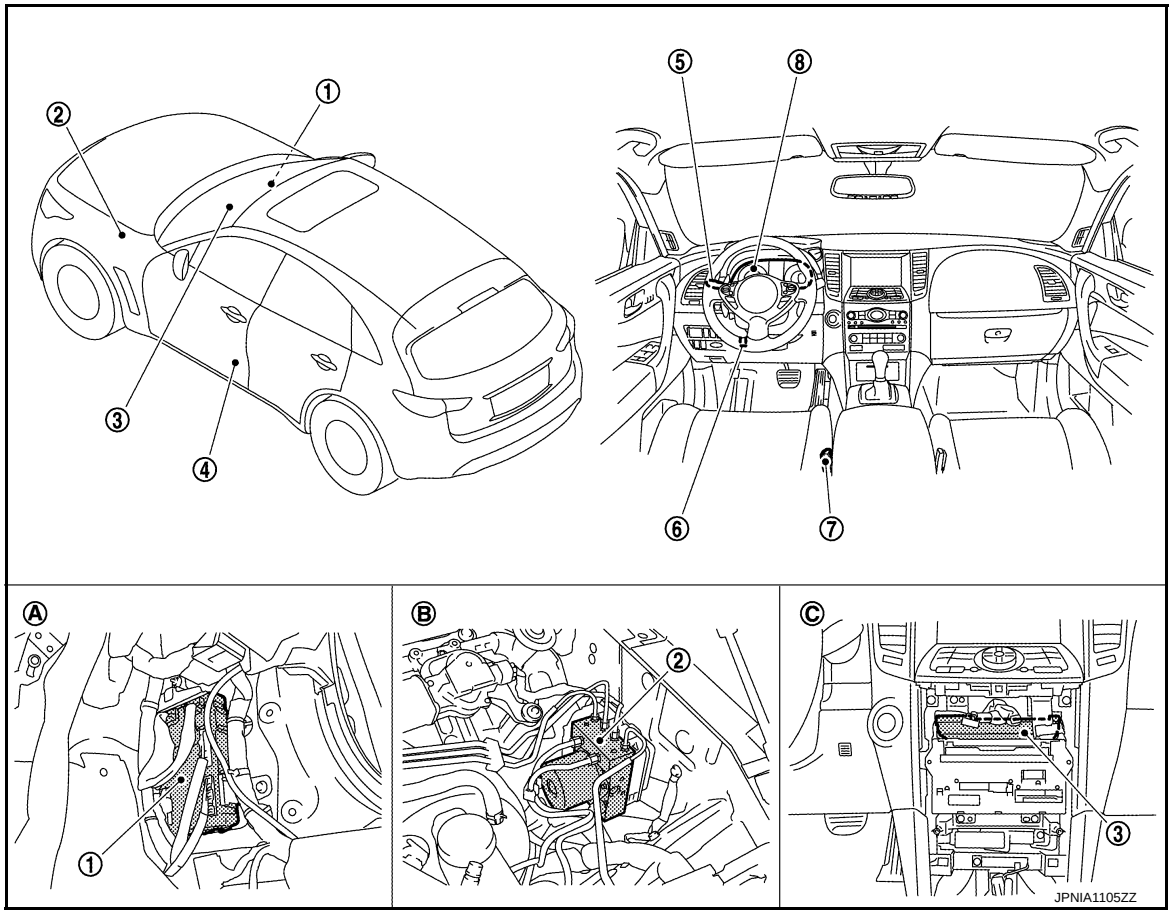
WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is fulfilled.

- Lighting switch OFF
- Ignition switch ON
- Front door switch (driver side) is OFF

LIGHT REMINDER WARNING CHIME : Component Parts Location

INFOID:0000000005524705



1. BCM	2. ABS actuator and electric unit (control unit)	3. Unified meter and A/C amp.
4. Front door switch (driver side)	5. Combination switch (Lighting switch)	6. Parking brake switch
7. Seat belt buckle switch (driver side)	8. Combination meter	
A. Dash side lower (passenger side)	B. Hoodledge cover (LH)	C. Behind cluster lid C

LIGHT REMINDER WARNING CHIME : Component Description

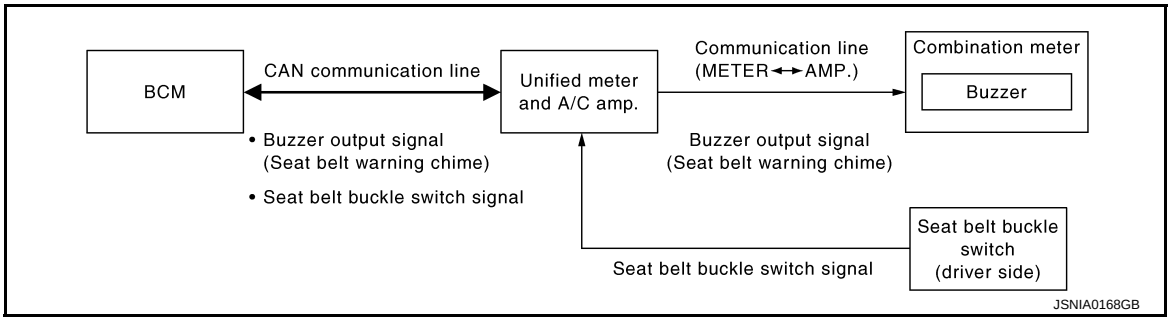
INFOID:0000000005524706

Unit	Description
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.
Unified meter and A/C amp.	Receives a buzzer output signal from BCM via CAN communication line and transmits it to the combination meter by means of communication line.
BCM	Judges the light warning conditions from the signals provided by various switches and transmits a buzzer output signal to the unified meter and A/C amp. via CAN communication line if necessary.
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the door switch signal to BCM.

SEAT BELT WARNING CHIME

SEAT BELT WARNING CHIME : System Diagram

INFOID:0000000005524707



SEAT BELT WARNING CHIME : System Description

INFOID:0000000005524708

DESCRIPTION

With ignition switch turned ON and driver seat belt unfastened, seat belt warning chime will sound for approximately 6 seconds.

- BCM receives seat belt buckle switch signal from unified meter and A/C amp. with CAN communication line.
- BCM detects ignition switch turned ON and seat belt buckle switch (driver side) ON. And then transmits buzzer output signal (seat belt warning chime) to unified meter and A/C amp. with CAN communication line.
- Unified meter and A/C amp. transmits buzzer output signal (seat belt warning chime) to combination meter with communication line.
- When combination meter receives buzzer output signal (seat belt warning chime), it sounds the buzzer.

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Ignition switch OFF→ON
- Seat belt buckle switch (driver side) is ON (driver seat belt not fastened)

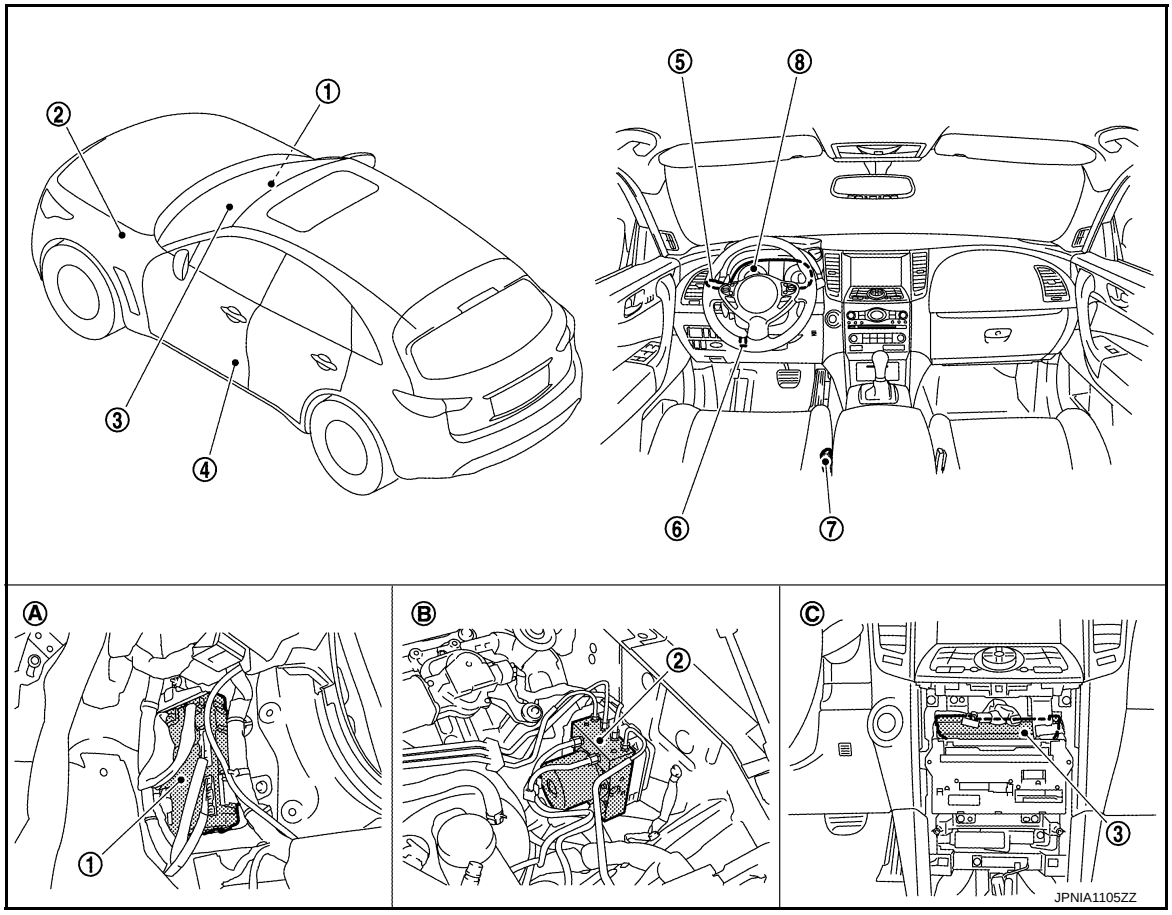
WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is fulfilled.

- Ignition switch OFF
- Seat belt buckle switch (driver side) is OFF (driver seat belt fastened)

SEAT BELT WARNING CHIME : Component Parts Location

INFOID:0000000005524709



1.	BCM	2.	ABS actuator and electric unit (control unit)	3.	Unified meter and A/C amp.
4.	Front door switch (driver side)	5.	Combination switch (Lighting switch)	6.	Parking brake switch
7.	Seat belt buckle switch (driver side)	8.	Combination meter		
A.	Dash side lower (passenger side)	B.	Hoodledge cover (LH)	C.	Behind cluster lid C

SEAT BELT WARNING CHIME : Component Description

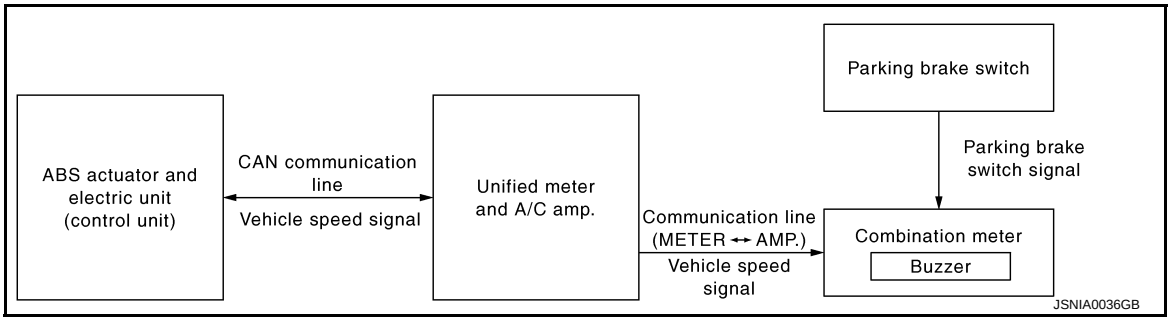
INFOID:0000000005524710

Unit	Description
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.
Unified meter and A/C amp.	• Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM via CAN communication line. • Receives a buzzer output signal from BCM via CAN communication line and transmits it to the combination meter by means of communication line.
BCM	Judges the seat belt warning condition from the seat belt buckle switch signal received from the unified meter and A/C amp. and transmits a buzzer output signal to the unified meter and A/C amp. via CAN communication line if necessary.
Seat belt buckle switch (driver side)	Refer to WCS-24, "Description".

PARKING BRAKE RELEASE WARNING CHIME

PARKING BRAKE RELEASE WARNING CHIME : System Diagram

INFOID:0000000005524711



PARKING BRAKE RELEASE WARNING CHIME : System Description

INFOID:0000000005524712

DESCRIPTION

- The unified meter and A/C amp. receives the vehicle speed signal from the ABS actuator and electric unit (control unit) via CAN communication line and transmits it to the combination meter by means of communication line.
- The combination meter judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. and the parking brake switch signal from the parking brake switch, and sounds the warning buzzer if necessary.

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Vehicle speed is 7 km/h (4.3 MPH) or higher
- Parking brake switch ON

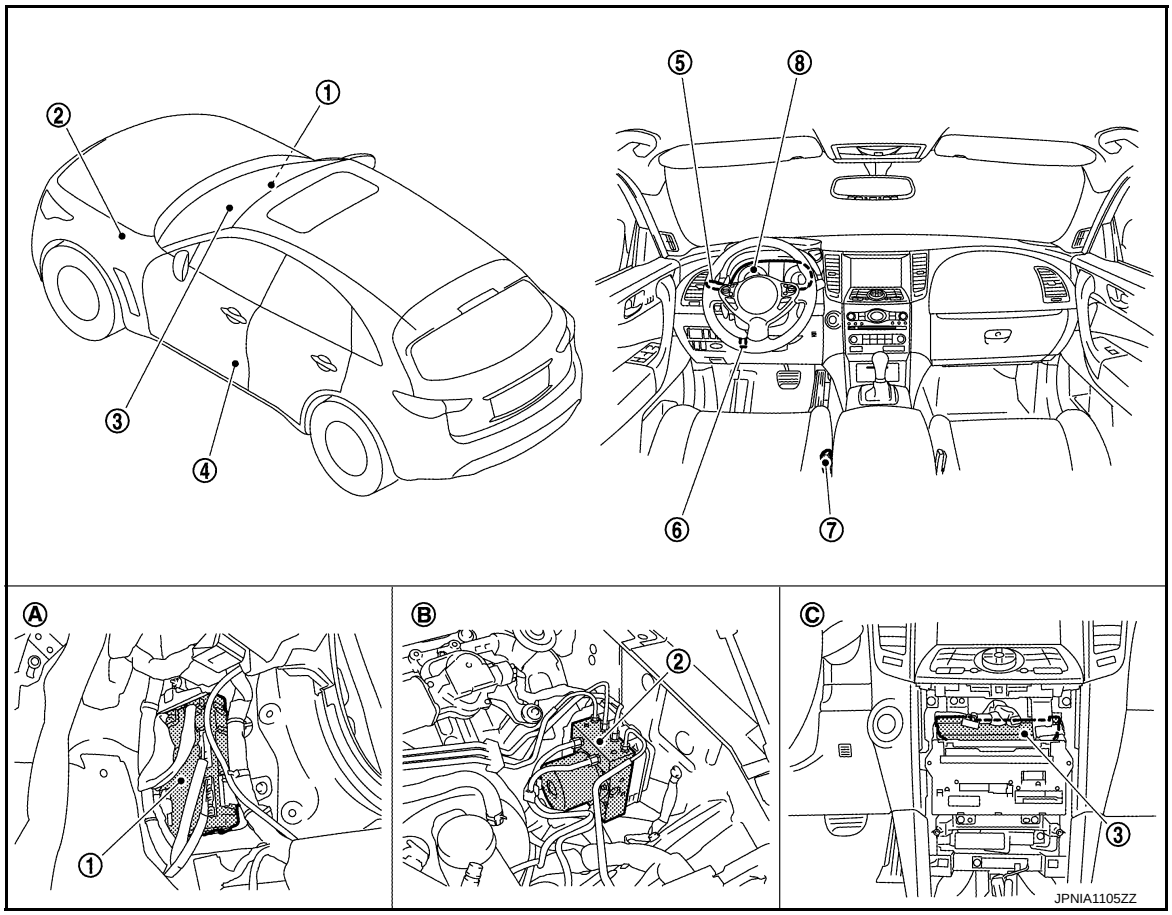
WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is fulfilled.

- Vehicle speed is approximately 3 km/h (1.9 MPH) or less
- Parking brake switch OFF

PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location

INFOID:0000000005524713



1.	BCM	2.	ABS actuator and electric unit (control unit)	3.	Unified meter and A/C amp.
4.	Front door switch (driver side)	5.	Combination switch (Lighting switch)	6.	Parking brake switch
7.	Seat belt buckle switch (driver side)	8.	Combination meter		
A.	Dash side lower (passenger side)	B.	Hoodledge cover (LH)	C.	Behind cluster lid C

PARKING BRAKE RELEASE WARNING CHIME : Component Description

INFOID:0000000005524714

Unit	Description
Combination meter	Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. via CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.
Unified meter and A/C amp.	Receives a vehicle speed signal from ABS actuator and electric unit (control unit) via CAN communication line and transmits it to the combination meter by means of communication line.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to unified meter and A/C amp. via CAN communication line.
Parking brake switch	Transmits the parking brake switch signal to the combination meter.

DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)

CONSULT-III Function (METER/M&A)

INFOID:0000000005524752

CONSULT-III APPLICATION ITEMS

CONSULT-III can perform the following diagnosis modes with CAN communication with the unified meter and A/C amp.

System	Diagnosis mode	Description
METER/M&A	Self Diagnostic Result	Unified meter and A/C amp. checks the conditions and displays memorized error.
	Data Monitor	Displays unified meter and A/C amp. input/output data in real time.
	Ecu Identification	The unified meter and A/C amp. part number is displayed.

SELF DIAG RESULT

Refer to WCS-76, "DTC Index".

DATA MONITOR

Display Item List

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER [km/h] or [mph]	X	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line. **NOTE:** 655.35 is displayed when the malfunction signal is received.
SPEED OUTPUT [km/h] or [mph]	X	Vehicle speed signal value transmitted to other units with CAN communication line. **NOTE:** 655.35 is displayed when the malfunction signal is received.
ODO OUTPUT [km/h]		Odometer signal value transmitted to other units with CAN communication line.
TACHO METER [rpm]	X	Value of the engine speed signal received from ECM with CAN communication line. **NOTE:** 8191.875 is displayed when the malfunction signal is received.
FUEL METER [L]	X	Fuel level indicated on combination meter.
W TEMP METER [°C] or [°F]	X	Value of engine coolant temperature signal received from ECM with CAN communication line. **NOTE:** 215 is displayed when the malfunction signal is input.
ABS W/L [On/Off]		Status of ABS warning lamp judged from ABS warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
VDC/TCS IND [On/Off]		Status of VDC OFF indicator lamp judged from VDC OFF indicator lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
SLIP IND [On/Off]		Status of SLIP indicator lamp judged from SLIP indicator lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
BRAKE W/L [On/Off]		Status of brake warning lamp judged from brake warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line. **NOTE:** Displays “Off” if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON.
DOOR W/L [On/Off]		Status of door warning judged from door switch signal received from BCM with CAN communication line.
HI-BEAM IND [On/Off]		Status of high beam indicator lamp judged from high beam request signal received from BCM with CAN communication line.

Display item [Unit]	MAIN SIGNALS	Description
TURN IND [On/Off]		Status of turn indicator lamp judged from turn indicator signal received from BCM with CAN communication line.
FR FOG IND [On/Off]		This item is displayed, but cannot be monitored.
RR FOG IND [On/Off]		This item is displayed, but cannot be monitored.
LIGHT IND [On/Off]		Status of tail lamp indicator lamp judged from position light request signal received from BCM with CAN communication line.
OIL W/L [On/Off]		Status of oil pressure warning lamp judged from oil pressure switch signal received from IPDM E/R with CAN communication line.
MIL [On/Off]		Status of malfunction indicator lamp judged from malfunctioning indicator lamp signal received from ECM with CAN communication line.
GLOW IND [On/Off]		This item is displayed, but cannot be monitored.
C-ENG2 W/L [On/Off]		This item is displayed, but cannot be monitored.
CRUISE IND [On/Off]		• Status of CRUISE indicator judged from ASCD status signal received from ECM with CAN communication line. • Status of CRUISE indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
SET IND [On/Off]		• Status of SET indicator judged from ASCD status signal received from ECM with CAN communication line. • Status of SET indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
CRUISE W/L [On/Off]		Status of CRUISE warning lamp judged from ICC warning lamp signal received from ICC sensor integrated unit with CAN communication line.
BA W/L [On/Off]		Status of IBA OFF indicator lamp judged from IBA OFF indicator signal received from ICC sensor integrated unit with CAN communication line.
ATC/T-AMT W/L [On/Off]		Status of A/T check warning lamp judged from A/T check indicator lamp signal received from TCM with CAN communication line.
4WD W/L [On/Off]		Status of AWD warning lamp judged from AWD warning lamp signal received from AWD control unit with CAN communication line.
4WD LOCK IND [On/Off]		This item is displayed, but cannot be monitored.
FUEL W/L [On/Off]		Low-fuel warning status judged by the identified fuel level.
WASHER W/L [On/Off]		Status of washer warning judged from washer level switch input to combination meter.
AIR PRES W/L [On/Off]		Status of low tire pressure warning lamp judged from tire pressure signal received from BCM with CAN communication line.
KEY G/Y W/L [On/Off]		Status of key warning lamp (G/Y) judged from key warning signal received from BCM with CAN communication line.
AFS OFF IND [On/Off]		Status of AFS OFF indicator lamp judged from AFS OFF indicator lamp signal received from AFS control unit with CAN communication line.
4WAS/RAS W/L [On/Off]		Status of RAS warning lamp judged from RAS warning lamp signal received from RAS control unit with CAN communication line.
DDS W/L [On/Off]		This item is displayed, but cannot be monitored.
LANE W/L [On/Off]		Status of lane departure warning lamp judged from lane departure warning lamp signal received from lane camera unit with CAN communication line.
LDP IND [On/Off]		Status of LDP ON indicator lamp judged from LDP ON indicator lamp signal received from lane camera unit with CAN communication line.

Display item [Unit]	MAIN SIGNALS	Description
E-SUS IND [On/Off]		Status of sports mode indicator lamp judged from sports mode indicator lamp signal received from E-SUS control unit with CAN communication line.
DCA IND [On/Off]		Status of DCA switch indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
LCD [B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY,OUTKY, LK WN]		Displays status of Intelligent Key system warning judged from meter display signal received from BCM with CAN communication line.
ACC TARGET [On/Off]		Status of vehicle ahead detection indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
ACC DISTANCE [Off, SHOR, MID, LONG]		Status of set distance indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
ACC OWN VHL [On/Off]		Status of own vehicle indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
ACC SET SPEED		Status of set vehicle speed indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
ACC UNIT [On/Off]		Status of display unit judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
SHIFT IND [P, R, N, D, L, M1, M2, M3, M4, M5, M6, M7]		Status of shift position indicator judged from shift position signal and manual mode indicator signal received from TCM with CAN communication line.
O/D OFF SW [On/Off]		This item is displayed, but cannot be monitored.
AT S MODE SW [On/Off]		Status of snow mode switch.
AT P MODE SW [On/Off]		This item is displayed, but cannot be monitored.
M RANGE SW [On/Off]		Status of manual mode switch.
NM RANGE SW [On/Off]		Status of non-manual mode switch.
AT SFT UP SW [On/Off]		Status of A/T shift up switch.
AT SFT DWN SW [On/Off]		Status of A/T shift down switch.
ST SFT UP SW [On/Off]		Status of paddle shifter up switch.
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the water temperature and the acceleration degree.
4WD LOCK SW [On/Off]		This item is displayed, but cannot be monitored.
PKB SW [On/Off]		Status of parking brake switch.
BUCKLE SW [On/Off]		Status of seat belt buckle switch.
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.
DISTANCE [km/h]		Value of possible driving distance calculated by unified meter and A/C amp.

Display item [Unit]	MAIN SIGNALS	Description
OUTSIDE TEMP [°C] or [°F]		Ambient air temperature value converted from ambient sensor signal received from ambient sensor. **NOTE:** This may not match with the temperature value indicated on the information display. (Because the information display value is a corrected value from the ambient sensor input value.)
FUEL LOW SIG [On/Off]		Status of fuel level low warning signal to output to AV control unit with CAN communication line.
BUZZER [On/Off]	X	Buzzer status (in the combination meter) is judged with the buzzer output signal received from each unit with CAN communication line and the warning output condition of the combination meter.

NOTE:

Some items are not available according to vehicle specification.

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:0000000005619280

APPLICATION ITEM
CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	• Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION
BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*			
• Intelligent Key system • Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×

NOTE:

*: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT-III.

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.)
	LOCK>ACC		While turning power supply position from “LOCK” to “ACC”
	ACC>ON		While turning power supply position from “ACC” to “IGN”
	RUN>ACC		While turning power supply position from “RUN” to “ACC” (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	OFF>LOCK		While turning power supply position from “OFF” to “LOCK”
	OFF>ACC		While turning power supply position from “OFF” to “ACC”
	ON>CRANK		While turning power supply position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is “LOCK”.) to low power consumption mode
	LOCK		Power supply position is “LOCK” (Ignition switch OFF with steering is locked.)
	OFF		Power supply position is “OFF” (Ignition switch OFF with steering is unlocked.)
	ACC		Power supply position is “ACC” (Ignition switch ACC)
	ON		Power supply position is “IGN” (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is “RUN” (Ignition switch ON with engine running)
	CRANKING		Power supply position is “CRANKING” (At engine cranking)
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

BUZZER

BUZZER : CONSULT-III Function (BCM - BUZZER)

INFOID:0000000005524717

CONSULT-III APPLICATION ITEMS

Test item	Diagnosis mode	Description
BUZZER	Data Monitor	Displays BCM input data in real time.
	Active Test	Operation of electrical loads can be checked by sending driving signal to them.

DATA MONITOR

Display item [Unit]	Description
PUSH SW [On/Off]	Status of push button ignition switch judged by BCM.
UNLK SEN-DR [On/Off]	Status of unlock sensor judged by BCM.
VEH SPEED 1 [Km/h or mph]	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line.
KEY SW-SLOT [On/Off]	Status of key slot judged by BCM.
TAIL LAMP SW [On/Off]	Status of each switch judged by BCM using the combination switch readout function.
FR FOG SW [On/Off]	Status of front fog lamp switch judged by BCM.
DOOR SW-DR [On/Off]	Status of driver side door switch judged by BCM.

ACTIVE TEST

Display item [Unit]	Description
IGN KEY WARN ALM	The key warning chime operation can be checked by operating the relevant function (On/Off).
SEAT BELT WARN TEST	The seat belt warning chime operation can be checked by operating the relevant function (On/Off).
LIGHT WARN ALM	The light warning chime operation can be checked by operating the relevant function (On/Off).

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT
COMBINATION METER

COMBINATION METER : Diagnosis Procedure

INFOID:0000000005524753

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	11
Ignition switch ON or START	4

Is the inspection result normal?

YES >> GO TO 2.
NO >> Be sure to eliminate cause of malfunction before installing new fuse.

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector and ground.

Terminals				Ignition switch position	Value (Approx.)
(+)			(-)		
Combination meter	Terminal	Signal name			
M53	1	Battery power supply	Ground	OFF	Battery voltage
	21	Ignition signal		ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check harness between combination meter and fuse.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector.
3. Check continuity between combination meter harness connector and ground.

Combination meter			Continuity
Connector	Terminal		
M53	5	Ground	Existed
	15		Existed
	22		Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair harness or connector.

UNIFIED METER AND A/C AMP.

UNIFIED METER AND A/C AMP. : Diagnosis Procedure

INFOID:0000000005524754

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	11
Ignition switch ACC or ON	19
Ignition switch ON or START	3

Is the inspection result normal?

YES >> GO TO 2.
NO >> Be sure to eliminate cause of malfunction before installing new fuse.

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between unified meter and A/C amp. harness connector and ground.

Terminals				Ignition switch position	Value (Approx.)
(+)			(-)		
Unified meter A/C amp.	Terminal	Signal name			
M67	54	Battery power supply	Ground	OFF	Battery voltage
	41	ACC power supply		ACC	Battery voltage
	53	Ignition signal		ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check harness between unified meter and A/C amp. and fuse.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect unified meter and A/C amp. connector.
3. Check continuity between unified meter and A/C amp. harness connector and ground.

Unified meter A/C amp.		Ground	Continuity
Connector	Terminal		
M67	55		Existed
	71		Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair harness or connector.

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:0000000005619281

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

Signal name	Fuse and fusible link No.
Battery power supply	L
	10

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.

3. Check voltage between BCM harness connector and ground.

Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M118	1		Battery voltage
M119	11		

Is the measurement value normal?

YES >> GO TO 3.
NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END
NO >> Repair harness or connector.

METER BUZZER CIRCUIT

Description

INFOID:0000000005524721

- The buzzer for warning chime system is installed in the combination meter.
- The combination meter sounds the alarm buzzer based on the signals transmitted from various units.

Component Function Check

INFOID:0000000005524722

1.CHECK OPERATION OF METER BUZZER

1. Select “BUZZER” of “BCM” on CONSULT-III.
2. Perform “LIGHT WARN ALM” of “ACTIVE TEST”.

Does meter buzzer beep?

YES >> INSPECTION END
NO >> GO TO 2.

2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

Select the “Data Monitor” for the “METER/M&A” and check the “BUZZER” monitor value.

BUZZER	
Under the condition of buzzer input	: On
Except above	: Off

Is the inspection result normal?

YES >> Replace combination meter.
NO >> Replace BCM. Refer to BCS-83, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000005524723

1.CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to WCS-20, "COMBINATION METER : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair power supply circuit of combination meter.

2.CHECK POWER SUPPLY OF UNIFIED METER AND A/C AMP.

Check power supply of unified meter and A/C amp. Refer to MWI-58, "COMBINATION METER : Diagnosis Procedure".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair power supply circuit of unified meter and A/C amp.

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description

INFOID:0000000005524724

Transmits a seat belt buckle switch signal to the unified meter and A/C amp.

Component Function Check

INFOID:0000000005524725

1.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

Select the “Data Monitor” for the “METER/M&A” and check the “BUCKLE SW” monitor value.

BUCKLE SW
When seat belt is fastened : Off
When seat belt is unfastened : On

>> INSPECTION END

Diagnosis Procedure

INFOID:0000000005524726

1.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between unified meter and A/C amp. harness connector and ground.

Terminals			Condition	Voltage (Approx.)
(+)		(-)		
Unified meter and A/C amp.		Ground		
Connector	Terminal			
M66	9		When driver seat belt is fastened	12 V
			When driver seat belt is unfastened	0 V

Is the inspection result normal?

YES >> Replace unified meter and A/C amp.
NO >> GO TO 2.

2.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect unified meter and A/C amp. connector and seat belt buckle switch (driver side) connector.
3. Check continuity between unified meter and A/C amp. harness connector and seat belt buckle switch (driver side) harness connector.

Unified meter and A/C amp.		Seat belt buckle switch (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M66	9	B13*1	1	Existed
		B503*2	61	Existed

*1: Without climate controlled seat

*2: With climate controlled seat

4. Check harness continuity between unified meter and A/C amp. harness connector and ground.

Unified meter and A/C amp.		Ground	Continuity
Connector	Terminal		
M66	9		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check harness continuity between seat belt buckle switch (driver side) harness connector and ground.

