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SECTION

WIPER, WASHER & HORN

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PRECAUTION

PRECAUTION

PFP:00011

Precautions for Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

EKS003LC

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 and SB section 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 section.
- 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.

Wiring Diagrams and Trouble Diagnosis

EKS003GO

When you read wiring diagrams, refer to the following:

- Refer to [GI-12, "How to Read Wiring Diagrams"](#) .
- Refer to [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#) for power distribution circuit.

When you perform trouble diagnosis, refer to the following:

- Refer to [GI-10, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"](#) .
- Refer to [GI-25, "How to Perform Efficient Diagnosis for an Electrical Incident"](#) .

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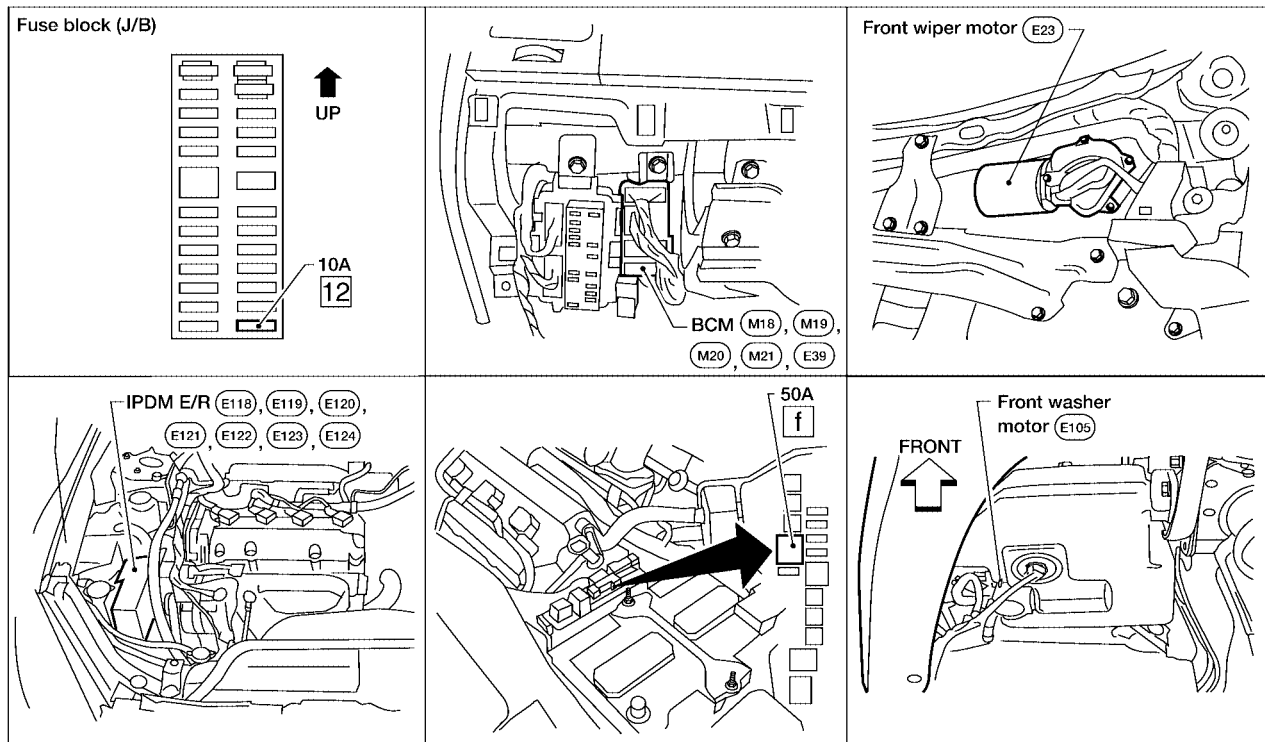
FRONT WIPER AND WASHER SYSTEM

FRONT WIPER AND WASHER SYSTEM

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Components Parts and Harness Connector Location

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WKIA1633E

System Description

EKS006U8

- Both front wiper relays are located in IPDM E/R.
- Wiper switch (combination switch) is composed of a combination of 5 output terminals and 5 input terminals. Terminal combination status is read by BCM when switch is turned ON.
- BCM controls front wiper LO, HI, and INT (intermittent) operation.
- IPDM E/R (intelligent power distribution module engine room) operates the wiper motor according to CAN communication signals from the BCM.

Power is supplied at all times

- through 50A fusible link (letter f , located in the fuse and fusible link box)
- to BCM terminal 7, and
- through 20A fuse (No. 39, located in the IPDM E/R)
- to front wiper relay (located in the IPDM E/R)
- through 15A fuse (No. 34, located in the IPDM E/R)
- to IPDM E/R (CPU).

With the ignition switch in ON or START position, power is supplied at all times

- through 10A fuse (No. 12, located in the fuse block J/B)
- to BCM terminal 35 and combination switch terminal 13, and
- through 10A fuse (No. 47, located in the IPDM E/R)
- through IPDM E/R terminal 44
- to combination switch terminal 11.

Ground is supplied at all times

- to BCM terminals 8, 27 and 63, and
- to combination switch terminal 12

FRONT WIPER AND WASHER SYSTEM

- through body grounds M57, M61, and F14 (QR25DE), and
- to IPDM E/R terminals 38 and 60, and
- to front wiper motor terminal E
- through body grounds E15 and E24.

A

LOW SPEED WIPER OPERATION

When the ignition switch is in the ON or START position, and the front wiper switch is turned to low position, the BCM detects a low speed wiper ON signal by BCM wiper switch reading function.

BCM then sends front wiper (low) request signal over CAN communication lines

- from BCM terminals 70 and 71
- to IPDM E/R terminals 48 and 49.

B

C

When IPDM E/R receives front wiper (low) request signal, it supplies ground to energize the front wiper relay. With the front wiper relay energized, power is supplied

- from front wiper relay
- to front wiper HI relay
- through IPDM E/R terminal 21
- to front wiper motor terminal L.

D

E

With power and ground supplied, the front wiper motor operates at low speed.

F

HI SPEED WIPER OPERATION

When the ignition switch is in the ON or START position, and the front wiper switch is turned to high position, the BCM detects a high speed wiper ON signal by BCM wiper switch reading function.

BCM then sends front wiper (high) request signal over CAN communication lines

- from BCM terminals 70 and 71
- to IPDM E/R terminals 48 and 49.

G

When IPDM E/R receives front wiper (high) request signal, it supplies ground to energize the front wiper and the front wiper HI relays.

With the front wiper and the front wiper HI relays energized, power is supplied

- from front wiper relay
- to front wiper HI relay
- through IPDM E/R terminal 31
- to front wiper motor terminal H.

H

I

With power and ground supplied, the front wiper motor operates at high speed.

J

WW

INTERMITTENT OPERATION

Wiper intermittent operation delay interval is determined from the combination of the intermittent wiper dial position inputs and vehicle speed. During each intermittent operation delay interval, the BCM sends a front wiper request signal to the IPDM E/R to operate the wipers.

When the ignition switch is in ON or START position, and the front wiper switch is turned to intermittent position, the BCM detects a front wiper (intermittent) ON signal by BCM wiper switch reading function.

BCM then sends front wiper (intermittent) request signal over CAN communication lines

- from BCM terminals 70 and 71
- to IPDM E/R terminals 48 and 49.

L

When BCM determines that combination switch status is front wiper intermittent ON, it performs the following operations.

- BCM detects ON/OFF status of intermittent wiper dial position
- BCM calculates operation interval from wiper dial position and vehicle speed signal received through CAN communications.
- BCM sends front wiper request signal (INT) to IPDM E/R at calculated operation interval.

M

When IPDM E/R receives front wiper request signal (INT), it supplies ground to energize the front wiper relay. It then sends auto-stop signal to BCM, and conducts intermittent front wiper motor operation.

FRONT WIPER AND WASHER SYSTEM

AUTO STOP OPERATION

When the wiper arms are not located at the base of the windshield, and the wiper switch is turned OFF, the wiper motor will continue to operate until the wiper arms reach windshield base. When wiper arms reach base of windshield, front wiper motor terminals E and L are connected.

Ground is supplied

- to terminal 32 of the IPDM E/R
- through front wiper motor terminal P
- through terminal E of the front wiper motor
- through body grounds E15 and E24.

The IPDM E/R sends auto stop operation signal to BCM through CAN communication lines.

When BCM receives auto stop operation signal, BCM sends wiper stop signal to IPDM E/R with CAN communication lines. The IPDM E/R then de-energizes the front wiper relay.

Wiper motor will then stop wiper arms at the STOP position.

WASHER OPERATION

When the ignition switch is in ON or START position, power is supplied

- through 10A fuse (No. 47 located in the IPDM E/R)
- through IPDM E/R terminal 44
- to front washer motor terminal +.

When front wiper switch is turned to washer position,

Ground is supplied

- to front washer motor terminal -
- through combination switch terminal 11
- through combination switch terminal 12
- through body grounds M57, M61 and F14 (QR25DE).

With ground supplied, the front washer motor is operated, and at the same time,

Power is supplied

- through combination switch terminal 7
- to BCM (output 2) terminal 40.

When BCM detects that front washer motor has operated for 0.4 seconds or longer, BCM uses CAN communication and sends wiper request signal to IPDM E/R for low speed operation of wipers.

When BCM detects that washer switch is OFF, low speed operation cycles approximately 3 times and then stops.

MIST OPERATION

When the wiper switch is temporarily placed in the mist position, wiper low speed operation cycles once and then stops.

For additional information about wiper operation under this condition, refer to [WW-5, "LOW SPEED WIPER OPERATION"](#).

If the switch is held in the mist position, low speed operation continues.

FAIL-SAFE FUNCTION

BCM includes fail-safe function to prevent malfunction of electrical components controlled by CAN communications if a malfunction in CAN communications occurs.

BCM uses CAN communications to stop output of electrical components it controls.

Until ignition switch is turned off, front wiper remains in same status as just before fail-safe control was initiated. (If wiper was in low speed operation just before fail-safe, it continues low speed operation until ignition switch is turned OFF.)

When fail-safe status is initiated, BCM remains in standby until normal signals are received.

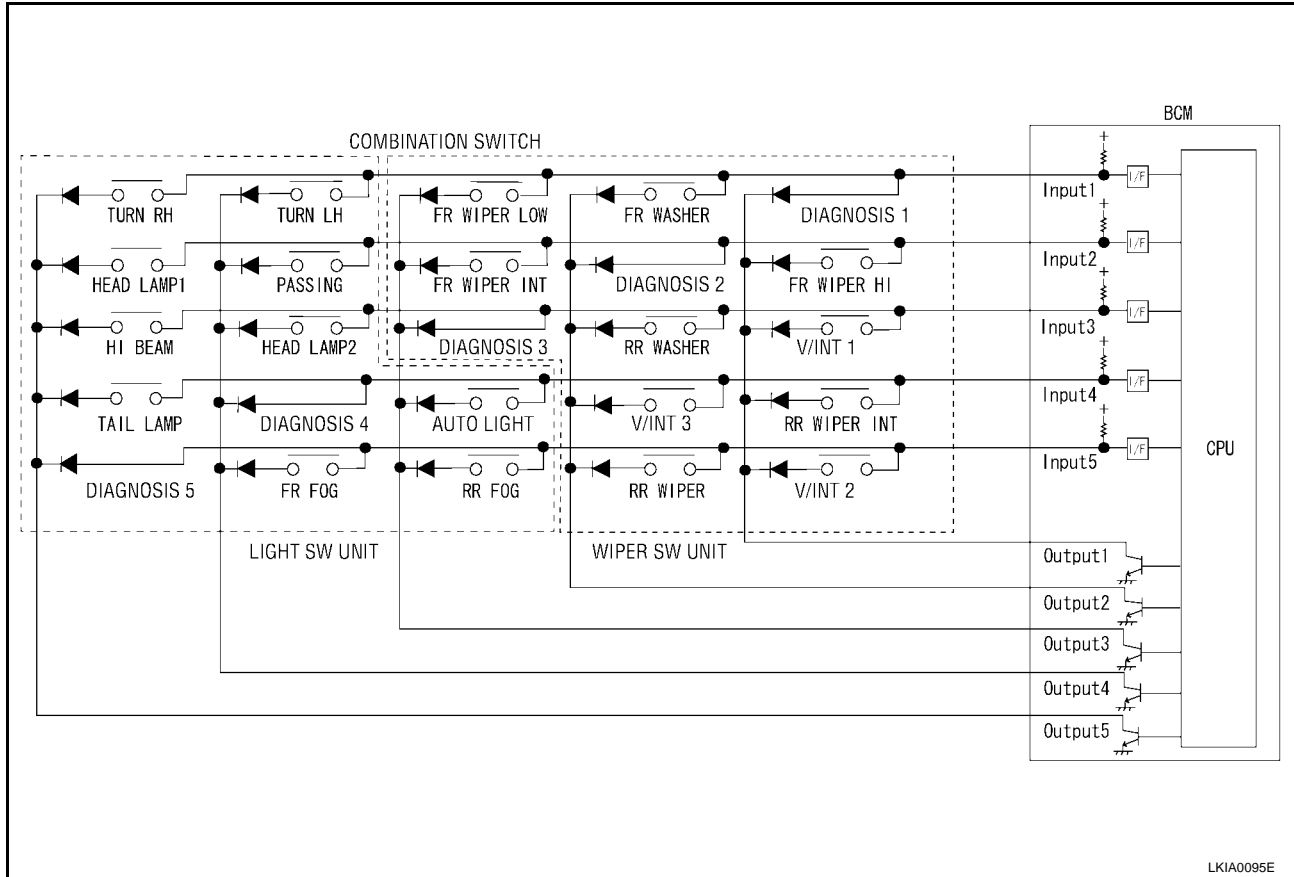
When normal signals are received, fail-safe status is canceled.

