SECTION MWI
METER, WARNING LAMP & INDICATOR

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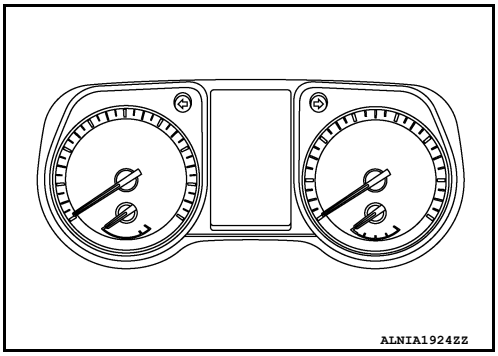
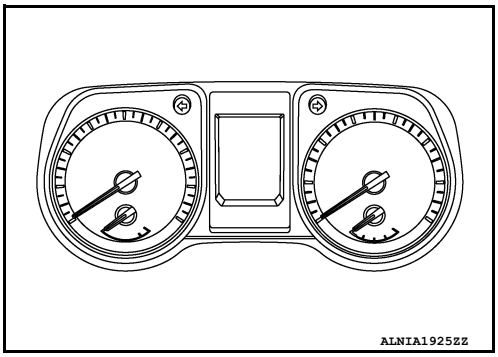
HOW TO USE THIS MANUAL

APPLICATION NOTICE

Information

INFOID:0000000014386535

Service information	Design of combination meter
TYPE A	 ALNIA1924ZZ
TYPE B	 ALNIA1925ZZ

PRECAUTION

PRECAUTIONS

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

INFOID:0000000014386536

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 collisions. Information necessary to service the system safely is included in the SR and SB sections 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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper repair, 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 SR 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 WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

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

Precaution for Work

INFOID:0000000014386537

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:

- Water soluble dirt:

- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

- Oily dirt:

- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

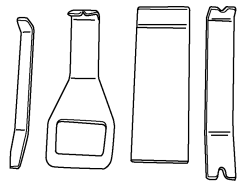
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000014386538

The actual shape of the tools may differ from those illustrated here.

Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim tool set  AWJIA0483ZZ	Removing trim components

Commercial Service Tools

INFOID:0000000014386539

Tool name	Description
Power tool  PIIB1407E	Loosening nuts, screws and bolts

SYSTEM DESCRIPTION

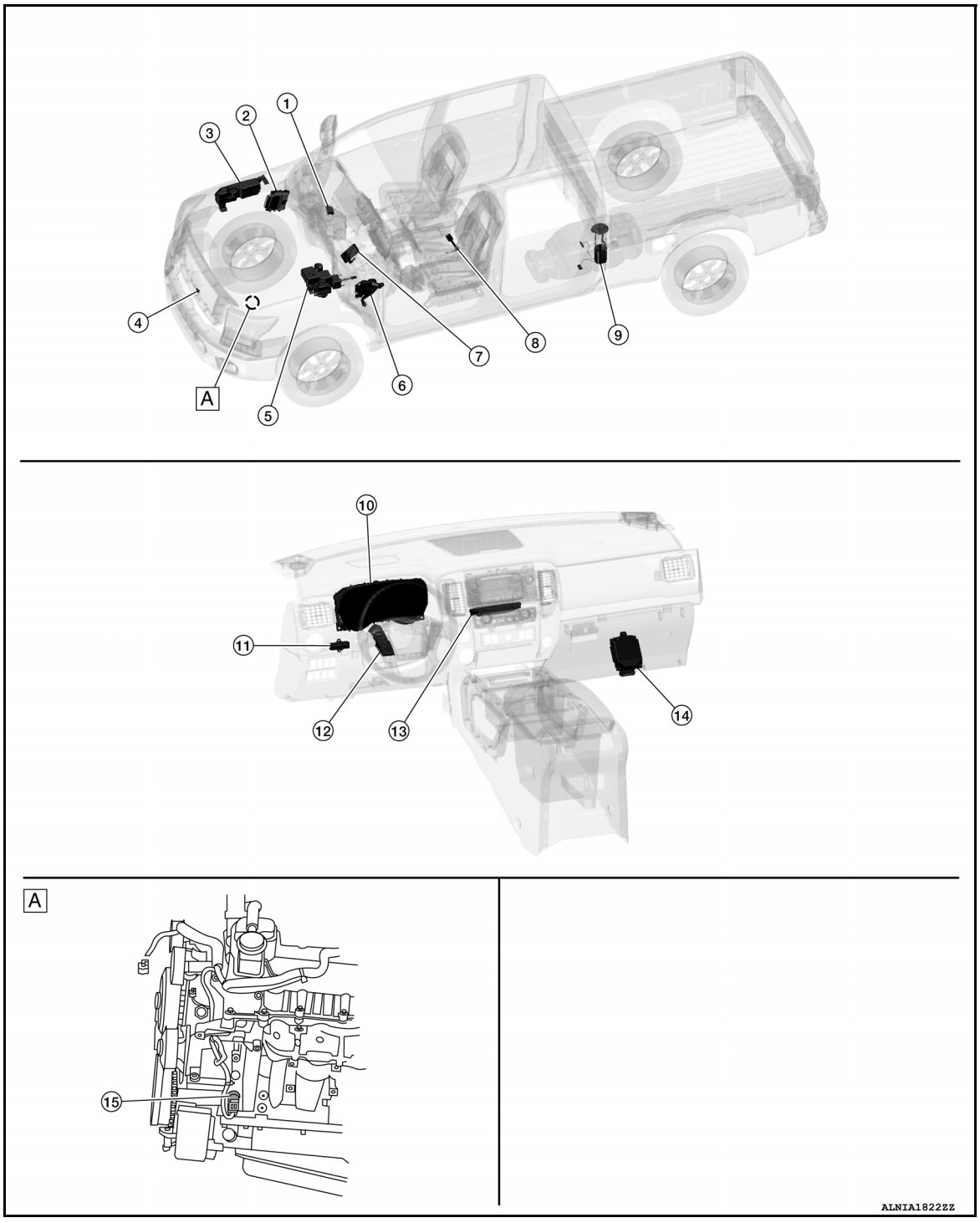
COMPONENT PARTS

METER SYSTEM

METER SYSTEM : Component Parts Location

INFOID:0000000014386540

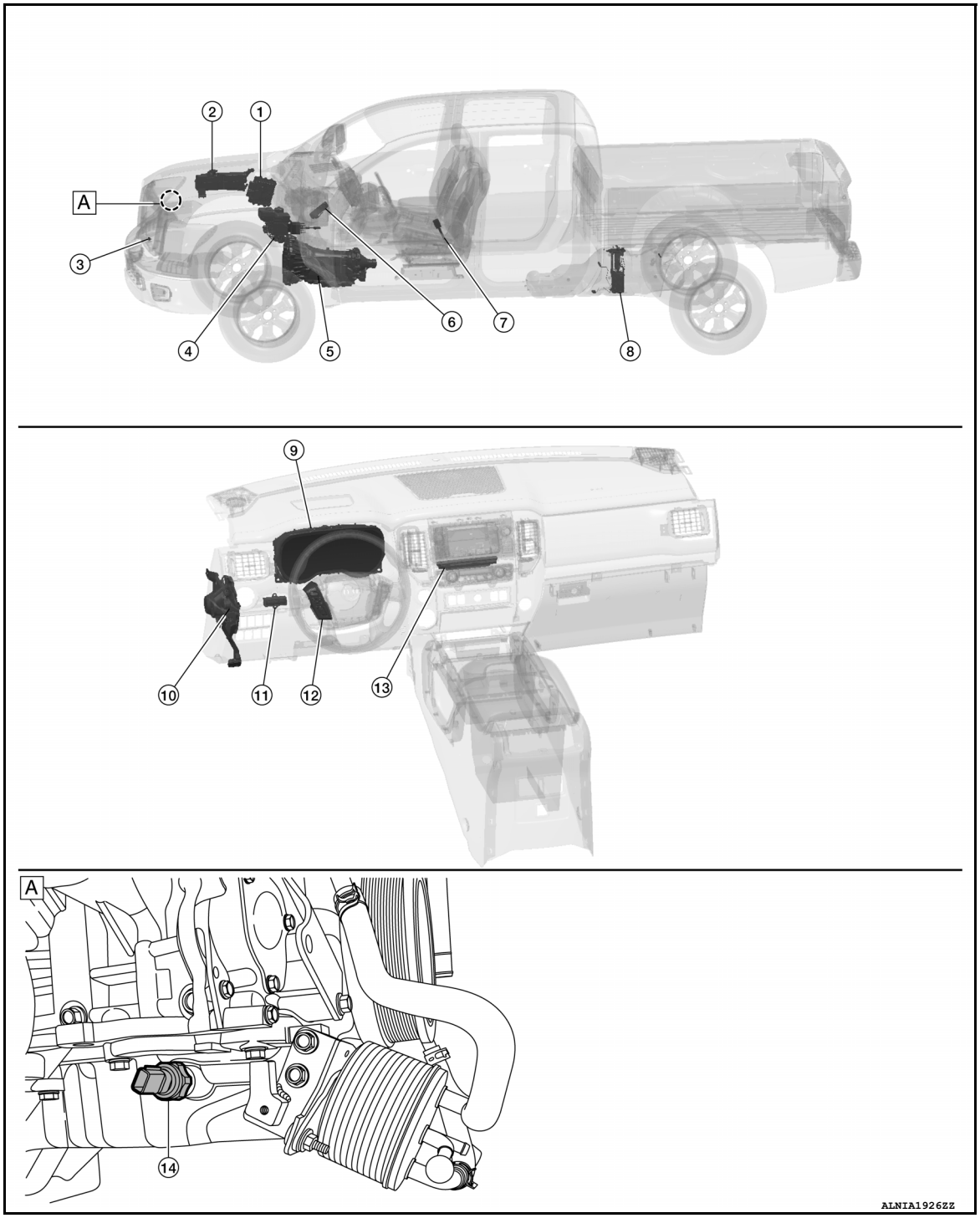
WITH CUMMINS 5.0L



A. View of front engine assembly (view with engine removed)

No.	Component	Function
1.	PTC heater control	• Transmits the ambient sensor signal to the combination meter via CAN communication (without auto a/c). • Refer to HAC-140, "Component Parts Location" for detailed installation location.
2.	ECM	• Transmits each signal to the combination meter via CAN communication. Refer to MWI-14, "METER SYSTEM : System Description". • Refer to EC-736, "Component Parts Location" for detailed installation location.
3.	Washer fluid level switch	• Transmits the washer fluid level switch signal to the combination meter. • Refer to WW-8, "Washer Fluid Level Switch" for detailed installation location.
4.	Ambient sensor	• Transmits the ambient sensor signal to the A/C auto amp (with auto a/c). • Transmits the ambient sensor signal to the PTC heater control (without auto a/c). • Refer to HAC-10, "Component Parts Location" for detailed installation location.
5.	ABS actuator and electric unit (control unit)	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-14, "METER SYSTEM : System Description". • Refer to BRC-9, "Component Parts Location" for detailed installation location.
6.	Parking brake switch	Transmits the parking brake switch signal to the combination meter.
7.	BCM	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-14, "METER SYSTEM : System Description". • Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
8.	Seat belt buckle switch LH	Transmits the seat belt buckle switch LH signal to the combination meter.
9.	Fuel level sensor unit and fuel pump (fuel level sensor)	Transmits the fuel level sensor signal to the combination meter.
10.	Combination meter	Refer to MWI-14, "METER SYSTEM : System Description".
11.	Meter control switch	Refer to MWI-13, "METER SYSTEM : Meter Control Switch".
12.	Steering switches	Refer to MWI-12, "METER SYSTEM : Steering Switches".
13.	A/C auto amp.	• Transmits the ambient sensor signal to the combination meter via CAN communication (with auto a/c). • Refer to HAC-10, "Component Parts Location" for detailed installation location.
14.	TCM	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-14, "METER SYSTEM : System Description". • Refer to TM-15, "A/T CONTROL SYSTEM : Component Parts Location" for detailed installation location.
15.	Engine oil pressure switch	Transmits the engine oil pressure switch signal to the ECM.

WITH VK565VD



A. View of front engine assembly (view with engine removed)

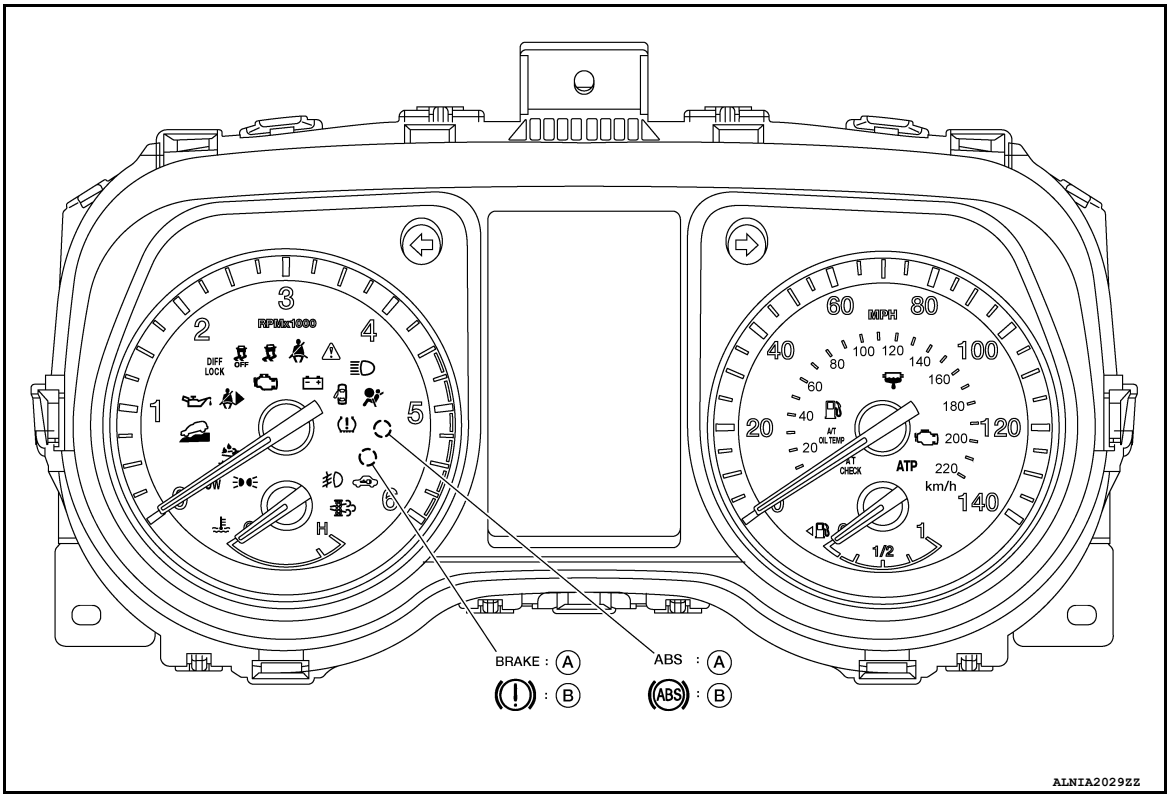
No.	Component	Function
1.	ECM	• Transmits each signal to the combination meter via CAN communication. Refer to MWI-14, "METER SYSTEM : System Description". • Refer to EC-736, "Component Parts Location" for detailed installation location.
2.	Washer fluid level switch	• Transmits the washer fluid level switch signal to the combination meter. • Refer to WW-8, "Washer Fluid Level Switch" for detailed installation location.

No.	Component	Function
3.	Ambient sensor	• Transmits the ambient sensor signal to the A/C auto amp (with auto a/c). • Transmits the ambient sensor signal to the combination meter (without auto a/c). • Refer to HAC-10, "Component Parts Location" for detailed installation location.
4.	ABS actuator and electric unit (control unit)	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-14, "METER SYSTEM : System Description". • Refer to BRC-9, "Component Parts Location" for detailed installation location.
5.	TCM	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-14, "METER SYSTEM : System Description". • Refer to TM-15, "A/T CONTROL SYSTEM : Component Parts Location" for detailed installation location.
6.	BCM	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-14, "METER SYSTEM : System Description". • Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
7.	Seat belt buckle switch LH	Transmits the seat belt buckle switch LH signal to the combination meter.
8.	Fuel level sensor unit and fuel pump (fuel level sensor)	Transmits the fuel level sensor signal to the combination meter.
9.	Combination meter	Refer to MWI-14, "METER SYSTEM : System Description".
10.	Parking brake switch	Transmits the parking brake switch signal to the combination meter.
11.	Meter control switch	Refer to MWI-13, "METER SYSTEM : Meter Control Switch".
12.	Steering switches	Refer to MWI-12, "METER SYSTEM : Steering Switches".
13.	A/C auto amp.	• Transmits the ambient sensor signal to the combination meter via CAN communication (with auto a/c). • Refer to HAC-10, "Component Parts Location" for detailed installation location.
14.	Engine oil pressure sensor	Transmits the engine oil pressure sensor signal to the ECM.

METER SYSTEM : Design

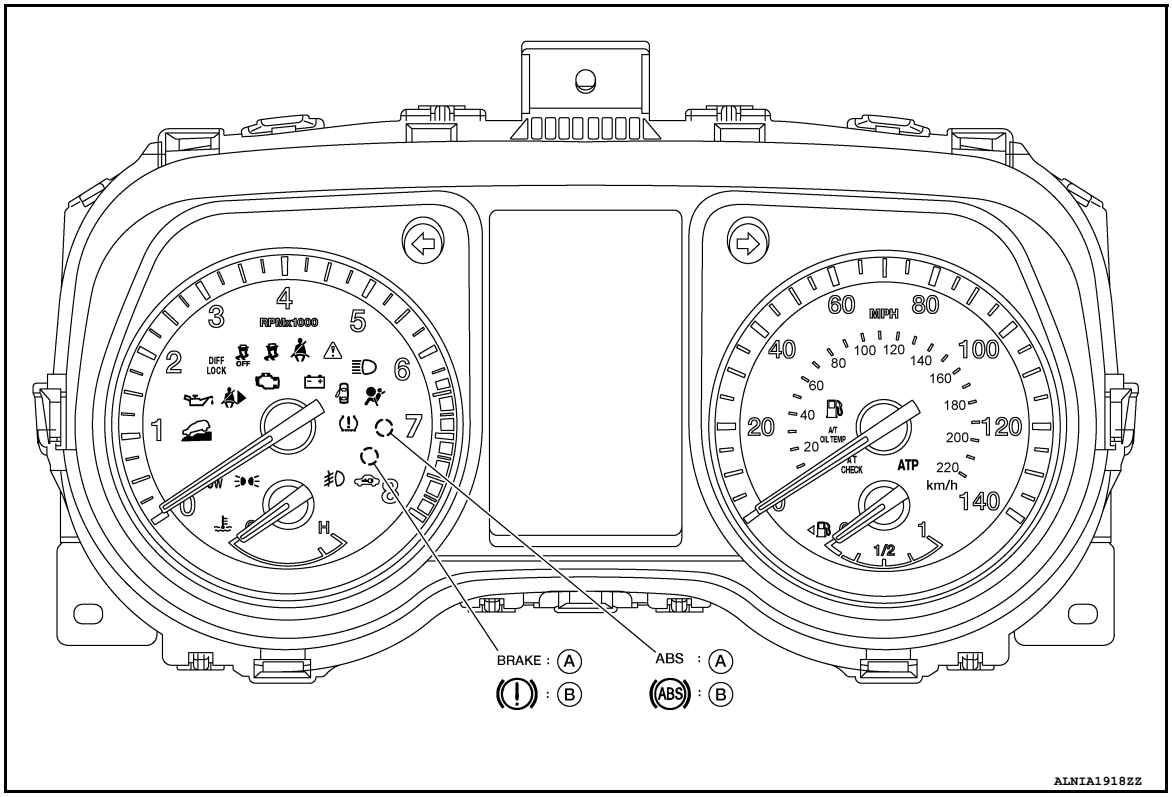
INFOID:0000000014386541

ARRANGEMENT OF COMBINATION METER
WITH CUMMINS 5.0L



A: USA B: Except USA

WITH VK56VD



A: USA B: Except USA

METER SYSTEM : Combination Meter

INFOID:0000000014386542

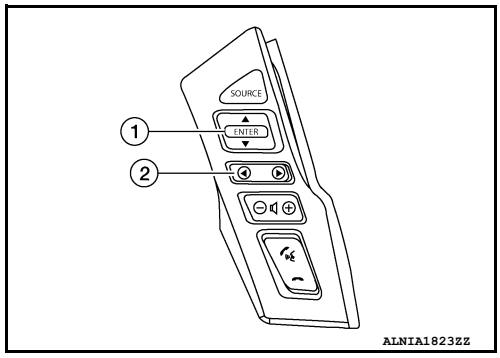
The combination meter controls the following items according to the signals received from each unit via CAN communication and the signals from switches and sensors:

- Speedometer
- Tachometer
- Engine coolant temperature gauge
- Fuel gauge
- Indicator lamps
- Warning lamps
- Meter illumination control
- Meter effect function
- Information display

METER SYSTEM : Steering Switches

INFOID:0000000014386543

- The steering switches are located on the steering wheel.
- The steering switch transmits the steering switch signal to the combination meter.



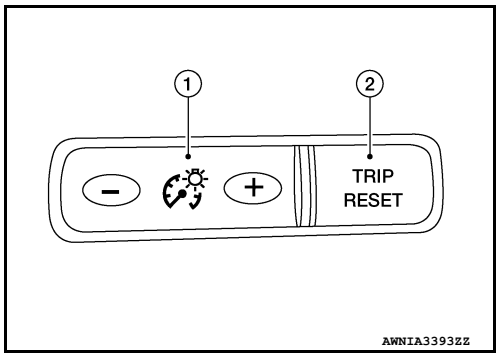
No.	Switch name	Operation	Description
1.	Enter/Up/Down switch	Press	The information display settings can be changed.
2.	Menu left/menu right switch		

METER SYSTEM : Meter Control Switch

INFOID:0000000014386544

- The meter control switch is located on the instrument lower panel LH.
- The meter control switch transmits the following signals to the combination meter:

- Trip reset switch signal
- Illumination control switch signal (+)
- Illumination control switch signal (−)

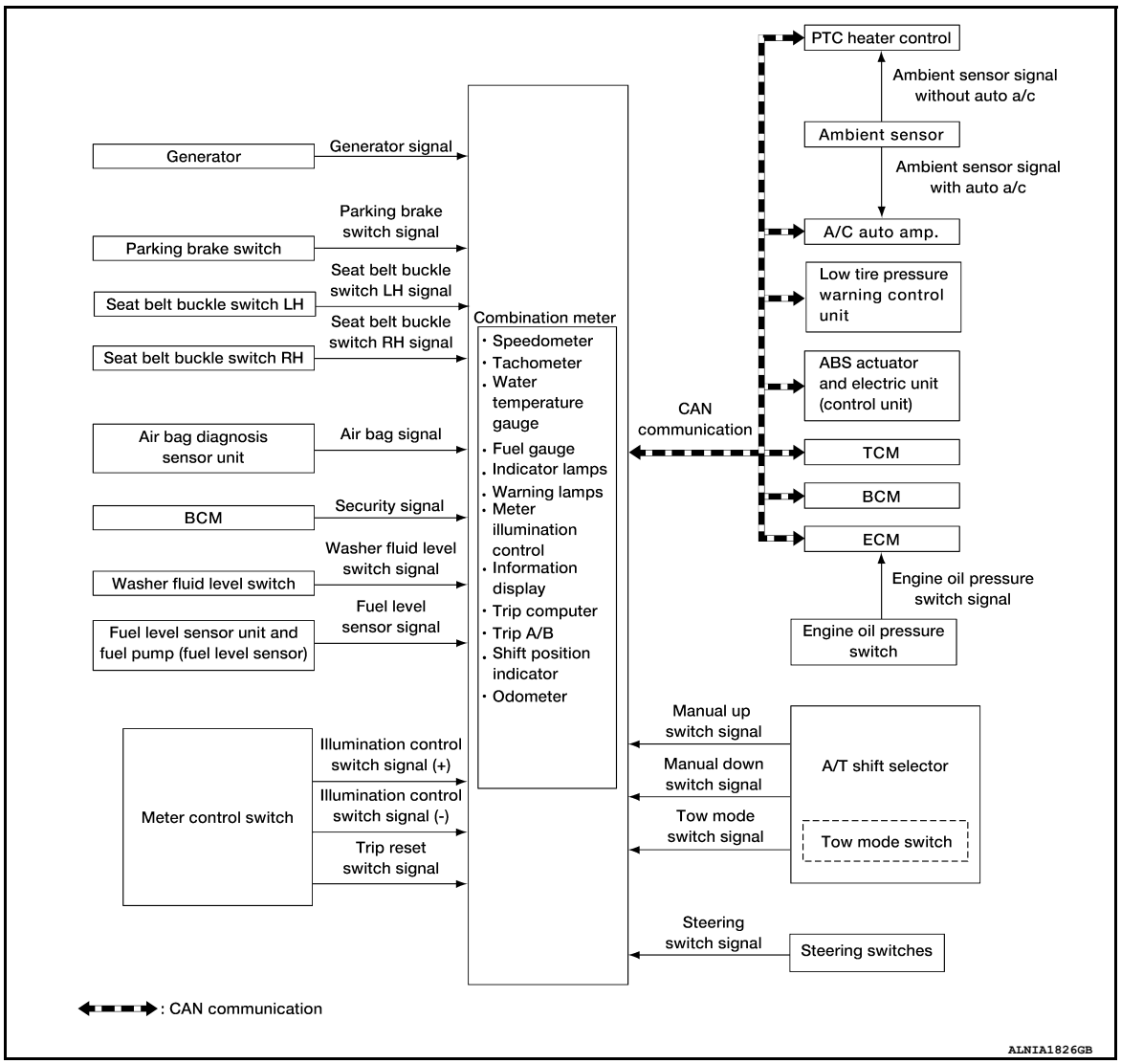


No.	Switch name	Operation	Description
1.	Illumination control switch	Press	The illumination level of the back light of the combination meter can be adjusted.
2.	Trip reset switch	Press	• The trip meter can be switched between A/ B and ODO. • Trip meter A/B can be reset by pressing and holding the trip reset switch. • A trip computer value displayed on the information display can be reset by pressing and holding the trip reset switch for 1 second or more. • All trip computer values can be reset by pressing and holding the trip reset switch for 3 seconds or more.

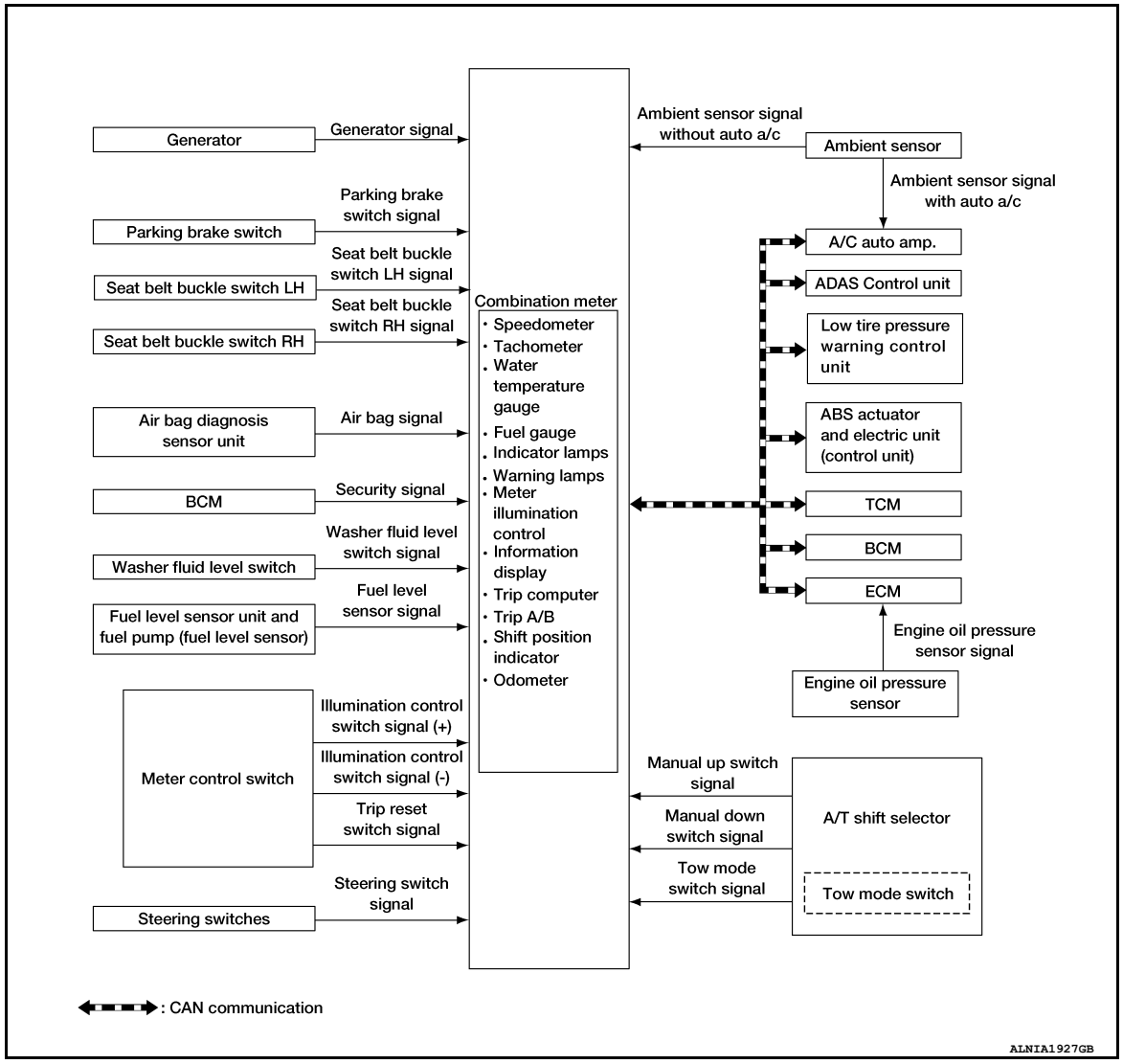
SYSTEM
METER SYSTEM
METER SYSTEM : System Description

INFOID:0000000014386545

SYSTEM DIAGRAM
WITH CUMMINS 5.0L



WITH VK56VD



Combination Meter Input Signal (CAN Communication Signal)

Transmit unit	Signal name
ABS actuator and electric unit (control unit)	Vehicle speed signal
	ABS warning lamp signal
	VDC warning lamp signal
	VDC OFF indicator lamp signal
	Brake warning lamp signal
	Hill descent indicator lamp signal
	Yaw rate/side/decel G sensor signal

Transmit unit	Signal name
BCM	Dimmer signal
	Position light request signal
	Door switch signal
	Front fog light request signal
	High beam request signal
	Meter display signal
	Sleep wake up signal
	Buzzer output signal
	Key ID signal
	Turn indicator signal
	Starter relay status signal
TCM	Shift position signal
	A/T check warning lamp signal
ECM	Engine speed signal
	ASCD status signal
	Engine coolant temperature signal
	Fuel consumption monitor signal
	Malfunctioning indicator lamp signal
	Engine status signal
	Engine oil pressure switch signal (Cummins 5.0L)
	Engine oil pressure sensor signal (VK56VD)
	Fuel-filler cap warning display signal
A/C auto amp.	Ambient sensor signal (with auto a/c)
PTC heater control	Ambient sensor signal (without auto a/c) (Cummins 5.0L)
Low tire pressure warning control unit	TPMS malfunction warning lamp signal
	Tire pressure data signal
	Low tire pressure warning lamp signal

DESCRIPTION

Combination Meter

The combination meter controls the following items according to the signals received from each unit via CAN communication and the signals from switches and sensors:

- Speedometer
- Tachometer
- Engine coolant temperature gauge
- Fuel gauge
- Warning lamps
- Indicator lamps
- Meter illumination control
- Meter effect function
- Information display

The combination meter incorporates a buzzer function that sounds an audible alarm with the integrated buzzer. Refer to WCS-7, "WARNING CHIME SYSTEM : System Description" for further details.

The combination meter includes an on board diagnosis function.

The combination meter can be diagnosed with CONSULT.

METER CONTROL FUNCTION LIST

System		Description	Reference
Measuring instruments	Speedometer	Indicates vehicle speed.	MWI-18, "SPEEDOMETER : System Description"
	Tachometer	Indicates engine speed.	MWI-19, "TACHOMETER : System Description"
	Engine coolant temperature gauge	Indicates engine coolant temperature.	MWI-19, "ENGINE COOLANT TEMPERATURE GAUGE : System Description"
	Fuel gauge	Indicates fuel level.	MWI-19, "FUEL GAUGE : System Description"
Information display		The information display displays status according to system malfunction or vehicle condition.	MWI-21, "INFORMATION DISPLAY : System Description"
Meter illumination control	Meter illumination control function	Switches back and forth between daytime mode and nighttime mode according to a light switch position.	MWI-20, "METER ILLUMINATION CONTROL : System Description"
	Back light illumination control function	The operation of the illumination control switch allows the brightness adjustment of meter illumination.	
Meter effect function	Engine-start effect function	Controls pointers of combination meter, back light illumination and information display at engine start to produce illumination effects.	MWI-20, "METER EFFECT FUNCTION : System Description"
	Driver welcome function	Controls meter illumination to produce illumination effects when getting in the vehicle.	

METER SYSTEM : Fail-safe

INFOID:0000000014687453

The combination meter activates the fail-safe control if the CAN communication lines between each unit are malfunctioning.

Function	Specifications
Speedometer	Reset to zero by suspending communication.
Tachometer	
Engine coolant temperature gauge	
Meter illumination control	When suspending communication, it changes to nighttime mode.
Buzzer	Turns OFF by suspending communication.

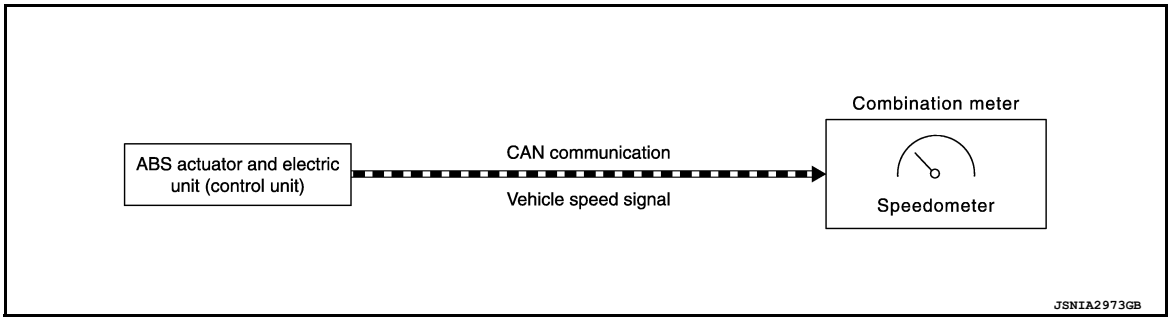
Function		Specifications
Information display	Current fuel consumption	The last result calculated during normal condition is indicated.
	Average fuel consumption	
	Average vehicle speed	
	Range (Distance to empty)	
	Driving distance	
	Door open warning	The display turns OFF by suspending communication.
	Low tire pressure warning	
	Parking brake release warning	
	Fuel-filler cap warning	
	Oil pressure warning	
	A/T error warning lamp	
	Odo/trip meter	An indicated value is maintained at communications blackout.
	Shift selector position indicator	The indicator turns OFF by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	Turns ON by suspending communication.
	Brake warning lamp	
	VDC warning lamp	
	Malfunction indicator lamp	
	Air bag warning lamp	
	VDC OFF indicator lamp	Turns OFF by suspending communication.
	Charge warning lamp	
	High beam indicator lamp	
	Turn signal indicator lamp	
	Position lamp indicator lamp	
	Front fog lamp indicator lamp	
	Low tire pressure warning lamp	After blinking for 1 minute, the lamp remains ON.

SPEEDOMETER

SPEEDOMETER : System Description

INFOID:0000000014386547

SYSTEM DIAGRAM



DESCRIPTION

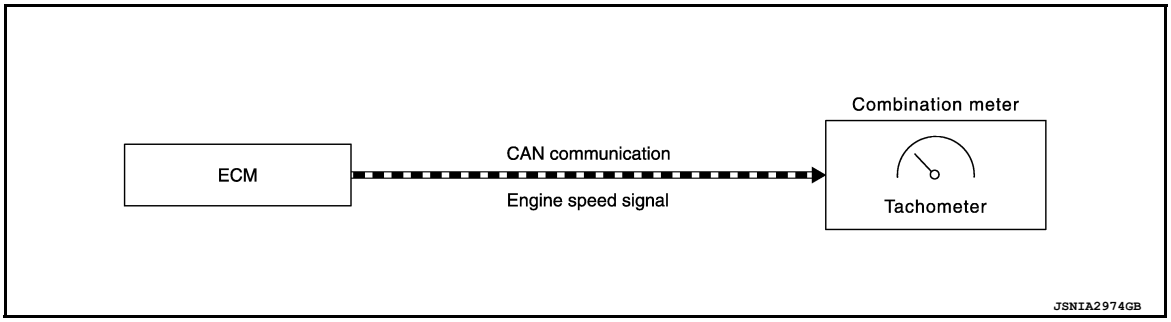
The ABS actuator and electric unit (control unit) receives each wheel speed sensor signal and provides a vehicle speed signal to the combination meter via CAN communication lines.

