SECTION DI

DRIVER INFORMATION SYSTEM

CONTENTS

PRECAUTION

PFP:00011

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

AKS004V5

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.**

Precautions for Battery Service

AKS00AUP

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Wiring Diagrams and Trouble Diagnosis

AKS003C7

When you read wiring diagrams, refer to the following:

- Refer to GI-15, "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-11, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"
- Refer to GI-27, "How to Perform Efficient Diagnosis for an Electrical Incident"

COMBINATION METERS

PFP:24814

System Description

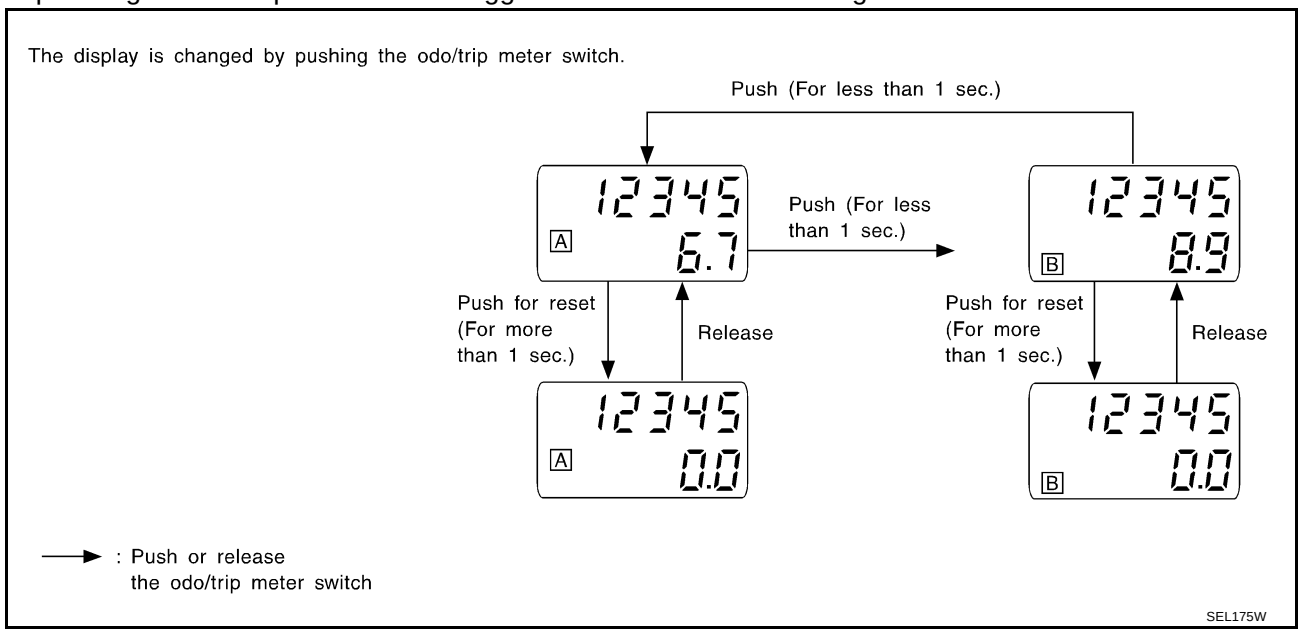
AKS004VL

UNIFIED METER CONTROL UNIT

- Speedometer, odo/trip meter, tachometer, fuel gauge and water temperature gauge are controlled by the unified meter control unit, which is built into the combination meter.
- Digital meter is adopted for odo/trip meter.*
  *The record of the odo meter is kept even if the battery cable is disconnected. The record of the trip meter is erased when the battery cable is disconnected.
- Odo/trip meter and A/T indicator segments can be checked in diagnosis mode.
- Meter/gauge can be checked in diagnosis mode.

HOW TO CHANGE THE DISPLAY FOR ODO/TRIP METER

- The vehicle speed signal and the memory signals from the meter memory circuit are processed by the combination meter and the mileage is displayed.
- Depressing the odo/trip meter switch toggles the mode in the following order.



- The odo/trip meter display mode toggling and trip display resetting can be identified by the amount of time that elapses from pressing the odo/trip meter switch to releasing it.
- When resetting with trip A displayed, only trip A display is reset (The same way for trip B.)

POWER SUPPLY AND GROUND CIRCUIT

Power is supplied at all times

- through 10A fuse [No. 19, located in the fuse block (J/B)]
- to combination meter terminal 43.

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

- through 10A fuse [No. 14, located in the fuse block (J/B)]
- to combination meter terminals 41 and 42.

With the ignition switch in the ACC or ON position, power is supplied

- through 10A fuse [No. 6, located in the fuse block (J/B)]
- to combination meter terminal 40.

Ground is supplied

- to combination meter terminals 45 and 47
- through body grounds M30 and M66.

WATER TEMPERATURE GAUGE

The water temperature gauge indicates the engine coolant temperature.
ECM provides an engine coolant temperature signal to combination meter for water temperature gauge with CAN communication line.

TACHOMETER

The tachometer indicates engine speed in revolutions per minute (rpm).
ECM provides an engine speed signal to combination meter for tachometer with CAN communication line.

FUEL GAUGE

The fuel gauge indicates the approximate fuel level in the fuel tank.
The fuel gauge is regulated by a variable resistance signal supplied

- through body grounds M30 and M66
- through terminals 2 and 5 of the fuel level sensor unit and fuel pump (main) and
- through terminals 1 and 2 of the fuel level sensor unit (sub)
- to combination meter terminal 17 for the fuel gauge.

SPEEDOMETER

VDC/TCS/ABS control unit provides a vehicle speed signal to the combination meter for the speedometer with CAN communication line.

CAN Communication

AKS00AJM

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

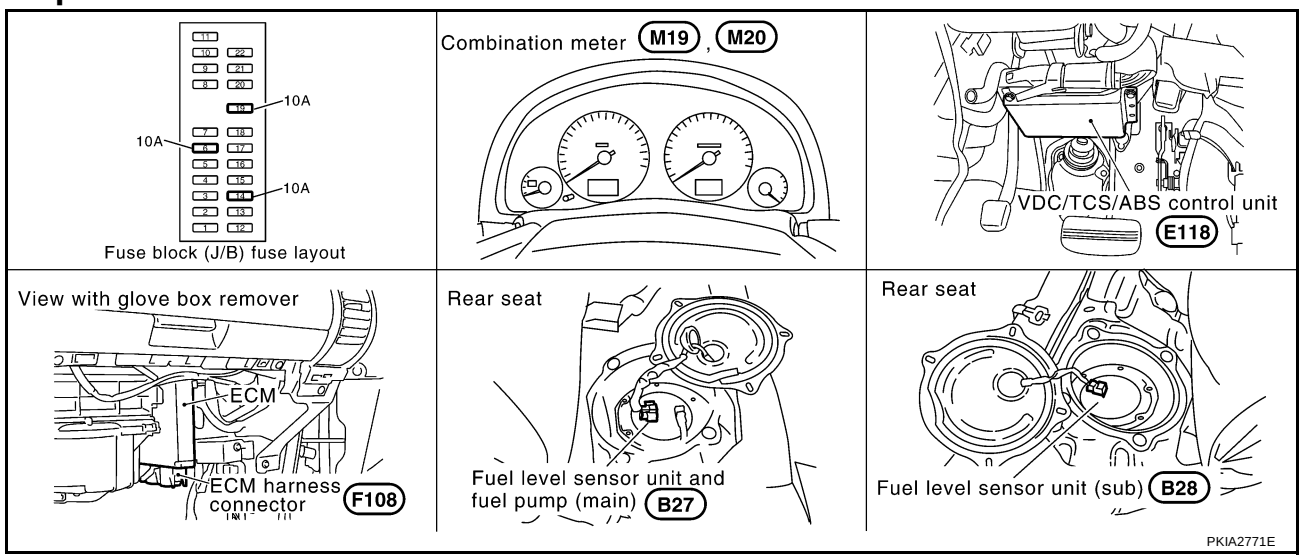
CAN Communication Unit

AKS00AJN

Refer to LAN-4, "CAN Communication Unit" in “LAN SYSTEM”.

Component Parts and Harness Connector Location

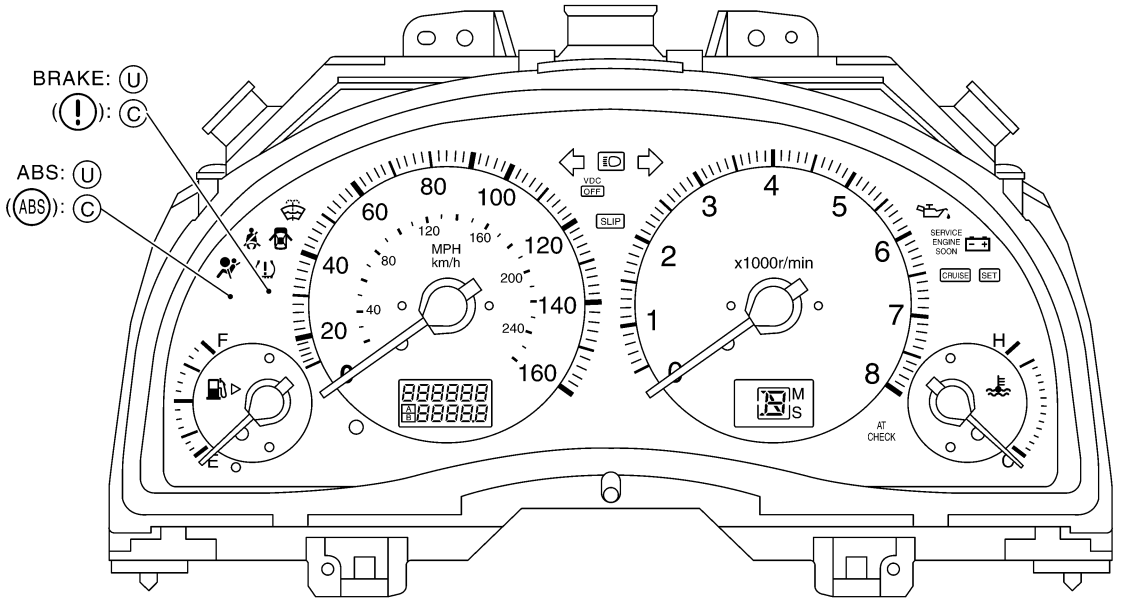
AKS004VN

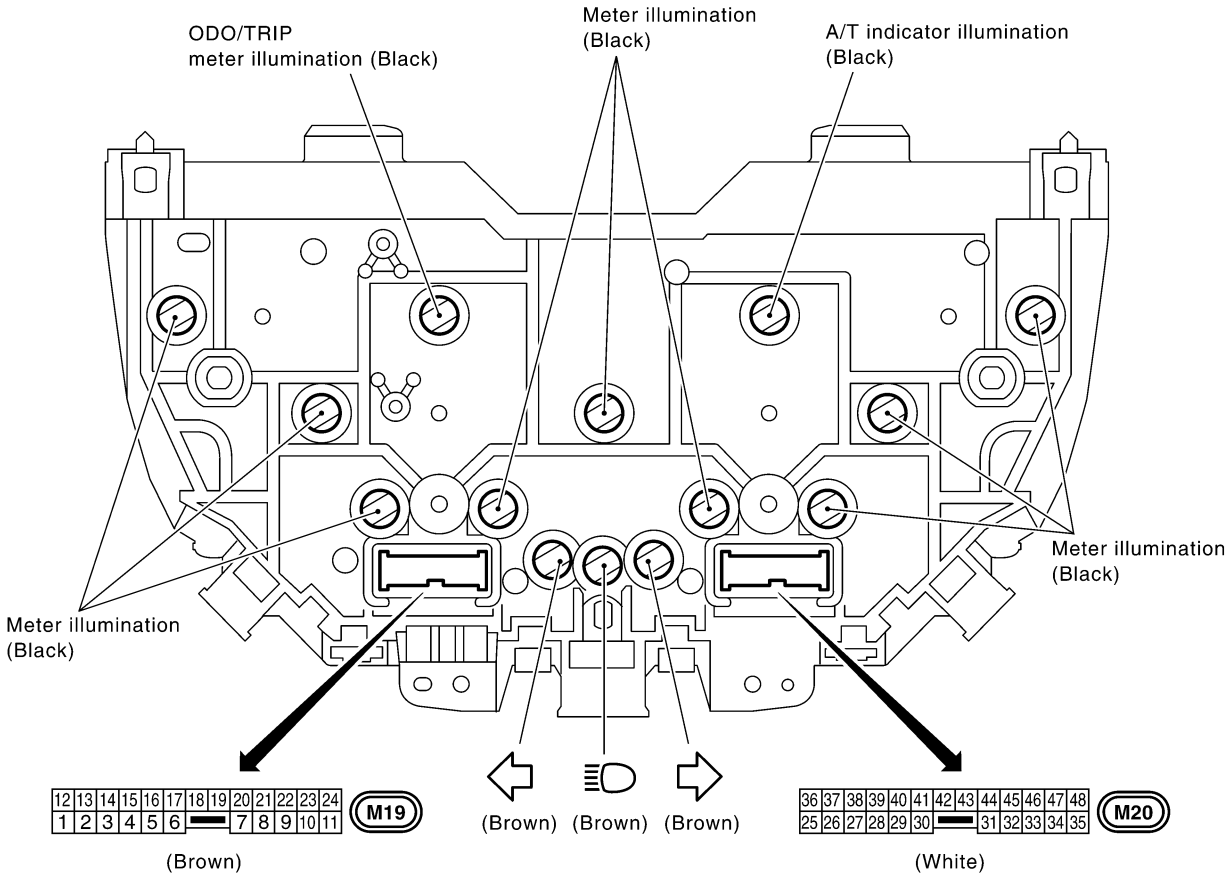


Combination Meter

AKS004VO

CHECK





Bulb socket color	Bulb wattage
Brown	1.4W
Black	3.0W

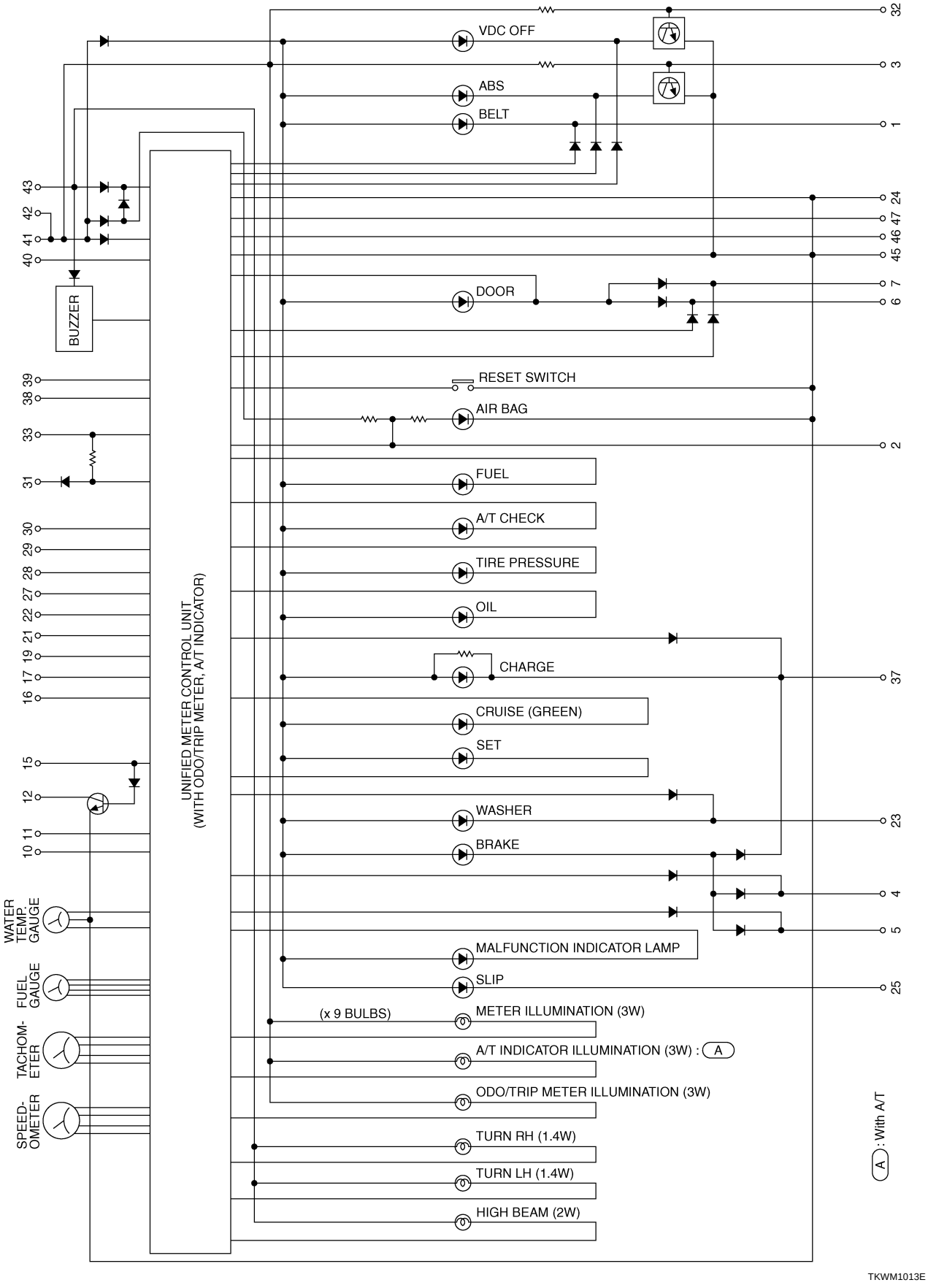
( ): Bulb socket color

Ⓤ: For U.S.A.
Ⓒ: For Canada

SKIB0017E

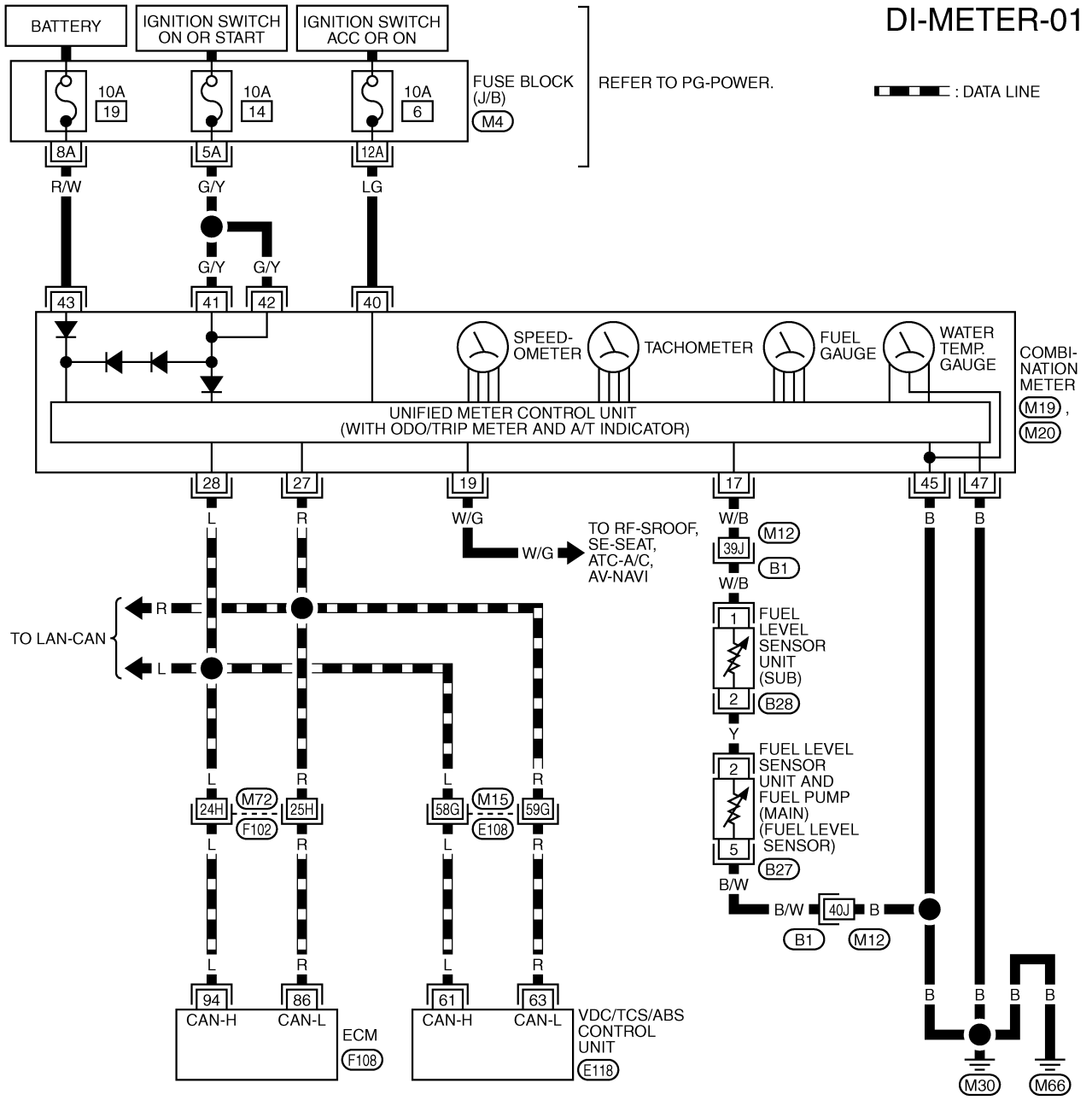
Schematic

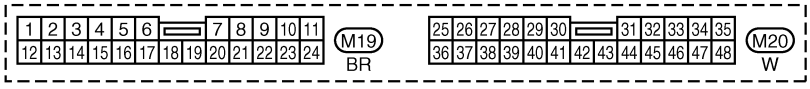
AKS004VP



Wiring Diagram — METER —

AKS004VQ





REFER TO THE FOLLOWING.