FRONT WIPER AND WASHER SYSTEM

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Combination Switch Reading Function

BCM reads combination switch (wiper switch) status, and controls front wipers based on the results. BCM is a combination of 5 output terminals (OUTPUT 1 - 5) and 5 input terminals (INPUT 1 - 5). It reads 20 types of switch data and 5 types of diagnosis data.



OPERATION DESCRIPTION

BCM continuously outputs power voltage from input terminals (INPUT 1 - 5). At this time, output terminals (OUTPUT 1 - 5) operate transistors in sequence and carry current. If any switch (or switches) become ON at this time, the input terminal corresponding to that switch detects current flowing, and BCM determines that the switch is ON.

FRONT WIPER AND WASHER SYSTEM

TABLE OF BCM - COMBINATION SWITCH OPERATIONS

BCM reads operation status of combination switch using combinations shown in table below.

	COMB SW INPUT 1		COMB SW INPUT 2		COMB SW INPUT 3		COMB SW INPUT 4		COMB SW INPUT 5	
	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
COMB SW OUTPUT 1 ↓	DIAGNOSIS 1 OK	DIAGNOSIS 1 NG	FR WIPER HI ON	FR WIPER HI OFF	V/INT 1 ON	V/INT 1 OFF	RR WIPER INT ON	RR WIPER INT OFF	V/INT 2 ON	V/INT 2 OFF
COMB SW OUTPUT 2 ↓	FR WASHER ON	FR WASHER OFF	DIAGNOSIS 2 OK	DIAGNOSIS 2 NG	RR WASHER ON	RR WASHER OFF	V/INT 3 ON	V/INT 3 OFF	RR WIPER ON	RR WIPER OFF
COMB SW OUTPUT 3 ↓	FR WIPER LOW ON	FR WIPER LOW OFF	FR WIPER INT ON	FR WIPER INT OFF	DIAGNOSIS 3 OK	DIAGNOSIS 3 NG	AUTO LIGHT ON	AUTO LIGHT OFF	RR FOG ON	RR FOG OFF
COMB SW OUTPUT 4 ↓	TURN LH ON	TURN LH OFF	PASSING ON	PASSING OFF	HEAD LAMP 2 ON	HEAD LAMP 2 OFF	DIAGNOSIS 4 OK	DIAGNOSIS 4 NG	FR FOG ON	FR FOG OFF
COMB SW OUTPUT 5	TURN RH ON	TURN RH OFF	HEAD LAMP ON	HEAD LAMP OFF	HI BEAM ON	HI BEAM OFF	LIGHTING SWITCH 1ST POSITION ON	LIGHTING SWITCH 1ST POSITION OFF	DIAGNOSIS 5 OK	DIAGNOSIS 5 NG

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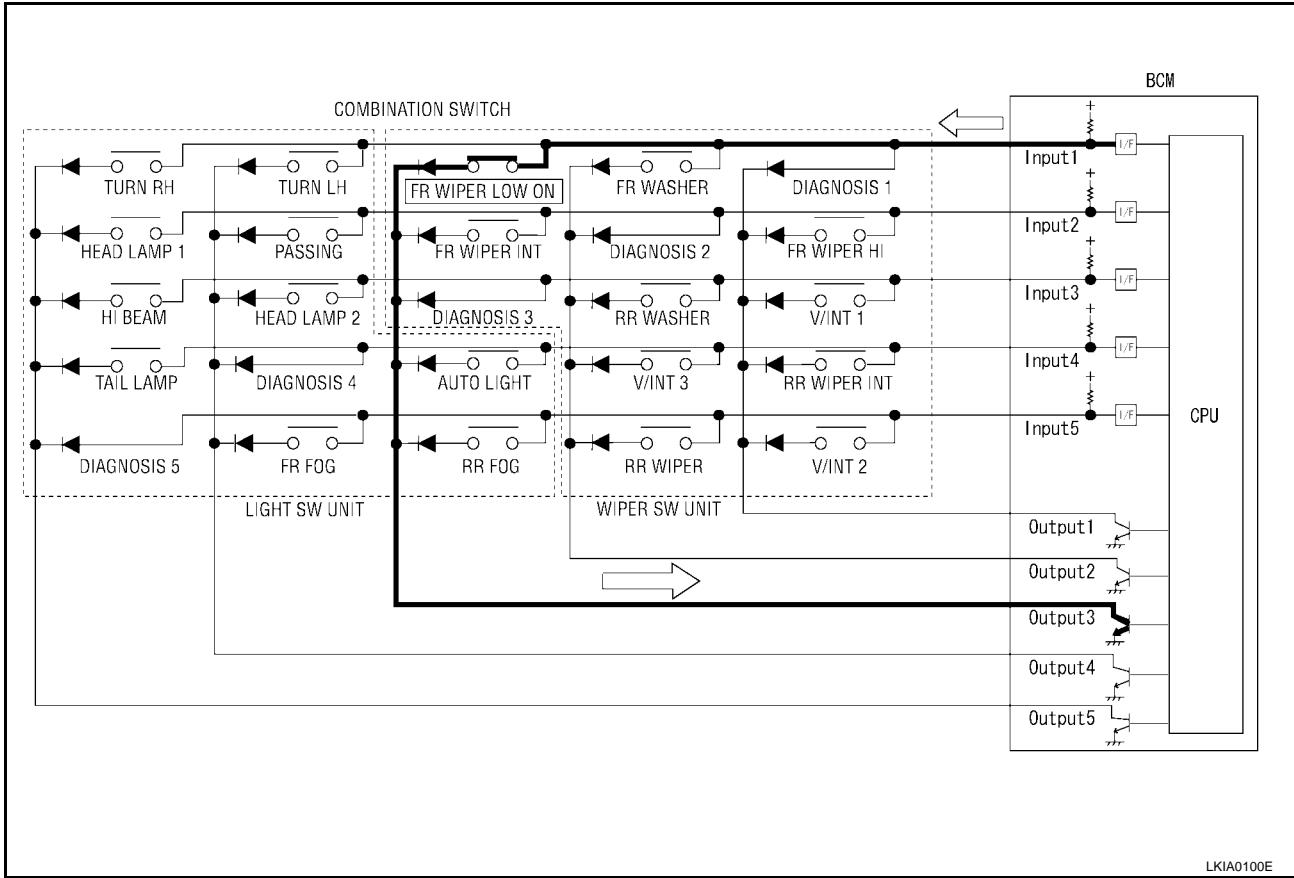
SAMPLE OPERATION: (WIPER SWITCH TURNED TO LO POSITION)

- When wiper switch is turned to LO position, front wiper LO contact inside combination switch becomes ON. At this time, OUTPUT 3 transistor operates and BCM detects flow of current at INPUT 1.
- When OUTPUT 3 transistor is ON and BCM detects current flowing at INPUT 1, BCM determines that wiper switch is at LO. BCM uses CAN communication and sends front wiper signals to IPDM E/R.
- When OUTPUT 3 transistor operates again and BCM again detects current flowing at INPUT 1, it confirms that front wiper LO operation is continuing.

FRONT WIPER AND WASHER SYSTEM

NOTE:

Each OUTPUT terminal transistor operates at 10 ms intervals. Therefore, a delay occurs between the switch becoming ON and operation of the electric load. However, this delay is so small it is undetectable by human senses.



OPERATING MODES

The following operation modes exist for combination switch reading function.

Normal status

When BCM is not in sleep status, OUTPUT terminals (1 - 5) each turn ON-OFF every 10 ms.

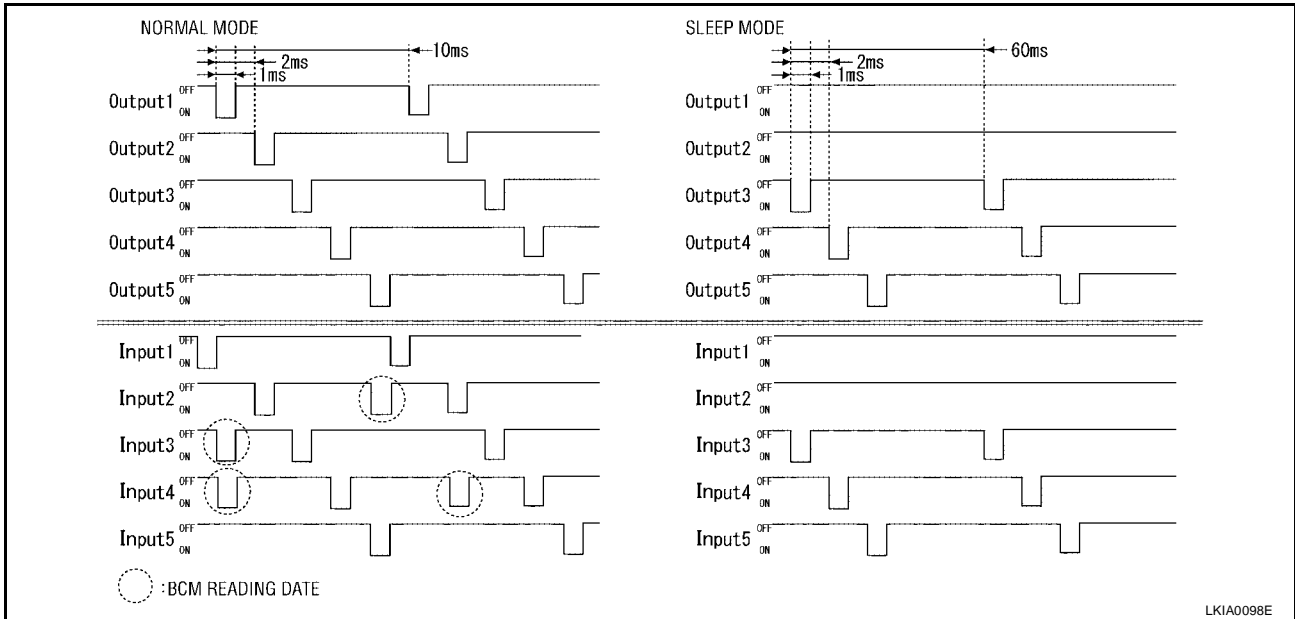
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FRONT WIPER AND WASHER SYSTEM

Sleep status

When BCM is in sleep status, output from OUTPUT 1 and 2 transistors stops, with BCM entering a power-saving mode. OUTPUT (3 - 5) turn ON-OFF every 60 ms, and only input from light switch system is accepted.



INTERMITTENT OPERATION

Wiper intermittent operation delay interval is determined from a combination of 3 switches (intermittent operation dial position 1, intermittent operation dial position 2, and intermittent operation dial position 3) and vehicle speed signal.

During each intermittent operation delay interval, BCM sends front wiper request signal to IPDM E/R.

Wiper Dial Position Setting

Wiper dial position	Intermittent operation interval	Combination switch		
		Intermittent operation dial position 1	Intermittent operation dial position 2	Intermittent operation dial position 3
Wiper dial position 1	Small	ON	ON	ON
Wiper dial position 2		ON	ON	OFF
Wiper dial position 3		ON	OFF	OFF
Wiper dial position 4	↓	OFF	OFF	OFF
Wiper dial position 5		OFF	OFF	ON
Wiper dial position 6		OFF	ON	ON
Wiper dial position 7		Large	OFF	ON

Example: For wiper dial position 1...

Using combination switch reading function, BCM detects ON/OFF status of intermittent operation dial positions 1, 2, and 3.

When combination switch status is as listed below, BCM determines that it is wiper dial position 1.

- Intermittent operation dial position 1: ON (input 3 and output 1 are conducting.)
- Intermittent operation dial position 2: ON (input 5 and output 1 are conducting.)
- Intermittent operation dial position 3: ON (input 4 and output 2 are conducting.)