TACHOMETER

TACHOMETER : System Description

INFOID:0000000014386548

SYSTEM DIAGRAM



DESCRIPTION

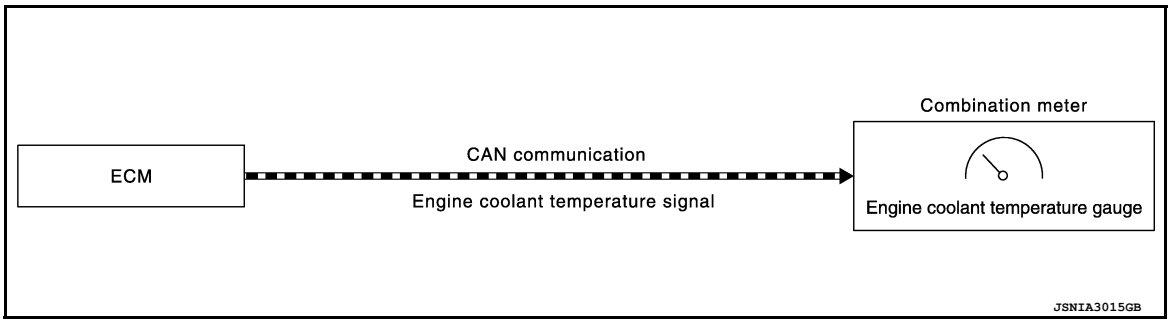
The crank position sensor sends a crankshaft position signal to the ECM. The ECM provides an engine speed signal to the combination meter via CAN communication lines. The tachometer indicates engine speed in revolutions per minute (rpm).

ENGINE COOLANT TEMPERATURE GAUGE

ENGINE COOLANT TEMPERATURE GAUGE : System Description

INFOID:0000000014386549

SYSTEM DIAGRAM



DESCRIPTION

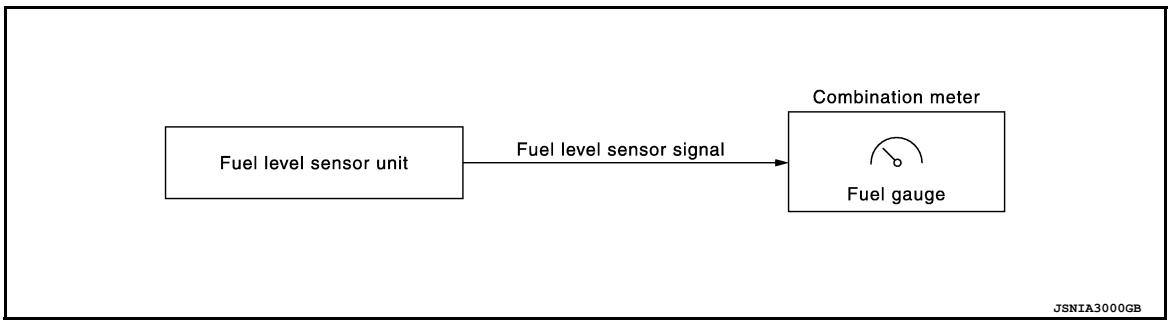
The engine coolant temperature sensor sends an engine coolant temperature signal to the ECM. The ECM provides an engine coolant temperature signal to the combination meter via CAN communication lines. The engine coolant temperature gauge indicates the engine coolant temperature.

FUEL GAUGE

FUEL GAUGE : System Description

INFOID:0000000014386550

SYSTEM DIAGRAM



DESCRIPTION

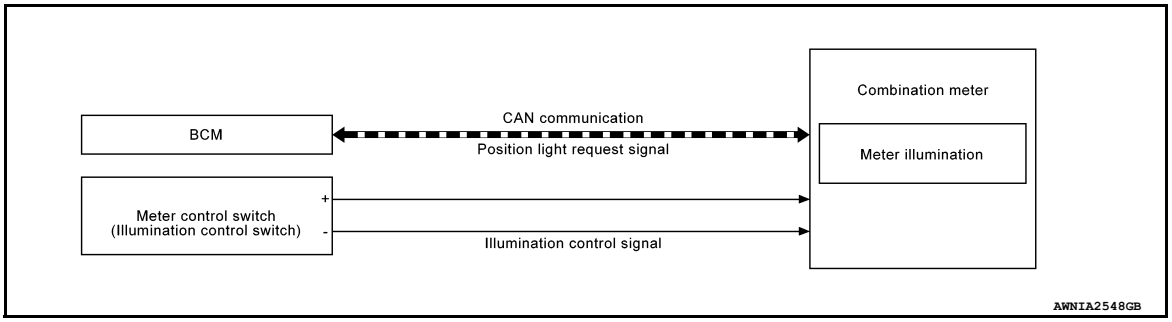
The fuel level sensor unit sends a variable resistor signal to the combination meter. The fuel gauge indicates the approximate fuel level in the fuel tank.

METER ILLUMINATION CONTROL

METER ILLUMINATION CONTROL : System Description

INFOID:0000000014386551

SYSTEM DIAGRAM



DESCRIPTION

Meter Illumination Control Function

The operation of the illumination control switch changes brightness of the meter illumination.

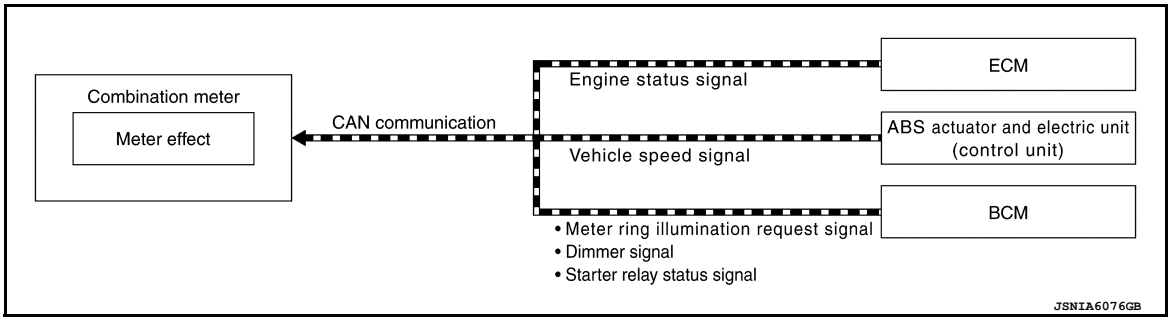
Meter illumination	The number of adjustable steps
Daytime	21
Nighttime	21

METER EFFECT FUNCTION

METER EFFECT FUNCTION : System Description

INFOID:0000000014386552

SYSTEM DIAGRAM



ENGINE-START EFFECT FUNCTION

When recognizing an engine start, the combination meter controls the following items for producing the effect:

- Speedometer
- Tachometer
- Engine coolant temperature gauge
- Fuel gauge
- Meter illumination

Meter and Illumination Operations During Engine-start Effect

The combination meter controls the following items during the engine-start effect:

Control item		Operation
Speedometer		Sweeps the pointer.
Tachometer		Sweeps the pointer.
Engine coolant temperature gauge		Stops the pointer.
Fuel gauge		Stops the pointer.
Meter illumination	Pointers	Turns on the illumination at the effect level.
	Information display	Turns on the illumination at the normal brightness level.
	Other than those above	Increases the brightness to the effect level in stages.

NOTE:
The pointers are stopped and illumination is turned off while cranking the engine.

Engine Start Judgment
The combination meter judges engine-start and activates the engine-start effect only once when the following operational conditions are all satisfied:

Condition	
Ignition switch	ON position
Vehicle speed	Less than 0.6 MPH (1 km/h)
Engine state	Other than the time of cranking the engine
	500 rpm or more
Information display (SETTING)	The setting of “EFFECT” is ON

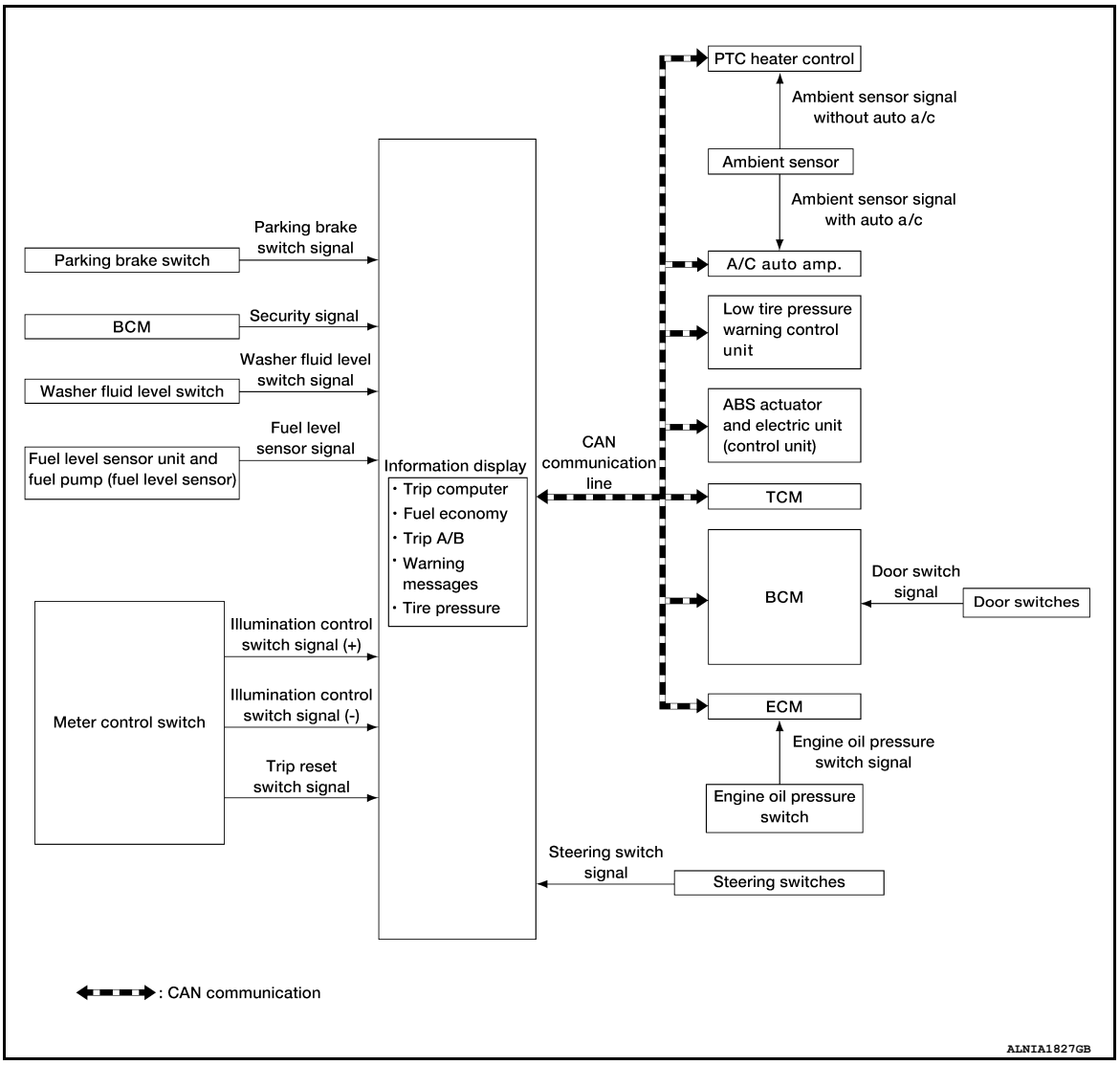
NOTE:
Engine-start effect exits when any of the above operational conditions are canceled during the engine-start effect.

INFORMATION DISPLAY

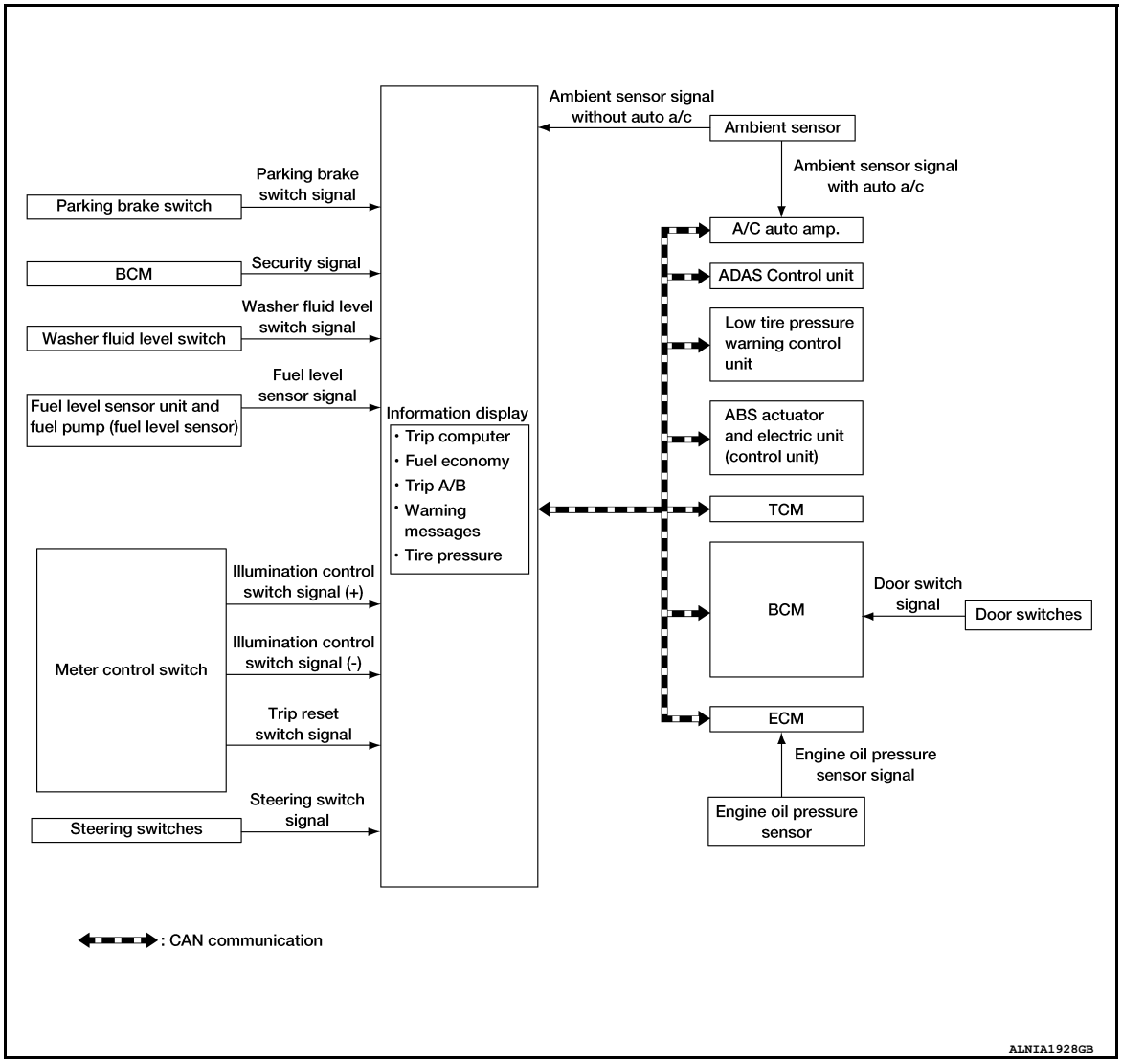
INFORMATION DISPLAY : System Description

INFOID:0000000014386553

SYSTEM DIAGRAM
WITH CUMMINS 5.0L



WITH VK56VD



FUNCTION

The information display can indicate the following items:

- Outside air temperature
- Trip computer
- Intelligent Key operation information
- Odometer
- Warning/Indication messages (door open, low oil pressure, I-Key, low fuel, low washer fluid, release parking brake, low tire pressure and loose fuel cap).

OUTSIDE AIR TEMPERATURE INDICATION

Displays the ambient temperature based on the signal received from:

- The ambient sensor signal (without auto a/c) (VK56VD).
- The A/C auto amp. via CAN communication (with auto a/c).
- The PTS heater control unit via CAN communication (without auto a/c) (Cummins 5.0L).

LOOSE FUEL CAP MESSAGE

The LOOSE FUEL CAP message will display in the information display when the fuel-filler cap is not tightened correctly. The message will turn off as soon as the ECM detects the fuel-filler cap is properly tightened. The ECM provides a loose fuel cap signal to the combination meter via CAN communication.

LOW TIRE PRESSURE WARNING

This warning appears when the low tire pressure warning control unit detects low inflation pressure or a system malfunction. The low tire pressure warning control unit sends a signal to the combination meter via CAN

communication to illuminate the low tire pressure warning lamp. In addition, a warning message will be displayed in the vehicle information display.

DOOR OPEN WARNING

This warning appears when the ignition switch is ON and the door is open. The BCM receives a door switch signal from the door switch of the open door. The BCM sends the door switch signal to the combination meter via CAN communication.

LOW FUEL WARNING

This warning appears when the fuel level in the fuel tank is low.

LOW WINDSHIELD WASHER FLUID WARNING

When the windshield washer fluid level is low, the washer fluid level switch provides a ground signal to the combination meter and the warning is displayed. Once fluid is added, the switch opens and the warning is no longer displayed.

RELEASE PARKING BRAKE WARNING

When the parking brake is applied, the parking brake switch provides a ground signal to the combination meter. When the vehicle speed is greater than 4 MPH (7 km/h), the message is displayed and the warning chime sounds.

LOW OIL PRESSURE WARNING

The low oil pressure warning appears in the information display when the combination meter receives a low engine oil pressure signal from the ECM via CAN communication.

WARNING CHECK INDICATION

The combination meter can cause an interruption on the information display to indicate a warning, based on signals received from each unit and switch.

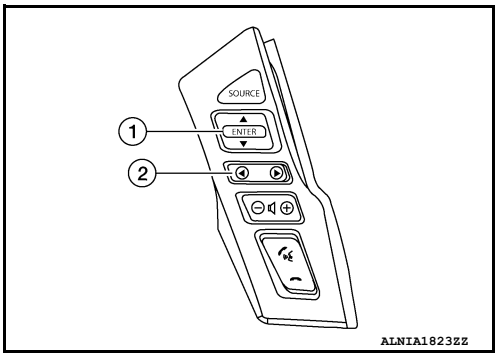
Refer to Owner’s Manual for additional information on the information display items.

OPERATION

Switch Name and Function

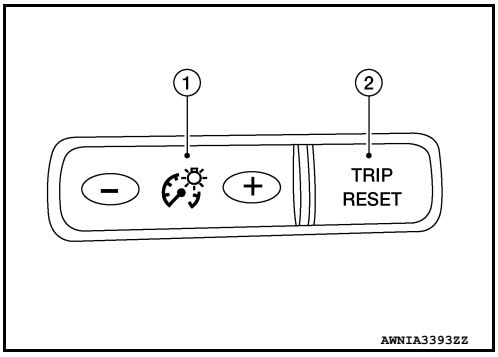
INFOID:0000000014386554

STEERING SWITCHES



No.	Switch name	Operation	Description
1.	Enter/Up/Down switch	Press	The information display settings can be changed.
2.	Menu left/menu right switch		

METER CONTROL SWITCH



No.	Switch name	Operation	Description
1.	Illumination control switch	Press	The illumination level of the back light of the combination meter can be adjusted.
2.	Trip reset switch	Press	• The trip meter can be switched between A/ B and ODO. • Trip meter A/B can be reset by pressing and holding the trip reset switch. • A trip computer value displayed on the information display can be reset by pressing and holding the trip reset switch for 1 second or more. • All trip computer values can be reset by pressing and holding the trip reset switch for 3 seconds or more.

DIAGNOSIS SYSTEM (COMBINATION METER)

On Board Diagnosis Function

INFOID:0000000014386555

COMBINATION METER SELF-DIAGNOSIS MODE

The following meter functions can be checked during Combination Meter Self-Diagnosis Mode:
- Pointer sweep of speedometer, tachometer and gauges
- Illumination of all LCD segments and color patterns for meter displays
- Illumination of all lamps/LEDs that are controlled by the combination meter (regardless of switch status)

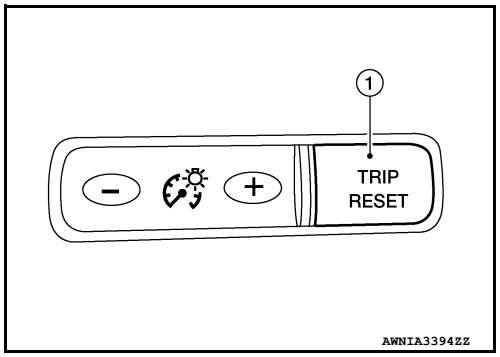
STARTING COMBINATION METER SELF-DIAGNOSIS MODE

NOTE:
- Check combination meter power supply and ground circuits if self-diagnosis mode does not start. Refer to MWI-87, "COMBINATION METER : Diagnosis Procedure". Replace combination meter if power supply and ground circuits are found to be normal and self-diagnosis mode does not start. Refer to MWI-108, "Removal and Installation".
- Combination meter self-diagnosis mode will function with the ignition switch in ON. Combination meter self-diagnosis mode will exit upon turning the ignition switch to OFF.

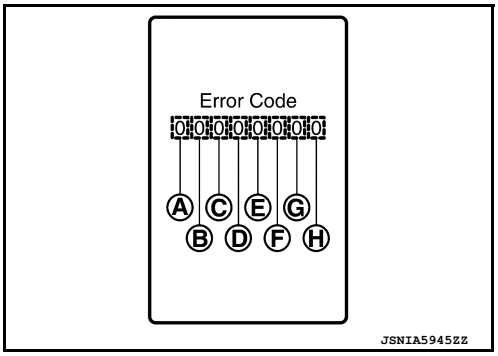
How to Initiate Self-Diagnosis Mode

1. Turn ignition switch OFF.
2. While pressing the trip reset switch (1), turn ignition switch ON.
3. Keep pressing the trip reset switch for 1 second or more.
4. Press the trip reset switch at least 3 times within 7 seconds after the ignition switch is turned ON.
5. “Work instruction code” is indicated in the top portion of information display and self-diagnosis is started.
6. The mode switches in the order shown below each time the trip reset switch is pressed.

NOTE:
If the trip reset switch is not operated for 20 seconds or more, the self-diagnosis mode is automatically canceled.



Test order	Test item	Description
1	Work instruction code	This item is displayed, but not used.
2	Part number	
3	Software code	
4	EEPROM code	
5	Hardware code	
6	P.C.B code	
7	Circuit check	The pointer of the following items moves from 0 to MAX twice: • Speedometer • Tachometer • Engine coolant temperature gauge • Fuel gauge **NOTE:** If any of the pointers does not sweep, replace combination meter.
8	Color check	Performs the color check of the information display.
9	Error code	Displays the error code of the following items: • Speedometer • Tachometer • Engine coolant temperature gauge • Fuel gauge • Meter control switch
10	Warning/indicator lamp check	All warning/indicator lamps illuminate.



Item		Code	Description	Action to take/Reference
Ⓐ	Speedometer	0	Normal	—
		1	A vehicle speed signal cannot be received from ABS actuator and electric unit (control unit).	Perform “Self Diagnostic Result” of “ABS.” Refer to MWI-36, "DTC Index".
		2	A vehicle speed signal received from the ABS actuator and electric unit (control unit) is abnormal.	
Ⓑ	Tachometer	0	Normal	—
		1	An engine speed signal cannot be received from ECM.	Perform “Self Diagnostic Result” of “ECM.” Refer to EC-837, "DTC Index" (Cummins 5.0L) or EC-136, "DTC Index" (VK56VD).
Ⓒ	Fuel gauge	0	Normal	—
		1	Fuel gauge circuit is shorted.	Refer to MWI-91, "Component Function Check (Cummins 5.0L)" or MWI-91, "Component Function Check (VK56VD)".
		2	Fuel gauge circuit is open.	
Ⓓ	Engine coolant temperature gauge	0	Normal	—
		1	An engine coolant temperature signal cannot be received from ECM.	Perform “Self Diagnostic Result” of “ECM.” Refer to EC-837, "DTC Index" (Cummins 5.0L) or EC-136, "DTC Index" (VK56VD).
Ⓔ	Meter control switch	0	Normal	—
		1	When judging that the illumination control switch signal circuit is shorted for 5 minutes or more.	Refer to MWI-89, "Diagnosis Procedure".
		2	When judging that the trip reset switch signal circuit is shorted for 5 minutes or more.	
		3	When judging that both switch signal circuit are shorted for 5 minutes or more.	
Ⓕ	—	0	Displays “0” constantly.	—
Ⓖ	—	0	Displays “0” constantly.	—
Ⓗ	—	0	Displays “0” constantly.	—

How to Reset Error Code

Error codes stored in combination meter can be reset by following the instructions below:

1. Turn ignition switch OFF.
2. While pressing the trip reset switch, turn ignition switch ON.
3. Keep pressing the trip reset switch for 1 second or more.
4. Press the trip reset switch at least 3 times within 7 seconds after the ignition switch is turned ON.
5. Turn ignition switch OFF.

6. Perform self-diagnosis and check that the error codes are reset.

CONSULT Function (METER/M&A)

INFOID:0000000014386556

APPLICATION ITEMS

CONSULT can display each diagnostic item using the diagnostic test modes shown.

METER/M&A Diagnosis mode	Description
Self Diagnostic Result	Displays combination meter self-diagnosis results.
Data Monitor	Displays combination meter input/output data in real time.
Work support	Displays diagnosis procedure of each work item.
Warning History	Lighting history of the warning lamp and indicator lamp can be checked.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.

SELF DIAG RESULT

Refer to MWI-36, "DTC Index".

DATA MONITOR

Display Item List

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER	X	Displays the value of vehicle speed signal.
SPEED OUTPUT [mph or km/h]	X	Vehicle speed signal value transmitted to other units via CAN communication.
ODO OUTPUT [mph or km/h]		Odometer signal value transmitted to other units via CAN communication.
TACHO METER [rpm]	X	Value of the engine speed signal received from ECM via CAN communication.
FUEL METER [L]	X	Fuel level indicated on combination meter.
W TEMP METER [°F] or [°C]	X	Displays the value of engine coolant temperature signal, which is input from ECM.
ABS W/L [On/Off]		Displays [ON/OFF] condition of ABS warning indicator.
VDC/TCS IND [On/Off]		Displays [ON/OFF] condition of VDC OFF indicator lamp.
SLIP IND [On/Off]		Displays [ON/OFF] condition of SLIP indicator lamp.
BRAKE W/L [On/Off]		Displays [ON/OFF] condition of brake warning indicator.
DOOR W/L [On/Off]		Displays [ON/OFF] condition of door warning message in the information display.
HI-BEAM IND [On/Off]		Displays [ON/OFF] condition of high beam indicator.
TURN IND [On/Off]		Displays [ON/OFF] condition of turn indicator.
FR FOG IND [On/Off]		Displays [ON/OFF] condition of front fog lamp indicator.
OIL W/L [On/Off]		Displays [ON/OFF] condition of low oil pressure warning message in the information display.
MIL [On/Off]		Displays [ON/OFF] condition of malfunction indicator.

Display item [Unit]	MAIN SIGNALS	Description
C-ENG2 W/L [On/Off]		Displays [ON/OFF] condition of malfunction indicator lamp (red).
ATC/T-AMT W/L [Off]		Displays [ON/OFF] condition of A/T check warning indicator.
4WD W/L [On/Off]		Displays [ON/OFF] condition of 4WD warning lamp.
FUEL W/L [On/Off]		Displays [ON/OFF] condition of low-fuel warning message in the information display.
WASHER W/L [On/Off]		Displays [ON/OFF] condition of low washer fluid warning message in the information display.
AIR PRES W/L [On/Off]		Displays [ON/OFF] condition of tire pressure warning lamp.
KEY G/Y W/L [On/Off]		Displays [ON/OFF] condition of key green warning lamp.
DDS W/L(Note 1) [On/Off]		Displays [ON/OFF] condition of hill descent control indicator lamp.
CHAGE W/L [On/Off]		Displays [ON/OFF] condition of charge warning lamp.
DPF W/L [On/Off]		Displays [ON/OFF] condition of DPF warning lamp detected from DPF (Diesel particulate filter) warning lamp signal is received from ECM via CAN communication.
ATP W/L [On/Off]		Displays [ON/OFF] condition of ATP warning lamp.
FILTER W/L [On/Off]		Displays [ON/OFF] condition of water in fuel warning lamp.
SHIFT IND [P, R, N, D]		Displays shift selector position.
LCD		Displays status of Intelligent Key system.
4WD IND [LOCK, 2W, 4L, 4H, MALF]		Displays status of 4WD.
TOW MODE IND [On/Off]		Displays [ON/OFF] condition of tow mode indicator.
M RANGE SW [On/Off]		Displays [ON/OFF] condition of manual mode switch.
NM RANGE SW [On/Off]		Displays [ON/OFF] condition of non-manual mode switch.
AT SFT UP SW [On/Off]		Displays [ON/OFF] condition of manual mode shift up switch.
AT SFT DWN SW [On/Off]		Displays [ON/OFF] condition of manual mode shift down switch.
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the engine coolant temperature and the acceleration degree.
FUEL CAP W/L [On/Off]		Displays [ON/OFF] condition of loose fuel cap warning message in the information display.
PKB SW [On/Off]		Displays [ON/OFF] condition of parking brake switch.
BUCKLE SW [On/Off]		Displays [ON/OFF] condition of seat belt buckle switch LH.
BRAKE OIL SW [On/Off]		Displays [ON/OFF] condition of brake fluid level switch.
PASS BUCKLE SW [On/Off]		Displays [ON/OFF] condition of seat belt buckle switch RH.

Display item [Unit]	MAIN SIGNALS	Description
TOW MODE SW [On/Off]		Displays [ON/OFF] condition of tow mode switch.
LED LMP R OPEN [On/Off]		Displays [ON/OFF] condition of LED headlamp (RH) warning message.
LED LMP L OPEN [On/Off]		Displays [ON/OFF] condition of LED headlamp (LH) warning message.
DIFF LOCK IND [On/Off]		Displays [ON/OFF] condition of electronic locking rear differential indicator.
DISTANCE [Mi] or [km]		Displays distance to empty.
OUTSIDE TEMP [°F or °C]		Displays the ambient air temperature which is input from the ambient sensor.
FUEL LOW SIG [On/Off]		Displays [ON/OFF] condition of low-fuel warning signal.
BUZZER [On/Off]	X	Buzzer status (in the combination meter) is detected from the buzzer output signal received from each unit via CAN communication and the warning output condition of the combination meter.
ASCD SPD BLNK [On/Off]		Displays [ON/OFF] condition of blinking status of ASCD or speed limiter set vehicle speed that is judged by the ASCD status signal received from ECM via CAN communication.
ASCD STATUS [Off, ASCD, CRUISE]		Display status of ASCD and speed limiter status display judged by the ASCD status signal received from ECM via CAN communication.
ASCD REQ SPD [km/h or mph]		ASCD set vehicle speed value judged by the ASCD status signal received from ECM via CAN communication.
E/O CHG TMNG RST [On/Off]		Displays [ON/OFF] condition of resetting remaining distance to the engine oil change time.
TPMS PRESS L [On/Off]		Displays [ON/OFF] condition of tire pressure low message in the information display.

Note 1: CONSULT will display DDS (Downhill Drive Support) when referring to the Hill descent control system.

WORK SUPPORT

Work support item	Description
Outside air temperature diagnosis	A possible malfunction can be narrowed down by following the displayed instructions.
Fuel meter diagnosis (Analog pointer)	
Warning/Indicator lamp diagnosis	

WARNING HISTORY

Special menu

Display item	Description
W/L ON HISTORY	Lighting history of warning lamp and indicator lamp can be checked.

W/L ON HISTORY
- “W/L ON HISTORY” indicates the “TIME” when the warning/indicator lamp is turned on.
- The “TIME” above is:
- 0: The condition that the warning/indicator lamp has been turned on 1 or more times after starting the engine and waiting for 30 seconds.
- 1 - 39: The number of times the engine was restarted after the 0 condition.
- NO W/L ON HISTORY: No warning/indicator lamp history is stored.

NOTE:
- “W/L ON HISTORY” is not stored for approximately 30 seconds after the engine starts.
- Brake warning lamp does not store any history when the parking brake is applied or the brake fluid level gets low.

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

INFOID:0000000014386557

VALUES ON THE DIAGNOSIS TOOL

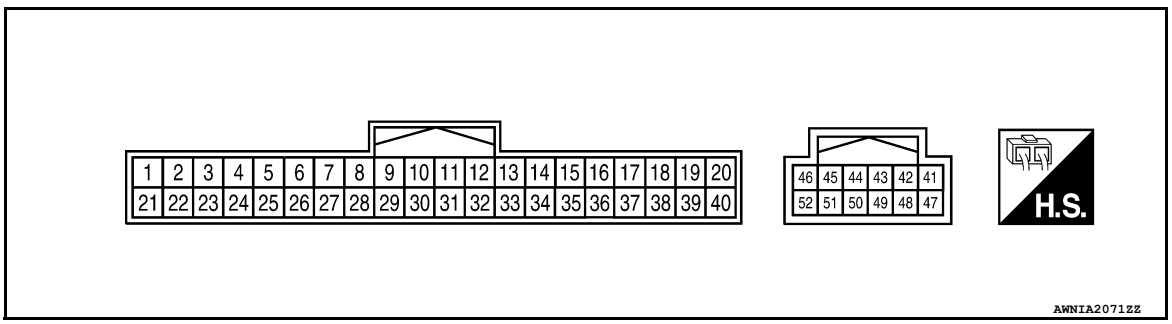
Monitor Item	Condition		Value/Status
SPEED METER [mph or km/h]	Ignition switch ON	While driving.	Input value of vehicle speed signal (CAN communication signal).
SPEED OUTPUT [mph or km/h]	Ignition switch ON	While driving.	Output value of vehicle speed signal (CAN communication signal).
ODO OUTPUT [mph or km/h]	Ignition switch ON	—	Output value of odometer signal (CAN communication signal).
TACHO METER [rpm]	Ignition switch ON	Engine running.	Input value of engine speed signal (CAN communication signal).
FUEL METER [L]	Ignition switch ON	—	Input value of fuel level sensor signal.
W TEMP METER [°F] or [°C]	Ignition switch ON	—	Input value of engine coolant temperature signal (CAN communication signal).
ABS W/L	Ignition switch ON	ABS warning lamp ON.	On
		ABS warning lamp OFF.	Off
VDC/TCS IND	Ignition switch ON	VDC OFF indicator lamp ON.	On
		VDC OFF indicator lamp OFF.	Off
SLIP IND	Ignition switch ON	VDC warning lamp ON.	On
		VDC warning lamp OFF.	Off
BRAKE W/L	Ignition switch ON	Brake warning lamp ON.	On*1
		Brake warning lamp OFF.	Off
DOOR W/L	Ignition switch ON	Door open warning displayed.	On
		Other than the above	Off
HI-BEAM IND	Ignition switch ON	High beam indicator lamp ON.	On
		High beam indicator lamp OFF.	Off
TURN IND	Ignition switch ON	Turn signal indicator lamp ON.	On
		Turn signal indicator lamp OFF.	Off
FR FOG IND	Ignition switch ON	Front fog lamp indicator lamp ON.	On
		Front fog lamp indicator lamp OFF.	Off
OIL W/L	Ignition switch ON	Engine oil pressure warning displayed.	On
		Other than the above.	Off
MIL	Ignition switch ON	Malfunction indicator lamp ON.	On
		Malfunction indicator lamp OFF.	Off
C-ENG2 W/L	Ignition switch ON	Malfunction indicator lamp (red) ON	On
		Malfunction indicator lamp (red) OFF	Off
ATC/T-AMT W/L	Ignition switch	A/T check warning indicator lamp ON.	On
		A/T check warning indicator lamp OFF.	Off
4WD W/L	Ignition switch ON	During 4WD warning indication	On
		Except during 4WD warning indication	Off
FUEL W/L	Ignition switch ON	Low fuel warning displayed.	On
		Low fuel warning lamp OFF.	Off

Monitor Item	Condition		Value/Status
WASHER W/L	Ignition switch ON	Low washer fluid warning displayed.	On
		Other than the above.	Off
AIR PRES W/L	Ignition switch ON	Low tire pressure warning lamp ON.	On
		Low tire pressure warning lamp OFF.	Off
KEY G/Y W/L	Ignition switch ON	Intelligent Key system warning indication.	On
		Other than the above.	Off
DDS W/L(Note 1)	Ignition switch ON	Hill descent control indicator lamp ON	On
		Hill descent control indicator lamp OFF	Off
CHAGE W/L	Ignition switch ON	Charge warning lamp ON	On
		Charge warning lamp OFF	Off
DPF W/L	Ignition switch ON	DPF (Diesel particulate filter) warning lamp ON	On
		DPF (Diesel particulate filter) warning lamp OFF	Off
ATP W/L	Ignition switch ON	ATP warning lamp ON	On
		ATP warning lamp OFF	Off
FILTER W/L	Ignition switch ON	Water-in-fuel-filter warning lamp ON	On
		Water-in-fuel-filter warning lamp OFF	Off
SHIFT IND	Ignition switch ON	Shift selector position indicator displayed.	[P, R, N, D, L]
4WD IND	Ignition switch ON	During LOCK indication	LOCK
		During 2W indication	2W
		During 4LO indication	4L
		During 4H indication	4H
		During MALF indication	MALF
TOW MODE IND	Ignition switch ON	Tow mode indicator lamp ON.	On
		Tow mode indicator lamp OFF.	Off
M RANGE SW	Ignition switch ON	Shift selector in manual mode position	On
		Other than the above	Off
NM RANGE SW	Ignition switch ON	Shift selector in manual mode position	Off
		Other than the above	On
AT SFT UP SW	Ignition switch ON	Shift selector operated in the up position	On
		Other than the above	Off
AT SFT DWN SW	Ignition switch ON	Shift selector operated in the down position	On
		Other than the above	Off
COMP F/B SIG	Ignition switch ON	A/C compressor activation condition	On
		Other than the above	Off
FUEL CAP W/L	Ignition switch ON	Fuel filler cap warning displayed.	On
		Other than the above.	Off
PKB SW	Ignition switch ON	Parking brake switch ON.	On
		Parking brake switch OFF.	Off
BUCKLE SW	Ignition switch ON	Driver seat belt not fastened.	On
		Driver seat belt fastened.	Off
BRAKE OIL SW	Ignition switch ON	Brake fluid level switch ON.	On
		Brake fluid level switch OFF.	Off

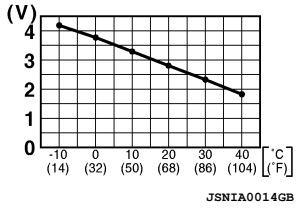
Monitor Item	Condition		Value/Status
PASS BUCKLE SW	Ignition switch ON	Passenger seat belt not fastened	On
		Passenger seat belt fastened	Off
TOW MODE SW	Ignition switch ON	TOW mode switch ON	On
		TOW mode switch OFF	Off
LED LMP R OPEN	Ignition switch ON	Front combination lamp RH malfunction	On
		Front combination lamp RH normal	Off
LED LMP L OPEN	Ignition switch ON	Front combination lamp LH malfunction	On
		Front combination lamp LH normal	Off
DIFF LOCK IND	Ignition switch ON	Diff lock switch ON	On
		Diff lock switch OFF	Off
DISTANCE [mi] or [km]	Ignition switch ON	—	Distance to empty.
OUTSIDE TEMP [°F] or [°C]	Ignition switch ON	—	Displays the ambient air temperature which is input from the ambient sensor.
FUEL LOW SIG	—	Low fuel level warning.	On
		Except during low fuel level warning.	Off
BUZZER	Ignition switch ON	Buzzer ON.	On
		Buzzer OFF.	Off
ASCD SPD BLNK	Ignition switch ON	Set vehicle speed indicator blinking	On
		Set vehicle speed indicator not blinking	Off
ASCD STATUS	Ignition switch ON	ASCD system OFF	Off
		ASCD system ON	ASCD
		ASCD set vehicle speed	CRUISE
ASCD REQ SPD	Ignition switch ON	While driving	Same value as ASCD set vehicle speed
E/O CHG TMNG RST	Ignition switch ON	Resetting of a remaining distance to the engine oil change time.	On
		Other than above	Off
LCD	Ignition switch ON	Intelligent key information.	B&P
TPMS PRESS L	Ignition switch ON	Tire pressure is low.	On
		Tire pressure is normal.	Off

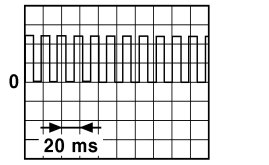
*1: Displays “Off” if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON.
Note 1: CONSULT will display DDS (Downhill Drive Support) when referring to the Hill descent control system.