E108, F102, B1 -SUPER MULTIPLE JUNCTION (SMJ)

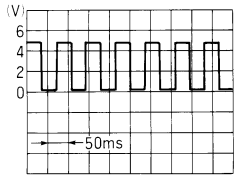
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

E118, F108 -ELECTRICAL UNITS

TKWT0547E

Terminals and Reference Value for Combination Meter

AKS004VR

Terminal	Wire Color	Item	Condition		Reference Value
			Ignition switch	Operation or condition	
17	W/B	Fuel level sensor signal	—	—	Refer to DI-17, "FUEL LEVEL SENSOR UNIT CHECK" .
19	W/G	Vehicle speed signal (2-pulse)	ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	 ELF1080D
27	R	CAN-L	—	—	—
28	L	CAN-H	—	—	—
40	LG	Ignition switch (ACC)	ACC	—	Battery voltage
41	G/Y	Ignition switch (ON)	ON	—	Battery voltage
42	G/Y	Ignition switch (ON)	ON	—	Battery voltage
43	R/W	Battery power supply	OFF	—	Battery voltage
45	B	Ground	ON	—	Approx. 0V
47	B	Ground	ON	—	Approx. 0V

Meter/Gauges Operation and Odo/Trip Meter

AKS004VS

SELF-DIAGNOSIS FUNCTION

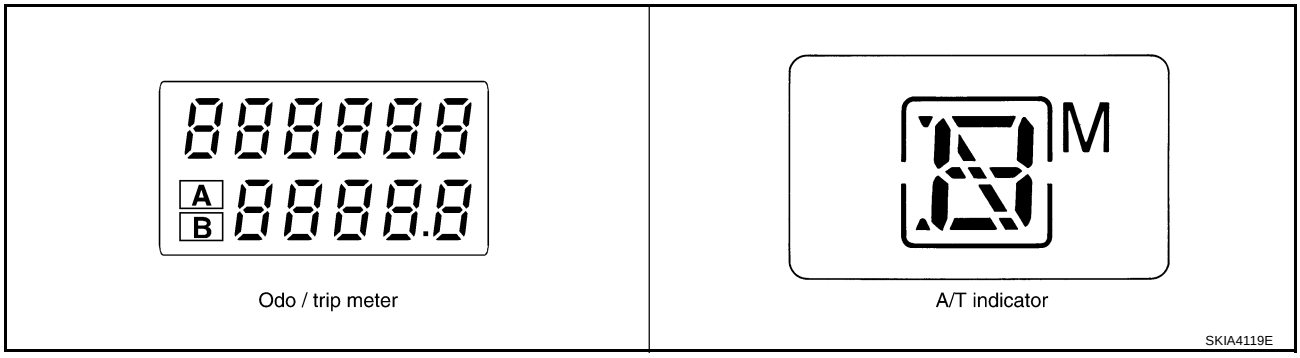
- Odo/trip meter segment and A/T indicator segment operation can be checked in self-diagnosis mode.
- Meters/gauges can be checked in self-diagnosis mode.

HOW TO ALTERNATE DIAGNOSIS MODE

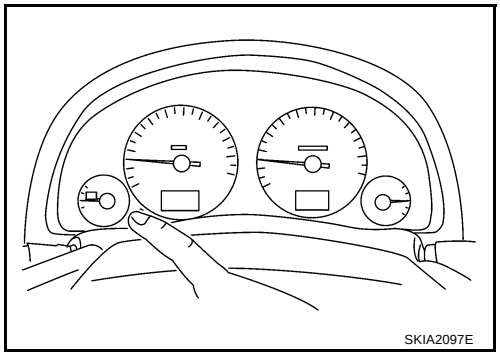
1. Turn the ignition switch ON, and switch the odo/trip meter to “trip A” or “trip B”.

   NOTE:
   If the diagnosis function is activated with the trip meter A displayed, the mileage on the trip meter A will indicate 0000.0 miles, but the actual trip mileage will be retained. (The same way for trip B.)
2. Turn the ignition switch OFF.
3. While pushing the odo/trip meter switch, turn the ignition switch ON again.
4. Check that the trip meter displays “0000.0”.
5. Push the odo/trip meter switch at least 3 times. (Within 7 seconds after the ignition switch is turned ON.)
6. All the segments on the odo/trip meter and A/T indicator illuminate, and simultaneously the low-fuel warning lamp indicator illuminates. At this time, the unified meter control unit is turned to diagnosis mode.

   NOTE:
   If any of the segments is not displayed, replace the combination meter.



7. Push the odo/trip meter switch. Each meter/gauge should indicate as shown in the figure while pushing odo/trip meter switch. (At this time, the low-fuel warning lamp goes off).



How to Proceed With Trouble Diagnosis

AKS004VT

1. Confirm the symptom or customer complaint.
2. Perform diagnosis according to diagnosis flow. Refer to DI-11, "Diagnosis Flow" .
3. According to the trouble diagnosis chart, repair or replace the cause of the trouble symptom. Refer to DI-13, "Trouble Diagnosis Chart by Symptom" .
4. Does the meter operate normally? If so, go to 5. If not, go to 2.
5. INSPECTION END

Diagnosis Flow

AKS004VU

1. CHECK WARNING LAMP ILLUMINATION

1. Turn ignition switch ON.
2. Check that warning lamps (such as MIL and oil pressure warning lamp) illuminate.

Do warning lamps illuminate?

YES >> GO TO 2.
NO >> Check power supply circuit of combination meter when ignition switch is ON. Refer to DI-12, "Power Supply and Ground Circuit Check" .

2. PERFORM SELF-DIAGNOSIS OPERATION

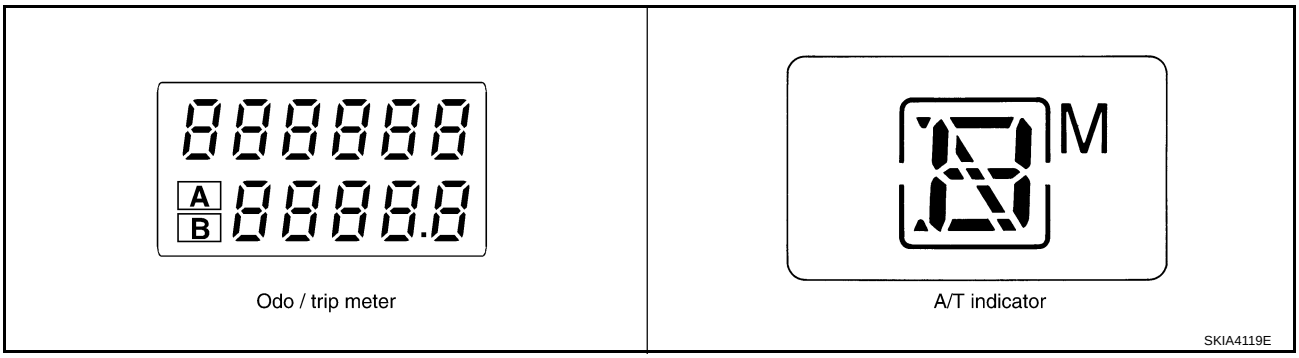
Perform combination meter self-diagnosis. Refer to DI-10, "SELF-DIAGNOSIS FUNCTION" .

Does self-diagnosis function operate?

YES >> GO TO 3.
NO >> Check battery power supply circuit and ground circuit of combination meter. Refer to DI-12, "Power Supply and Ground Circuit Check" .

3. CHECK ODO/TRIP METER OPERATION

Check segment display status of odo/trip meter and A/T indicator.



Is the display normal?

YES >> GO TO 4.
NO >> Replace combination meter.

4. CHECK FUEL WARNING LAMP ILLUMINATION

During fuel warning lamp check, confirm illumination of fuel warning lamp.

Condition of odo/trip meter switch	Fuel warning lamp
Pushed	Does not illuminate.
Released	Illuminates.

OK or NG

OK >> GO TO 5.
NG >> Replace combination meter.

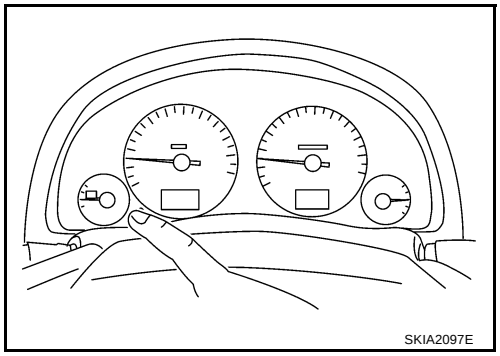
5. CHECK METER CIRCUIT

Check indication of each meter/gauge in self-diagnosis mode.

OK or NG

YES >> GO TO diagnosis results. Refer to DI-13, "DIAGNOSIS RESULTS" .

NO >> Replace combination meter.



Power Supply and Ground Circuit Check

AKS009I2

1. CHECK FUSES

Check for blown combination meter fuses.

Unit	Power source	Fuse No.
Combination meter	Battery	19
	Ignition switch (ON)	14
	Ignition switch (ACC)	6

OK or NG

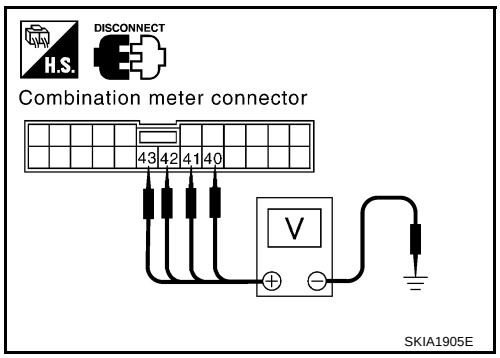
OK >> GO TO 2.

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 combination meter connector.
2. Check voltage between combination meter and ground.

Terminals			Ignition switch position		
(+)		(–)			
Connector	Terminal (Wire color)		OFF	ACC	ON
M20	40 (LG)	Ground	0V	Battery voltage	Battery voltage
	41 (G/Y)		0V	0V	Battery voltage
	42 (G/Y)		0V	0V	Battery voltage
	43 (R/W)		Battery voltage	Battery voltage	Battery voltage



OK or NG

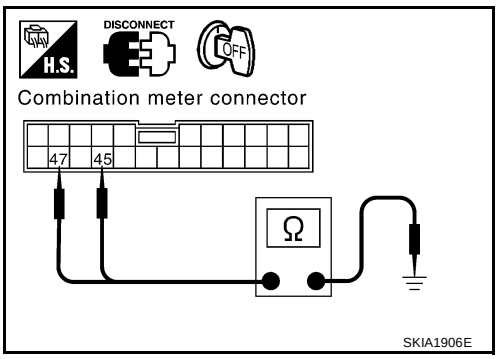
OK >> GO TO 3.

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

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between combination meter harness connector M20 terminals 45 (B), 47 (B) and ground.

Continuity should exist.



OK or NG

OK >> INSPECTION END
NG >> Repair ground harness.

Trouble Diagnosis Chart by Symptom

AKS004VW

DIAGNOSIS RESULTS

Trouble phenomenon	Possible cause
Tachometer indication is malfunction.	Refer to DI-15, "Inspection/Engine Speed Signal" .
Fuel warning lamp indication is irregular.	Refer to DI-14, "Inspection/Fuel Level Sensor" .
Fuel gauge indication is malfunction.	
Water temperature gauge indication is malfunction.	Refer to DI-15, "Inspection/Water Temperature Signal" .
Indication is irregular for the speedometer and odo/trip meter.	Refer to DI-15, "Inspection/Vehicle Speed Signal" .
Indications are irregular for more than one gauge.	Replace combination meter.
A/T position indicator is malfunction.	Refer to DI-37, "A/T Indicator Does Not Illuminate" .

Inspection/Fuel Level Sensor

AKS004VX

NOTE:
The following symptoms are not malfunction.

FUEL GAUGE

- Depending on vehicle position or driving circumstances, the fuel in the tank varies, and the pointer may fluctuate.
- If the vehicle is fueled with the ignition switch ON, the pointer moves slowly.

LOW-FUEL WARNING LAMP

- Depending on vehicle position or driving circumstances, the fuel in the tank varies, and the warning lamp ON timing may change.

1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Check meter, fuel level sensor unit and terminals (meter-side, unit-side, harness-side) for looseness or bent terminals.

OK or NG

OK >> GO TO 2.
NG >> Repair terminal or connector.

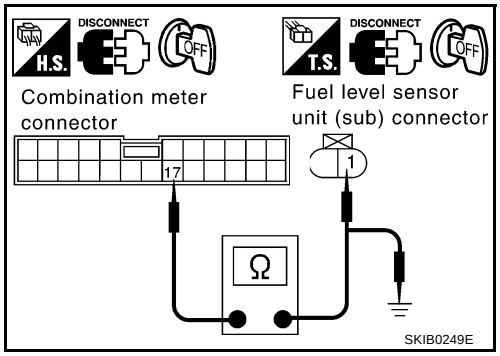
2. CHECK COMBINATION METER CIRCUIT

1. Disconnect combination meter connector and fuel level sensor unit (sub) connector.
2. Check continuity between combination meter harness connector M19 terminal 17 (W/B) and fuel level sensor unit (sub) harness connector B28 terminal 1(W/B).

   Continuity should exist.

3. Check continuity between combination meter harness connector M19 terminal 17 (W/B) and ground.

   Continuity should not exist.



OK or NG

OK >> GO TO 3.
NG >> Repair harness or connector.

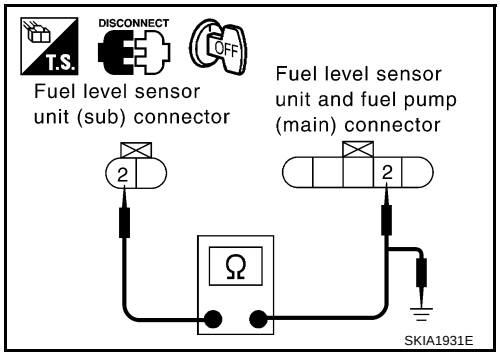
3. CHECK FUEL LEVEL SENSOR CIRCUIT

1. Disconnect fuel level sensor unit and fuel pump (main) connector.
2. Check continuity between fuel level sensor unit (sub) harness connector B28 terminal 2 (Y) and fuel level sensor unit and fuel pump (main) harness connector B27 terminal 2 (Y).

   Continuity should exist.

3. Check continuity between fuel level sensor unit (sub) harness connector B28 terminal 2 (Y) and ground.

   Continuity should not exist.



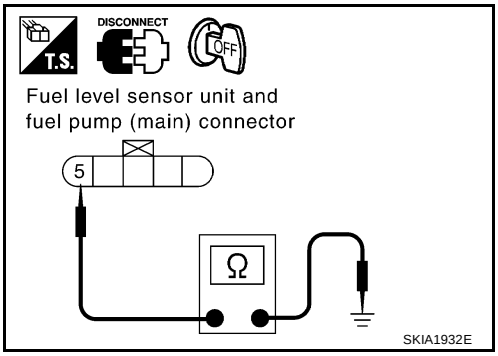
OK or NG

OK >> GO TO 4.
NG >> Repair harness or connector.

4. CHECK GROUND CIRCUIT

Check continuity between fuel level sensor unit and fuel pump (main) harness connector B27 terminal 5 (B) and ground.

Continuity should exist.



OK or NG

OK >> GO TO 5.
NG >> Repair harness or connector.

5. CHECK FUEL LEVEL SENSOR

Check fuel level sensor units. Refer to DI-17, "FUEL LEVEL SENSOR UNIT CHECK" .

OK or NG

OK >> GO TO 6.
NG >> Replace fuel level sensor unit and fuel pump (main) or fuel level sensor unit (sub).

6. CHECK INSTALLATION CONDITION

Check fuel level sensor unit installation, and check whether the float arm interferes or binds with any of the internal components in the fuel tank.

OK or NG

OK >> Replace combination meter.
NG >> Install fuel level sensor unit properly.

Inspection/Engine Speed Signal

AKS004VY

1. CHECK ECM SELF-DIAGNOSIS

Perform ECM self-diagnosis. Refer to EC-103, "CONSULT-II Function" .

OK or NG

OK >> Replace combination meter.
NG >> Perform “Diagnostic Procedure” in displayed DTC.

Inspection/Water Temperature Signal

AKS004VZ

1. CHECK ECM SELF-DIAGNOSIS

Preform the ECM self-diagnosis. Refer to EC-103, "CONSULT-II Function" .

OK or NG

OK >> Replace combination meter.
NG >> Perform “Diagnostic Procedure” in displayed DTC.

Inspection/Vehicle Speed Signal

AKS004W0

1. CHECK VDC/TCS/ABS CONTROL UNIT SELF-DIAGNOSIS

Preform VDC/TCS/ABS control unit self-diagnosis. Refer to BRC-25, "CONSULT-II Functions" .

OK or NG

OK >> Replace combination meter.
NG >> Check applicable parts.

The Fuel Gauge Pointer Fluctuates, Indicator Wrong Value or Varies

AKS004W1

1. CHECK FUEL GAUGE FLUCTUATION

Test drive vehicle to see if gauge fluctuates only during driving or before or after stopping.

Does the indication value vary only during driving or before or after stopping?

YES >> The pointer fluctuation may be caused by fuel level change in the fuel tank. Condition is normal.
NO >> Ask the customer about the situation when the symptom occurs in detail, and perform the trouble diagnosis.

The Fuel Gauge Does Not Move to FULL position

AKS004W2

1. QUESTION 1

Does it take a long time for the pointer to move to FULL position?

YES or NO

YES >> GO TO 2.
NO >> GO TO 3.

2. QUESTION 2

Was the vehicle fueled with the ignition switch ON?

YES or NO

YES >> Be sure to fuel the vehicle with the ignition switch OFF. Otherwise, it will take a long time to move to FULL position because of the characteristic of the fuel gauge.
NO >> GO TO 3.

3. QUESTION 3

Is the vehicle parked on an incline?

YES or NO

YES >> Check fuel level indication with vehicle on a level surface.
NO >> GO TO 4.

4. QUESTION 4

During driving, does the fuel gauge pointer move gradually toward EMPTY position?

YES or NO

YES >> Check fuel level sensor unit. Refer to DI-17, "FUEL LEVEL SENSOR UNIT CHECK" .
NO >> The float arm may interfere or bind with any of the components in the fuel tank.

Electrical Components Inspection

AKS004XN

FUEL LEVEL SENSOR UNIT CHECK

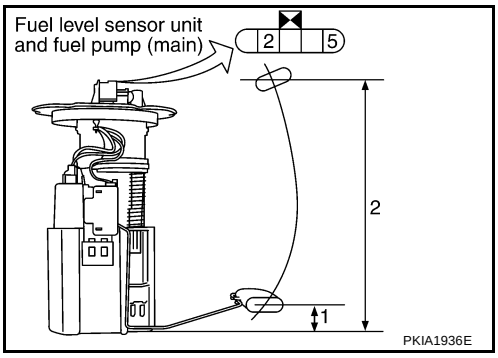
For removal, refer to FL-5, "FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY" .