BCM determines front wiper intermittent operation delay interval from wiper dial position 1 and vehicle speed, and sends wiper request signal (INT) to IPDM E/R.

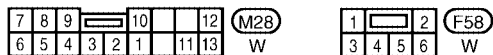
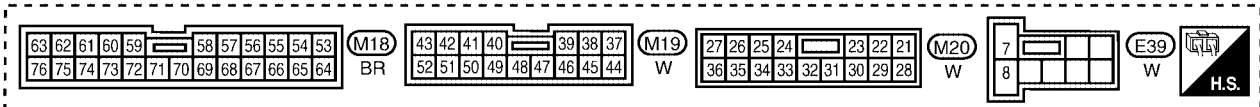
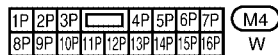
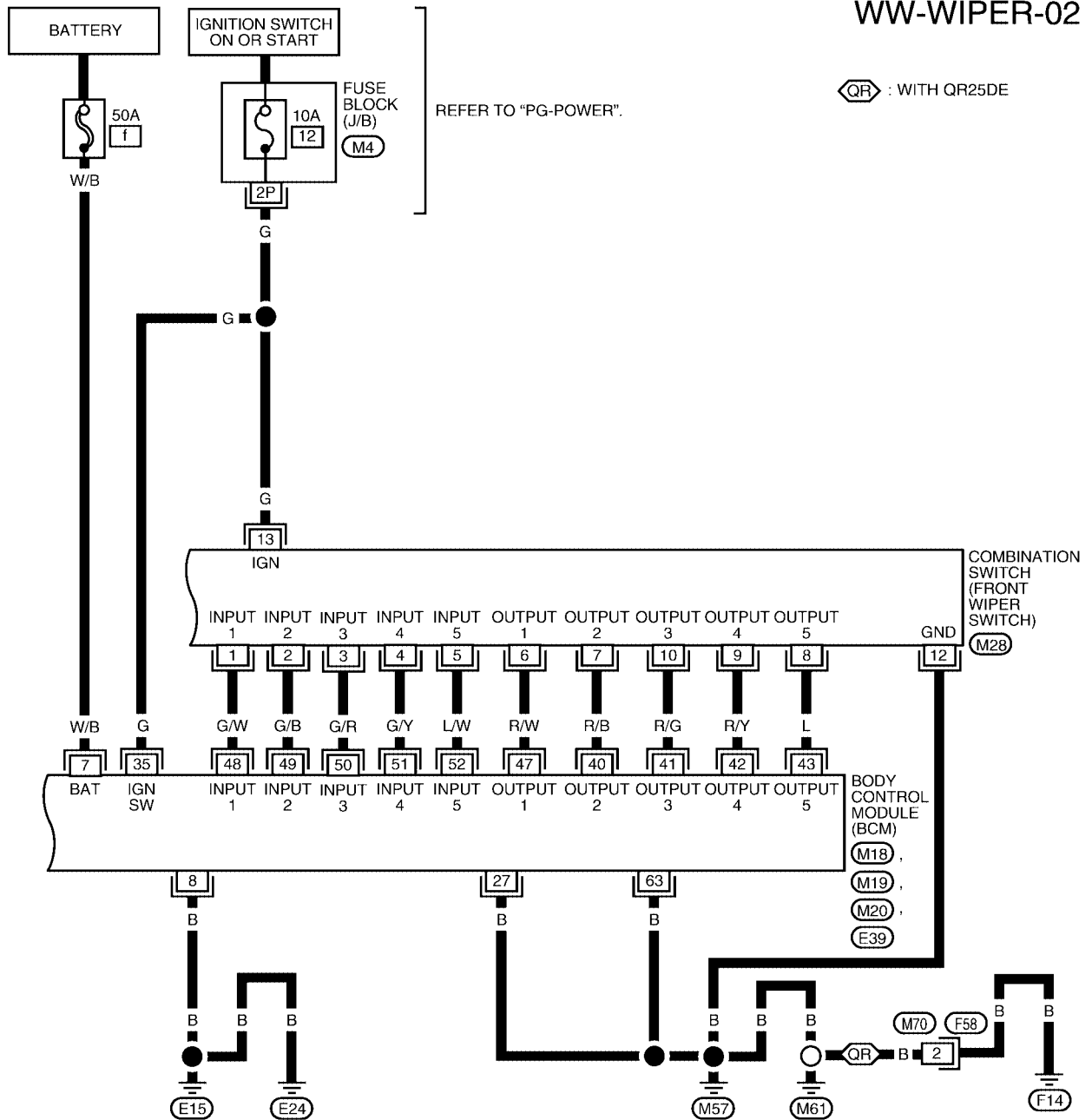
CAN Communication System Description

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Refer to [LAN-4, "CAN COMMUNICATION"](#).

FRONT WIPER AND WASHER SYSTEM

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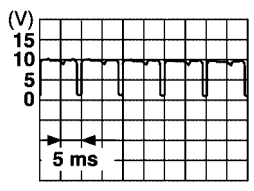
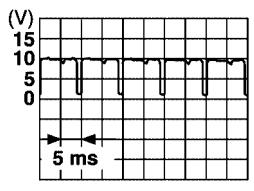
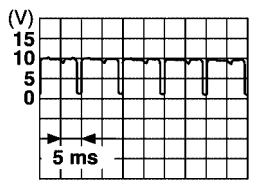
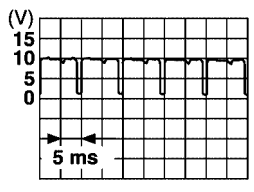
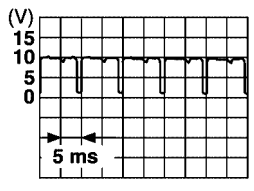
FRONT WIPER AND WASHER SYSTEM

Terminals and Reference Value for BCM

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Terminal No. (Wire color)	Signal name	Measuring condition		Standard (V) (Approx.)
		Ignition switch	Operation or condition	
7 (W/B)	Battery power	—	—	12
8 (B)	Ground	—	—	0
35 (G)	IGN power	ON	—	12
40 (R/B)	Combination switch output 2	ON	Light switch and wiper switch OFF	 <p style="text-align: right; font-size: small;">SKIA1119J</p>
41 (R/G)	Combination switch output 3	ON	Light switch and wiper switch OFF	 <p style="text-align: right; font-size: small;">SKIA1119J</p>
42 (R/Y)	Combination switch output 4	ON	Light switch and wiper switch OFF	 <p style="text-align: right; font-size: small;">SKIA1119J</p>
43 (L)	Combination switch output 5	ON	Light switch and wiper switch OFF	 <p style="text-align: right; font-size: small;">SKIA1119J</p>
47 (R/W)	Combination switch output 1	ON	Light switch and wiper switch OFF	 <p style="text-align: right; font-size: small;">SKIA1119J</p>
48 (G/W)	Combination switch input 1 (Front washer, front wiper LO)	ON	Light switch and wiper switch OFF	4.5 or more
49 (G/B)	Combination switch input 2 (Front wiper HI, front wiper INT)	ON	Light switch and wiper switch OFF	4.5 or more
50 (G/R)	Combination switch input 3 (intermittent operation dial position 1)	ON	Light switch and wiper switch OFF	4.5 or more

FRONT WIPER AND WASHER SYSTEM

Terminal No. (Wire color)	Signal name	Measuring condition		Standard (V) (Approx.)
		Ignition switch	Operation or condition	
51 (G/Y)	Combination switch input 4 (intermittent operation dial position 3)	ON	Light switch and wiper switch OFF	4.5 or more
52 (L/W)	Combination switch input 5 (intermittent operation dial position 2)	ON	Light switch and wiper switch OFF	4.5 or more
70 (L)	CAN HI	ON	—	—
71 (Y)	CAN LO	ON	—	—

Terminals and Reference Values for IPDM E/R

EKS006UC

Terminal No. (Wire color)	Signal name	Measuring condition		Reference value (V) (Approx.)
		Ignition switch	Operation or condition	
21 (L)	Low speed signal	ON	Wiper switch	0
			OFF	Battery
31 (L/B)	High speed signal	ON	Wiper switch	0
			LO	Battery
32 (L/Y)	Wiper auto - stop signal	ON	Wiper operating	Battery
			Wiper stopped	0
38 (B)	Ground	—	—	0
44 (R/W)	Front washer motor power	ON	—	Battery
48 (L)	CAN-H	ON	—	—
49 (Y)	CAN-L	ON	—	—
60 (B)	Ground	—	—	0

Work Flow

EKS006UD

1. Confirm the trouble symptom or customer complaint.
2. Understand the system description, refer to [WW-4, "System Description"](#) .
3. Perform preliminary inspection, refer to [WW-15, "Preliminary Inspection"](#) .
4. According to the trouble diagnosis chart, repair or replace the cause of the malfunction.
5. Does wiper function operate normally? If it operates normally, GO TO 6. If not, GO TO 4.
6. INSPECTION END.

FRONT WIPER AND WASHER SYSTEM

EKS006UE

Preliminary Inspection INSPECTION FOR POWER SUPPLY AND GROUND CIRCUIT

Inspection procedure

1. CHECK FUSE

- Check if wiper or washer fuse is blown.

Unit	Power source	Fuse No.
Front and washer motor	Ignition ON or START	47
Front wiper relay	Battery	39
BCM	Ignition ON or START	12
BCM	Battery	f

OK or NG

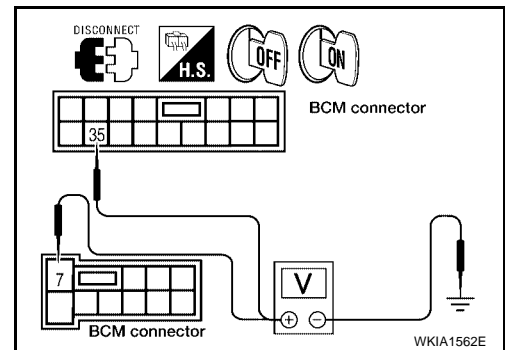
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of problem before installing new fuse. Refer to [PG-4](#), "[POWER SUPPLY ROUTING CIRCUIT](#)".

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check voltage between BCM harness connector terminals and ground.

Terminals		Ignition switch position		
(+)		(-)	OFF	ON
Connector	Terminal (Wire color)		OFF	ON
M20	35 (G)	Ground	0V	Battery voltage
E39	7 (W/B)		Battery voltage	Battery voltage



OK or NG

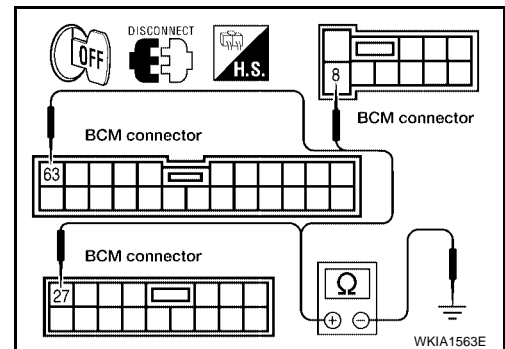
OK >> GO TO 3.

NG >> Check harness for open or short between BCM and fuse.

3. GROUND CIRCUIT INSPECTION (BCM)

Check for continuity between the following terminals on BCM connector and body ground.

Terminals		Ignition switch condition	Continuity
(+)			
Connector	Terminal (wire color)	OFF	Continuity should exist
M18	63 (B)	OFF	Continuity should exist
M20	27 (B)		
E39	8 (B)		



OK or NG

OK >> Inspection End.

NG >> Repair/replace BCM ground circuit.

FRONT WIPER AND WASHER SYSTEM

EKS006UF

CONSULT-II Functions (BCM)

CONSULT-II can display each diagnostic item using the following test modes: work support, self-diagnosis, data monitor, and active test through data reception and command transmission via the BCM CAN communication lines.

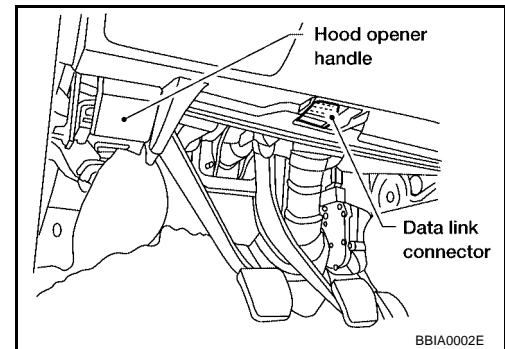
BCM diagnosis location	Check item, diagnosis mode	Description
Wiper	Data monitor	Displays BCM input data in real time.
	Active test	Device operation can be checked by applying a drive signal to device.
BCM	Self-diagnosis	BCM performs self-diagnosis of CAN communications.