Seat belt buckle switch (driver side)		Ground	Continuity
Connector	Terminal		
B13*1	2		Existed
B503*2	60		Existed

*1: Without climate controlled seat

*2: With climate controlled seat

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair harness or connector.

Component Inspection

INFOID:0000000005524727

1. CHECK SEAT BELT BUCKLE SWITCH UNIT

1. Turn ignition switch OFF.
2. Disconnect the seat belt buckle switch connector.
3. Check continuity between terminals.

Connector	Terminal		Condition	Continuity
B13*1	1	2	When seat belt is fastened	Not existed
			When seat belt is unfastened	Existed
B503*2	61	60	When seat belt is fastened	Not existed
			When seat belt is unfastened	Existed

*1: Without climate controlled seat

*2: With climate controlled seat

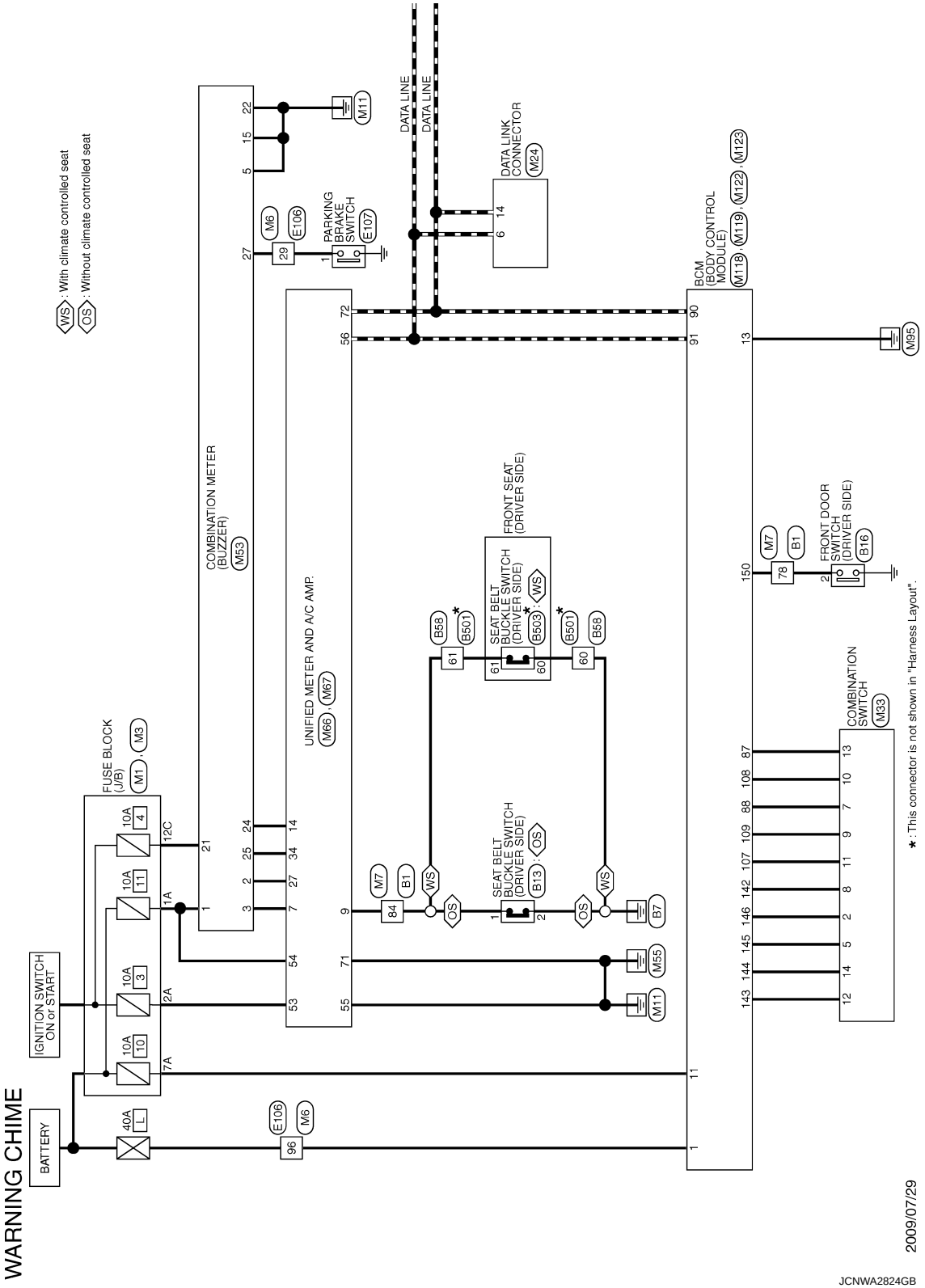
Is the inspection result normal?

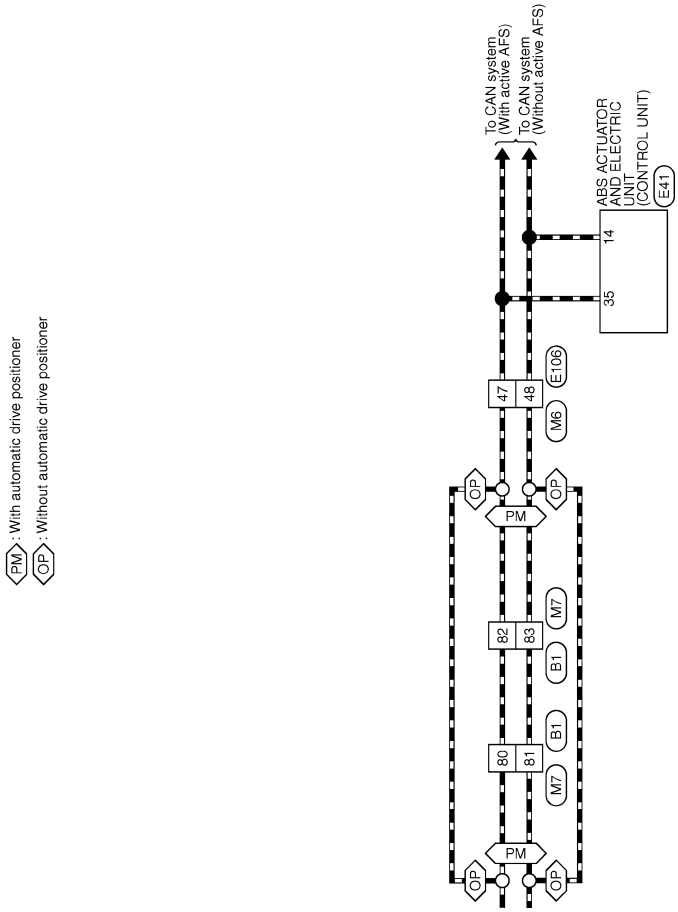
YES >> INSPECTION END
NO >> Replace the seat belt buckle. Refer to SB-8, "SEAT BELT BUCKLE : Removal and Installation".

WARNING CHIME SYSTEM

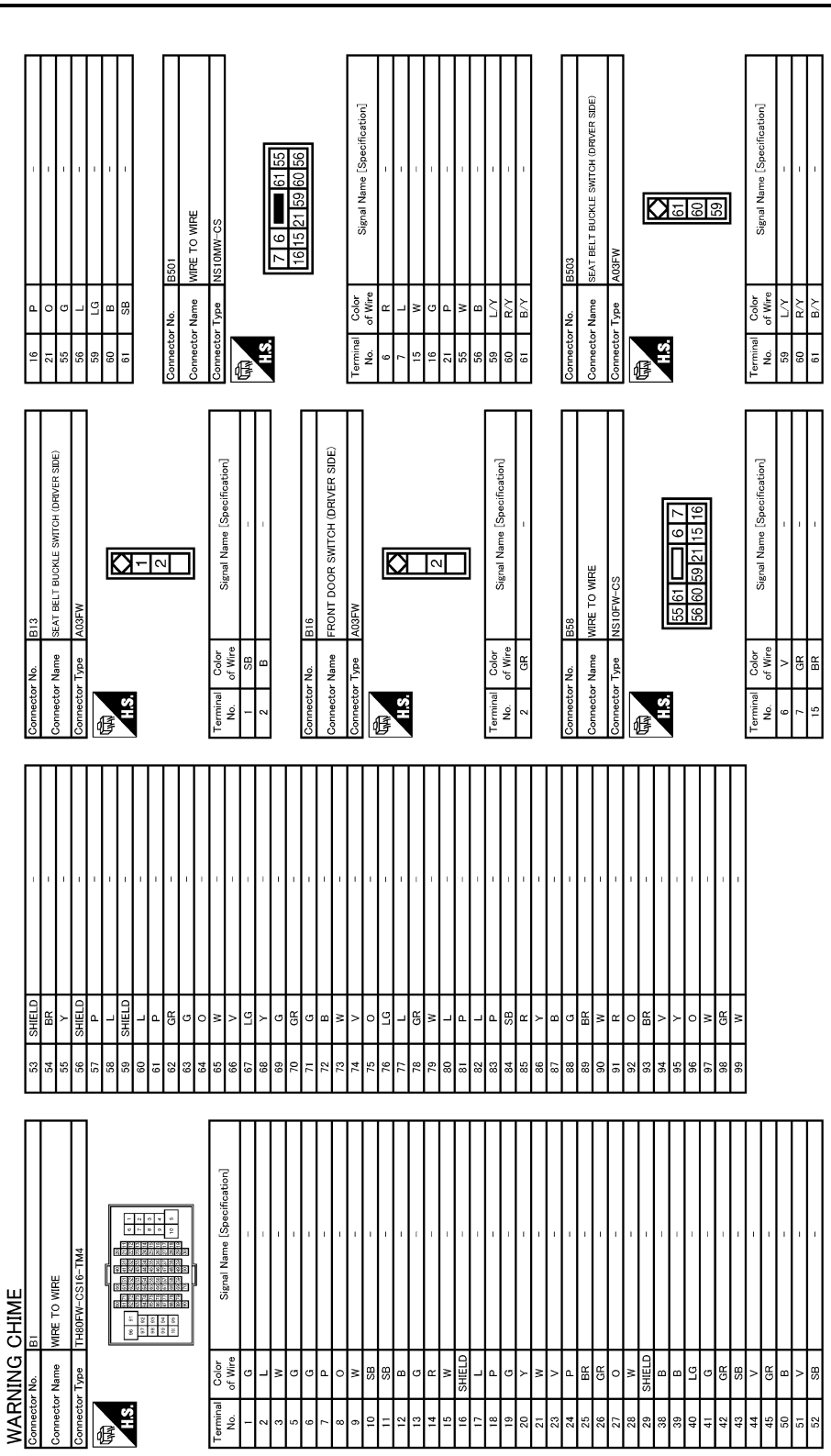
Wiring Diagram - WARNING CHIME -

INFOID:0000000005524728





JCNWA2825GB



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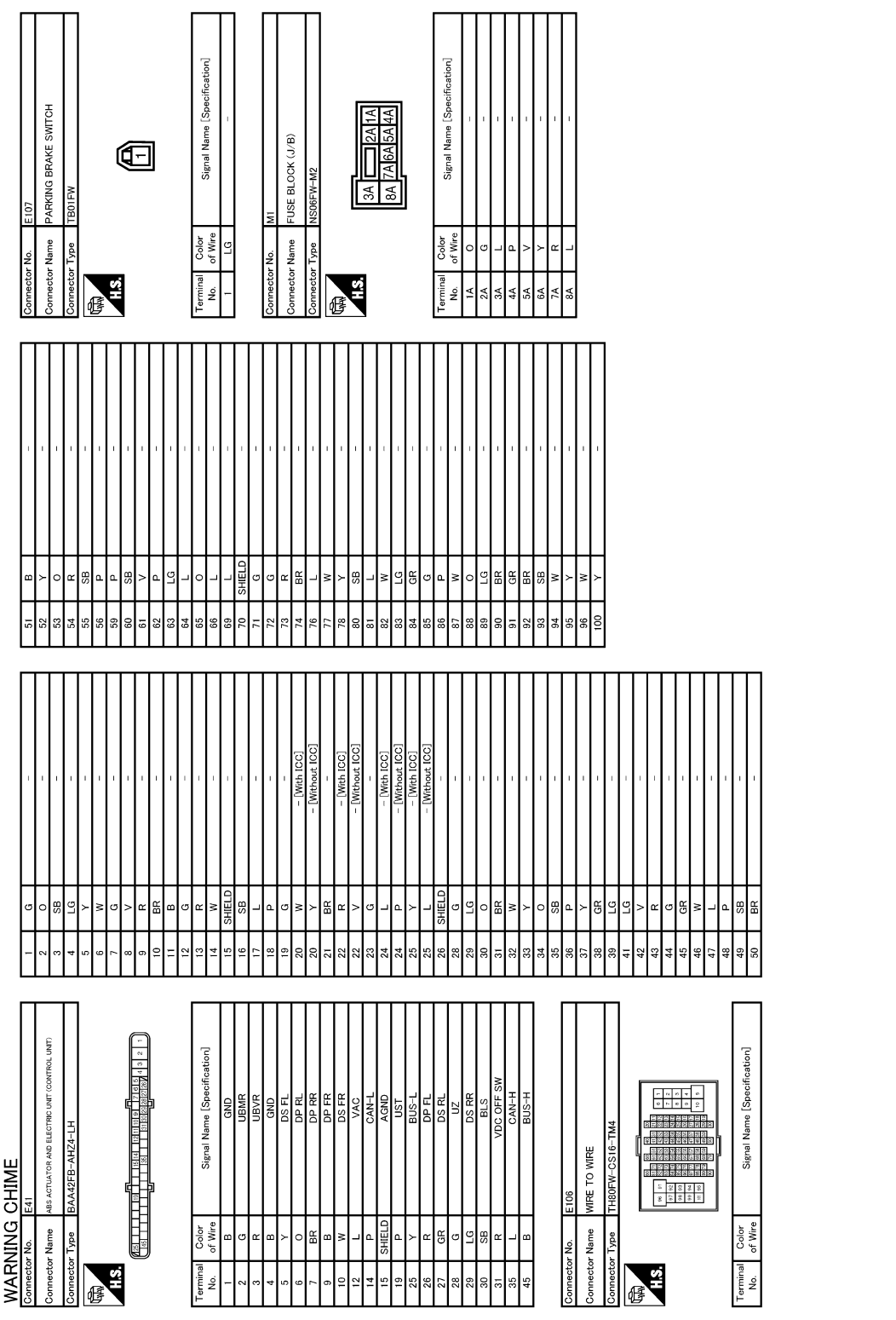

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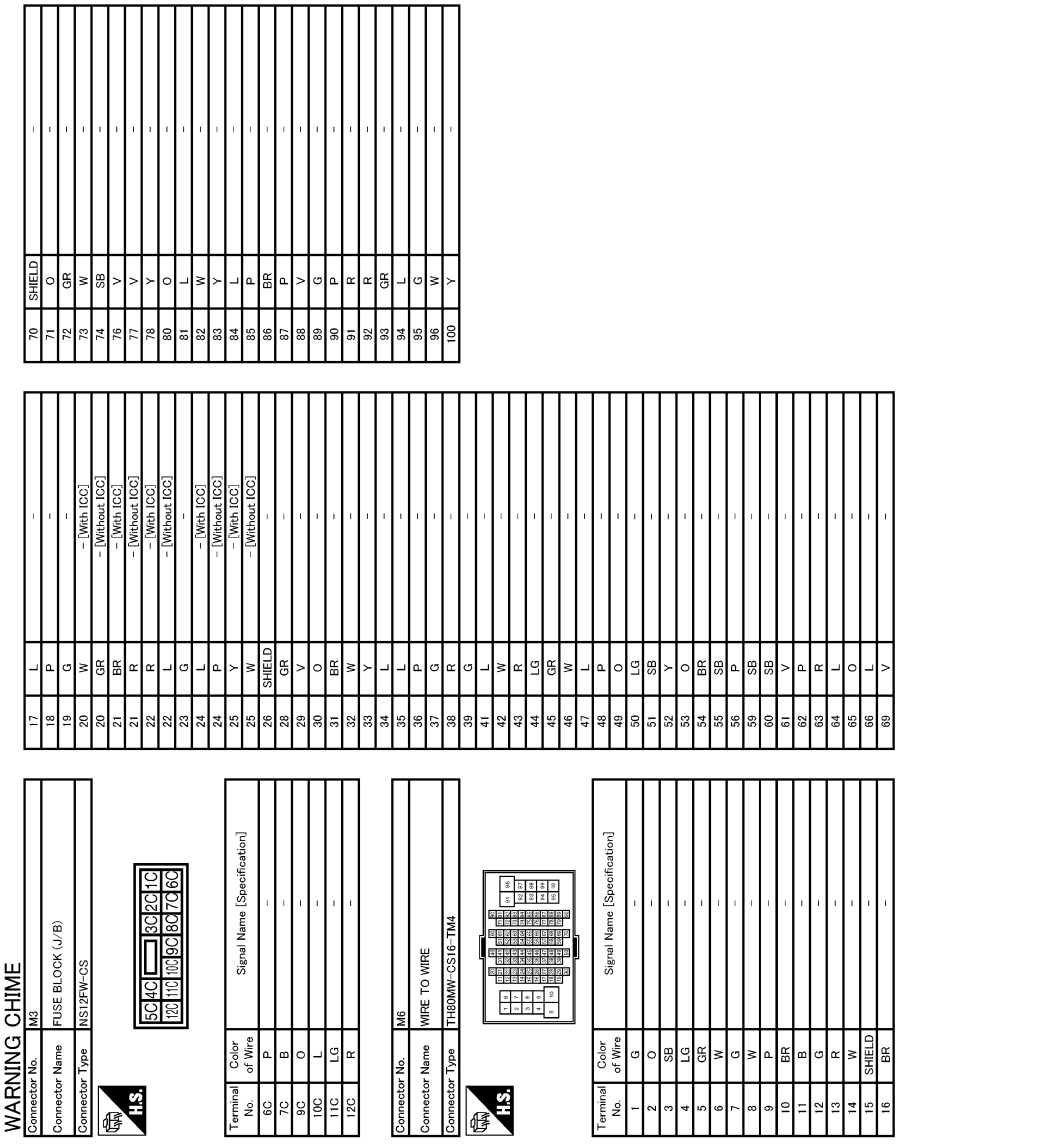

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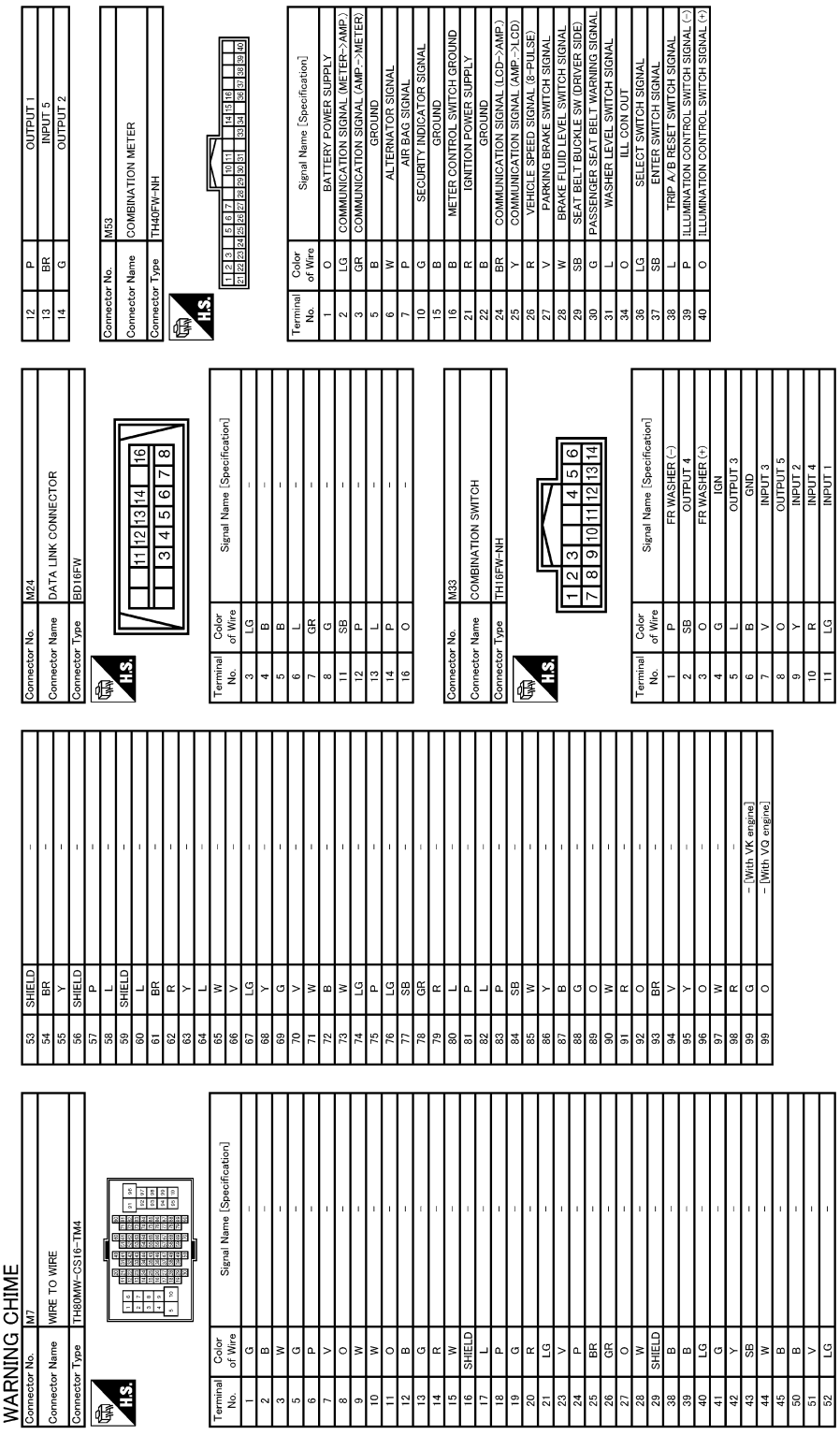

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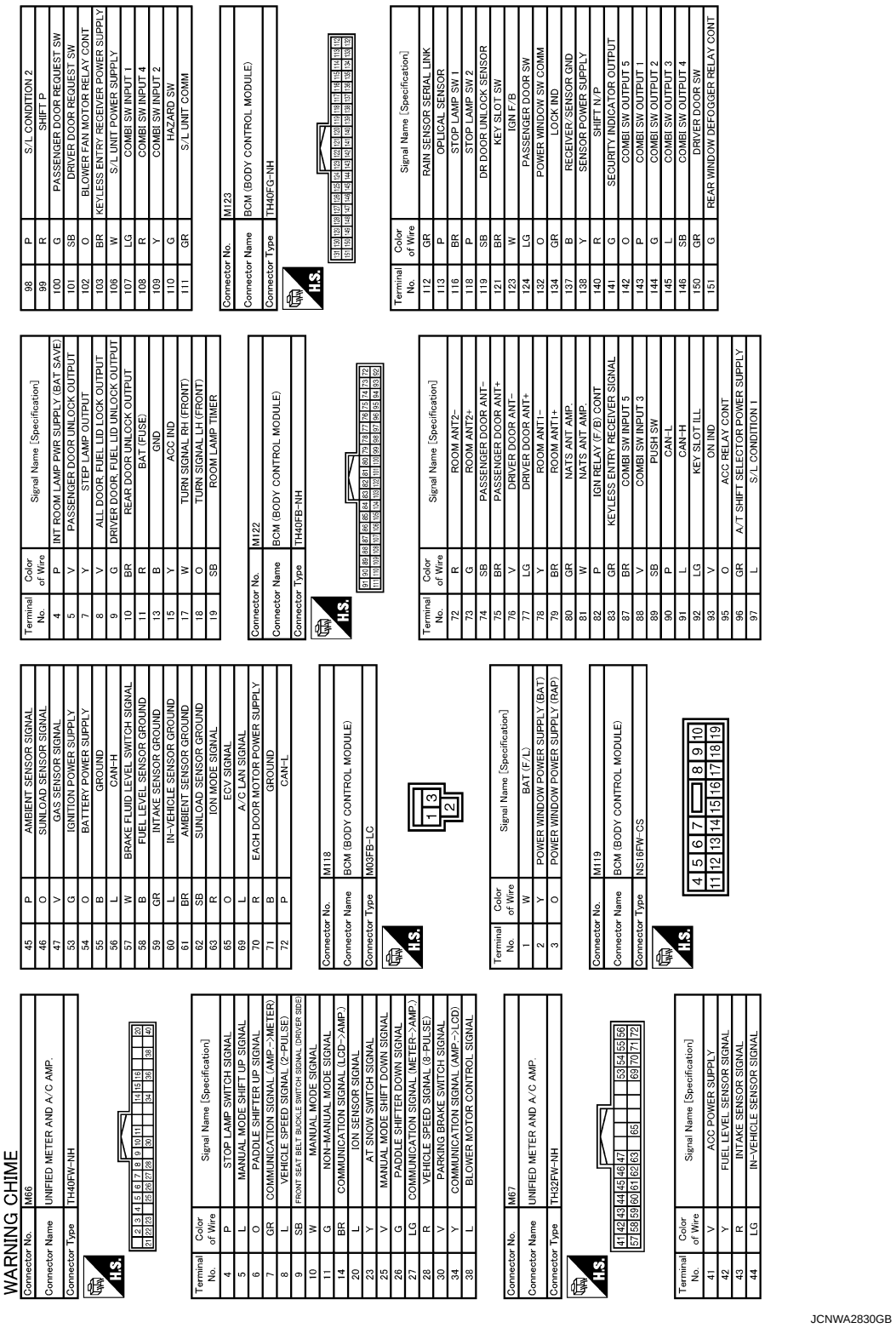


JCNWA2830GB

ECU DIAGNOSIS INFORMATION

COMBINATION METER

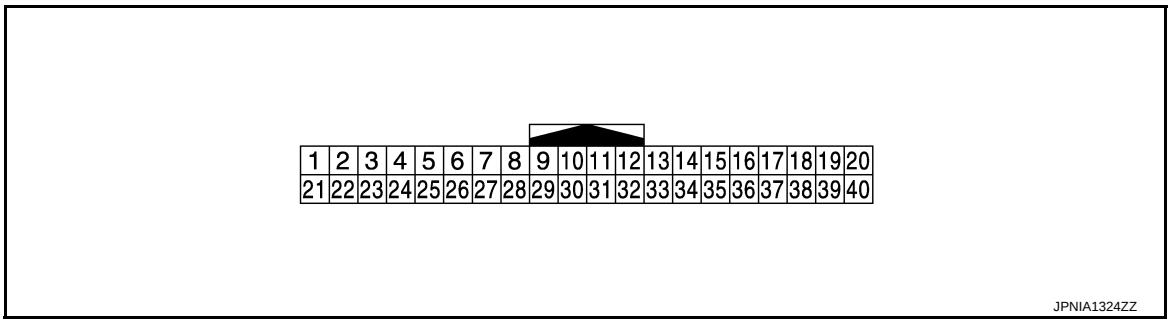
Reference Value

INFOID:0000000005524755

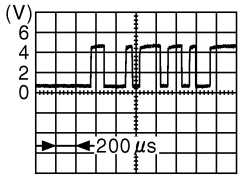
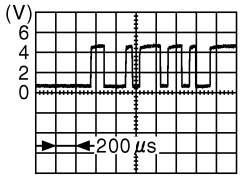
VALUES ON THE DIAGNOSIS TOOL

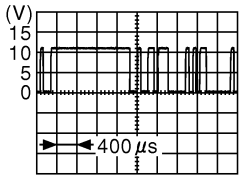
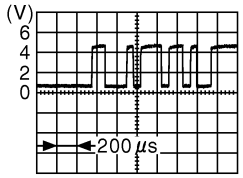
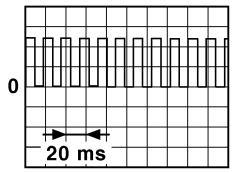
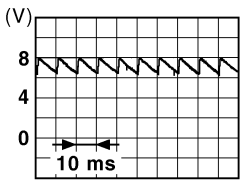
Refer to WCS-53, "Reference Value".