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (B)	Ground	Steering switch ground	—	—	—	0 V
7 (V)	Ground	Security signal	Input	Ignition switch OFF	Security indicator ON	0 V
					Security indicator OFF	Battery voltage
9 (BG)	Ground	Seat belt buckle switch RH signal (without ODS)	Input	Ignition switch ON	When passenger seat belt is fastened	Battery voltage
					When passenger seat belt is unfastened	0 V
10 (LG)	Ground	Tow mode switch	—	—	—	0 V
11 (BR)	Ground	Generator signal	—	Ignition switch ON	Charge warning lamp ON	2 V
					Charge warning lamp OFF	Battery voltage
12 (BR)	Ground	LED headlamp RH warning signal	Input	Ignition switch ON	Headlamp ON	1.0 V
					Headlamp OFF	Battery voltage
13 (W)	Ground	LED headlamp LH warning signal	Input	Ignition switch ON	Headlamp ON	1.0 V
					Headlamp OFF	Battery voltage
14 (R)	Ground	ACC power supply	—	Ignition switch ACC	—	Battery voltage
15 (W)	Ground	Ambient sensor signal (VK56VD without auto A/C)	—	Ignition switch ON	Changes depending to ambient temperature.	 JSNIA0014GB
16 (O)	Ground	Air bag signal	—	—	—	—
18 (P)	Ground	Trip/reset switch signal	Input	Ignition switch ON	Trip/Reset switch is pressed	0 V
					Other than the above	5.0 V
20 (R)	Ground	Ambient sensor ground (VK56VD without auto A/C)	—	—	—	0 V
22 (P)	Ground	Steering switch input 1	—	—	—	—
23 (R)	Ground	Steering switch input 2	—	—	—	—
24 (W)	Ground	Washer fluid level switch signal	Input	Ignition switch ON	Washer fluid level switch ON	0 V
					Washer fluid level switch OFF	Battery voltage
26 (G)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake applied	0 V
					Parking brake released	Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
27 (P/L)	Ground	Seat belt buckle switch RH signal (VK56VD with ODS)	Input	Ignition switch ON	When passenger seat belt is fastened	Battery voltage
					When passenger seat belt is unfastened	0 V
28 (O/B)	Ground	Seat belt buckle switch LH signal	Input	Ignition switch ON	When driver seat belt is fastened	Battery voltage
					When driver seat belt is unfastened	0 V
32 (BR)	Ground	Manual mode shift up signal	Input	Ignition switch ON	Manual mode UP operation	0 V
					Other than the above	Battery voltage
33 (V/W)	Ground	Manual mode shift down signal	Input	Ignition switch ON	Manual mode DOWN operation	0 V
					Other than the above	Battery voltage
36 (W)	Ground	Illumination control switch signal (+)	Input	Ignition switch ON	When illumination control switch (+) is pressed	0 V
					Other than the above	5.0 V
37 (R)	Ground	Illumination control switch signal (-)	Input	Ignition switch ON	When illumination control switch (-) is pressed	0 V
					Other than the above	5.0 V
38 (G)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 25 MPH (40 km/h)]	**NOTE:** The maximum voltage varies depending on the specification (destination unit).  JSNIA0012GB
41 (W)	Ground	Ignition signal	—	Ignition switch ON or START	—	Battery voltage
42 (R)	Ground	Battery power supply	—	—	—	Battery voltage
43 (Y/V)	Ground	Fuel level sensor ground	—	Ignition switch ON	—	0 V
44 (GR)	Ground	Illumination control output signal	Output	Ignition switch ON	—	—
45 (P)	Ground	CAN low	—	—	—	—
46 (L)	Ground	CAN high	—	—	—	—
47 (B)	Ground	Ground	—	—	—	—
48 (BR/Y)	Ground	Fuel level sensor signal	—	Ignition switch ON	Fuel gauge indication position	Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
51 (LG)	Ground	M CAN low	—	—	—	—
52 (SB)	Ground	M CAN high	—	—	—	—

Fail-safe

INFOID:0000000014386558

The combination meter activates the fail-safe control if the CAN communication lines between each unit are malfunctioning.

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Engine coolant temperature gauge		
Meter illumination control		When suspending communication, it changes to nighttime mode.
Buzzer		Turns OFF by suspending communication.
Information display	Current fuel consumption	The last result calculated during normal condition is indicated.
	Average fuel consumption	
	Average vehicle speed	
	Range (Distance to empty)	
	Driving distance	
	Door open warning	The display turns OFF by suspending communication.
	Low tire pressure warning	
	Parking brake release warning	
	Fuel-filler cap warning	
	Oil pressure warning	
	A/T error warning lamp	
	Odo/trip meter	An indicated value is maintained at communications blackout.
	Shift selector position indicator	The indicator turns OFF by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	Turns ON by suspending communication.
	Brake warning lamp	
	VDC warning lamp	
	Malfunction indicator lamp	
	Air bag warning lamp	
	VDC OFF indicator lamp	Turns OFF by suspending communication.
	Charge warning lamp	
	High beam indicator lamp	
	Turn signal indicator lamp	
	Position lamp indicator lamp	
	Front fog lamp indicator lamp	
	Low tire pressure warning lamp	After blinking for 1 minute, the lamp remains ON.

DTC Index

INFOID:0000000014386559

Display contents of CONSULT	Diagnostic item is detected when...	Refer to
CAN COMM CIRCUIT [U1000]	Combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-81
CONTROL UNIT (CAN) [U1010]	Detecting error during the initial diagnosis of CAN controller of combination meter.	MWI-82
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-84
ENGINE SPEED [B2267]	ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-85
WATER TEMP [B2268]	ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-86
CALIBRATION [U1325]	The decel G sensor has not been calibrated after replacing the combination meter.	MWI-83

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000014386560

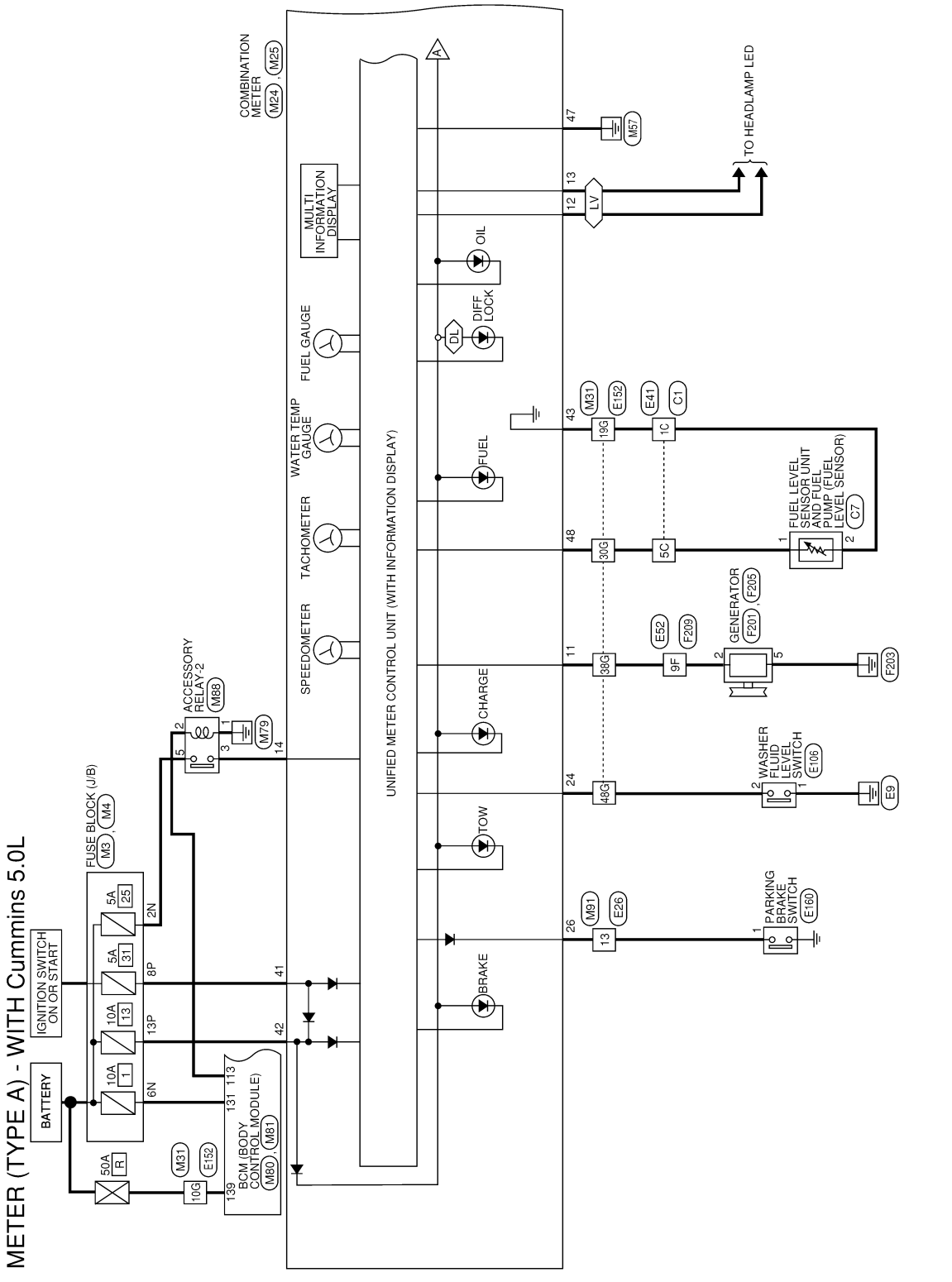
ECU	Reference
BCM	BCS-32, "Reference Value"
	BCS-51, "Fail Safe"
	BCS-51, "DTC Inspection Priority Chart"
	BCS-52, "DTC Index"

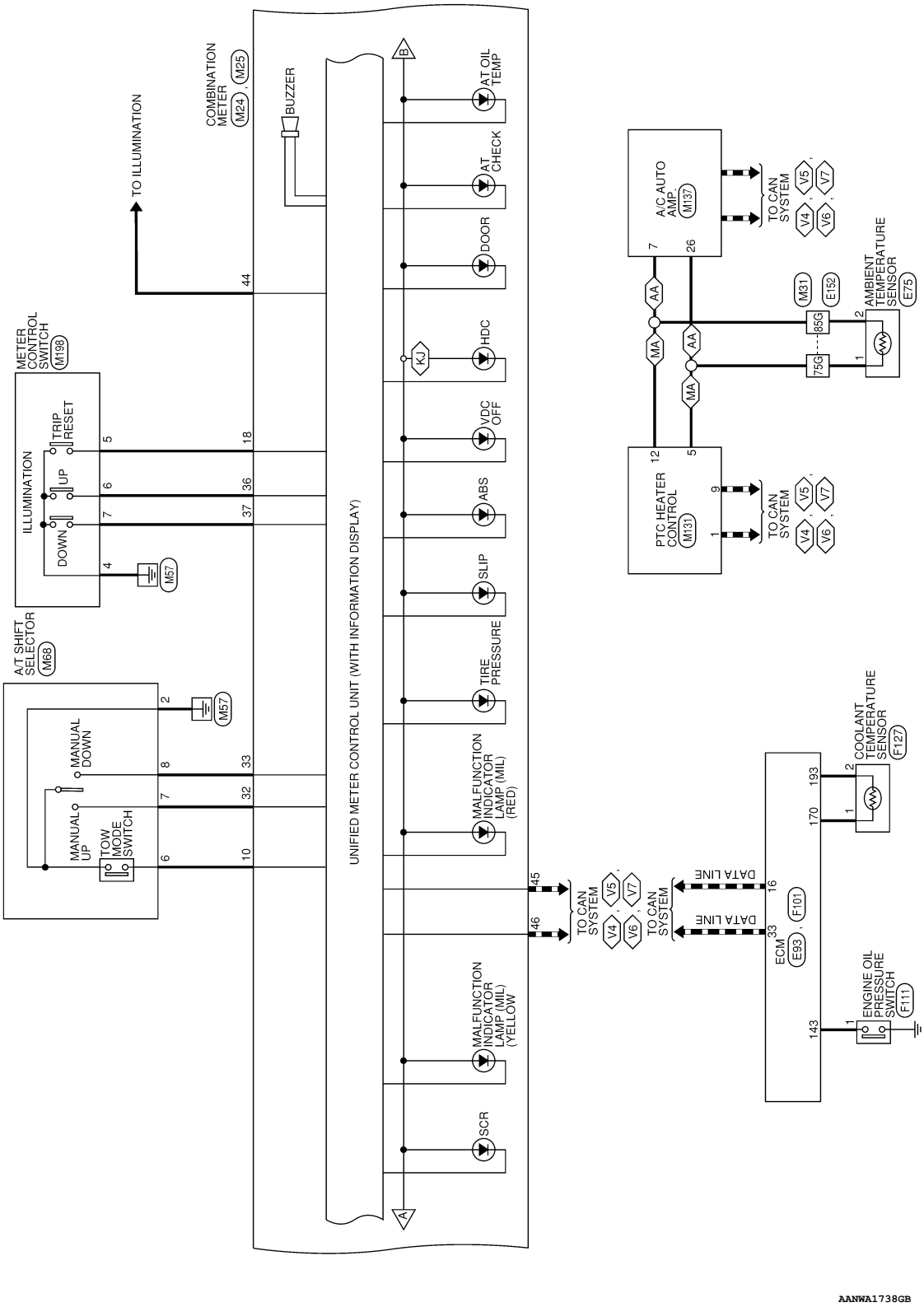
WIRING DIAGRAM

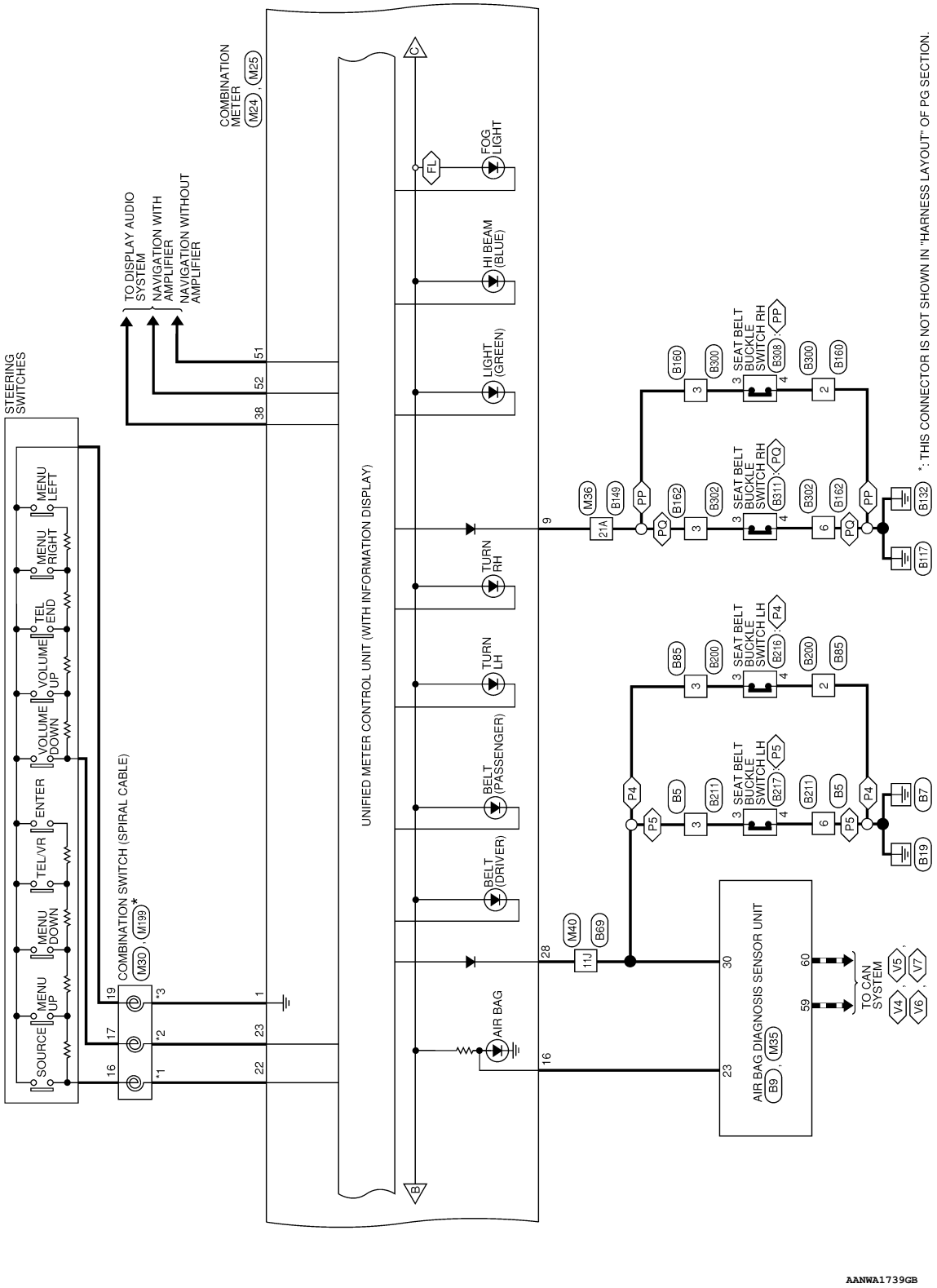
METER SYSTEM

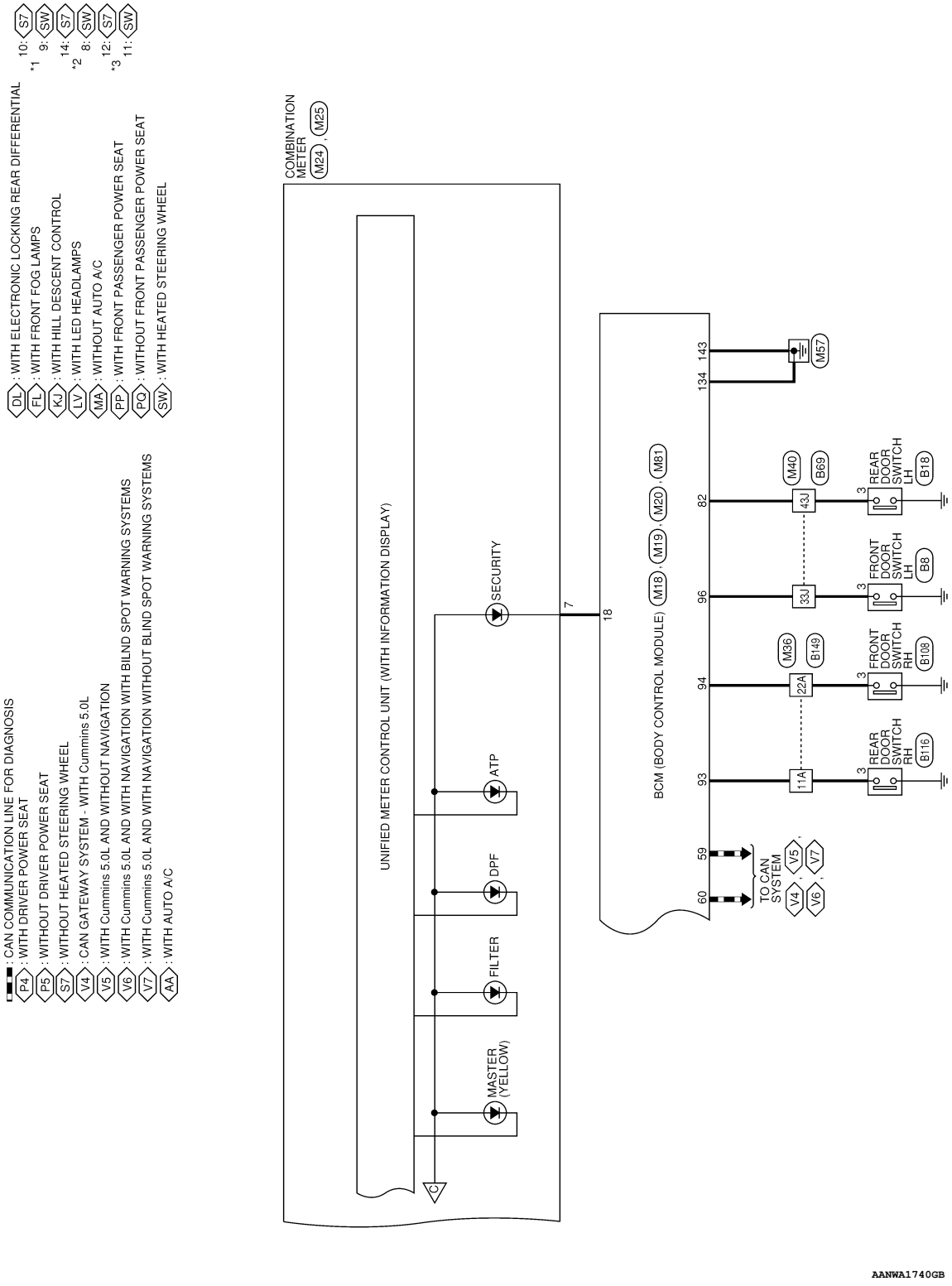
Wiring Diagram (with Cummins 5.0L)

INFOID:0000000014386561




COMBINATION METER
M24
M25
BUZZER
TO ILLUMINATION
44
METER CONTROL SWITCH
M199
ILLUMINATION
TRIP RESET
UP
DOWN
5
6
7
4
18
36
37
M57
A/T SHIFT SELECTOR
M68
MANUAL DOWN
MANUAL UP
TOW MODE SWITCH
8
7
6
2
33
32
10
M57
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
B
A
AT OIL TEMP
AT CHECK
DOOR
HDC
VDC OFF
ABS
SLIP
TIRE PRESSURE
MALFUNCTION INDICATOR LAMP (MIL) (RED)
MALFUNCTION INDICATOR LAMP (MIL) (YELLOW)
SCR
KJ
45
46
TO CAN SYSTEM
V5, V7
V4, V6
DATA LINE
A/C AUTO AMP.
M137
7
26
AA
MA
TO CAN SYSTEM
V5, V7
V4, V6
M31
E152
85G
75G
AMBIENT TEMPERATURE SENSOR
E75
2
1
PTC HEATER CONTROL
M131
12
5
9
1
TO CAN SYSTEM
V5, V7
V4, V6
ECM
E93, F101
16
33
193
170
143
COOLANT TEMPERATURE SENSOR
F127
ENGINE OIL PRESSURE SWITCH
F111
AANWA1738GB


STEERING SWITCHES
SOURCE
MENU UP
MENU DOWN
TEL/VR
ENTER
VOLUME DOWN
VOLUME UP
TEL END
MENU RIGHT
MENU LEFT
COMBINATION SWITCH (SPIRAL CABLE)
COMBINATION METER
TO DISPLAY AUDIO SYSTEM
NAVIGATION WITH AMPLIFIER
NAVIGATION WITHOUT AMPLIFIER
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
FOG LIGHT
HI BEAM (BLUE)
LIGHT (GREEN)
TURN RH
TURN LH
BELT (PASSENGER)
BELT (DRIVER)
AIR BAG
SEAT BELT BUCKLE SWITCH RH
SEAT BELT BUCKLE SWITCH LH
AIR BAG DIAGNOSIS SENSOR UNIT
TO CAN SYSTEM
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.
AANWA1739GB


: CAN COMMUNICATION LINE FOR DIAGNOSIS
P4 : WITH DRIVER POWER SEAT
P5 : WITHOUT DRIVER POWER SEAT
S7 : WITHOUT HEATED STEERING WHEEL
V4 : CAN GATEWAY SYSTEM - WITH Cummins 5.0L
V5 : WITH Cummins 5.0L AND WITHOUT NAVIGATION
V6 : WITH Cummins 5.0L AND WITH NAVIGATION WITH BILND SPOT WARNING SYSTEMS
V7 : WITH Cummins 5.0L AND WITH NAVIGATION WITHOUT BLIND SPOT WARNING SYSTEMS
AA : WITH AUTO A/C
DL : WITH ELECTRONIC LOCKING REAR DIFFERENTIAL
FL : WITH FRONT FOG LAMPS
KJ : WITH HILL DESCENT CONTROL
LV : WITH LED HEADLAMPS
MA : WITHOUT AUTO A/C
PP : WITH FRONT PASSENGER POWER SEAT
PO : WITHOUT FRONT PASSENGER POWER SEAT
SW : WITH HEATED STEERING WHEEL
10: S7
*1 9: SW
14: S7
*2 8: SW
12: S7
*3 11: SW
COMBINATION METER
M24 , M25
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
SECURITY
ATP
DPF
FILTER
MASTER (YELLOW)
7
18
BCM (BODY CONTROL MODULE)
M18 , M19 , M20 , M81
134 143
82
96
94
93
59
60
M57
M40
B69
43J
33J
M36
B149
22A
11A
B116
B108
B8
B18
REAR DOOR SWITCH RH
FRONT DOOR SWITCH RH
FRONT DOOR SWITCH LH
REAR DOOR SWITCH LH
TO CAN SYSTEM
V5 , V7
V4 , V6
AANWA1740GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	TO FRONT SEAT LH HARNESS
2	–	TO FRONT SEAT LH HARNESS
3	O/B	TO FRONT SEAT LH HARNESS
4	–	TO FRONT SEAT LH HARNESS
5	–	TO FRONT SEAT LH HARNESS
6	B	TO FRONT SEAT LH HARNESS

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	L	DR DOOR SW
4	–	–

Connector No.	B9
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITHOUT OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH22FY-2V-EX
Connector Color	YELLOW

H.S.

Terminal No.	Color of Wire	Signal Name
12	G	P-LH (+)
13	BG	P-LH (-)
30	O/B	LH SEAT BELT BUCKLE SWITCH +
33	Y	S-LH (+)
34	BR	S-LH (-)
37	B	C-LH (+)
38	W	C-LH (-)
49	L/W	LH B-PILLAR SATELLITE SENSOR (+)
50	Y/B	LH B-PILLAR SATELLITE SENSOR (-)
56	SHIELD	GND
63	W	LH C-PILLAR SATELLITE SENSOR (+)
64	G	LH C-PILLAR SATELLITE SENSOR (-)

Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	SB	RL DOOR SW
4	–	–

AANIA5324GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1J	P	TO MAIN HARNESS
2J	R/Y	TO MAIN HARNESS
3J	L	TO MAIN HARNESS
4J	L/B	TO MAIN HARNESS
5J	G/W	TO MAIN HARNESS
6J	LG/Y	TO MAIN HARNESS
7J	BR/LG	TO MAIN HARNESS
8J	SB/BR	TO MAIN HARNESS
9J	BR	TO MAIN HARNESS
10J	BR	TO MAIN HARNESS
11J	O/B	TO MAIN HARNESS
12J	L	TO MAIN HARNESS
13J	SB/O	TO MAIN HARNESS
14J	Y	TO MAIN HARNESS
15J	–	TO MAIN HARNESS
16J	R	TO MAIN HARNESS
17J	G	TO MAIN HARNESS
18J	SB	TO MAIN HARNESS
19J	O	TO MAIN HARNESS
20J	O/B	TO MAIN HARNESS
21J	Y/R	TO MAIN HARNESS
22J	P	TO MAIN HARNESS
23J	W	TO MAIN HARNESS
24J	W/R	TO MAIN HARNESS
25J	V	TO MAIN HARNESS
26J	L	TO MAIN HARNESS
27J	R	TO MAIN HARNESS
28J	L	TO MAIN HARNESS
29J	G/O	TO MAIN HARNESS
30J	SB	TO MAIN HARNESS
31J	LG	TO MAIN HARNESS
32J	R	TO MAIN HARNESS
33J	L	TO MAIN HARNESS
34J	Y	TO MAIN HARNESS
35J	P	TO MAIN HARNESS
36J	G/R	TO MAIN HARNESS
37J	LG/B	TO MAIN HARNESS
38J	SB	TO MAIN HARNESS
39J	Y/L	TO MAIN HARNESS
40J	BR	TO MAIN HARNESS
41J	L	TO MAIN HARNESS
42J	L	TO MAIN HARNESS
43J	SB	TO MAIN HARNESS
44J	BR	TO MAIN HARNESS
45J	BG	TO MAIN HARNESS
46J	P/Y	TO MAIN HARNESS
47J	Y/GR	TO MAIN HARNESS
48J	V	TO MAIN HARNESS
49J	BR/Y	TO MAIN HARNESS
50J	G/W	TO MAIN HARNESS
51J	–	TO MAIN HARNESS
52J	SHIELD	TO MAIN HARNESS
53J	R	TO MAIN HARNESS
54J	L	TO MAIN HARNESS
55J	R	TO MAIN HARNESS
56J	W	TO MAIN HARNESS
57J	L/G	TO MAIN HARNESS
58J	O	TO MAIN HARNESS
59J	–	TO MAIN HARNESS
60J	SHIELD	TO MAIN HARNESS
61J	G	TO MAIN HARNESS
62J	–	TO MAIN HARNESS
63J	R/W	TO MAIN HARNESS
64J	L/W	TO MAIN HARNESS
65J	SHIELD	TO MAIN HARNESS
66J	B	TO MAIN HARNESS
67J	SHIELD	TO MAIN HARNESS
68J	O/L	TO MAIN HARNESS
69J	SHIELD	TO MAIN HARNESS
70J	BR	TO MAIN HARNESS
71J	L/W	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
73J	–	TO MAIN HARNESS
74J	SHIELD	TO MAIN HARNESS
75J	LG/B	TO MAIN HARNESS
76J	R	TO MAIN HARNESS
77J	SHIELD	TO MAIN HARNESS
78J	GR/B	TO MAIN HARNESS
79J	B	TO MAIN HARNESS
80J	W	TO MAIN HARNESS
81J	SHIELD	TO MAIN HARNESS
82J	L/R	TO MAIN HARNESS
83J	–	TO MAIN HARNESS
84J	–	TO MAIN HARNESS
85J	Y/B	TO MAIN HARNESS
86J	G	TO MAIN HARNESS
87J	B/R	TO MAIN HARNESS
88J	SHIELD	TO MAIN HARNESS
89J	GR/R	TO MAIN HARNESS
90J	L	TO MAIN HARNESS
91J	L/B	TO MAIN HARNESS
92J	SB	TO MAIN HARNESS
93J	B	TO MAIN HARNESS
94J	L	TO MAIN HARNESS
95J	LG	TO MAIN HARNESS
96J	R	TO MAIN HARNESS
97J	B/Y	TO MAIN HARNESS
98J	L/B	TO MAIN HARNESS
99J	W/L	TO MAIN HARNESS
100J	SB	TO MAIN HARNESS

Connector No.	B85
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L/B	TO FRONT SEAT LH HARNESS
2	B	TO FRONT SEAT LH HARNESS
3	O/B	TO FRONT SEAT LH HARNESS
4	B	TO FRONT SEAT LH HARNESS
5	B	TO FRONT SEAT LH HARNESS
6	SB/O	TO FRONT SEAT LH HARNESS
7	V	TO FRONT SEAT LH HARNESS
8	BR/LG	TO FRONT SEAT LH HARNESS
9	LG/Y	TO FRONT SEAT LH HARNESS
10	Y	TO FRONT SEAT LH HARNESS
11	R	TO FRONT SEAT LH HARNESS
12	–	TO FRONT SEAT LH HARNESS

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	LG/R	AS DOOR SW
4	–	–

Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

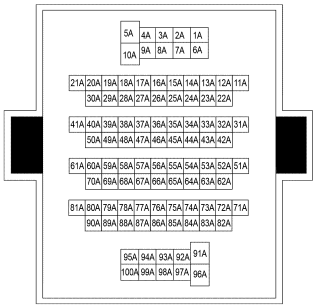
Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	LG	RR DOOR SW
4	–	–

AANIA5325GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	B149
Connector Name	WIRE TO WIRE
Connector Type	TH80MDGY-CS16-TM4
Connector Color	GRAY

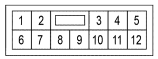
H.S.



Terminal No.	Color of Wire	Signal Name
1A	SB/G	TO MAIN HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
1A	SB	TO MAIN HARNESS -(WITH CLIMATE CONTROLLED SEATS)
2A	L	TO MAIN HARNESS
3A	V	TO MAIN HARNESS
4A	SB/R	TO MAIN HARNESS
5A	–	TO MAIN HARNESS
6A	LG/Y	TO MAIN HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
6A	LG	TO MAIN HARNESS -(WITH CLIMATE CONTROLLED SEATS)
7A	W	TO MAIN HARNESS
8A	B	TO MAIN HARNESS
9A	L/B	TO MAIN HARNESS
10A	W	TO MAIN HARNESS
11A	LG	TO MAIN HARNESS
12A	BR/O	TO MAIN HARNESS
13A	Y/W	TO MAIN HARNESS
14A	R/G	TO MAIN HARNESS
15A	Y/L	TO MAIN HARNESS
16A	O/L	TO MAIN HARNESS
17A	L	TO MAIN HARNESS
18A	Y	TO MAIN HARNESS
19A	LG	TO MAIN HARNESS
20A	R	TO MAIN HARNESS
21A	BG	TO MAIN HARNESS
22A	LG/R	TO MAIN HARNESS
23A	Y/LG	TO MAIN HARNESS
24A	BR/Y	TO MAIN HARNESS
25A	–	TO MAIN HARNESS
26A	GR	TO MAIN HARNESS
27A	LG	TO MAIN HARNESS
28A	LG/B	TO MAIN HARNESS
29A	–	TO MAIN HARNESS
30A	BR	TO MAIN HARNESS
31A	W/R	TO MAIN HARNESS
32A	G/R	TO MAIN HARNESS
33A	–	TO MAIN HARNESS
34A	SHIELD	TO MAIN HARNESS
35A	P	TO MAIN HARNESS
36A	B	TO MAIN HARNESS
37A	–	TO MAIN HARNESS
38A	R/B	TO MAIN HARNESS
39A	G/O	TO MAIN HARNESS
40A	V	TO MAIN HARNESS
41A	SHIELD	TO MAIN HARNESS
42A	SHIELD	TO MAIN HARNESS
43A	R	TO MAIN HARNESS
44A	G	TO MAIN HARNESS
45A	–	TO MAIN HARNESS
46A	–	TO MAIN HARNESS
47A	Y	TO MAIN HARNESS
48A	R/W	TO MAIN HARNESS
49A	R/L	TO MAIN HARNESS
50A	B	TO MAIN HARNESS
51A	–	TO MAIN HARNESS
52A	–	TO MAIN HARNESS
53A	–	TO MAIN HARNESS
54A	–	TO MAIN HARNESS
55A	–	TO MAIN HARNESS
56A	–	TO MAIN HARNESS
57A	–	TO MAIN HARNESS
58A	–	TO MAIN HARNESS
59A	–	TO MAIN HARNESS
60A	G/W	TO MAIN HARNESS
61A	–	TO MAIN HARNESS
62A	–	TO MAIN HARNESS
63A	–	TO MAIN HARNESS
64A	–	TO MAIN HARNESS
65A	–	TO MAIN HARNESS
66A	–	TO MAIN HARNESS
67A	–	TO MAIN HARNESS
68A	–	TO MAIN HARNESS
69A	Y/R	TO MAIN HARNESS
70A	R/G	TO MAIN HARNESS
71A	–	TO MAIN HARNESS
72A	Y/B	TO MAIN HARNESS
73A	G	TO MAIN HARNESS
74A	B/R	TO MAIN HARNESS
75A	SHIELD	TO MAIN HARNESS
76A	GR/R	TO MAIN HARNESS
77A	L	TO MAIN HARNESS
78A	SHIELD	TO MAIN HARNESS
79A	Y	TO MAIN HARNESS
80A	L	TO MAIN HARNESS
81A	R	TO MAIN HARNESS
82A	SHIELD	TO MAIN HARNESS
83A	LG/B	TO MAIN HARNESS
84A	R	TO MAIN HARNESS
85A	SHIELD	TO MAIN HARNESS
86A	GR/B	TO MAIN HARNESS
87A	B	TO MAIN HARNESS
88A	W	TO MAIN HARNESS
89A	SHIELD	TO MAIN HARNESS
90A	G	TO MAIN HARNESS
91A	W/L	TO MAIN HARNESS
92A	BR	TO MAIN HARNESS
93A	L/Y	TO MAIN HARNESS
94A	R/L	TO MAIN HARNESS
95A	BR	TO MAIN HARNESS
96A	R	TO MAIN HARNESS
97A	LG	TO MAIN HARNESS
98A	B/V	TO MAIN HARNESS
99A	O/L	TO MAIN HARNESS
100A	BR/W	TO MAIN HARNESS

Connector No.	B160
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS
Connector Color	WHITE

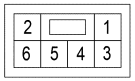
H.S.