CONSULT-II OPERATION

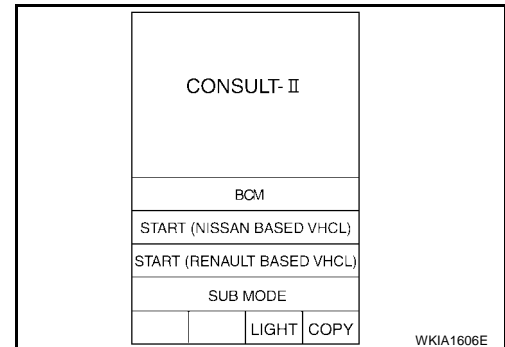
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

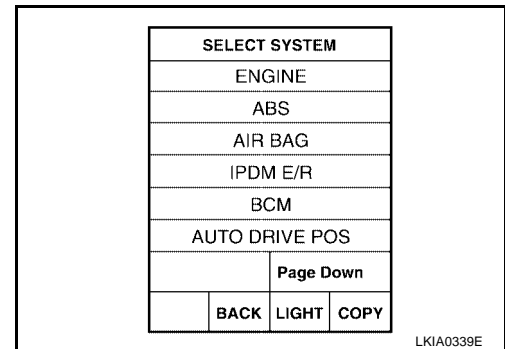
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn the ignition switch ON.



2. Touch "START (NISSAN BASED VHCL)".



3. Touch "BCM" on the "SELECT SYSTEM" screen. If "BCM" is not indicated, go to [GI-37, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



FRONT WIPER AND WASHER SYSTEM

4. Select the desired part to be diagnosed on the "SELECT TEST ITEM" screen.

SELECT TEST ITEM			
HEAD LAMP			
WIPER			
FLASHER			
AIR CONDITIONER			
COMB SW			
BCM			
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BACK	LIGHT	COPY	

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DATA MONITOR Operation Procedure

1. Touch "WIPER" on the "SELECT TEST ITEM" screen.
2. Touch "DATA MONITOR" on the "SELECT DIAG MODE" screen.
3. Touch either "ALL SIGNALS" or "SELECTION FROM MENU" on the "DATA MONITOR" screen.

ALL SIGNALS	Monitors all the items.
SELECTION FROM MENU	Selects and monitors the individual item selected.

4. Touch "START".
5. When "SELECTION FROM MENU" is selected, touch items to be monitored. When "ALL SIGNALS" is selected, all the items will be monitored.
6. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

Display Item List

Monitor item name "OPERATION OR UNIT"	Contents
IGN ON SW "ON/OFF"	Displays "IGN Position (ON)/OFF, ACC Position (OFF)" status as judged from ignition switch signal.
IGN SW CAN "ON/OFF"	Displays "IGN switch ON (ON)/Other OFF or ACC (OFF)" status as judged from CAN communications.
FR WIPER HI "ON/OFF"	Displays "Front Wiper HI (ON)/Other (OFF)" status as judged from wiper switch signal.
FR WIPER LOW "ON/OFF"	Displays "Front Wiper LOW (ON)/Other (OFF)" status as judged from wiper switch signal.
FR WIPER INT "ON/OFF"	Displays "Front Wiper INT (ON)/Other (OFF)" status as judged from wiper switch signal.
FR WASHER SW "ON/OFF"	Displays "Front Washer Switch (ON)/Other (OFF)" status as judged from wiper switch signal.
INT VOLUME (1 - 7)	Displays intermittent operation dial position setting (1 - 7) as judged from wiper switch signal.
FR WIPER STOP "ON/OFF"	Displays "Stopped (ON)/Operating (OFF)" status as judged from the auto-stop signal.
VEHICLE SPEED "0.0 km/h"	Displays vehicle speed as received from CAN communication.

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FRONT WIPER AND WASHER SYSTEM

ACTIVE TEST

Operation Procedure

1. Touch "WIPER" on the "SELECT TEST ITEM" screen.
2. Touch "ACTIVE TEST" on the "SELECT DIAG MODE" screen.
3. Touch item(s) to be tested and check operation of the selected item(s).
4. During the operation check, touching "BACK" deactivates the operation.

Display Item List

Test item	Display on CONSULT-II screen	Description
Front wiper HI output	FR WIPER (HI)	Front wiper HI can be operated by any ON-OFF operation.
Front wiper LO output	FR WIPER (LO)	Front wiper LO can be operated by any ON-OFF operation.
Front wiper INT output	FR WIPER (INT)	Front wiper INT can be operated by any ON-OFF operation.

FRONT WIPER AND WASHER SYSTEM

CONSULT-II Functions (IPDM E/R)

EKS006UG

CONSULT-II can display each diagnostic item using the following test modes: work support, self-diagnosis, data monitor, and active test through data reception and command transmission via the IPDM E/R CAN communication lines.

Check item, diagnosis mode	Description
DATA MONITOR	Displays IPDM E/R input/output data in real time.
ACTIVE TEST	The IPDM E/R sends a drive signal to electronic components to check their operation.

CONSULT-II OPERATION

CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

Refer to [WW-16, "CONSULT-II OPERATION"](#).

DATA MONITOR

Operation Procedure

1. Touch "WIPER" on the "SELECT TEST ITEM" screen.
2. Touch "DATA MONITOR" on the "SELECT DIAG MODE" screen.
3. Touch "ALL SIGNALS", "MAIN SIGNALS" or "SELECTION FROM MENU" on the "DATA MONITOR" screen.

ALL SIGNALS	Monitors all the items.
MAIN SIGNALS	Monitors predetermined items.
SELECTION FROM MENU	Selects and monitors the individual item selected.

4. Touch "START".
5. When "SELECTION FROM MENU" is selected, touch items to be monitored. When "ALL SIGNALS" is selected, all the items will be monitored.
6. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

All Items, Main Items, Select Item Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECT FROM MENU	
FR wiper request	FR WIP REQ	STOP/1LO/LO/HI	x	x	x	Signal status input from BCM.
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	x	x	x	Output status of IPDM E/R.
Wiper protection	WIP PROT	OFF/LS/HS/BLOCK	x	x	x	Control status of IPDM E/R.

NOTE:

Perform monitoring of IPDM E/R data with the ignition switch ON. When the ignition switch is at ACC, the display may not be correct.

FRONT WIPER AND WASHER SYSTEM

ACTIVE TEST

Operation Procedure

1. Touch "WIPER" on the "SELECT TEST ITEM" screen.
2. Touch "ACTIVE TEST" on the "SELECT DIAG MODE" screen.
3. Touch item(s) to be tested and check operation of the selected item(s).
4. During the operation check, touching "BACK" deactivates the operation.

Display Item List

Test item	CONSULT-II screen display	Description
Front wiper (HI, LO) output	FRONT WIPER	With a certain operation (OFF, HI ON, LO ON) front wiper relays can be operated.

Trouble Diagnosis

FRONT WIPER DOES NOT OPERATE

EKS006UH

CAUTION:

During IPDM E/R fail-safe control, front wipers may not operate. Refer to [PG-15, "CAN COMMUNICATION LINE CONTROL"](#) in "PG IPDM E/R" to make sure that it is not in fail-safe status.

Inspection Procedure

1. CHECK IPDM E/R TO FRONT WIPERS (1)

Ⓟ With CONSULT-II

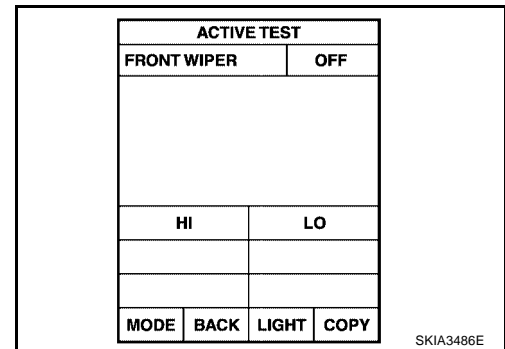
1. Select "IPDM E/R" with CONSULT-II, and select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
2. Select "FRONT WIPER" on "SELECT TEST ITEM" screen.

ⓧ Without CONSULT-II

1. Turn on front wipers using auto active test. Refer to [PG-21, "Auto Active Test"](#).
2. Confirm front wiper operation.

OK or NG

- OK >> GO TO 4.
 NG >> GO TO 2.

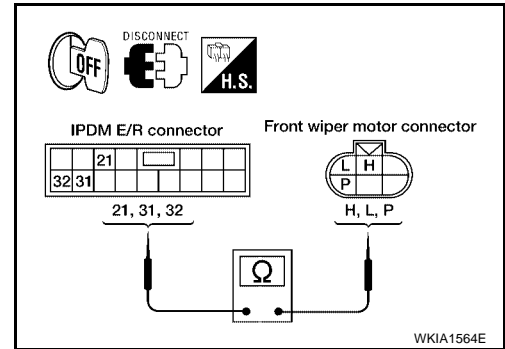


FRONT WIPER AND WASHER SYSTEM

2. IPDM E/R TO FRONT WIPERS (2) INSPECTION

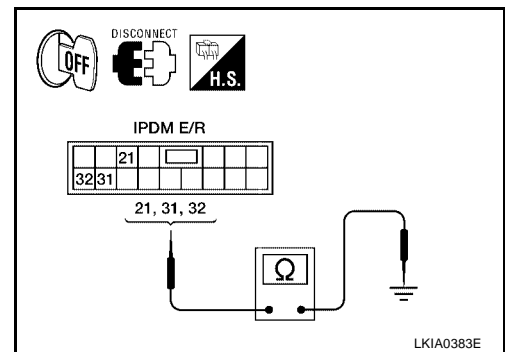
1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector and front wiper motor connector.
3. Check continuity between IPDM E/R harness connector terminals and front wiper motor harness connector terminals.

Terminals				Continuity
(+)		(-)		
Connector	Terminal (wire color)	Connector	Terminal (wire color)	
E122	31 (L/B)	E23	H (L/B)	Yes
	21 (L)		L (L)	
	32 (L/Y)		P (L/Y)	



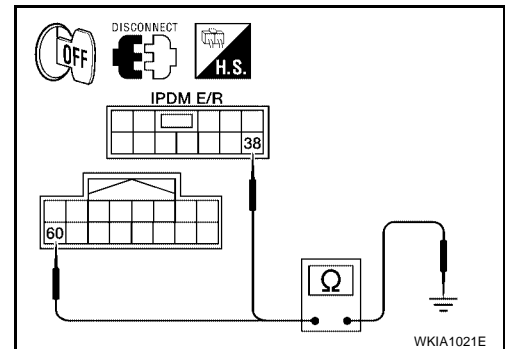
4. Check continuity between IPDM E/R harness connector terminals and ground.

Terminals			Continuity
(+)		(-)	
Connector	Terminal (wire color)	(-)	
E122	31 (L/B)	Ground	No
	21 (L)		
	32 (L/Y)		



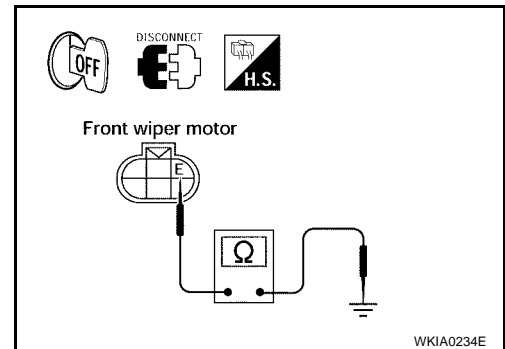
5. Check continuity between IPDM E/R harness connector terminal and body ground.

Terminals			Continuity
(+)		(-)	
Connector	Terminal (wire color)	(-)	
E121	60 (B)	Body ground	Yes
E124	38 (B)		



6. Check continuity between front wiper motor harness connector terminal 1 and body ground.

Terminals			Continuity
(+)		(-)	
Connector	Terminal (wire color)	(-)	
E23	E (B)	Body ground	Yes



OK or NG

- OK >> Connect connector. GO TO 3.
 NG >> Check for open circuit in harness between front wiper motor and body ground.

FRONT WIPER AND WASHER SYSTEM

3. IPDM E/R INSPECTION

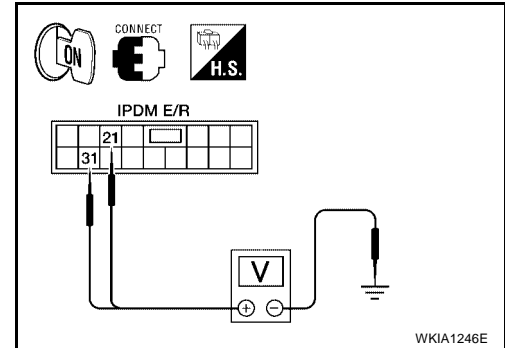
Ⓜ With CONSULT-II

1. Connect IPDM E/R connector and front wiper motor connector.
2. Select "FR WIPER HI" during "ACTIVE TEST".
3. When front wiper relay, and front wiper HI relay are operating, check voltage between IPDM E/R terminals and body ground.