Fuel Level Sensor Unit and Fuel Pump (Main)

1. Check the resistance between terminals 2 and 5.

Ohmmeter		Float position mm (in)			Resistance value Ω
(+)	(–)				
2	5	*1	Empty	30 (1.18)	Approx. 80
		*2	Full	210 (8.27)	Approx. 3

*1 and *2: When float rod is in contact with stopper.

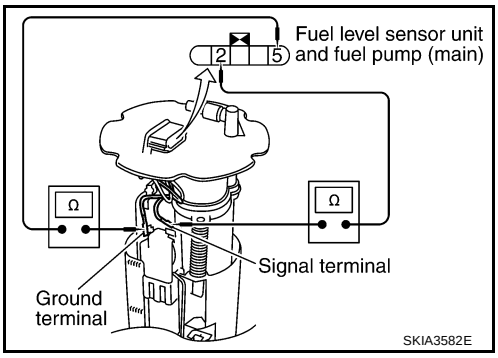


- If the results of check is NG, perform as following “Check the fuel level sensor unit and fuel pump (main) harness”.

Fuel Level Sensor Unit and Pump (Main) Harness

1. Check the continuity following terminals.

Terminal	Continuity
2 - Signal terminal	Yes
5 - Ground terminal	



- If the results of check is NG, replace fuel pump assembly.
- If the results of check is OK, replace fuel level sensor unit.

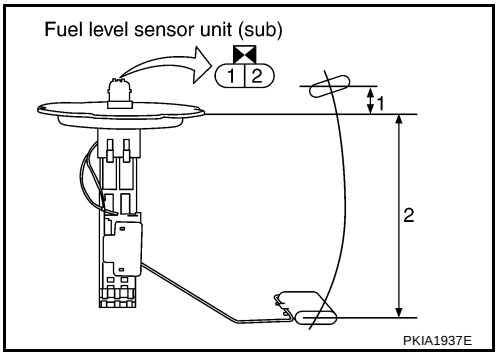
NOTE:
When replace fuel level sensor unit, refer to FL-5, "FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY" in FE section.

Fuel Level Sensor Unit (Sub)

Check the resistance between terminals 1 and 2.

Ohmmeter		Float position mm (in)			Resistance value Ω
(+)	(–)				
1	2	*1	Full	8 (0.31)	Approx. 3
		*2	Empty	175 (6.89)	Approx. 43

*1 and *2: When float rod is in contact with stopper.

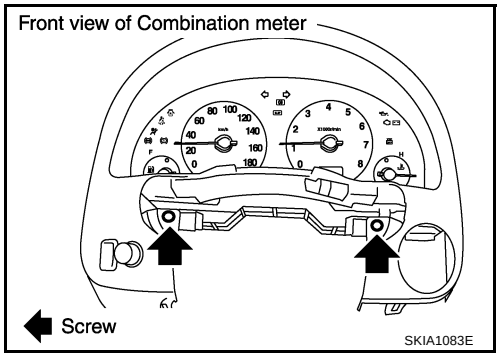


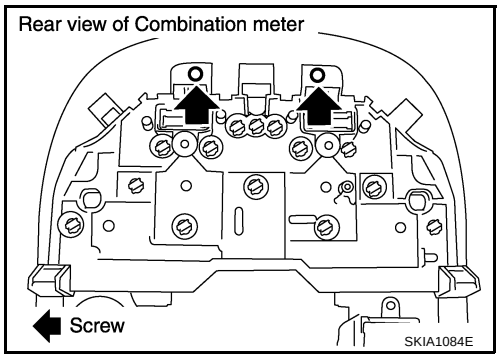
Removal and Installation for Combination Meter

AKS004W6

REMOVAL

1. Remove column cover. Refer to PS-10, "STEERING COLUMN" .
2. Remove combination switch. Refer to LT-123, "LIGHTING AND TURN SIGNAL SWITCH" and WW-34, "Removal and Installation of Front Wiper and Washer Switch" .
3. Remove instrument lower cover. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
4. Remove the screw (4) and remove cluster lid A and combination meter assembly. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
5. Disconnect connectors and remove combination meter.
6. Disassembly cluster lid A and combination meter.



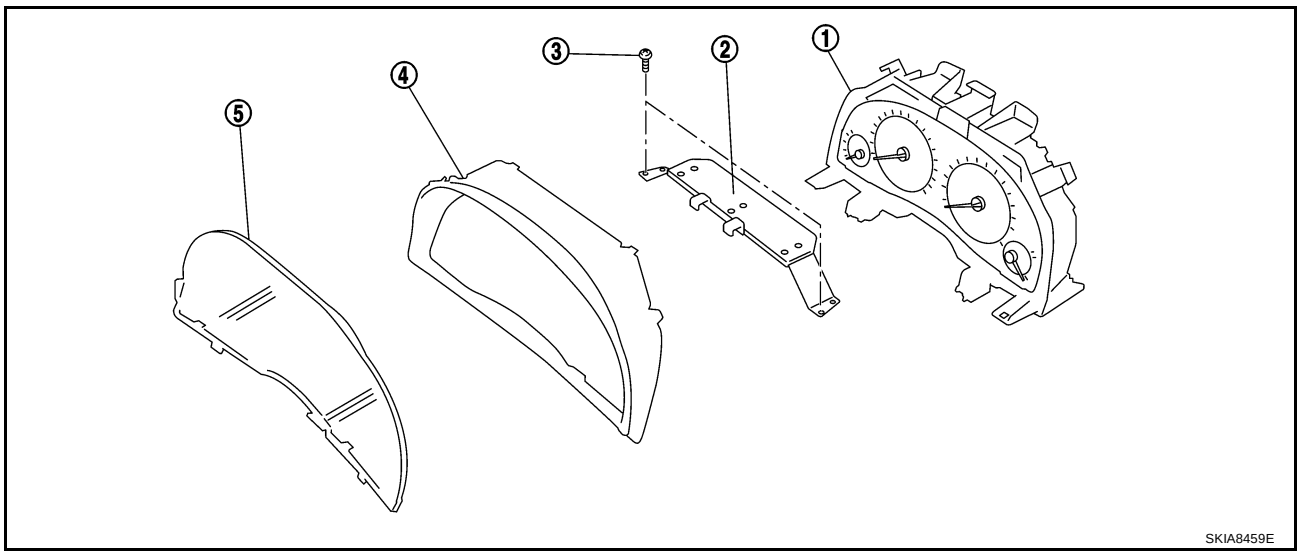


INSTALLATION

Install in the reverse order of removal.

Disassembly and Assembly for Combination Meter

AKS004W7



1. Unified meter control unit assembly
2. Plate
3. Screw (2)
4. Upper housing
5. Front cover

DISASSEMBLY

1. Disengaged the tabs (8) to separate front cover.
2. Remove screw (2) and remove plate.
3. Disengaged the tabs (8) to separate upper housing.
4. Remove bulbs.

ASSEMBLY

Assembly in the reverse order of disassembly.

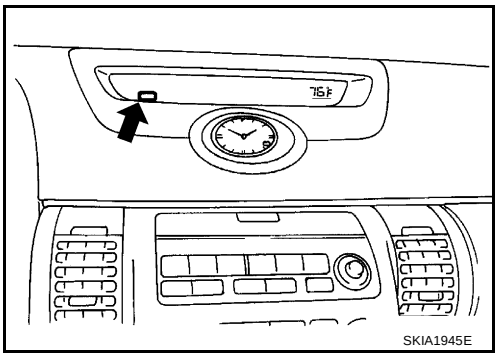
COMPASS

PFP:24835

System Description

AKS004W8

This unit displays earth magnetism and heading direction of vehicle.



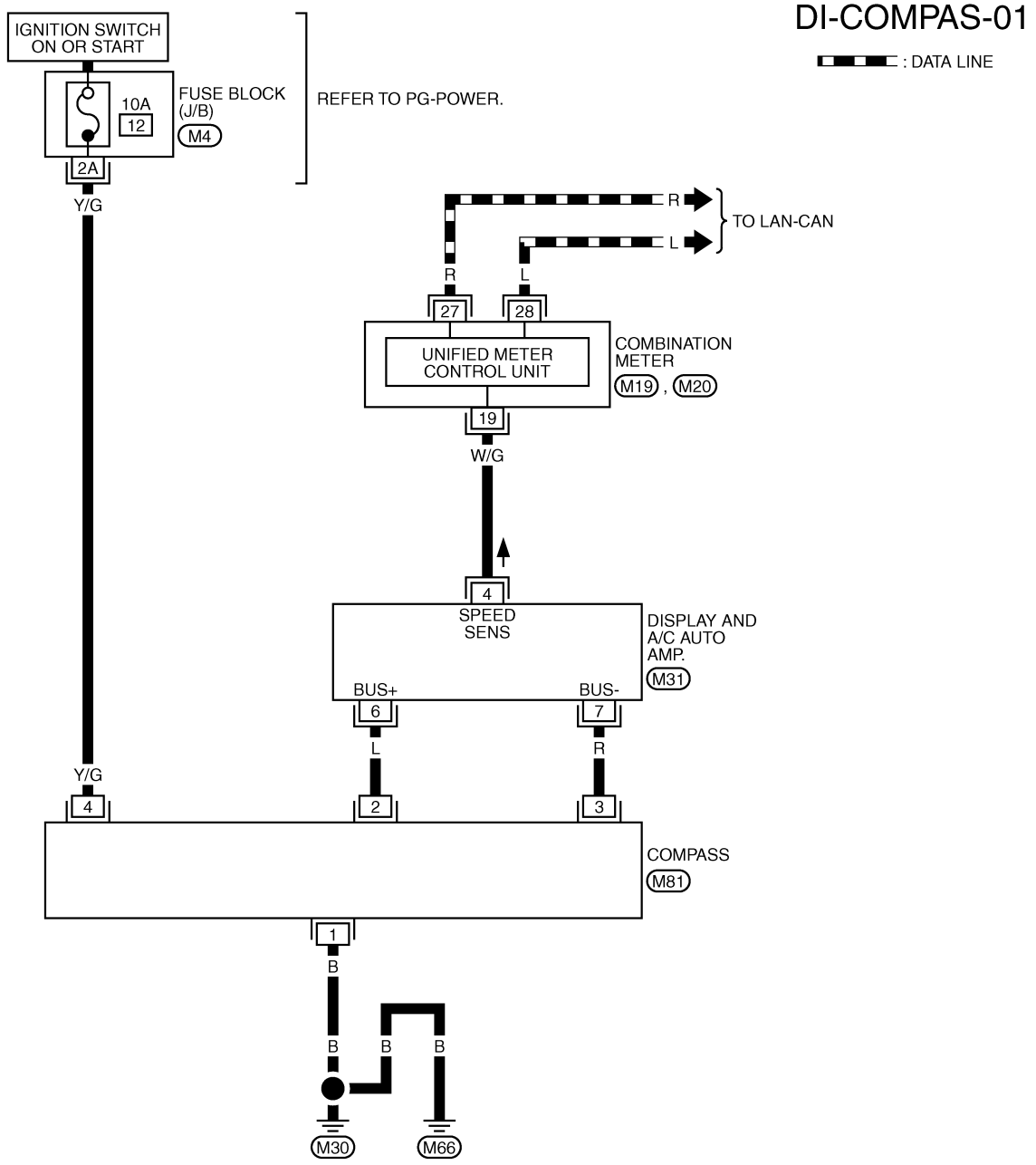
DIRECTION DISPLAY

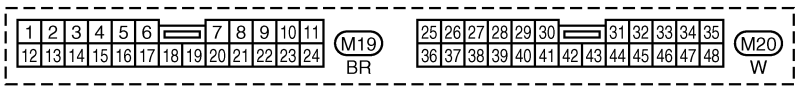
Push the switch when the ignition key is “ON” or “START”. The direction will be displayed.

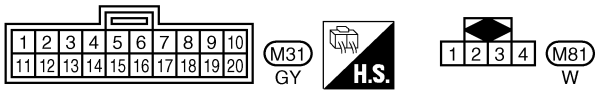
Wiring Diagram — COMPASS —

AKS004W9

DI-COMPAS-01







REFER TO THE FOLLOWING.

M4 -FUSE BLOCK-JUNCTION BOX (J/B)

TKWT0548E

Power Supply and Ground Circuit Check for Compass

AKS004WA

1. CHECK FUSE

Check 10A fuse [No. 12, located in fuse block (J/B)].

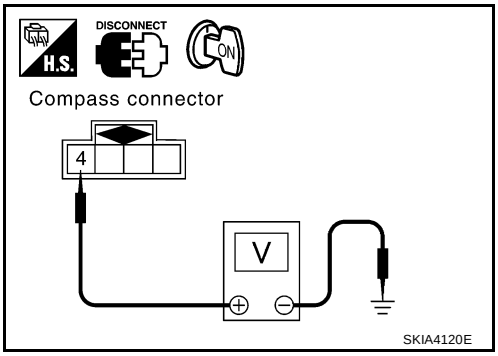
OK or NG

OK >> GO TO 2.
NG >> If fuse is blown, be sure to eliminate case of problem before installing new fuse. Refer to PG-4, "POWER SUPPLY ROUTING CIRCUIT" .

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect compass connector.
2. Turn ignition switch ON.
3. Check voltage between compass harness connector M81 terminal 4 (Y/G) and ground.

Battery voltage should exist.



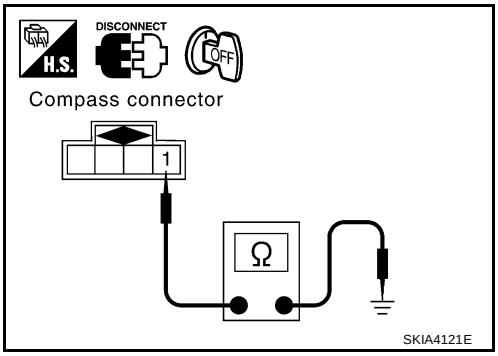
OK or NG

OK >> GO TO 3.
NG >> Check harness for open or short between compass and fuse.

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between compass harness connector M81 terminal 1 (B) and ground.

Continuity should exist.



OK or NG

OK >> INSPECTION END
NG >> Repair or replace harness for ground circuit.

Fail-Safe System

AKS004WB

DESCRIPTION

- If there is no response from display and A/C auto amp., previous display is kept for 10 minutes. After 10 minutes, “---” is displayed. (Only when there is no response continuously for 10 minutes.)
- If display and A/C auto amp. receives normal data within 10 minutes, normal operation will be recovered.
- If display and A/C auto amp. receives normal data while “---” is being displayed, normal operation will be recovered.
- If ignition switch is turned OFF within 10 minutes: Previously retained data is displayed when ignition switch is turned ON again. Then after 10 minutes, “---” is displayed.
- If response is never received after battery is turned ON, no data is retained. Therefore nothing is displayed for 10 minutes.

Compass Does not Display.

AKS004WC

1. CHECK DISPLAY AND A/C AUTO AMP. SELF-DIAGNOSIS

Check display and A/C auto amp. self-diagnosis. Refer to ATC-54, "FUNCTION CONFIRMATION PROCEDURE" .

Does display and A/C auto amp. segments all displayed?

YES >> Check fail safe system. refer to DI-22, "Fail-Safe System" .
NO >> Replace the display and A/C auto amp.

Compass Display “– – –”.

AKS004WD

1. CHECK FAIL-SAFE MODE

Check that fail-safe mode is not activated. Refer to DI-22, "Fail-Safe System" .

Does be activated fail-safe mode?

YES >> GO TO 3.
NO >> GO TO 2.

2. CHECK DISPLAY AND A/C AUTO AMP. SELF-DIAGNOSIS

Check display and A/C auto amp. self-diagnosis. Refer to ATC-54, "FUNCTION CONFIRMATION PROCEDURE" .

Does display and A/C auto amp. segments all displayed?

YES >> INSPECTION END
NO >> Replace the display and A/C auto amp.

3. CHECK POWER AND GROUND CIRCUIT

Check power and ground circuit. Refer to DI-21, "Power Supply and Ground Circuit Check for Compass" .

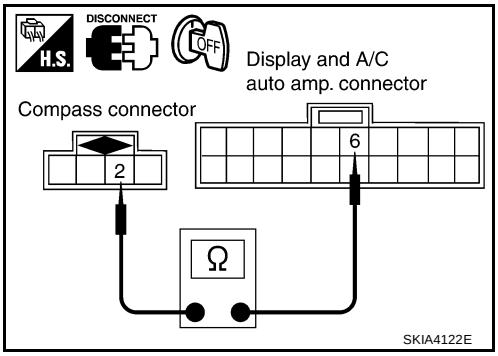
OK or NG

OK >> GO TO 4.
NG >> Repair power and ground circuit.

4. CHECK COMPASS CIRCUIT

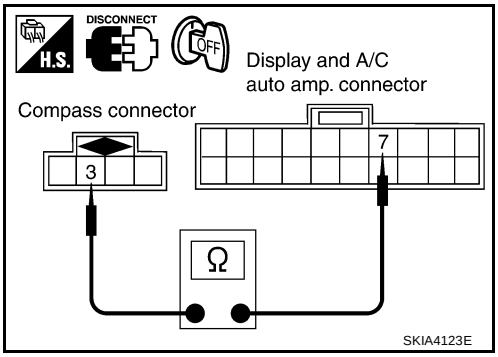
1. Turn ignition switch OFF.
2. Disconnect compass connector and display and A/C auto amp. connector.
3. Check continuity between compass harness connector M81 terminal 2 (L) and display and A/C auto amp. harness connector M31 terminal 6 (L).

Continuity should exist.



4. Check continuity between compass harness connector M81 terminal 3 (R) and display and A/C auto amp. harness connector M31 terminal 7 (R).

Continuity should exist.

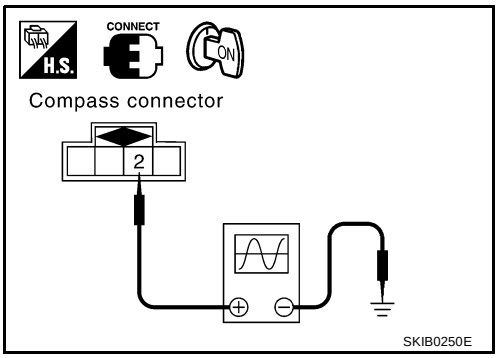


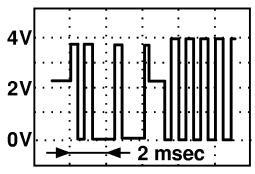
OK or NG

OK >> GO TO 5.
NG >> Repair harness or connector.

5. CHECK COMPASS SIGNAL

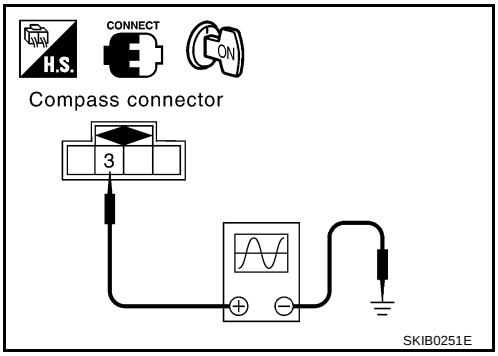
1. Connect compass connector and display and A/C auto amp. connector.
2. Turn ignition switch ON.
3. Check the signal between compass harness connector M81 terminal 2 (L) and ground with CONSULT-II or oscilloscope.

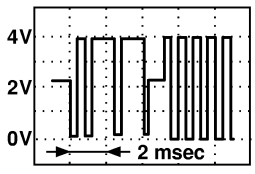




RJIA0867E

4. Check the signal between compass harness connector M81 terminal 3 (R) and ground with CONSULT-II or oscilloscope.





RJIA0868E

OK or NG

OK >> Replace display and A/C auto amp.
NG >> Replace compass

Forward Direction Indication Slips Off The Mark or Incorrect

AKS004WE

1. ZONE VARIATION CHANGE IS NOT DONE

Perform the zone variation change.

OK or NG

OK >> INSPECTION END
NG >> Replace the compass.

Compass Reading Remains Unchanged

AKS004WF

1. CHECK POWER AND GROUND CIRCUIT

Check power and ground circuit. Refer to DI-21, "Power Supply and Ground Circuit Check for Compass" .