Terminal No.	Color of Wire	Signal Name
1	L/B	TO FRONT SEAT RH HARNESS
2	B	TO FRONT SEAT RH HARNESS
3	BG	TO FRONT SEAT RH HARNESS
4	B	TO FRONT SEAT RH HARNESS
5	B	TO FRONT SEAT RH HARNESS
6	Y/W	TO FRONT SEAT RH HARNESS
7	BR/Y	TO FRONT SEAT RH HARNESS
8	SB	TO FRONT SEAT RH HARNESS -(WITH CLIMATE CONTROLLED SEATS)
8	SB/G	TO FRONT SEAT RH HARNESS (WITHOUT CLIMATE CONTROLLED SEATS)
9	LG	TO FRONT SEAT RH HARNESS -(WITH CLIMATE CONTROLLED SEATS)
9	LG/Y	TO FRONT SEAT RH HARNESS (WITHOUT CLIMATE CONTROLLED SEATS)
10	Y/L	TO FRONT SEAT RH HARNESS
11	W	TO FRONT SEAT RH HARNESS
12	–	TO FRONT SEAT RH HARNESS

Connector No.	B162
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	B	TO FRONT SEAT RH HARNESS
2	–	TO FRONT SEAT RH HARNESS
3	BG	TO FRONT SEAT RH HARNESS
4	LG/Y	TO FRONT SEAT RH HARNESS
5	SB/G	TO FRONT SEAT RH HARNESS
6	B	TO FRONT SEAT RH HARNESS

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METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	B200
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	R	TO BODY HARNESS
2	P	TO BODY HARNESS
3	BR	TO BODY HARNESS
4	B	TO BODY HARNESS
5	GR	TO BODY HARNESS
6	B	TO BODY HARNESS
7	G	TO BODY HARNESS
8	Y	TO BODY HARNESS -(WITH CLIMATE CONTROLLED SEATS)
8	LG	TO BODY HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
9	W	TO BODY HARNESS -(WITH CLIMATE CONTROLLED SEATS)
9	R	TO BODY HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
10	LG	TO BODY HARNESS
11	R	TO BODY HARNESS
12	SB	TO BODY HARNESS

Connector No.	B211
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS
Connector Color	WHITE

H.S.

1		2
3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	–	TO BODY HARNESS LH
2	–	TO BODY HARNESS LH
3	BR	TO BODY HARNESS LH
4	–	TO BODY HARNESS LH
5	–	TO BODY HARNESS LH

6	P	TO BODY HARNESS LH

Connector No.	B216
Connector Name	SEAT BELT BUCKLE SWITCH LH (WITH DRIVER POWER SEAT)
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	BR	BUCKLE SW (+)
4	P	BUCKLE SW (-)

Connector No.	B217
Connector Name	SEAT BELT BUCKLE SWITCH LH (WITHOUT DRIVER POWER SEAT)
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	BR	BUCKLE SW (+)
4	P	BUCKLE SW (-)

Connector No.	B300
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	R	TO BODY NO. 2 HARNESS
2	P	TO BODY NO. 2 HARNESS
3	BR	TO BODY NO. 2 HARNESS
4	B	TO BODY NO. 2 HARNESS
5	GR	TO BODY NO. 2 HARNESS
6	B	TO BODY NO. 2 HARNESS
7	G	TO BODY NO. 2 HARNESS
8	Y	TO BODY NO. 2 HARNESS -(WITH CLIMATE CONTROLLED SEATS)
8	LG	TO BODY NO. 2 HARNESS - (WITHOUT CLIMATE CONTROLLED SEATS)
9	W	TO BODY NO. 2 HARNESS -(WITH CLIMATE CONTROLLED SEATS)
9	R	TO BODY NO. 2 HARNESS - (WITHOUT CLIMATE CONTROLLED SEATS)
10	LG	TO BODY NO. 2 HARNESS
11	R	TO BODY NO. 2 HARNESS
12	SB	TO BODY NO. 2 HARNESS

Connector No.	B302
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS
Connector Color	WHITE

H.S.

1		2
3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	B	TO BODY HARNESS RH
2	–	TO BODY HARNESS RH
3	BR	TO BODY HARNESS RH
4	R	TO BODY HARNESS RH
5	LG	TO BODY HARNESS RH

6	P	TO BODY HARNESS RH

Connector No.	B308
Connector Name	SEAT BELT BUCKLE SWITCH RH (WITH FRONT PASSENGER POWER SEAT)
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	BR	BUCKLE SW (+)
4	P	BUCKLE SW (-)

Connector No.	B311
Connector Name	SEAT BELT BUCKLE SWITCH RH (WITHOUT FRONT PASSENGER POWER SEAT)
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	BR	BUCKLE SW (+)
4	P	BUCKLE SW (-)

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METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	C1
Connector Name	WIRE TO WIRE
Connector Type	RK26FGY-RS20-X6
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1C	Y/V	TO ENGINE ROOM HARNESS
2C	W/L	TO ENGINE ROOM HARNESS
3C	B	TO ENGINE ROOM HARNESS
4C	BR/W	TO ENGINE ROOM HARNESS
5C	BR/Y	TO ENGINE ROOM HARNESS
6C	Y	TO ENGINE ROOM HARNESS
7C	G/R	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
7C	R	TO ENGINE ROOM HARNESS - (WITH VK56VD)
8C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
8C	O/B	TO ENGINE ROOM HARNESS - (WITH VK56VD)
9C	W/L	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
9C	SB	TO ENGINE ROOM HARNESS - (WITH VK56VD)
10C	GR/R	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
10C	GR	TO ENGINE ROOM HARNESS - (WITH VK56VD)
11C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
11C	R/W	TO ENGINE ROOM HARNESS - (WITH VK56VD)
12C	Y	TO ENGINE ROOM HARNESS
13C	B	TO ENGINE ROOM HARNESS
14C	BG	TO ENGINE ROOM HARNESS
15C	Y	TO ENGINE ROOM HARNESS
16C	B	TO ENGINE ROOM HARNESS
17C	V	TO ENGINE ROOM HARNESS
18C	BG	TO ENGINE ROOM HARNESS
19C	L	TO ENGINE ROOM HARNESS
20C	W	TO ENGINE ROOM HARNESS
21C	LG	TO ENGINE ROOM HARNESS
22C	SHIELD	TO ENGINE ROOM HARNESS
23C	G/B	TO ENGINE ROOM HARNESS
24C	G/B	TO ENGINE ROOM HARNESS
25C	W	TO ENGINE ROOM HARNESS
26C	B	TO ENGINE ROOM HARNESS
27C	LG	TO ENGINE ROOM HARNESS
28C	G/W	TO ENGINE ROOM HARNESS
29C	R/LG	TO ENGINE ROOM HARNESS
30C	R/L	TO ENGINE ROOM HARNESS
31C	B	TO ENGINE ROOM HARNESS
32C	R	TO ENGINE ROOM HARNESS
33C	L/W	TO ENGINE ROOM HARNESS
34C	L	TO ENGINE ROOM HARNESS
35C	R/W	TO ENGINE ROOM HARNESS
36C	L	TO ENGINE ROOM HARNESS
37C	Y	TO ENGINE ROOM HARNESS
38C	GR	TO ENGINE ROOM HARNESS
39C	R	TO ENGINE ROOM HARNESS
40C	P	TO ENGINE ROOM HARNESS
41C	V	TO ENGINE ROOM HARNESS
42C	LG/B	TO ENGINE ROOM HARNESS
43C	Y/B	TO ENGINE ROOM HARNESS
44C	R	TO ENGINE ROOM HARNESS
45C	G	TO ENGINE ROOM HARNESS
46C	BR	TO ENGINE ROOM HARNESS
47C	B	TO ENGINE ROOM HARNESS
48C	Y/R	TO ENGINE ROOM HARNESS
49C	R/Y	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
49C	V	TO ENGINE ROOM HARNESS - (WITH VK56VD)
50C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
50C	B/Y	TO ENGINE ROOM HARNESS - (WITH VK56VD)
51C	V	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
51C	B	TO ENGINE ROOM HARNESS - (WITH VK56VD)
52C	V/W	TO ENGINE ROOM HARNESS

Connector No.	C7
Connector Name	FUEL LEVEL SENSOR
Connector Type	E02FGY-RS
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR/Y	SENDER +
2	Y/V	SENDER -

Connector No.	E26
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG/B	TO MAIN HARNESS
2	R/W	TO MAIN HARNESS
3	Y/R	TO MAIN HARNESS
4	G/R	TO MAIN HARNESS
5	G/W	TO MAIN HARNESS
6	P	TO MAIN HARNESS
7	O	TO MAIN HARNESS
8	R	TO MAIN HARNESS
9	G	TO MAIN HARNESS
10	LG	TO MAIN HARNESS
11	BR	TO MAIN HARNESS
12	GR	TO MAIN HARNESS
13	G	TO MAIN HARNESS
14	BR	TO MAIN HARNESS
15	–	TO MAIN HARNESS
16	–	TO MAIN HARNESS
17	W	TO MAIN HARNESS
18	–	TO MAIN HARNESS
19	Y/R	TO MAIN HARNESS
20	G/W	TO MAIN HARNESS
21	–	TO MAIN HARNESS
22	–	TO MAIN HARNESS
23	–	TO MAIN HARNESS
24	O/L	TO MAIN HARNESS

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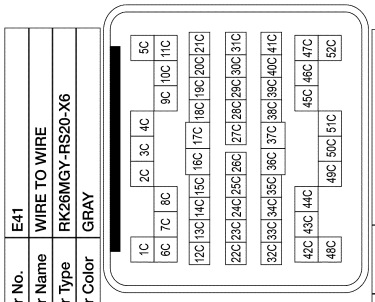
METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	E41
Connector Name	WIRE TO WIRE
Connector Type	RK26MGY-RS20-X6
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
1C	Y/V	TO CHASSIS HARNESS
2C	W/L	TO CHASSIS HARNESS
3C	B	TO CHASSIS HARNESS
4C	BR/W	TO CHASSIS HARNESS
5C	BR/Y	TO CHASSIS HARNESS
6C	Y	TO CHASSIS HARNESS
7C	G/R	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
7C	R	TO CHASSIS HARNESS - (WITH VK56VD)
8C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
8C	O/B	TO CHASSIS HARNESS - (WITH VK56VD)
9C	W/L	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
9C	SB	TO CHASSIS HARNESS - (WITH VK56VD)
10C	GR/R	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
10C	GR	TO CHASSIS HARNESS - (WITH VK56VD)
11C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
11C	R/W	TO CHASSIS HARNESS - (WITH VK56VD)
12C	Y	TO CHASSIS HARNESS
13C	B	TO CHASSIS HARNESS
14C	BG	TO CHASSIS HARNESS
15C	Y	TO CHASSIS HARNESS
16C	B	TO CHASSIS HARNESS
17C	V	TO CHASSIS HARNESS
18C	BG	TO CHASSIS HARNESS
19C	L	TO CHASSIS HARNESS
20C	BG	TO CHASSIS HARNESS
21C	B	TO CHASSIS HARNESS
22C	SHIELD	TO CHASSIS HARNESS
23C	G/B	TO CHASSIS HARNESS
24C	G/Y	TO CHASSIS HARNESS
25C	W	TO CHASSIS HARNESS
26C	B	TO CHASSIS HARNESS
27C	LG	TO CHASSIS HARNESS
28C	G/W	TO CHASSIS HARNESS
29C	G/R	TO CHASSIS HARNESS - (WITH BULB CHECK)
29C	R/G	TO CHASSIS HARNESS - (WITHOUT BULB CHECK)
30C	R/L	TO CHASSIS HARNESS
31C	B	TO CHASSIS HARNESS
32C	R	TO CHASSIS HARNESS
33C	L/W	TO CHASSIS HARNESS
34C	L	TO CHASSIS HARNESS
35C	R/W	TO CHASSIS HARNESS
36C	L	TO CHASSIS HARNESS
37C	Y	TO CHASSIS HARNESS
38C	BR	TO CHASSIS HARNESS
39C	R	TO CHASSIS HARNESS
40C	P	TO CHASSIS HARNESS
41C	V	TO CHASSIS HARNESS
42C	G/B	TO CHASSIS HARNESS
43C	Y/B	TO CHASSIS HARNESS
44C	R	TO CHASSIS HARNESS
45C	G	TO CHASSIS HARNESS
46C	BR	TO CHASSIS HARNESS
47C	B	TO CHASSIS HARNESS
48C	Y/R	TO CHASSIS HARNESS
49C	R/Y	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
49C	V	TO CHASSIS HARNESS - (WITH VK56VD)
50C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
50C	B/Y	TO CHASSIS HARNESS - (WITH VK56VD)
51C	V	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
51C	B	TO CHASSIS HARNESS - (WITH VK56VD)
52C	B	TO CHASSIS HARNESS - (WITHOUT FFV)
52C	L	TO CHASSIS HARNESS - (WITH FFV)
52C	V/W	TO CHASSIS HARNESS

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METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	E52
Connector Name	WIRE TO WIRE
Connector Type	RK26FGY-RS20-X6
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1F	Y	TO ENGINE CONTROL NO. 2 HARNESS
2F	B	TO ENGINE CONTROL NO. 2 HARNESS
3F	BR	TO ENGINE CONTROL NO. 2 HARNESS
4F	W/R	TO ENGINE CONTROL NO. 2 HARNESS
5F	B/R	TO ENGINE CONTROL NO. 2 HARNESS
6F	O	TO ENGINE CONTROL NO. 2 HARNESS
7F	GR/Y	TO ENGINE CONTROL NO. 2 HARNESS
8F	V	TO ENGINE CONTROL NO. 2 HARNESS
9F	BR	TO ENGINE CONTROL NO. 2 HARNESS
10F	Y/B	TO ENGINE CONTROL NO. 2 HARNESS
11F	L	TO ENGINE CONTROL NO. 2 HARNESS
12F	R	TO ENGINE CONTROL NO. 2 HARNESS
13F	Y	TO ENGINE CONTROL NO. 2 HARNESS
14F	V	TO ENGINE CONTROL NO. 2 HARNESS
15F	SB	TO ENGINE CONTROL NO. 2 HARNESS
16F	P	TO ENGINE CONTROL NO. 2 HARNESS
17F	Y/R	TO ENGINE CONTROL NO. 2 HARNESS
18F	R	TO ENGINE CONTROL NO. 2 HARNESS
19F	V	TO ENGINE CONTROL NO. 2 HARNESS
20F	BR	TO ENGINE CONTROL NO. 2 HARNESS
21F	L/R	TO ENGINE CONTROL NO. 2 HARNESS
22F	L/W	TO ENGINE CONTROL NO. 2 HARNESS
23F	R/L	TO ENGINE CONTROL NO. 2 HARNESS
24F	W/L	TO ENGINE CONTROL NO. 2 HARNESS
25F	W/R	TO ENGINE CONTROL NO. 2 HARNESS
26F	B/R	TO ENGINE CONTROL NO. 2 HARNESS
27F	Y	TO ENGINE CONTROL NO. 2 HARNESS
28F	W/R	TO ENGINE CONTROL NO. 2 HARNESS
29F	L/O	TO ENGINE CONTROL NO. 2 HARNESS
30F	B	TO ENGINE CONTROL NO. 2 HARNESS
31F	B	TO ENGINE CONTROL NO. 2 HARNESS
32F	V/W	TO ENGINE CONTROL NO. 2 HARNESS
33F	GR	TO ENGINE CONTROL NO. 2 HARNESS
34F	L/R	TO ENGINE CONTROL NO. 2 HARNESS
35F	R/W	TO ENGINE CONTROL NO. 2 HARNESS
36F	L/B	TO ENGINE CONTROL NO. 2 HARNESS
37F	L	TO ENGINE CONTROL NO. 2 HARNESS
38F	R/Y	TO ENGINE CONTROL NO. 2 HARNESS
39F	R/Y	TO ENGINE CONTROL NO. 2 HARNESS
40F	B/R	TO ENGINE CONTROL NO. 2 HARNESS
41F	W	TO ENGINE CONTROL NO. 2 HARNESS
42F	Y	TO ENGINE CONTROL NO. 2 HARNESS
43F	B/P	TO ENGINE CONTROL NO. 2 HARNESS
44F	Y/B	TO ENGINE CONTROL NO. 2 HARNESS
45F	L/Y	TO ENGINE CONTROL NO. 2 HARNESS
46F	O	TO ENGINE CONTROL NO. 2 HARNESS
47F	W/R	TO ENGINE CONTROL NO. 2 HARNESS
48F	L	TO ENGINE CONTROL NO. 2 HARNESS
49F	BR	TO ENGINE CONTROL NO. 2 HARNESS
50F	SHIELD	TO ENGINE CONTROL NO. 2 HARNESS
51F	L	TO ENGINE CONTROL NO. 2 HARNESS
52F	BR	TO ENGINE CONTROL NO. 2 HARNESS

Connector No.	E75
Connector Name	AMBIENT SENSOR
Connector Type	RS02FB
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	R	SENS GND
2	W/B	AMB SENS

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METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	E93
Connector Name	ECM (WITH CUMMINS 5.0L)
Connector Type	1-928-405-452
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	B	GROUND
3	BR	SW BATTERY
4	B	GROUND
5	BR	SW BATTERY
6	BR	SW BATTERY
7	O	DOF DELTA PRESS
8	–	–
9	–	–
10	–	–
11	–	–
12	–	–
13	–	–
14	–	–
15	L/R	AT SENSOR RTN
16	P	CAN-L
17	–	–
18	G	J1939 +
19	–	–
20	G	SMART POWER LSD
21	–	–
22	–	–
23	–	–
24	SB	DPF OUT PRESS
25	–	–
26	R/L	REF PRESS SENS SIGNAL
27	–	–
28	–	–
29	–	–
30	–	–
31	–	–
32	Y	AT SSR SUPPLY
33	L	CAN-H
34	–	–
35	Y	J1939 +
36	–	–
37	L	MAIN RLY LSD
38	–	–
39	–	–
40	GR	FUEL PUMP RLY SIG
41	BR	SW RETURN
42	–	–
43	–	–
44	–	–
45	–	–
46	–	–
47	–	–
48	–	–
49	–	–
50	–	–
51	–	–
52	–	–
53	R/G	BRAKE SW OPEN
54	L	BRAKE NC
55	–	–
56	–	–
57	–	–
58	–	–
59	G/Y	ASCD SIGNAL
60	–	–
61	B/Y	ASCD RETURN
62	R	PPS2 RETURN
63	R	PPS1 RETURN
64	R/W	REF PRESS SENS RETURN
65	L/W	IGN/KEYSWITCH
66	–	–
67	–	–
68	–	–
69	–	–
70	–	–
71	–	–
72	–	–
73	B	DOSER RETURN
74	GR/R	DOSER HS
75	L/W	COOLANT SIGNAL
76	–	–
77	L	WIF SIGNAL
78	L	PPS2 SIGNAL
79	BR	PPS1 SIGNAL
80	W	PPS1 SUPPLY
81	B	PPS2 SUPPLY
82	–	–
83	BR	BATTERY
84	–	–
85	–	–
86	–	–
87	–	–
88	–	–
89	–	–
90	–	–
91	–	–

Connector No.	E106
Connector Name	WASHER FLUID LEVEL SWITCH
Connector Type	YEZ02FLGY
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GND
2	W	WASHER SW

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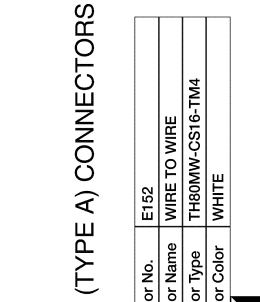
METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1G	G	TO MAIN HARNESS
2G	B/R	TO MAIN HARNESS
3G	W/B	TO MAIN HARNESS
4G	BR/W	TO MAIN HARNESS
5G	BR	TO MAIN HARNESS
6G	P	TO MAIN HARNESS - (WITH VK56VD)
6G	R/W	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
7G	Y	TO MAIN HARNESS
8G	G	TO MAIN HARNESS
9G	R	TO MAIN HARNESS
10G	W	TO MAIN HARNESS
11G	R/G	TO MAIN HARNESS
12G	W/B	TO MAIN HARNESS
13G	BR	TO MAIN HARNESS
14G	Y/B	TO MAIN HARNESS
15G	G/W	TO MAIN HARNESS
16G	G	TO MAIN HARNESS
17G	G/Y	TO MAIN HARNESS
18G	G/Y	TO MAIN HARNESS
19G	Y/V	TO MAIN HARNESS
20G	G/Y	TO MAIN HARNESS
21G	B/Y	TO MAIN HARNESS
22G	G/R	TO MAIN HARNESS
23G	Y/R	TO MAIN HARNESS
24G	G/B	TO MAIN HARNESS
25G	R/W	TO MAIN HARNESS
26G	R	TO MAIN HARNESS
27G	LG	TO MAIN HARNESS
28G	G/B	TO MAIN HARNESS
29G	G/B	TO MAIN HARNESS
30G	BR/Y	TO MAIN HARNESS
31G	P	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
31G	R	TO MAIN HARNESS - (WITH VK56VD)
32G	P	TO MAIN HARNESS
33G	Y/L	TO MAIN HARNESS
34G	GR	TO MAIN HARNESS
35G	G/R	TO MAIN HARNESS
36G	SB	TO MAIN HARNESS
37G	R/W	TO MAIN HARNESS
38G	BR	TO MAIN HARNESS
39G	BR	TO MAIN HARNESS
40G	–	TO MAIN HARNESS
41G	R/G	TO MAIN HARNESS
42G	O	TO MAIN HARNESS
43G	B	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
43G	G	TO MAIN HARNESS - (WITH VK56VD)
44G	R/Y	TO MAIN HARNESS
45G	G	TO MAIN HARNESS
46G	LG	TO MAIN HARNESS
47G	R	TO MAIN HARNESS
48G	W	TO MAIN HARNESS
49G	–	TO MAIN HARNESS
50G	BR	TO MAIN HARNESS
51G	R	TO MAIN HARNESS
52G	L	TO MAIN HARNESS
53G	W	TO MAIN HARNESS
54G	W	TO MAIN HARNESS
55G	G	TO MAIN HARNESS
56G	W	TO MAIN HARNESS
57G	Y	TO MAIN HARNESS
58G	BG	TO MAIN HARNESS
59G	BG	TO MAIN HARNESS
60G	BG	TO MAIN HARNESS
61G	B	TO MAIN HARNESS
62G	W	TO MAIN HARNESS
63G	R	TO MAIN HARNESS
64G	W/L	TO MAIN HARNESS
65G	W/R	TO MAIN HARNESS
66G	BG	TO MAIN HARNESS
67G	BG	TO MAIN HARNESS
68G	B	TO MAIN HARNESS
69G	Y	TO MAIN HARNESS
70G	L	TO MAIN HARNESS
71G	R/W	TO MAIN HARNESS
72G	L/W	TO MAIN HARNESS
73G	SHIELD	TO MAIN HARNESS
74G	W	TO MAIN HARNESS
75G	R	TO MAIN HARNESS
76G	R/G	TO MAIN HARNESS
77G	G	TO MAIN HARNESS
78G	W	TO MAIN HARNESS
79G	–	TO MAIN HARNESS
80G	R	TO MAIN HARNESS
81G	L	TO MAIN HARNESS
82G	R	TO MAIN HARNESS
83G	L	TO MAIN HARNESS
84G	L	TO MAIN HARNESS
85G	W/B	TO MAIN HARNESS
86G	B/R	TO MAIN HARNESS
87G	W/B	TO MAIN HARNESS
88G	P	TO MAIN HARNESS
89G	L	TO MAIN HARNESS
90G	G	TO MAIN HARNESS
91G	G	TO MAIN HARNESS
92G	V/W	TO MAIN HARNESS
93G	BR	TO MAIN HARNESS
94G	G	TO MAIN HARNESS
95G	G	TO MAIN HARNESS
96G	W	TO MAIN HARNESS
97G	R	TO MAIN HARNESS
98G	W/B	TO MAIN HARNESS
99G	BR	TO MAIN HARNESS
100G	GR/W	TO MAIN HARNESS

Connector No.	E160
Connector Name	PARKING BRAKE SWITCH
Connector Type	P01FB-A
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	PKB SW

AANIA5332GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	F101
Connector Name	ECM (WITH CUMMINS 5.0L)
Connector Type	1-928-405-455
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
92	B	FUEL INJECTOR DRIVER 2
93	B/Y	FUEL INJECTOR DRIVER 8
94	B	FUEL INJECTOR DRIVER 5
95	B/R	FUEL INJECTOR DRIVER 3
96	–	–
97	B/SB	PCV LSP
98	–	–
99	–	–
100	–	–
101	–	–
102	DG	J1939-
103	LG/B	J1939-
104	–	–
105	–	–
106	P	VS01 5V
107	–	–
108	–	–
109	W/SB	INLET AIR TEMPERATURE
110	W/V	CHARGE AIR CLR OUT TEMPERATURE
111	W/R	CCV PRESSURE SENSOR SIGNAL
112	–	–
113	R/B	FUEL INJECTOR SIGNAL 2
114	R/Y	FUEL INJECTOR SIGNAL 8
115	R	FUEL INJECTOR SIGNAL 5
116	R/B	FUEL INJECTOR SIGNAL 3
117	–	–
118	B/W	ME UN LSP
119	–	–
120	–	–
121	–	–
122	–	–
123	Y	J1939+
124	Y/B	J1939+
125	–	–
126	–	–
127	B	VS01RTN

128	B/W	RPS RTN
129	W/O	INLET AIR PRESSURE
130	W/B	LOW FUEL PRESSURE SENSOR SIGNAL
131	–	–
132	W/LG	EXHAUST PRESSURE SENSOR SIGNAL
133	–	–
134	R	EGR VALVE +
135	B	EGR VALVE -
136	–	–
137	R	COMPRESSOR BYPASS VALVE
138	R/V	MAF HSP
139	B	COMPRESSOR BYPASS VALVE RETURN
140	–	–
141	–	–
142	–	–
143	W/SB	OIL PRESSURE SWITCH SIGNAL
144	–	–
145	–	–
146	–	–
147	–	–
148	–	–
149	–	–
150	–	–
151	–	–
152	W/Y	EGR POSITION SIGNAL
153	–	–
154	W	EGR ORFICE TEMP
155	R/B	FUEL INJECTOR SIGNAL 1
156	R/Y	FUEL INJECTOR SIGNAL 7
157	R	FUEL INJECTOR SIGNAL 4
158	R/B	FUEL INJECTOR SIGNAL 6
159	B/SB	EGR BYPASS VALVE -
160	–	–
161	–	–
162	–	–
163	–	–
164	–	–
165	–	–
166	W	FAN SPEED
167	–	–
168	W/V	ENGINE POSITION
169	B	VS03RTN
170	B	COMMON SENSOR RETURN
171	W/DG	RAIL PRESSURE SENSOR SIGNAL
172	W/Y	EGR BYPASS POSITION SIGNAL
173	–	–
174	W/SB	FUEL TEMPERATURE
175	–	–
176	B	FUEL INJECTOR DRIVER 1
177	B/Y	FUEL INJECTOR DRIVER 7
178	B	FUEL INJECTOR DRIVER 4

179	B/R	FUEL INJECTOR DRIVER 6
180	R/V	EGR BYPASS VLAVE +
181	B/W	FAN CLUTCH LSP
182	–	–
183	–	–
184	–	–
185	–	–
186	–	–
187	W/Y	MASS AIR FLOW SIGNAL
188	W/SB	TURBO SPEED SENSOR SIGNAL
189	W/O	ENGINE SPEED
190	P	VS03 5V
191	–	–
192	–	–
193	W/R	COOLANT TEMPERATURE
194	W/B	BOOST PRESSURE
195	W/P	INTAKE MANIFOLD TEMPERATURE
196	W/O	INTERSTAGE BOOST PRESSURE SENSOR SIG

Connector No.	F111
Connector Name	OIL PRESSURE SWITCH
Connector Type	54200212
Connector Color	LIGHT GREEN

H.S.

Terminal No.	Color of Wire	Signal Name
1	W/SB	SIGNAL
2	–	–

Connector No.	F127
Connector Name	COOLANT TEMPERATURE SENSOR
Connector Type	12162194
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name

1	B	SIGNAL
2	W/R	RETURN

Connector No.	F201
Connector Name	GENERATOR (WITH CUMMINS 5.0L)
Connector Type	E-BA506
Connector Color	-

H.S.

Terminal No.	Color of Wire	Signal Name
5	B	GROUND

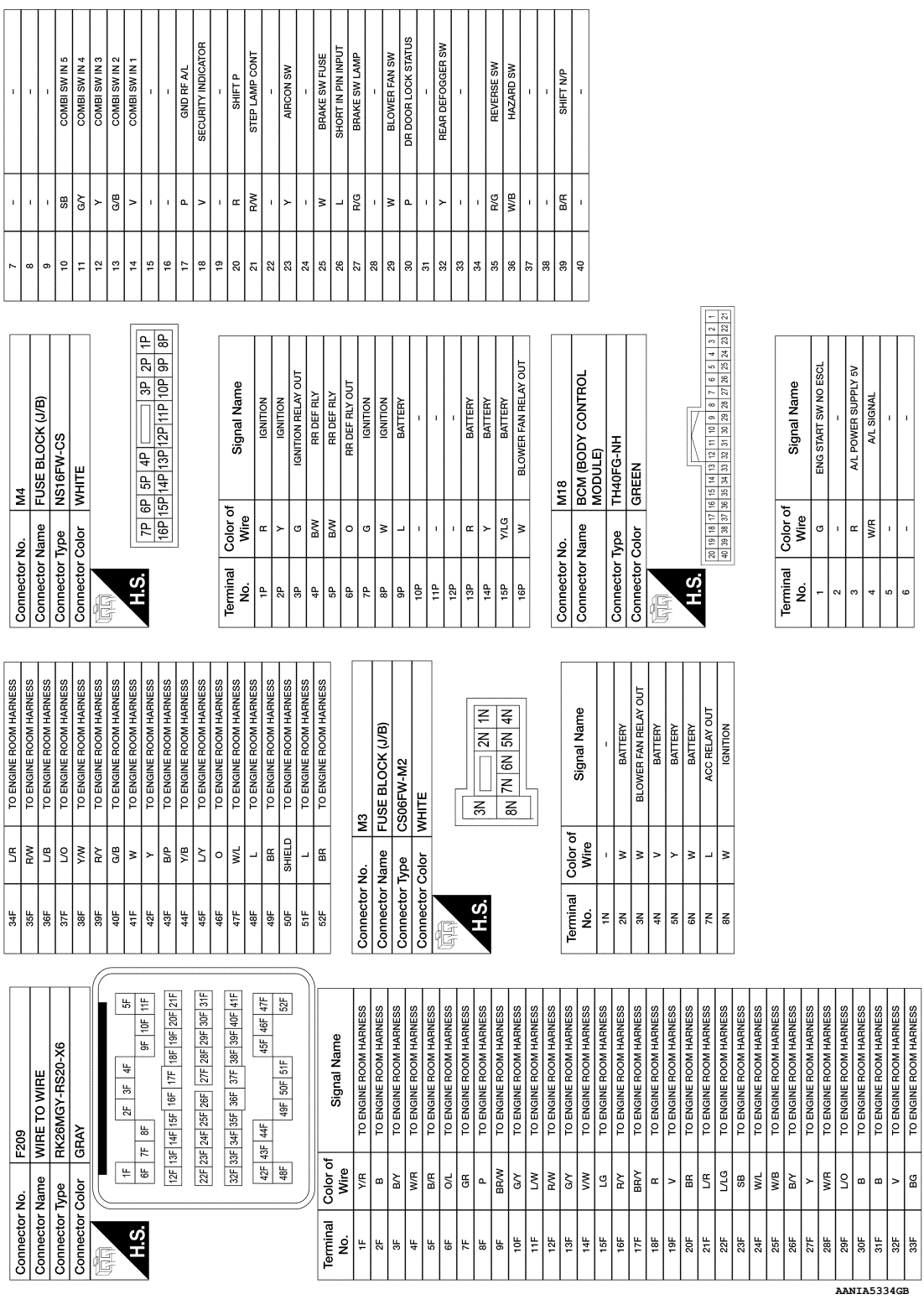
Connector No.	F205
Connector Name	GENERATOR (WITH CUMMINS 5.0L)
Connector Type	HS03FB
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
2	BR/W	CHG
3	G/Y	BATTERY
4	–	–

AANIA5333GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L



METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
41	Y/L	TRAILER LIGHT CHECK RELAY OUT
42	R/Y	CARGO LAMP OUT
43	–	–
44	–	–
45	–	–
46	–	–
47	–	–
48	R	HIGH SIDE START SW LED
49	–	–
50	–	–
51	–	–
52	W	AUDIO DONGLE
53	–	–
54	W/L	PW UART
55	W/B	L&R SENSOR K-LINE
56	–	–
57	–	–
58	–	–
59	P	CAN-L
60	L	CAN-H
61	O	REAR DEFOGGER RELAY OUT
62	W	STARTER RELAY OUT
63	–	–
64	P	BUZZER OUT
65	–	–
66	W	BLOWER FAN RELAY OUT
67	G	IGN ELEC RELAY OUT 2
68	L	MR OUTPUT
69	R/B	AT DEVICE OUT
70	P	IGN USM OUT 1
71	O	DR REQUEST SW
72	G	AS REQUEST SW
73	–	–
74	–	–
75	L/W	COMBI SW OUT 5
76	P	COMBI SW OUT 4
77	L	COMBI SW OUT 3

78	O/B	COMBI SW OUT 2
79	R/W	COMBI SW OUT 1
80	–	–

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FGY-NH
Connector Color	GRAY

H.S.

92	91	90	89	88	87	86	85	84	83	82	81
104	103	102	101	100	99	98	97	96	95	94	93

Terminal No.	Color of Wire	Signal Name
81	–	–
82	W	RL DOOR SW
83	–	–
84	–	–
85	–	–
86	G/B	TRAILER FLASHER RL
87	Y/B	TRAILER FLASHER RR
88	–	–
89	–	–
90	–	–
91	–	–
92	O	RR FLASHER
93	R	RR DOOR SW
94	G	AS DOOR SW
95	–	–
96	BG	DR DOOR SW
97	P/L	CARGO LAMP SW
98	–	–
99	–	–
100	–	–
101	–	–
102	–	–
103	G/B	RL FLASHER
104	–	–

Connector No.	M24
Connector Name	COMBINATION METER (WITH TYPE A)
Connector Type	TH40FW-NH
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	16	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
1	B	GND(STRG/SATELLITE SW GND)
2	–	–
3	–	–
4	–	–
5	–	–
6	–	–
7	V	SECURITY
8	–	–
9	BG	AS BELT SW (W/O ODS)
10	LG	TOW MODE SW
11	BR	CHG
12	BR	LED HEAD LAMP (R)
13	W	LED HEAD LAMP (L)
14	R	ACC SW
15	W	OUTSIDE TEMP SENSOR (WITH VK56VD)
16	O	AIR BAG
17	–	–
18	P	TRIP RESET SW
19	–	–
20	R	OUTSIDE TEMP GND (WITH VK56VD)
21	–	–
22	P	STRG SW A
23	R	STRG SW B
24	W	WASHER SW
25	–	–
26	G	PKB SW
27	P/L	AS BELT SW (WITH ODS)
28	O/B	DR BELT SW
29	–	–
30	–	–
31	–	–
32	BR	AT SHIFT UP
33	V/W	AT SHIFT DOWN
34	–	–
35	–	–
36	W	ILL UP SW

37	R	ILL DOWN SW
38	G	8P/R OUTPUT
39	–	–
40	–	–

Connector No.	M25
Connector Name	COMBINATION METER (WITH TYPE A)
Connector Type	TH12FW-NH
Connector Color	WHITE

H.S.