ⓧ Without CONSULT-II

1. Connect IPDM E/R connector and front wiper motor connector.
2. Turn on front wipers using the auto active test. Refer to [PG-21, "Auto Active Test"](#) .
3. When front wiper relay, and front wiper HI relay are operating, check voltage between IPDM E/R terminals and body ground.

Terminals			Condition	Voltage (Approx.)
(+)		(-)		
Connector	Terminal (wire color)			
E122	21 (L)	Ground	Stopped	0
			LO operation	Battery voltage
	31 (L/B)		Stopped	0
			HI operation	Battery voltage



OK or NG

- OK >> Replace the front wiper motor. Refer to [WW-30, "Removal and Installation for Wiper Motor and Linkage"](#) .
- NG >> Replace IPDM E/R. Refer to [PG-27, "Removal and Installation of IPDM E/R"](#) .

4. COMBINATION SWITCH TO BCM (1) INSPECTION

Select "BCM" on Consult-II. With "WIPER" data monitor, check that "FR WIPER INT", "FR WIPER LOW" and "FR WIPER HI" turn ON-OFF according to operation of wiper switch.

OK or NG

- OK >> GO TO 5.
- NG >> Check wiper switch. Refer to [BCS-3, "COMBINATION SWITCH READING FUNCTION"](#) .

DATA MONITOR	
MONITOR	
IGN ON SW	OFF
IGN SW CAN	ON
FR WIPER HI	OFF
FR WIPER LOW	OFF
FR WIPER INT	OFF
FR WASHER SW	OFF
INT VOLUME	7
FR WIPER STOP	ON
VEHICLE SPEED	0.0 km/h
PAGE DOWN	
RECORD	
MODE	BACK
LIGHT	COPY

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5. COMBINATION SWITCH TO BCM (2) INSPECTION

Select "BCM" on Consult-II. Carry out self-diagnosis of "BCM".

Displayed self-diagnosis results

- NO DTC>> Replace the BCM.
- CAN COMM CIRCUIT>> Check CAN communication line of BCM.
GO TO [BCS-12, "CAN Communication Inspection Using CONSULT-II \(Self-Diagnosis\)"](#) .

SELF-DIAG RESULTS			
DTC RESULTS		TIME	
CAN COMM CIRCUIT [U1000]		PAST	
ERASE		PRINT	
MODE	BACK	LIGHT	COPY

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FRONT WIPER AND WASHER SYSTEM

FRONT WIPER STOP POSITION IS INCORRECT

Inspection Procedure

1. IPDM E/R TO FRONT WIPER MOTOR (1) INSPECTION

④ With CONSULT-II

Select "IPDM E/R" with CONSULT-II. With data monitor, confirm that "WIP AUTO STOP" changes from "ACT P" to "STOP P" according to wiper operation.

⊗ Without CONSULT-II

GO TO 2.

OK or NG

OK >> Replace IPDM E/R. Refer to [PG-27, "Removal and Installation of IPDM E/R"](#).

NG >> GO TO 2.

DATA MONITOR	
MONITOR	
MOTOR FAN REQ	1
AC COMP REQ	OFF
TAIL&CLR REQ	OFF
HL LO REQ	OFF
HL HI REQ	OFF
FR FOG REQ	OFF
FR WIP REQ	STOP
WIP AUTO STOP	STOP P
WIP PROT	OFF
Page DOWN	
RECORD	
MODE	BACK
LIGHT	COPY

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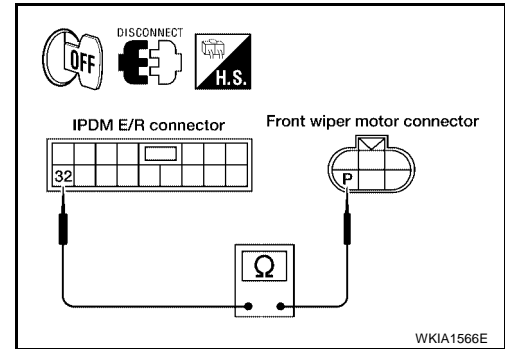
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FRONT WIPER AND WASHER SYSTEM

2. IPDM E/R TO FRONT WIPER MOTOR (2) INSPECTION

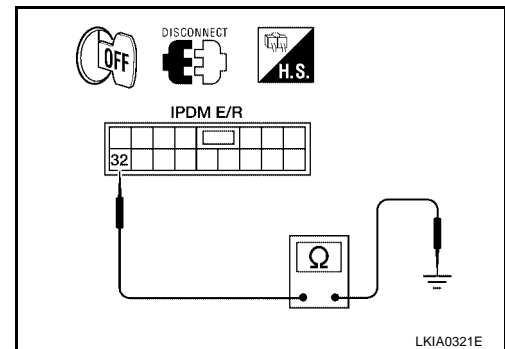
1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector and front wiper motor connector.
3. Check continuity between IPDM E/R harness connector and front wiper motor harness connector.

Terminals				Continuity
(+)		(-)		
Connector	Terminal (wire color)	Connector	Terminal (wire color)	
E122	32 (L/Y)	E23	P (L/Y)	Yes



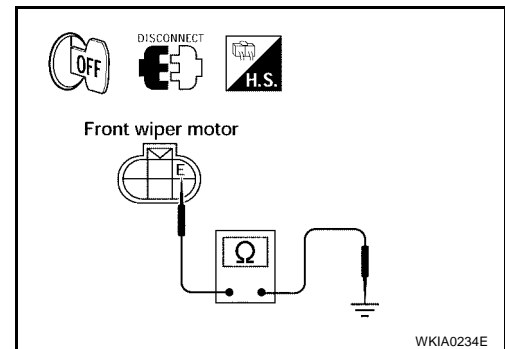
4. Check continuity between IPDM E/R harness connector terminal and ground.

Terminals			Continuity
(+)		(-)	
Connector	Terminal (wire color)	Ground	
E122	32 (L/Y)	Ground	No



5. Check continuity between front wiper motor harness connector terminal E and body ground.

Terminals			Continuity
(+)		(-)	
Connector	Terminal (wire color)	Ground	
E23	E (B)	Ground	Yes



OK or NG

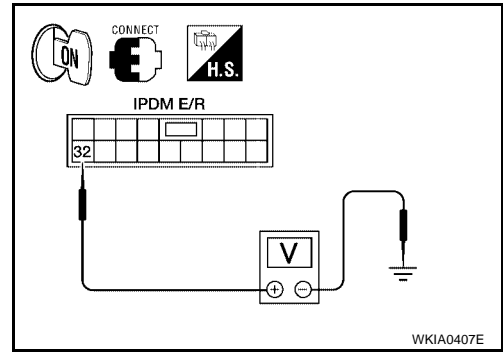
- OK >> Connect connector. GO TO 3.
- NG >>
 - Check for short circuit or open circuit in harness between IPDM E/R and front wiper motor.
 - Check for open circuit in harness between front wiper motor and body ground.

FRONT WIPER AND WASHER SYSTEM

3. IPDM E/R TO FRONT WIPER MOTOR (3) INSPECTION

While front wiper motor is stopped and while operating, measure voltage between IPDM E/R terminal 32 and body ground.

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
Connector	Terminal (wire color)	Ground	Wiper operating Fluctuating
E122	32 (L/Y)		



OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-27, "Removal and Installation of IPDM E/R"](#).
- NG >> Replace front wiper motor. Refer to [WW-30, "Removal and Installation for Wiper Motor and Linkage"](#).

ONLY FRONT WIPER LOW DOES NOT OPERATE

Inspection Procedure

1. COMBINATION SWITCH TO BCM INSPECTION

Select BCM on Consult-II. With "WIPER" data monitor, check that "FR WIPER LOW" turns ON-OFF according to operation of wiper switch.

OK or NG

- OK >> Replace BCM.
- NG >> Replace wiper switch. Refer to [WW-33, "Removal and Installation for Wiper and Washer Switch"](#).

DATA MONITOR	
MONITOR	
IGN ON SW	OFF
IGN SW CAN	ON
FR WIPER HI	OFF
FR WIPER LOW	OFF
FR WIPER INT	OFF
FR WASHER SW	OFF
INT VOLUME	7
FR WIPER STOP	ON
VEHICLE SPEED	0.0 km/h
PAGE DOWN	
RECORD	
MODE	BACK
LIGHT	COPY

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ONLY FRONT WIPER HI DOES NOT OPERATE

Inspection Procedure

1. IPDM E/R TO FRONT WIPERS (1) INSPECTION

Ⓜ With CONSULT-II

1. Select "IPDM E/R" with CONSULT-II, and select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
2. Select "FRONT WIPER" on "SELECT TEST ITEM" screen.

ⓧ Without CONSULT-II

1. Turn on front wipers using auto active test. Refer to [PG-21, "Auto Active Test"](#).
2. Confirm front wiper operation.

OK or NG

- OK >> GO TO 4.
- NG >> GO TO 2.

ACTIVE TEST	
FRONT WIPER	OFF
HI	LO
MODE	BACK
LIGHT	COPY

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FRONT WIPER AND WASHER SYSTEM

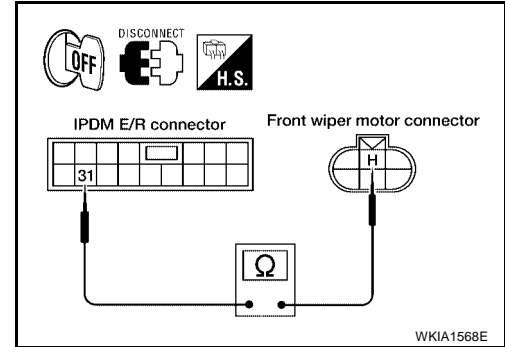
2. IPDM E/R TO FRONT WIPERS (2) INSPECTION

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector and front wiper motor connector.
3. Check continuity between IPDM E/R harness connector terminal and front wiper motor harness connector terminal.

Terminals				Continuity
(+)		(-)		
Connector	Terminal (wire color)	Connector	Terminal (wire color)	
E122	31 (L/B)	E23	H (L/B)	Yes

OK or NG

- OK >> Connect connector. GO TO 3.
 NG >> Check for short circuit or open circuit in harness between IPDM E/R and front wiper motor.



3. IPDM E/R INSPECTION

With CONSULT-II

1. Connect IPDM E/R connector and front wiper motor connector.
2. Select "FR WIPER HI" during "ACTIVE TEST".
3. When front wiper relay (HI) is operating, check voltage between IPDM E/R terminals.

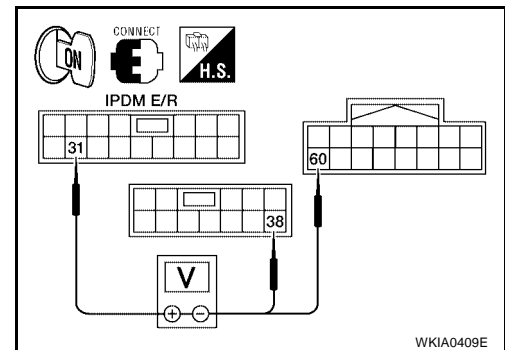
Without CONSULT-II

1. Connect IPDM E/R connector and front wiper motor connector.
2. Turn on front wipers using the auto active test. Refer to [PG-21, "Auto Active Test"](#).
3. When front wiper relay (HI) is operating, check voltage between IPDM E/R terminals.

Terminals			Voltage (Approx.)
IPDM E/R			
Connector	Terminal (wire color)	Terminal (wire color)	
E122	31 (L/B)	38 (B)	12
E122	31 (L/B)	60 (B)	12

OK or NG

- OK >> Replace the wiper motor. Refer to [WW-30, "Removal and Installation for Wiper Motor and Linkage"](#).
 NG >> Replace IPDM E/R. Refer to [PG-27, "Removal and Installation of IPDM E/R"](#).

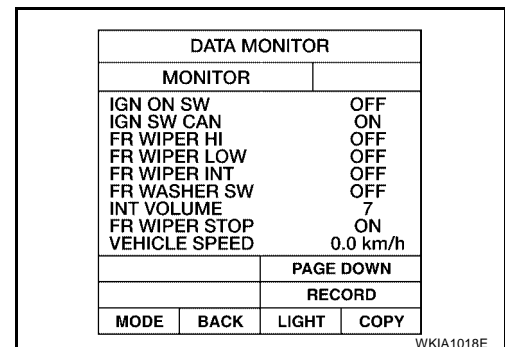


4. COMBINATION SWITCH TO BCM INSPECTION

Select BCM on Consult-II. With "WIPER" data monitor, check that "FR WIPER HI" turns ON-OFF according to operation of wiper switch.