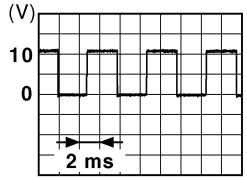
TERMINAL LAYOUT



PHYSICAL VALUES

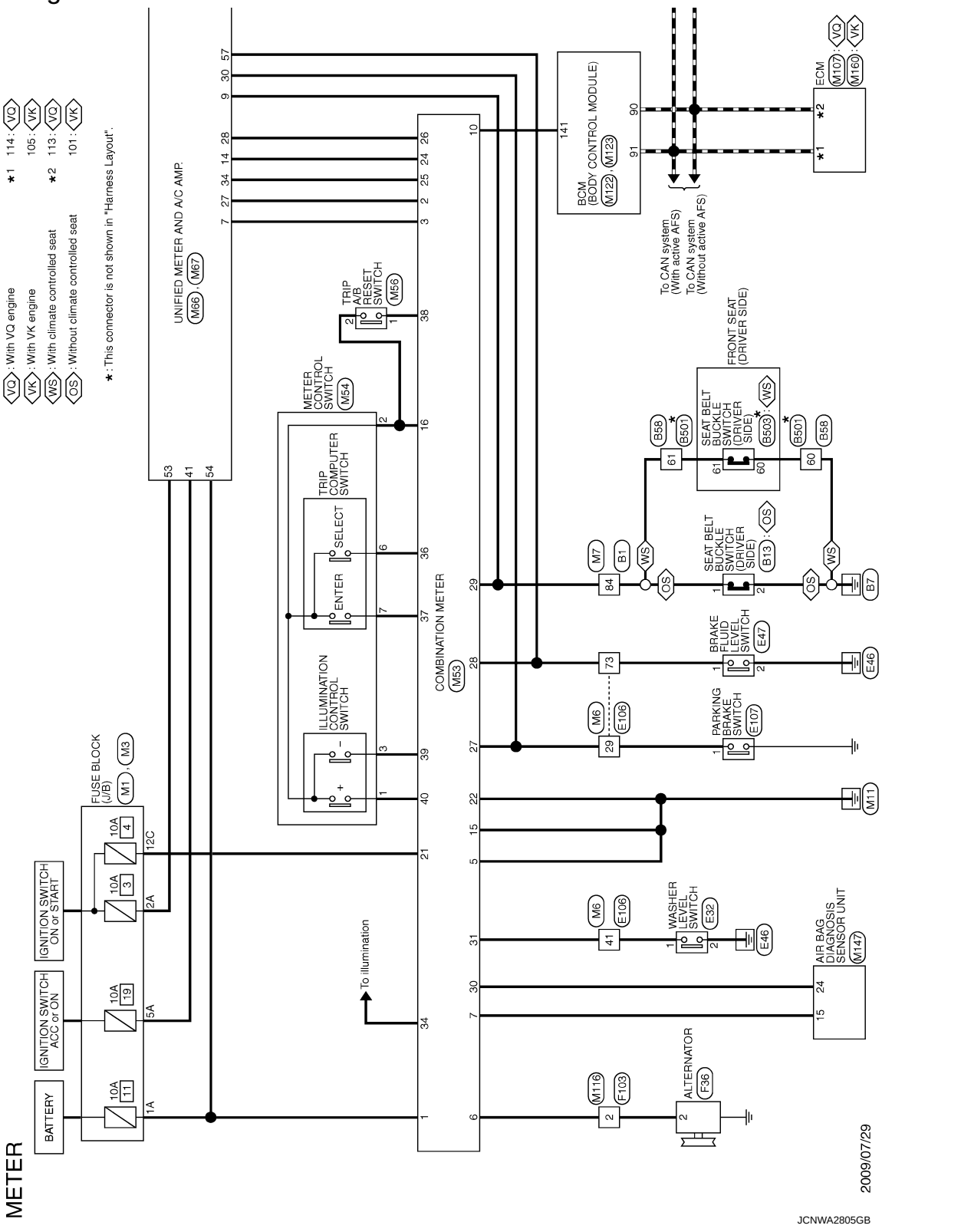
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (O)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
2 (LG)	Ground	Communication signal (METER→ AMP.)	Output	Ignition switch ON	—	 JSNIA0027GB
3 (GR)	Ground	Communication signal (AMP.→ METER)	Input	Ignition switch ON	—	 JSNIA0027GB
5 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
6 (W)	Ground	Alternator signal	Input	Ignition switch ON	Charge warning lamp ON	0 V
					Charge warning lamp OFF	Battery voltage
7 (P)	Ground	Air bag signal	Input	Ignition switch ON	Air bag warning lamp ON	4 V
					Air bag warning lamp OFF	0 V
10 (G)	Ground	Security indicator signal	Input	Ignition switch OFF	Security warning lamp ON	0 V
					Security warning lamp OFF	12 V

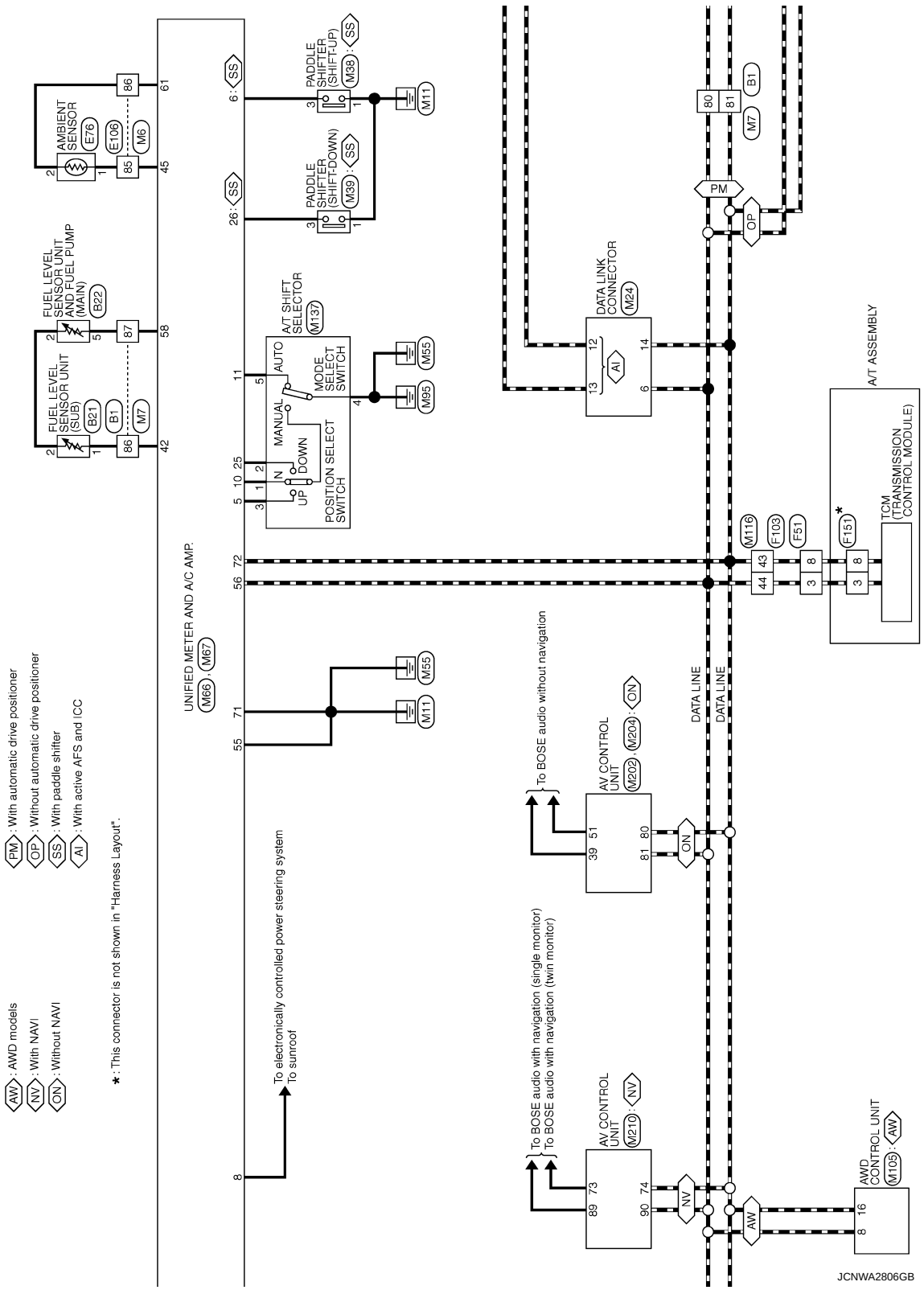
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
15 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
16 (B)	Ground	Meter control switch ground	—	Ignition switch ON	—	0 V
21 (R)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
22 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
24 (BR)	Ground	Communication signal (LCD→ AMP.)	Output	Ignition switch ON	—	 JSNIA0028GB
25 (Y)	Ground	Communication signal (AMP.→ LCD)	Input	Ignition switch ON	—	 JSNIA0027GB
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	**NOTE:** The maximum voltage varies depending on the specification (destination unit).  JSNIA0012GB
27 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	 JSNIA0007GB
28 (W)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal.	5 V
					The brake fluid level is lower than the low level	0 V

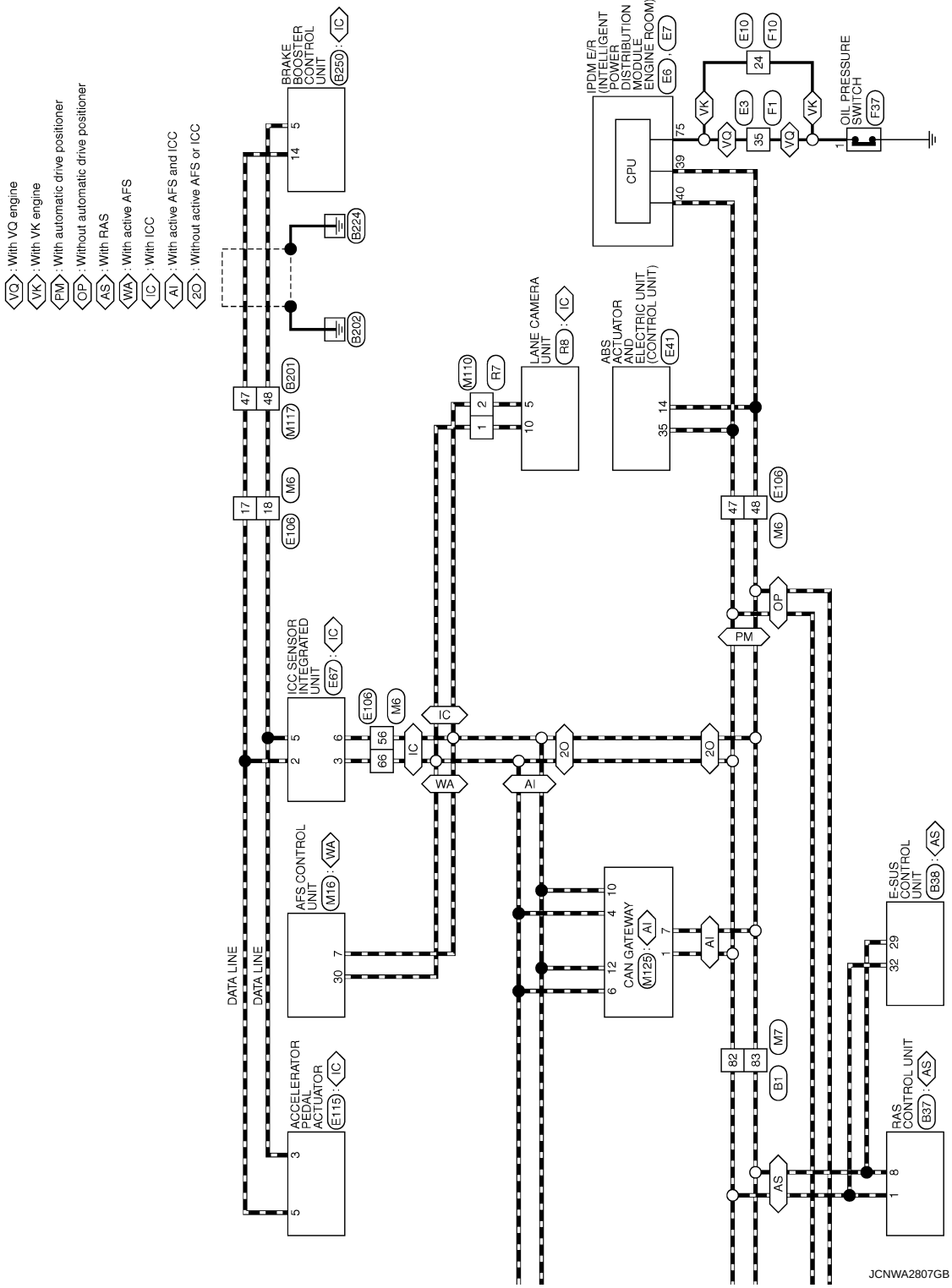
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
29 (SB)	Ground	Seat belt buckle switch signal (driver side)	Input	Ignition switch ON	When driver seat belt is fastened	12 V
					When driver seat belt is unfastened	0 V
30 (G)	Ground	Passenger seat belt warning signal	Input	Ignition switch ON	• When getting in the passenger seat • When passenger seat belt is fastened	12 V
					• When getting in the passenger seat • When passenger seat belt is unfastened	0 V
31 (L)	Ground	Washer level switch signal	Input	Ignition switch ON	Washer level switch ON	0 V
					Washer level switch OFF	5 V
34 (O)	Ground	Illumination control signal	Output	Ignition switch ON	Lighting switch ON, then operate the illumination control switch.	**NOTE:** When brightness level is midway  JSNIA0010GB
36 (LG)	16 (B)	Select switch signal	Input	Ignition switch ON	When ● is pressed	0 V
					Other than the above	5 V
37 (SB)	16 (B)	Enter switch signal	Input	Ignition switch ON	When ❑ is pressed	0 V
					Other than the above	5 V
38 (L)	16 (B)	Trip A/B reset switch signal	Input	Ignition switch ON	When trip A/B reset switch is pressed	0 V
					Other than the above	5 V
39 (P)	16 (B)	Illumination control switch signal (–)	Input	Ignition switch ON	When – switch is pressed	0 V
					Other than the above	5 V
40 (O)	16 (B)	Illumination control switch signal (+)	Input	Ignition switch ON	When + switch is pressed	0 V
					Other than the above	5 V

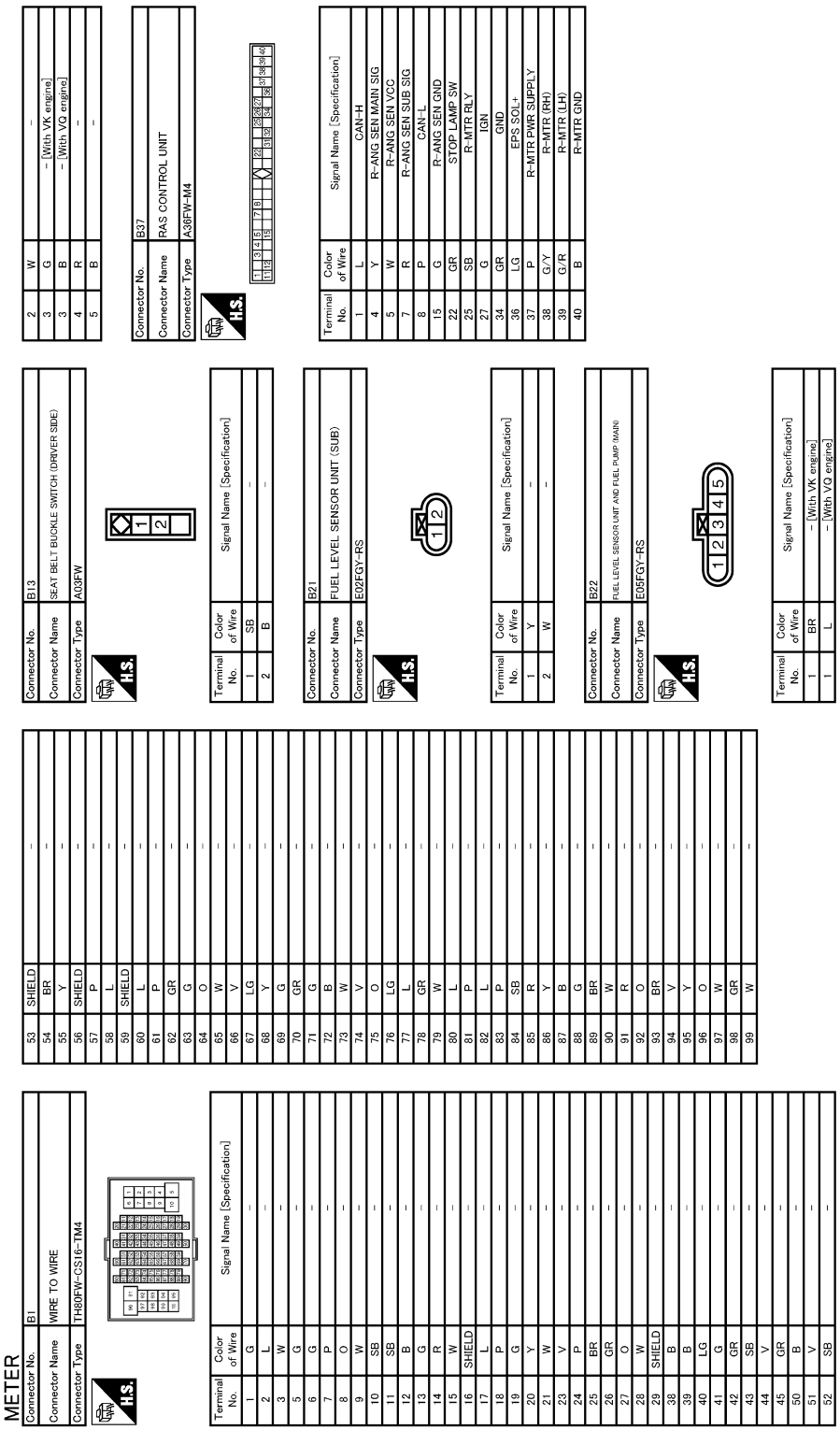
Wiring Diagram - METER -

INFOID:0000000005524756




PM : With automatic drive positioner
OP : Without automatic drive positioner
SS : With paddle shifter
AI : With active AFS and ICC
AW : AWD models
NV : With NAVI
ON : Without NAVI
*: This connector is not shown in "Harness Layout".
UNIFIED METER AND A/C AMP.
M66, M67
AMBIENT SENSOR E76
FUEL LEVEL SENSOR UNIT AND FUEL PUMP (MAIN) B22
FUEL LEVEL SENSOR UNIT (SUB) B21
PADDLE SHIFTER (SHIFT-UP) M38 : SS
PADDLE SHIFTER (SHIFT-DOWN) M39 : SS
A/T SHIFT SELECTOR M137
MODE SELECT SWITCH
POSITION SELECT SWITCH
AUTO
MANUAL
UP
DOWN
DATA LINK CONNECTOR M24
AI
PM
OP
A/T ASSEMBLY
TCM (TRANSMISSION CONTROL MODULE)
F151*
F103
F51
M116
DATA LINE
DATA LINE
To electronically controlled power steering system
To sunroof
To BOSE audio without navigation
AV CONTROL UNIT M202, M204 : ON
To BOSE audio with navigation (single monitor)
To BOSE audio with navigation (twin monitor)
AV CONTROL UNIT M210 : NV
AWD CONTROL UNIT M105 : AW
JCNWA2806GB


VQ : With VQ engine
VK : With VK engine
PM : With automatic drive positioner
OP : Without automatic drive positioner
AS : With RAS
WA : With active AFS
IC : With ICC
AI : With active AFS and ICC
2O : Without active AFS or ICC
BRAKE BOOSTER CONTROL UNIT B250 : IC
B224
B202
B201
M117
M6
E106
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E7 E6
CPU
OIL PRESSURE SWITCH F37
E10 F10 E3 F1
LANE CAMERA UNIT R8 : IC
M110 R7
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E41
ICC SENSOR INTEGRATED UNIT E67 : IC
AFS CONTROL UNIT M16 : WA
ACCELERATOR PEDAL ACTUATOR E115 : IC
DATA LINE
CAN GATEWAY M123 : AI
E-SUS CONTROL UNIT B38 : AS
RAS CONTROL UNIT B37 : AS
M7 B1
IC
WA
AI
2O
OP
PM
AS
JCNWA2807GB



JCNWA2808GB

METER

Connector No.	B38
Connector Name	E-SUS CONTROL UNIT
Connector Type	AAB32FL

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	IGN2
2	P	ACTUATOR FR–
3	V	ACTUATOR FR+
4	G	ACTUATOR FL–
5	Y	ACTUATOR FL+
6	LG	ACTUATOR RL+
7	V	ACTUATOR RL–
8	L	ACTUATOR RR+
9	P	ACTUATOR RR–
10	O	FRONT WHEEL G SENSOR SIG LH
11	SB	FRONT BODY G SENSOR SIG RH
12	R	FRONT BODY G SENSOR SIG LH
14	G	REAR BODY G SENSOR SIG
17	L	IGN1
18	B	GND2
19	B	GND1
20	W	MODE SW SIG
23	G	MODE LAMP SIG
24	W	FRONT WHEEL G SENSOR SIG RH
25	Y	REAR BODY G SENSOR–
26	BR	FRONT G SENSOR–
27	GR	FRONT G SENSOR+
29	P	CAN-L
30	LG	REAR BODY G SENSOR+
32	L	CAN-H

Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

H.S.

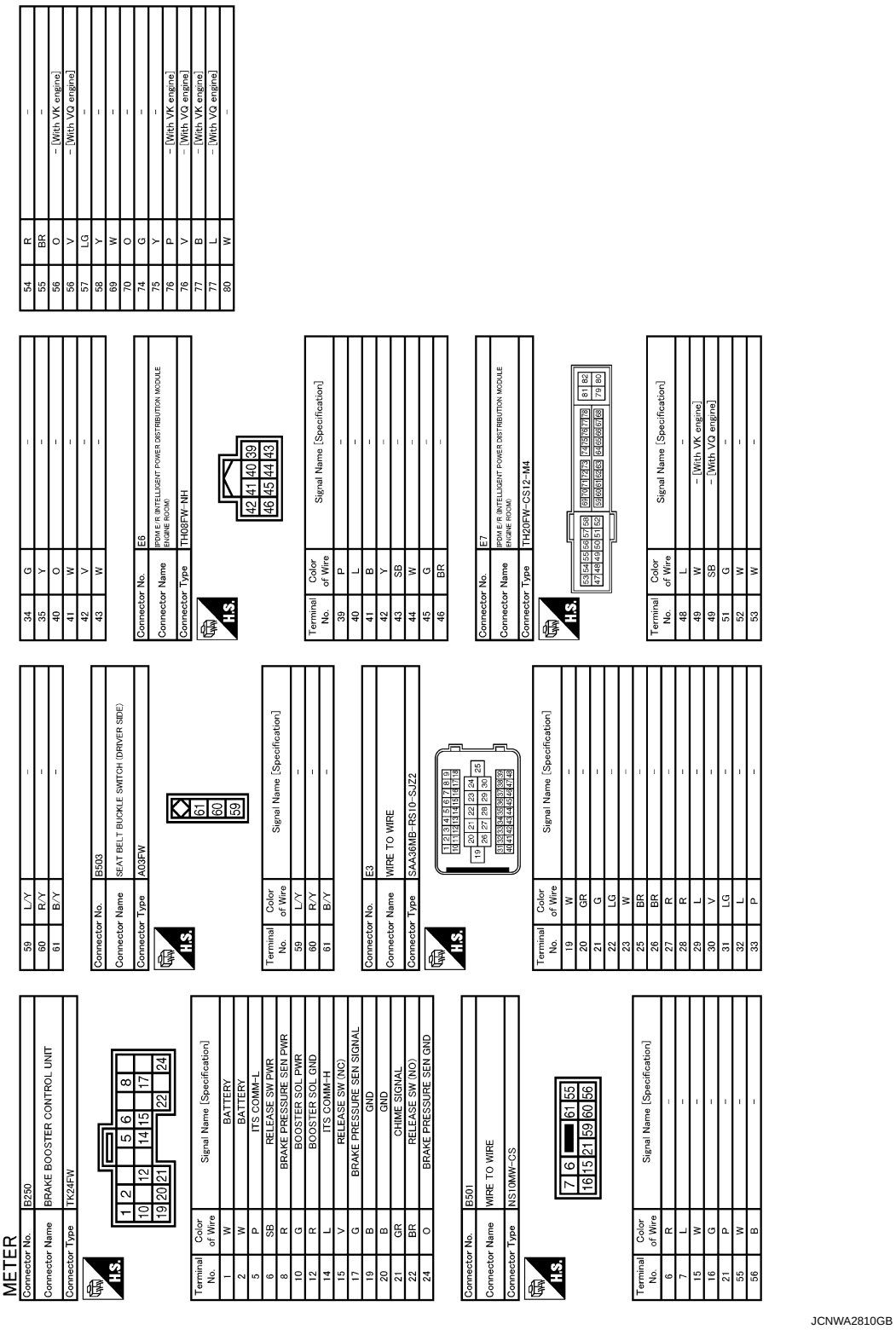
Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
7	GR	–
15	BR	–
16	P	–
21	O	–
55	G	–
56	L	–
59	LG	–
60	B	–
61	SB	–

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	R	–
3	BR	–
4	SB	–
6	O	–
7	GR	–
8	W	–
10	G	–
11	BR	–
12	Y	–
13	SHIELD	–
14	G	–
15	R	–
16	SHIELD	–
17	LG	–
18	GR	–
19	V	–
20	SB	–
21	LG	–
22	B	– [With entertainment system]
22	GR	– [Without entertainment system]
23	W	– [With entertainment system]
23	LG	– [Without entertainment system]
24	R	– [With entertainment system]
24	W	– [Without entertainment system]
25	SHIELD	– [With entertainment system]
25	V	– [Without entertainment system]
26	SB	–
27	V	–
28	SHIELD	–
29	O	–
30	P	–
31	W	–
32	GR	–
33	SB	–
40	LG	– [With ICC]
40	V	– [Without ICC]
41	SB	– [With ICC]
41	Y	– [Without ICC]
42	V	– [With ICC]
42	W	– [Without ICC]
43	BR	– [With ICC]
43	B	– [Without ICC]
44	R	–
45	G	–
46	O	– [With ICC]
46	SHIELD	– [Without ICC]
47	L	– [With ICC]
47	B	– [Without ICC]
48	P	– [With ICC]
48	R	– [Without ICC]
49	G	– [With ICC]
49	W	– [Without ICC]
50	SHIELD	–
51	W	–
52	R	–
53	G	–
54	L	–
55	SB	–
60	GR	–
61	LG	–
62	SB	–
63	P	–
64	BR	–
65	O	–
66	Y	–
67	W	–
68	SHIELD	–
69	G	–
71	SB	–
72	V	–
73	LG	–
74	W	–
75	BR	–
76	V	–
77	LG	–
80	O	–
81	G	–
82	P	–
83	Y	–
84	R	–
85	SB	–
86	GR	–
87	L	–
91	V	–
92	W	–
93	R	–
94	LG	–
95	GR	–
96	W	–
97	G	–
98	O	–
99	L	–
100	Y	–

JCNWA2809GB



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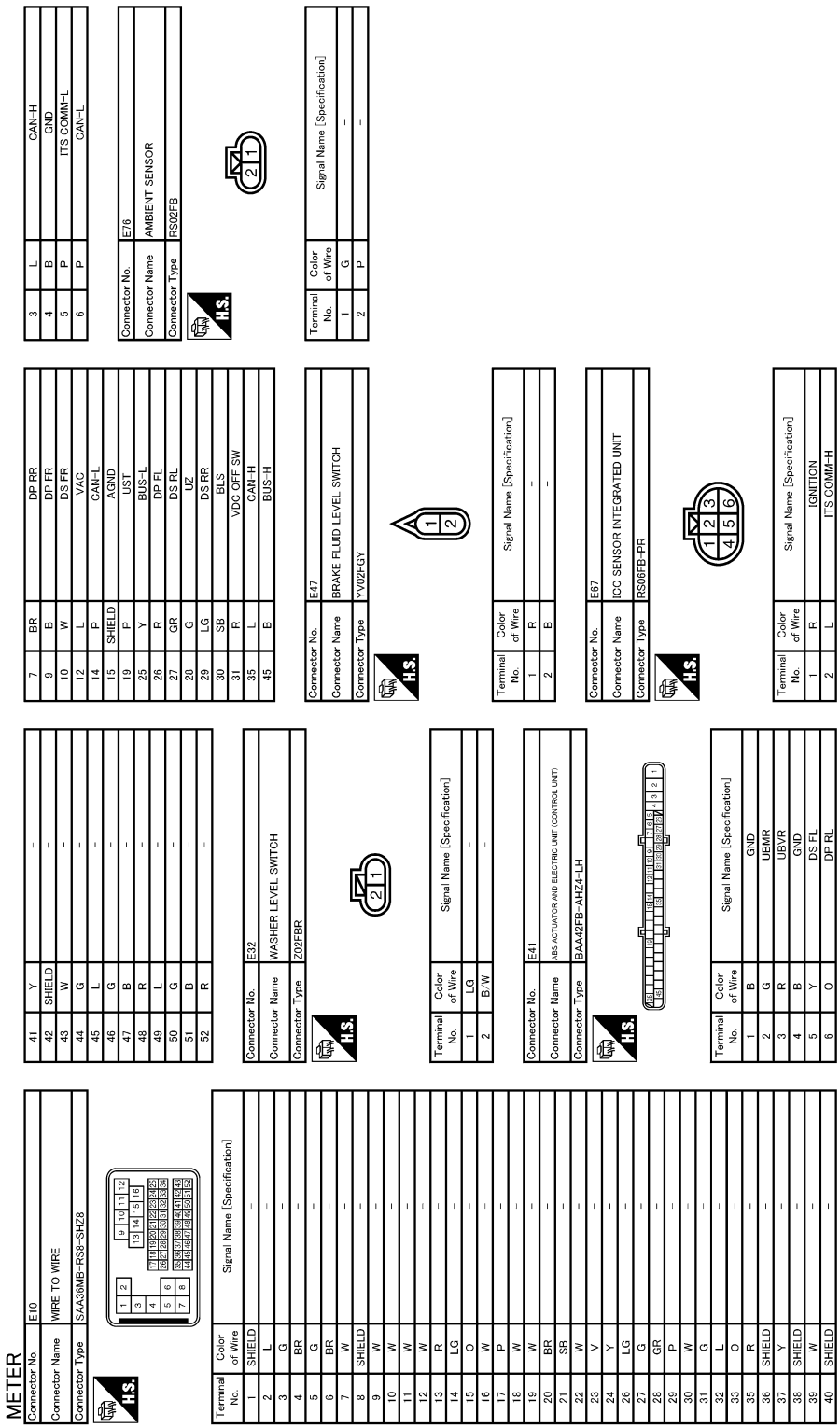

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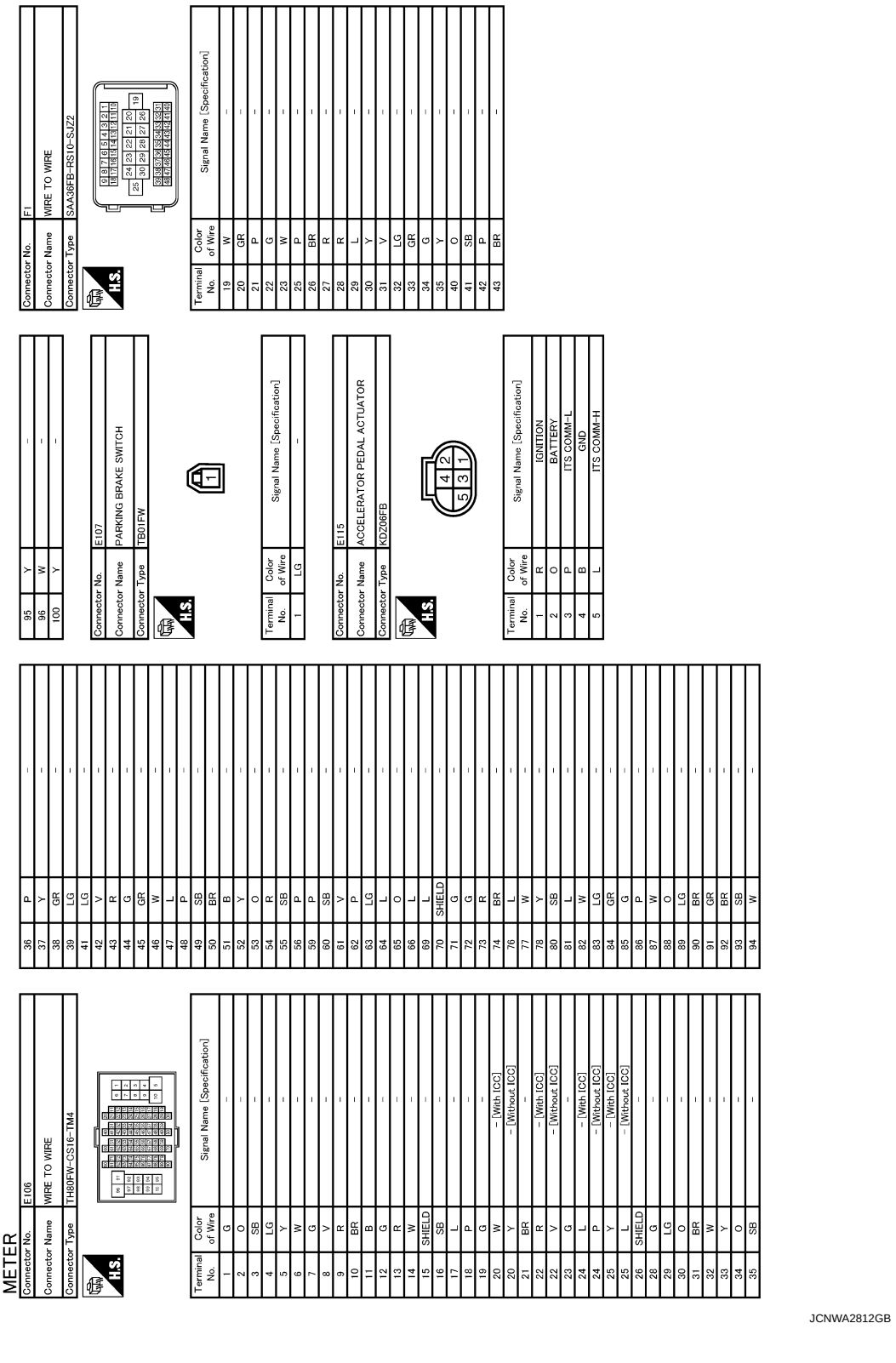