46	45	44	43	42	41
52	51	50	49	48	47

Terminal No.	Color of Wire	Signal Name
41	W	IGN
42	R	BAT
43	Y/V	FUEL SENSOR GND
44	GR	ILL CONT OUTPUT
45	P	CAN-L
46	L	CAN-H
47	B	G1
48	BR/Y	FUEL SENSOR
49	–	–
50	–	–
51	LG	M CAN-L
52	SB	M CAN-H

AANIA5335GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	M30
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-1V
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
7	B/Y	ASCD GND -(WITH HEATED STEERING WHEEL)
8	GR	ILL (-) - (WITHOUT HEATED STEERING WHEEL)
8	R	AUDIO STRG SW REMOTE B - (WITH HEATED STEERING WHEEL)
9	G/Y	ASCD SW - (WITHOUT HEATED STEERING WHEEL)
9	P	AUDIO STRG SW REMOTE A - (WITH HEATED STEERING WHEEL)
10	P	AUDIO STRG SW REMOTE A - (WITHOUT HEATED STEERING WHEEL)
10	G/Y	ASCD SW - (WITH HEATED STEERING WHEEL)
11	R/W	HORN SWITCH OUTPUT - (WITHOUT HEATED STEERING WHEEL)
11	B	AUDIO STRG SW GND - (WITH HEATED STEERING WHEEL)
12	B	AUDIO STRG SW GND -(WITHOUT HEATED STEERING WHEEL)
13	B/Y	ASCD GND -(WITHOUT HEATED STEERING WHEEL)
14	R	AUDIO STRG SW REMOTE B - (WITHOUT HEATED STEERING WHEEL)

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1G	G	TO ENGINE ROOM HARNESS
2G	B/R	TO ENGINE ROOM HARNESS
3G	W	TO ENGINE ROOM HARNESS
4G	BR/W	TO ENGINE ROOM HARNESS
5G	–	TO ENGINE ROOM HARNESS
6G	R/W	TO ENGINE ROOM HARNESS
7G	Y	TO ENGINE ROOM HARNESS
8G	G	TO ENGINE ROOM HARNESS
9G	R	TO ENGINE ROOM HARNESS
10G	W	TO ENGINE ROOM HARNESS
11G	R/G	TO ENGINE ROOM HARNESS
12G	W/B	TO ENGINE ROOM HARNESS
13G	BR	TO ENGINE ROOM HARNESS
14G	Y/B	TO ENGINE ROOM HARNESS
15G	G/W	TO ENGINE ROOM HARNESS
16G	G	TO ENGINE ROOM HARNESS
17G	O	TO ENGINE ROOM HARNESS
18G	G/Y	TO ENGINE ROOM HARNESS
19G	Y/V	TO ENGINE ROOM HARNESS
20G	G/Y	TO ENGINE ROOM HARNESS
21G	B/Y	TO ENGINE ROOM HARNESS
22G	G/R	TO ENGINE ROOM HARNESS
23G	Y/R	TO ENGINE ROOM HARNESS
24G	G/B	TO ENGINE ROOM HARNESS
25G	R/W	TO ENGINE ROOM HARNESS
26G	R	TO ENGINE ROOM HARNESS
27G	LG	TO ENGINE ROOM HARNESS
28G	G/B	TO ENGINE ROOM HARNESS
29G	G/B	TO ENGINE ROOM HARNESS
30G	BR/Y	TO ENGINE ROOM HARNESS
31G	R	TO ENGINE ROOM HARNESS
32G	R	TO ENGINE ROOM HARNESS
33G	Y/L	TO ENGINE ROOM HARNESS
34G	GR	TO ENGINE ROOM HARNESS
35G	G/R	TO ENGINE ROOM HARNESS
36G	SB	TO ENGINE ROOM HARNESS
37G	R/W	TO ENGINE ROOM HARNESS
38G	BR	TO ENGINE ROOM HARNESS
39G	BR	TO ENGINE ROOM HARNESS
40G	–	TO ENGINE ROOM HARNESS
41G	R/G	TO ENGINE ROOM HARNESS
42G	O	TO ENGINE ROOM HARNESS
43G	G	TO ENGINE ROOM HARNESS
44G	R/Y	TO ENGINE ROOM HARNESS
45G	G	TO ENGINE ROOM HARNESS
46G	LG	TO ENGINE ROOM HARNESS
47G	R	TO ENGINE ROOM HARNESS
48G	W	TO ENGINE ROOM HARNESS
49G	–	TO ENGINE ROOM HARNESS
50G	BR	TO ENGINE ROOM HARNESS
51G	R	TO ENGINE ROOM HARNESS
52G	L	TO ENGINE ROOM HARNESS
53G	W	TO ENGINE ROOM HARNESS
54G	W	TO ENGINE ROOM HARNESS
55G	G	TO ENGINE ROOM HARNESS
56G	W	TO ENGINE ROOM HARNESS
57G	Y	TO ENGINE ROOM HARNESS
58G	BG	TO ENGINE ROOM HARNESS
59G	BG	TO ENGINE ROOM HARNESS
60G	BG	TO ENGINE ROOM HARNESS
61G	O	TO ENGINE ROOM HARNESS
62G	W	TO ENGINE ROOM HARNESS
63G	O	TO ENGINE ROOM HARNESS
64G	W/L	TO ENGINE ROOM HARNESS
65G	W/R	TO ENGINE ROOM HARNESS
66G	BG	TO ENGINE ROOM HARNESS
67G	O	TO ENGINE ROOM HARNESS
68G	B	TO ENGINE ROOM HARNESS
69G	Y	TO ENGINE ROOM HARNESS
70G	L	TO ENGINE ROOM HARNESS
71G	R/W	TO ENGINE ROOM HARNESS
72G	L/W	TO ENGINE ROOM HARNESS
73G	SHIELD	TO ENGINE ROOM HARNESS
74G	W	TO ENGINE ROOM HARNESS
75G	R	TO ENGINE ROOM HARNESS
76G	R/G	TO ENGINE ROOM HARNESS
77G	BG	TO ENGINE ROOM HARNESS
78G	P	TO ENGINE ROOM HARNESS
79G	–	TO ENGINE ROOM HARNESS
80G	R	TO ENGINE ROOM HARNESS
81G	L	TO ENGINE ROOM HARNESS
82G	R	TO ENGINE ROOM HARNESS
83G	L	TO ENGINE ROOM HARNESS
84G	L	TO ENGINE ROOM HARNESS
85G	W	TO ENGINE ROOM HARNESS
86G	B/R	TO ENGINE ROOM HARNESS
87G	W	TO ENGINE ROOM HARNESS
88G	G	TO ENGINE ROOM HARNESS
89G	P	TO ENGINE ROOM HARNESS
90G	G	TO ENGINE ROOM HARNESS
91G	P	TO ENGINE ROOM HARNESS
92G	V/W	TO ENGINE ROOM HARNESS
93G	BR	TO ENGINE ROOM HARNESS
94G	B	TO ENGINE ROOM HARNESS
95G	G	TO ENGINE ROOM HARNESS
96G	R	TO ENGINE ROOM HARNESS
97G	R	TO ENGINE ROOM HARNESS
98G	W/B	TO ENGINE ROOM HARNESS
99G	R	TO ENGINE ROOM HARNESS
100G	GR/W	TO ENGINE ROOM HARNESS

AANIA5336GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	M35
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITHOUT OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH28FY-EX
Connector Color	YELLOW

H.S.

Terminal No.	Color of Wire	Signal Name
1	R	IGN
2	B	GND
3	Y	DR1 (+)
4	Y/B	DR1 (-)
6	O	AS1 (+)
7	G	AS1 (-)
8	P	AS2 (+)
9	Y	AS2 (-)
18	GR/R	ECZS (+)
19	GR/B	ECZS (-)
22	SHIELD	ECZS GND
23	O	AIRBAG WARN LAMP
51	LG/B	RH DOOR SATELLITE SENSOR+
52	Y/B	RH DOOR SATELLITE SENSOR -
53	L	LH DOOR SATELLITE SENSOR+
54	W	LH DOOR SATELLITE SENSOR -
59	L	CAN-H
60	P	CAN-L

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	TH80FDGY-CS16-TM4
Connector Color	GRAY

H.S.

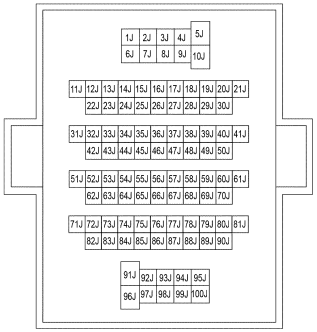
Terminal No.	Color of Wire	Signal Name
1A	W	TO BODY NO. 2 HARNESS
2A	LG	TO BODY NO. 2 HARNESS
3A	V	TO BODY NO. 2 HARNESS
4A	SB	TO BODY NO. 2 HARNESS
5A	-	TO BODY NO. 2 HARNESS
6A	BG	TO BODY NO. 2 HARNESS - (WITH CLIMATE CONTROLLED SEAT)
6A	LG	TO BODY NO. 2 HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
7A	W	TO BODY NO. 2 HARNESS
8A	B	TO BODY NO. 2 HARNESS
9A	L/B	TO BODY NO. 2 HARNESS
10A	W	TO BODY NO. 2 HARNESS
11A	R	TO BODY NO. 2 HARNESS
12A	BR	TO BODY NO. 2 HARNESS
13A	G	TO BODY NO. 2 HARNESS
14A	R/G	TO BODY NO. 2 HARNESS
15A	O	TO BODY NO. 2 HARNESS
16A	O/L	TO BODY NO. 2 HARNESS
17A	L	TO BODY NO. 2 HARNESS
18A	Y	TO BODY NO. 2 HARNESS
19A	B/W	TO BODY NO. 2 HARNESS
20A	R	TO BODY NO. 2 HARNESS
21A	BG	TO BODY NO. 2 HARNESS
22A	G	TO BODY NO. 2 HARNESS
23A	Y	TO BODY NO. 2 HARNESS
24A	L	TO BODY NO. 2 HARNESS
25A	-	TO BODY NO. 2 HARNESS
26A	GR	TO BODY NO. 2 HARNESS
27A	LG	TO BODY NO. 2 HARNESS
28A	LG	TO BODY NO. 2 HARNESS
29A	GR	TO BODY NO. 2 HARNESS
30A	BR	TO BODY NO. 2 HARNESS
31A	W/R	TO BODY NO. 2 HARNESS
32A	G/R	TO BODY NO. 2 HARNESS
33A	-	TO BODY NO. 2 HARNESS
34A	SHIELD	TO BODY NO. 2 HARNESS
35A	P	TO BODY NO. 2 HARNESS
36A	B	TO BODY NO. 2 HARNESS
37A	-	TO BODY NO. 2 HARNESS
38A	R/B	TO BODY NO. 2 HARNESS
39A	G/O	TO BODY NO. 2 HARNESS
40A	V	TO BODY NO. 2 HARNESS
41A	SHIELD	TO BODY NO. 2 HARNESS
42A	SHIELD	TO BODY NO. 2 HARNESS
43A	R	TO BODY NO. 2 HARNESS
44A	G	TO BODY NO. 2 HARNESS
45A	-	TO BODY NO. 2 HARNESS
46A	-	TO BODY NO. 2 HARNESS
47A	Y	TO BODY NO. 2 HARNESS
48A	R/W	TO BODY NO. 2 HARNESS
49A	R/L	TO BODY NO. 2 HARNESS
50A	B	TO BODY NO. 2 HARNESS
51A	-	TO BODY NO. 2 HARNESS
52A	-	TO BODY NO. 2 HARNESS
53A	-	TO BODY NO. 2 HARNESS
54A	-	TO BODY NO. 2 HARNESS
55A	-	TO BODY NO. 2 HARNESS
56A	-	TO BODY NO. 2 HARNESS
57A	-	TO BODY NO. 2 HARNESS
58A	-	TO BODY NO. 2 HARNESS
59A	-	TO BODY NO. 2 HARNESS
60A	G/W	TO BODY NO. 2 HARNESS
61A	-	TO BODY NO. 2 HARNESS
62A	-	TO BODY NO. 2 HARNESS
63A	-	TO BODY NO. 2 HARNESS
64A	-	TO BODY NO. 2 HARNESS
65A	-	TO BODY NO. 2 HARNESS
66A	-	TO BODY NO. 2 HARNESS
67A	-	TO BODY NO. 2 HARNESS
68A	-	TO BODY NO. 2 HARNESS
69A	Y/R	TO BODY NO. 2 HARNESS
70A	R/G	TO BODY NO. 2 HARNESS
71A	-	TO BODY NO. 2 HARNESS
72A	W	TO BODY NO. 2 HARNESS
73A	G	TO BODY NO. 2 HARNESS
74A	W	TO BODY NO. 2 HARNESS
75A	SHIELD	TO BODY NO. 2 HARNESS
76A	R	TO BODY NO. 2 HARNESS
77A	L	TO BODY NO. 2 HARNESS
78A	SHIELD	TO BODY NO. 2 HARNESS
79A	GR	TO BODY NO. 2 HARNESS
80A	V	TO BODY NO. 2 HARNESS
81A	R	TO BODY NO. 2 HARNESS
82A	SHIELD	TO BODY NO. 2 HARNESS
83A	R	TO BODY NO. 2 HARNESS
84A	O	TO BODY NO. 2 HARNESS
85A	SHIELD	TO BODY NO. 2 HARNESS
86A	W	TO BODY NO. 2 HARNESS
87A	B	TO BODY NO. 2 HARNESS
88A	W	TO BODY NO. 2 HARNESS
89A	SHIELD	TO BODY NO. 2 HARNESS
90A	G	TO BODY NO. 2 HARNESS
91A	W/L	TO BODY NO. 2 HARNESS
92A	BR	TO BODY NO. 2 HARNESS
93A	L/Y	TO BODY NO. 2 HARNESS
94A	R/L	TO BODY NO. 2 HARNESS
95A	BR	TO BODY NO. 2 HARNESS
96A	R	TO BODY NO. 2 HARNESS
97A	LG	TO BODY NO. 2 HARNESS
98A	B/V	TO BODY NO. 2 HARNESS
99A	O/L	TO BODY NO. 2 HARNESS
100A	BR/W	TO BODY NO. 2 HARNESS

AANIA5337GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

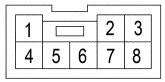
H.S.



Terminal No.	Color of Wire	Signal Name
1J	G	TO BODY HARNESS
2J	R/Y	TO BODY HARNESS
3J	L	TO BODY HARNESS
4J	L/B	TO BODY HARNESS
5J	B	TO BODY HARNESS
6J	BR	TO BODY HARNESS
7J	BG	TO BODY HARNESS
8J	SB	TO BODY HARNESS
9J	BR	TO BODY HARNESS
10J	R	TO BODY HARNESS
11J	O/B	TO BODY HARNESS
12J	L	TO BODY HARNESS
13J	W	TO BODY HARNESS
14J	Y	TO BODY HARNESS
15J	–	TO BODY HARNESS
16J	R	TO BODY HARNESS
17J	G	TO BODY HARNESS
18J	SB	TO BODY HARNESS
19J	O	TO BODY HARNESS
20J	O/B	TO BODY HARNESS
21J	Y	TO BODY HARNESS
22J	P	TO BODY HARNESS
23J	W	TO BODY HARNESS
24J	W/R	TO BODY HARNESS
25J	P	TO BODY HARNESS
26J	L	TO BODY HARNESS
27J	R	TO BODY HARNESS
28J	L	TO BODY HARNESS
29J	G/O	TO BODY HARNESS
30J	SB	TO BODY HARNESS
31J	L/G	TO BODY HARNESS
32J	R	TO BODY HARNESS
33J	BG	TO BODY HARNESS
34J	Y	TO BODY HARNESS
35J	P	TO BODY HARNESS
36J	G/R	TO BODY HARNESS
37J	LG	TO BODY HARNESS
38J	SB	TO BODY HARNESS
39J	Y	TO BODY HARNESS
40J	SB	TO BODY HARNESS
41J	L	TO BODY HARNESS
42J	L	TO BODY HARNESS
43J	W	TO BODY HARNESS
44J	BR	TO BODY HARNESS
45J	BG	TO BODY HARNESS
46J	P	TO BODY HARNESS
47J	O	TO BODY HARNESS
48J	V	TO BODY HARNESS
49J	BR	TO BODY HARNESS
50J	G/W	TO BODY HARNESS
51J	–	TO BODY HARNESS
52J	SHIELD	TO BODY HARNESS
53J	R	TO BODY HARNESS
54J	L	TO BODY HARNESS
55J	R	TO BODY HARNESS
56J	W	TO BODY HARNESS
57J	R	TO BODY HARNESS
58J	B	TO BODY HARNESS
59J	–	TO BODY HARNESS
60J	SHIELD	TO BODY HARNESS
61J	G	TO BODY HARNESS
62J	–	TO BODY HARNESS
63J	R/W	TO BODY HARNESS
64J	L/W	TO BODY HARNESS
65J	SHIELD	TO BODY HARNESS
66J	B	TO BODY HARNESS
67J	SHIELD	TO BODY HARNESS
68J	W	TO BODY HARNESS
69J	SHIELD	TO BODY HARNESS
70J	B/R	TO BODY HARNESS
71J	L/W	TO BODY HARNESS
72J	–	TO BODY HARNESS
73J	–	TO BODY HARNESS
74J	SHIELD	TO BODY HARNESS
75J	R	TO BODY HARNESS
76J	O	TO BODY HARNESS
77J	SHIELD	TO BODY HARNESS
78J	W	TO BODY HARNESS
79J	B	TO BODY HARNESS
80J	W	TO BODY HARNESS
81J	SHIELD	TO BODY HARNESS
82J	L/R	TO BODY HARNESS
83J	–	TO BODY HARNESS
84J	–	TO BODY HARNESS
85J	W	TO BODY HARNESS
86J	G	TO BODY HARNESS
87J	W	TO BODY HARNESS
88J	SHIELD	TO BODY HARNESS
89J	R	TO BODY HARNESS
90J	L	TO BODY HARNESS
91J	L/B	TO BODY HARNESS
92J	SB	TO BODY HARNESS
93J	B	TO BODY HARNESS
94J	LG	TO BODY HARNESS
95J	L	TO BODY HARNESS
96J	G	TO BODY HARNESS
97J	B/Y	TO BODY HARNESS
98J	L/B	TO BODY HARNESS
99J	W/L	TO BODY HARNESS
100J	Y	TO BODY HARNESS

Connector No.	M68
Connector Name	A/T SHIFT SELECTOR
Connector Type	TK08FW
Connector Color	WHITE

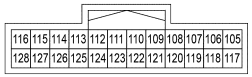
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	GND
2	B	GND
3	L/R	SHIFT LOCK SOL OUT
4	R	SHIFT P
5	R/B	AT DEVICE OUT
6	LG	TOW MODE SW
7	BR	SHIFT UP
8	V/W	SHIFT DOWN

Connector No.	M80
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FB-NH
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
105	G/Y	FR FLASHER
106	–	–
107	W	LOW SIDE START SW LED
108	L/R	SHIFT LOCK SOLENOID OUT
109	–	–
110	–	–
111	P	ACC LED
112	–	–
113	L	ACC RELAY OUT
114	W	AS DOOR ANT A
115	BG	AS DOOR ANT B
116	W	ROOM ANT 2 A
117	G/B	FL FLASHER
118	–	–
119	R	RF NIMOCO
120	–	–
121	G	DR DOOR ANT B
122	P	DR DOOR ANT A
123	W	ROOM ANT 1 A
124	G	ROOM ANT 1 B
125	–	–
126	P	IMMO START BUTTON ANT B
127	BG	IMMO START BUTTON ANT A
128	B	ROOM ANT 2 B

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METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA
Connector Color	WHITE

H.S.

137	136	135	134	133	132	131	130	129
143	142	141	140	139	138			

Terminal No.	Color of Wire	Signal Name
129	P/G	BATTERY SAVER OUT
130	LG	SUPER LOCK/DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	Y	DOOR LOCK AS/RR/RL
133	BR	DOOR UNLOCK AS/RR/RL
134	B	GND2
135	O	DOOR LOCK DR/AS/FL
136	L	ROOM LAMP CONT
137	V	DOOR UNLOCK DR/AS/FL
138	V	BAT REAR DOOR
139	W	BAT-POWER F/L
140	LG	P/W POWER SUPPLY IGN
141	V	P/W POWER SUPPLY BAT
142	Y	BAT FRONT DOOR
143	B	GND1

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
1	G/W	TO ENGINE ROOM HARNESS
2	R/W	TO ENGINE ROOM HARNESS
3	Y/R	TO ENGINE ROOM HARNESS
4	G/R	TO ENGINE ROOM HARNESS
5	G	TO ENGINE ROOM HARNESS
6	P	TO ENGINE ROOM HARNESS
7	O	TO ENGINE ROOM HARNESS
8	R	TO ENGINE ROOM HARNESS
9	G	TO ENGINE ROOM HARNESS
10	LG	TO ENGINE ROOM HARNESS
11	BR	TO ENGINE ROOM HARNESS
12	GR	TO ENGINE ROOM HARNESS
13	G	TO ENGINE ROOM HARNESS
14	BR	TO ENGINE ROOM HARNESS
15	–	TO ENGINE ROOM HARNESS
16	–	TO ENGINE ROOM HARNESS
17	W	TO ENGINE ROOM HARNESS
18	–	TO ENGINE ROOM HARNESS
19	Y/R	TO ENGINE ROOM HARNESS
20	G/W	TO ENGINE ROOM HARNESS
21	–	TO ENGINE ROOM HARNESS
22	–	TO ENGINE ROOM HARNESS
23	–	TO ENGINE ROOM HARNESS
24	O/L	TO ENGINE ROOM HARNESS

Connector No.	M88
Connector Name	ACCESSORY RELAY-2
Connector Type	MS02FL-M2-LC
Connector Color	BLUE

H.S.

3		
	5	
2		1

Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	L	RELAY CONTROL
3	R	RELAY OUTPUT
5	W	BATTERY

Connector No.	M131
Connector Name	PTC HEATER CONTROL
Connector Type	TH16FW-NH
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
1	L	CAN H
2	B	GND
3	G	IGNITION
4	–	–
5	R	SENS GND
6	–	–
7	–	–
8	–	–
9	P	CAN L
10	SB	BATTERY
11	–	–
12	W	AMB SENS
13	L/W	FAN SPEED
14	G/R	PTC 1
15	LG	PTC 2
16	SB	PTC 3

Connector No.	M137
Connector Name	A/C AUTO AMP.
Connector Type	TH40FW-NH
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

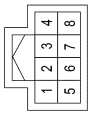
Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	B	GND
3	SB	BAT
4	BR	TX (FR CONT)
5	–	–
6	–	–
7	W	AMB SENS
8	W	STRG HEATER SW
9	G	SUN SENS
10	–	–
11	–	–
12	–	–
13	W	IGN2(ACC)
14	P	FAN GATE
15	Y	RR DEF ON
16	G	LIN SIG
17	W	VACTR
18	–	–
19	G/R	PTC1 - (WITH CUMMINS 5.0L)
20	P	STRG HEATER RLY
21	P	CAN-L
22	B	P-GND
23	G	IGN
24	V	RX (FR CONT)
25	–	–
26	R	SENS GND
27	G	INCAR SENS
28	P	INTAKE SENS
29	–	–
30	–	–
31	–	–
32	–	–
33	Y	COMP ON
34	L/W	FAN FB
35	B/W	RR DEF F/B
36	–	–
37	B	ACTR GND
38	W	FAN ON
39	LG	PTC2 - (WITH CUMMINS 5.0L)
40	SB	PTC3 - (WITH CUMMINS 5.0L)

AANIA5339GB

METER (TYPE A) CONNECTORS - WITH Cummins 5.0L

Connector No.	M198
Connector Name	METER CONTROL SWITCH
Connector Type	TH08FW-NH
Connector Color	WHITE

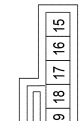
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	ILL +
2	GR	ILL GND
3	–	–
4	B	GROUND
5	P	TRIP RESET SW
6	W	ILL UP SW
7	R	ILL DOWN SW
8	–	–

Connector No.	M199
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
15	R	ASCD SW
16	W	AUDIO STRG SW REMOTE A
17	L	AUDIO STRG SW REMOTE B
18	B	ASCD GND
19	BR	AUDIO STRG SW GND
20	G	HORN SWITCH OUTPUT
21	P	ILL -
22	Y	ILL +

AANIA5340GB

Wiring Diagram (with VK56VD)

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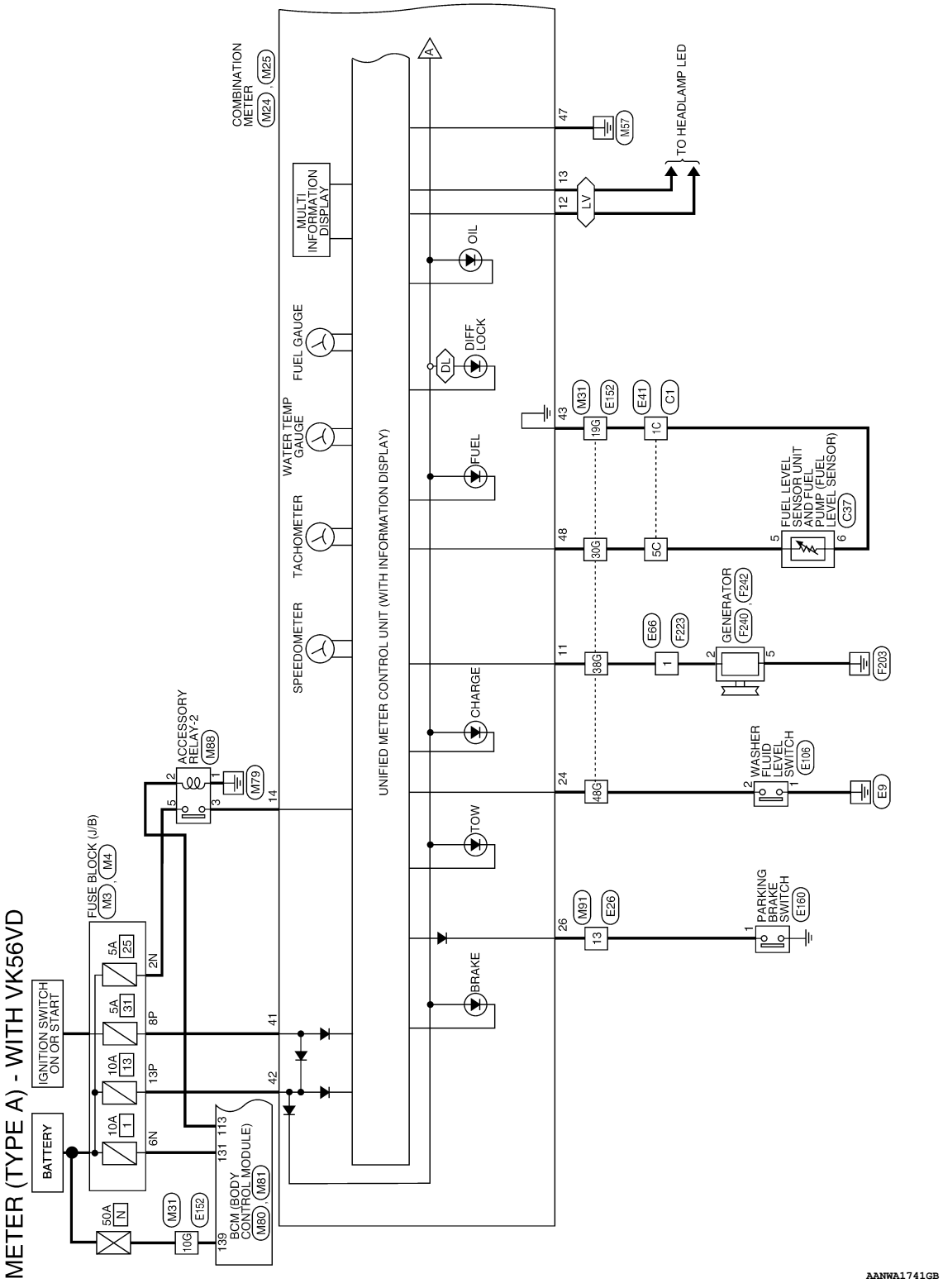
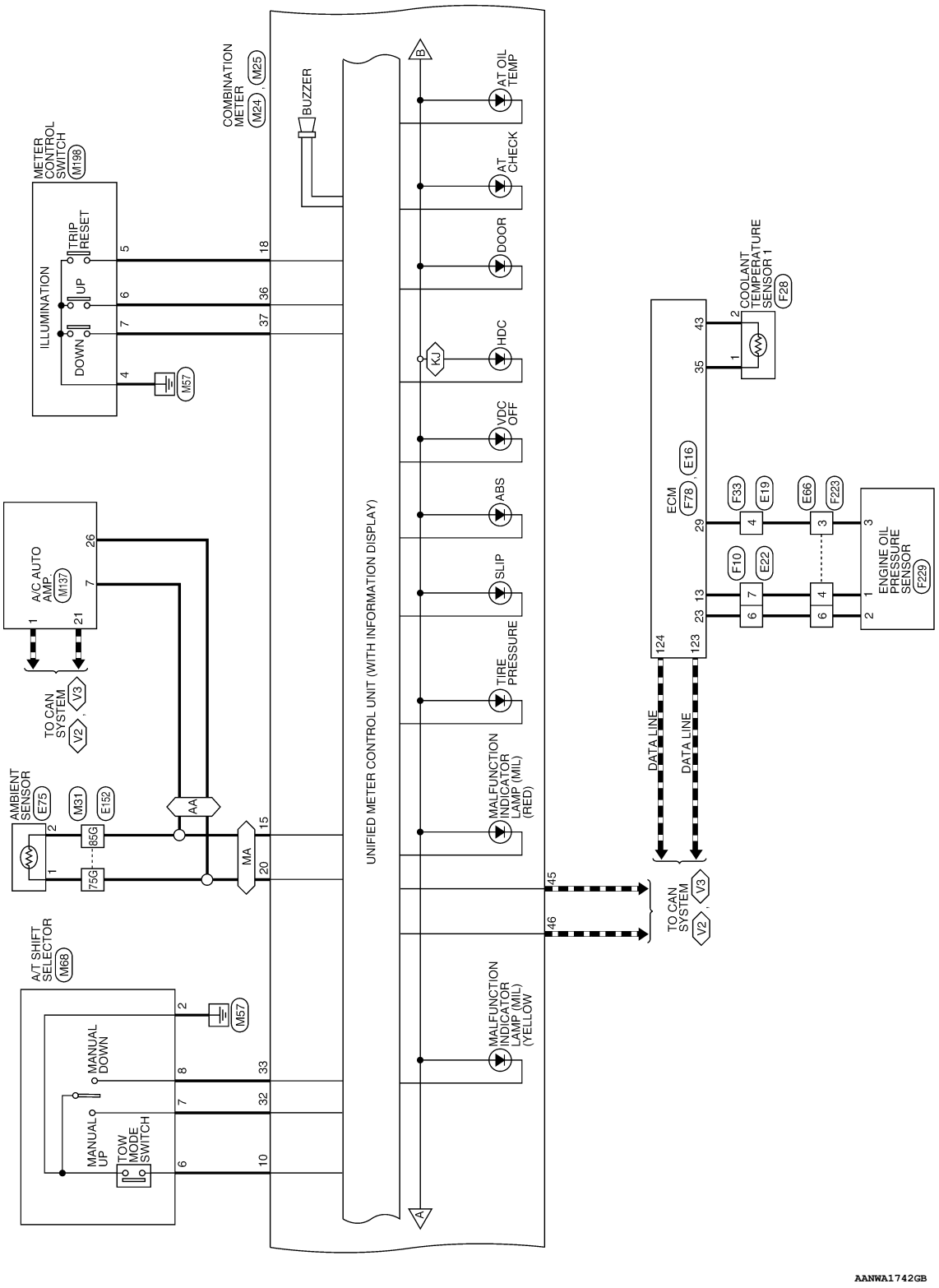
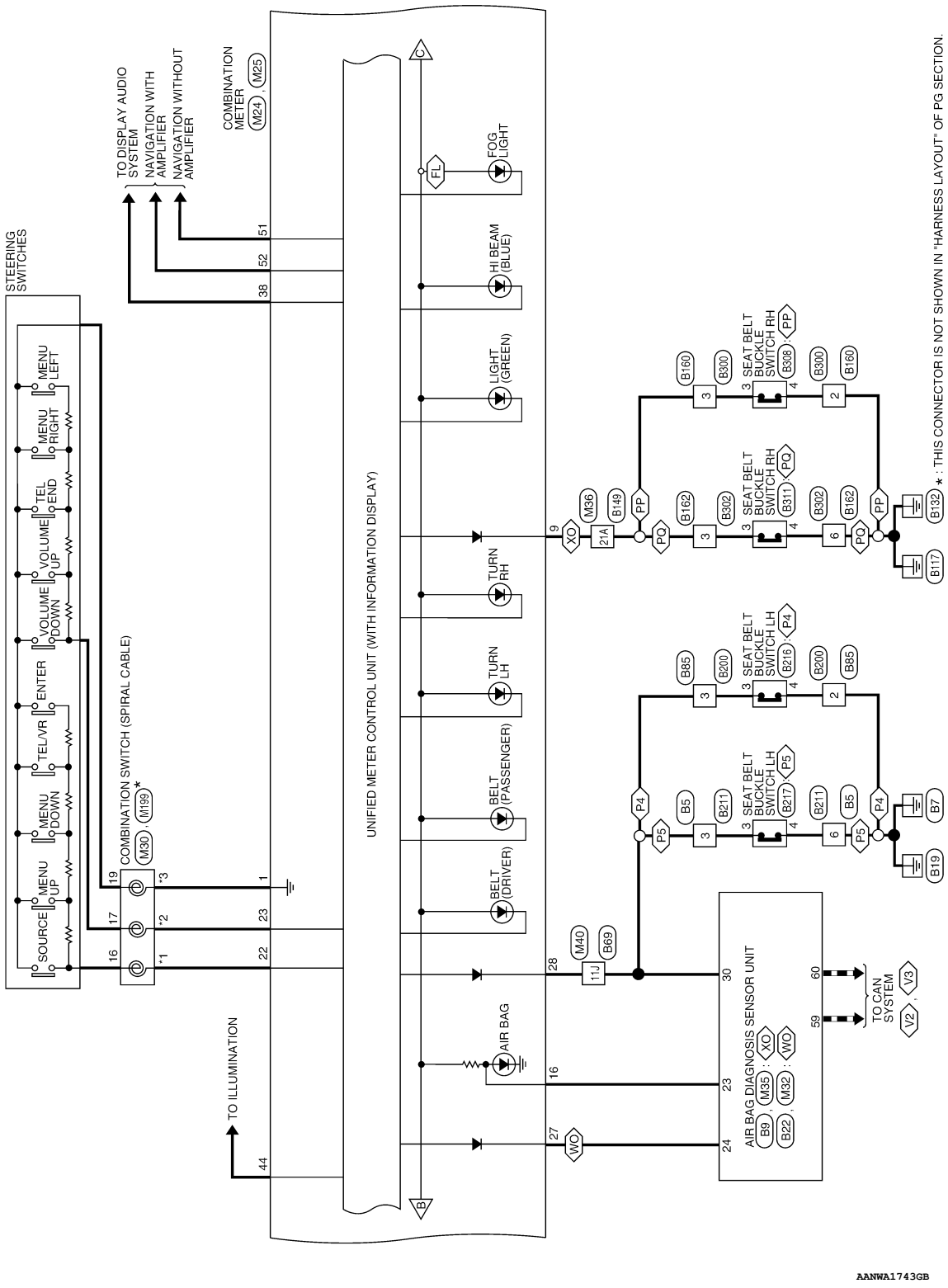
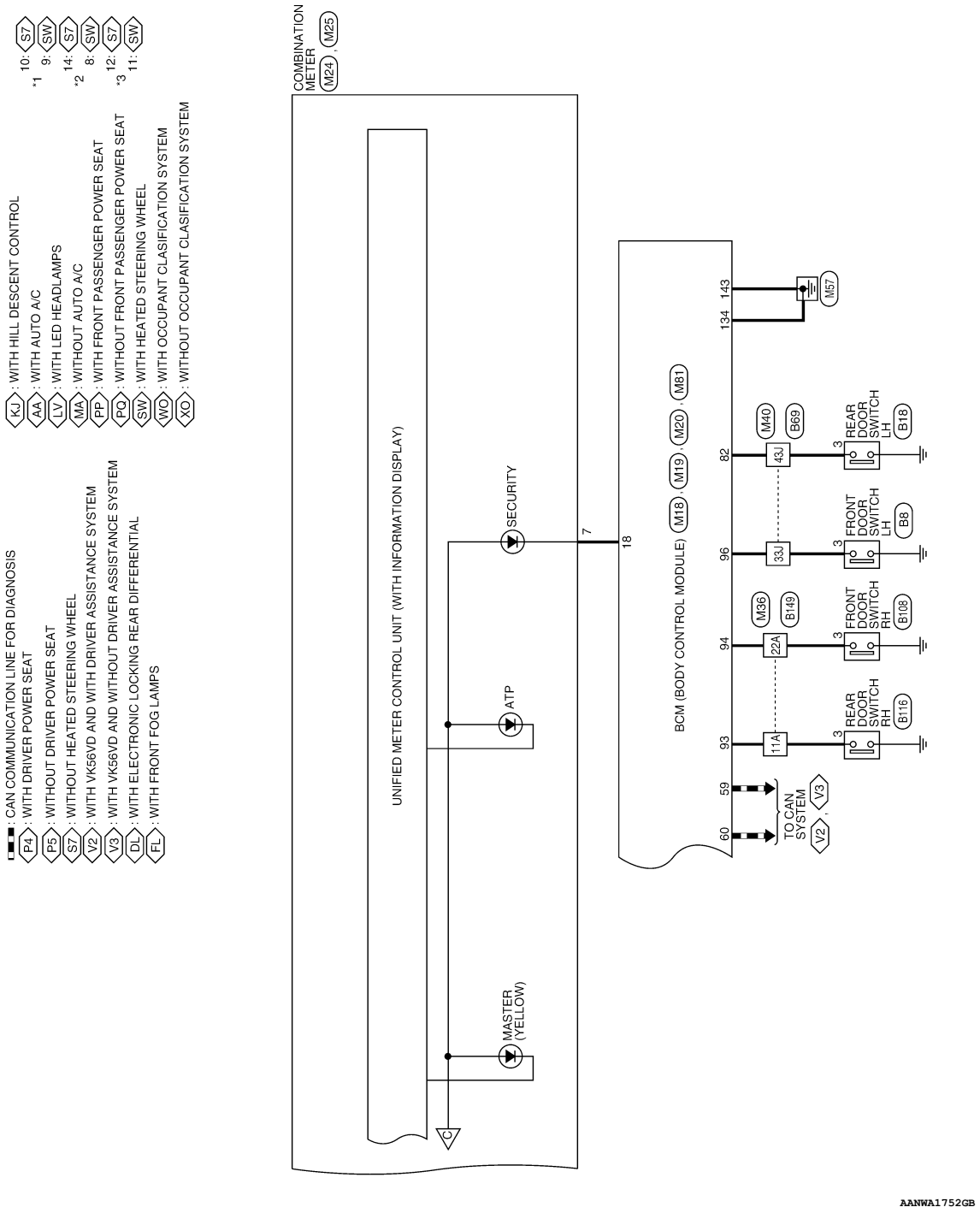




AANWA1742GB

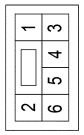

STEERING SWITCHES
SOURCE
MENU UP
MENU DOWN
TEL/VR
ENTER
VOLUME DOWN
VOLUME UP
TEL END
MENU RIGHT
MENU LEFT
COMBINATION SWITCH (SPIRAL CABLE)
M30, M199*
TO DISPLAY AUDIO SYSTEM
NAVIGATION WITH AMPLIFIER
NAVIGATION WITHOUT AMPLIFIER
COMBINATION METER
M24, M25
TO ILLUMINATION
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
FOG LIGHT
HI BEAM (BLUE)
LIGHT (GREEN)
TURN RH
TURN LH
BELT (PASSENGER)
BELT (DRIVER)
AIR BAG
SEAT BELT BUCKLE SWITCH RH
SEAT BELT BUCKLE SWITCH LH
AIR BAG DIAGNOSIS SENSOR UNIT
TO CAN SYSTEM
* : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.
AANWA1743GB


: CAN COMMUNICATION LINE FOR DIAGNOSIS
P4 : WITH DRIVER POWER SEAT
P5 : WITHOUT DRIVER POWER SEAT
S7 : WITHOUT HEATED STEERING WHEEL
V2 : WITH VK56VD AND WITH DRIVER ASSISTANCE SYSTEM
V3 : WITH VK56VD AND WITHOUT DRIVER ASSISTANCE SYSTEM
DL : WITH ELECTRONIC LOCKING REAR DIFFERENTIAL
FL : WITH FRONT FOG LAMPS
KJ : WITH HILL DESCENT CONTROL
AA : WITH AUTO A/C
LV : WITH LED HEADLAMPS
MA : WITHOUT AUTO A/C
PP : WITH FRONT PASSENGER POWER SEAT
PQ : WITHOUT FRONT PASSENGER POWER SEAT
SW : WITH HEATED STEERING WHEEL
WO : WITH OCCUPANT CLASIFICATION SYSTEM
XO : WITHOUT OCCUPANT CLASIFICATION SYSTEM
10: S7
*1 9: SW
14: S7
*2 8: SW
12: S7
*3 11: SW
COMBINATION METER (M24), (M25)
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
SECURITY
ATP
MASTER (YELLOW)
C
7
18
BCM (BODY CONTROL MODULE) (M18), (M19), (M20), (M81)
59
60
TO CAN SYSTEM
V2, V3
93
94
96
82
134
143
11A
22A
33J
43J
M57
M36
B149
M40
B69
REAR DOOR SWITCH RH
FRONT DOOR SWITCH RH
FRONT DOOR SWITCH LH
REAR DOOR SWITCH LH
B116
B108
B8
B18
3
AANWA1752GB

METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS
Connector Color	WHITE

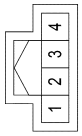
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	TO FRONT SEAT LH HARNESS
2	–	TO FRONT SEAT LH HARNESS
3	O/B	TO FRONT SEAT LH HARNESS
4	–	TO FRONT SEAT LH HARNESS
5	–	TO FRONT SEAT LH HARNESS
6	B	TO FRONT SEAT LH HARNESS

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

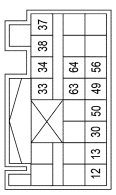
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	L	DR DOOR SW
4	–	–

Connector No.	B9
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITHOUT OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH22FY-2V-EX
Connector Color	YELLOW

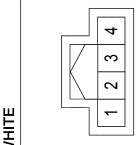
H.S.