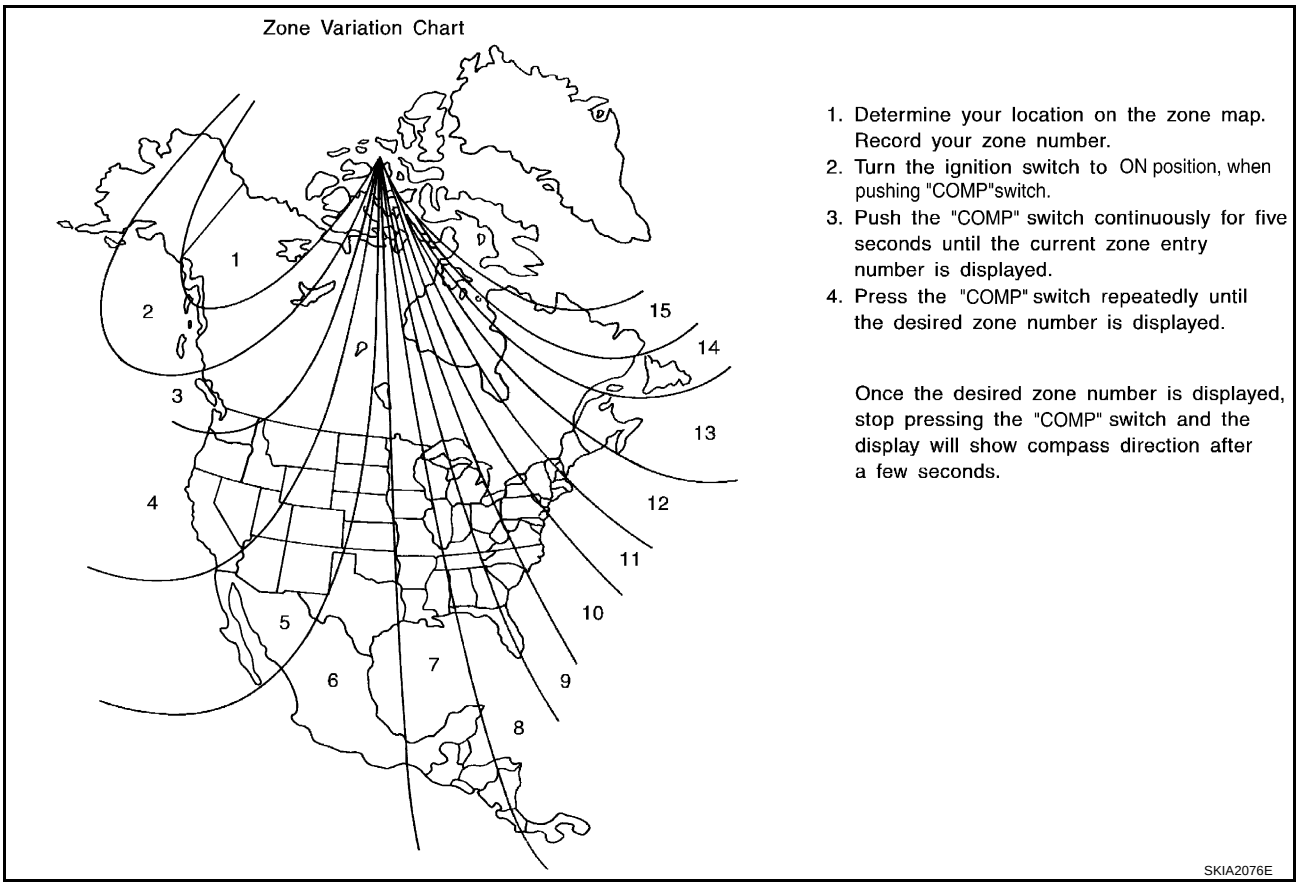
OK or NG

OK >> Replace compass.
NG >> Repair power and ground circuit.

Calibration Procedure for Compass

AKS004WG

The difference between magnetic North and geographical North can sometimes be great enough to cause false compass readings.
In order for the compass to operate accurately in a particular zone, it must be calibrated using the following procedure.

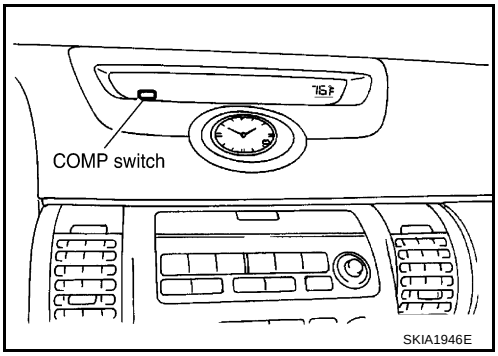


CORRECTION FUNCTIONS OF COMPASS

If the direction is not shown correctly, carry out initial correction.

INITIAL CORRECTION PROCEDURE FOR COMPASS

1. Pushing the “COMP” switch for about 10 seconds will enter the initial correction mode. The direction bar starts blinking.
2. Turn off all electrical equipment (turn signals, hazard signal, A/C, lights, etc.). In a broad, flat, and safe location, drive the vehicle slowly [approximately 5 km/h (3 MPH) or less], and turn the vehicle 360° or more several times. When the direction appears on the display, correction is complete.



NOTE:
The correct direction may not be shown in locations where the earth's magnetic field is disrupted, such as those listed below.

- Elevated bridges
- Railroad crossings
- Streets lined with large buildings
- Iron bridges
- Tunnels
- Locations above subways
- Underground parking areas
- Near large vehicles
- Electric power substations

If display correction is performed in any of the above locations, accurate correction may not be possible.

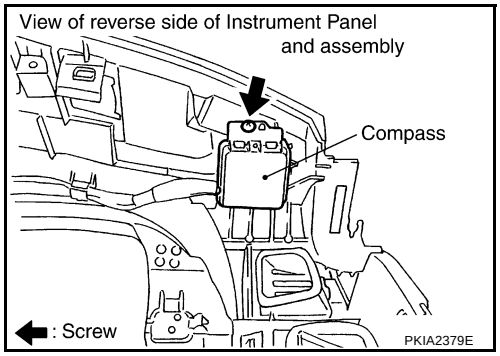
- When heater or A/C fan speed is at maximum, the direction indicator display may move. This is not a malfunction. It will return to normal when the heater or A/C fan speed is reduced.

Removal and Installation of Compass

AKS004WH

REMOVAL

1. Remove instrument panel and pad. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
2. Remove screw (1), and remove compass.



INSTALLATION

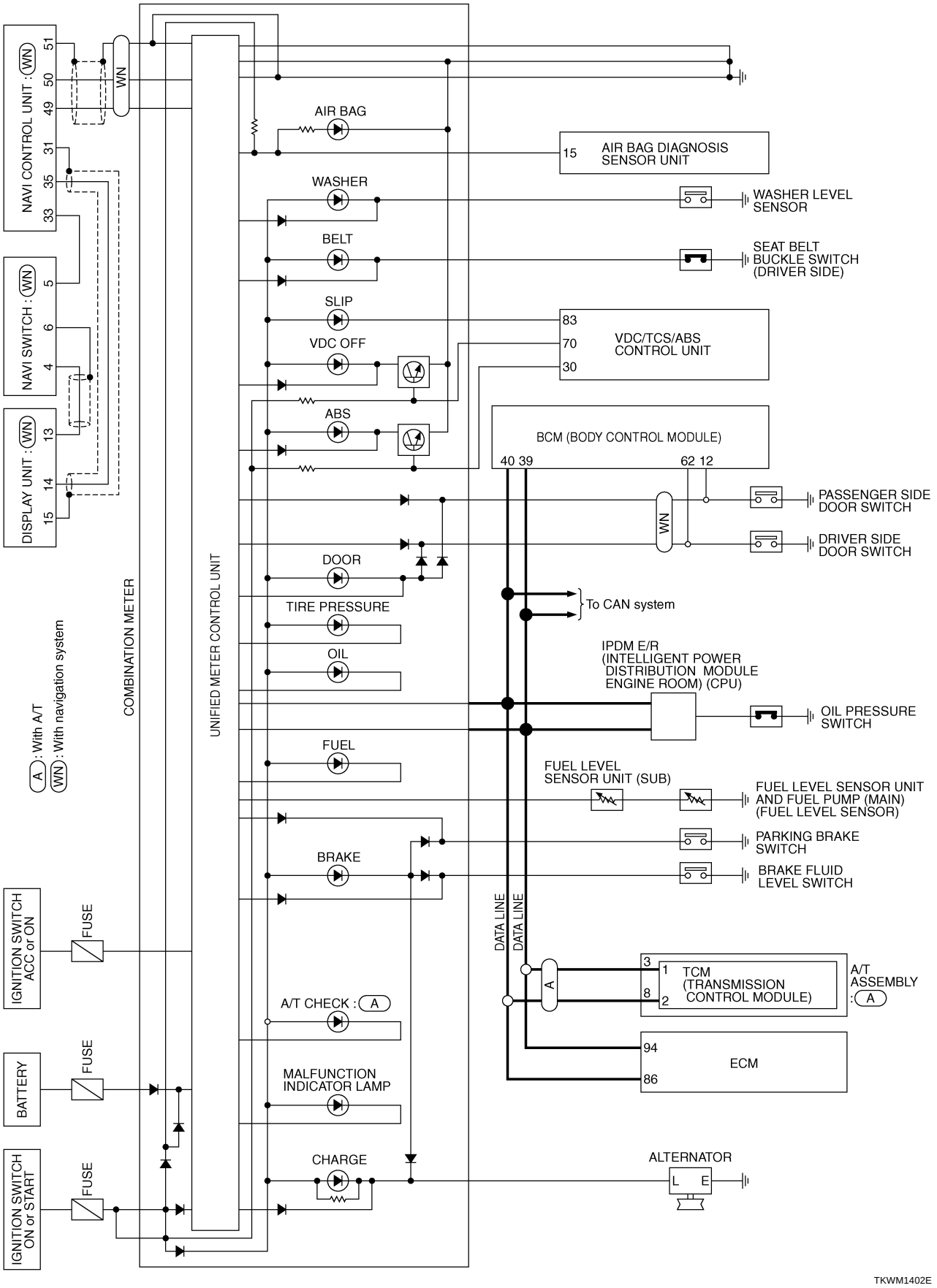
Install in the reverse order of removal.

WARNING LAMPS

PFP:24814

Schematic

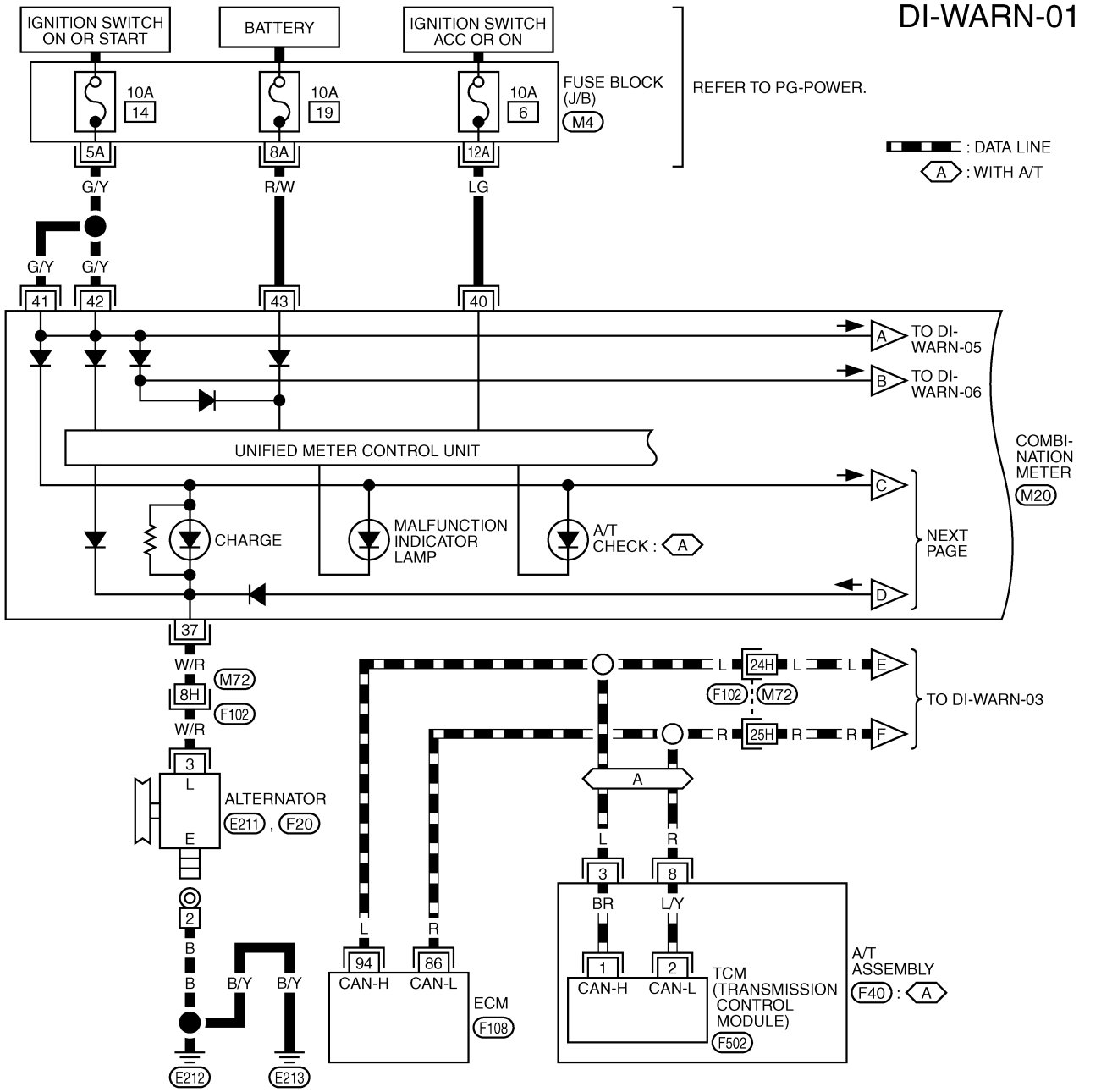
AKS004WI



TKWM1402E

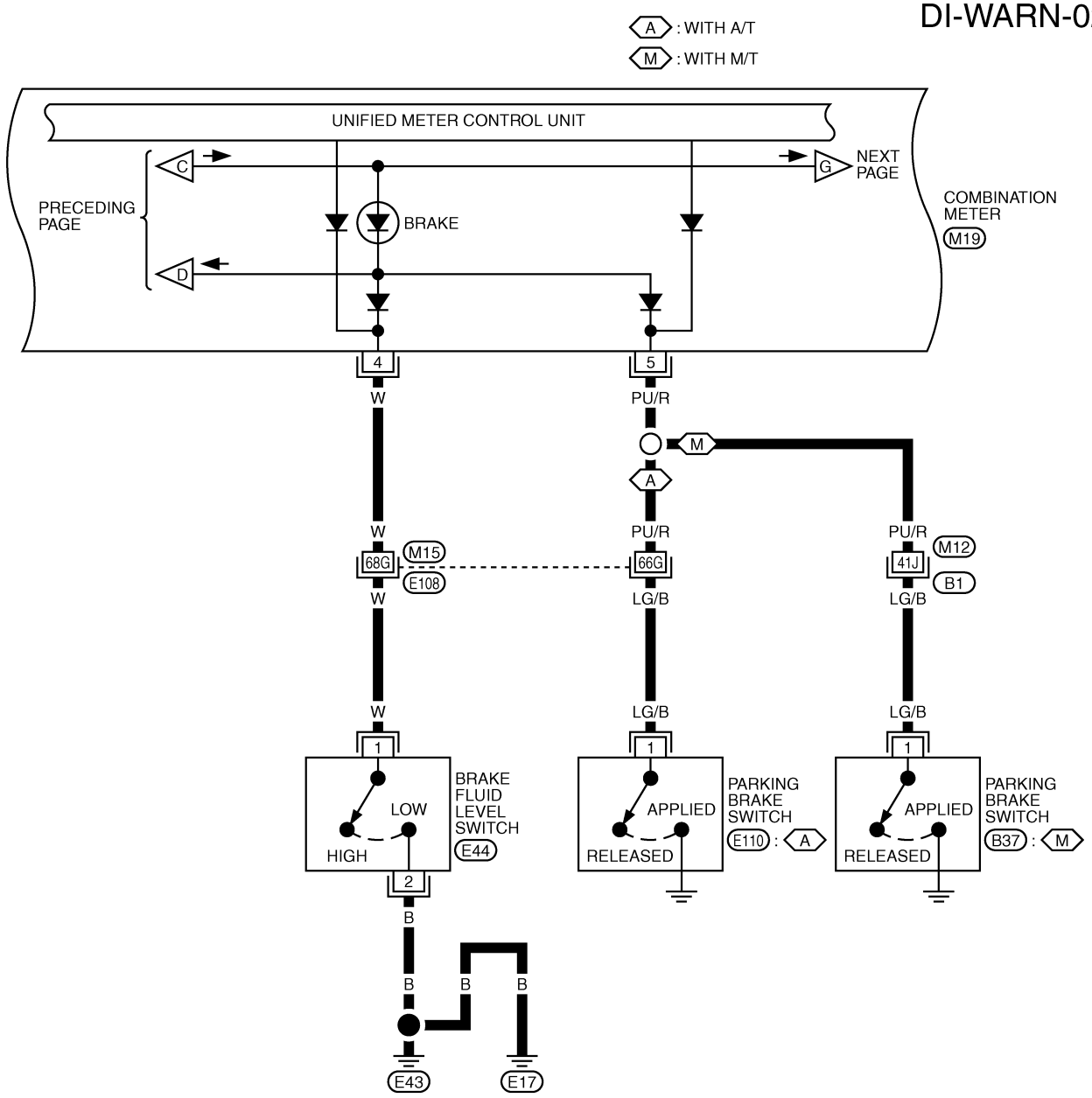
Wiring Diagram — WARN —

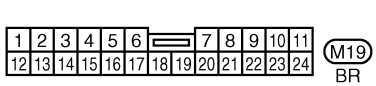
AKS004WJ

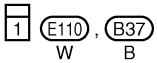


TKWM1403E

DI-WARN-02



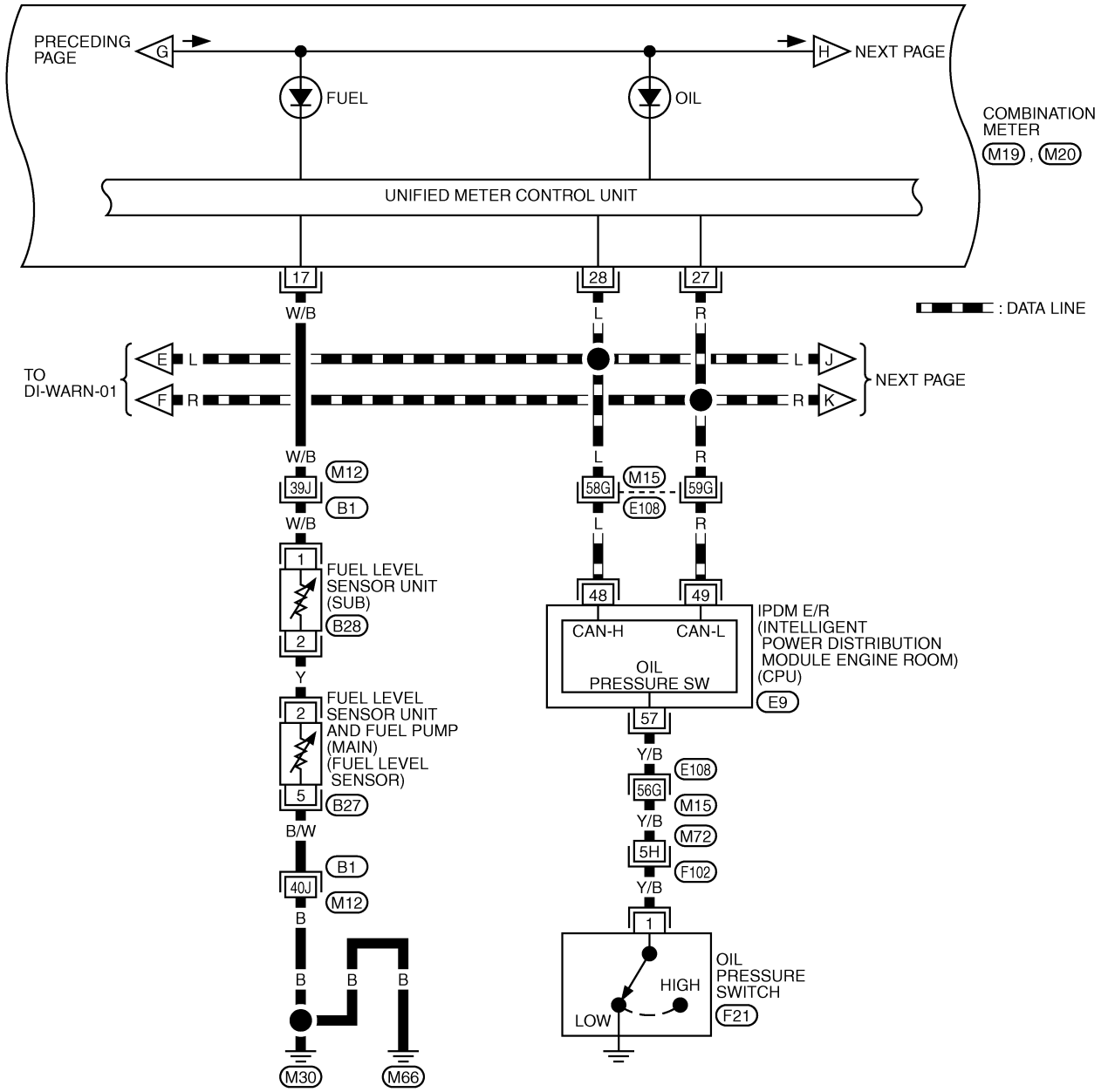


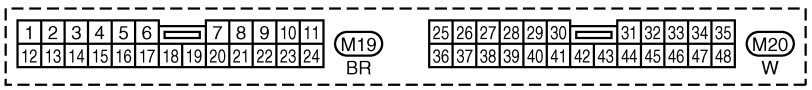


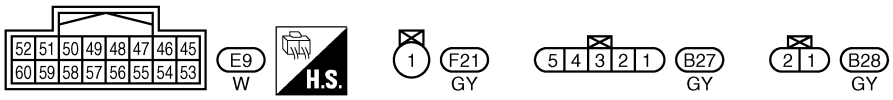
REFER TO THE FOLLOWING.
E108 , B1 -SUPER MULTIPLE JUNCTION (SMJ)