OK or NG

- OK >> Replace BCM.
 NG >> Replace wiper switch. Refer to [WW-33, "Removal and Installation for Wiper and Washer Switch"](#).



FRONT WIPER AND WASHER SYSTEM

ONLY FRONT WIPER INT DOES NOT OPERATE

Inspection Procedure

1. COMBINATION SWITCH TO BCM INSPECTION

Select BCM on Consult-II. With "WIPER" data monitor, check that "FR WIPER INT" turns ON-OFF according to operation of wiper switch.

OK or NG

- OK >> Replace BCM.
- NG >> Replace wiper switch. Refer to [WW-33, "Removal and Installation for Wiper and Washer Switch"](#) .

DATA MONITOR			
MONITOR			
IGN ON SW		OFF	
IGN SW CAN		ON	
FR WIPER HI		OFF	
FR WIPER LOW		OFF	
FR WIPER INT		OFF	
FR WASHER SW		OFF	
INT VOLUME		7	
FR WIPER STOP		ON	
VEHICLE SPEED		0.0 km/h	
		PAGE DOWN	
RECORD			
MODE	BACK	LIGHT	COPY

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FRONT WIPER INTERMITTENT OPERATION SWITCH POSITION CANNOT BE ADJUSTED

Inspection Procedure

1. COMBINATION SWITCH TO BCM INSPECTION

Select BCM on Consult-II. With "WIPER" data monitor, check that "INT VOLUME" changes in order from 1 to 7 according to operation of the intermittent switch dial position.

OK or NG

- OK >> Replace BCM.
- NG >> Replace wiper switch. Refer to [WW-33, "Removal and Installation for Wiper and Washer Switch"](#) .

DATA MONITOR			
MONITOR			
IGN ON SW		OFF	
IGN SW CAN		ON	
FR WIPER HI		OFF	
FR WIPER LOW		OFF	
FR WIPER INT		OFF	
FR WASHER SW		OFF	
INT VOLUME		7	
FR WIPER STOP		ON	
VEHICLE SPEED		0.0 km/h	
		PAGE DOWN	
RECORD			
MODE	BACK	LIGHT	COPY

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WIPERS DO NOT WIPE WHEN FRONT WASHER OPERATES

Inspection Procedure

1. COMBINATION SWITCH TO BCM INSPECTION

Select BCM on Consult-II. With "WIPER" data monitor, check that "FR WASHER SW" turns ON-OFF according to operation of front washer switch.

OK or NG

- OK >> Replace BCM.
- NG >> Replace wiper switch. Refer to [WW-33, "Removal and Installation for Wiper and Washer Switch"](#) .

DATA MONITOR			
MONITOR			
IGN ON SW		OFF	
IGN SW CAN		ON	
FR WIPER HI		OFF	
FR WIPER LOW		OFF	
FR WIPER INT		OFF	
FR WASHER SW		OFF	
INT VOLUME		7	
FR WIPER STOP		ON	
VEHICLE SPEED		0.0 km/h	
		PAGE DOWN	
RECORD			
MODE	BACK	LIGHT	COPY

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FRONT WIPERS OPERATE FOR 10 SECONDS, STOP FOR 20 SECONDS, AND AFTER REPEATING THIS OPERATION FIVE TIMES, THEY BECOME INOPERATIVE

CAUTION:

- When auto stop signal has not varied for 10 seconds or longer while IPDM E/R is operating front wipers, IPDM E/R considers front wipers locked and stops wiper output, which causes this symptom.
- This status can be checked by using IPDM E/R "DATA MONITOR". Under this condition, "WIP PROT" reads "BLOCK".

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FRONT WIPER AND WASHER SYSTEM

Inspection Procedure

1. IPDM E/R TO FRONT WIPER MOTOR (1) INSPECTION

Ⓟ With CONSULT-II

Select "IPDM E/R" with CONSULT-II. With data monitor, confirm that "WIP AUTO STOP" changes from "ACT P" to "STOP P" according to wiper operation.

ⓧ Without CONSULT-II

GO TO 2.

OK or NG

OK >> Replace IPDM E/R. Refer to [PG-27, "Removal and Installation of IPDM E/R"](#) .

NG >> GO TO 2.

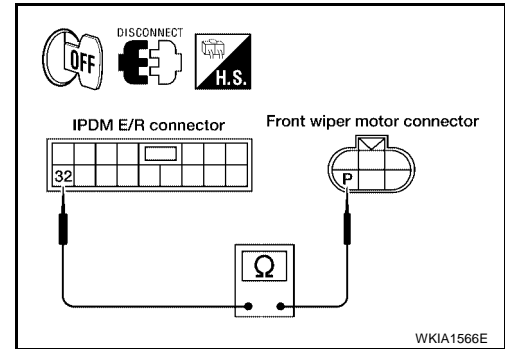
DATA MONITOR	
MONITOR	
MOTOR FAN REQ	1
AC COMP REQ	OFF
TAIL&CLR REQ	OFF
HL LO REQ	OFF
HL HI REQ	OFF
FR FOG REQ	OFF
FR WIP REQ	STOP
WIP AUTO STOP	STOP P
WIP PROT	OFF
Page DOWN	
RECORD	
MODE	BACK
LIGHT	COPY

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2. IPDM E/R TO FRONT WIPER MOTOR (2) INSPECTION

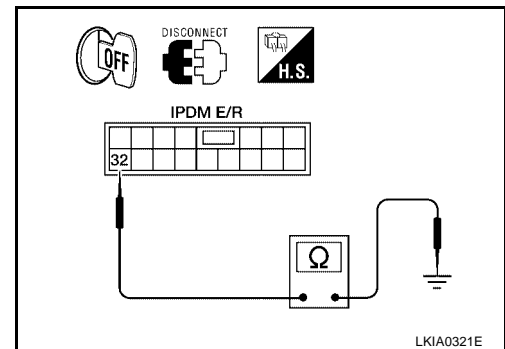
1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector and front wiper motor connector.
3. Check continuity between IPDM E/R harness connector terminal and front wiper motor harness connector terminal.

Terminals				Continuity
(+)		(-)		
Connector	Terminal (wire color)	Connector	Terminal (wire color)	
E122	32 (L/Y)	E23	P (L/Y)	Yes



4. Check continuity between IPDM E/R harness connector terminal and body ground.

Terminals			Continuity
(+)		(-)	
Connector	Terminal (wire color)	Ground	
E122	32 (L/Y)		No



OK or NG

OK >> Connect connectors. GO TO 3.

NG >> Repair harness or connector.

FRONT WIPER AND WASHER SYSTEM

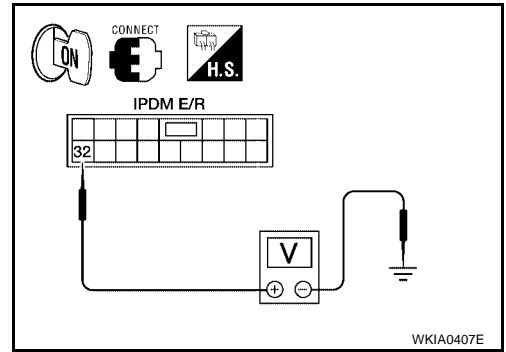
3. IPDM E/R TO FRONT WIPER MOTOR (3) INSPECTION

While front wiper motor is stopped and while operating, measure voltage between IPDM E/R terminal 32 and body ground.

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
Connector	Terminal (wire color)	Ground	Wiper operating
E122	32 (L/Y)		
			Fluctuating
			0V

OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-27, "Removal and Installation of IPDM E/R"](#).
- NG >> Replace front wiper motor. Refer to [WW-30, "Removal and Installation for Wiper Motor and Linkage"](#).



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FRONT WIPER AND WASHER SYSTEM

Removal and Installation for Front Wiper Arms, Adjustment for Wiper Arms Stop Location

EKS003H0

REMOVAL

1. Operate wiper motor, and stop it at the auto stop position.
2. Remove the wiper arm caps and mounting nuts, and remove wiper arms from vehicle.

INSTALLATION

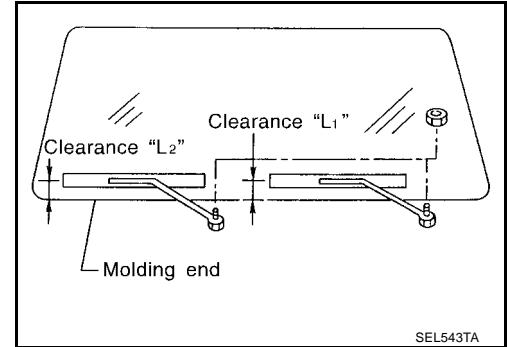
1. Prior to wiper arm installation, turn on wiper switch to operate wiper motor and then turn it "OFF" (auto stop).
2. Lift the blade up and then set it down onto glass surface to set the blade center to clearance "L1" & "L2" immediately before tightening nut.
3. Eject washer fluid. Turn on wiper switch to operate wiper motor and then turn it "OFF".
4. Ensure that wiper blades stop within clearance "L1" & "L2".

Clearance "L1" : 24.5 - 39.5 mm (0.965 - 1.555 in)

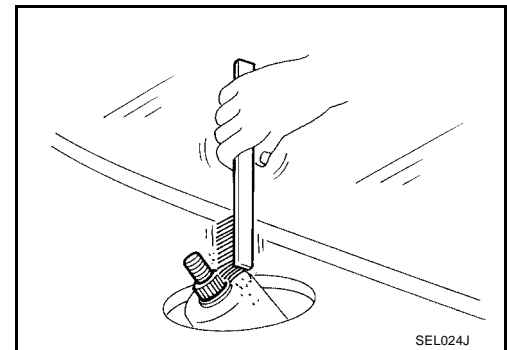
Clearance "L2" : 32.5 - 47.5 mm (1.280 - 1.870 in)

- Before reinstalling wiper arm, clean up the pivot area as illustrated. This will reduce possibility of wiper arm looseness.
- Tighten wiper arm nuts to specified torque.

Front wiper arm nuts : 24.0 N-m (2.4 kg-m, 208 in-lb)



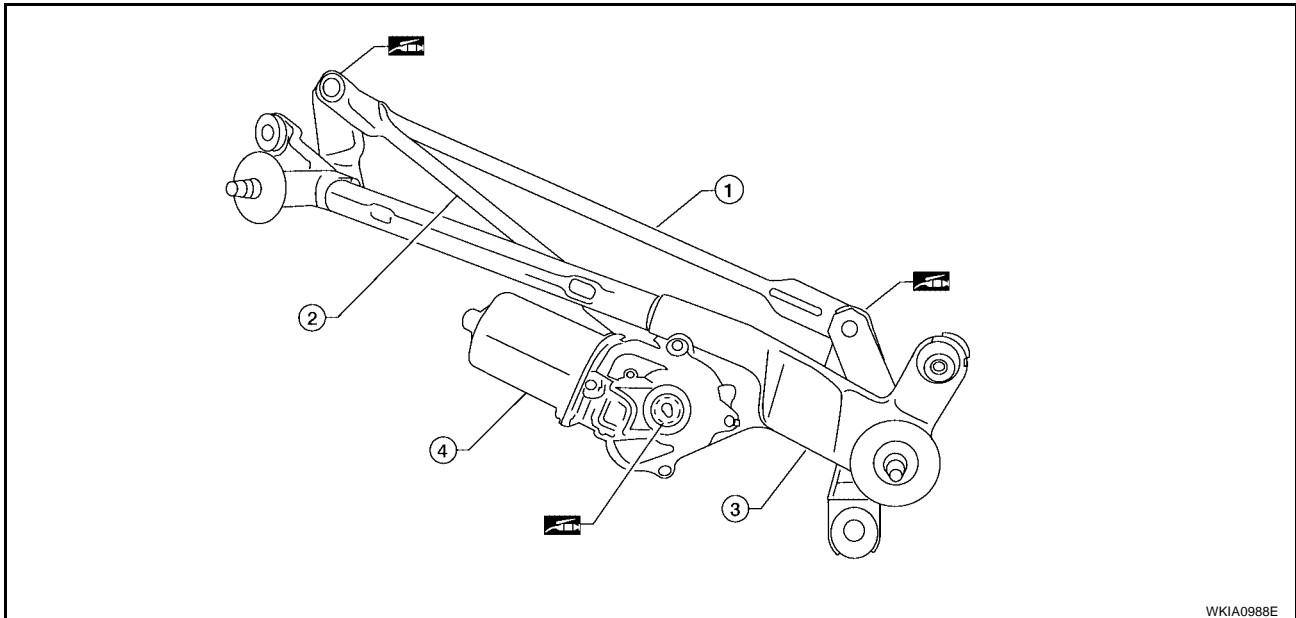
SEL543TA



SEL024J

Removal and Installation for Wiper Motor and Linkage

EKS003H1



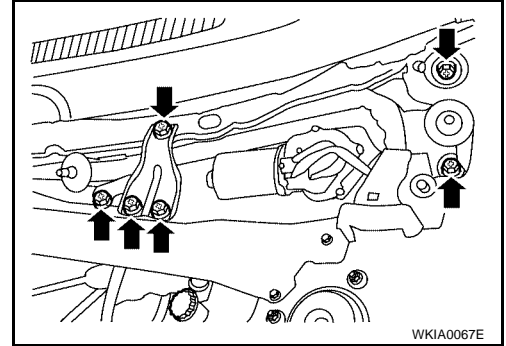
WKIA0988E

1. Wiper link
2. Wiper link
3. Wiper frame
4. Front wiper motor

FRONT WIPER AND WASHER SYSTEM

REMOVAL

1. Operate the wiper motor and then turn it "OFF" (auto stop).
2. Remove wiper arms from the vehicle, refer to [WW-30, "Removal and Installation for Front Wiper Arms, Adjustment for Wiper Arms Stop Location"](#) .
3. Remove the cowl top cover, refer to [EI-18, "Removal and Installation"](#) .
4. Disconnect wiper motor connector.
5. Remove bracket and wiper frame, link and motor assembly.
6. Remove wiper motor from wiper frame and link assembly.