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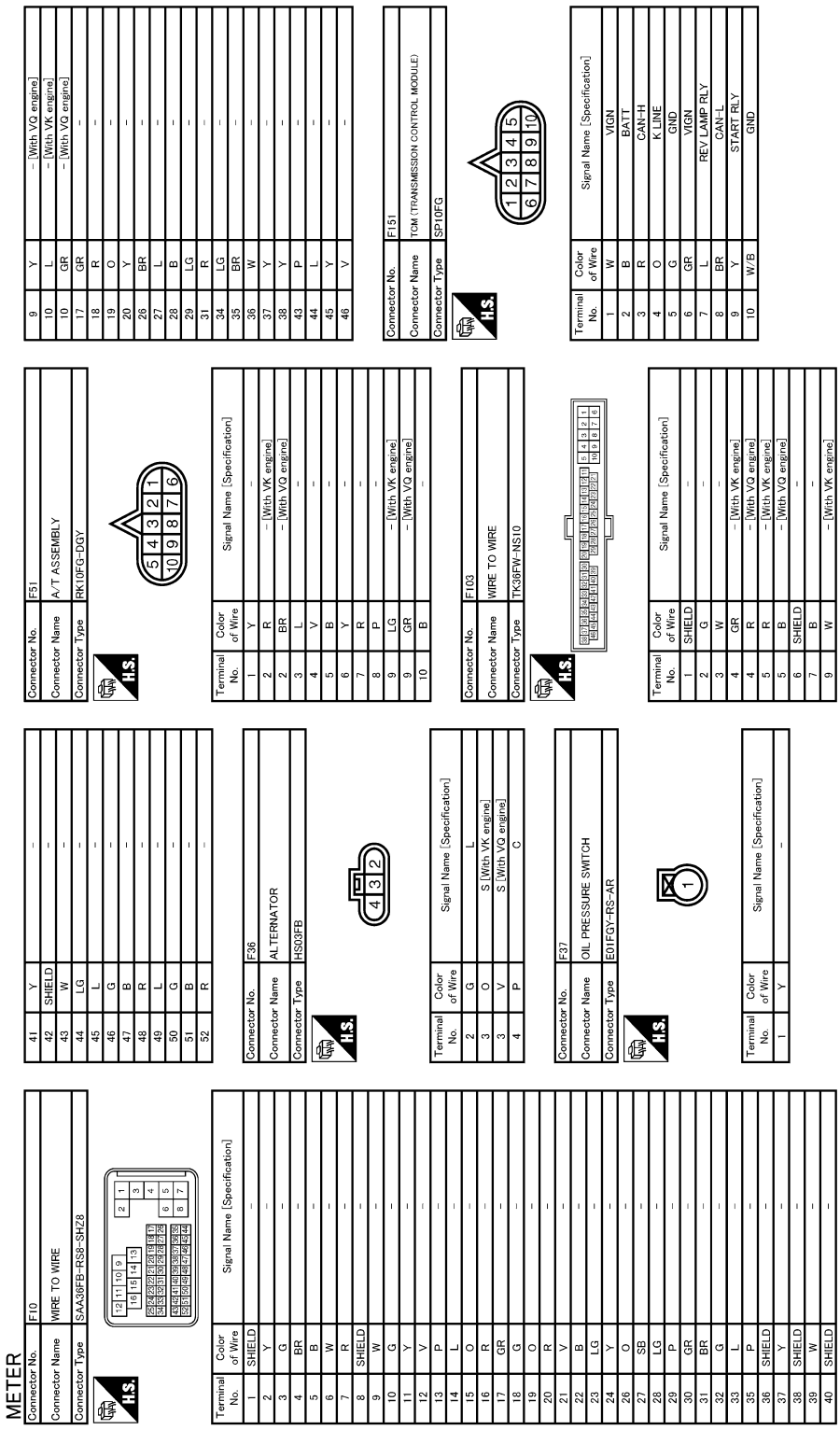


JCNWA2813GB

METER

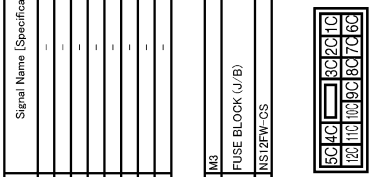
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1A	O	–
2A	G	–
3A	L	–
4A	P	–
5A	V	–
6A	Y	–
7A	R	–
8A	L	–

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS

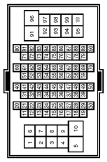
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6C	P	–
7C	B	–
9C	O	–
10C	L	–
11C	LG	–
12C	R	–

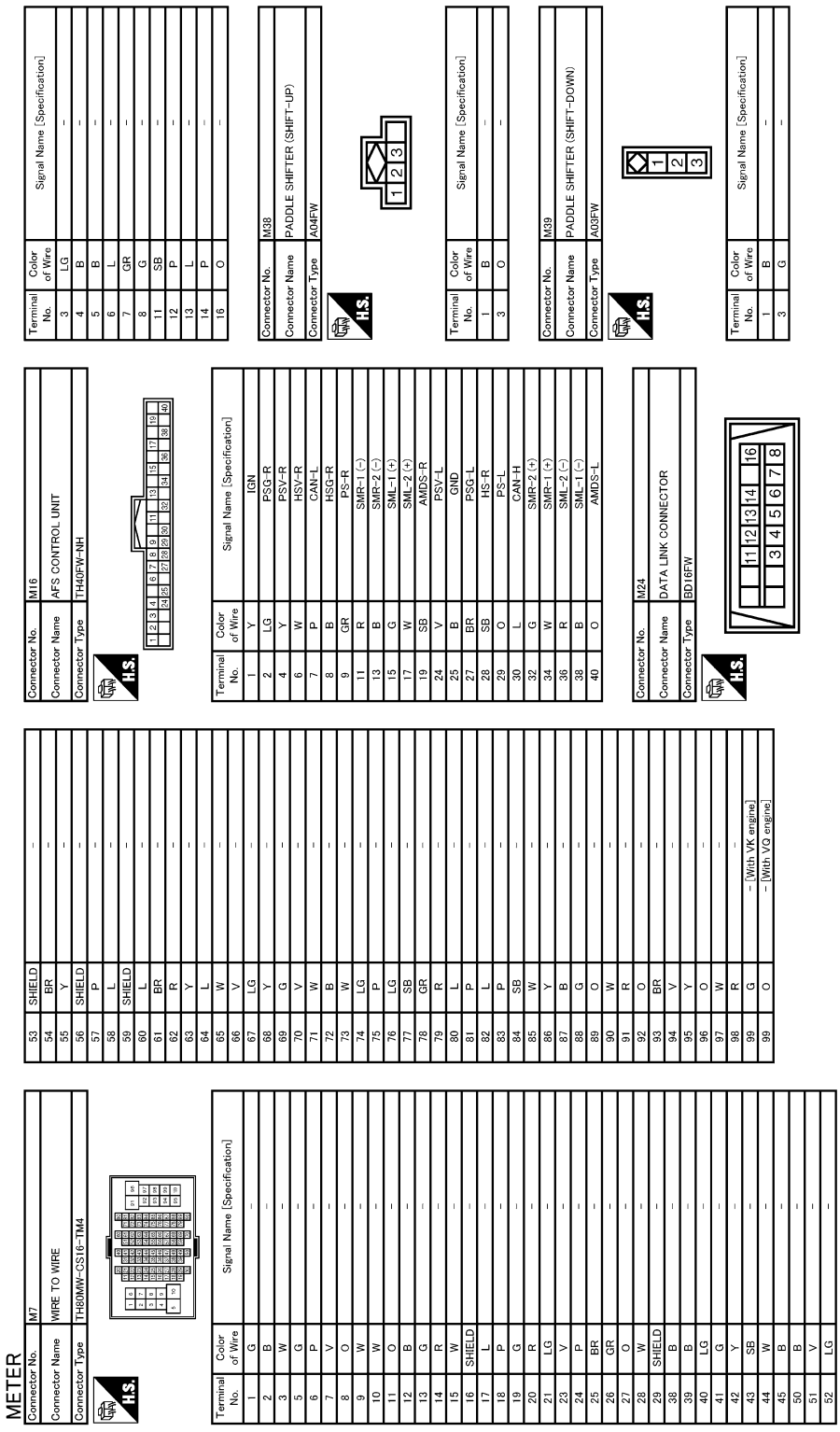
Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	O	–
3	SB	–
4	LG	–
5	GR	–
6	W	–
7	G	–
8	W	–
9	P	–
10	BR	–
11	B	–
12	G	–
13	R	–
14	W	–
15	SHIELD	–
16	BR	–
17	L	–
18	P	–
19	G	–
20	W	– [With ICC]
20	GR	– [Without ICC]
21	BR	– [With ICC]
21	R	– [Without ICC]
22	R	– [With ICC]
22	L	– [Without ICC]
23	G	–
24	L	– [With ICC]
24	P	– [Without ICC]
25	Y	– [With ICC]
25	W	– [Without ICC]
26	SHIELD	–
28	GR	–
29	V	–
30	O	–
31	BR	–
32	W	–
33	Y	–
34	L	–
35	L	–
36	P	–
37	G	–
38	R	–
39	G	–
41	L	–
42	W	–
43	R	–
44	LG	–
45	GR	–
46	W	–
47	L	–
48	P	–
49	O	–
50	LG	–
51	SB	–
52	Y	–
53	O	–
54	BR	–
55	SB	–
56	P	–
59	SB	–
60	SB	–
61	V	–
62	P	–
63	R	–
64	L	–
65	O	–
66	L	–
69	V	–
70	SHIELD	–
71	O	–
72	GR	–
73	W	–
74	SB	–
76	V	–
77	V	–
78	Y	–
80	O	–
81	L	–
82	W	–
83	Y	–
84	L	–
85	P	–
86	BR	–
87	P	–
88	V	–
89	G	–
90	P	–
91	R	–
92	R	–
93	GR	–
94	L	–
95	G	–
96	W	–
100	Y	–

JCNWA2814GB



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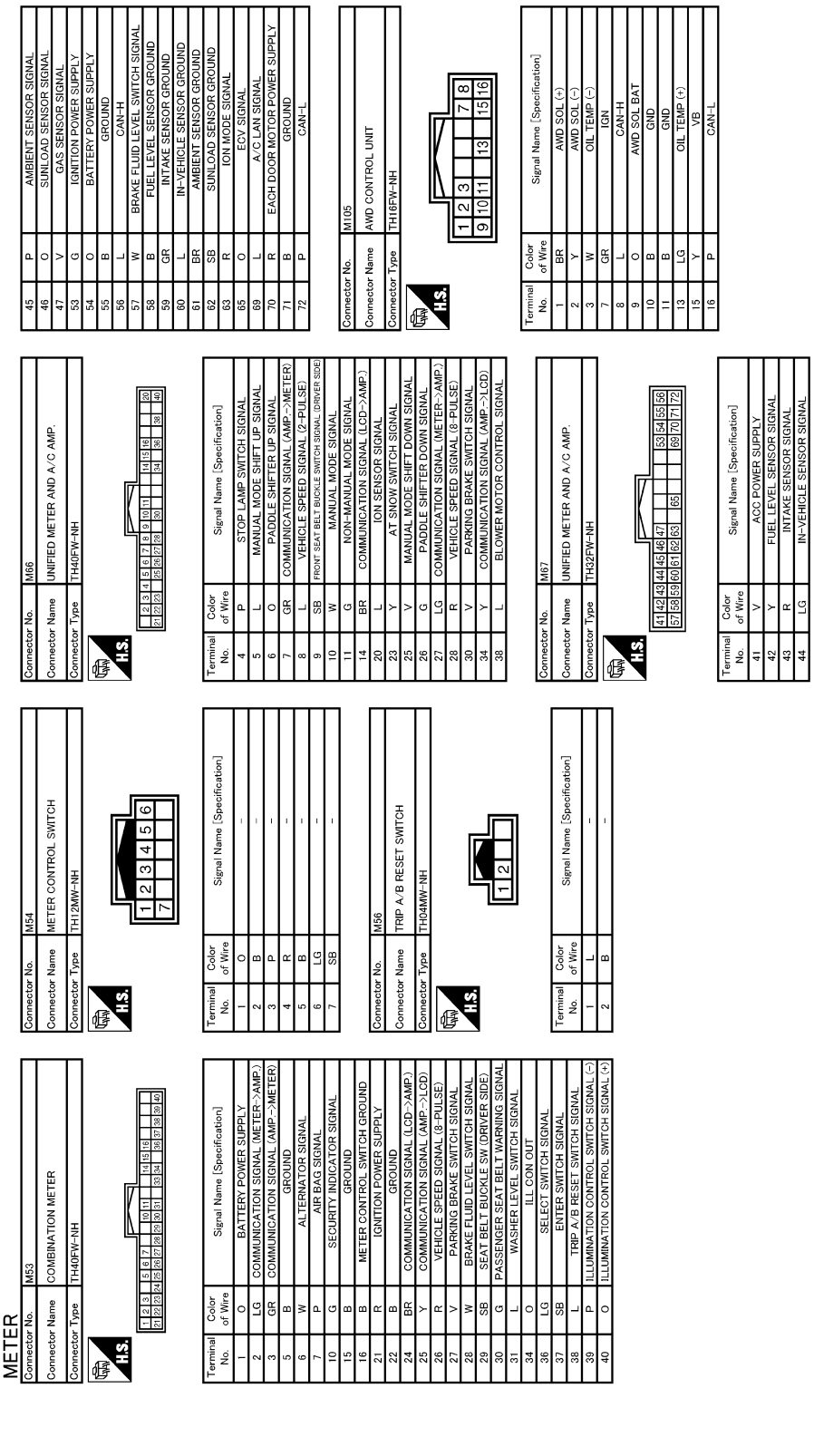

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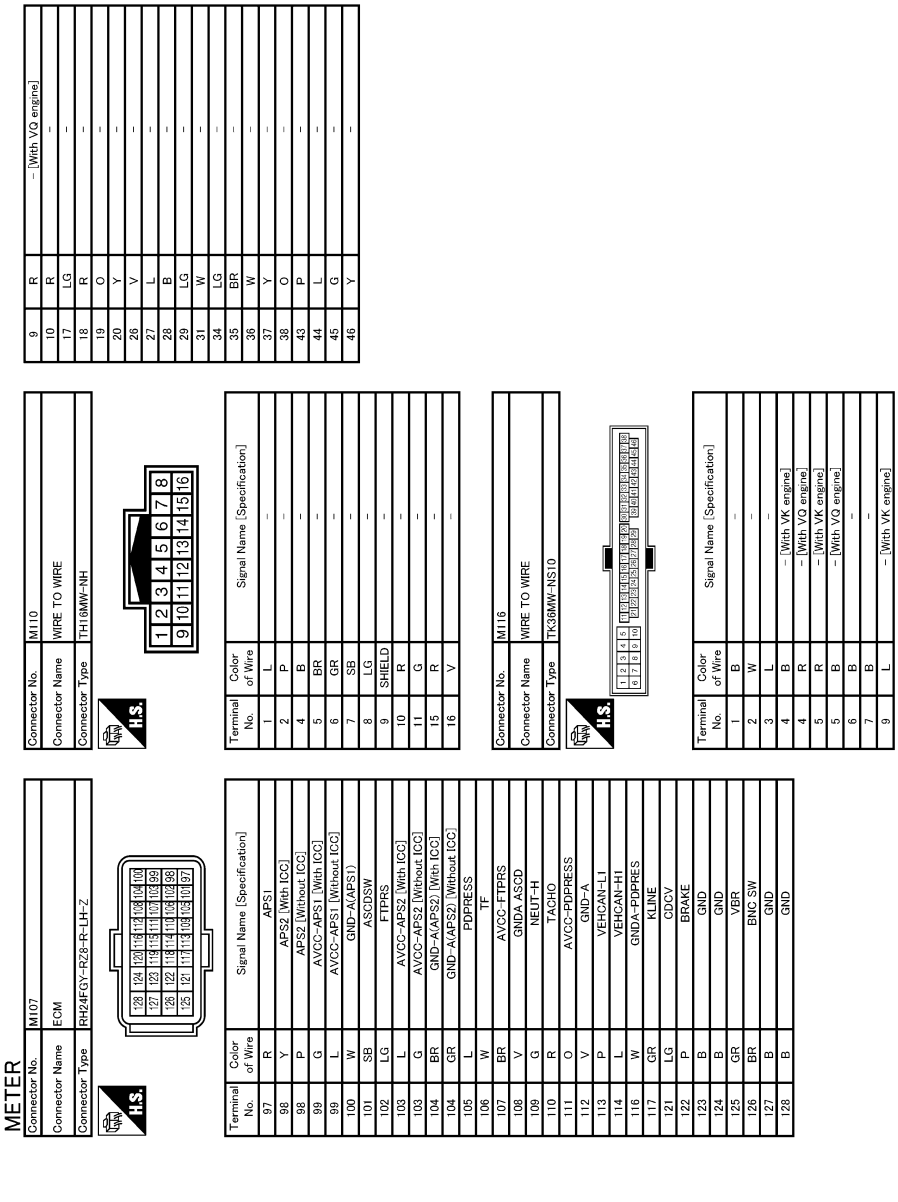

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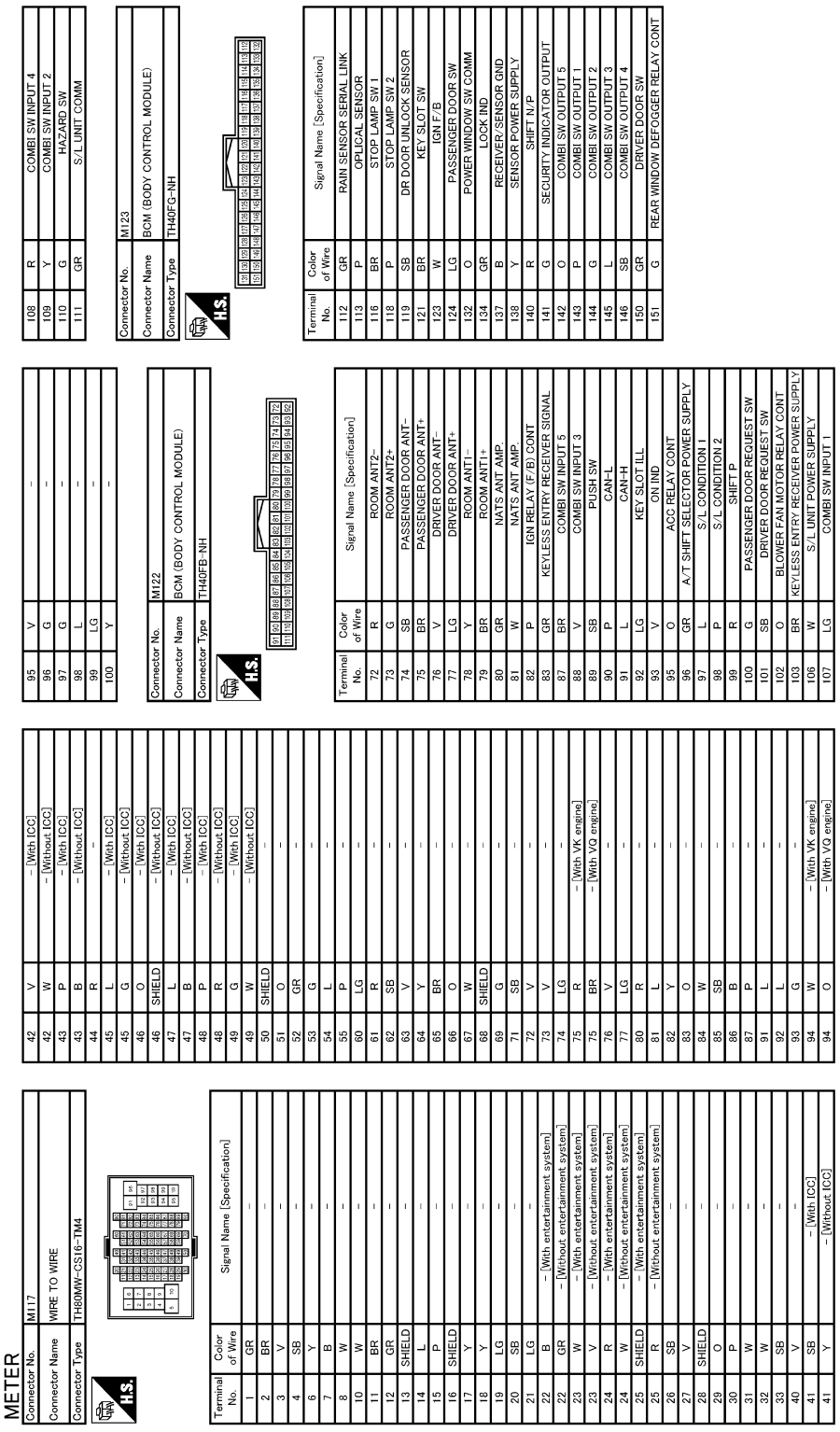


METER

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2	BR	–
3	V	–
4	SB	–
6	Y	–
7	B	–
8	W	–
10	W	–
11	BR	–
12	GR	–
13	SHIELD	–
14	L	–
15	P	–
16	SHIELD	–
17	Y	–
18	Y	–
19	LG	–
20	SB	–
21	LG	–
22	B	– [With entertainment system]
22	GR	– [Without entertainment system]
23	W	– [With entertainment system]
23	V	– [Without entertainment system]
24	R	– [With entertainment system]
24	W	– [Without entertainment system]
25	SHIELD	– [With entertainment system]
25	R	– [Without entertainment system]
26	SB	–
27	V	–
28	SHIELD	–
29	O	–
30	P	–
31	W	–
32	W	–
33	SB	–
40	V	–
41	SB	– [With ICC]
41	Y	– [Without ICC]
42	V	– [With ICC]
42	W	– [Without ICC]
43	P	– [With ICC]
43	B	– [Without ICC]
44	R	–
45	L	– [With ICC]
45	G	– [Without ICC]
46	O	– [With ICC]
46	SHIELD	– [Without ICC]
47	L	– [With ICC]
47	B	– [Without ICC]
48	P	– [With ICC]
48	R	– [Without ICC]
49	G	– [With ICC]
49	W	– [Without ICC]
50	SHIELD	–
51	O	–
52	GR	–
53	G	–
54	L	–
55	P	–
60	LG	–
61	R	–
62	SB	–
63	V	–
64	Y	–
65	BR	–
66	O	–
67	W	–
68	SHIELD	–
69	G	–
71	SB	–
72	V	–
73	V	–
74	LG	–
75	R	– [With VK engine]
75	BR	– [With VQ engine]
76	V	–
77	LG	–
80	R	–
81	L	–
82	Y	–
83	O	–
84	W	–
85	SB	–
86	B	–
87	P	–
91	L	–
92	L	–
93	G	–
94	W	– [With VK engine]
94	O	– [With VQ engine]
95	V	–
96	G	–
97	G	–
98	L	–
99	LG	–
100	Y	–

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

H.S.

61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96

Terminal No.	Color of Wire	Signal Name [Specification]
72	R	ROOM ANT2–
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT–
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1–
79	BR	ROOM ANT1+
80	GR	NATS ANT AMP
81	W	NATS ANT AMP
82	P	IGN RELAY (F/B) CONT
83	GR	KEYLESS ENTRY RECEIVER SIGNAL
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	SB	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL
93	V	ON IND
95	O	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	P	S/L CONDITION 2
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	O	BLOWER FAN MOTOR RELAY CONT
103	BR	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	W	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	GR	S/L UNIT COMM

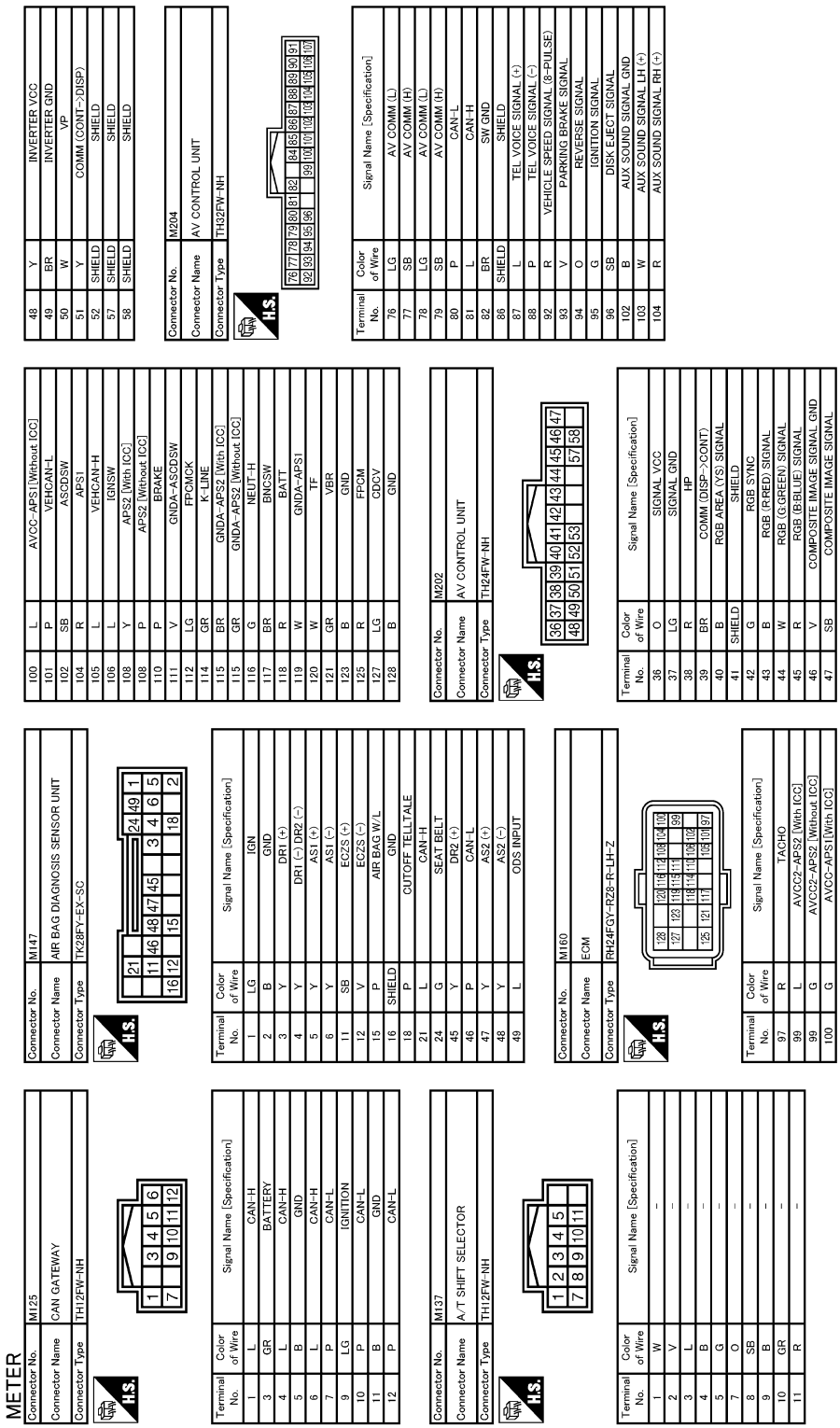
Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

H.S.

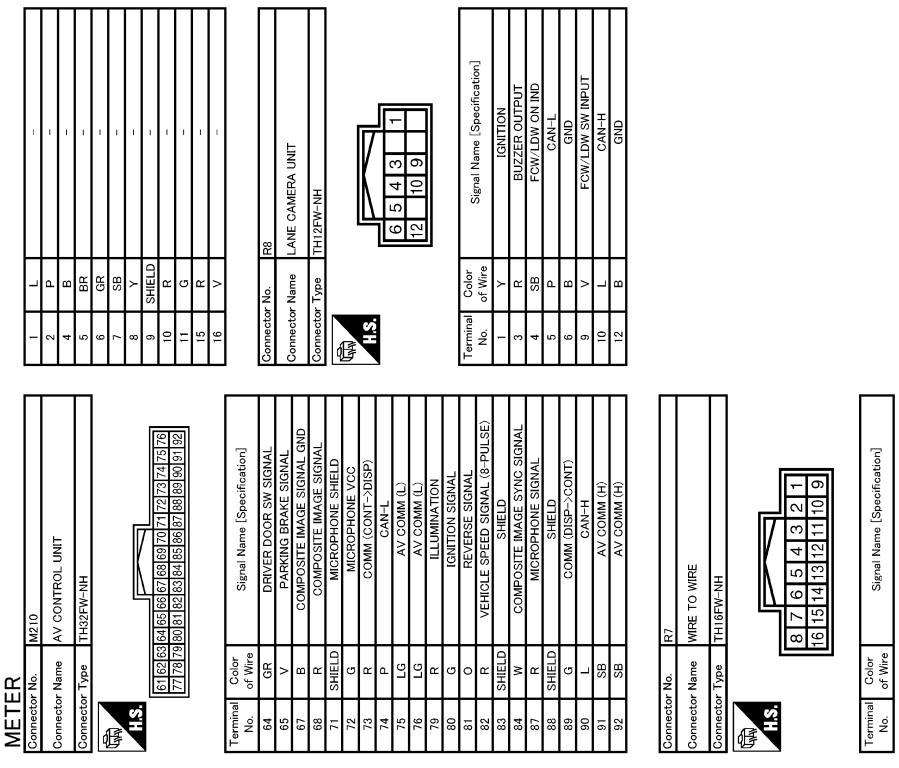
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name [Specification]
112	GR	RAIN SENSOR SERIAL LINK
113	P	OPTICAL SENSOR
116	BR	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	O	POWER WINDOW SW COMM
134	GR	LOCK IND
137	B	RECEIVER/SENSOR GND
138	Y	SENSOR POWER SUPPLY
140	R	SHIFT N/P
141	G	SECURITY INDICATOR OUTPUT
142	O	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

JCNWA2818GB



JCNWA2819GB



JCNWA2820GB

Fail-Safe

INFOID:0000000005524757

FAIL-SAFE

Combination meter performs fail-safe operation when unified meter and A/C amp. communication is malfunction.

Solution for communication error between the unified meter and A/C amp. and combination meter.

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Fuel gauge		
Engine coolant temperature gauge		
Illumination control		When suspending communication, change to nighttime mode.
Information display		The display turns off by suspending communication.
Buzzer		The buzzer turns off by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	The lamp turns on by suspending communication.
	VDC OFF indicator lamp	
	SLIP indicator lamp	
	Brake warning lamp	
	RAS warning lamp	
	CRUISE warning lamp	
	IBA OFF indicator lamp	
	Malfunction indicator lamp	
	High beam indicator	The lamp turns off by suspending communication.
	Turn signal indicator lamp	
	Tail lamp indicator lamp	
	Oil pressure warning lamp	
	A/T CHECK warning lamp	
	AWD warning lamp	
	Low tire pressure warning lamp	
	Key warning lamp	
	AFS OFF indicator lamp	
	Lane departure warning lamp	
	LDP ON indicator lamp	
	Sports mode indicator lamp	
	Master warning lamp	

DTC Index

INFOID:0000000005524758

Refer to WCS-76, "DTC Index".

UNIFIED METER AND A/C AMP.