TKWM0897E

DI-WARN-03



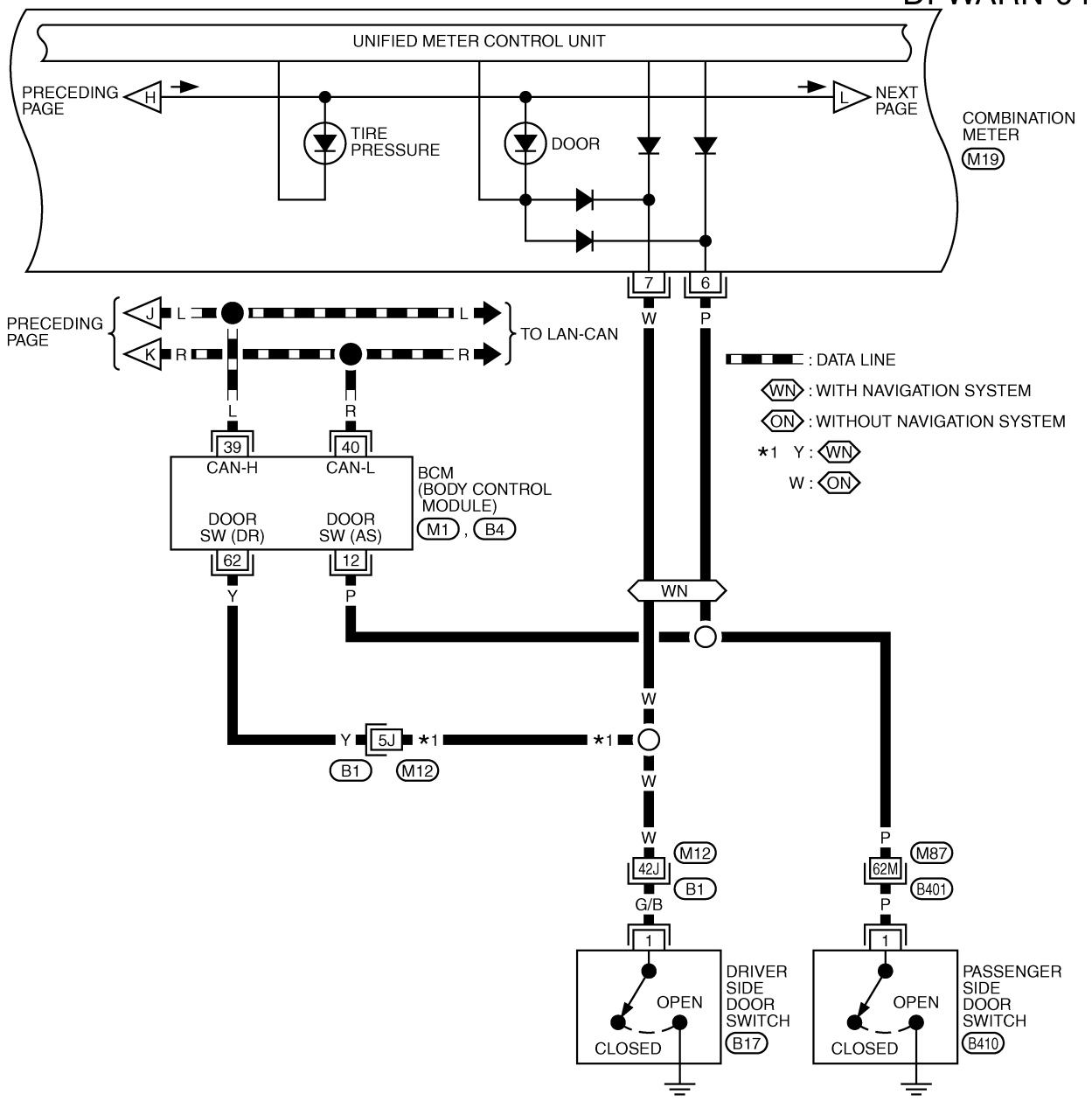


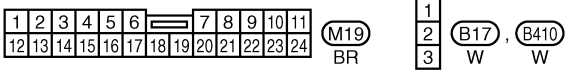


REFER TO THE FOLLOWING.
E108 , F102 , B1 -SUPER MULTIPLE JUNCTION (SMJ)

TKWM0898E

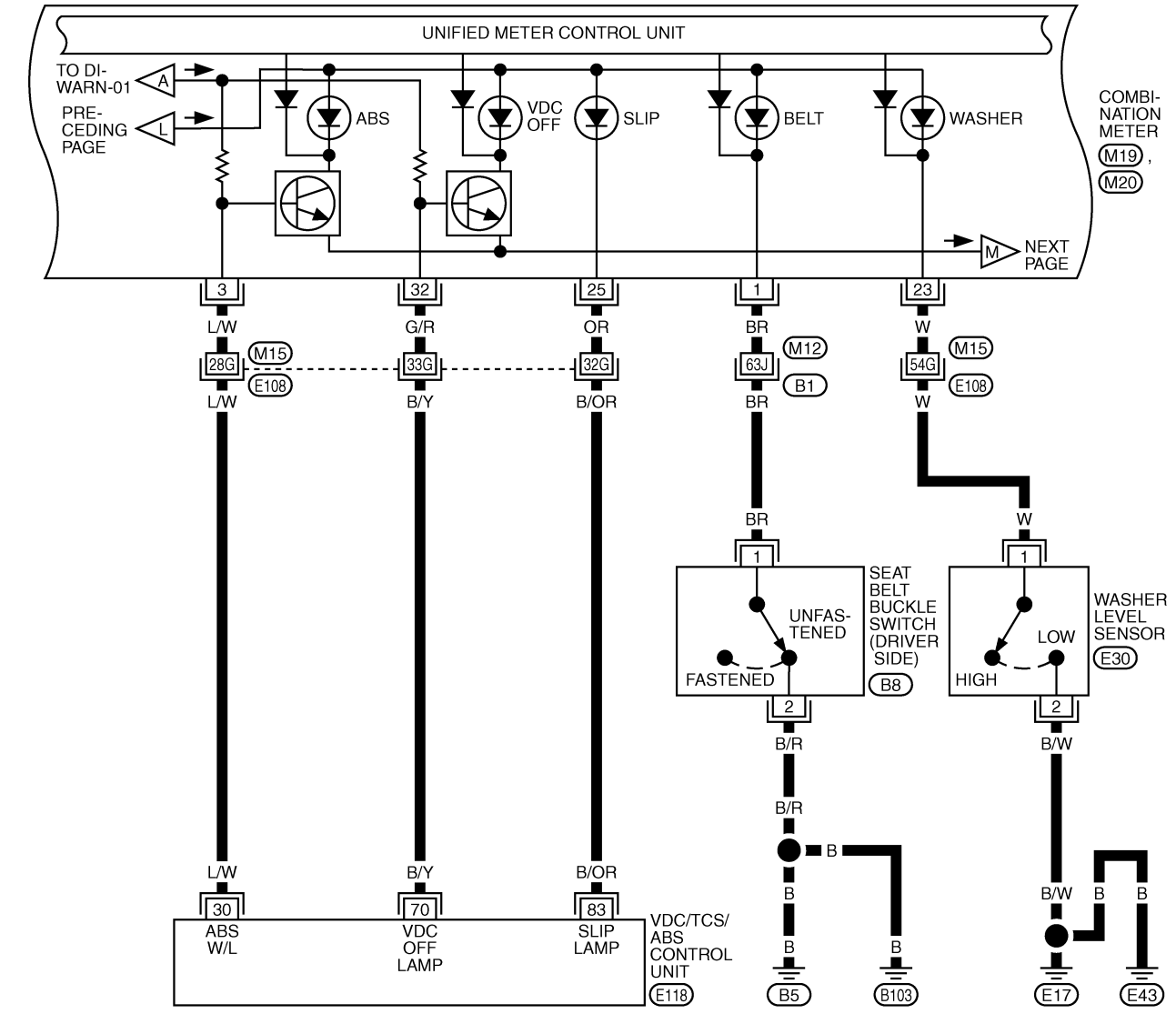
DI-WARN-04

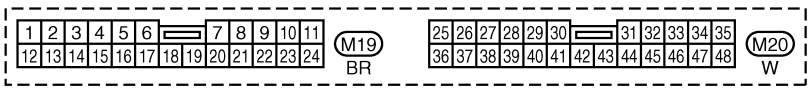


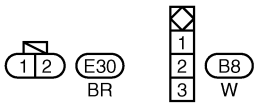


REFER TO THE FOLLOWING.
B1 , B401 -SUPER MULTIPLE JUNCTION (SMJ)
M1 , B4 -ELECTRICAL UNITS

TKWM1098E







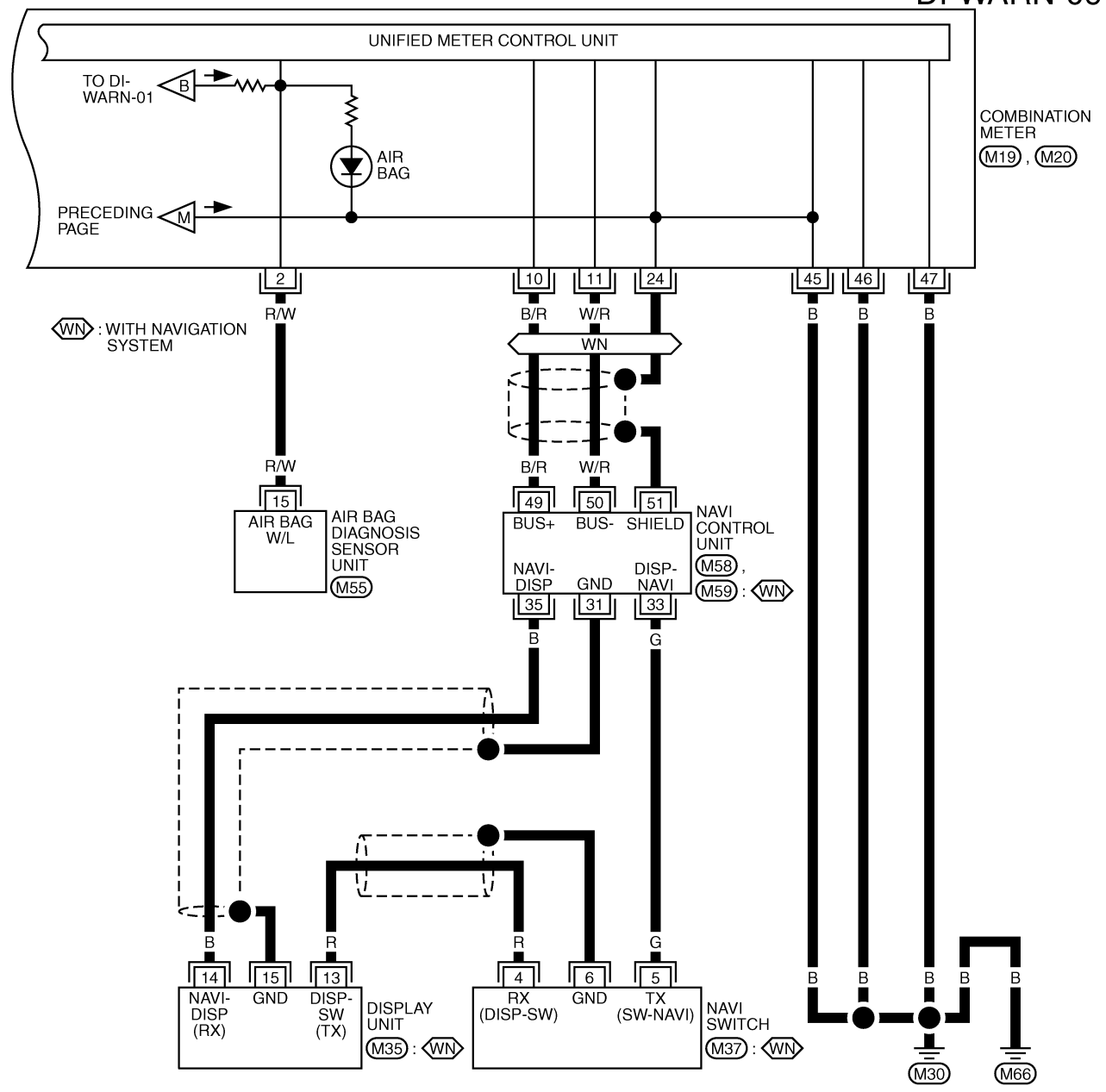
REFER TO THE FOLLOWING.

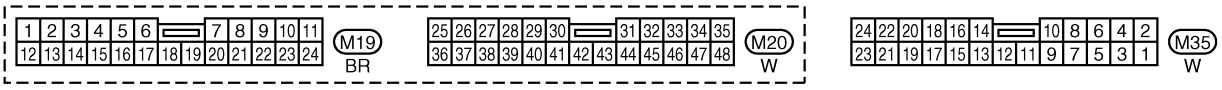
E108 , B1 -SUPER MULTIPLE JUNCTION (SMJ)

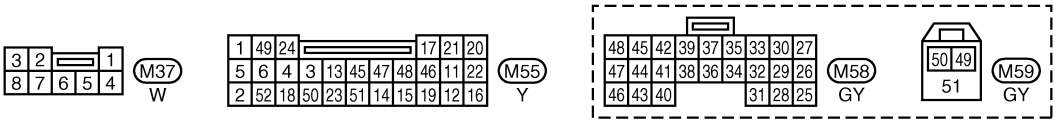
E118 -ELECTRICAL UNITS

TKWM1016E

DI-WARN-06







TKWM0901E

Oil Pressure Warning Lamp Stays Off (Ignition Switch ON)

AKS009I3

1. CHECK IPDM E/R OUTPUT SIGNAL

Activate IPDM E/R auto active test. Refer to PG-23, "Auto Active Test" .

Does oil pressure warning lamp is blinking?

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

2. CHECK SELF-DIAGNOSTIC RESULTS OF IPDM E/R

Select “IPDM E/R” on CONSULT-II, and perform self-diagnosis of IPDM E/R. Refer to PG-19, "CONSULT-II" .

Self-diagnostic results content

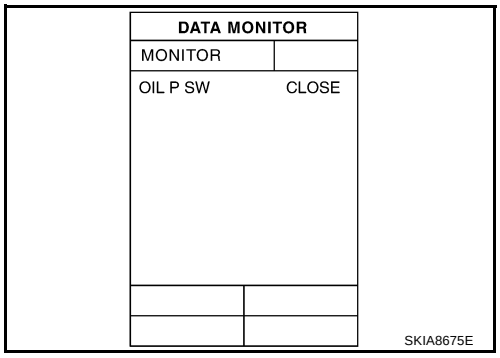
No malfunction detected>> GO TO 3.
Malfunction detected>> Go to PG-20, "SELF-DIAG RESULTS" in “IPDM E/R”.

3. CHECK IPDM E/R INPUT SIGNAL

Select “IPDM E/R” on CONSULT-II. Operate ignition switch with “OIL P SW” of “DATA MONITOR” and check operation status.

When ignition switch is in ON position (Engine stopped) : OIL P SW CLOSE

When engine running : OIL P SW OPEN



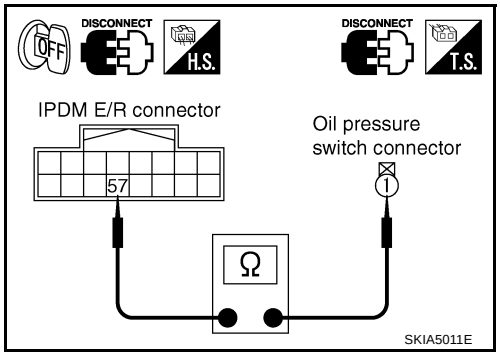
OK or NG

OK >> Replace combination meter.
NG >> Replace IPDM E/R. Refer to PG-29, "Removal and Installation of IPDM E/R" .

4. CHECK OIL PRESSURE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector and oil pressure switch connector.
3. Check continuity between IPDM E/R harness connector E9 terminal 57 (Y/B) and oil pressure switch harness connector F21 terminal 1 (Y/B).

Continuity should exist.



OK or NG

OK >> GO TO 5.
NG >> Repair harness or connector.

5. CHECK OIL PRESSURE SWITCH

Check oil pressure switch. Refer to DI-35, "OIL PRESSURE SWITCH" .

OK or NG

OK >> Replace IPDM E/R. Refer to PG-29, "Removal and Installation of IPDM E/R" .
NG >> Replace oil pressure switch.

Oil Pressure Warning Lamp Does Not Turn Off (Oil Pressure Is Normal)

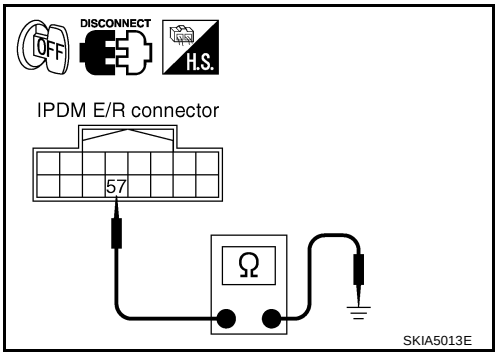
AKS009I4

NOTE:
For oil pressure inspection, refer to LU-8, "Changing Engine Oil" .

1. CHECK OIL PRESSURE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector and oil pressure switch connector.
3. Check continuity between IPDM E/R harness connector E9 terminal 57 (Y/B) and ground.

Continuity should not exist.



OK or NG

OK >> GO TO 2.
NG >> Repair harness or connector.

2. CHECK OIL PRESSURE SWITCH

Check oil pressure switch.Refer to DI-35, "OIL PRESSURE SWITCH" .

OK or NG

OK >> Replace IPDM E/R. Refer to PG-29, "Removal and Installation of IPDM E/R" .
NG >> Replace oil pressure switch.

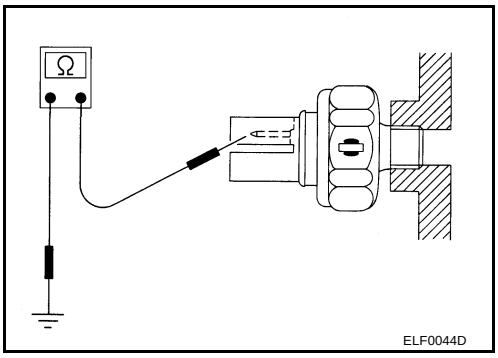
Component Inspection

AKS004WM

OIL PRESSURE SWITCH

Check continuity between the oil pressure switch and body ground.