Terminal No.	Color of Wire	Signal Name
12	G	P-LH (+)
13	BG	P-LH (-)
30	O/B	LH SEAT BELT BUCKLE SWITCH +
33	Y	S-LH (+)
34	BR	S-LH (-)
37	B	C-LH (+)
38	W	C-LH (-)
49	L/W	LH B-PILLAR SATELLITE SENSOR (+)
50	Y/B	LH B-PILLAR SATELLITE SENSOR (-)
56	SHIELD	GND
63	W	LH C-PILLAR SATELLITE SENSOR (+)
64	G	LH C-PILLAR SATELLITE SENSOR (-)

Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

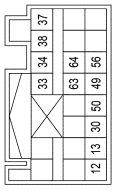
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	SB	RL DOOR SW
4	–	–

Connector No.	B22
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITH OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH22FY-2V-EX
Connector Color	YELLOW

H.S.



Terminal No.	Color of Wire	Signal Name
12	G	P-LH (+)
13	BG	P-LH (-)
30	O/B	LH SEAT BELT BUCKLE SWITCH +
33	Y	S-LH (+)
34	BR	S-LH (-)
37	B	C-LH (+)
38	W	C-LH (-)
49	L/W	LH B-PILLAR SATELLITE SENSOR (+)
50	Y/B	LH B-PILLAR SATELLITE SENSOR (-)
56	SHIELD	GND
63	W	LH C-PILLAR SATELLITE SENSOR (+)
64	G	LH C-PILLAR SATELLITE SENSOR (-)

AANIA5310GB

METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1J	P	TO MAIN HARNESS
2J	R/Y	TO MAIN HARNESS
3J	L	TO MAIN HARNESS
4J	L/B	TO MAIN HARNESS
5J	G/W	TO MAIN HARNESS
6J	LG/Y	TO MAIN HARNESS
7J	BR/LG	TO MAIN HARNESS
8J	SB/BR	TO MAIN HARNESS
9J	BR	TO MAIN HARNESS
10J	BR	TO MAIN HARNESS
11J	O/B	TO MAIN HARNESS
12J	L	TO MAIN HARNESS
13J	SB/O	TO MAIN HARNESS
14J	Y	TO MAIN HARNESS
15J	–	TO MAIN HARNESS
16J	R	TO MAIN HARNESS
17J	G	TO MAIN HARNESS
18J	SB	TO MAIN HARNESS
19J	O	TO MAIN HARNESS
20J	O/B	TO MAIN HARNESS
21J	Y/R	TO MAIN HARNESS
22J	P	TO MAIN HARNESS
23J	W	TO MAIN HARNESS
24J	W/R	TO MAIN HARNESS
25J	V	TO MAIN HARNESS
26J	L	TO MAIN HARNESS
27J	R	TO MAIN HARNESS
28J	L	TO MAIN HARNESS
29J	G/O	TO MAIN HARNESS
30J	SB	TO MAIN HARNESS
31J	LG	TO MAIN HARNESS
32J	R	TO MAIN HARNESS
33J	L	TO MAIN HARNESS
34J	Y	TO MAIN HARNESS
35J	P	TO MAIN HARNESS
36J	G/R	TO MAIN HARNESS
37J	LG/B	TO MAIN HARNESS
38J	SB	TO MAIN HARNESS
39J	Y/L	TO MAIN HARNESS
40J	BR	TO MAIN HARNESS
41J	L	TO MAIN HARNESS
42J	L	TO MAIN HARNESS
43J	SB	TO MAIN HARNESS
44J	BR	TO MAIN HARNESS
45J	BG	TO MAIN HARNESS
46J	P/Y	TO MAIN HARNESS
47J	Y/GR	TO MAIN HARNESS
48J	V	TO MAIN HARNESS
49J	BR/Y	TO MAIN HARNESS
50J	G/W	TO MAIN HARNESS
51J	–	TO MAIN HARNESS
52J	SHIELD	TO MAIN HARNESS
53J	R	TO MAIN HARNESS
54J	L	TO MAIN HARNESS
55J	R	TO MAIN HARNESS
56J	W	TO MAIN HARNESS
57J	L/G	TO MAIN HARNESS
58J	O	TO MAIN HARNESS
59J	–	TO MAIN HARNESS
60J	SHIELD	TO MAIN HARNESS
61J	G	TO MAIN HARNESS
62J	–	TO MAIN HARNESS
63J	R/W	TO MAIN HARNESS
64J	L/W	TO MAIN HARNESS
65J	SHIELD	TO MAIN HARNESS
66J	B	TO MAIN HARNESS
67J	SHIELD	TO MAIN HARNESS
68J	O/L	TO MAIN HARNESS
69J	SHIELD	TO MAIN HARNESS
70J	BR	TO MAIN HARNESS
71J	L/W	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
73J	–	TO MAIN HARNESS
74J	SHIELD	TO MAIN HARNESS
75J	LG/B	TO MAIN HARNESS
76J	R	TO MAIN HARNESS
77J	SHIELD	TO MAIN HARNESS
78J	GR/B	TO MAIN HARNESS
79J	B	TO MAIN HARNESS
80J	W	TO MAIN HARNESS
81J	SHIELD	TO MAIN HARNESS
82J	L/R	TO MAIN HARNESS
83J	–	TO MAIN HARNESS
84J	–	TO MAIN HARNESS
85J	Y/B	TO MAIN HARNESS
86J	G	TO MAIN HARNESS
87J	B/R	TO MAIN HARNESS
88J	SHIELD	TO MAIN HARNESS
89J	GR/R	TO MAIN HARNESS
90J	L	TO MAIN HARNESS
91J	L/B	TO MAIN HARNESS
92J	SB	TO MAIN HARNESS
93J	B	TO MAIN HARNESS
94J	L	TO MAIN HARNESS
95J	LG	TO MAIN HARNESS
96J	R	TO MAIN HARNESS
97J	B/Y	TO MAIN HARNESS
98J	L/B	TO MAIN HARNESS
99J	W/L	TO MAIN HARNESS
100J	SB	TO MAIN HARNESS

Connector No.	B85
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L/B	TO FRONT SEAT LH HARNESS
2	B	TO FRONT SEAT LH HARNESS
3	O/B	TO FRONT SEAT LH HARNESS
4	B	TO FRONT SEAT LH HARNESS
5	B	TO FRONT SEAT LH HARNESS
6	SB/O	TO FRONT SEAT LH HARNESS
7	V	TO FRONT SEAT LH HARNESS
8	BR/LG	TO FRONT SEAT LH HARNESS
9	LG/Y	TO FRONT SEAT LH HARNESS
10	Y	TO FRONT SEAT LH HARNESS
11	R	TO FRONT SEAT LH HARNESS
12	–	TO FRONT SEAT LH HARNESS

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	LG/R	AS DOOR SW
4	–	–

Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	LG	RR DOOR SW
4	–	–

AANIA5311GB

METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	B149
Connector Name	WIRE TO WIRE
Connector Type	TH80MDGY-CS16-TM4
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1A	SB/G	TO MAIN HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
1A	SB	TO MAIN HARNESS -(WITH CLIMATE CONTROLLED SEATS)
2A	L	TO MAIN HARNESS
3A	V	TO MAIN HARNESS
4A	SB/R	TO MAIN HARNESS
5A	–	TO MAIN HARNESS
6A	LG/Y	TO MAIN HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
6A	LG	TO MAIN HARNESS -(WITH CLIMATE CONTROLLED SEATS)
7A	W	TO MAIN HARNESS
8A	B	TO MAIN HARNESS
9A	L/B	TO MAIN HARNESS
10A	W	TO MAIN HARNESS
11A	LG	TO MAIN HARNESS
12A	BR/O	TO MAIN HARNESS
13A	Y/W	TO MAIN HARNESS
14A	R/G	TO MAIN HARNESS
15A	Y/L	TO MAIN HARNESS
16A	O/L	TO MAIN HARNESS
17A	L	TO MAIN HARNESS
18A	Y	TO MAIN HARNESS
19A	LG	TO MAIN HARNESS
20A	R	TO MAIN HARNESS
21A	BG	TO MAIN HARNESS
22A	LG/R	TO MAIN HARNESS

23A	Y/LG	TO MAIN HARNESS
24A	BR/Y	TO MAIN HARNESS
25A	–	TO MAIN HARNESS
26A	GR	TO MAIN HARNESS
27A	LG	TO MAIN HARNESS
28A	LG/B	TO MAIN HARNESS
29A	–	TO MAIN HARNESS
30A	BR	TO MAIN HARNESS
31A	W/R	TO MAIN HARNESS
32A	G/R	TO MAIN HARNESS
33A	–	TO MAIN HARNESS
34A	SHIELD	TO MAIN HARNESS
35A	P	TO MAIN HARNESS
36A	B	TO MAIN HARNESS
37A	–	TO MAIN HARNESS
38A	R/B	TO MAIN HARNESS
39A	G/O	TO MAIN HARNESS
40A	V	TO MAIN HARNESS
41A	SHIELD	TO MAIN HARNESS
42A	SHIELD	TO MAIN HARNESS
43A	R	TO MAIN HARNESS
44A	G	TO MAIN HARNESS
45A	–	TO MAIN HARNESS
46A	–	TO MAIN HARNESS
47A	Y	TO MAIN HARNESS
48A	R/W	TO MAIN HARNESS
49A	R/L	TO MAIN HARNESS
50A	B	TO MAIN HARNESS
51A	–	TO MAIN HARNESS
52A	–	TO MAIN HARNESS
53A	–	TO MAIN HARNESS
54A	–	TO MAIN HARNESS
55A	–	TO MAIN HARNESS
56A	–	TO MAIN HARNESS
57A	–	TO MAIN HARNESS
58A	–	TO MAIN HARNESS
59A	–	TO MAIN HARNESS
60A	G/W	TO MAIN HARNESS
61A	–	TO MAIN HARNESS
62A	–	TO MAIN HARNESS
63A	–	TO MAIN HARNESS
64A	–	TO MAIN HARNESS
65A	–	TO MAIN HARNESS
66A	–	TO MAIN HARNESS
67A	–	TO MAIN HARNESS
68A	–	TO MAIN HARNESS
69A	Y/R	TO MAIN HARNESS
70A	R/G	TO MAIN HARNESS
71A	–	TO MAIN HARNESS
72A	Y/B	TO MAIN HARNESS
73A	G	TO MAIN HARNESS
74A	B/R	TO MAIN HARNESS
75A	SHIELD	TO MAIN HARNESS

76A	GR/R	TO MAIN HARNESS
77A	L	TO MAIN HARNESS
78A	SHIELD	TO MAIN HARNESS
79A	Y	TO MAIN HARNESS
80A	L	TO MAIN HARNESS
81A	R	TO MAIN HARNESS
82A	SHIELD	TO MAIN HARNESS
83A	LG/B	TO MAIN HARNESS
84A	R	TO MAIN HARNESS
85A	SHIELD	TO MAIN HARNESS
86A	GR/B	TO MAIN HARNESS
87A	B	TO MAIN HARNESS
88A	W	TO MAIN HARNESS
89A	SHIELD	TO MAIN HARNESS
90A	G	TO MAIN HARNESS
91A	W/L	TO MAIN HARNESS
92A	BR	TO MAIN HARNESS
93A	L/Y	TO MAIN HARNESS
94A	R/L	TO MAIN HARNESS
95A	BR	TO MAIN HARNESS
96A	R	TO MAIN HARNESS
97A	LG	TO MAIN HARNESS
98A	B/V	TO MAIN HARNESS
99A	O/L	TO MAIN HARNESS
100A	BR/W	TO MAIN HARNESS

Connector No.	B160
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L/B	TO FRONT SEAT RH HARNESS
2	B	TO FRONT SEAT RH HARNESS
3	BG	TO FRONT SEAT RH HARNESS
4	B	TO FRONT SEAT RH HARNESS
5	B	TO FRONT SEAT RH HARNESS
6	Y/W	TO FRONT SEAT RH HARNESS
7	BR/Y	TO FRONT SEAT RH HARNESS
8	SB	TO FRONT SEAT RH HARNESS - (WITH CLIMATE CONTROLLED SEATS)
8	SB/G	TO FRONT SEAT RH HARNESS (WITHOUT CLIMATE CONTROLLED SEATS)

9	LG	TO FRONT SEAT RH HARNESS - (WITH CLIMATE CONTROLLED SEATS)
9	LG/Y	TO FRONT SEAT RH HARNESS (WITHOUT CLIMATE CONTROLLED SEATS)
10	Y/L	TO FRONT SEAT RH HARNESS
11	W	TO FRONT SEAT RH HARNESS
12	–	TO FRONT SEAT RH HARNESS

Connector No.	B162
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS
Connector Color	WHITE

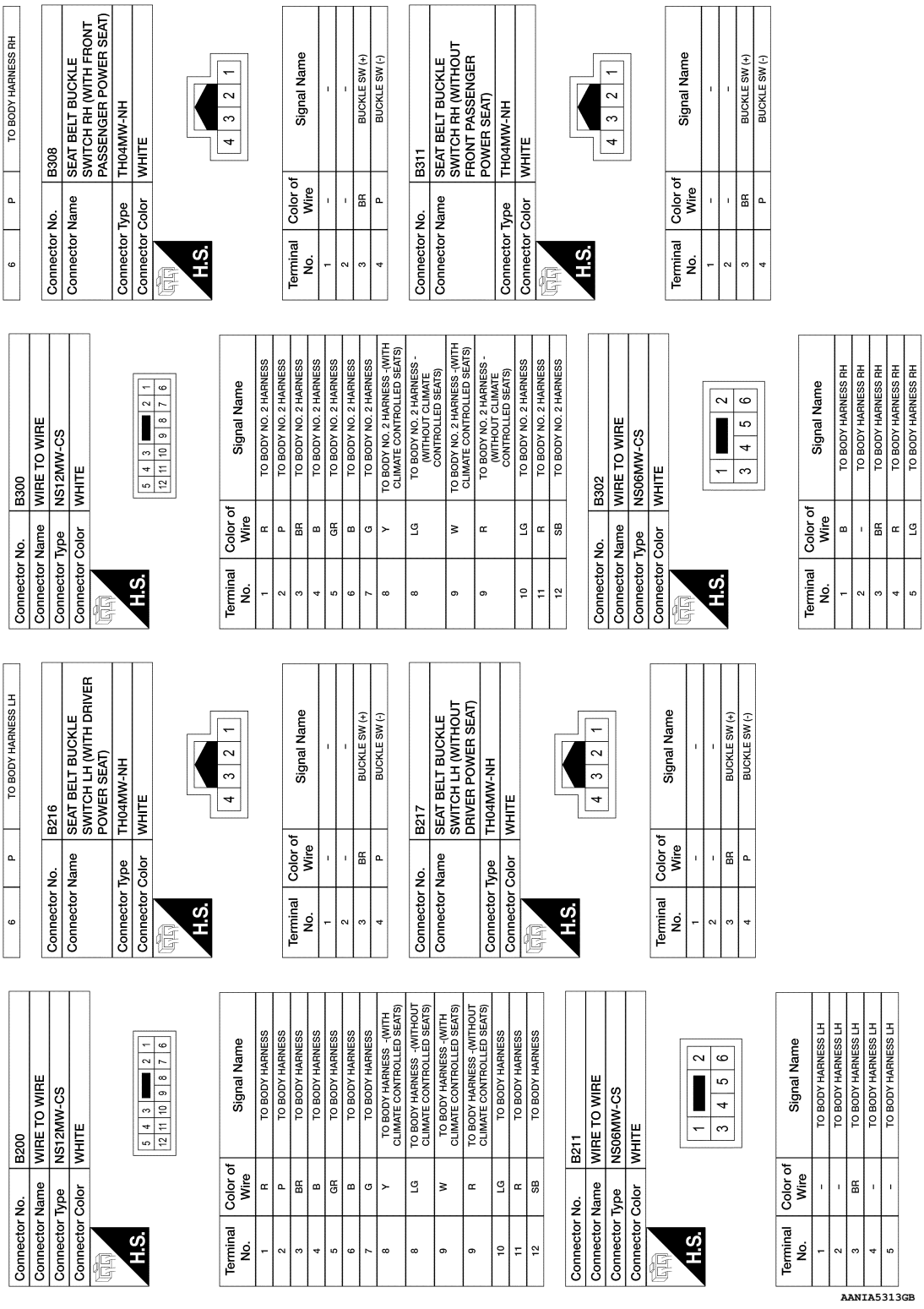
H.S.

2		1
6	5	4	3

Terminal No.	Color of Wire	Signal Name
1	B	TO FRONT SEAT RH HARNESS
2	–	TO FRONT SEAT RH HARNESS
3	BG	TO FRONT SEAT RH HARNESS
4	LG/Y	TO FRONT SEAT RH HARNESS
5	SB/G	TO FRONT SEAT RH HARNESS
6	B	TO FRONT SEAT RH HARNESS

AANIA5312GB

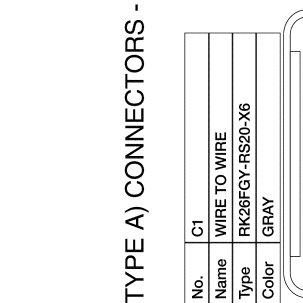
METER (TYPE A) CONNECTORS - WITH VK56VD



METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	C1
Connector Name	WIRE TO WIRE
Connector Type	RK26FGY-RS20-X6
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
1C	Y/V	TO ENGINE ROOM HARNESS
2C	W/L	TO ENGINE ROOM HARNESS
3C	B	TO ENGINE ROOM HARNESS
4C	BR/W	TO ENGINE ROOM HARNESS
5C	BR/Y	TO ENGINE ROOM HARNESS
6C	Y	TO ENGINE ROOM HARNESS
7C	G/R	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
7C	R	TO ENGINE ROOM HARNESS - (WITH VK56VD)
8C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
8C	O/B	TO ENGINE ROOM HARNESS - (WITH VK56VD)
9C	W/L	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
9C	SB	TO ENGINE ROOM HARNESS - (WITH VK56VD)
10C	GR/R	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
10C	GR	TO ENGINE ROOM HARNESS - (WITH VK56VD)
11C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
11C	R/W	TO ENGINE ROOM HARNESS - (WITH VK56VD)
12C	Y	TO ENGINE ROOM HARNESS
13C	B	TO ENGINE ROOM HARNESS
14C	BG	TO ENGINE ROOM HARNESS
15C	Y	TO ENGINE ROOM HARNESS
16C	B	TO ENGINE ROOM HARNESS
17C	V	TO ENGINE ROOM HARNESS
18C	BG	TO ENGINE ROOM HARNESS
19C	L	TO ENGINE ROOM HARNESS
20C	W	TO ENGINE ROOM HARNESS
21C	LG	TO ENGINE ROOM HARNESS
22C	SHIELD	TO ENGINE ROOM HARNESS
23C	G/B	TO ENGINE ROOM HARNESS
24C	G/B	TO ENGINE ROOM HARNESS
25C	W	TO ENGINE ROOM HARNESS
26C	B	TO ENGINE ROOM HARNESS
27C	LG	TO ENGINE ROOM HARNESS
28C	G/W	TO ENGINE ROOM HARNESS
29C	R/LG	TO ENGINE ROOM HARNESS
30C	R/L	TO ENGINE ROOM HARNESS
31C	B	TO ENGINE ROOM HARNESS
32C	R	TO ENGINE ROOM HARNESS
33C	L/W	TO ENGINE ROOM HARNESS
34C	L	TO ENGINE ROOM HARNESS
35C	R/W	TO ENGINE ROOM HARNESS
36C	L	TO ENGINE ROOM HARNESS
37C	Y	TO ENGINE ROOM HARNESS
38C	GR	TO ENGINE ROOM HARNESS
39C	R	TO ENGINE ROOM HARNESS
40C	P	TO ENGINE ROOM HARNESS
41C	V	TO ENGINE ROOM HARNESS
42C	LG/B	TO ENGINE ROOM HARNESS
43C	Y/B	TO ENGINE ROOM HARNESS
44C	R	TO ENGINE ROOM HARNESS
45C	G	TO ENGINE ROOM HARNESS
46C	BR	TO ENGINE ROOM HARNESS
47C	B	TO ENGINE ROOM HARNESS
48C	Y/R	TO ENGINE ROOM HARNESS
49C	R/Y	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
49C	V	TO ENGINE ROOM HARNESS - (WITH VK56VD)
50C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
50C	B/Y	TO ENGINE ROOM HARNESS - (WITH VK56VD)
51C	V	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
51C	B	TO ENGINE ROOM HARNESS - (WITH VK56VD)
52C	V/W	TO ENGINE ROOM HARNESS

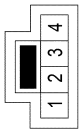
Connector No.	C37
Connector Name	FUEL LEVEL SENSOR UNIT AND FUEL PUMP
Connector Type	E06FGY-RS
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR	PUMP +
2	L	PUMP -
3	V/W	TEMP +
4	R	TEMP -
5	BR/Y	SENDER +
6	Y/V	SENDER -

Connector No.	E19
Connector Name	WIRE TO WIRE
Connector Type	NS04MW-CS
Connector Color	WHITE

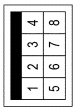
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	TO ENGINE CONTROL HARNESS
2	W	TO ENGINE CONTROL HARNESS
3	P	TO ENGINE CONTROL HARNESS
4	SB	TO ENGINE CONTROL HARNESS

Connector No.	E22
Connector Name	WIRE TO WIRE
Connector Type	M08MB-LC
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	V	TO ENGINE CONTROL HARNESS
2	L	TO ENGINE CONTROL HARNESS
3	W	TO ENGINE CONTROL HARNESS
4	L	TO ENGINE CONTROL HARNESS
5	L	TO ENGINE CONTROL HARNESS
6	L/Y	TO ENGINE CONTROL HARNESS
7	W/L	TO ENGINE CONTROL HARNESS
8	R	TO ENGINE CONTROL HARNESS

AANIA5314GB

METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	E26
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG/B	TO MAIN HARNESS
2	R/W	TO MAIN HARNESS
3	Y/R	TO MAIN HARNESS
4	G/R	TO MAIN HARNESS
5	G/W	TO MAIN HARNESS
6	P	TO MAIN HARNESS
7	O	TO MAIN HARNESS
8	R	TO MAIN HARNESS
9	G	TO MAIN HARNESS
10	LG	TO MAIN HARNESS
11	BR	TO MAIN HARNESS
12	GR	TO MAIN HARNESS
13	G	TO MAIN HARNESS
14	BR	TO MAIN HARNESS
15	–	TO MAIN HARNESS
16	–	TO MAIN HARNESS
17	W	TO MAIN HARNESS
18	–	TO MAIN HARNESS
19	Y/R	TO MAIN HARNESS
20	G/W	TO MAIN HARNESS
21	–	TO MAIN HARNESS
22	–	TO MAIN HARNESS
23	–	TO MAIN HARNESS
24	O/L	TO MAIN HARNESS

Connector No.	E41
Connector Name	WIRE TO WIRE
Connector Type	RK26MGY-RS20-X6
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1C	Y/V	TO CHASSIS HARNESS
2C	W/L	TO CHASSIS HARNESS
3C	B	TO CHASSIS HARNESS
4C	BR/W	TO CHASSIS HARNESS
5C	BR/Y	TO CHASSIS HARNESS
6C	Y	TO CHASSIS HARNESS
7C	G/R	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
7C	R	TO CHASSIS HARNESS - (WITH VK56VD)
8C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
8C	O/B	TO CHASSIS HARNESS - (WITH VK56VD)
9C	W/L	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
9C	SB	TO CHASSIS HARNESS - (WITH VK56VD)
10C	GR/R	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
10C	GR	TO CHASSIS HARNESS - (WITH VK56VD)
11C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
11C	R/W	TO CHASSIS HARNESS - (WITH VK56VD)
12C	Y	TO CHASSIS HARNESS
13C	B	TO CHASSIS HARNESS
14C	BG	TO CHASSIS HARNESS
15C	Y	TO CHASSIS HARNESS
16C	B	TO CHASSIS HARNESS
17C	V	TO CHASSIS HARNESS
18C	BG	TO CHASSIS HARNESS
19C	L	TO CHASSIS HARNESS
20C	BG	TO CHASSIS HARNESS
21C	B	TO CHASSIS HARNESS

22C	SHIELD	TO CHASSIS HARNESS
23C	G/B	TO CHASSIS HARNESS
24C	G/Y	TO CHASSIS HARNESS
25C	W	TO CHASSIS HARNESS
26C	B	TO CHASSIS HARNESS
27C	LG	TO CHASSIS HARNESS
28C	G/W	TO CHASSIS HARNESS
29C	R/G	TO CHASSIS HARNESS - (WITHOUT BULB CHECK)
29C	G/R	TO CHASSIS HARNESS - (WITH BULB CHECK)
30C	R/L	TO CHASSIS HARNESS
31C	B	TO CHASSIS HARNESS
32C	R	TO CHASSIS HARNESS
33C	L/W	TO CHASSIS HARNESS
34C	L	TO CHASSIS HARNESS
35C	R/W	TO CHASSIS HARNESS
36C	L	TO CHASSIS HARNESS
37C	Y	TO CHASSIS HARNESS
38C	BR	TO CHASSIS HARNESS
39C	R	TO CHASSIS HARNESS
40C	P	TO CHASSIS HARNESS
41C	V	TO CHASSIS HARNESS
42C	G/B	TO CHASSIS HARNESS
43C	Y/B	TO CHASSIS HARNESS
44C	R	TO CHASSIS HARNESS
45C	G	TO CHASSIS HARNESS
46C	BR	TO CHASSIS HARNESS
47C	B	TO CHASSIS HARNESS
48C	Y/R	TO CHASSIS HARNESS
49C	R/Y	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
49C	V	TO CHASSIS HARNESS - (WITH VK56VD)
50C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
50C	B/Y	TO CHASSIS HARNESS - (WITH VK56VD)
51C	V	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
51C	B	TO CHASSIS HARNESS - (WITH VK56VD)
52C	B	TO CHASSIS HARNESS - (WITHOUT FFV)
52C	L	TO CHASSIS HARNESS - (WITH FFV)
52C	V/W	TO CHASSIS HARNESS

Connector No.	E66
Connector Name	WIRE TO WIRE
Connector Type	RS06MGY
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR	TO ENGINE ROOM SUB-HARNESS
2	Y	TO ENGINE ROOM SUB-HARNESS
3	SB	TO ENGINE ROOM SUB-HARNESS
4	W/L	TO ENGINE ROOM SUB-HARNESS
5	Y/B	TO ENGINE ROOM SUB-HARNESS
6	L/Y	TO ENGINE ROOM SUB-HARNESS

Connector No.	E75
Connector Name	AMBIENT SENSOR
Connector Type	RS02FB
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	R	SENS GND
2	W/B	AMB SENS

AANIA5315GB

METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	E106
Connector Name	WASHER FLUID LEVEL SWITCH
Connector Type	YEZ02FLGY
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GND
2	W	WASHER SW

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1G	G	TO MAIN HARNESS
2G	B/R	TO MAIN HARNESS
3G	W/B	TO MAIN HARNESS
4G	BR/W	TO MAIN HARNESS
5G	BR	TO MAIN HARNESS
6G	P	TO MAIN HARNESS - (WITH VK56VD)

6G	R/W	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
7G	Y	TO MAIN HARNESS
8G	G	TO MAIN HARNESS
9G	R	TO MAIN HARNESS
10G	W	TO MAIN HARNESS
11G	R/G	TO MAIN HARNESS
12G	W/B	TO MAIN HARNESS
13G	BR	TO MAIN HARNESS
14G	Y/B	TO MAIN HARNESS
15G	G/W	TO MAIN HARNESS
16G	G	TO MAIN HARNESS
17G	G/Y	TO MAIN HARNESS
18G	G/Y	TO MAIN HARNESS
19G	Y/V	TO MAIN HARNESS
20G	G/Y	TO MAIN HARNESS
21G	B/Y	TO MAIN HARNESS
22G	G/R	TO MAIN HARNESS
23G	Y/R	TO MAIN HARNESS
24G	G/B	TO MAIN HARNESS
25G	R/W	TO MAIN HARNESS
26G	R	TO MAIN HARNESS
27G	LG	TO MAIN HARNESS
28G	G/B	TO MAIN HARNESS
29G	G/B	TO MAIN HARNESS
30G	BR/Y	TO MAIN HARNESS
31G	P	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
31G	R	TO MAIN HARNESS - (WITH VK56VD)
32G	P	TO MAIN HARNESS
33G	Y/L	TO MAIN HARNESS
34G	GR	TO MAIN HARNESS
35G	G/R	TO MAIN HARNESS
36G	SB	TO MAIN HARNESS
37G	R/W	TO MAIN HARNESS
38G	BR	TO MAIN HARNESS
39G	BR	TO MAIN HARNESS
40G	–	TO MAIN HARNESS
41G	R/G	TO MAIN HARNESS
42G	O	TO MAIN HARNESS
43G	B	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
43G	G	TO MAIN HARNESS - (WITH VK56VD)
44G	R/Y	TO MAIN HARNESS
45G	G	TO MAIN HARNESS
46G	LG	TO MAIN HARNESS
47G	R	TO MAIN HARNESS
48G	W	TO MAIN HARNESS
49G	–	TO MAIN HARNESS
50G	BR	TO MAIN HARNESS
51G	R	TO MAIN HARNESS
52G	L	TO MAIN HARNESS
53G	W	TO MAIN HARNESS
54G	W	TO MAIN HARNESS
55G	G	TO MAIN HARNESS
56G	W	TO MAIN HARNESS
57G	Y	TO MAIN HARNESS
58G	BG	TO MAIN HARNESS
59G	BG	TO MAIN HARNESS
60G	BG	TO MAIN HARNESS
61G	B	TO MAIN HARNESS
62G	W	TO MAIN HARNESS
63G	R	TO MAIN HARNESS
64G	W/L	TO MAIN HARNESS
65G	W/R	TO MAIN HARNESS
66G	BG	TO MAIN HARNESS
67G	BG	TO MAIN HARNESS
68G	B	TO MAIN HARNESS
69G	Y	TO MAIN HARNESS
70G	L	TO MAIN HARNESS
71G	R/W	TO MAIN HARNESS
72G	L/W	TO MAIN HARNESS
73G	SHIELD	TO MAIN HARNESS
74G	W	TO MAIN HARNESS
75G	R	TO MAIN HARNESS
76G	R/G	TO MAIN HARNESS
77G	G	TO MAIN HARNESS
78G	W	TO MAIN HARNESS
79G	–	TO MAIN HARNESS
80G	R	TO MAIN HARNESS
81G	L	TO MAIN HARNESS
82G	R	TO MAIN HARNESS
83G	L	TO MAIN HARNESS
84G	L	TO MAIN HARNESS
85G	W/B	TO MAIN HARNESS
86G	B/R	TO MAIN HARNESS
87G	W/B	TO MAIN HARNESS
88G	P	TO MAIN HARNESS
89G	L	TO MAIN HARNESS
90G	G	TO MAIN HARNESS
91G	G	TO MAIN HARNESS
92G	V/W	TO MAIN HARNESS
93G	BR	TO MAIN HARNESS
94G	G	TO MAIN HARNESS
95G	G	TO MAIN HARNESS
96G	W	TO MAIN HARNESS
97G	R	TO MAIN HARNESS
98G	W/B	TO MAIN HARNESS
99G	BR	TO MAIN HARNESS
100G	GR/W	TO MAIN HARNESS

Connector No.	E160
Connector Name	PARKING BRAKE SWITCH
Connector Type	P01FB-A
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	PKB SW

Connector No.	F10
Connector Name	WIRE TO WIRE
Connector Type	M08FB-LC
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	V	TO ENGINE ROOM HARNESS
2	L/LG	TO ENGINE ROOM HARNESS
3	W	TO ENGINE ROOM HARNESS
4	L	TO ENGINE ROOM HARNESS
5	L/G	TO ENGINE ROOM HARNESS
6	L/Y	TO ENGINE ROOM HARNESS
7	W/L	TO ENGINE ROOM HARNESS
8	R	TO ENGINE ROOM HARNESS

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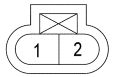
METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	F28
Connector Name	ENGINE COOLANT TEMPERATURE SENSOR 1
Connector Type	E02FGY-RS
Connector Color	GRAY

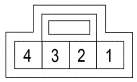
H.S.