Reference Value

INFOID:0000000005524759

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition		Value/Status
SPEED METER [km/h] or [mph]	Ignition switch ON	While driving	Equivalent to speedometer reading **NOTE:** 655.35 is displayed when the malfunction signal is received
SPEED OUTPUT [km/h] or [mph]	Ignition switch ON	While driving	Equivalent to speedometer reading **NOTE:** 655.35 is displayed when the malfunction signal is received
ODO OUTPUT [km/h]	Ignition switch ON	—	Equivalent to odometer reading in combination meter
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading **NOTE:** 8191.875 is displayed when the malfunction signal is received
FUEL METER [L]	Ignition switch ON	—	Values according to fuel level
W TEMP METER [°C] or [°F]	Ignition switch ON	—	Values according to engine coolant temperature **NOTE:** 215 is displayed when the malfunction signal is input
ABS W/L	Ignition switch ON	ABS warning lamp ON	On
		ABS warning lamp OFF	Off
VDC/TCS IND	Ignition switch ON	VDC OFF indicator lamp ON	On
		VDC OFF indicator lamp OFF	Off
SLIP IND	Ignition switch ON	SLIP indicator lamp ON	On
		SLIP indicator lamp OFF	Off
BRAKE W/L	Ignition switch ON	Brake warning lamp ON	On
		Brake warning lamp OFF	Off
DOOR W/L	Ignition switch ON	Door warning displayed	On
		Door warning not displayed	Off
HI-BEAM IND	Ignition switch ON	Hi-beam indicator lamp ON	On
		Hi-beam indicator lamp OFF	Off
TURN IND	Ignition switch ON	Turn indicator lamp ON	On
		Turn indicator lamp OFF	Off
FR FOG IND	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
RR FOG IND	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
LIGHT IND	Ignition switch ON	Tail lamp indicator lamp ON	On
		Tail lamp indicator lamp OFF	Off
OIL W/L	Ignition switch ON	Oil pressure warning lamp ON	On
		Oil pressure warning lamp OFF	Off

Monitor Item	Condition		Value/Status
MIL	Ignition switch ON	Malfunction warning lamp ON	On
		Malfunction warning lamp OFF	Off
GLOW IND	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
C-ENG2 W/L	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
CRUISE IND	Ignition switch ON	CRUISE indicator displayed	On
		CRUISE indicator not displayed	Off
SET IND	Ignition switch ON	SET indicator displayed ON	On
		SET indicator not displayed OFF	Off
CRUISE W/L	Ignition switch ON	CRUISE warning lamp ON	On
		CRUISE warning lamp OFF	Off
BA W/L	Ignition switch ON	IBA OFF indicator lamp ON	On
		IBA OFF indicator lamp OFF	Off
ATC/T-AMT W/L	Ignition switch ON	A/T check warning lamp ON	On
		A/T check warning lamp OFF	Off
4WD W/L	Ignition switch ON	AWD warning lamp ON	On
		AWD warning lamp OFF	Off
4WD LOCK IND	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
FUEL W/L	Ignition switch ON	Low-fuel warning displayed	On
		Low-fuel warning not displayed	Off
WASHER W/L	Ignition switch ON	Washer warning displayed	On
		Washer warning not displayed	Off
AIR PRES W/L	Ignition switch ON	Low tire pressure lamp ON	On
		Low tire pressure lamp OFF	Off
KEY G/Y W/L	Ignition switch ON	Key warning lamp ON	On
		Key warning lamp OFF	Off
AFS OFF IND	Ignition switch ON	AFS OFF indicator lamp ON	On
		AFS OFF indicator lamp OFF	Off
4WAS/RAS W/L	Ignition switch ON	RAS warning lamp ON	On
		RAS warning lamp OFF	Off
DDS W/L	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
LANE W/L	Ignition switch ON	Lane departure warning lamp ON	On
		Lane departure warning lamp OFF	Off
LDP IND	Ignition switch ON	LDP ON indicator lamp ON	On
		LDP ON indicator lamp OFF	Off
E-SUS IND	Ignition switch ON	Sports mode indicator lamp ON	On
		Sports mode indicator lamp OFF	Off
DCA IND	Ignition switch ON	DCA switch indicator displayed	On
		DCA switch indicator not displayed	Off

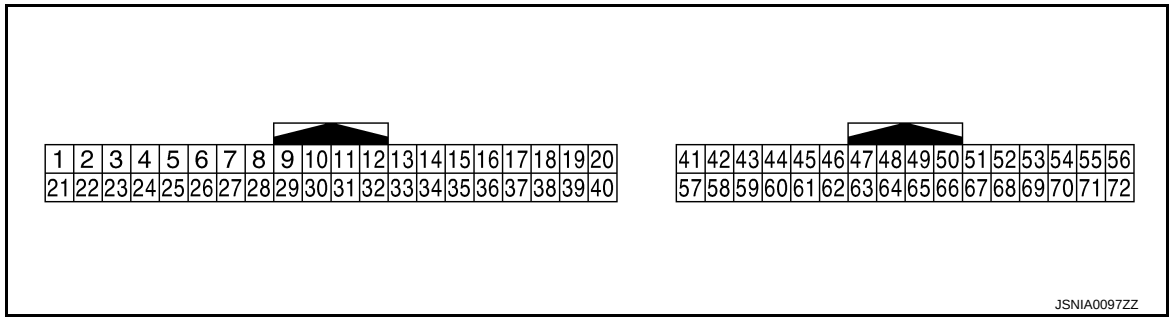
Monitor Item	Condition		Value/Status
LCD	Ignition switch ON	Engine start information display	B&P I
	Ignition switch ACC	Engine start information display	B&P N
	Ignition switch LOCK	Key ID warning display	ID NG
	Ignition switch LOCK	Steering lock information display	ROTAT
	Ignition switch LOCK	P position warning display	SFT P
	Ignition switch LOCK	Intelligent Key insert information display	INSRT
	Ignition switch LOCK	Intelligent Key low battery warning display	BATT
	Ignition switch ON	Take away warning display	NO KY
	Ignition switch LOCK	Key warning display	OUTKY
	Ignition switch ON	ACC warning display	LK WN
ACC TARGET	Ignition switch ON	Vehicle ahead detection indicator displayed	On
		Vehicle ahead detection indicator not displayed	Off
ACC DISTANCE	Ignition switch ON	When following distance set to “LONG”	Long
		When following distance set to “MIDDLE”	Middle
		When following distance set to “SHORT”	Short
		Set distance indicator not displayed	Off
ACC OWN VHL	Ignition switch ON	Own vehicle indicator displayed	On
		Own vehicle indicator not displayed	Off
ACC SET SPEED	Ignition switch ON	Set vehicle speed indicator not displayed	Off
		Set vehicle speed indicator displayed	Indicates the set vehicle speed
ACC UNIT	Ignition switch ON	Set vehicle speed indicator unit display ON	On
		Set vehicle speed indicator unit display OFF	Off
SHIFT IND	Ignition switch ON	Shift position indicator P display	P
		Shift position indicator R display	R
		Shift position indicator N display	N
		Shift position indicator D display	D
		Shift position indicator DS display	L
		Shift position indicator M1 display	M1
		Shift position indicator M2 display	M2
		Shift position indicator M3 display	M3
		Shift position indicator M4 display	M4
		Shift position indicator M5 display	M5
		Shift position indicator M6 display	M6
		Shift position indicator M7 display	M7
O/D OFF SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off

Monitor Item	Condition		Value/Status
AT S MODE SW	Ignition switch ON	Snow mode switch pressed	On
		Snow mode switch not pressed	Off
AT P MODE SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
M RANGE SW	Ignition switch ON	Selector lever manual mode position	On
		Other than the above	Off
NM RANGE SW	Ignition switch ON	Selector lever manual mode position	Off
		Other than the above	On
AT SFT UP SW	Ignition switch ON	Selector lever + position	On
		Other than the above	Off
AT SFT DWN SW	Ignition switch ON	Selector lever – position	On
		Other than the above	Off
ST SFT UP SW	Ignition switch ON	Paddle shifter switch up operation	On
		Other than the above	Off
ST SFT DWN SW	Ignition switch ON	Paddle shifter switch down operation	On
		Other than the above	Off
COMP F/B SIG	Ignition switch ON	A/C compressor activation condition	On
		A/C compressor deactivation condition	Off
4WD LOCK SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
PKB SW	Ignition switch ON	Parking brake switch ON	On
		Parking brake switch OFF	Off
BUCKLE SW	Ignition switch ON	Seat belt not fastened	On
		Seat belt fastened	Off
BRAKE OIL SW	Ignition switch ON	Brake fluid level switch ON	On
		Brake fluid level switch OFF	Off
DISTANCE [km/h]	Ignition switch ON	—	Possible driving distance calculated by unified meter and A/C amp.
OUTSIDE TEMP [°C] or [°F]	Ignition switch ON	—	Equivalent to ambient temperature **NOTE:** This may not match the indicated value on the information display.
FUEL LOW SIG	Ignition switch ON	Low-fuel warning signal output	On
		Low-fuel warning signal not output	Off
BUZZER	Ignition switch ON	Buzzer ON	On
		Buzzer OFF	Off

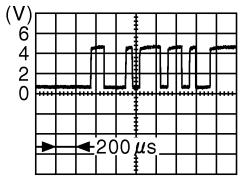
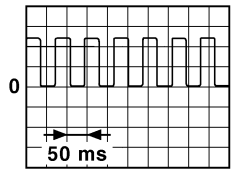
NOTE:

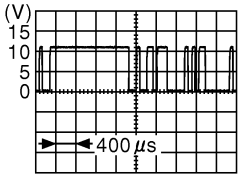
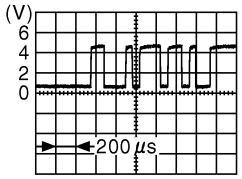
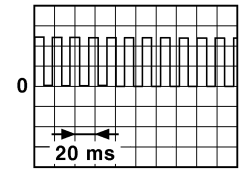
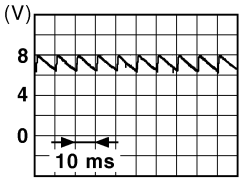
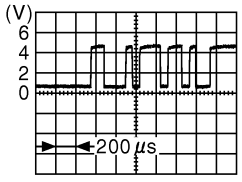
Some items are not available according to vehicle specification.

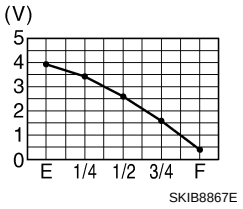
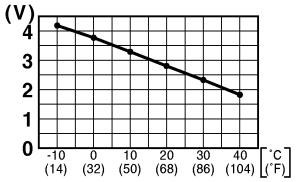
TERMINAL LAYOUT



PHYSICAL VALUES

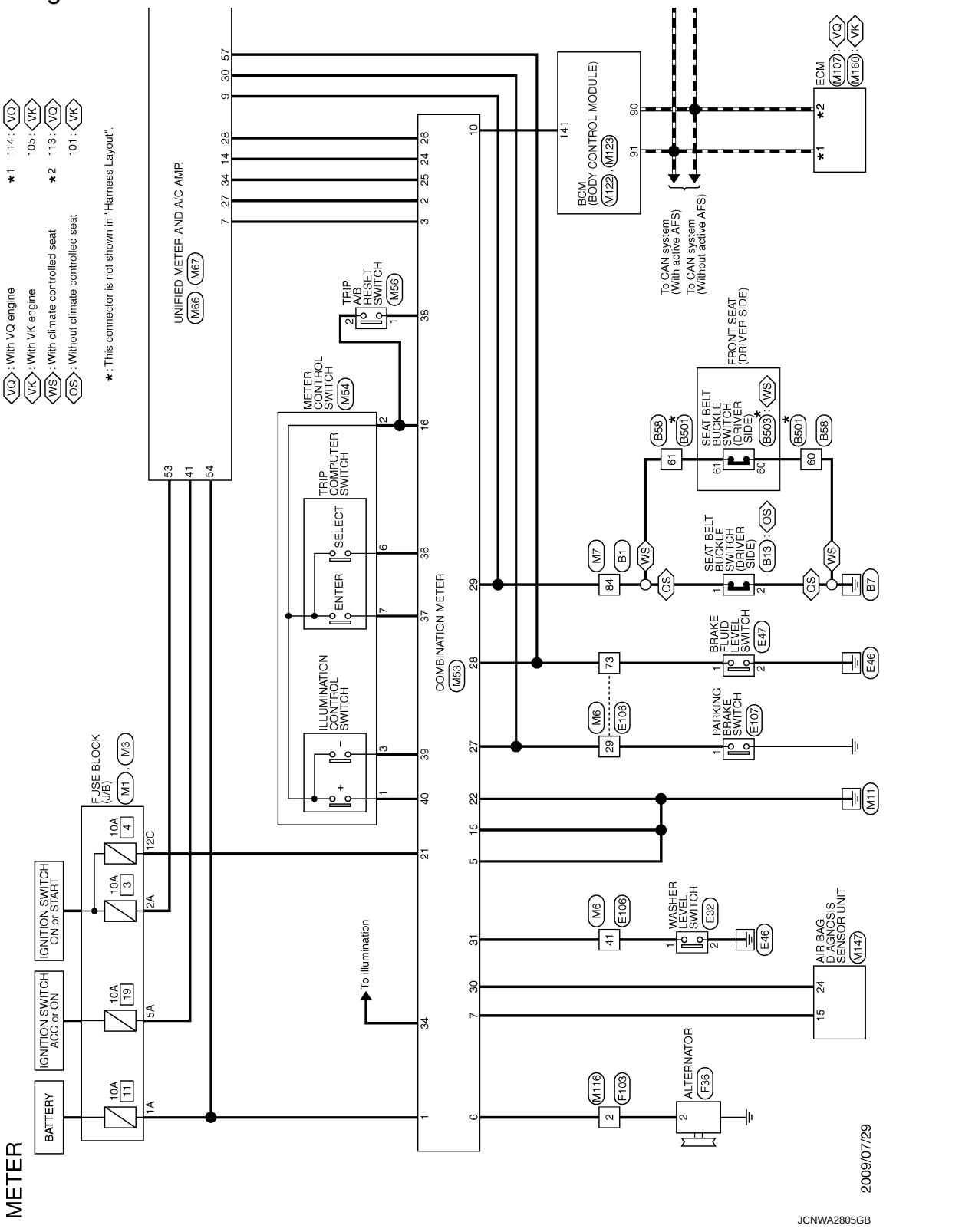
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
5 (L)	Ground	Manual mode shift up signal	Input	Ignition switch ON	Selector lever UP operation	0 V
					Other than the above	12 V
6 (O)	Ground	Paddle shifter up signal	Input	Ignition switch ON	Paddle shifter up operation	0 V
					Other than the above	12 V
7 (GR)	Ground	Communication signal (AMP. → METER)	Output	Ignition switch ON	—	 JSNIA0027GB
8 (L)	Ground	Vehicle speed signal output (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	**NOTE:** The maximum voltage varies depending on the specification (destination unit).  JSNIA0015GB
9 (SB)	Ground	Seat belt buckle switch signal (driver side)	Input	Ignition switch ON	When seat belt is fastened	12 V
					When seat belt is not fastened	0 V
10 (W)	Ground	Manual mode signal	Input	Ignition switch ON	Selector lever DS position	0 V
					Other than the above	12 V
11 (G)	Ground	Non-manual mode signal	Input	Ignition switch ON	Selector lever DS position	12 V
					Other than the above	0 V

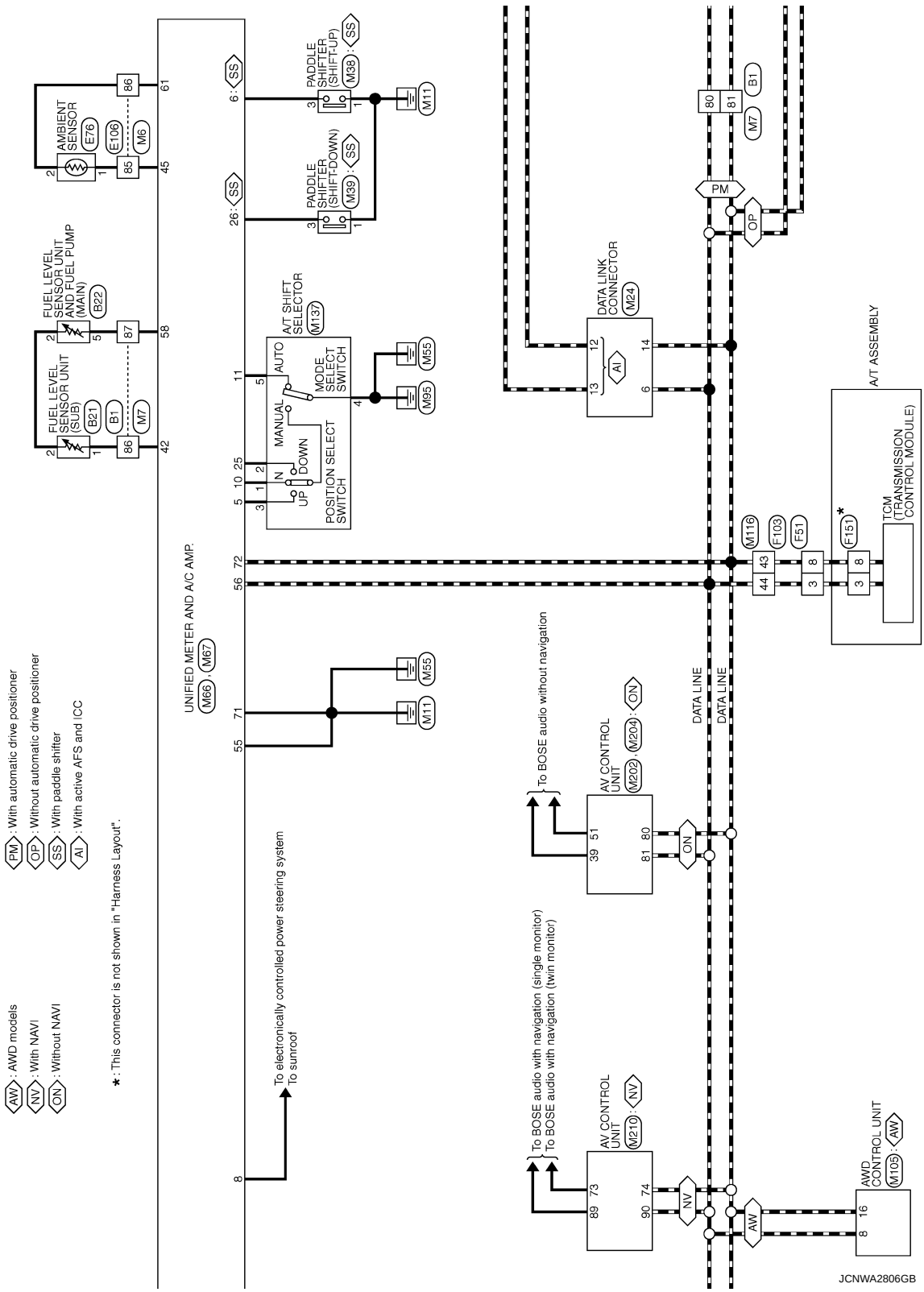
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
14 (BR)	Ground	Communication signal (LCD → AMP.)	Input	Ignition switch ON	—	 JSNIA0028GB
25 (V)	Ground	Manual mode shift down signal	Input	Ignition switch ON	Selector lever down operation	0 V
					Other than the above	12 V
26 (G)	Ground	Paddle shifter down signal	Input	Ignition switch ON	Paddle shifter down operation	0 V
					Other than the above	12 V
27 (LG)	Ground	Communication signal (METER → AMP.)	Input	Ignition switch ON	—	 JSNIA0027GB
28 (R)	Ground	Vehicle speed signal output (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	**NOTE:** The maximum voltage varies depending on the specification (destination unit).  JSNIA0012GB
30 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	 JSNIA0007GB
34 (Y)	Ground	Communication signal (AMP. → LCD)	Output	Ignition switch ON	—	 JSNIA0027GB
41 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage

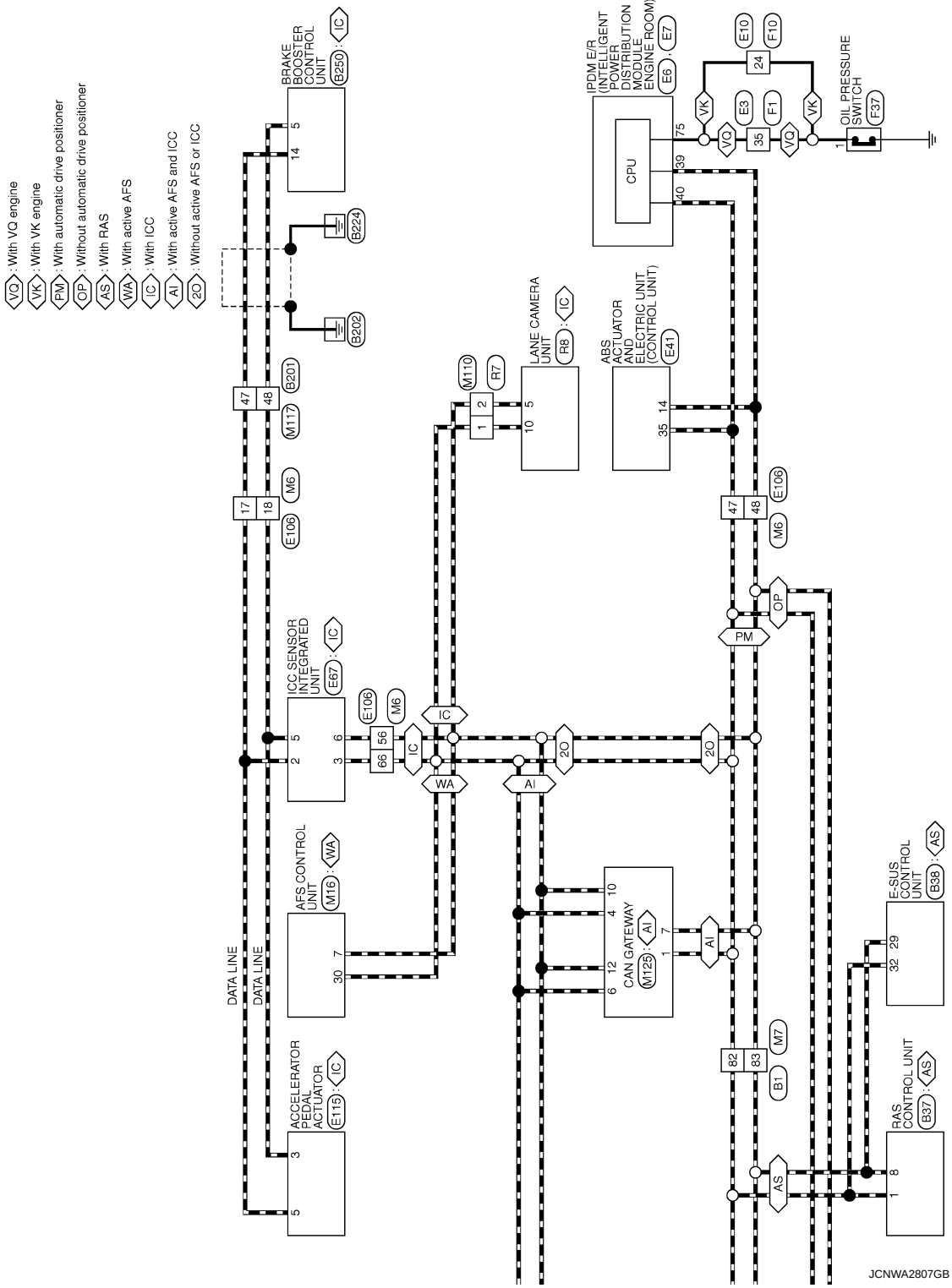
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
42 (Y)	Ground	Fuel level sensor signal	Input	Ignition switch ON	—	 SKIB8867E
45 (P)	Ground	Ambient sensor signal	Input	—	—	 JSNIA0014GB
53 (G)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
54 (O)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
55 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
56 (L)	Ground	CAN-H	—	—	—	—
57 (W)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal.	5 V
					The brake fluid level is lower than the low level	0 V
58 (B)	Ground	Fuel level sensor signal ground	—	Ignition switch ON	—	0 V
61 (BR)	Ground	Ambient sensor signal ground	—	Ignition switch ON	—	0 V
71 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
72 (P)	Ground	CAN-L	—	—	—	—

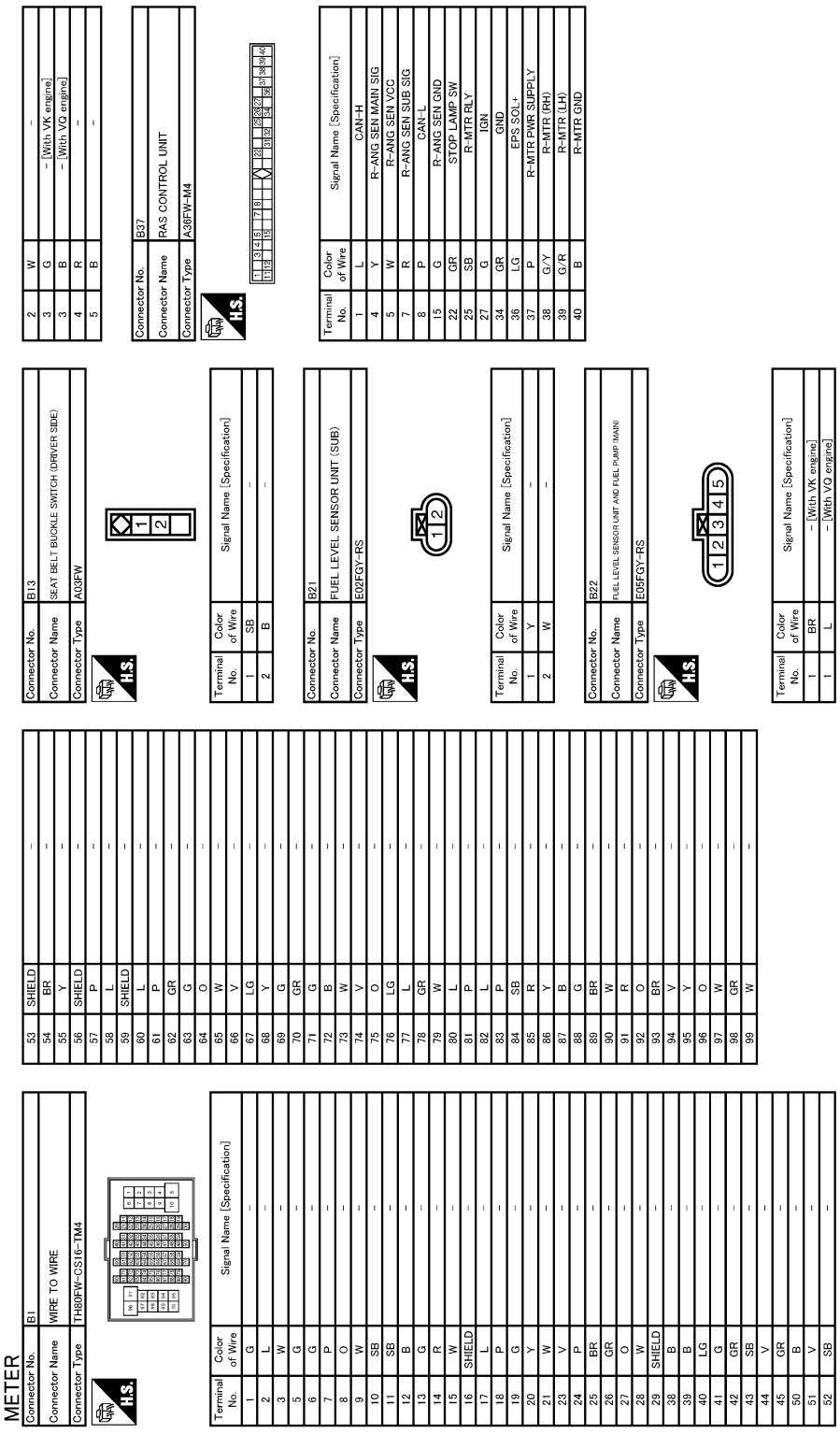
Wiring Diagram - METER -

INFOID:0000000005524760




PM : With automatic drive positioner
OP : Without automatic drive positioner
SS : With paddle shifter
AI : With active AFS and ICC
AW : AWD models
NV : With NAVI
ON : Without NAVI
* : This connector is not shown in "Harness Layout".
UNIFIED METER AND A/C AMP.
(M66), (M67)
To electronically controlled power steering system
To sunroof
AMBIENT SENSOR (E76)
FUEL LEVEL SENSOR UNIT (SUB) (B21)
FUEL LEVEL SENSOR UNIT AND FUEL PUMP (MAIN) (B22)
PADDLE SHIFTER (SHIFT-UP) (M38)
PADDLE SHIFTER (SHIFT-DOWN) (M39)
A/T SHIFT SELECTOR (M137)
AUTO
MANUAL
MODE SELECT SWITCH
POSITION SELECT SWITCH
UP
DOWN
DATA LINK CONNECTOR (M24)
A/T ASSEMBLY
TCM (TRANSMISSION CONTROL MODULE)
(F151)
(M116)
(F103)
(F51)
DATA LINE
DATA LINE
To BOSE audio without navigation
AV CONTROL UNIT (M202), (M204)
To BOSE audio with navigation (single monitor)
To BOSE audio with navigation (twin monitor)
AV CONTROL UNIT (M210)
AWD CONTROL UNIT (M105)
JCNWA2806GB


VQ : With VQ engine
VK : With VK engine
PM : With automatic drive positioner
OP : Without automatic drive positioner
AS : With RAS
WA : With active AFS
IC : With ICC
AI : With active AFS and ICC
2O : Without active AFS or ICC
BRAKE BOOSTER CONTROL UNIT B250 : IC
B224
B202
B201
M117
M6
E106
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E7 E6
CPU
OIL PRESSURE SWITCH F37
E10 F10 24 E3 F1 35
LANE CAMERA UNIT R8 : IC
M110 R7
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E41
ICC SENSOR INTEGRATED UNIT E67 : IC
E106 M6
AFS CONTROL UNIT M16 : WA
ACCELERATOR PEDAL ACTUATOR E115 : IC
CAN GATEWAY M123 : AI
E-SUS CONTROL UNIT B38 : AS
RAS CONTROL UNIT B37 : AS
B1 M7
DATA LINE
IC
WA
AI
2O
PM
OP
AS
JCNWA2807GB