Condition	Oil pressure kPa (kg/cm^2 , psi)	Continuity
Engine stopped	Less than 29 (0.3, 4)	Yes
Engine running	More than 29 (0.3, 4)	No



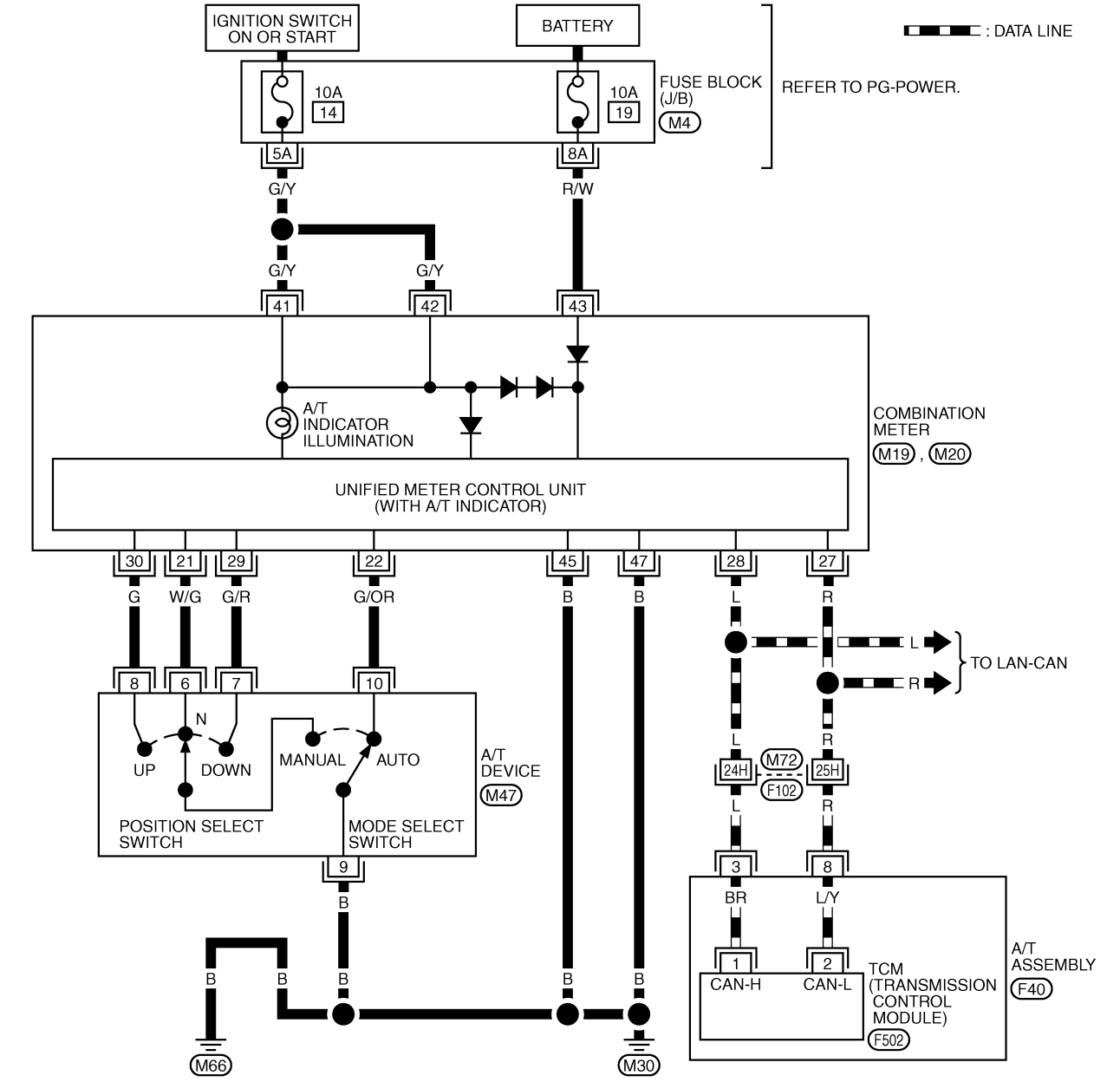
A/T INDICATOR

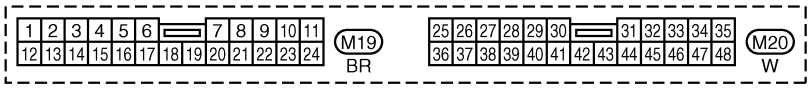
PFP:24814

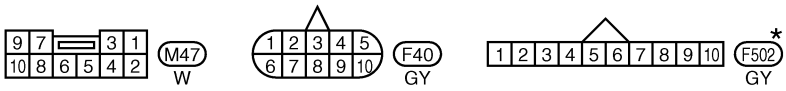
Wiring Diagram — AT/IND —

AKS004WN

DI-AT/IND-01







REFER TO THE FOLLOWING.

F102 -SUPER MULTIPLE JUNCTION (SMJ)

M4 -FUSE BLOCK-JUNCTION BOX (J/B)

★: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TKWM1404E

A/T Indicator Does Not Illuminate

AKS004WO

1. CHECK COMBINATION METER SELF-DIAGNOSIS

Perform combination meter self-diagnosis. Refer to DI-10, "Meter/Gauges Operation and Odo/Trip Meter" .

Does all segments displayed?

YES or NO

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

2. CHECK TCM SELF-DIAGNOSIS

Perform TCM self-diagnosis. Refer to AT-87, "CONSULT-II" .

OK or NG

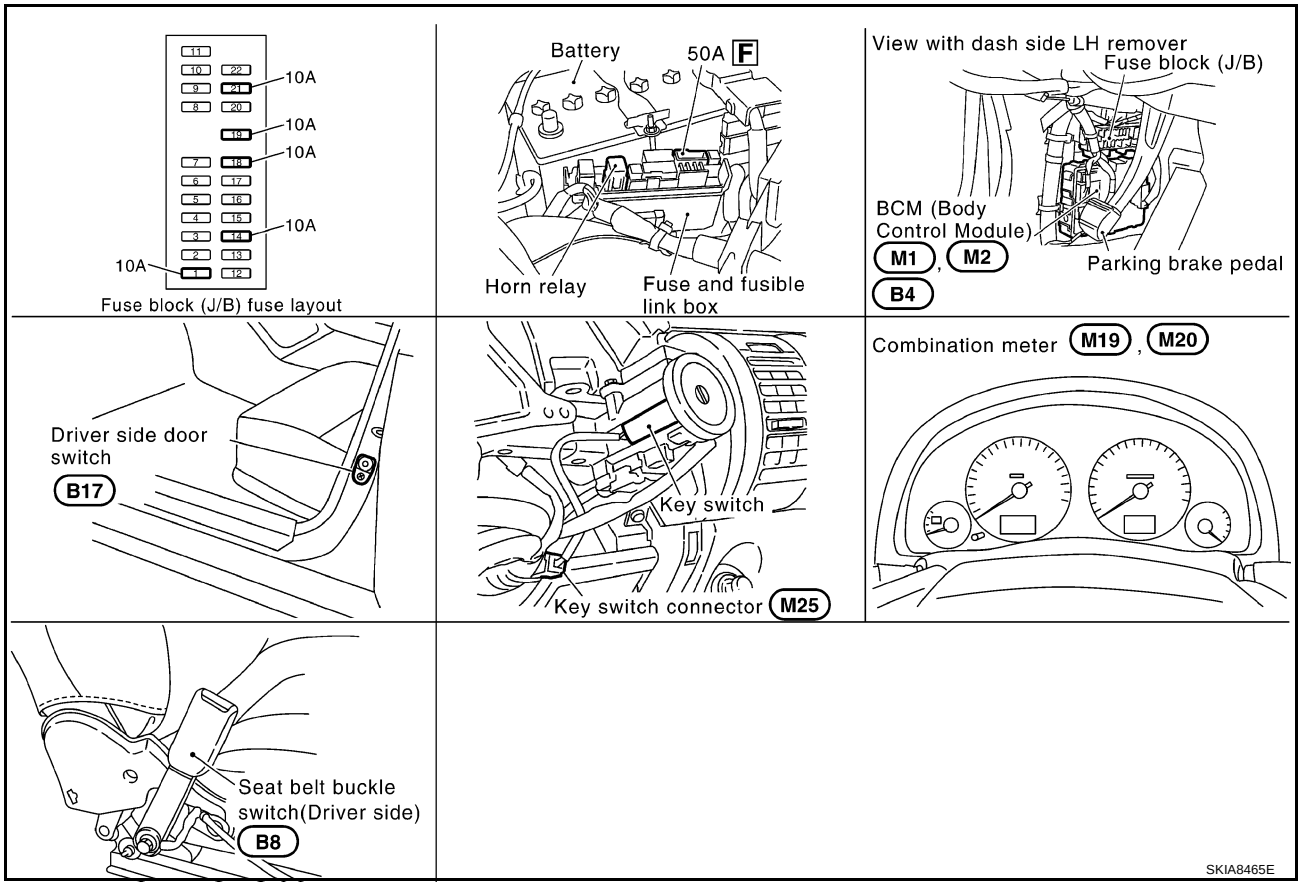
OK >> Replace combination meter.
NG >> Go to TCM trouble diagnosis.

WARNING CHIME

PFP:24814

Component Parts and Harness Connector Location

AKS004WP



System Description

AKS004WQ

The warning chime is controlled by the BCM.
The warning chime is located in the combination meter.
Combination meter is received buzzer signal from BCM with CAN communication line, the warning chime will sound.

FUNCTION

Power is supplied at all times

- through 50A fusible link (letter **F** , located in the fuse and fusible link box)
- to BCM terminal 55
- through 10A fuse [No. 18, located in the fuse block (J/B)]
- to BCM terminal 42
- through 10A fuse [No. 21, located in the fuse block (J/B)]
- to key switch terminal 2
- through 10A fuse [No. 19, located in the fuse block (J/B)]
- to combination meter terminal 43.

When ignition switch ON or START position, power is supplied

- through 10A fuse [No. 1, located in the fuse block (J/B)]
- to BCM terminal 38
- through 10A fuse [No. 14, located in the fuse block (J/B)]
- to combination meter terminals 41 and 42.

Ground is supplied

- to BCM terminal 52
- through body grounds M30 and M66 and

- to combination meter terminal 45
- through body grounds M30 and M66.

IGNITION KEY WARNING CHIME

With the key inserted into the ignition key cylinder, and the driver's door open, the warning chime will sound.Power is supplied

- through key switch terminal 1
- to BCM terminal 37

Ground is supplied (with navigation system)

- to combination meter terminal 7
- through driver side door switch terminal 1.

Driver side door switch is case grounded.
Combination meter send door open signal to BCM with CAN communication system.
Ground is supplied (without navigation system)

- to BCM terminal 62
- through driver side door switch terminal 1.

Driver side door switch is case grounded.
BCM detects key inserted into the ignition key cylinder, and sends buzzer output signal (key warning signal) to combination meter with CAN communication line.
When combination meter receives buzzer output signal (key warning signal), it sounds warning chime.

LIGHT WARNING CHIME

With the key removed from the ignition key cylinder, the driver's door open, and the lighting switch in 1ST or 2ND position, the warning chime will sound. [Except when headlamp battery saver control operates (for 5 minutes after ignition switch is turned to OFF or ACC position) and headlamps do not illuminate.]
Signal is supplied

- from combination switch (lighting switch) terminals 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10
- to BCM terminals 2, 3, 4, 5, 6, 32, 33, 34, 35 and 36.

NOTE:
BCM detected lighting switch in 1st or 2nd position, refer to BCS-3, "COMBINATION SWITCH READING FUNCTION" .

Ground is supplied (with navigation system)

- to combination meter terminal 7
- through driver side door switch terminal 1.

Driver side door switch is case grounded.
Combination meter send door open signal to BCM with CAN communication system.
Ground is supplied (without navigation system)

- from driver side door switch terminal 1
- to BCM terminal 62.

BCM detects headlamps are illuminated, and sends buzzer output signal (light warning signal) to combination meter with CAN communication line.
When combination meter receives buzzer output signal (light warning signal), it sounds warning chime.

SEAT BELT WARNING CHIME

With ignition switch turned ON and seat belt unfastened [seat belt buckle switch (driver side) ON], warning chime will sound for approximately 6 seconds.
Ground is supplied

- from seat belt buckle switch (driver side) terminal 1
- to combination meter terminal 1.

Seat belt buckle switch (driver side) terminal 2 is grounded through body grounds B5 and B103.
BCM receives seat belt buckle switch signal (seat belt unfastened) from combination meter over CAN communication line, and then BCM sends buzzer output signal (seat belt warning signal) to combination meter with CAN communication line.
When combination meter receives buzzer output signal (seat belt warning signal), it sounds warning chime.

CAN Communication

AKS009I5

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

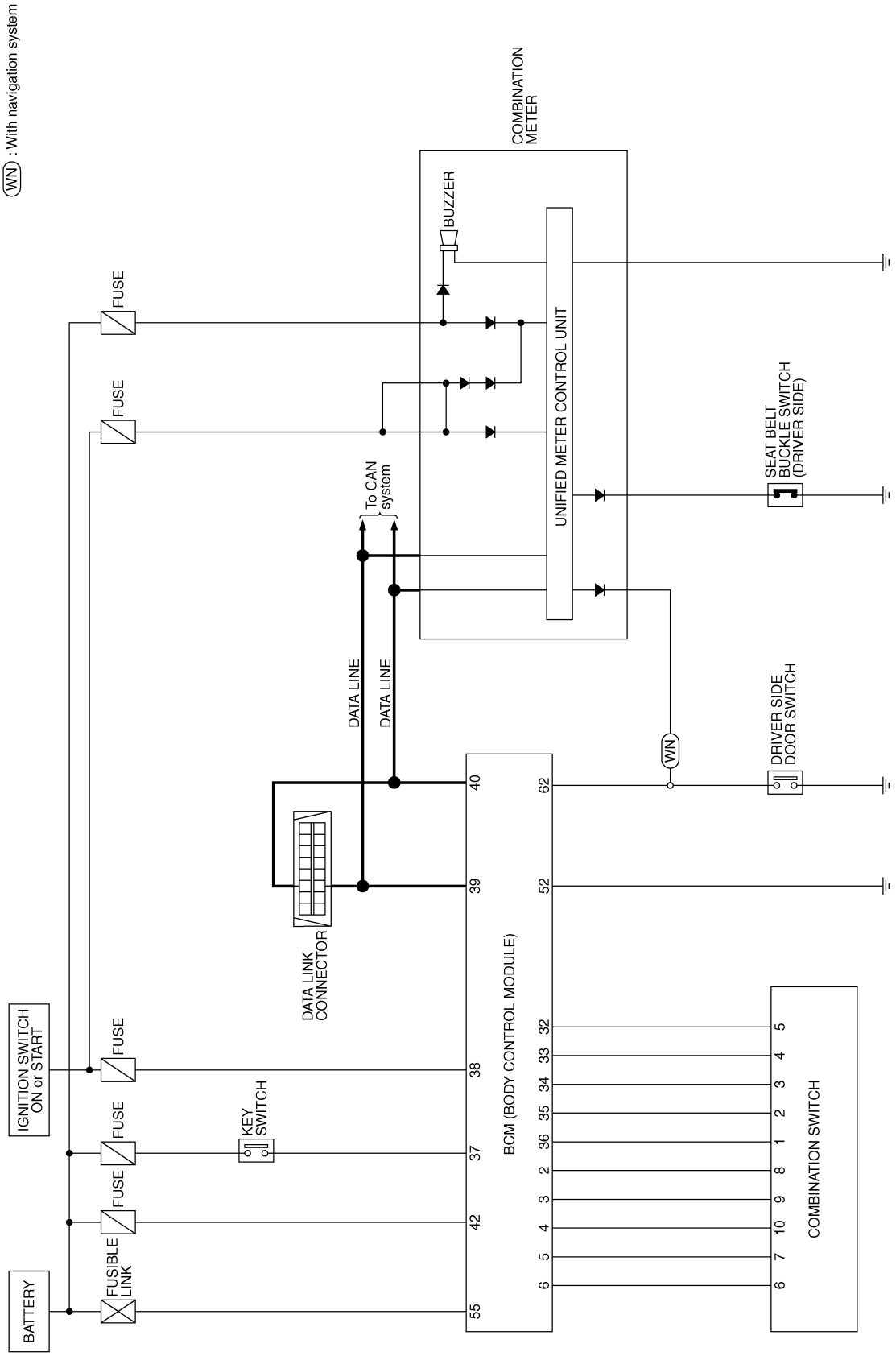
CAN Communication Unit

AKS009I6

Refer to LAN-4, "CAN Communication Unit" in LAN section.