Terminal No.	Color of Wire	Signal Name
1	R/W	OUT
2	R	GNDA OTHER

Connector No.	F33
Connector Name	WIRE TO WIRE
Connector Type	NS04FW-CS
Connector Color	WHITE

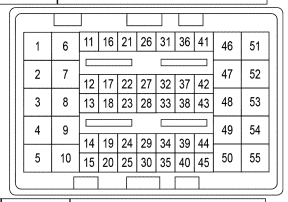
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	TO ENGINE ROOM HARNESS
2	W	TO ENGINE ROOM HARNESS
3	P	TO ENGINE ROOM HARNESS
4	SB	TO ENGINE ROOM HARNESS

Connector No.	F78
Connector Name	ECM (WITH VK56VD)
Connector Type	MAB35FB-MEB20-LH
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	R	FUEL INJECTOR DRIVER POWER SUPPLY
2	SB	HIGH PRESSURE FUEL PUMP DRIVER POWER SUPPLY
3	B/R	FUEL INJECTOR NO. 8 (LO)
4	O	FUEL INJECTOR NO. 3 (LO)
5	G	FUEL INJECTOR NO. 2, 3 (HI)
6	R	FUEL INJECTOR DRIVER POWER SUPPLY
7	V/B	FUEL INJECTOR NO. 5, 8 (HI)
8	B/W	FUEL INJECTOR NO. 5 (LO)
9	R/W	INJ-L #2
10	B	ECM GROUND
11	–	–
12	L/Y	REFRIGERANT PRESSURE SENSOR
13	W/L	SENSOR GROUND
14	SHIELD	SHIELD
15	W	KNOCK SENSOR (BANK 1)
16	–	–
17	V	EXHAUST GAS TEMPERATURE SENSOR (BANK 2)
18	W	KNOCK SENSOR (BANK 2)
19	GR/R	EXHAUST GAS TEMPERATURE SENSOR (BANK 1)
20	SHIELD	SENSOR GROUND
21	–	–
22	L/Y	ENGINE OIL TEMPERATURE SENSOR
23	L/Y	ENGINE OIL PRESSURE SENSOR
24	P/GR	POWER STEERING PRESSURE SENSOR
25	V/W	FUEL RAIL PRESSURE SENSOR
26	–	–
27	W/G	SENSOR POWER SUPPLY
28	Y/R	SENSOR POWER SUPPLY
29	SB	SENSOR POWER SUPPLY
30	SB	SENSOR POWER SUPPLY
31	BR	COOLING FAN SPEED
32	LG	BATTERY TEMPERATURE SENSOR
33	R/W	CRANKSHAFT POSITION SENSOR (POS)
34	–	–
35	R/W	ENGINE COOLANT TEMPERATURE SENSOR 1
36	G/O	INTAKE AIR TEMPERATURE SENSOR
37	G/B	MASS AIR FLOW SENSOR
38	V	BATTERY CURRENT SENSOR
39	–	–
40	L/R	CAMSHAFT POSITION SENSOR (PHASE) (BANK 1)
41	P	EXHAUST VALVE TIMING CONTROL POSITION SENSOR (BANK 1)
42	R	SENSOR GROUND
43	R	SENSOR GROUND
44	G/W	SENSOR GROUND
45	BR/W	SENSOR GROUND
46	SB	HIGH PRESSURE FUEL PUMP DRIVER POWER SUPPLY
47	BR	FUEL INJECTOR NO. 1, 6 (HI)
48	Y	FUEL INJECTOR NO. 1 (LO)
49	L	FUEL INJECTOR NO. 4 (LO)
50	B	ECM GROUND
51	P	HIGH PRESSURE FUEL PUMP DRIVER POWER SUPPLY
52	R	FUEL INJECTOR NO. 6 (LO)
53	V	FUEL INJECTOR NO. 7 (LO)
54	W	FUEL INJECTOR NO. 4, 7 (HI)
55	B	ECM GROUND

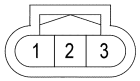
Connector No.	F223
Connector Name	WIRE TO WIRE
Connector Type	RS06FGY-PR
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR	TO ENGINE ROOM HARNESS
2	Y	TO ENGINE ROOM HARNESS
3	SB	TO ENGINE ROOM HARNESS
4	W/L	TO ENGINE ROOM HARNESS
5	Y/B	TO ENGINE ROOM HARNESS
6	L/Y	TO ENGINE ROOM HARNESS

Connector No.	F229
Connector Name	ENGINE OIL PRESSURE SENSOR
Connector Type	RH03FB
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	W/L	GND
2	L/Y	VOUT
3	SB	VCC

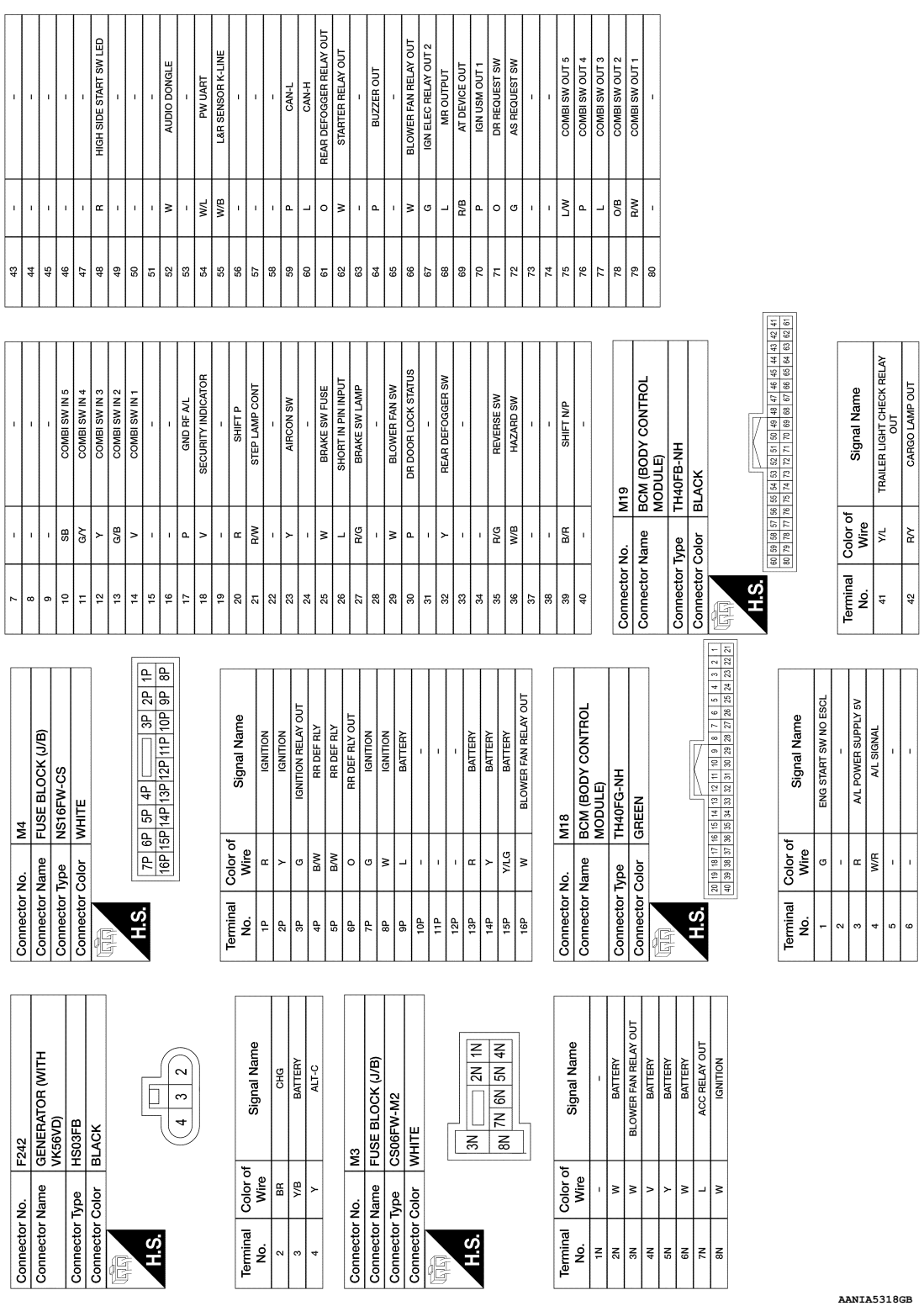
Connector No.	F240
Connector Name	GENERATOR (WITH VK56VD)
Connector Type	E-LA6
Connector Color	-

H.S.

Terminal No.	Color of Wire	Signal Name
5	B	GROUND

AANIA5317GB

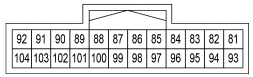
METER (TYPE A) CONNECTORS - WITH VK56VD



METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FGY-NH
Connector Color	GRAY

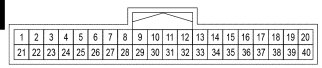
H.S.



Terminal No.	Color of Wire	Signal Name
81	–	–
82	W	RL DOOR SW
83	–	–
84	–	–
85	–	–
86	G/B	TRAILER FLASHER RL
87	Y/B	TRAILER FLASHER RR
88	–	–
89	–	–
90	–	–
91	–	–
92	O	RR FLASHER
93	R	RR DOOR SW
94	G	AS DOOR SW
95	–	–
96	BG	DR DOOR SW
97	P/L	CARGO LAMP SW
98	–	–
99	–	–
100	–	–
101	–	–
102	–	–
103	G/B	RL FLASHER
104	–	–

Connector No.	M24
Connector Name	COMBINATION METER (WITH TYPE A)
Connector Type	TH40FW-NH
Connector Color	WHITE

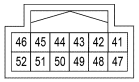
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	GND(STRG/SATELLITE SW GND)
2	–	–
3	–	–
4	–	–
5	–	–
6	–	–
7	V	SECURITY
8	–	–
9	BG	AS BELT SW (W/O ODS)
10	LG	TOW MODE SW
11	BR	CHG
12	BR	LED HEAD LAMP (R)
13	W	LED HEAD LAMP (L)
14	R	ACC SW
15	W	OUTSIDE TEMP SENSOR (WITH VK56VD)
16	O	AIR BAG
17	–	–
18	P	TRIP RESET SW
19	–	–
20	R	OUTSIDE TEMP GND (WITH VK56VD)
21	–	–
22	P	STRG SW A
23	R	STRG SW B
24	W	WASHER SW
25	–	–
26	G	PKB SW
27	P/L	AS BELT SW (WITH ODS)
28	O/B	DR BELT SW
29	–	–
30	–	–
31	–	–
32	BR	AT SHIFT UP
33	V/W	AT SHIFT DOWN
34	–	–
35	–	–
36	W	ILL UP SW
37	R	ILL DOWN SW
38	G	8P/R OUTPUT
39	–	–
40	–	–

Connector No.	M25
Connector Name	COMBINATION METER (WITH TYPE A)
Connector Type	TH12FW-NH
Connector Color	WHITE

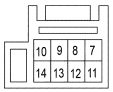
H.S.



Terminal No.	Color of Wire	Signal Name
41	W	IGN
42	R	BAT
43	Y/V	FUEL SENSOR GND
44	GR	ILL CONT OUTPUT
45	P	CAN-L
46	L	CAN-H
47	B	G1
48	BR/Y	FUEL SENSOR
49	–	–
50	–	–
51	LG	M CAN-L
52	SB	M CAN-H

Connector No.	M30
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-1V
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
7	B/Y	ASCD GND -(WITH HEATED STEERING WHEEL)
8	GR	ILL (-) - (WITHOUT HEATED STEERING WHEEL)
8	R	AUDIO STRG SW REMOTE B - (WITH HEATED STEERING WHEEL)
9	G/Y	ASCD SW - (WITHOUT HEATED STEERING WHEEL)
9	P	AUDIO STRG SW REMOTE A - (WITH HEATED STEERING WHEEL)
10	P	AUDIO STRG SW REMOTE A - (WITHOUT HEATED STEERING WHEEL)
10	G/Y	ASCD SW - (WITH HEATED STEERING WHEEL)
11	R/W	HORN SWITCH OUTPUT - (WITHOUT HEATED STEERING WHEEL)
11	B	AUDIO STRG SW GND - (WITH HEATED STEERING WHEEL)
12	B	AUDIO STRG SW GND -(WITHOUT HEATED STEERING WHEEL)
13	B/Y	ASCD GND -(WITHOUT HEATED STEERING WHEEL)
14	R	AUDIO STRG SW REMOTE B - (WITHOUT HEATED STEERING WHEEL)

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METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1G	G	TO ENGINE ROOM HARNESS
2G	B/R	TO ENGINE ROOM HARNESS
3G	W	TO ENGINE ROOM HARNESS
4G	BR/W	TO ENGINE ROOM HARNESS
5G	–	TO ENGINE ROOM HARNESS
6G	R/W	TO ENGINE ROOM HARNESS
7G	Y	TO ENGINE ROOM HARNESS
8G	G	TO ENGINE ROOM HARNESS
9G	R	TO ENGINE ROOM HARNESS
10G	W	TO ENGINE ROOM HARNESS
11G	R/G	TO ENGINE ROOM HARNESS
12G	W/B	TO ENGINE ROOM HARNESS
13G	BR	TO ENGINE ROOM HARNESS
14G	Y/B	TO ENGINE ROOM HARNESS
15G	G/W	TO ENGINE ROOM HARNESS
16G	G	TO ENGINE ROOM HARNESS
17G	O	TO ENGINE ROOM HARNESS
18G	G/Y	TO ENGINE ROOM HARNESS
19G	Y/V	TO ENGINE ROOM HARNESS
20G	G/Y	TO ENGINE ROOM HARNESS
21G	B/Y	TO ENGINE ROOM HARNESS
22G	G/R	TO ENGINE ROOM HARNESS
23G	Y/R	TO ENGINE ROOM HARNESS
24G	G/B	TO ENGINE ROOM HARNESS
25G	R/W	TO ENGINE ROOM HARNESS
26G	R	TO ENGINE ROOM HARNESS
27G	LG	TO ENGINE ROOM HARNESS
28G	G/B	TO ENGINE ROOM HARNESS
29G	G/B	TO ENGINE ROOM HARNESS
30G	BR/Y	TO ENGINE ROOM HARNESS
31G	R	TO ENGINE ROOM HARNESS
32G	R	TO ENGINE ROOM HARNESS
33G	Y/L	TO ENGINE ROOM HARNESS
34G	GR	TO ENGINE ROOM HARNESS
35G	G/R	TO ENGINE ROOM HARNESS
36G	SB	TO ENGINE ROOM HARNESS
37G	R/W	TO ENGINE ROOM HARNESS
38G	BR	TO ENGINE ROOM HARNESS
39G	BR	TO ENGINE ROOM HARNESS
40G	–	TO ENGINE ROOM HARNESS
41G	R/G	TO ENGINE ROOM HARNESS
42G	O	TO ENGINE ROOM HARNESS
43G	G	TO ENGINE ROOM HARNESS
44G	R/Y	TO ENGINE ROOM HARNESS
45G	G	TO ENGINE ROOM HARNESS
46G	LG	TO ENGINE ROOM HARNESS
47G	R	TO ENGINE ROOM HARNESS
48G	W	TO ENGINE ROOM HARNESS
49G	–	TO ENGINE ROOM HARNESS
50G	BR	TO ENGINE ROOM HARNESS
51G	R	TO ENGINE ROOM HARNESS
52G	L	TO ENGINE ROOM HARNESS
53G	W	TO ENGINE ROOM HARNESS
54G	W	TO ENGINE ROOM HARNESS
55G	G	TO ENGINE ROOM HARNESS
56G	W	TO ENGINE ROOM HARNESS
57G	Y	TO ENGINE ROOM HARNESS
58G	BG	TO ENGINE ROOM HARNESS
59G	BG	TO ENGINE ROOM HARNESS
60G	BG	TO ENGINE ROOM HARNESS
61G	O	TO ENGINE ROOM HARNESS
62G	W	TO ENGINE ROOM HARNESS
63G	O	TO ENGINE ROOM HARNESS
64G	W/L	TO ENGINE ROOM HARNESS
65G	W/R	TO ENGINE ROOM HARNESS
66G	BG	TO ENGINE ROOM HARNESS
67G	O	TO ENGINE ROOM HARNESS
68G	B	TO ENGINE ROOM HARNESS
69G	Y	TO ENGINE ROOM HARNESS
70G	L	TO ENGINE ROOM HARNESS
71G	R/W	TO ENGINE ROOM HARNESS
72G	L/W	TO ENGINE ROOM HARNESS
73G	SHIELD	TO ENGINE ROOM HARNESS
74G	W	TO ENGINE ROOM HARNESS
75G	R	TO ENGINE ROOM HARNESS
76G	R/G	TO ENGINE ROOM HARNESS
77G	BG	TO ENGINE ROOM HARNESS
78G	P	TO ENGINE ROOM HARNESS
79G	–	TO ENGINE ROOM HARNESS
80G	R	TO ENGINE ROOM HARNESS
81G	L	TO ENGINE ROOM HARNESS
82G	R	TO ENGINE ROOM HARNESS
83G	L	TO ENGINE ROOM HARNESS
84G	L	TO ENGINE ROOM HARNESS
85G	W	TO ENGINE ROOM HARNESS
86G	B/R	TO ENGINE ROOM HARNESS
87G	W	TO ENGINE ROOM HARNESS
88G	G	TO ENGINE ROOM HARNESS
89G	P	TO ENGINE ROOM HARNESS
90G	G	TO ENGINE ROOM HARNESS
91G	P	TO ENGINE ROOM HARNESS
92G	V/W	TO ENGINE ROOM HARNESS
93G	BR	TO ENGINE ROOM HARNESS
94G	B	TO ENGINE ROOM HARNESS
95G	G	TO ENGINE ROOM HARNESS
96G	R	TO ENGINE ROOM HARNESS
97G	R	TO ENGINE ROOM HARNESS
98G	W/B	TO ENGINE ROOM HARNESS
99G	R	TO ENGINE ROOM HARNESS
100G	GR/W	TO ENGINE ROOM HARNESS

Connector No.	M32
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITH OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH28FY-EX
Connector Color	YELLOW

H.S.

Terminal No.	Color of Wire	Signal Name
1	R	IGN
2	B	GND
3	Y	DR1 (+)
4	Y/B	DR1 (-)
6	O	AS1 (+)
7	G	AS1 (-)
8	P	AS2 (+)
9	Y	AS2 (-)
18	GR/R	ECZS (+)
19	GR/B	ECZS (-)
22	SHIELD	ECZS GND
23	O	AIRBAG WARN LAMP
24	P/L	SEATBELT REMINDER
25	R/Y	TELLTALE LAMP A
51	LG/B	RH DOOR SATELLITE SENSOR+
52	Y/B	RH DOOR SATELLITE SENSOR -
53	L	LH DOOR SATELLITE SENSOR+
54	W	LH DOOR SATELLITE SENSOR -
59	L	CAN-H
60	P	CAN-L

Connector No.	M35
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITHOUT OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH28FY-EX
Connector Color	YELLOW

H.S.

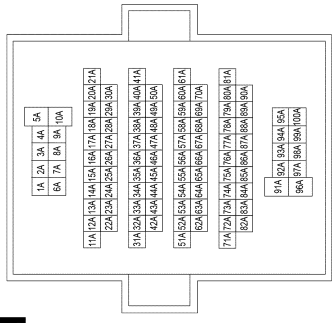
Terminal No.	Color of Wire	Signal Name
1	R	IGN
2	B	GND
3	Y	DR1 (+)
4	Y/B	DR1 (-)
6	O	AS1 (+)
7	G	AS1 (-)
8	P	AS2 (+)
9	Y	AS2 (-)
18	GR/R	ECZS (+)
19	GR/B	ECZS (-)
22	SHIELD	ECZS GND
23	O	AIRBAG WARN LAMP
51	LG/B	RH DOOR SATELLITE SENSOR+
52	Y/B	RH DOOR SATELLITE SENSOR -
53	L	LH DOOR SATELLITE SENSOR+
54	W	LH DOOR SATELLITE SENSOR -
59	L	CAN-H
60	P	CAN-L

AANIA5320GB

METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	TH80FDGY-CS16-TM4
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
1A	W	TO BODY NO. 2 HARNESS
2A	LG	TO BODY NO. 2 HARNESS
3A	V	TO BODY NO. 2 HARNESS
4A	SB	TO BODY NO. 2 HARNESS
5A	–	TO BODY NO. 2 HARNESS
6A	BG	TO BODY NO. 2 HARNESS - (WITH CLIMATE CONTROLLED SEAT)
6A	LG	TO BODY NO. 2 HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
7A	W	TO BODY NO. 2 HARNESS
8A	B	TO BODY NO. 2 HARNESS
9A	L/B	TO BODY NO. 2 HARNESS
10A	W	TO BODY NO. 2 HARNESS
11A	R	TO BODY NO. 2 HARNESS
12A	BR	TO BODY NO. 2 HARNESS
13A	G	TO BODY NO. 2 HARNESS
14A	R/G	TO BODY NO. 2 HARNESS
15A	O	TO BODY NO. 2 HARNESS
16A	O/L	TO BODY NO. 2 HARNESS
17A	L	TO BODY NO. 2 HARNESS
18A	Y	TO BODY NO. 2 HARNESS
19A	B/W	TO BODY NO. 2 HARNESS
20A	R	TO BODY NO. 2 HARNESS
21A	BG	TO BODY NO. 2 HARNESS
22A	G	TO BODY NO. 2 HARNESS
23A	Y	TO BODY NO. 2 HARNESS
24A	L	TO BODY NO. 2 HARNESS
25A	–	TO BODY NO. 2 HARNESS
26A	GR	TO BODY NO. 2 HARNESS
27A	LG	TO BODY NO. 2 HARNESS
28A	LG	TO BODY NO. 2 HARNESS
29A	GR	TO BODY NO. 2 HARNESS
30A	BR	TO BODY NO. 2 HARNESS
31A	W/R	TO BODY NO. 2 HARNESS
32A	G/R	TO BODY NO. 2 HARNESS
33A	–	TO BODY NO. 2 HARNESS
34A	SHIELD	TO BODY NO. 2 HARNESS
35A	P	TO BODY NO. 2 HARNESS
36A	B	TO BODY NO. 2 HARNESS
37A	–	TO BODY NO. 2 HARNESS
38A	R/B	TO BODY NO. 2 HARNESS
39A	G/O	TO BODY NO. 2 HARNESS
40A	V	TO BODY NO. 2 HARNESS
41A	SHIELD	TO BODY NO. 2 HARNESS
42A	SHIELD	TO BODY NO. 2 HARNESS
43A	R	TO BODY NO. 2 HARNESS
44A	G	TO BODY NO. 2 HARNESS
45A	–	TO BODY NO. 2 HARNESS
46A	–	TO BODY NO. 2 HARNESS
47A	Y	TO BODY NO. 2 HARNESS
48A	R/W	TO BODY NO. 2 HARNESS
49A	R/L	TO BODY NO. 2 HARNESS
50A	B	TO BODY NO. 2 HARNESS
51A	–	TO BODY NO. 2 HARNESS
52A	–	TO BODY NO. 2 HARNESS
53A	–	TO BODY NO. 2 HARNESS
54A	–	TO BODY NO. 2 HARNESS
55A	–	TO BODY NO. 2 HARNESS
56A	–	TO BODY NO. 2 HARNESS
57A	–	TO BODY NO. 2 HARNESS
58A	–	TO BODY NO. 2 HARNESS
59A	–	TO BODY NO. 2 HARNESS
60A	G/W	TO BODY NO. 2 HARNESS
61A	–	TO BODY NO. 2 HARNESS
62A	–	TO BODY NO. 2 HARNESS
63A	–	TO BODY NO. 2 HARNESS
64A	–	TO BODY NO. 2 HARNESS
65A	–	TO BODY NO. 2 HARNESS
66A	–	TO BODY NO. 2 HARNESS
67A	–	TO BODY NO. 2 HARNESS
68A	–	TO BODY NO. 2 HARNESS
69A	Y/R	TO BODY NO. 2 HARNESS
70A	R/G	TO BODY NO. 2 HARNESS
71A	–	TO BODY NO. 2 HARNESS
72A	W	TO BODY NO. 2 HARNESS
73A	G	TO BODY NO. 2 HARNESS
74A	W	TO BODY NO. 2 HARNESS
75A	SHIELD	TO BODY NO. 2 HARNESS
76A	R	TO BODY NO. 2 HARNESS
77A	L	TO BODY NO. 2 HARNESS
78A	SHIELD	TO BODY NO. 2 HARNESS
79A	GR	TO BODY NO. 2 HARNESS
80A	V	TO BODY NO. 2 HARNESS
81A	R	TO BODY NO. 2 HARNESS
82A	SHIELD	TO BODY NO. 2 HARNESS
83A	R	TO BODY NO. 2 HARNESS
84A	O	TO BODY NO. 2 HARNESS
85A	SHIELD	TO BODY NO. 2 HARNESS
86A	W	TO BODY NO. 2 HARNESS
87A	B	TO BODY NO. 2 HARNESS
88A	W	TO BODY NO. 2 HARNESS
89A	SHIELD	TO BODY NO. 2 HARNESS
90A	G	TO BODY NO. 2 HARNESS
91A	W/L	TO BODY NO. 2 HARNESS
92A	BR	TO BODY NO. 2 HARNESS
93A	L/Y	TO BODY NO. 2 HARNESS
94A	R/L	TO BODY NO. 2 HARNESS
95A	BR	TO BODY NO. 2 HARNESS
96A	R	TO BODY NO. 2 HARNESS
97A	LG	TO BODY NO. 2 HARNESS
98A	B/V	TO BODY NO. 2 HARNESS
99A	O/L	TO BODY NO. 2 HARNESS
100A	BR/W	TO BODY NO. 2 HARNESS

AANIA5321GB

METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1J	G	TO BODY HARNESS
2J	R/Y	TO BODY HARNESS
3J	L	TO BODY HARNESS
4J	L/B	TO BODY HARNESS
5J	B	TO BODY HARNESS
6J	BR	TO BODY HARNESS
7J	BG	TO BODY HARNESS
8J	SB	TO BODY HARNESS
9J	BR	TO BODY HARNESS
10J	R	TO BODY HARNESS
11J	O/B	TO BODY HARNESS
12J	L	TO BODY HARNESS
13J	W	TO BODY HARNESS
14J	Y	TO BODY HARNESS
15J	–	TO BODY HARNESS
16J	R	TO BODY HARNESS
17J	G	TO BODY HARNESS
18J	SB	TO BODY HARNESS
19J	O	TO BODY HARNESS
20J	O/B	TO BODY HARNESS
21J	Y	TO BODY HARNESS
22J	P	TO BODY HARNESS
23J	W	TO BODY HARNESS
24J	W/R	TO BODY HARNESS
25J	P	TO BODY HARNESS
26J	L	TO BODY HARNESS
27J	R	TO BODY HARNESS
28J	L	TO BODY HARNESS
29J	G/O	TO BODY HARNESS
30J	SB	TO BODY HARNESS
31J	L/G	TO BODY HARNESS
32J	R	TO BODY HARNESS
33J	BG	TO BODY HARNESS
34J	Y	TO BODY HARNESS
35J	P	TO BODY HARNESS
36J	G/R	TO BODY HARNESS
37J	LG	TO BODY HARNESS
38J	SB	TO BODY HARNESS
39J	Y	TO BODY HARNESS
40J	SB	TO BODY HARNESS
41J	L	TO BODY HARNESS
42J	L	TO BODY HARNESS
43J	W	TO BODY HARNESS
44J	BR	TO BODY HARNESS
45J	BG	TO BODY HARNESS
46J	P	TO BODY HARNESS
47J	O	TO BODY HARNESS
48J	V	TO BODY HARNESS
49J	BR	TO BODY HARNESS
50J	G/W	TO BODY HARNESS
51J	–	TO BODY HARNESS
52J	SHIELD	TO BODY HARNESS
53J	R	TO BODY HARNESS
54J	L	TO BODY HARNESS
55J	R	TO BODY HARNESS
56J	W	TO BODY HARNESS
57J	R	TO BODY HARNESS
58J	B	TO BODY HARNESS
59J	–	TO BODY HARNESS
60J	SHIELD	TO BODY HARNESS
61J	G	TO BODY HARNESS
62J	–	TO BODY HARNESS
63J	R/W	TO BODY HARNESS
64J	L/W	TO BODY HARNESS
65J	SHIELD	TO BODY HARNESS
66J	B	TO BODY HARNESS
67J	SHIELD	TO BODY HARNESS
68J	W	TO BODY HARNESS
69J	SHIELD	TO BODY HARNESS
70J	B/R	TO BODY HARNESS
71J	L/W	TO BODY HARNESS
72J	–	TO BODY HARNESS
73J	–	TO BODY HARNESS
74J	SHIELD	TO BODY HARNESS
75J	R	TO BODY HARNESS
76J	O	TO BODY HARNESS
77J	SHIELD	TO BODY HARNESS
78J	W	TO BODY HARNESS
79J	B	TO BODY HARNESS
80J	W	TO BODY HARNESS
81J	SHIELD	TO BODY HARNESS
82J	L/R	TO BODY HARNESS
83J	–	TO BODY HARNESS
84J	–	TO BODY HARNESS
85J	W	TO BODY HARNESS
86J	G	TO BODY HARNESS
87J	W	TO BODY HARNESS
88J	SHIELD	TO BODY HARNESS
89J	R	TO BODY HARNESS
90J	L	TO BODY HARNESS
91J	L/B	TO BODY HARNESS
92J	SB	TO BODY HARNESS
93J	B	TO BODY HARNESS
94J	LG	TO BODY HARNESS
95J	L	TO BODY HARNESS
96J	G	TO BODY HARNESS
97J	B/Y	TO BODY HARNESS
98J	L/B	TO BODY HARNESS
99J	W/L	TO BODY HARNESS
100J	Y	TO BODY HARNESS

Connector No.	M68
Connector Name	A/T SHIFT SELECTOR
Connector Type	TK08FW
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GND
2	B	GND
3	L/R	SHIFT LOCK SOL OUT
4	R	SHIFT P
5	R/B	AT DEVICE OUT
6	LG	TOW MODE SW
7	BR	SHIFT UP
8	V/W	SHIFT DOWN

Connector No.	M80
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FB-NH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
105	G/Y	FR FLASHER
106	–	–
107	W	LOW SIDE START SW LED
108	L/R	SHIFT LOCK SOLENOID OUT
109	–	–
110	–	–
111	P	ACC LED
112	–	–
113	L	ACC RELAY OUT
114	W	AS DOOR ANT A
115	BG	AS DOOR ANT B
116	W	ROOM ANT 2 A
117	G/B	FL FLASHER
118	–	–
119	R	RF NIMOCO
120	–	–
121	G	DR DOOR ANT B
122	P	DR DOOR ANT A
123	W	ROOM ANT 1 A
124	G	ROOM ANT 1 B
125	–	–
126	P	IMMO START BUTTON ANT B
127	BG	IMMO START BUTTON ANT A
128	B	ROOM ANT 2 B

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METER (TYPE A) CONNECTORS - WITH VK56VD

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA
Connector Color	WHITE

H.S.

137	136	135	134	133	132	131	130	129
143	142	141	140	139	138			

Terminal No.	Color of Wire	Signal Name
129	R/G	BATTERY SAVER OUT
130	LG	SUPER LOCK/DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	Y	DOOR LOCK AS/RR/RL
133	BR	DOOR UNLOCK AS/RR/RL
134	B	GND2
135	O	DOOR LOCK DR/AS/FL
136	L	ROOM LAMP CONT
137	V	DOOR UNLOCK DR/AS/FL
138	V	BAT REAR DOOR
139	W	BAT-POWER F/L
140	LG	P/W POWER SUPPLY IGN
141	V	P/W POWER SUPPLY BAT
142	Y	BAT FRONT DOOR
143	B	GND1

Connector No.	M88
Connector Name	ACCESSORY RELAY-2
Connector Type	MS02FL-M2-LC
Connector Color	BLUE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	L	RELAY CONTROL
3	R	RELAY OUTPUT
5	W	BATTERY

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
1	G/W	TO ENGINE ROOM HARNESS
2	R/W	TO ENGINE ROOM HARNESS
3	Y/R	TO ENGINE ROOM HARNESS
4	G/R	TO ENGINE ROOM HARNESS
5	G	TO ENGINE ROOM HARNESS
6	P	TO ENGINE ROOM HARNESS
7	O	TO ENGINE ROOM HARNESS
8	R	TO ENGINE ROOM HARNESS
9	G	TO ENGINE ROOM HARNESS
10	LG	TO ENGINE ROOM HARNESS
11	BR	TO ENGINE ROOM HARNESS
12	GR	TO ENGINE ROOM HARNESS
13	G	TO ENGINE ROOM HARNESS
14	BR	TO ENGINE ROOM HARNESS
15	–	TO ENGINE ROOM HARNESS
16	–	TO ENGINE ROOM HARNESS
17	W	TO ENGINE ROOM HARNESS
18	–	TO ENGINE ROOM HARNESS
19	Y/R	TO ENGINE ROOM HARNESS
20	G/W	TO ENGINE ROOM HARNESS
21	–	TO ENGINE ROOM HARNESS
22	–	TO ENGINE ROOM HARNESS
23	–	TO ENGINE ROOM HARNESS
24	O/L	TO ENGINE ROOM HARNESS

Connector No.	M137
Connector Name	A/C AUTO AMP.
Connector Type	TH40FW-NH
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	B	GND
3	SB	BAT
4	BR	TX (FR CONT)
5	–	–
6	–	–
7	W	AMB SENS
8	BR	STRG HEATER SW
9	G	SUN SENS
10	–	–
11	–	–
12	–	–
13	W	IGN2(ACC)
14	P	FAN GATE
15	Y	RR DEF ON
16	G	LIN SIG
17	W	VACTR
18	–	–
19	G/R	PTC1 - (WITH CUMMINS 5.0L)
20	P	STRG HEATER RLY
21	P	CAN-L
22	B	P-GND
23	G	IGN
24	V	RX (FR CONT)
25	–	–
26	R	SENS GND
27	G	INCAR SENS
28	P	INTAKE SENS
29	–	–
30	–	–
31	–	–
32	–	–
33	Y	COMP ON
34	L/W	FAN FB
35	B/W	RR DEF F/B
36	–	–
37	B	ACTR GND
38	W	FAN ON
39	LG	PTC2 - (WITH CUMMINS 5.0L)
40	SB	PTC3 - (WITH CUMMINS 5.0L)

Connector No.	M198
Connector Name	METER CONTROL SWITCH
Connector Type	TH08FW-NH
Connector Color	WHITE

H.S.

1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name
1	L	ILL +
2	GR	ILL GND
3	–	–
4	B	GROUND
5	P	TRIP RESET SW
6	W	ILL UP SW
7	R	ILL DOWN SW
8	–	–

Connector No.	M199
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY
Connector Color	GRAY

H.S.

22	21	20	19	18	17	16	15

Terminal No.	Color of Wire	Signal Name
15	R	ASCD SW
16	W	AUDIO STRG SW REMOTE A
17	L	AUDIO STRG SW REMOTE B
18	B	ASCD GND
19	BR	AUDIO STRG SW GND
20	G	HORN SWITCH OUTPUT
21	P	ILL -
22	Y	ILL +

AANIA5323GB

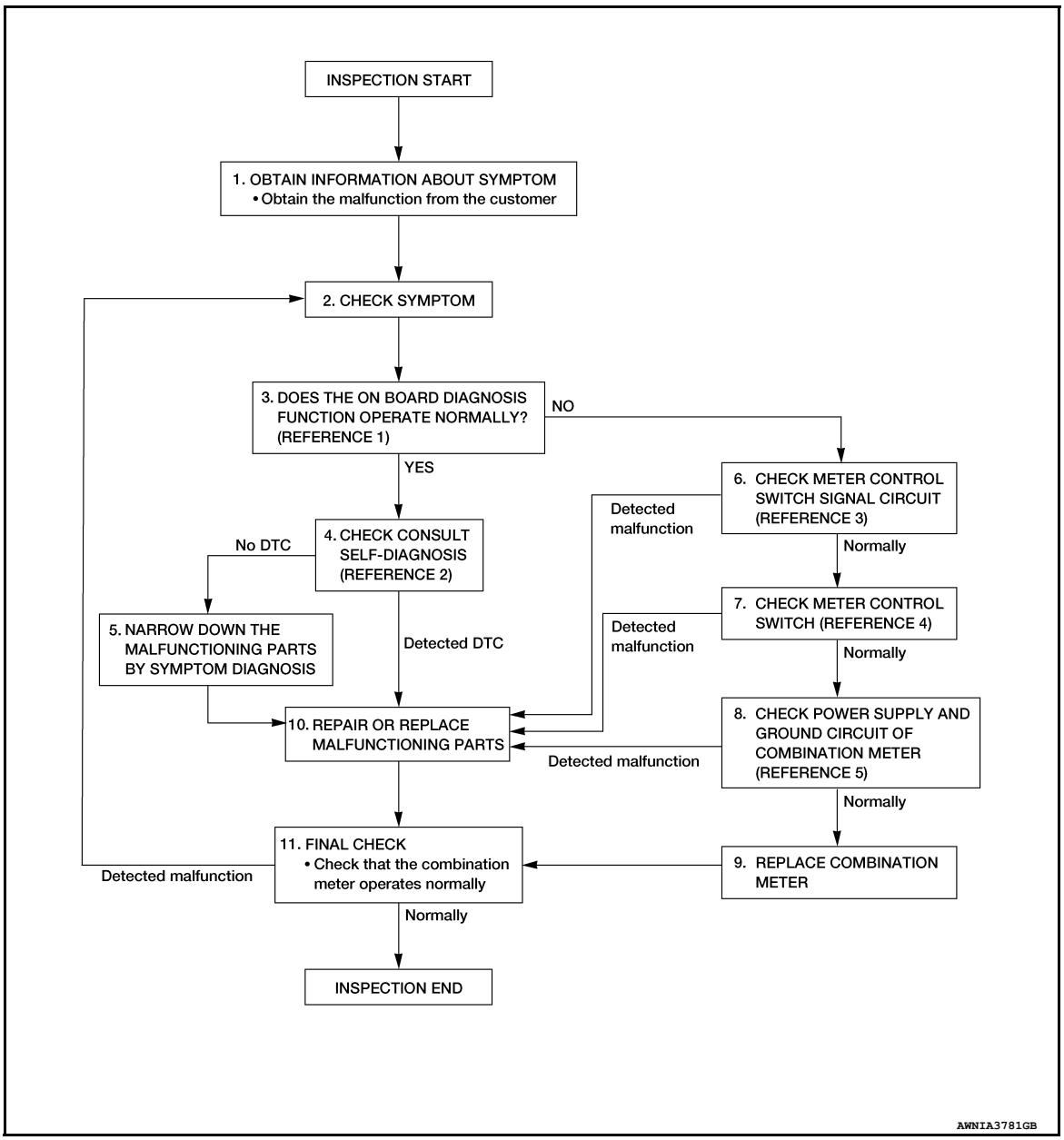
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work flow

INFOID:0000000014386563

OVERALL SEQUENCE



- Reference 1: MWI-25, "On Board Diagnosis Function"
- Reference 2: MWI-36, "DTC Index"
- Reference 3: MWI-89, "Diagnosis Procedure"
- Reference 4: MWI-90, "Component Inspection"
- Reference 5: MWI-87, "COMBINATION METER : Diagnosis Procedure"

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK SYMPTOM

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

>> GO TO 3.