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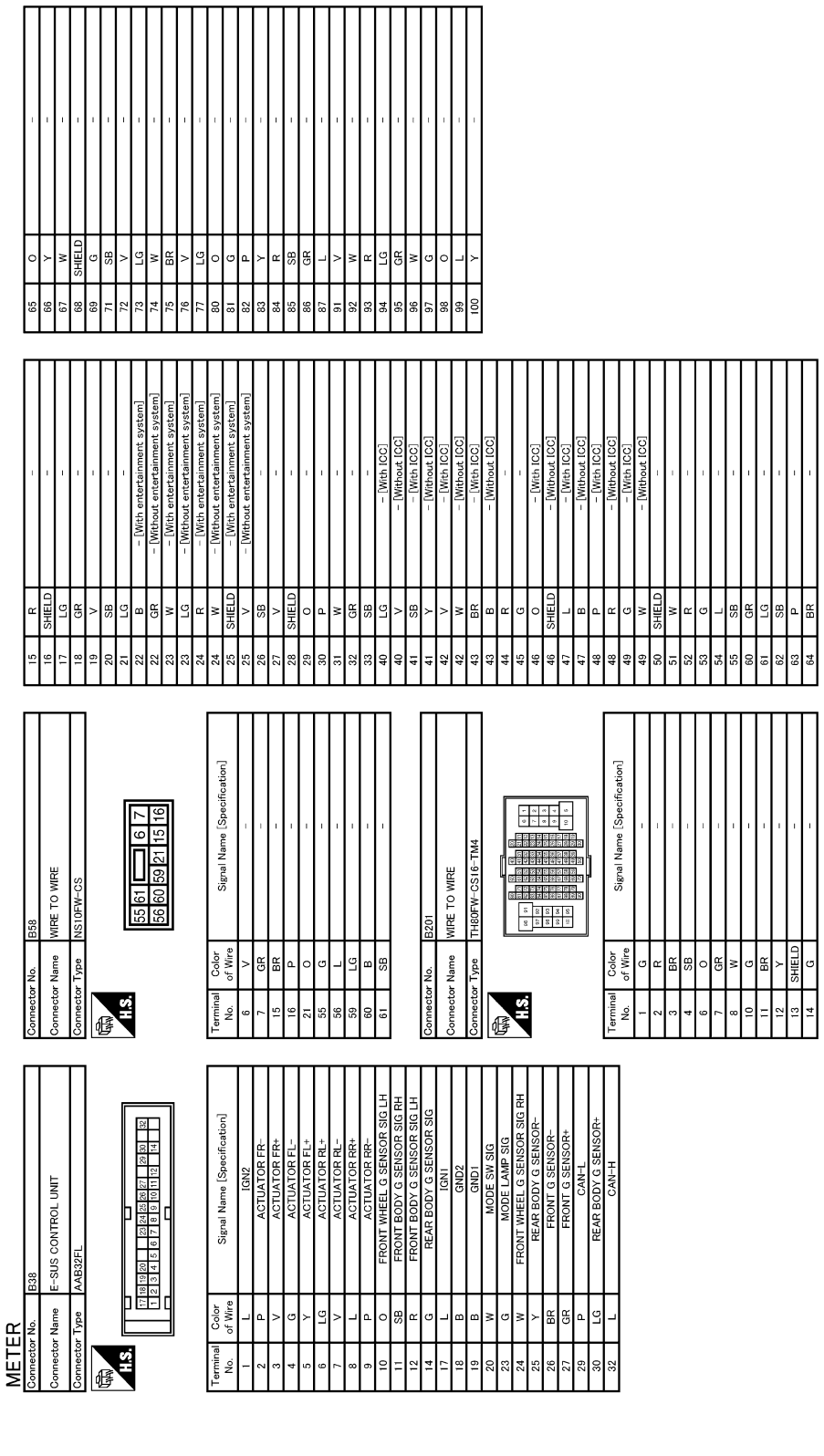

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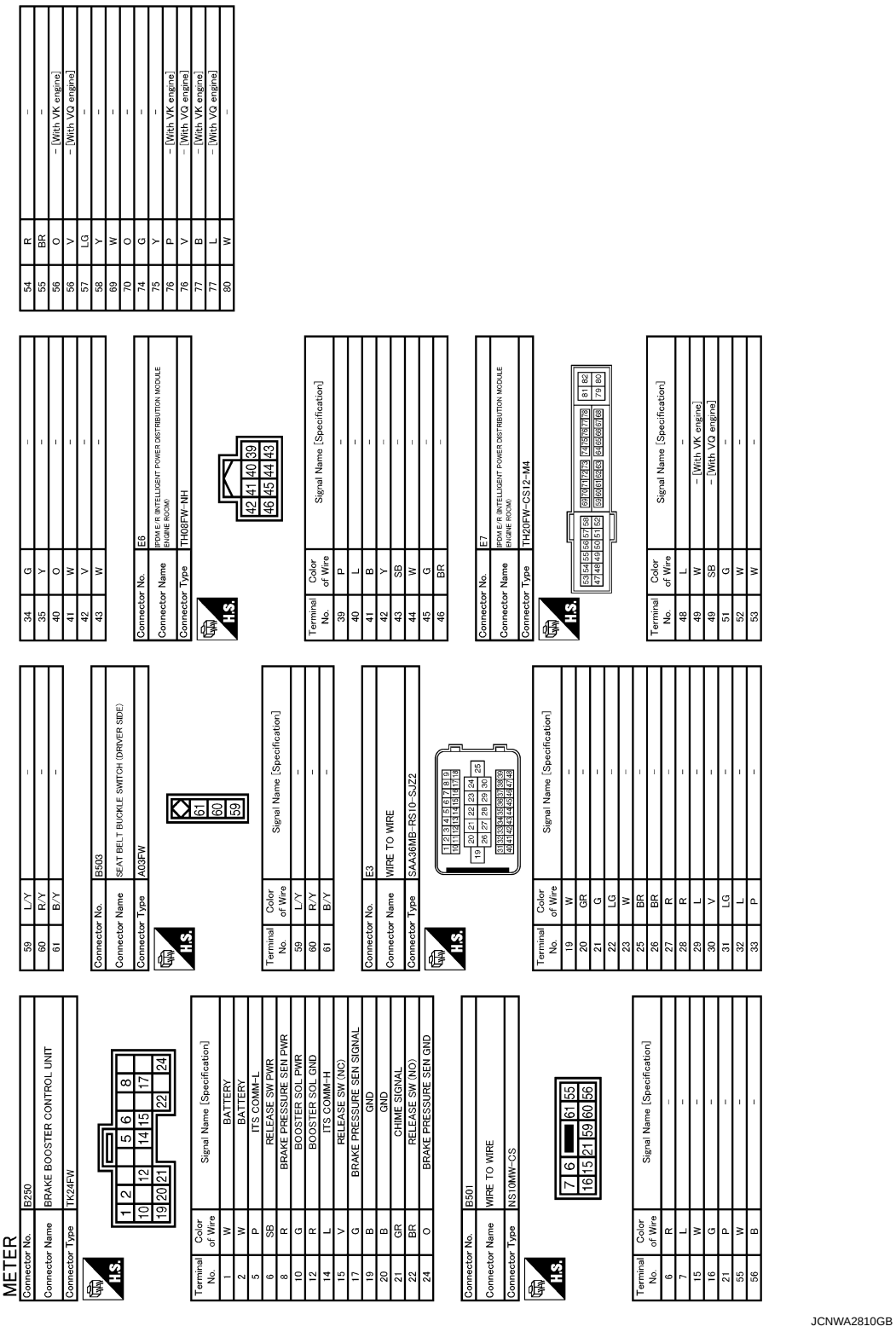

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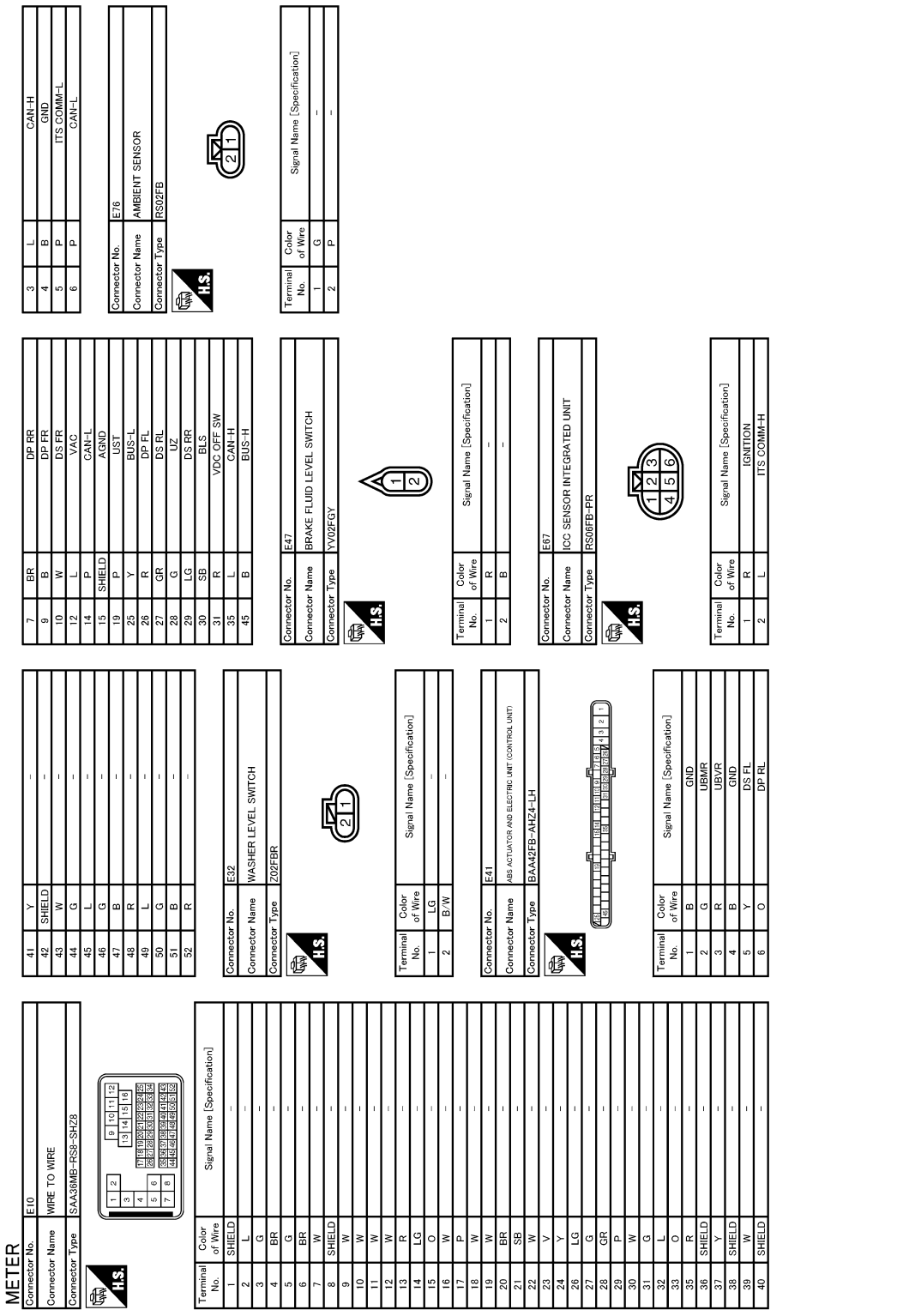


JCNWA2811GB

METER

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	O	–
3	SB	–
4	LG	–
5	Y	–
6	W	–
7	G	–
8	V	–
9	R	–
10	BR	–
11	B	–
12	G	–
13	R	–
14	W	–
15	SHIELD	–
16	SB	–
17	L	–
18	P	–
19	G	–
20	W	– [With ICC]
20	Y	– [Without ICC]
21	BR	–
22	R	– [With ICC]
22	V	– [Without ICC]
23	G	–
24	L	– [With ICC]
24	P	– [Without ICC]
25	Y	– [With ICC]
25	L	– [Without ICC]
26	SHIELD	–
28	G	–
29	LG	–
30	O	–
31	BR	–
32	W	–
33	Y	–
34	O	–
35	SB	–
36	P	–
37	Y	–
38	GR	–
39	LG	–
41	LG	–
42	V	–
43	R	–
44	G	–
45	GR	–
46	W	–
47	L	–
48	P	–
49	SB	–
50	BR	–
51	B	–
52	Y	–
53	O	–
54	R	–
55	SB	–
56	P	–
59	P	–
60	SB	–
61	V	–
62	P	–
63	LG	–
64	L	–
65	O	–
66	L	–
69	L	–
70	SHIELD	–
71	G	–
72	G	–
73	R	–
74	BR	–
76	L	–
77	W	–
78	Y	–
80	SB	–
81	L	–
82	W	–
83	LG	–
84	GR	–
85	G	–
86	P	–
87	W	–
88	O	–
89	LG	–
90	BR	–
91	GR	–
92	BR	–
93	SB	–
94	W	–
95	Y	–
96	W	–
100	Y	–

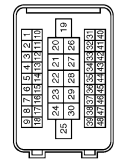
Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–

Connector No.	E115
Connector Name	ACCELERATOR PEDAL ACTUATOR
Connector Type	KDZ06FB

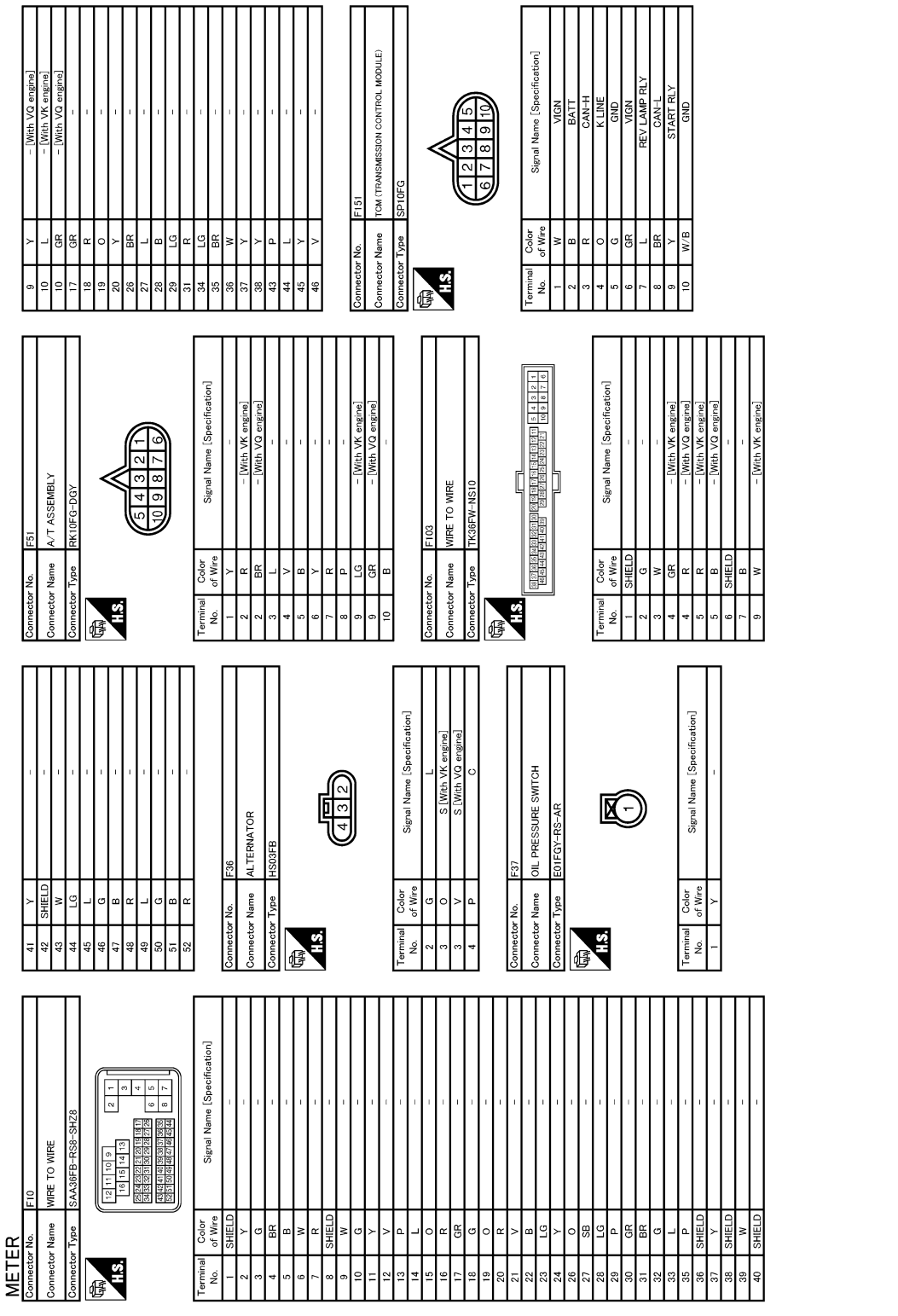
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	IGNITION
2	O	BATTERY
3	P	ITS COMM-L
4	B	GND
5	L	ITS COMM-H

Connector No.	F1
Connector Name	WIRE TO WIRE
Connector Type	SAA36FB-RS10-SJ22



Terminal No.	Color of Wire	Signal Name [Specification]
19	W	–
20	GR	–
21	P	–
22	G	–
23	W	–
25	P	–
26	BR	–
27	R	–
28	R	–
29	L	–
30	Y	–
31	V	–
32	LG	–
33	GR	–
34	G	–
35	Y	–
40	O	–
41	SB	–
42	P	–
43	BR	–

JCNWA2812GB



JCNWA2813GB

METER

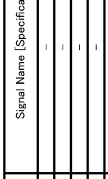
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1A	O	–
2A	G	–
3A	L	–
4A	P	–
5A	V	–
6A	Y	–
7A	R	–
8A	L	–

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS

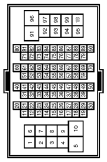
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6C	P	–
7C	B	–
9C	O	–
10C	L	–
11C	LG	–
12C	R	–

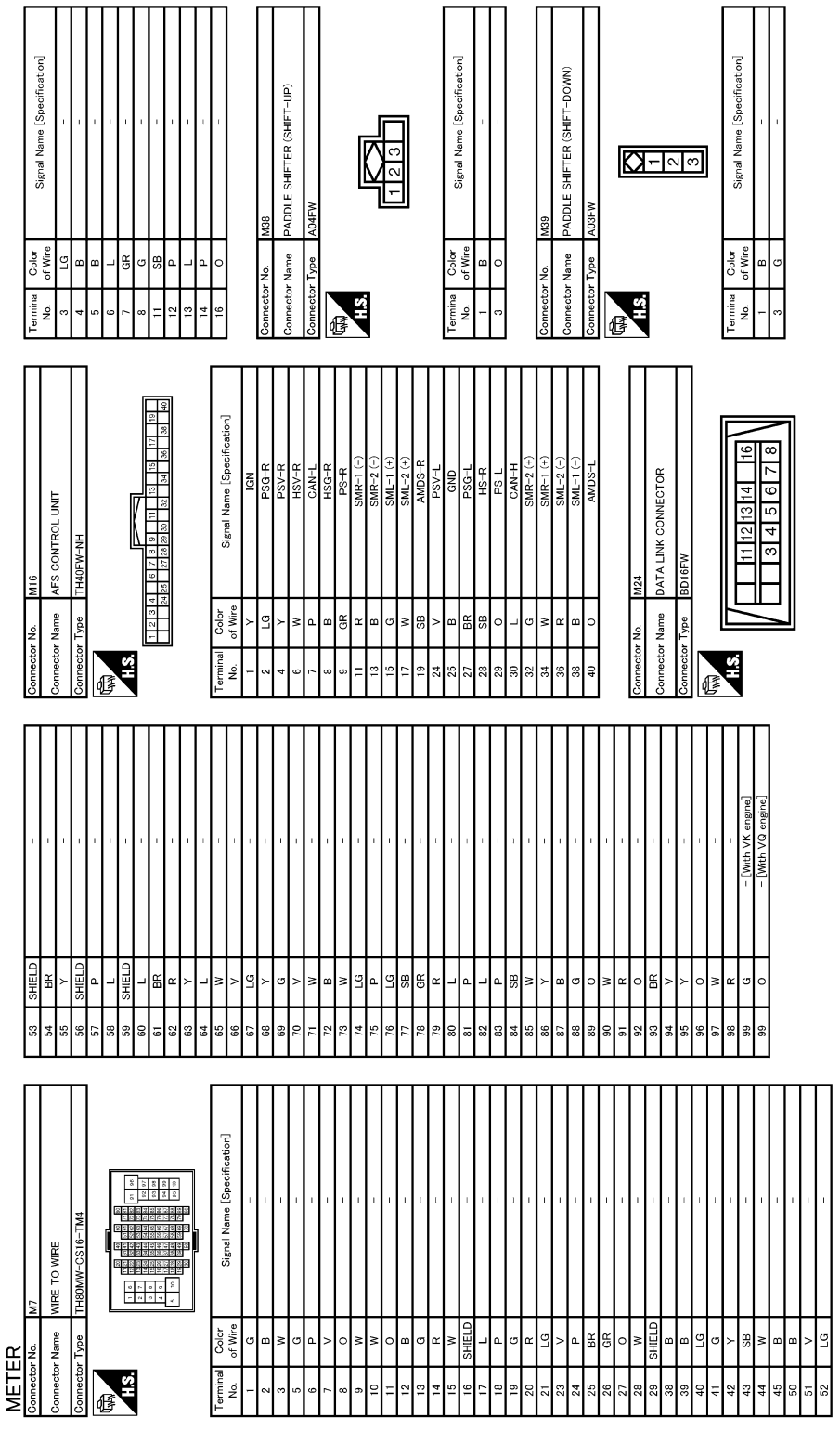
Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

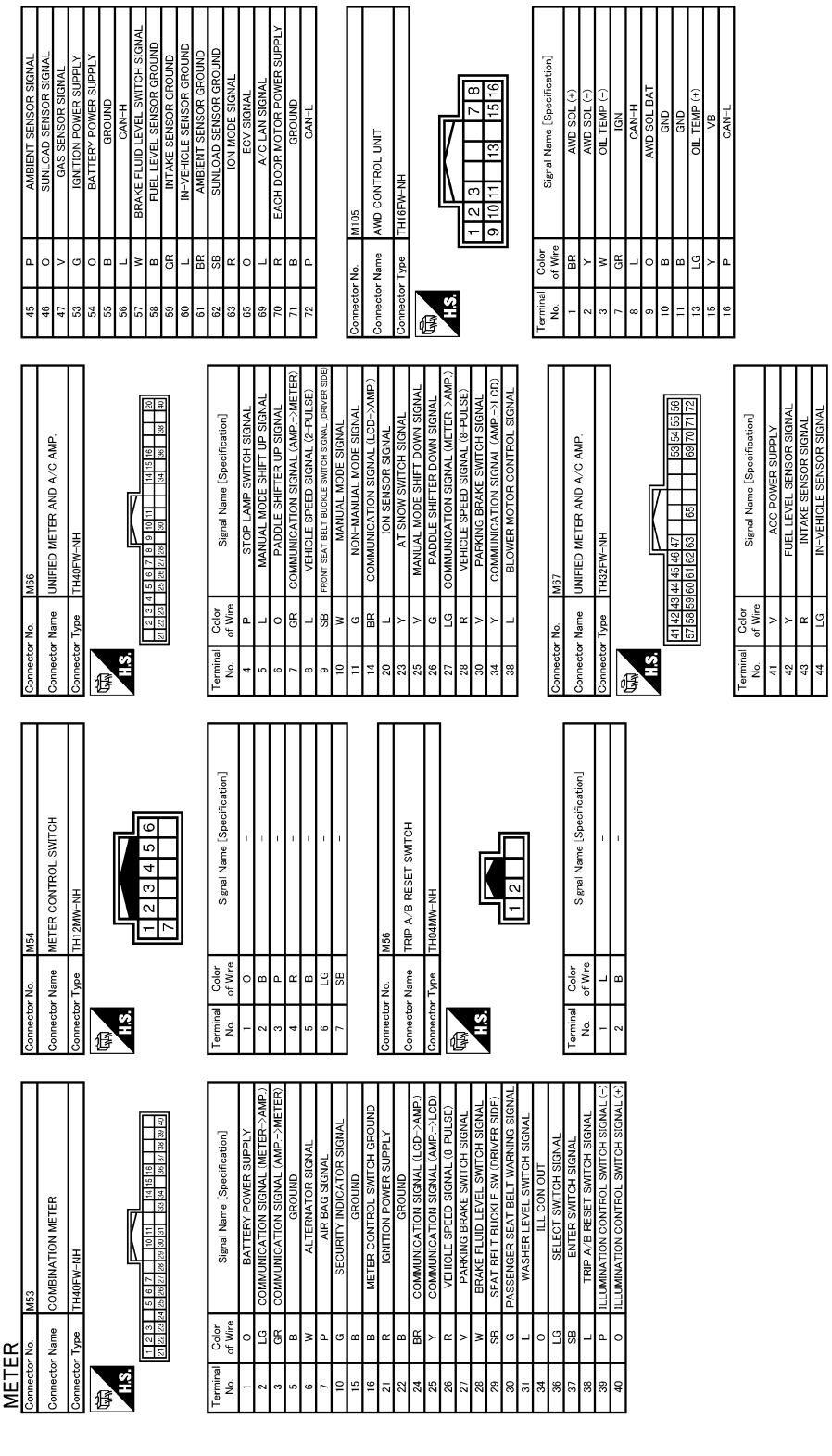


Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	O	–
3	SB	–
4	LG	–
5	GR	–
6	W	–
7	G	–
8	W	–
9	P	–
10	BR	–
11	B	–
12	G	–
13	R	–
14	W	–
15	SHIELD	–
16	BR	–
17	L	–
18	P	–
19	G	–
20	W	– [With ICC]
20	GR	– [Without ICC]
21	BR	– [With ICC]
21	R	– [Without ICC]
22	R	– [With ICC]
22	L	– [Without ICC]
23	G	–
24	L	– [With ICC]
24	P	– [Without ICC]
25	Y	– [With ICC]
25	W	– [Without ICC]
26	SHIELD	–
28	GR	–
29	V	–
30	O	–
31	BR	–
32	W	–
33	Y	–
34	L	–
35	L	–
36	P	–
37	G	–
38	R	–
39	G	–
41	L	–
42	W	–
43	R	–
44	LG	–
45	GR	–
46	W	–
47	L	–
48	P	–
49	O	–
50	LG	–
51	SB	–
52	Y	–
53	O	–
54	BR	–
55	SB	–
56	P	–
59	SB	–
60	SB	–
61	V	–
62	P	–
63	R	–
64	L	–
65	O	–
66	L	–
69	V	–
70	SHIELD	–
71	O	–
72	GR	–
73	W	–
74	SB	–
76	V	–
77	V	–
78	Y	–
80	O	–
81	L	–
82	W	–
83	Y	–
84	L	–
85	P	–
86	BR	–
87	P	–
88	V	–
89	G	–
90	P	–
91	R	–
92	R	–
93	GR	–
94	L	–
95	G	–
96	W	–
100	Y	–

JCNWA2814GB



JCNWA2815GB



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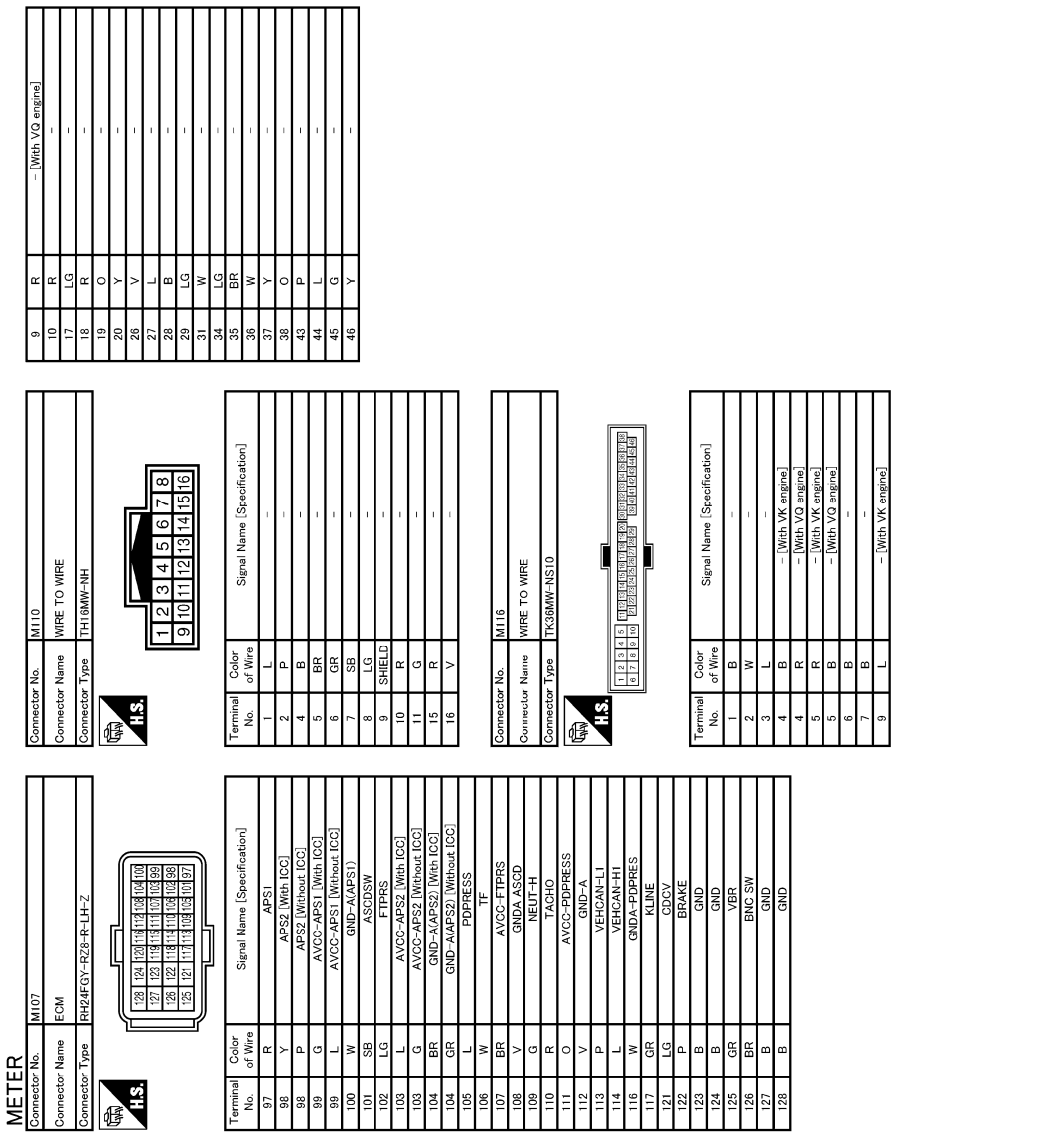

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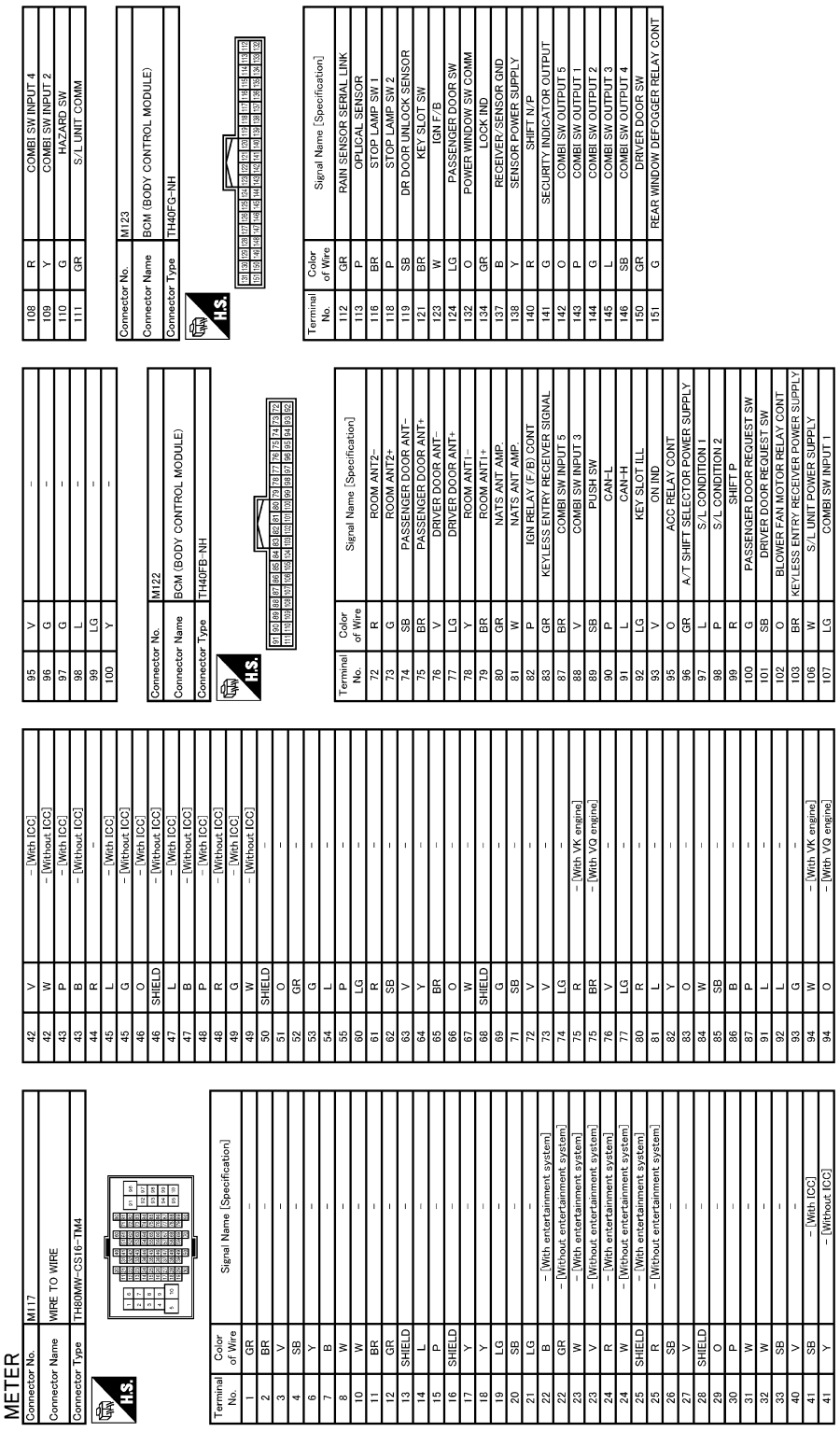