Schematic

AKS005H5

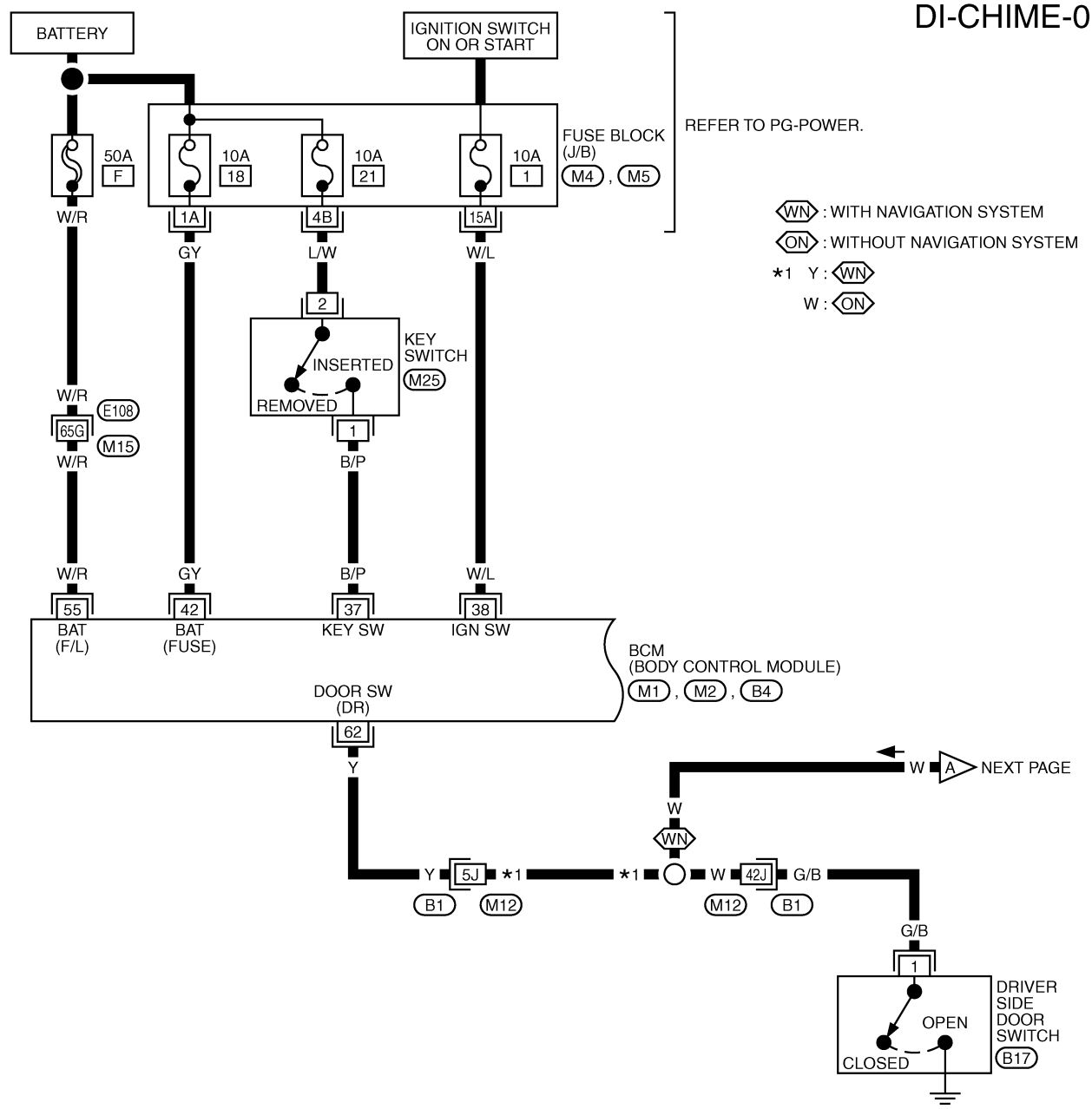


TKWM0902E

Wiring Diagram — CHIME —

AKS004WS

DI-CHIME-01



1 2 M25 BR

1 2 3 B17 W

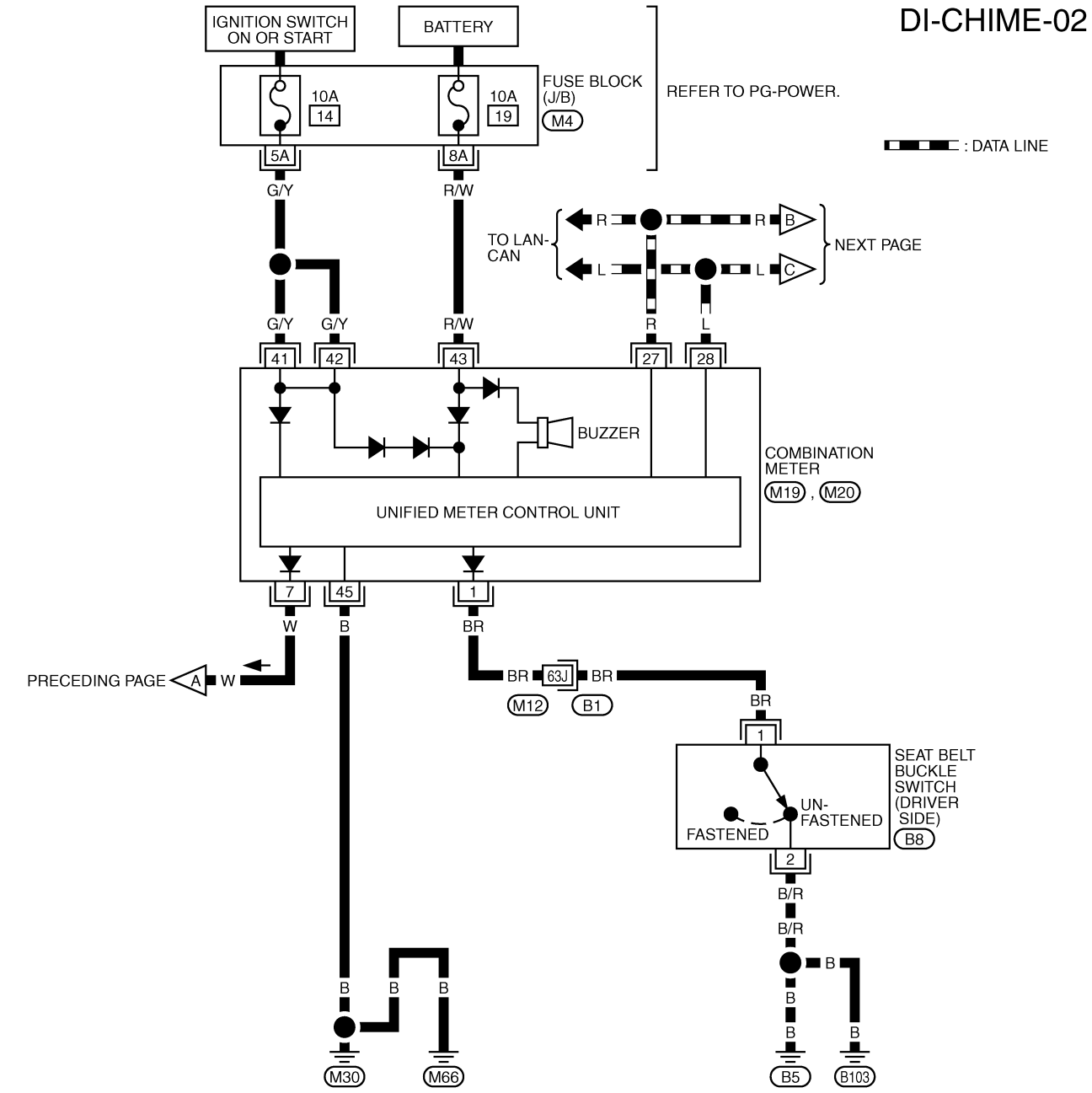
REFER TO THE FOLLOWING.

E108, B1 -SUPER MULTIPLE JUNCTION (SMJ)

M4, M5 -FUSE BLOCK-JUNCTION BOX (J/B)

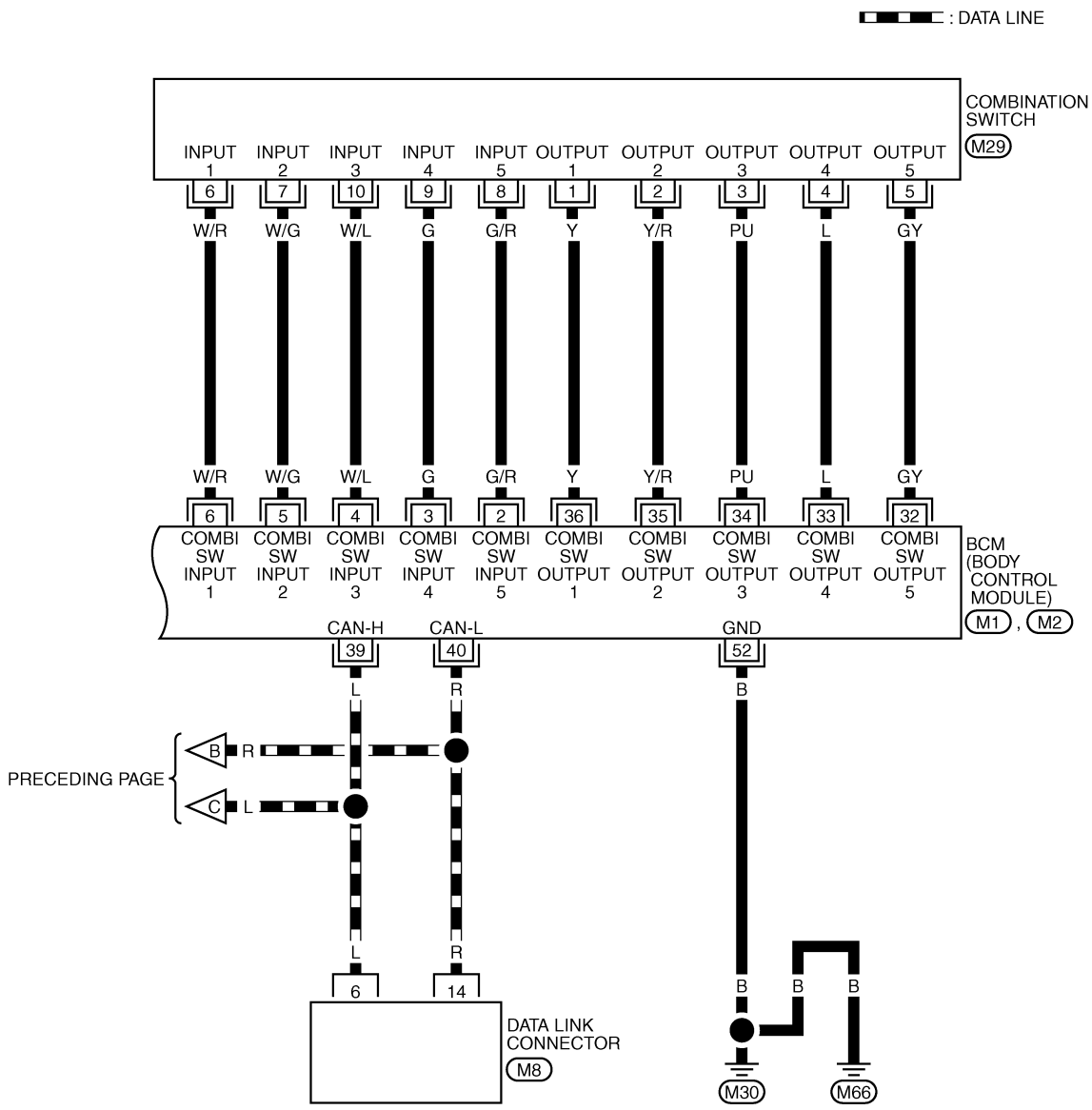
M1, M2, B4 -ELECTRICAL UNITS

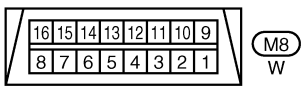
TKWM0903E

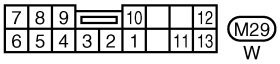

DI-CHIME-02
IGNITION SWITCH ON OR START
BATTERY
FUSE BLOCK (J/B)
M4
10A 14
10A 19
5A
8A
REFER TO PG-POWER.
: DATA LINE
G/Y
R/W
TO LAN-CAN
R
L
B
C
NEXT PAGE
G/Y
G/Y
R/W
R
L
41
42
43
27
28
BUZZER
COMBINATION METER
M19 , M20
UNIFIED METER CONTROL UNIT
7
45
1
W
B
BR
PRECEDING PAGE
A
W
BR
63J
BR
M12
B1
BR
1
SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
UN-FASTENED
FASTENED
B8
2
B/R
B/R
B
B
B
B
B
B
B
M30
M66
B5
B103
1 2 3 4 5 6 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21 22 23 24
M19
BR
25 26 27 28 29 30 31 32 33 34 35
36 37 38 39 40 41 42 43 44 45 46 47 48
M20
W
1
2
3
B8
W
REFER TO THE FOLLOWING.
B1 -SUPER MULTIPLE JUNCTION (SMJ)
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

TKWM0904E

DI-CHIME-03





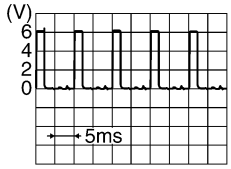
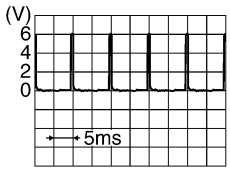
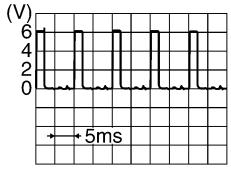
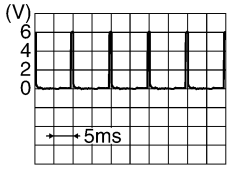
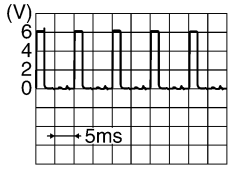
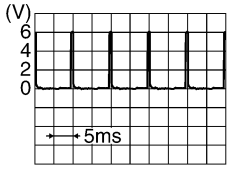
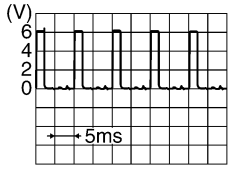


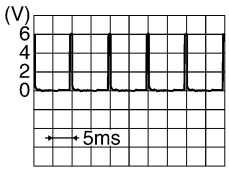
REFER TO THE FOLLOWING.
M1 , M2 -ELECTRICAL UNITS

TKWM0905E

Terminals and Reference Value for BCM

AKS004WT

Terminal No.	Wire color	Signal name	Measuring condition		Reference value
			Ignition switch	Operation or condition	
2	G/R	Combination switch input 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
3	G	Combination switch input 4	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
4	W/L	Combination switch input 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
5	W/G	Combination switch input 2	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
6	W/R	Combination switch input 1			
32	GY	Combination switch output 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
33	L	Combination switch output 4	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
34	PU	Combination switch output 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E

Terminal No.	Wire color	Signal name	Measuring condition			Reference value
			Ignition switch	Operation or condition		
35	Y/R	Combination switch output 2	ON	Lighting, turn, wiper OFF Wiper dial position 4		 SKIA5292E
36	Y	Combination switch output 1				
37	B/P	Key switch signal	OFF	Key is removed		Approx. 0V
				Key is inserted		Approx. 12V
38	W/L	Ignition switch (ON)	ON	—		Battery voltage
39	L	CAN– H	—	—		—
40	R	CAN– L	—	—		—
42	GY	Battery power supply (FUSE)	OFF	—		Battery voltage
52	B	Ground	ON	—		Approx. 0V
55	W/R	Battery power supply (F/L)	OFF	—		Battery voltage
62	Y	Driver side door switch signal	OFF	Driver's door	ON (open)	Approx.0V
					OFF (close)	Approx.5V

How to Proceed With Trouble Diagnosis

AKS004WU

1. Confirm the symptom or customer complaint.
2. Understand operation description and function description. Refer to DI-38, "System Description" .
3. Perform the preliminary check. Refer to DI-47, "Preliminary Check" .
4. Check symptom and repair or replace the cause of malfunction.
5. Does the warning chime operate normally? If so, go to 6. If not, go to 4.
6. INSPECTION END

Preliminary Check

AKS009I7

INSPECTION FOR POWER SUPPLY AND GROUND CIRCUIT

1. CHECK FUSE AND FUSIBLELINK

Check for blown fuse and fusible link of BCM.

Unit	Power source	Fuse and fusible link No.
BCM	Battery	F
		18
	Ignition switch (ON)	1

Refer to DI-42, "Wiring Diagram — CHIME —" .

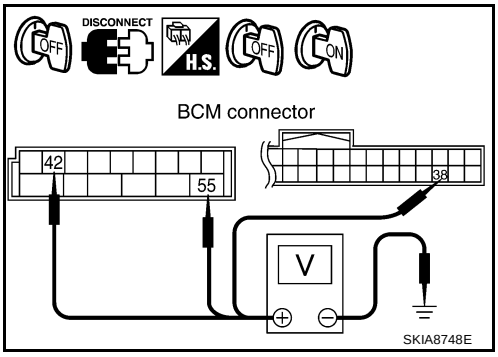
OK or NG

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 connector and ground.

Terminals			Ignition switch position	
(+)		(–)	OFF	ON
Connector	Terminal (Wire color)			
M2	55 (W/R)	Ground	Battery voltage	Battery voltage
	42 (GY)			
M1	38 (W/L)		0V	Battery voltage



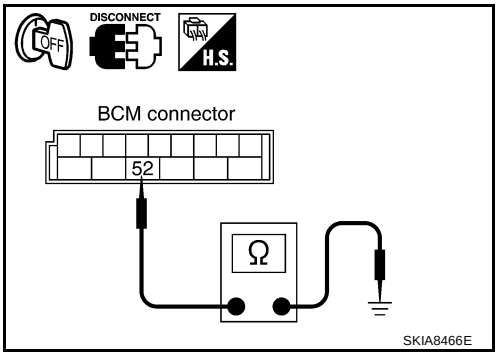
OK or NG

OK >> GO TO 3.
NG >> Check harness for open or short between BCM and fuse.

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between BCM harness connector M2 terminal 52 (B) and ground.

Continuity should exist.



OK or NG

OK >> INSPECTION END
NG >> Repair harness or connector.

CONSULT-II Function

AKS009I8

CONSULT-II performs the following functions communicating with the BCM.

DIAGNOSTIC ITEMS DESCRIPTION

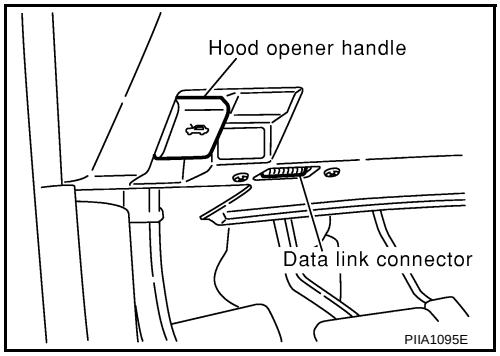
BCM diagnosis position	Diagnosis mode	Description
BUZZER	Data monitor	The input data to the BCM control unit is displayed in real time.
	Active test	Operation of electrical loads can be checked by sending driving signal to them.
BCM	Self-diagnostic	BCM performs self-diagnosis of CAN communication.

CONSULT-II BASIC OPERATION PROCEDURE

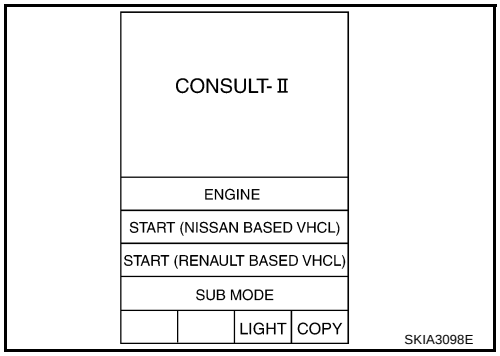
CAUTION:

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

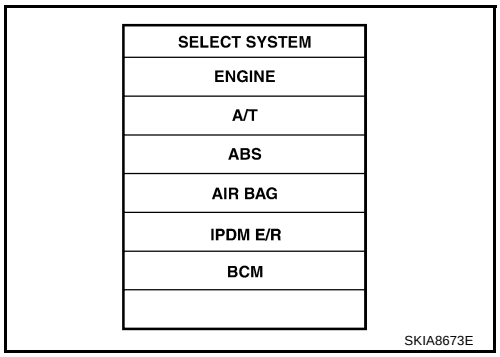
1. With the ignition switch OFF, connect “CONSULT-II” and “CONSULT-II CONVERTER” to the data link connector, and turn the ignition switch ON.



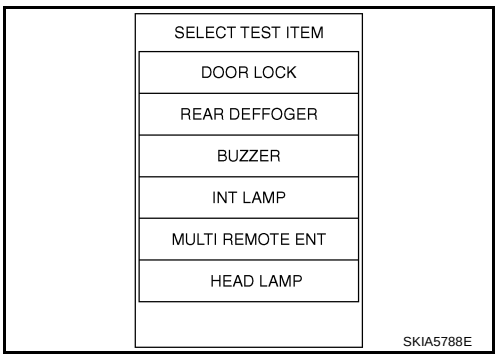
2. Touch “START (NISSAN BASED VHCL)”.



3. Touch “BCM” on “SELECT SYSTEM” screen. If “BCM” is not indicated, go to GI-39, "CONSULT-II Data Link Connector (DLC) Circuit" .



4. Touch “BUZZER” or “BCM”.
5. Select “DATA MONITOR”, “ACTIVE TEST” or “SELF-DIAG RESULTS”.



DATA MONITOR

Operation Procedure

1. Touch “BUZZER” on “SELECT TEST ITEM” screen.
2. Touch “DATA MONITOR” on “SELECT DIAG MODE” screen.
3. Touch “ALL SIGNALS” or “SELECTION FROM MENU” on “DATA MONITOR” screen.

ALL SIGNALS	Monitors main items.
SELECTION FROM MENU	Selects and monitors items.

4. If “SELECTION FROM MENU” is selected, touch the desired monitor item. If “ALL SIGNALS” is selected, all items required to control are monitored.
5. Touch “START”.
6. During monitoring, touching “RECORD” can start recording the monitored item status.

Data Monitor Item

Monitored item	Description
IGN ON SW	Indicates [ON/OFF] condition of ignition switch.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
TAIL LAMP SW	Indicates [ON/OFF] condition of lighting switch.
BUCKLE SW	Indicates [ON/OFF] condition of seat belt buckle switch.

ACTIVE TEST

Operation Procedure

1. Touch “BUZZER” on “SELECT TEST ITEM” screen.
2. Touch “ACTIVE TEST” on “SELECT DIAG MODE” screen.
3. Touch the item to be tested, and check the operation.
4. During the operation check, touching “OFF” deactivates the operation.

Active Test Item

Test item	Malfunction is detected when…
LIGHT WARN ALM	This test is able to check light warning chime operation. Light warning chime sounds for 2 seconds after touching “ON” on CONSULT-II screen.
IGN KEY WARN ALM	This test is able to check key warning chime operation. Key warning chime sounds for 2 seconds after touching “ON” on CONSULT-II screen.
SEAT BELT WARN	This test is able to check seat belt warning chime operation. Seat belt warning chime sounds for 2 seconds after touching “ON” on CONSULT-II screen.

SELF-DIAGNOSTIC RESULTS

Operation Procedure

1. Touch “BCM” on “SELECT TEST ITEM” screen.
2. Touch “SELF-DIAG RESULTS” on “SELECT DIAG MODE” screen.
3. Self-diagnostic results are displayed.

Display Item List

Monitored Item	CONSULT-II display	Description
CAN communication	CAN communication [U1000]	Malfunction is detected in CAN communication.

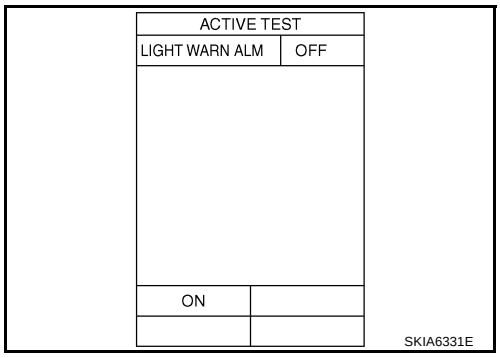
NOTE:
If “CAN communication [U1000]” is indicated, after printing the monitor item, go to “CAN system”. Refer to LAN-2, "Precautions When Using CONSULT-II" .