INSTALLATION

CAUTION:

- Do not drop the wiper motor or cause it to contact other parts.
 - Check the grease conditions of the motor arm and wiper link joint(s). Apply grease if necessary.
1. Connect wiper motor to connector. Turn the wiper switch ON to operate wiper motor, then turn the wiper switch OFF (auto stop).
 2. Disconnect wiper motor connector.
 3. Install wiper motor to bracket and wiper frame and link assembly, and install assembly to the vehicle.
Wiper motor assembly bolts : 4.5 N-m (0.46 kg-m, 40 in-lb)
 4. Connect wiper motor connector. Turn the wiper switch ON to operate the wiper motor, then turn wiper switch OFF (auto stop).
 5. Install cowl top cover. Refer to [EI-18, "Removal and Installation"](#) .
 6. Install wiper arms. Refer to [WW-30, "Removal and Installation for Front Wiper Arms, Adjustment for Wiper Arms Stop Location"](#) .

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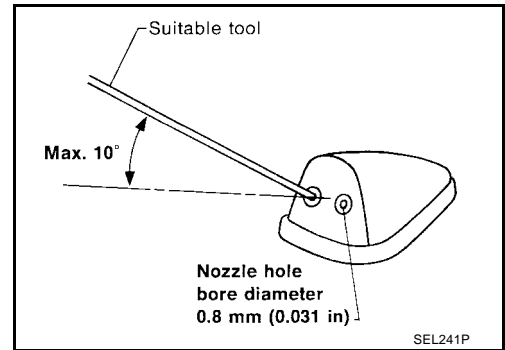
FRONT WIPER AND WASHER SYSTEM

EKS003H2

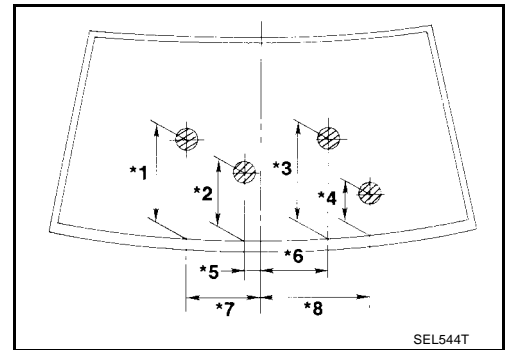
Washer Nozzle Adjustment

- Adjust washer nozzle with suitable tool as shown.

Adjustable range: $\pm 10^\circ$

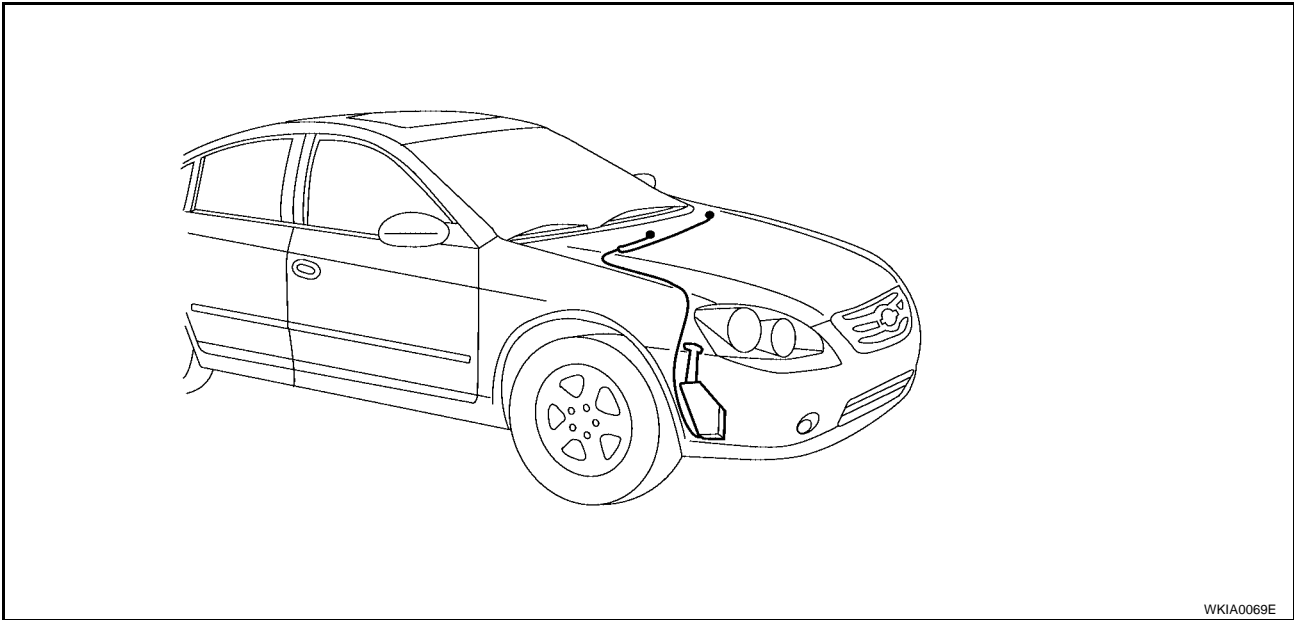


*1	350 mm (13.78 in)	*5	135 mm (5.31 in)
*2	190 mm (7.48 in)	*6	230 mm (9.06 in)
*3	320 mm (12.60 in)	*7	275 mm (10.83 in)
*4	135 mm (5.31 in)	*8	440 mm (17.32 in)



Washer Tube Layout

EKS003H3



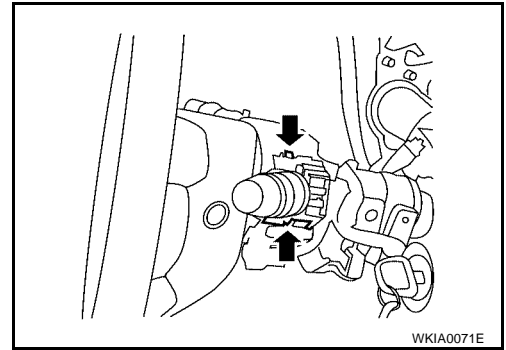
FRONT WIPER AND WASHER SYSTEM

Removal and Installation for Wiper and Washer Switch

EKS003H4

REMOVAL

1. Remove steering column cover.
2. Remove wiper washer switch connector.
3. Pinch tabs at wiper and washer switch base and slide switch away from steering column to remove.



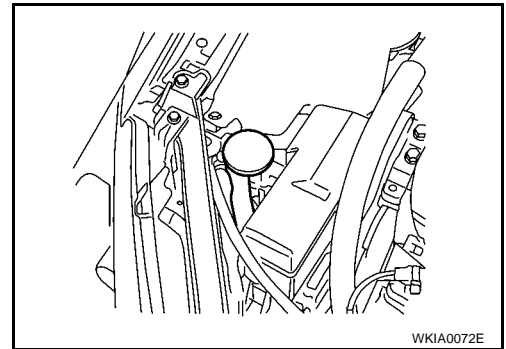
INSTALLATION

Installation is in the reverse order of removal.

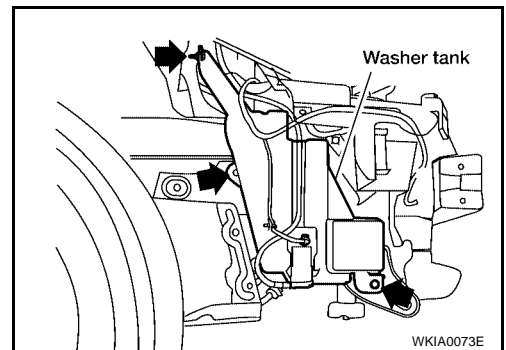
Removal and Installation for Washer Tank

EKS003H5

1. Pull out washer tank inlet.



2. Remove fender protector, refer to [EI-20, "Removal and Installation"](#).
3. Remove front washer motor connector and washer fluid level sensor connector (if equipped).
4. Remove washer tank screws.
5. Remove washer hose, and remove the washer tank from the vehicle.



CAUTION:

After installation, add water up to the upper level of the washer tank inlet, and check for water leaks.

Washer tank installation screws

Tightening torque : 4.5 N·m (0.46 kg-m, 40 in-lb)

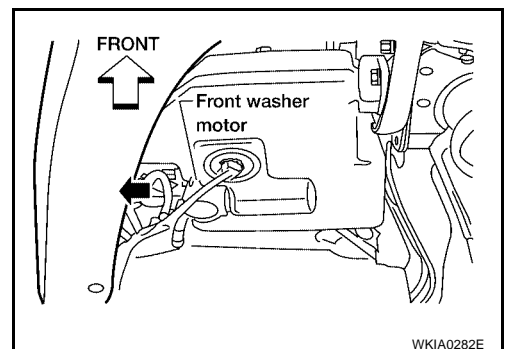
Removal and Installation for Washer Motor

EKS003H6

1. Remove fender protector. Refer to [EI-20, "Removal and Installation"](#).
2. Remove front washer motor connector and hose.
3. Pull out front washer motor in the direction of the arrow as shown, and remove the washer motor from the washer tank.

CAUTION:

When installing front washer motor, there should be no packing twists, etc.



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CIGARETTE LIGHTER

PF:35330

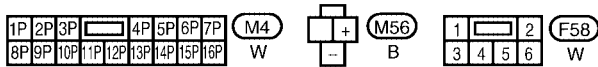
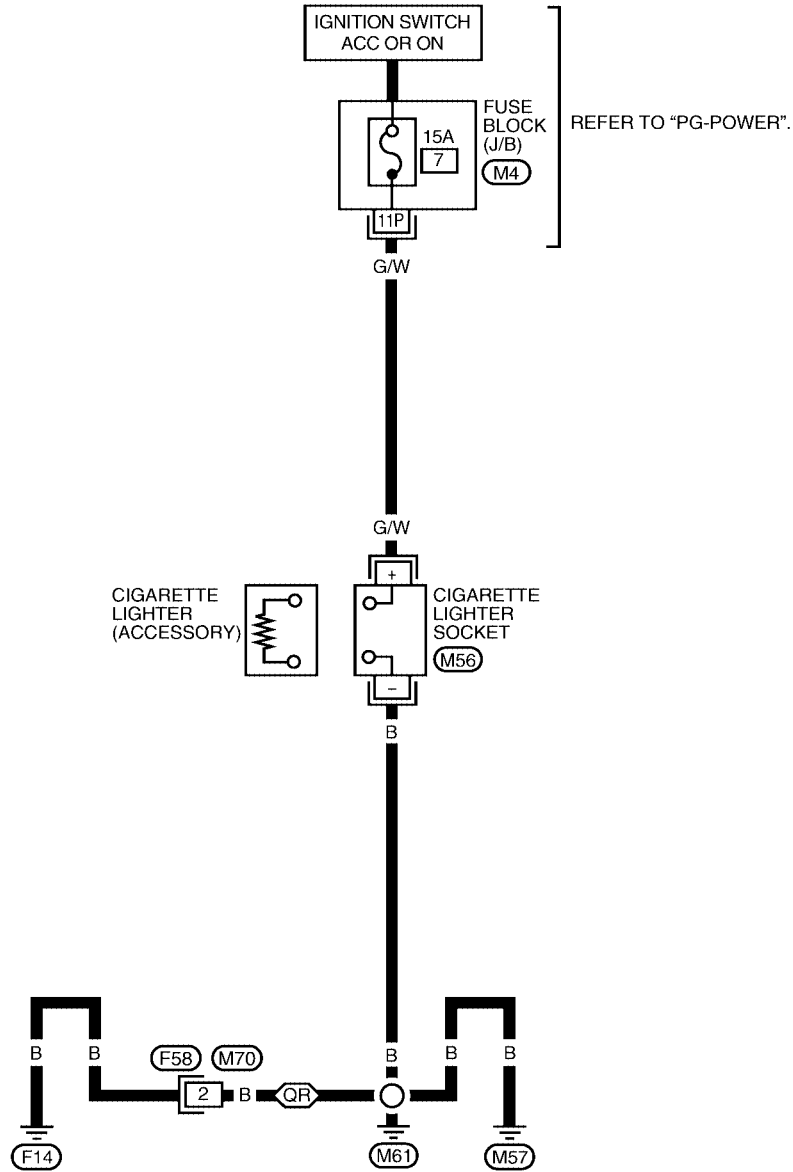
CIGARETTE LIGHTER