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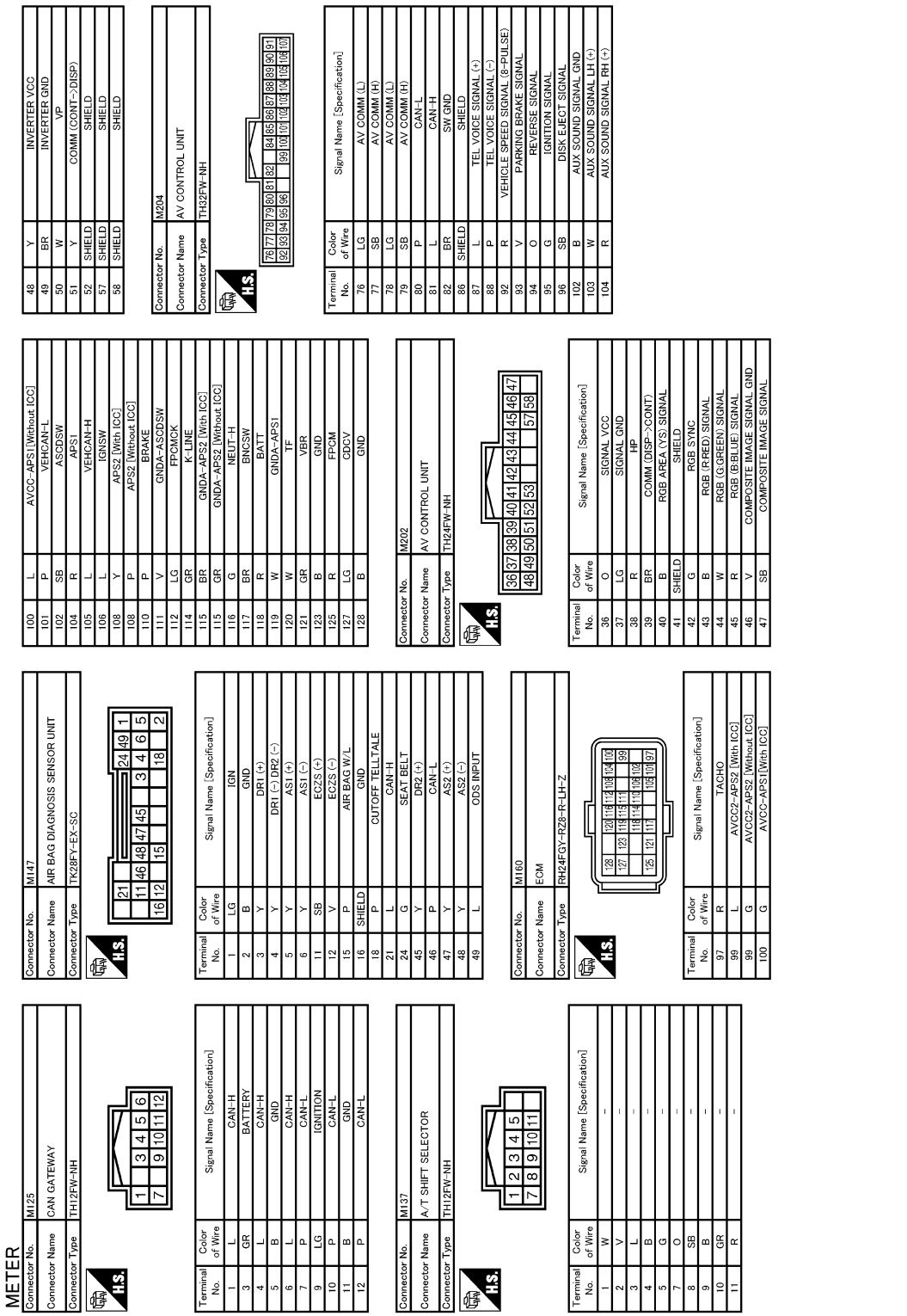

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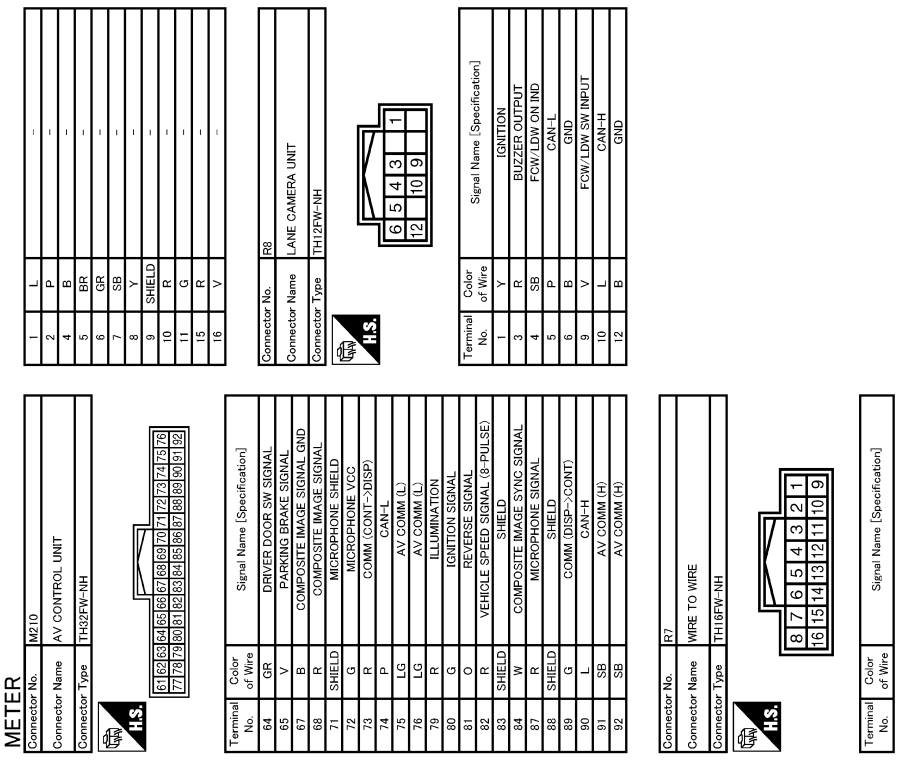


JCNWA2820GB

Fail-Safe

INFOID:0000000005524761

FAIL-SAFE

The unified meter and A/C amp. activates the fail-safe control if CAN communication with each unit is malfunctioning.

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Fuel gauge		
Engine coolant temperature gauge		
Illumination control		When suspending communication, change to nighttime mode.
Information display		The display turns off by suspending communication.
Buzzer		The buzzer turns off by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	The lamp turns on by suspending communication.
	VDC OFF indicator lamp	
	SLIP indicator lamp	
	Brake warning lamp	
	CRUISE warning lamp	
	IBA OFF indicator lamp	
	AWD warning lamp	
	Low tire pressure warning lamp	
	RAS warning lamp	
	Master warning lamp	
	Malfunction indicator lamp	
	AFS OFF indicator lamp	The lamp blinking caused by communication malfunction
	High beam indicator	The lamp turns off by suspending communication.
	Turn signal indicator lamp	
	Tail lamp indicator lamp	
	Oil pressure warning lamp	
	A/T CHECK warning lamp	
	Key warning lamp	
	Lane departure warning lamp	
	LDP ON indicator lamp	
	Sports mode indicator lamp	

DTC Index

INFOID:0000000005524762

Display contents of CONSULT-III	Time	Diagnostic item is detected when ...	Refer to
CAN COMM CIRCUIT [U1000]	CRNT, 1 - 39	When unified meter and A/C amp. is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-49
CONTROL UNIT (CAN) [U1010]	CRNT, 1 - 39	When detecting error during the initial diagnosis of CAN controller of unified meter and A/C amp.	MWI-50
COMM ERROR 1 [B2201]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	MWI-51
COMM ERROR 2 [B2202]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	MWI-53
VEHICLE SPEED [B2205]	CRNT, 1 - 39	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-55

Display contents of CONSULT-III	Time	Diagnostic item is detected when ...	Refer to
ENGINE SPEED [B2267]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-56
WATER TEMP [B2268]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-57

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000005619282

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	**NOTE:** The item is indicated, but not monitored.	Off

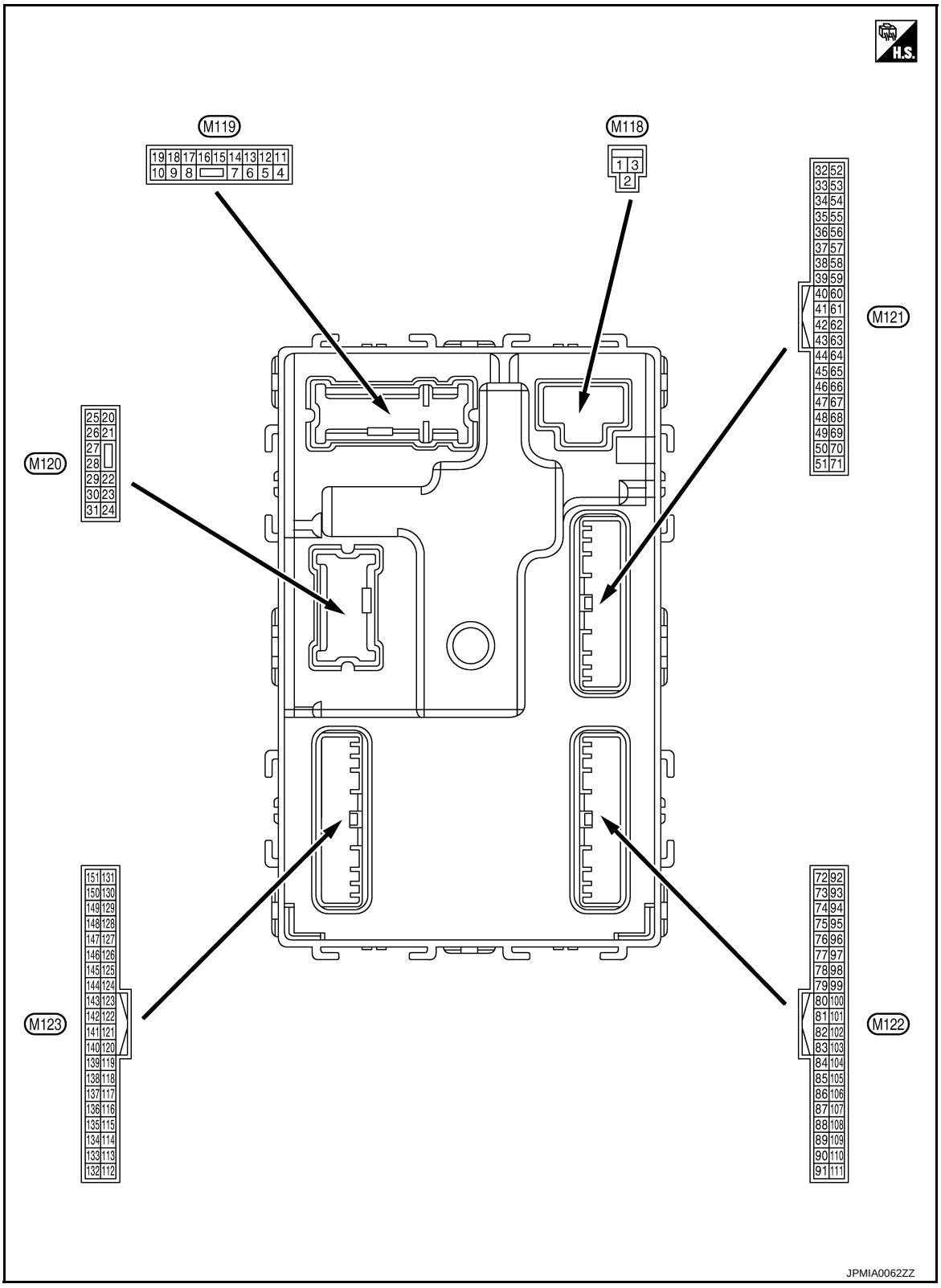
Monitor Item	Condition	Value/Status
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	**NOTE:** The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW	**NOTE:** The item is indicated, but not monitored.	Off
TR CANCEL SW	**NOTE:** The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	**NOTE:** The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
	LOCK button of the Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD	**NOTE:** The item is indicated, but not monitored.	Off
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V

Monitor Item	Condition	Value/Status
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -RL	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
CLUCH SW	**NOTE:** The item is indicated, but not monitored.	Off
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
	The brake pedal is depressed	On
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	Steering is unlocked	Off
	Steering is locked	On
S/L -UNLOCK	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On

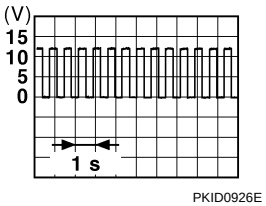
Monitor Item	Condition	Value/Status
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is unlocked	Off
	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-REQ	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK	On
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Steering is locked	Reset
	Steering is unlocked	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	**NOTE:** The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	**NOTE:** The item is indicated, but not monitored.	—
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done

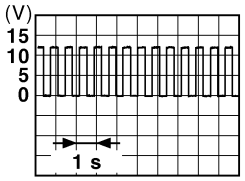
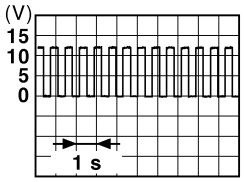
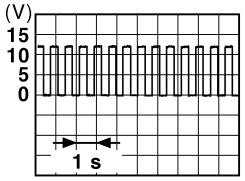
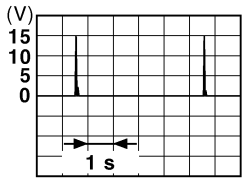
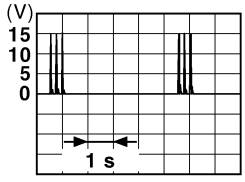
Monitor Item	Condition	Value/Status
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
	The ID of first Intelligent Key is registered to BCM	Done

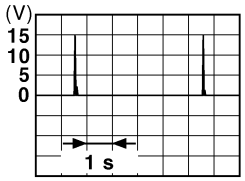
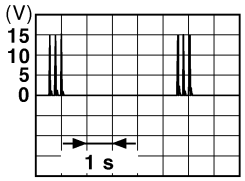
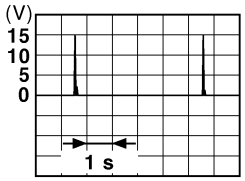
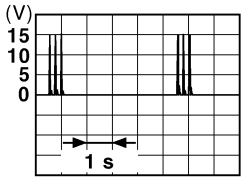
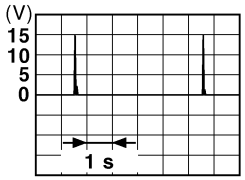
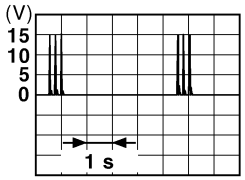
TERMINAL LAYOUT

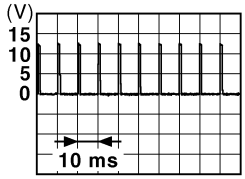
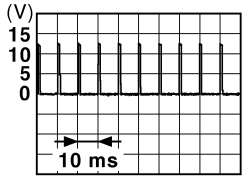
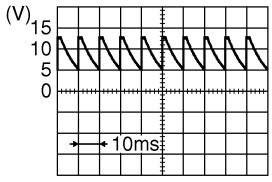
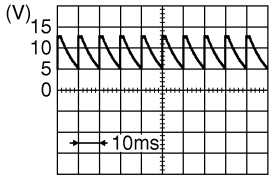


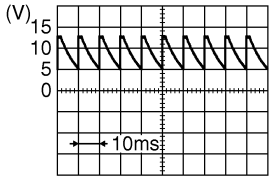
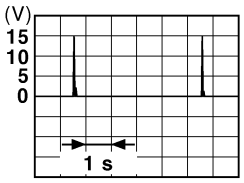
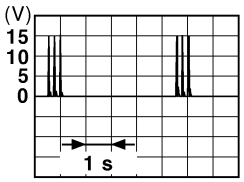
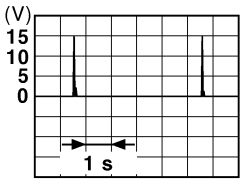
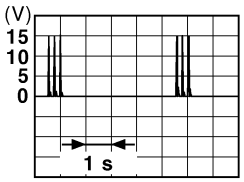
PHYSICAL VALUES

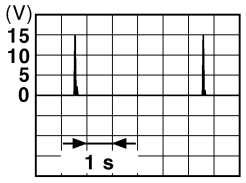
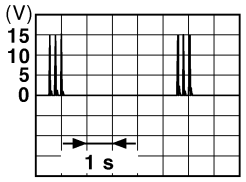
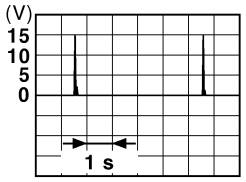
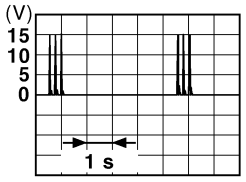
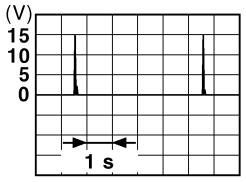
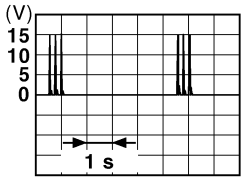
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		12 V
4 (P)	Ground	Interior room lamp power supply (Battery saver signal)	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		12 V
5 (V)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	12 V
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activated)	12 V
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door, fuel lid	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
10 (BR)	Ground	Rear RH door and rear LH door UNLOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ACC or ON	0 V
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V

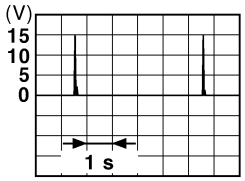
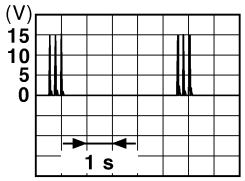
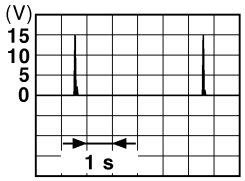
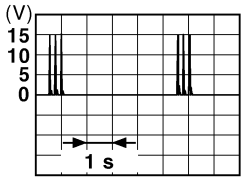
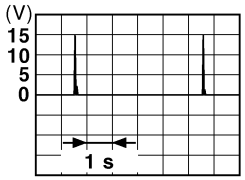
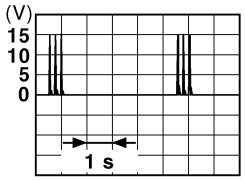
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
18 (O)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (SB)	Ground	Room lamp timer	Output	Other than under condition		5.0 V
				• Interior room lamp timer is activated. (Door is unlocked. etc...) • Welcome light function is activated.		0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
26 (P)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Operated)	12 V
34 (SB)	Ground	Luggage room antenna (–)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

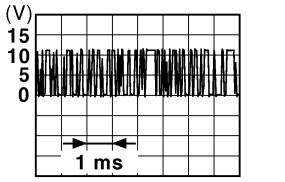
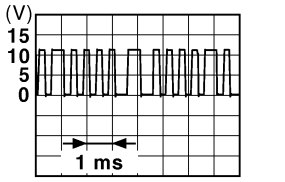
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
35 (V)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (B)	Ground	Back door antenna (–)	Output	When the back door opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
39 (W)	Ground	Back door antenna (+)	Output	When the back door opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	12 V
					ON	0 V

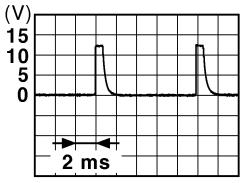
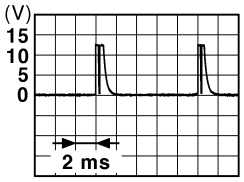
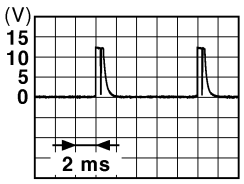
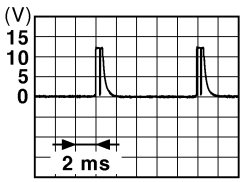
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
48 (W)	Ground	Back door opener switch operation	Output	Back door opener switch	Not pressed	12 V
					Pressed	0 V
52 (LG)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	12 V
					When selector lever is not in P or N position	0 V
61 (W)	Ground	Back door opener request switch	Input	Back door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (L)	Ground	Intelligent Key warning buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	Sounding	0 V
					Not sounding	12 V
65 (O)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	 JPMIA0016GB 1.0 V
					Not in stop position	0 V
66 (LG)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	12 V
					ON (Door open)	0 V
67 (P)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 JPMIA0594GB 8.5 - 9.0 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	 JPMIA0594GB 8.5 - 9.0 V
					ON (Door open)	0 V

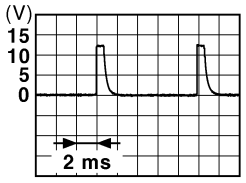
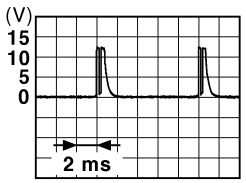
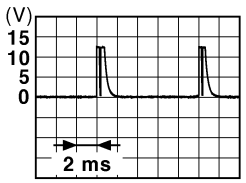
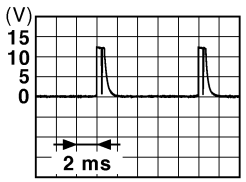
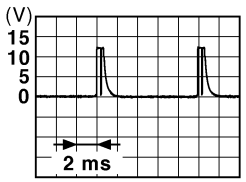
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	 JPMIA0594GB 8.5 - 9.0 V
					ON (Door open)	0 V
72 (R)	Ground	Room antenna 2 (–) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
73 (G)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

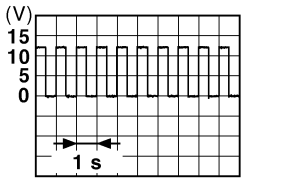
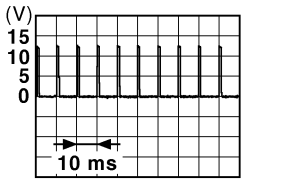
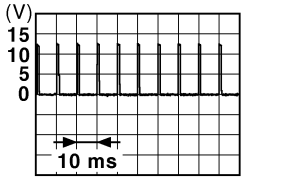
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
74 (SB)	Ground	Passenger door antenna (–)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
75 (BR)	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
76 (V)	Ground	Driver door antenna (–)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

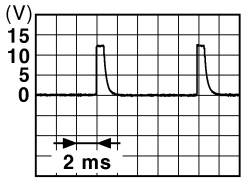
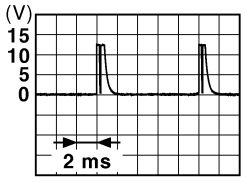
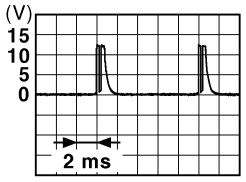
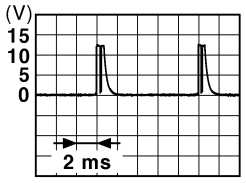
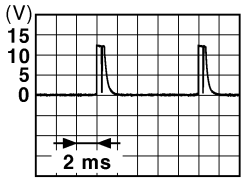
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
77 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
78 (Y)	Ground	Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

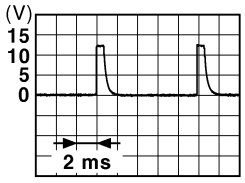
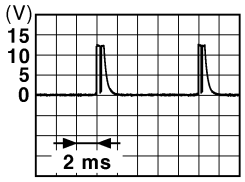
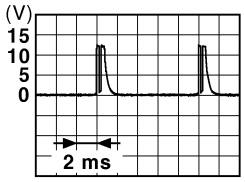
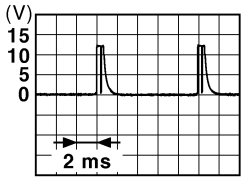
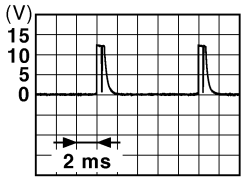
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (P)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
83 (GR)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on the Intelligent Key		 JMKIA0065GB

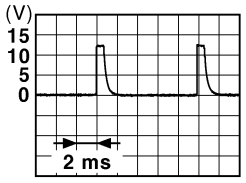
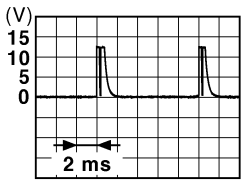
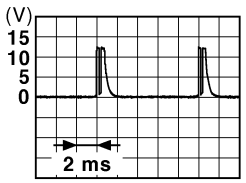
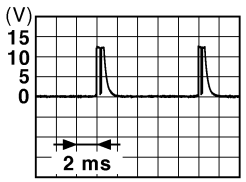
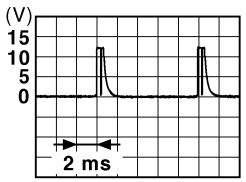
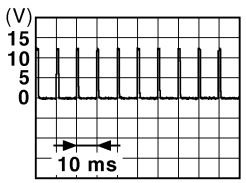
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3 V

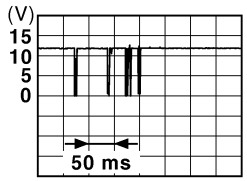
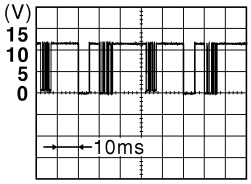
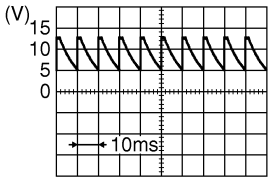
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3 V
89 (SB)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ignition switch (Push switch)	Pressed	0 V
					Not pressed	12 V
90 (P)	Ground	CAN-L	Input/ Output	—		—
91 (L)	Ground	CAN-H	Input/ Output	—		—

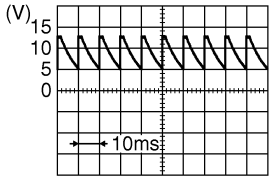
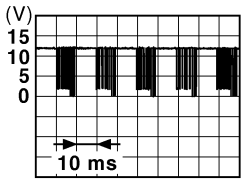
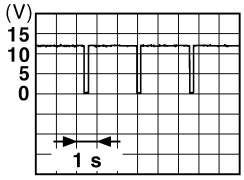
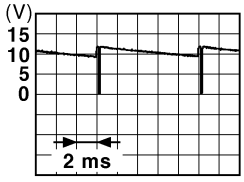
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	12 V
					Blinking	 JPMIA0015GB 6.5 V
					ON	0 V
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON or ACC	0 V
95 (O)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	—		12 V
97 (L)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	12 V
98 (P)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	12 V
					UNLOCK status	0 V
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	12 V
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
102 (O)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
103 (BR)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		12 V

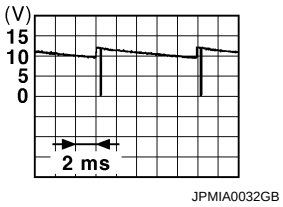
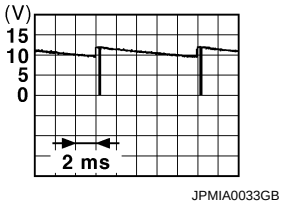
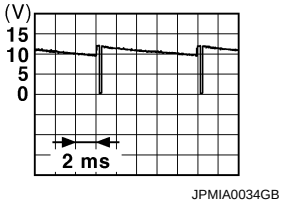
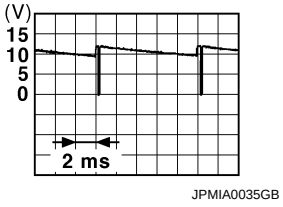
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
106 (W)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	12 V
					ON	0 V
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch RH	 JPMIA0036GB 1.3 V
					Front wiper switch LO	 JPMIA0038GB 1.3 V
					Front washer switch ON	 JPMIA0039GB 1.3 V

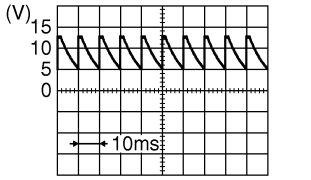
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Rear wiper switch INT (Wiper intermittent dial 4)	 JPMIA0040GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	 JPMIA0039GB 1.3 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Lighting switch PASS	 JPMIA0037GB 1.3 V
					Lighting switch 2ND	 JPMIA0036GB 1.3 V
					Front wiper switch INT/ AUTO	 JPMIA0038GB 1.3 V
					Front wiper switch HI	 JPMIA0040GB 1.3 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	ON	0 V
					OFF	 JPMIA0012GB 1.1 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
111 (GR)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	12 V
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UNLOCK	12 V
					15 seconds or later after UNLOCK	0 V
112 (GR)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		 JPMIA0156GB 8.7 V
113 (P)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
116 (BR)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (P)	Ground	Stop lamp switch 2 (Without ICC)	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is depressed)	Battery voltage
		Stop lamp switch 2 (With ICC)		Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF		0 V
				Stop lamp switch ON (Brake pedal is depressed) or ICC brake hold relay ON		Battery voltage
119 (SB)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 JPMIA0594GB 8.5 - 9.0 V
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (BR)	Ground	Key slot switch	Input	When the Intelligent Key is inserted into key slot		12 V
				When the Intelligent Key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