All Warnings Are Not Operated

AKS009I9

1. CHECK CHIME OPERATION

Select “BUZZER” on CONSULT-II, and perform “LIGHT WARN ALM”, “IGN KEY WARN ALM” or “SEAT BELT WARN” of “ACTIVE TEST”.



Does chime sound?

YES >> Replace BCM.
NO >> GO TO 2.

2. BCM SELF-DIAGNOSIS

Select BCM on CONSULT-II, and perform “BCM” self-diagnosis.

Self-diagnostic result content.

No malfunction detected>>Replace combination meter.
CAN communication>>Check BCM CAN communication system. Go to BCS-14, "CAN Communication Inspection Using CONSULT-II (Self-Diagnosis)"

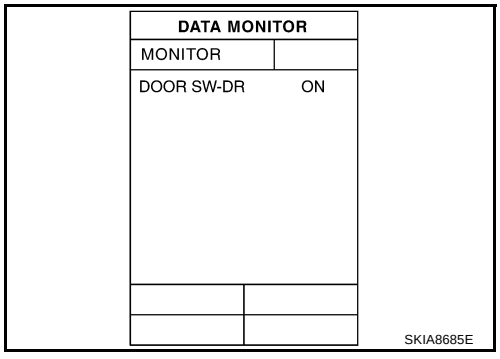
Key Warning Chime and Light Warning Chime Does Not Operate (Seat Belt Warning Chime Does Operate)

AKS009IA

1. CHECK BCM INPUT SIGNAL

With CONSULT-II

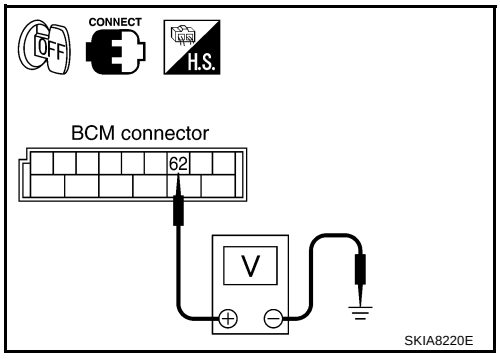
1. Select “BCM”.
2. With “DATA MONITOR” of “BUZZER”, confirm “DOOR SW-DR” when the driver side door is operated.



When driver side door is opened : DOOR SW-DR ON
When driver side door is closed : DOOR SW-DR OFF

Without CONSULT-II

Check voltage between BCM harness connector B4 terminal 62 (Y) and ground.



When driver side door is opened : Approx. 0V
When driver side door is closed : Approx. 5V

OK or NG

OK >> Replace BCM. Refer to BCS-15, "Removal and Installation of BCM" .
NG >>
- GO TO 2. (With navigation system)
- GO TO 3. (Without navigation system)

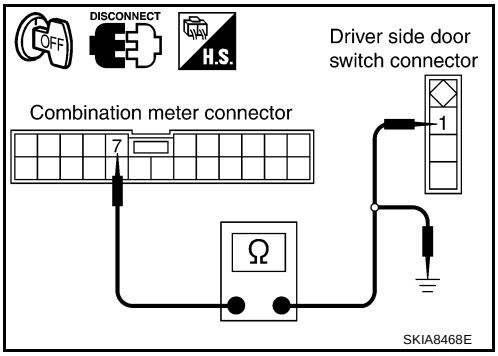
2. CHECK CONTINUITY DOOR SWITCH CIRCUIT (WITH NAVIGATION SYSTEM)

1. Disconnect combination meter connector and driver side door switch connector.
2. Check harness continuity between combination meter harness connector M19 terminal 7 (W) and driver side door switch harness connector B17 terminal 1 (G/B).

Continuity should exist.

3. Check continuity between combination meter harness connector M19 terminal 7 (W) and ground.

Continuity should not exist.



OK or NG

OK >> GO TO 4.
NG >> Repair harness or connector.

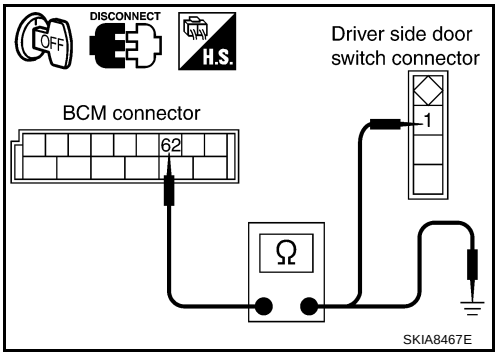
3. CHECK DOOR SWITCH CIRCUIT (WITHOUT NAVIGATION SYSTEM)

1. Disconnect BCM connector and driver side door switch connector.
2. Check harness continuity between BCM harness connector B4 terminal 62 (Y) and driver side door switch harness connector B17 terminal 1 (G/B).

Continuity should exist.

3. Check continuity between BCM harness connector B4 terminal 62 (Y) and ground.

Continuity should not exist.



OK or NG

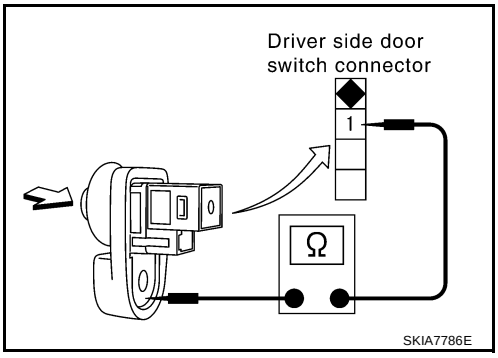
OK >> GO TO 4.
NG >> Repair harness or connector.

4. CHECK DOOR SWITCH

Check driver side door switch.

When door switch is released : Continuity should exist.

When door switch is pushed : Continuity should not exist.



OK or NG

OK >> Replace BCM. Refer to BCS-15, "Removal and Installation of BCM" .
NG >> Replace driver side door switch.

Key Warning Chime Does Not Operate

AKS009IB

1. CHECK FUSE

Check if the key switch 10A fuse [No.21, located in the fuse block (J/B)] is blown. Refer to DI-42, "Wiring Diagram — CHIME —" .

Is the fuse blown?

YES >> Replace fuse. Be sure to repair the cause of the problem before installing new fuse.
NO >> GO TO 2.

2. CHECK WARNING CHIME OPERATION

Check the chime under conditions in exception of key warning chime operation.

Dose warning chime sound?

YES >> GO TO 3.
NO >> Go to DI-50, "All Warnings Are Not Operated" or DI-50, "Key Warning Chime and Light Warning Chime Does Not Operate (Seat Belt Warning Chime Does Operate)" .

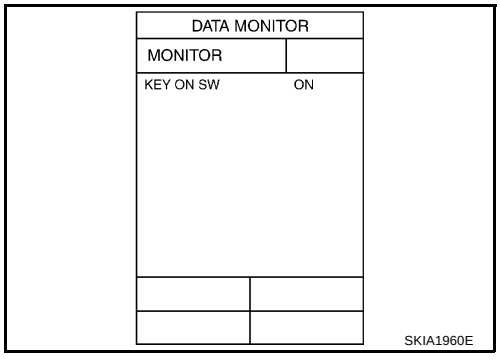
3. CHECK KEY SWITCH INPUT SIGNAL

With CONSULT-II

1. Select “BCM”.
2. With “DATA MONITOR” of “BUZZER”, confirm “KEY ON SW” when the key switch is operated.

When key is inserted to ignition key cylinder : KEY ON SW ON

When key is removed from ignition key cylinder : KEY ON SW OFF

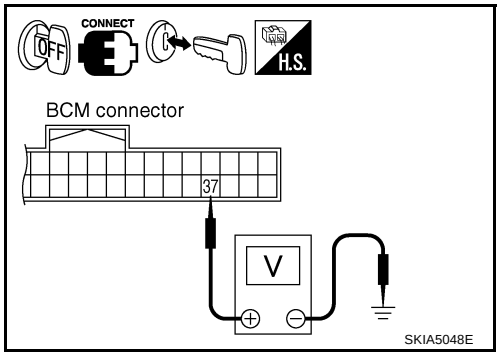


Without CONSULT-II

Check voltage between BCM harness connector M1 terminal 37 (B/P) and ground.

When key is inserted to ignition key cylinder : Approx. 12V

When key is removed from ignition key cylinder : Approx. 0V



OK or NG

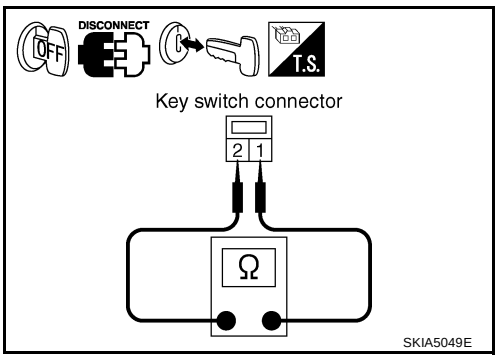
OK >> Replace BCM. Refer to BCS-15, "Removal and Installation of BCM" .
NG >> GO TO 4.

4. CHECK KEY SWITCH

1. Disconnect key switch connector.
2. Check continuity between key switch connector terminal 1 and 2.

When key is inserted to ignition key cylinder : Continuity should exist.

When key is removed from ignition key cylinder : Continuity should not exist.



OK or NG

OK >> GO TO 5.
NG >> Replace key switch.

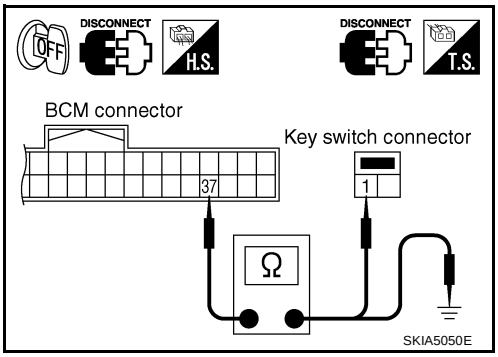
5. CHECK KEY SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector M1 terminal 37 (B/P) and key switch harness connector M25 terminal 1 (B/P).

Continuity should exist.

3. Check continuity between BCM harness connector M1 terminal 37 (B/P) and ground.

Continuity should not exist.



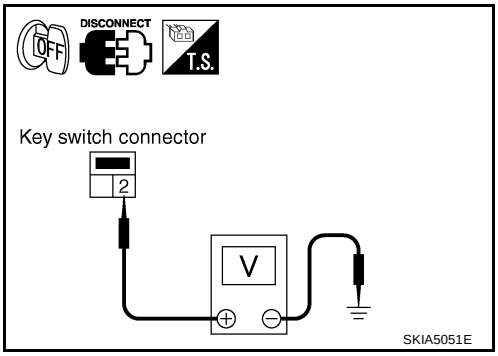
OK or NG

OK >> GO TO 6.
NG >> Repair harness or connector.

6. CHECK KEY SWITCH INPUT SIGNAL

Check voltage between key switch harness connector M25 terminal 2 (L/W) and ground.

Battery voltage should exist.



OK or NG

OK >> Replace BCM. Refer to BCS-15, "Removal and Installation of BCM" .
NG >> Check continuity open or short between key switch and fuse.

Light Warning Chime Does Not Operate

AKS009IC

1. CHECK WARNING CHIME OPERATION

Check except for headlamp warning chime operation.

Dose warning chime sound?

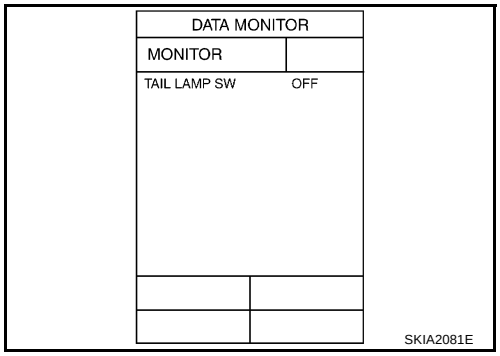
YES >> GO TO 2.
NO >> Go to DI-50, "All Warnings Are Not Operated" . Check the chime under conditions in exception of light warning chime operation. Refer to DI-50, "Key Warning Chime and Light Warning Chime Does Not Operate (Seat Belt Warning Chime Does Operate)" .

2. CHECK DATA MONITOR

With “DATA MONITOR” of “BUZZER”, confirm “TAIL LAMP SW” when the lighting switch is operated.

Lighting switch (1st position) :TAIL LAMP SW ON

Lighting switch (OFF) :TAIL LAMP SW OFF



OK or NG

OK >> Replace BCM. Refer to BCS-15, "Removal and Installation of BCM" .

NG >> Check lighting switch.Refer to LT-128, "Combination Switch Inspection" .

Seat Belt Warning Chime Does Not Operate

AKS009ID

1. CHECK WARNING CHIME OPERATION

Check the chime under conditions in exception of seat belt warning chime operation.

Does warning chime sound?

YES >> GO TO 2.

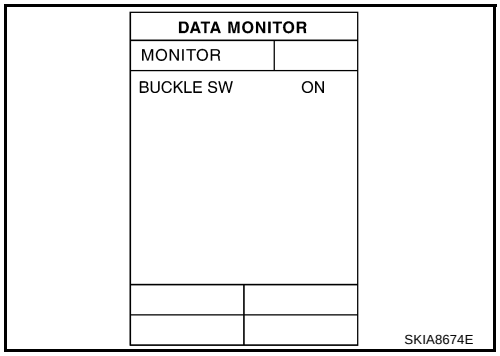
NO >> Go to DI-50, "All Warnings Are Not Operated" .

2. SEAT BELT WARNING CHIME INPUT SIGNAL

1. Select “BCM” on CONSULT-II.
2. With “DATA MONITOR” of “BUZZER”, confirm “BUCKLE SW” when the seat belt buckle switch (driver side) is operated.

When seat belt is fastened : BUCKLE SW OFF

When seat belt is unfastened : BUCKLE SW ON



OK or NG

OK >> Replace BCM. Refer to BCS-15, "Removal and Installation of BCM" .

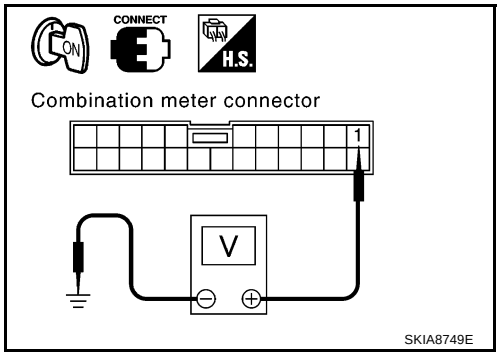
NG >> GO TO 3.

3. COMBINATION METER INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between combination meter harness connector M19 terminal 1 (BR) and ground.

When seat belt is fastened : Approx.12V

When seat belt is unfastened : Approx. 0V



OK or NG

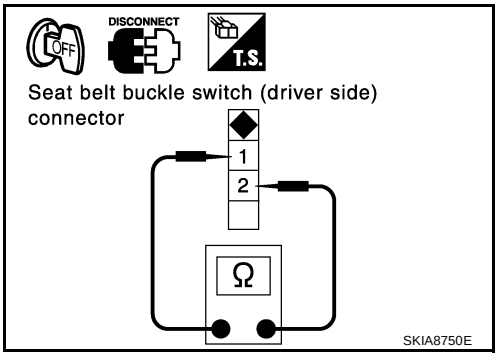
OK >> Replace combination meter.

NG >> GO TO 4.

4. CHECK SEAT BELT BUCKLE SWITCH

1. Turn ignition switch OFF.
2. Disconnect seat belt buckle switch (driver side) connector
3. Check continuity seat belt buckle switch (driver side) connector terminals 1 and 2.

Seat belt is fastened : Continuity should not exist.
Seat belt is unfastened : Continuity should exist.



OK or NG

OK >> GO TO 5.
NG >> Replace seat belt buckle switch (driver side).

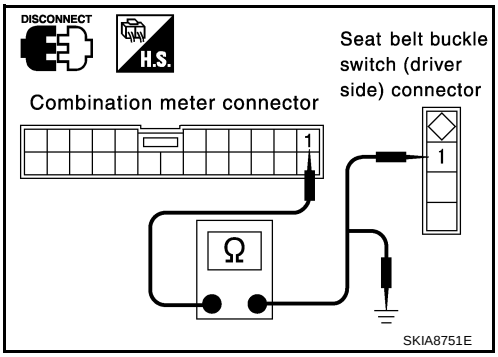
5. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

1. Disconnect combination meter connector.
2. Check continuity between combination meter harness connector M19 terminal 1 (BR) and seat belt buckle switch (driver side) harness connector B8 terminal 1 (BR).

Continuity should exist.

3. Check continuity between combination meter harness connector M19 terminal 1 (BR) and ground.

Continuity should not exist.



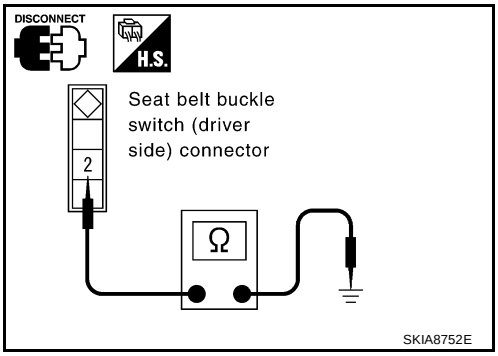
OK or NG

OK >> GO TO 6.
NG >> Repair harness or connector.

6. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check continuity between seat belt buckle switch (driver side) harness connector B8 terminal 2 (B/R) and ground.

Continuity should exist.



OK or NG

OK >> Replace combination meter.
NG >> Repair harness or connector.

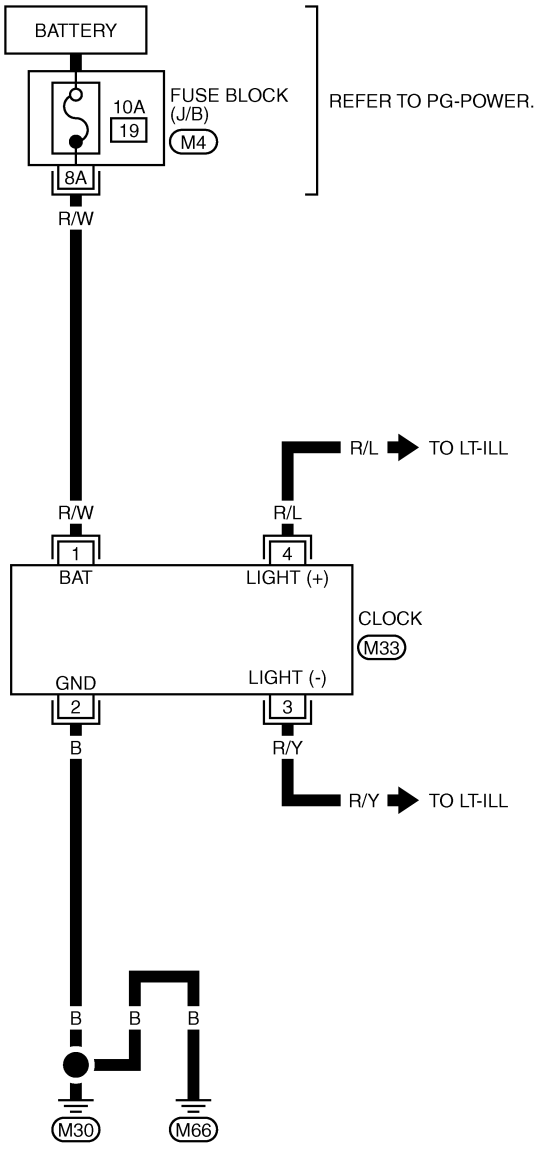
CLOCK

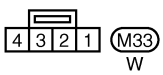
PFP:25820

Wiring Diagram — CLOCK —

AKS004X1

DI-CLOCK-01





REFER TO THE FOLLOWING.
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

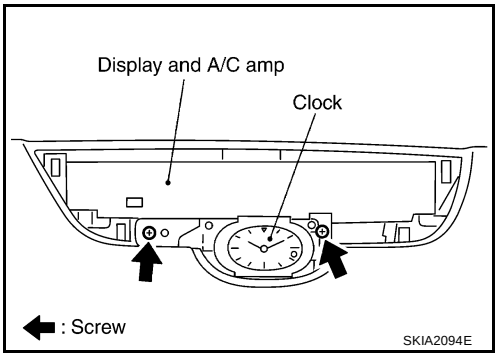
TKWT0345E

Removal and Installation of Clock

AKS004X2

REMOVAL

1. Remove the cluster lid finisher, refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
2. Remove the screws (2), and remove clock.



INSTALLATION

Install in the reverse order of removal.