Wiring Diagram — CIGAR —

EKS003H7

WW-CIGAR-01

QR : WITH QR25DE



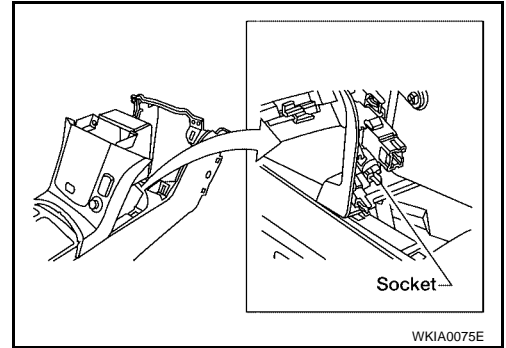
WKWA0938E

CIGARETTE LIGHTER

EKS003H8

Removal and Installation

1. Remove the A/T finisher (A/T models). Refer to [IP-13, "A/T Finisher"](#) , or remove the M/T finisher (M/T models). Refer to [IP-13, "M/T Finisher"](#) .
2. Remove console box finisher. Refer to [IP-15, "CENTER CONSOLE ASSEMBLY"](#) .
3. Remove socket.
4. Press out ring from the back of console box finisher.



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POWER SOCKET

PPF:253A2

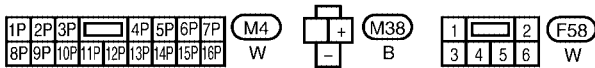
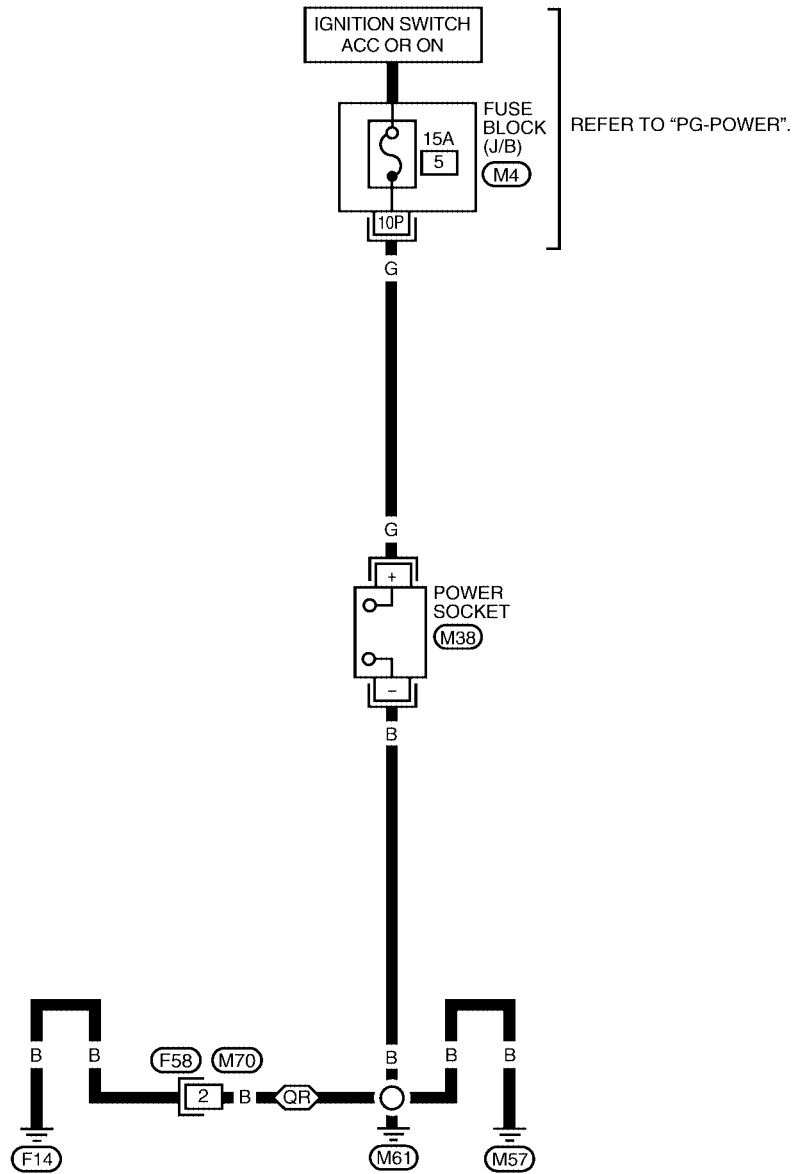
POWER SOCKET

Wiring Diagram — P/SCKT —

EKS003H9

WW-P/SCKT-01

QR : WITH QR25DE



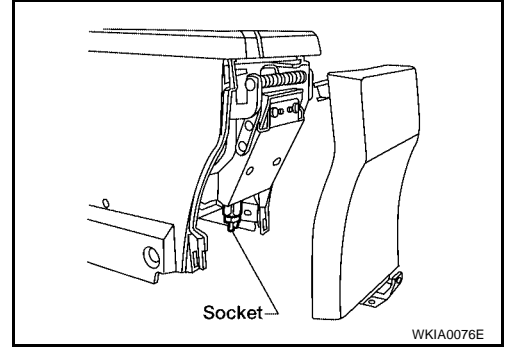
WKWA0939E

POWER SOCKET

Removal and Installation

EKS003HA

1. Remove the console finisher. Refer to [IP-15, "CENTER CONSOLE ASSEMBLY"](#).
2. Disconnect power socket connector.
3. Remove socket from the console.



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HORN


PFP:25610

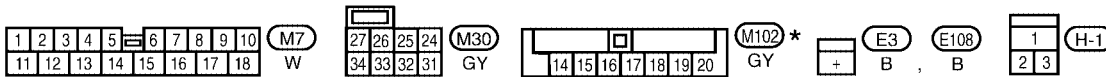
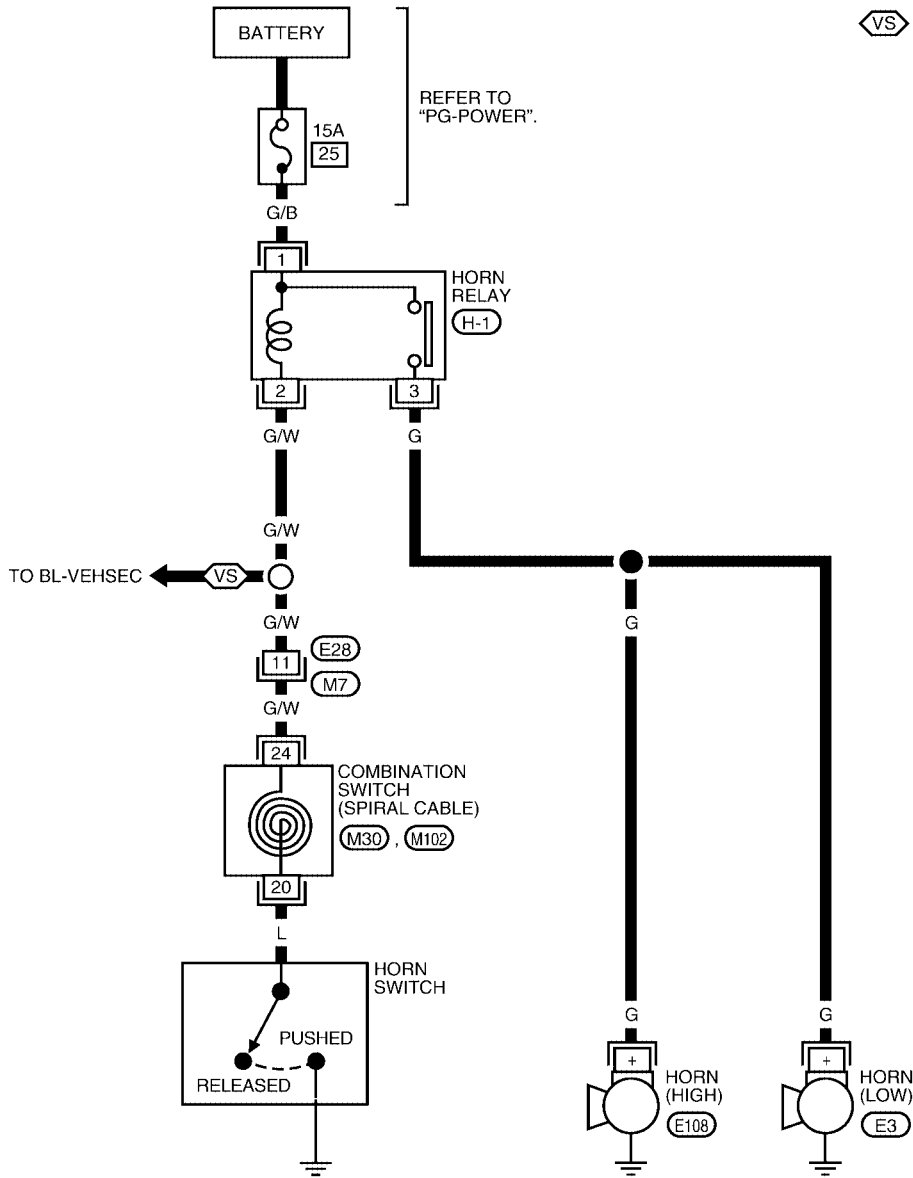
HORN

Wiring Diagram — HORN —

EKS003HB

WW-HORN-01

 : WITH VEHICLE SECURITY SYSTEM



* : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

WKWA0276E

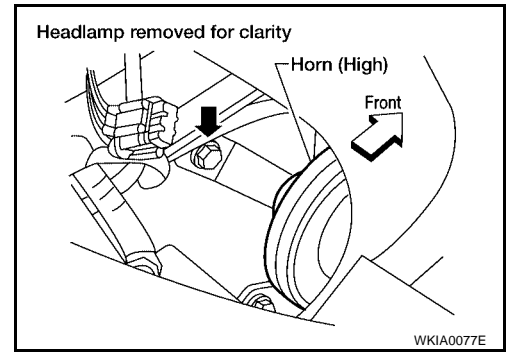
HORN

EKS003HC

Removal and Installation

REMOVAL (HORN HIGH)

1. Remove right headlamp. Refer to [LT-29, "REMOVAL"](#) .
2. Disconnect horn connector.
3. Remove horn.



INSTALLATION (HORN HIGH)

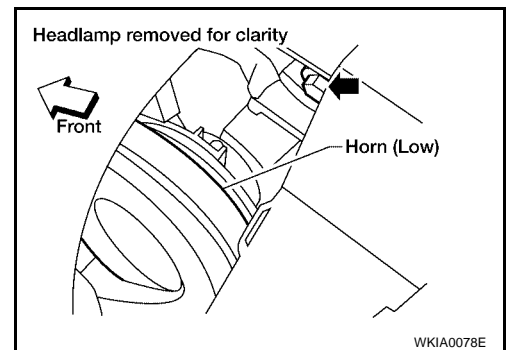
Tighten horn bolt to specified torque.

Horn bolt : 17 N·m (1.7 kg-m, 12.3 ft-lb)

1. Reconnect horn connector.
2. Install right headlamp. Refer to [LT-29, "INSTALLATION"](#) .

REMOVAL (HORN LOW)

1. Remove left headlamp. Refer to [LT-29, "REMOVAL"](#) .
2. Disconnect horn connector.
3. Remove horn.



INSTALLATION (HORN LOW)

Tighten horn bolt to specified torque.

Horn bolt : 17 N·m (1.7 kg-m, 12.3 ft-lb)

1. Reconnect horn connector.
2. Install left headlamp, refer to [LT-29, "INSTALLATION"](#) .

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HORN