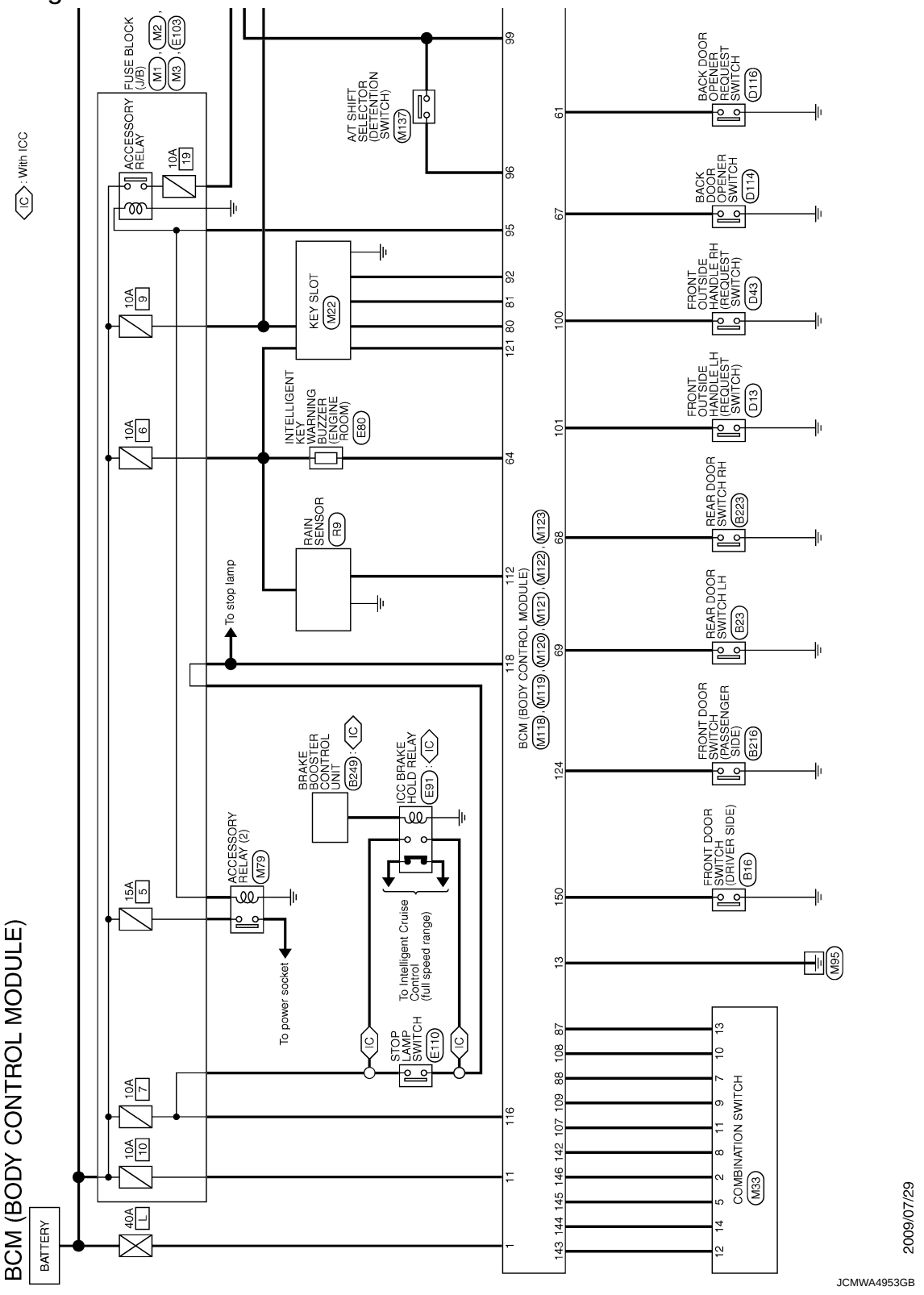
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 JPMIA0594GB 8.5 - 9.0 V
					ON (Door opene)	0 V
132 (O)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2 V
				Ignition switch OFF or ACC		12 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (B)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (Y)	Ground	Sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
140 (R)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	12 V
					Except P and N positions	0 V
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	12 V
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit-tent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB 10.7 V
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	

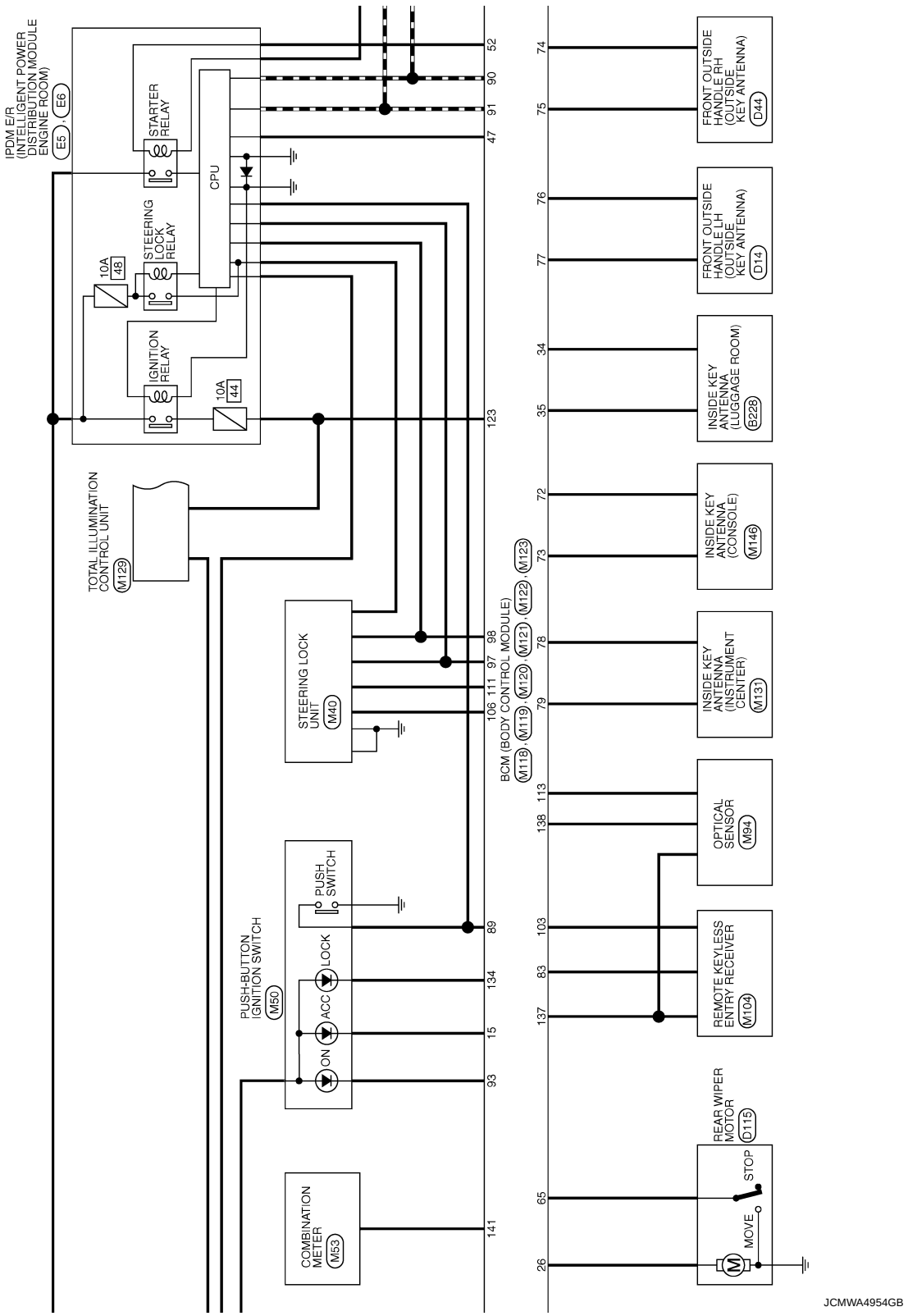
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7 V
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT/ AUTO	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	 JPMIA0035GB 10.7 V
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	

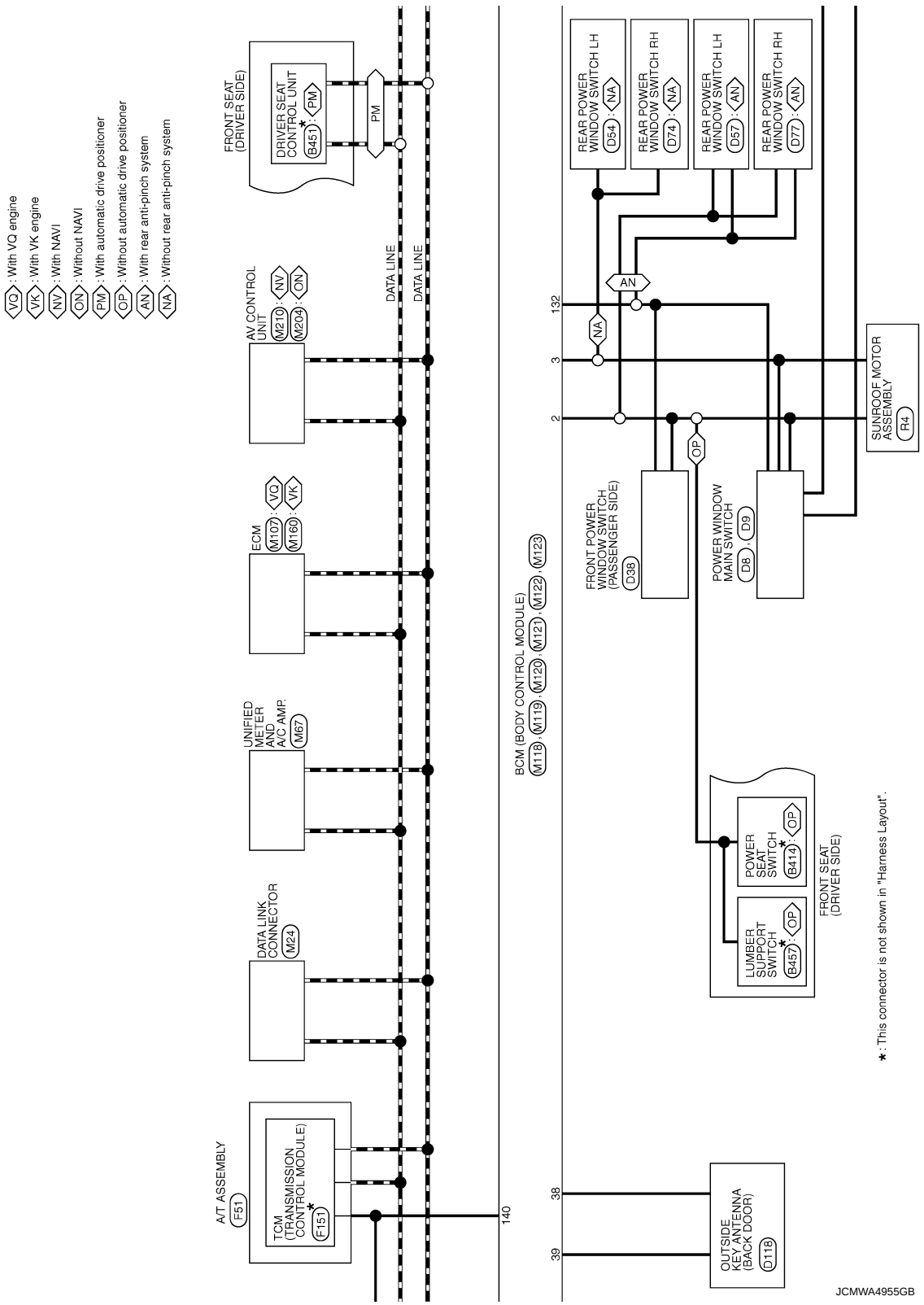
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 JPMIA0594GB 8.5 - 9.0 V
					ON (Door open)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

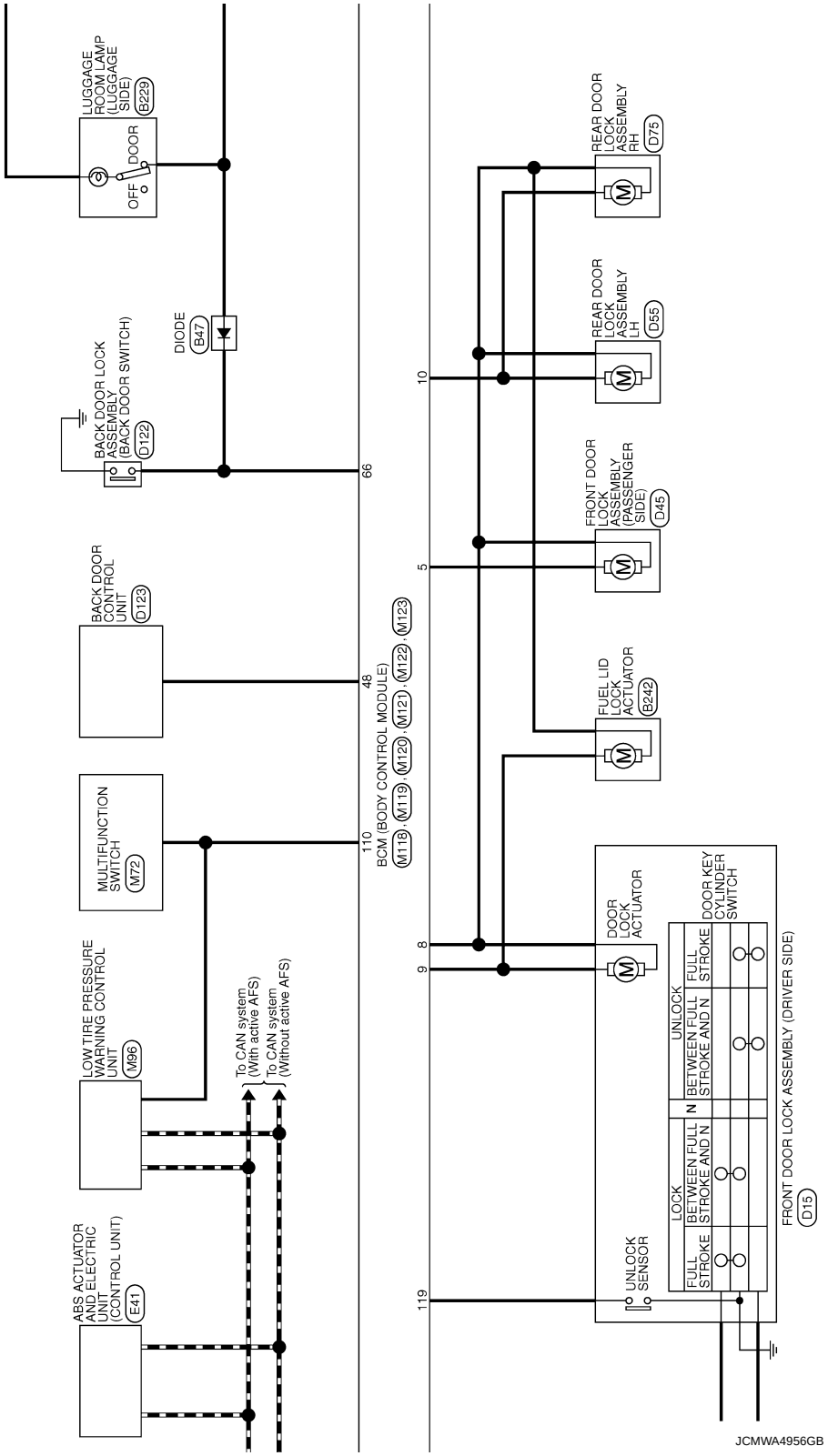
Wiring Diagram - BCM -

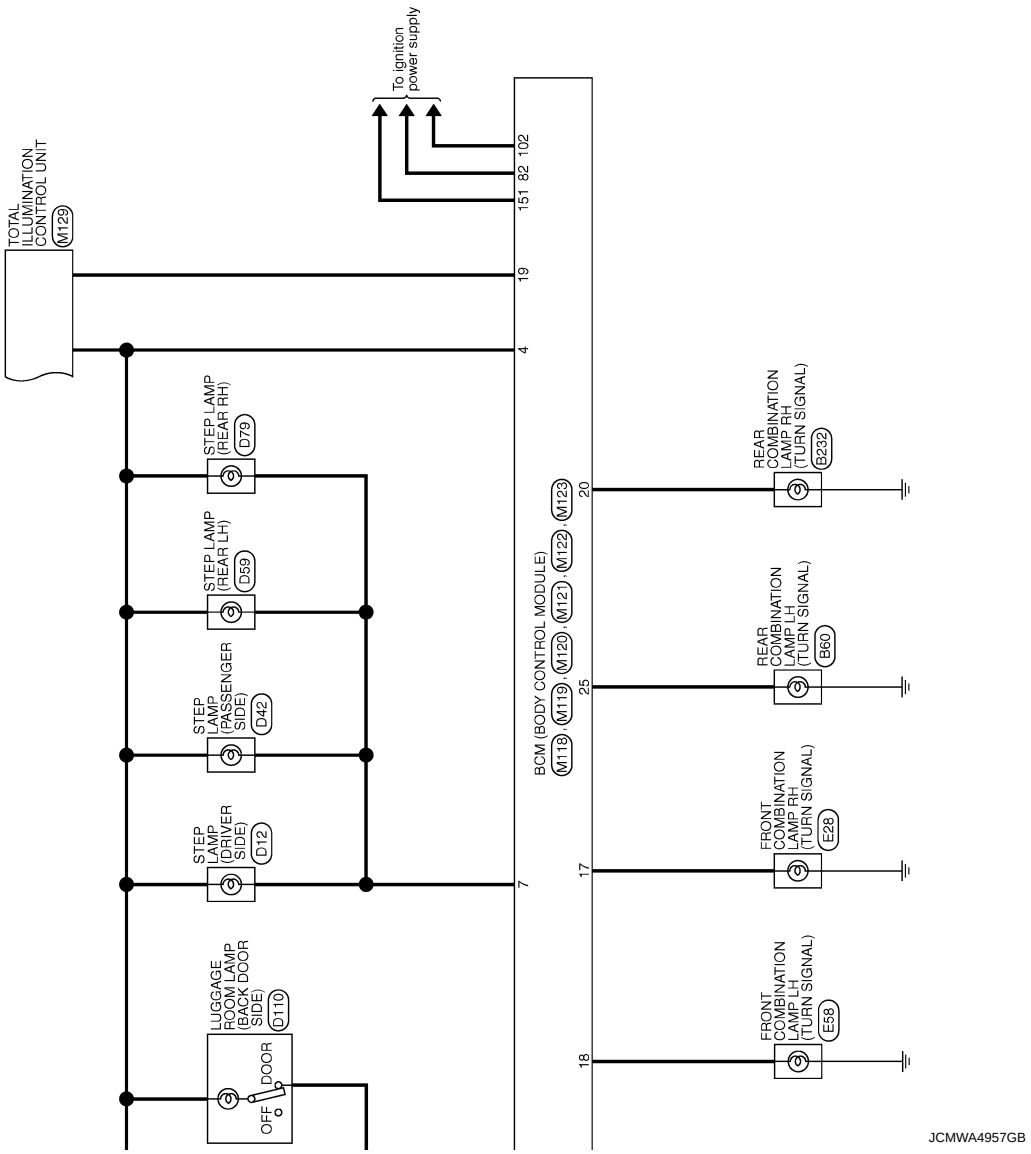
INFOID:0000000005619283




IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5, E6
STARTER RELAY
CPU
STEERING LOCK RELAY
10A 48
IGNITION RELAY
10A 44
TOTAL ILLUMINATION CONTROL UNIT M129
STEERING LOCK UNIT M40
PUSH-BUTTON IGNITION SWITCH M50
PUSH SWITCH
LOCK
ACC
ON
COMBINATION METER M53
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
52 90 91 47 123 98 97 111 106 89 134 15 93 141
74 75 76 77 34 35 72 73 78 79 113 138 103 83 137 65 26
FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA) D44
FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA) D14
INSIDE KEY ANTENNA (LUGGAGE ROOM) B228
INSIDE KEY ANTENNA (CONSOLE) M146
INSIDE KEY ANTENNA (INSTRUMENT CENTER) M131
OPTICAL SENSOR M94
REMOTE KEYLESS ENTRY RECEIVER M104
REAR WIPER MOTOR D115
STOP
MOVE
JCMWA4954GB


VQ : With VQ engine
VK : With VK engine
NV : With NAVI
ON : Without NAVI
PM : With automatic drive positioner
OP : Without automatic drive positioner
AN : With rear anti-pinch system
NA : Without rear anti-pinch system
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT
B451
PM
DATA LINE
DATA LINE
AV CONTROL UNIT
M210 : NV
M204 : ON
ECM
M107 : VQ
M160 : VK
UNIFIED METER AND A/C AMP.
M67
DATA LINK CONNECTOR
M24
A/T ASSEMBLY
F51
TCM (TRANSMISSION CONTROL MODULE)
F151
140
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
132
3
2
38
39
REAR POWER WINDOW SWITCH LH
D54 : NA
REAR POWER WINDOW SWITCH RH
D74 : NA
REAR POWER WINDOW SWITCH LH
D57 : AN
REAR POWER WINDOW SWITCH RH
D77 : AN
AN
NA
OP
FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
D38
POWER WINDOW MAIN SWITCH
D8, D9
SUNROOF MOTOR ASSEMBLY
R4
FRONT SEAT (DRIVER SIDE)
LUMBER SUPPORT SWITCH
B457 : OP
POWER SEAT SWITCH
B414 : OP
OUTSIDE KEY ANTENNA (BACK DOOR)
D118
*: This connector is not shown in "Harness Layout".
JCMWA4955GB


LUGGAGE ROOM LAMP (LUGGAGE SIDE) B229
DOOR
OFF
DIODE B47
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH) D122
BACK DOOR CONTROL UNIT D123
MULTIFUNCTION SWITCH M72
LOW TIRE PRESSURE WARNING CONTROL UNIT M96
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E41
To CAN system (With active AFS)
To CAN system (Without active AFS)
66
48
110
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
10
5
8
9
119
REAR DOOR LOCK ASSEMBLY RH D75
REAR DOOR LOCK ASSEMBLY LH D55
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) D45
FUEL LID LOCK ACTUATOR B242
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) D15
JCMWA4956GB


To ignition power supply
TOTAL ILLUMINATION CONTROL UNIT (M129)
STEP LAMP (REAR RH) (D79)
STEP LAMP (REAR LH) (D59)
STEP LAMP (PASSENGER SIDE) (D42)
STEP LAMP (DRIVER SIDE) (D12)
LUGGAGE ROOM LAMP (BACK DOOR SIDE) (D110)
DOOR
OFF
BCM (BODY CONTROL MODULE) (M118) (M119) (M120) (M121) (M122) (M123)
151 82 102
19
4
7
20
25
17
18
REAR COMBINATION LAMP RH (TURN SIGNAL) (B232)
REAR COMBINATION LAMP LH (TURN SIGNAL) (B60)
FRONT COMBINATION LAMP RH (TURN SIGNAL) (E28)
FRONT COMBINATION LAMP LH (TURN SIGNAL) (E58)
JCMWA4957GB

BCM (BODY CONTROL MODULE)

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH

H.S.

1	2	3		4	5	6
7	8	9	10	11	12	13	14

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	FR WASHER (–)
2	SB	OUTPUT 4
3	O	FR WASHER (+)
4	G	IGN
5	L	OUTPUT 3
6	B	GND
7	V	INPUT 3
8	O	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

1	3
2	

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	Y	POWER WINDOW POWER SUPPLY (BAT)
3	O	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

H.S.

4	5	6	7		8	9	10
11	12	13	14	15	16	17	18	19

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INT ROOM LAMP PWR SUPPLY (BAT SAVE)
5	V	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP OUTPUT
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	O	TURN SIGNAL LH (FRONT)
19	SB	ROOM LAMP TIMER

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS

H.S.

20	21		22	23	24
25	26	27	28	29	30	31

Terminal No.	Color of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
25	G	TURN SIGNAL LH (REAR)
26	P	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH

H.S.

51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52

Terminal No.	Color of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANT–
35	V	LUGGAGE ROOM ANT+
38	B	BACK DOOR ANT–
39	W	BACK DOOR ANT+
47	Y	IGN RELAY (IPDM E/R) CONT
48	W	BK DOOR OPENER SW OPERATION
52	LG	STARTER RELAY CONT
61	W	BACK DOOR OPENER REQUEST SW
64	L	I-KEY WARN BUZZER (ENG ROOM)
65	O	REAR WIPER STOP POSITION
66	LG	BACK DOOR SW
67	P	BACK DOOR OPENER SW
68	BR	REAR RH DOOR SW
69	R	REAR LH DOOR SW

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

H.S.

91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72
111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92

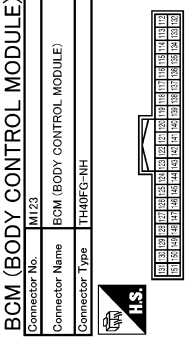
Terminal No.	Color of Wire	Signal Name [Specification]
72	R	ROOM ANT2–
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT–
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1–
79	BR	ROOM ANT1+

Terminal No.	Color of Wire	Signal Name [Specification]
80	GR	NATS ANT AMP.
81	W	NATS ANT AMP.
82	P	IGN RELAY (F/B) CONT
83	GR	KEYLESS ENTRY RECEIVER SIGNAL
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	SB	PUSH SW
90	P	CAN–L
91	L	CAN–H
92	LG	KEY SLOT ILL
93	V	ON IND
95	O	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	P	S/L CONDITION 2
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	O	BLOWER FAN MOTOR RELAY CONT
103	BR	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	W	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	GR	S/L UNIT COMM

JCMWA4958GB

BCM (BODY CONTROL MODULE)

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color of Wire	Signal Name [Specification]
112	GR	RAIN SENSOR SERIAL LINK
113	P	OPLICAL SENSOR
116	BR	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	O	POWER WINDOW SW COMM
134	GR	LOCK IND
137	B	RECEIVER/SENSOR GND
138	Y	SENSOR POWER SUPPLY
140	R	SHIFT N/P
141	G	SECURITY INDICATOR OUTPUT
142	O	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

JCMWA4959GB

Fail-safe

INFOID:0000000005619284

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B2609: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When the following steering lock conditions agree • BCM steering lock control status • Steering lock condition No. 1 signal status • Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When any of the following conditions are fulfilled • Steering lock unit status signal (CAN) is received normally • The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled • Steering condition No. 1 signal: LOCK (0 V) • Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:
If rain sensor malfunction is detected when ignition switch is turned OFF ⇒ ON and front wiper switch is INT position, BCM operates a fail-safe control.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.
When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation
1. More than 1 minute is passed after the rear wiper stops.

2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:0000000005619285

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	B2562: LOW VOLTAGE
2	• U1000: CAN COMM • U1010: CONTROL UNIT(CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • U0415: VEHICLE SPEED SIG
5	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA
6	B26E7: TPMS CAN COMM

DTC Index

INFOID:0000000005619286

NOTE:
The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to BCS-17, "COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Reference page
No DTC is detected. Further testing may be required.	—	—	—	—
U1000: CAN COMM	—	—	—	BCS-35
U1010: CONTROL UNIT(CAN)	—	—	—	BCS-36
U0415: VEHICLE SPEED SIG	—	—	—	BCS-37
B2013: ID DISCORD BCM-S/L	×	×	—	SEC-50
B2014: CHAIN OF S/L-BCM	×	×	—	SEC-51
B2190: NATS ANTENNA AMP	×	—	—	SEC-42
B2191: DIFFERENCE OF KEY	×	—	—	SEC-45
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-46
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-48
B2195: ANTI SCANNING	×	—	—	SEC-49
B2553: IGNITION RELAY	—	×	—	PCS-50
B2555: STOP LAMP	—	×	—	SEC-54
B2556: PUSH-BTN IGN SW	—	×	×	SEC-56
B2557: VEHICLE SPEED	×	×	×	SEC-58
B2560: STARTER CONT RELAY	×	×	×	SEC-59
B2562: LOW VOLTAGE	—	×	—	BCS-38
B2601: SHIFT POSITION	×	×	×	SEC-60
B2602: SHIFT POSITION	×	×	×	SEC-63
B2603: SHIFT POSI STATUS	×	×	×	SEC-65
B2604: PNP SW	×	×	×	SEC-68
B2605: PNP SW	×	×	×	SEC-70
B2606: S/L RELAY	×	×	×	SEC-72
B2607: S/L RELAY	×	×	×	SEC-73
B2608: STARTER RELAY	×	×	×	SEC-75
B2609: S/L STATUS	×	×	×	SEC-77
B260A: IGNITION RELAY	×	×	×	PCS-52
B260B: STEERING LOCK UNIT	—	×	×	SEC-81
B260C: STEERING LOCK UNIT	—	×	×	SEC-82
B260D: STEERING LOCK UNIT	—	×	×	SEC-83
B260F: ENG STATE SIG LOST	×	×	×	SEC-84
B2612: S/L STATUS	×	×	×	SEC-88
B2614: ACC RELAY CIRC	—	×	×	PCS-54
B2615: BLOWER RELAY CIRC	—	×	×	PCS-56
B2616: IGN RELAY CIRC	—	×	×	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	SEC-92
B2618: BCM	×	×	×	PCS-60
B2619: BCM	×	×	×	SEC-94
B261A: PUSH-BTN IGN SW	—	×	×	SEC-95
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	SEC-98

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Reference page
B2621: INSIDE ANTENNA	—	×	—	DLK-61
B2622: INSIDE ANTENNA	—	×	—	DLK-63
B2623: INSIDE ANTENNA	—	×	—	DLK-65
B26E7: TPMS CAN COMM	—	—	—	BCS-39
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	SEC-86
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	SEC-87

SYMPTOM DIAGNOSIS

THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

Description

INFOID:0000000005524742

- The parking brake warning buzzer sounds continuously during vehicle travel though the parking brake is released
- The parking brake warning buzzer does not sound at all even though driving the vehicle with the parking brake applied.

Diagnosis Procedure

INFOID:0000000005524743

1.CHECK PARKING BRAKE WARNING LAMP

1. Start the engine.
2. Check the operation of the brake warning lamp by operating the parking brake.

Parking brake applied	: ON
Parking brake released	: OFF

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Perform a check for the parking brake switch signal circuit. Refer to BRC-99, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair harness or connector.

3.CHECK PARKING BRAKE SWITCH UNIT

Perform a unit check for the parking brake switch. Refer to BRC-99, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> Replace the parking brake switch. Refer to PB-5, "Exploded View".

THE LIGHT REMINDER WARNING DOES NOT SOUND

Description

INFOID:0000000005524744

Light reminder warning chime does not sound even though headlamp is illuminated.

Diagnosis Procedure

INFOID:0000000005524745

1.CHECK COMBINATION SWITCH (LIGHT SWITCH) OPERATION

Check that the tail lamps operate normally by operating the combination switch (light switch).

Do they operate normally?

YES >> GO TO 2.
NO >> Refer to EXL-214, "Symptom Table".

2.CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL CIRCUIT

Perform the check for the front door switch (driver side) signal circuit. Refer to DLK-69, "Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-84, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

Description

INFOID:0000000005524746

- Seat belt warning does not sound even though driver seat belt is not fastened.
- Seat belt warning sounds even though driver seat belt is fastened.

Diagnosis Procedure

INFOID:0000000005524747

1.CHECK SEAT BELT WARNING LAMP

1. Turn ignition switch ON.
2. Check the operation of the seat belt warning lamp in the combination meter.

Seat belt fastened	: OFF
Seat belt not fastened	: ON

Is the inspection result normal?

YES >> GO TO 2.
NO >> GO TO 4.

2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

Check the buckle switch input signal with the “Data Monitor”. Refer to WCS-24, "Component Function Check".

Is the inspection result normal?

YES >> Replace the unified meter and A/C amp.
NO >> GO TO 3.

3.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

Perform the check for the seat belt buckle switch circuit. Refer to WCS-24, "Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace the unified meter and A/C amp.
NO >> Repair harness or connector.

4.CHECK SEAT BELT BUCKLE SWITCH UNIT

Perform a unit check for the seat belt buckle switch. Refer to WCS-25, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> Replace the seat belt buckle. Refer to SB-8, "SEAT BELT BUCKLE : Removal and Installation".

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:0000000005524748

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the “SRS AIR BAG”.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.**