3.CHECK ON BOARD DIAGNOSIS OPERATION

Check that the on board diagnosis function operates. Refer to MWI-25, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 6.

4.CHECK CONSULT SELF-DIAGNOSIS RESULTS

1. Perform “Self Diagnostic Result”. Refer to MWI-36, "DTC Index".
2. When DTC is detected, follow the instructions below:

- Record DTC and Freeze Frame Data.

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 10.

5.NARROW DOWN THE MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 10.

6.CHECK METER CONTROL SWITCH SIGNAL CIRCUIT

Check meter control switch signal circuit. Refer to MWI-89, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 10.

7.CHECK METER CONTROL SWITCH

Check meter control switch. Refer to MWI-90, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> GO TO 10.

8.CHECK COMBINATION METER POWER SUPPLY AND GROUND CIRCUITS

Check combination meter power supply and ground circuits. Refer to MWI-87, "COMBINATION METER : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 9.
NO >> GO TO 10.

9.REPLACE COMBINATION METER

Replace combination meter. Refer to MWI-108, "Removal and Installation".

>> GO TO 11.

10.REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace the malfunctioning parts.

NOTE:

If DTC is displayed, erase DTC after repairing or replacing malfunctioning parts.

>> GO TO 11.

11. FINAL CHECK

Check that the combination meter operates normally.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 2.

ADDITIONAL SERVICE WHEN REPLACING COMBINATION METER

Description

INFOID:0000000014386564

After replacing the combination meter, decel G sensor calibration must be performed. If not performed, the off road gauge may not function properly and DTC U1325 may be set.

Work Procedure

INFOID:0000000014386565

1.PERFORM DECEL G SENSOR CALIBRATION

Perform decel G sensor calibration. Refer to BRC-72, "Work Procedure".

>> GO TO 2.

2.CONFIRM OFF ROAD GAUGE OPERATION

Confirm proper operation of the off road gauge.

>> Work End.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

DTC Description

INFOID:0000000014386566

Refer to LAN-44, "CAN COMMUNICATION SYSTEM : System Description".

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U1000	CAN COMM CIRCUIT (CAN COMM CIRCUIT)	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	-
		Threshold	When combination meter is not transmitting or receiving CAN communication signals
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

CAN communication system

FAIL-SAFE

The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning. Refer to MWI-35, "Fail-safe".

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT
1. Turn ignition switch ON and wait for 2 seconds or more.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-81, "Diagnosis Procedure".
NO >> Refer to GI-47, "Intermittent Incident".

Diagnosis Procedure

INFOID:0000000014386567

1.CHECK CAN COMMUNICATION SYSTEM

Check CAN communication system. Refer to LAN-53, "Trouble Diagnosis Flow Chart".

>> Inspection End.

U1010 CONTROL UNIT (CAN)

DTC Description

INFOID:0000000014386568

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U1010	CONTROL UNIT (CAN) [CONTROL UNIT (CAN)]	Diagnosis condition	When Ignition switch is ON.
		Signal (terminal)	-
		Threshold	-
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

Combination meter

FAIL-SAFE

The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning. Refer to MWI-35, "Fail-safe".

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT
1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-82, "Diagnosis Procedure".
NO >> Refer to GI-47, "Intermittent Incident".

Diagnosis Procedure

INFOID:0000000014386569

1.REPLACE COMBINATION METER

Replace combination meter. Refer to MWI-108, "Removal and Installation".

>> Inspection End.

U1325 CALIBRATION

DTC Description

INFOID:0000000014386570

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U1325	CALIBRATION [CALIBRATION]	Diagnosis condition	When Ignition switch is ON.
		Signal (terminal)	-
		Threshold	-
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

Incomplete calibration of the decel G sensor.

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT
1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-83, "Diagnosis Procedure".
NO >> Refer to GI-47, "Intermittent Incident".

Diagnosis Procedure

INFOID:0000000014386571

1.PERFORM CALIBRATION OF DECEL G SENSOR

Perform calibration of decel G sensor. Refer to BRC-72, "Work Procedure".

>> GO TO 2.

2.OPERATION CHECK

Confirm the combination meter operates normally.

>> Work End.

B2205 VEHICLE SPEED

DTC Description

INFOID:0000000014386572

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
B2205	VEHICLE SPEED CIRC [VEHICLE SPEED CIRC]	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	-
		Threshold	When an erroneous speed signal is received
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- Wheel speed sensor
- ABS actuator and electric unit (control unit)

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-84, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000014386573

1.PERFORM SELF DIAGNOSTIC RESULT

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “ABS”.
3. Check DTC.

Is DTC detected?

YES >> Perform diagnosis procedure on the detected DTC. Refer to BRC-55, "DTC Index".
NO >> Inspection End.

B2267 ENGINE SPEED

DTC Description

INFOID:0000000014386574

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
B2267	ENGINE SPEED [ENGINE SPEED]	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	-
		Threshold	ECM continuously transmits abnormal engine speed signals
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- Crankshaft position sensor
- ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-85, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000014386575

1.PERFORM SELF DIAGNOSTIC RESULT

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “ECM”.
3. Check DTC.

Is DTC detected?

YES >> Perform diagnosis procedure on the detected DTC. Refer to EC-837, "DTC Index" (with Cummins 5.0L) or EC-136, "DTC Index" (with VK56VD).
NO >> Inspection End.

B2268 WATER TEMP

DTC Description

INFOID:0000000014386576

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
B2268	WATER TEMP [WATER temperature]	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	-
		Threshold	ECM continuously transmits abnormal engine coolant temperature signals
		Diagnosis delay time	60 seconds or more

POSSIBLE CAUSE

- Engine coolant temperature sensor
- ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-86, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000014386577

1.PERFORM SELF DIAGNOSTIC RESULT

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “ECM”.
3. Check DTC.

Is DTC detected?

YES >> Perform diagnosis procedure on the detected DTC. Refer to EC-837, "DTC Index" (with Cummins 5.0L) or EC-136, "DTC Index" (with VK56VD).
NO >> Inspection End.

POWER SUPPLY AND GROUND CIRCUIT
COMBINATION METER

COMBINATION METER : Diagnosis Procedure

INFOID:0000000014386578

Regarding Wiring Diagram information, refer to MWI-38, "Wiring Diagram (with Cummins 5.0L)" or MWI-59, "Wiring Diagram (with VK56VD)".

1.CHECK FUSES

Check that the following fuses are not blown:

Unit	Power source	Fuse No.
Combination meter	Battery	13 (10A)
	Ignition switch ON or ACC	25 (5A)
	Ignition switch ON or START	31 (5A)

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect combination meter harness connectors M24 and M25.
2. Check voltage between combination meter harness connectors M24 and M25 and ground.

Combination meter		Ground	Ignition switch position		
Connector	Terminal		OFF	ON or ACC	START
M24	14	(–)	0 V	Battery voltage	Battery voltage
M25	41		0 V	Battery voltage	Battery voltage
	42		Battery voltage	Battery voltage	Battery voltage

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between combination meter harness connector M25 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M25	47	(–)	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:0000000014687454

Regarding Wiring Diagram information, refer to BCS-54, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
	Cummins 5.0L	VK56VD
Fusible link battery power	R (50A)	N (50A)
BCM battery fuse	1 (10A)	1 (10A)

Is the fuse or fusible link blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M81.
2. Check voltage between BCM connector M81 terminals 131, 139 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M81	131	(—)	Battery voltage
	139		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M81 terminals 134, 143 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	134	—	Yes
	143		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

METER CONTROL SWITCH SIGNAL CIRCUIT

Diagnosis Procedure

INFOID:0000000014386580

Regarding Wiring Diagram information, refer to MWI-38, "Wiring Diagram (with Cummins 5.0L)" or MWI-59, "Wiring Diagram (with VK56VD)".

1. CHECK METER CONTROL SWITCH SIGNAL

1. Turn ignition switch ON.
2. Check voltage between the following terminals of the meter control switch harness connector M198.

Meter control switch			Condition	Voltage (Approx.)
Connector	Terminals			
	(+)	(–)		
M198	7	4	When illumination control switch (–) is pressed	0 V
			Other than the above	5 V
	5		When trip reset switch is pressed	0 V
			Other than the above	5 V
	6		When illumination control switch (+) is pressed	0 V
			Other than the above	5 V

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 2.

2. CHECK METER CONTROL SWITCH CIRCUITS

1. Turn ignition switch OFF.
2. Disconnect combination meter harness connector M24 and meter control switch harness connector M198.
3. Check continuity between combination meter harness connector M24 and meter control switch harness connector M198.

Combination meter		Meter control switch		Continuity
Connector	Terminal	Connector	Terminal	
M24	18	M198	5	Yes
	37		7	
	36		6	

4. Check continuity between meter control switch harness connector M198 and ground.

Meter control switch		Ground	Continuity
Connector	Terminal		
M198	4		Yes

5. Check continuity between combination meter harness connector M24 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M24	18		No
	37		
	36		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000014386581

1.CHECK METER CONTROL SWITCH

1. Turn ignition switch OFF.
2. Disconnect meter control switch harness connector.
3. Check meter control switch.

Meter control switch		Condition	Continuity
Terminals			
7	4	When illumination control switch (−) is pressed	Yes
		Other than the above	No
5		When trip reset switch is pressed	Yes
		Other than the above	No
6		When illumination control switch (+) is pressed	Yes
		Other than the above	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace meter control switch. Refer to MWI-111, "Removal and Installation".

FUEL LEVEL SENSOR SIGNAL CIRCUIT

Component Function Check (Cummins 5.0L)

INFOID:0000000014386582

1.COMBINATION METER INPUT SIGNAL

CONSULT
1. Select “Data Monitor” mode of “METER/M&A”.
2. Select “FUEL METER”.
3. Compare the “FUEL METER” value and the fuel gauge reading of the combination meter. Fuel gauge and data monitor indications should be close.

Combination meter	Monitor item
Fuel gauge	FUEL METER [L] (Approx.)
Full	96
3/4	74
1/2	52
1/4	30.2
Empty	8.0

Does the data monitor value approximately match the fuel gauge indication?

YES >> Inspection End.
NO >> Replace combination meter. Refer to MWI-108, "Removal and Installation".

Component Function Check (VK56VD)

INFOID:0000000014386583

1.COMBINATION METER INPUT SIGNAL

CONSULT
1. Select “Data Monitor” mode of “METER/M&A”.
2. Select “FUEL METER”.
3. Compare the “FUEL METER” value and the fuel gauge reading of the combination meter. Fuel gauge and data monitor indications should be close.

Combination meter	Monitor item
Fuel gauge	FUEL METER [L] (Approx.)
Full	102.10
3/4	78.52
1/2	51.30
1/4	31.0
Empty	10.0

Does the data monitor value approximately match the fuel gauge indication?

YES >> Inspection End.
NO >> Replace combination meter. Refer to MWI-108, "Removal and Installation".

Diagnosis Procedure (Cummins 5.0L)

INFOID:0000000014386584

Regarding Wiring Diagram information, refer to MWI-38, "Wiring Diagram (with Cummins 5.0L)".

1.CHECK HARNESS CONNECTOR

1. Turn ignition switch OFF.

2. Check combination meter and fuel level sensor unit and fuel pump (fuel level sensor) terminals (meter-side and harness-side) for poor connection.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace terminals or connectors.

2.CHECK FUEL LEVEL SENSOR CIRCUIT

1. Disconnect combination meter harness connector M25 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C7.
2. Check continuity between combination meter harness connector M25 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C7.

Fuel level sensor unit and fuel pump (fuel level sensor)		Combination meter		Continuity
Connector	Terminal	Connector	Terminal	
C7	1	M25	48	Yes

3. Check continuity between fuel level sensor unit and fuel pump (fuel level sensor) harness connector C7 and ground.

Fuel level sensor unit and fuel pump (fuel level sensor)		Ground	Continuity
Connector	Terminal		
C7	1		No

Is the inspection result normal?

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

3.CHECK FUEL LEVEL SENSOR GROUND CIRCUIT

1. Check continuity between combination meter harness connector M25 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C7.

Fuel level sensor unit and fuel pump (fuel level sensor)		Combination meter		Continuity
Connector	Terminal	Connector	Terminal	
C7	2	M25	43	Yes

2. Check continuity between fuel level sensor unit and fuel pump (fuel level sensor) harness connector C7 and ground.

Fuel level sensor unit and fuel pump (fuel level sensor)		Ground	Continuity
Connector	Terminal		
C7	2		No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4.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.

Is the inspection result normal?

YES >> Inspection End.
NO >> Install the fuel level sensor unit properly. Refer to FL-36, "Removal and Installation".

Diagnosis Procedure (VK56VD)

INFOID:0000000014386585

Regarding Wiring Diagram information, refer to MWI-59, "Wiring Diagram (with VK56VD)".

1.CHECK HARNESS CONNECTOR

1. Turn ignition switch OFF.
2. Check combination meter and fuel level sensor unit and fuel pump (fuel level sensor) terminals (meter-side and harness-side) for poor connection.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace terminals or connectors.

2.CHECK FUEL LEVEL SENSOR CIRCUIT

1. Disconnect combination meter harness connector M25 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37.
2. Check continuity between combination meter harness connector M25 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37.

Fuel level sensor unit and fuel pump (fuel level sensor)		Combination meter		Continuity
Connector	Terminal	Connector	Terminal	
C37	5	M25	48	Yes

3. Check continuity between fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37 and ground.

Fuel level sensor unit and fuel pump (fuel level sensor)		Ground	Continuity
Connector	Terminal		
C37	5		No

Is the inspection result normal?

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

3.CHECK FUEL LEVEL SENSOR GROUND CIRCUIT

1. Check continuity between combination meter harness connector M25 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37.

Fuel level sensor unit and fuel pump (fuel level sensor)		Combination meter		Continuity
Connector	Terminal	Connector	Terminal	
C37	6	M25	43	Yes

2. Check continuity between fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37 and ground.

Fuel level sensor unit and fuel pump (fuel level sensor)		Ground	Continuity
Connector	Terminal		
C37	6		No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4.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.

Is the inspection result normal?

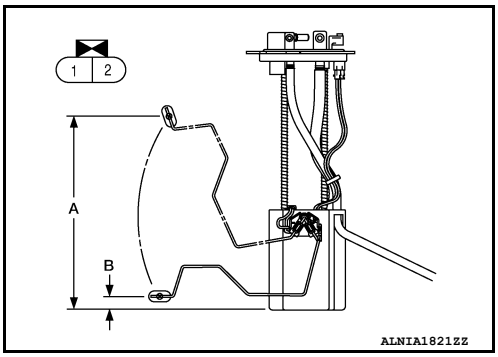
YES >> Inspection End.
NO >> Install the fuel level sensor unit properly. Refer to FL-6, "Removal and Installation".

Component Inspection (Cummins 5.0L)

INFOID:0000000014386586

1. CHECK FUEL LEVEL SENSOR UNIT AND FUEL PUMP (FUEL LEVEL SENSOR)

1. Remove the fuel level sensor unit and fuel pump (fuel level sensor). Refer to FL-36, "Removal and Installation".
2. Check the resistance between fuel level sensor unit and fuel pump (fuel level sensor) terminals.



Fuel level sensor unit and fuel pump (fuel level sensor) Terminals		Condition	Resistance (Ω) (Approx.)	Height [mm (in)]
1	2	Full* (A)	51	295.6 (11.6)
		Empty* (B)	278	23 (0.91)

*: When float rod is in contact with stopper.

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace fuel level sensor unit and fuel pump (fuel level sensor). Refer to FL-36, "Removal and Installation".

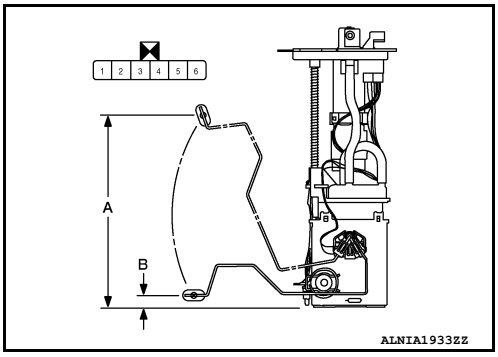
Component Inspection (VK56VD)

INFOID:0000000014386587

WITH VK56VD ENGINE

1. CHECK FUEL LEVEL SENSOR UNIT AND FUEL PUMP (FUEL LEVEL SENSOR)

1. Remove the fuel level sensor unit and fuel pump (fuel level sensor). Refer to FL-6, "Removal and Installation".
2. Check the resistance between fuel level sensor unit and fuel pump (fuel level sensor) terminals.



Fuel level sensor unit and fuel pump (fuel level sensor) Terminals		Condition	Resistance (Ω) (Approx.)	Height [mm (in)]
5	6	Full* (A)	51	256.34 (10.1)
		Empty* (B)	278	19.34 (0.8)

*: When float rod is in contact with stopper.

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace fuel level sensor unit and fuel pump (fuel level sensor). Refer to FL-6, "Removal and Installation".

WASHER FLUID LEVEL SWITCH CIRCUIT

Diagnosis Procedure

INFOID:0000000014386588

Regarding Wiring Diagram information, refer to MWI-38, "Wiring Diagram (with Cummins 5.0L)" or MWI-59, "Wiring Diagram (with VK56VD)".

1.CHECK WASHER FLUID LEVEL SWITCH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter harness connector M24 and washer fluid level switch harness connector E106.
3. Check continuity between combination meter harness connector M24 and washer fluid level switch harness connector E106.

Combination meter		Washer fluid level switch		Continuity
Connector	Terminal	Connector	Terminal	
M24	24	E106	2	Yes

4. Check continuity between combination meter harness connector M24 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M24	24		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK WASHER FLUID LEVEL SWITCH GROUND CIRCUIT

Check continuity between washer fluid level switch harness connector E106 and ground.

Washer fluid level switch		Ground	Continuity
Connector	Terminal		
E106	1		Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000014386589

1.CHECK WASHER FLUID LEVEL SWITCH

1. Turn ignition switch OFF.
2. Disconnect washer fluid level switch connector.
3. Check washer fluid level switch.

Washer fluid level switch		Condition	Continuity
Terminals			
1	2	Washer fluid level switch ON	Yes
		Washer fluid level switch OFF	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace washer fluid level switch. Refer to WW-53, "Removal and Installation".

STEERING SWITCH

Diagnosis Procedure

INFOID:0000000014386590

Regarding Wiring Diagram information, refer to MWI-38, "Wiring Diagram (with Cummins 5.0L)" or MWI-59, "Wiring Diagram (with VK56VD)".

1.CHECK STEERING SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter harness connector M24 and spiral cable harness connector M30.
3. Check continuity between combination meter harness connector M24 and spiral cable harness connector M30.

With heated steering wheel

Combination meter		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M24	1	M30	11	Yes
	22		9	
	23		8	

Without heated steering wheel

Combination meter		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M24	1	M30	12	Yes
	22		10	
	23		14	

4. Check continuity between combination meter harness connector M24 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M24	1	Ground	No
	22		
	23		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000014386591

1.CHECK STEERING SWITCH RESISTANCE

Check resistance between the following steering switch terminals:

Steering switches Terminals		Condition	Resistance (Ω) (Approx.)
17	19	Depress ▷ switch.	723
		Depress ◁ switch.	2023
16		Depress ENTER switch.	2023
		Depress △ switch.	121
		Depress ▽ switch.	321

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace steering wheel switch. Refer to AV-70, "Removal and Installation".

2. CHECK COMBINATION SWITCH (SPIRAL CABLE)

Check continuity between the following combination switch (spiral cable) terminals:

With heated steering wheel

Combination switch (spiral cable) Terminals		Continuity
16	9	Yes
17	8	
19	11	

Without heated steering wheel

Combination switch (spiral cable) Terminals		Continuity
16	10	Yes
17	14	
19	12	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace spiral cable. Refer to SR-14, "Removal and Installation".

AMBIENT SENSOR SIGNAL CIRCUIT

Description

INFOID:0000000014386592

It detects outside air temperature and converts it into a resistance value which is then input into the combination meter.

Diagnosis Procedure

INFOID:0000000014386593

Regarding Wiring Diagram information, refer to MWI-59, "Wiring Diagram (with VK56VD)".

1.CHECK AMBIENT SENSOR SIGNAL CIRCUIT

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

Combination meter		Ambient sensor		Continuity
Connector	Terminal	Connector	Terminal	
M24	15	E75	2	Yes

4. Check continuity between combination meter harness connector and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M24	20		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK AMBIENT SENSOR SIGNAL GROUND CIRCUIT

Check continuity between combination meter harness connector and ambient sensor harness connector.

Combination meter		Ambient sensor		Continuity
Connector	Terminal	Connector	Terminal	
M24	20	E75	1	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000014386594

1.CHECK AMBIENT SENSOR

1. Turn ignition switch OFF.
2. Disconnect ambient sensor connector.
3. Check resistance between ambient sensor terminals.

Terminal		Condition	Resistance: kΩ
		Temperature: °C (°F)	
1	2	−15 (5)	12.73
		−10 (14)	9.92
		−5 (23)	7.80
		0 (32)	6.19
		5 (41)	4.95
		10 (50)	3.99
		15 (59)	3.24
		20 (68)	2.65
		25 (77)	2.19
		30 (86)	1.81
		35 (95)	1.51
		40 (104)	1.27
		45 (113)	1.07

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace ambient sensor. Refer to MWI-111, "Removal and Installation".

SYMPTOM DIAGNOSIS

THE FUEL GAUGE INDICATOR DOES NOT OPERATE

Description

INFOID:0000000014386595

Fuel gauge will not indicate from a certain position.

Diagnosis Procedure

INFOID:0000000014386596

1.PERFORM COMBINATION METER SELF-DIAGNOSIS MODE

Perform the self-diagnosis mode of combination meter, and then check that the fuel gauge operates normally. Refer to MWI-25, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the combination meter. Refer to MWI-108, "Removal and Installation".

2.CHECK COMBINATION METER INPUT SIGNAL

Perform component function check. Refer to MWI-91, "Component Function Check (Cummins 5.0L)" or MWI-91, "Component Function Check (VK56VD)".

Does data monitor value match fuel gauge reading?

YES >> GO TO 3.
NO >> Replace combination meter. Refer to MWI-108, "Removal and Installation".

3.CHECK FUEL LEVEL SENSOR UNIT CIRCUITS

Check the fuel level sensor circuits. Refer to MWI-91, "Diagnosis Procedure (Cummins 5.0L)" or MWI-92, "Diagnosis Procedure (VK56VD)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4.CHECK FUEL LEVEL SENSOR UNIT

Check the fuel level sensor unit. Refer to MWI-94, "Component Inspection (Cummins 5.0L)" or MWI-94, "Component Inspection (VK56VD)".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace fuel level sensor unit. Refer to FL-36, "Removal and Installation" (with Cummins 5.0L) or FL-6, "Removal and Installation" (with VK56VD).

5.CHECK FLOAT INTERFERENCE

Check that the float arm does not interfere with or bind to other components in the fuel tank.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".
NO >> Repair or replace malfunctioning parts.

THE METER CONTROL SWITCH IS INOPERATIVE

Description

INFOID:0000000014386597

The meter control switches are inoperative when pressed.

Diagnosis Procedure

INFOID:0000000014386598

1.CHECK METER CONTROL SWITCH

Check the meter control switch. Refer to MWI-90, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace meter control switch. Refer to MWI-111, "Removal and Installation".

2.CHECK METER CONTROL SWITCH SIGNAL

Check the meter control switch signal. Refer to MWI-89, "Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-108, "Removal and Installation".
NO >> Repair or replace harness or connector.

THE OIL PRESSURE WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000014386599

- The low oil pressure warning message stays on when oil pressure is normal.
- The low oil pressure warning message stays off when oil pressure is low.

Diagnosis Procedure

INFOID:0000000014386600

1.CHECK COMBINATION METER INPUT

CONSULT

1. Start the engine.
2. Select “Data Monitor” mode of “METER/M&A”.
3. Select “OIL W/L”.
4. Check that the function operates normally according to the following conditions:

Monitor item	Condition	CONSULT
OIL W/L	Engine running	Off

Is the inspection result normal?

YES >> Perform “Self Diagnostic Result” of “ECM”. Refer to EC-805, "CONSULT Function" (with Cummins 5.0L) or EC-94, "CONSULT Function" (with VK56VD) .

NO >> Replace combination meter. Refer to MWI-108, "Removal and Installation".

THE PARKING BRAKE RELEASE WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000014386601

- The parking brake warning is displayed during vehicle travel, even though the parking brake is released.
- The parking brake warning is not displayed, even while driving the vehicle with the parking brake applied.

Diagnosis Procedure

INFOID:0000000014386602

1.CHECK PARKING BRAKE WARNING LAMP OPERATION

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

Condition	Warning lamp status
Parking brake applied	ON
Parking brake released	OFF

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Check the parking brake switch signal circuit. Refer to WCS-49, "Diagnosis Procedure".

Is the inspection result normal?

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

3.CHECK PARKING BRAKE SWITCH UNIT

Check the parking brake switch. Refer to WCS-49, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-108, "Removal and Installation".
NO >> Replace parking brake switch. Refer to PB-12, "Removal and Installation".

THE LOW WASHER FLUID WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000014386603

- The warning is still displayed even after washer fluid is added.
- The warning is not displayed even though the washer tank is empty.

Diagnosis Procedure

INFOID:0000000014386604

1.CHECK WASHER FLUID LEVEL SWITCH SIGNAL CIRCUIT

Check the washer fluid level switch signal circuit. Refer to MWI-95, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK WASHER FLUID LEVEL SWITCH UNIT

Check the washer fluid level switch. Refer to MWI-95, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-108, "Removal and Installation".
NO >> Replace washer fluid level switch. Refer to WW-53, "Removal and Installation".

THE DOOR OPEN WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000014386605

- The door open warning is displayed even though all of the doors are closed.
- The door open warning is not displayed even though a door is ajar.

Diagnosis Procedure

INFOID:0000000014386606

1.CHECK BCM INPUT SIGNAL

Check the BCM input signal. Refer to DLK-98, "Component_Function_Check".

Is the inspection result normal?

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

2.CHECK COMBINATION METER INPUT SIGNAL

CONSULT

1. Select “Data Monitor” mode of “METER/M&A”.
2. Select “DOOR W/L”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition	Status
DOOR W/L	Door open	On
	Door closed	Off

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-108, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

3.CHECK DOOR SWITCH SIGNAL CIRCUIT

Check the door switch signal circuit. Refer to DLK-98, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4.CHECK DOOR SWITCH

Check the door switch. Refer to DLK-99, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-108, "Removal and Installation".
NO >> Replace applicable door switch. Refer to DLK-191, "Removal and Installation".

THE STEERING SWITCHES ARE INOPERATIVE

Description

INFOID:0000000014386607

One or more of the steering switches to control the information display are inoperative.

Diagnosis Procedure

INFOID:0000000014386608

1.CHECK STEERING SWITCH CIRCUIT

Check steering switch circuit. Refer to MWI-96, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK STEERING SWITCH RESISTANCE

Check steering switch resistance. Refer to MWI-96, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace steering switch. Refer to AV-70, "Removal and Installation".

3.CHECK COMBINATION SWITCH (SPIRAL CABLE)

Check combination switch (spiral cable) for continuity. Refer to MWI-96, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-108, "Removal and Installation".
NO >> Replace spiral cable. Refer to SR-14, "Removal and Installation".

THE AMBIENT TEMPERATURE DISPLAY IS INCORRECT

Description

INFOID:0000000014386609

- The displayed outside air temperature is higher than the actual temperature.
- The displayed outside air temperature is lower than the actual temperature.
- Outside air temperature is not indicated.

Diagnosis Procedure

INFOID:0000000014386610

1.CHECK AMBIENT SENSOR SIGNAL CIRCUIT

Check the ambient sensor signal circuit. Refer to HAC-75, "Diagnosis Procedure" (Cummins 5.0L with auto a/c) or HAC-193, "Diagnosis Procedure" (Cummins 5.0L without auto a/c) or MWI-98, "Diagnosis Procedure" (VK56VD without auto a/c).

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK AMBIENT SENSOR

Check the ambient sensor. Refer to HAC-77, "Component Inspection" (Cummins 5.0L Engine with auto a/c) or HAC-195, "Component Inspection" (Cummins 5.0L without auto a/c) or MWI-98, "Component Inspection" (VK56VD without auto a/c).

Is the inspection result normal?

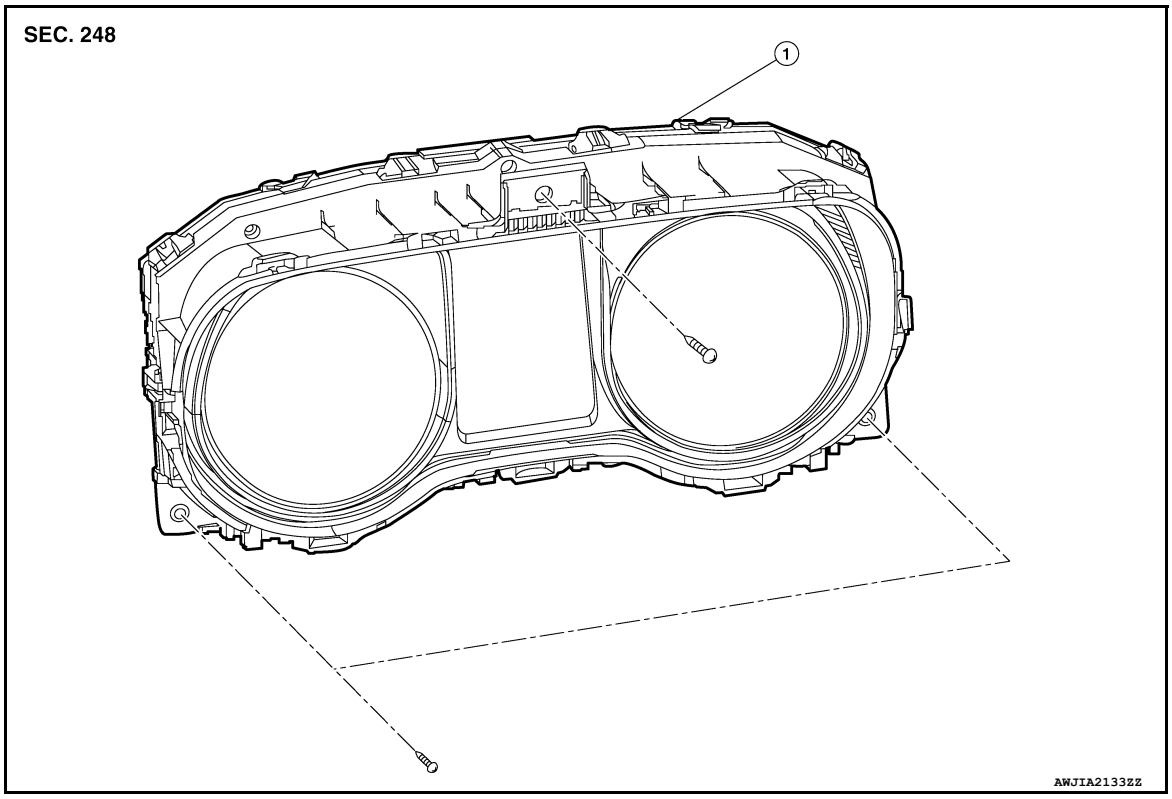
YES >> Replace combination meter. Refer to MWI-108, "Removal and Installation".
NO >> Replace ambient sensor. Refer to MWI-111, "Removal and Installation".

REMOVAL AND INSTALLATION

COMBINATION METER

Exploded View

INFOID:0000000014386611



1. Combination meter

Removal and Installation

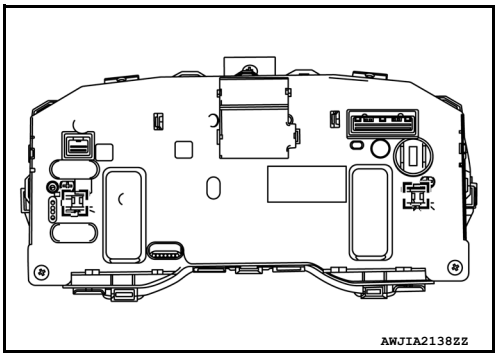
INFOID:0000000014386612

CAUTION:
Do not damage the combination meter front cover.

REMOVAL

1. Remove cluster lid A. Refer to IP-19, "Removal and Installation".
2. Remove combination meter screws.
3. Release combination meter clips.

: Metal clip



4. Disconnect harness connectors from combination meter.
5. Remove combination meter.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
After replacing the combination meter, perform the decel G sensor calibration. Refer to MWI-80, "Description".

METER CONTROL SWITCH

Removal and Installation

INFOID:0000000014386613

For removal and installation of the meter control switch, Refer to INL-73, "Removal and Installation".

AMBIENT SENSOR

Removal and Installation

INFOID:0000000014386614

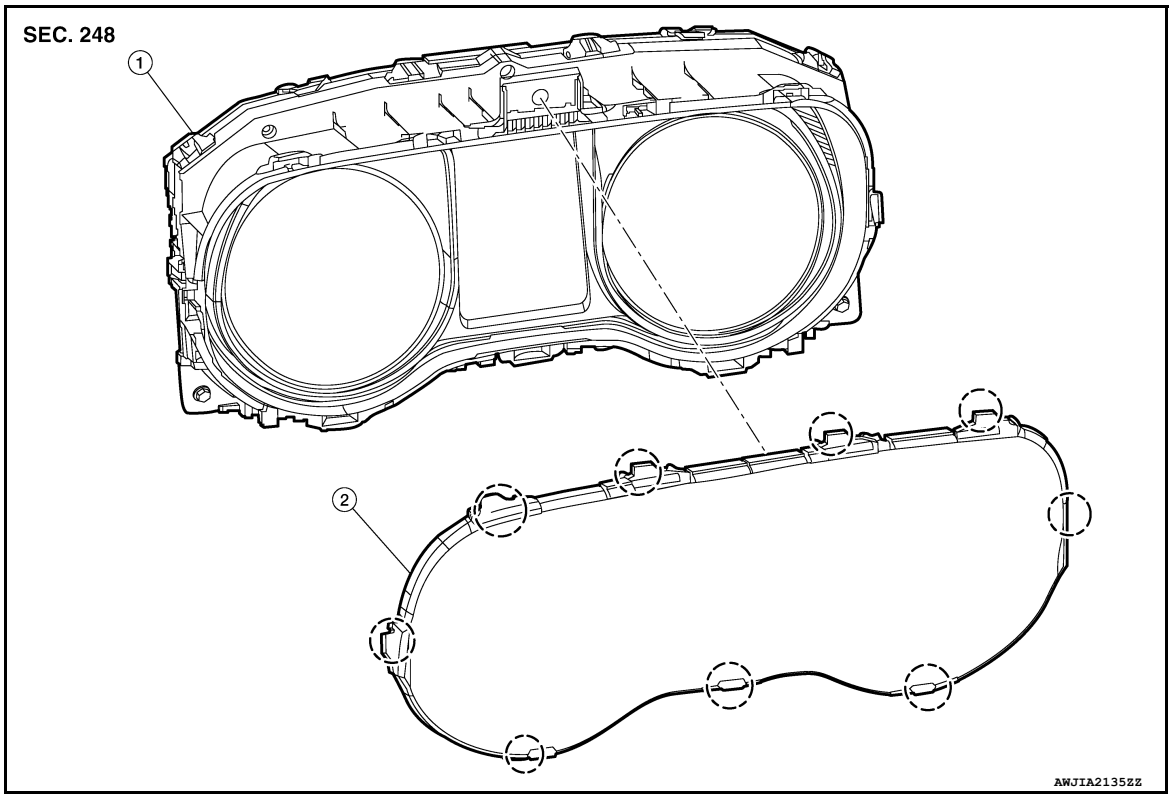
For removal and installation of the ambient sensor, refer to HAC-123, "Removal and Installation" (AUTOMATIC AIR CONDITIONER) or HAC-231, "Removal and Installation" (MANUAL AIR CONDITIONER).

UNIT DISASSEMBLY AND ASSEMBLY

COMBINATION METER

Exploded View

INFOID:0000000014386615



1. Combination meter
2. Combination meter lens
Pawl

Disassembly and Assembly

INFOID:0000000014386616

CAUTION:

- **Do not touch the display, pointer, or the inside of the front cover and printed area of the dial during the work.**
- **Keep away from magnetic sources.**
- **Do not damage the combination meter front cover.**

DISASSEMBLY

1. Remove the combination meter. Refer to MWI-108, "Removal and Installation".
2. Using a suitable tool, release the pawls on the combination meter lens and remove the combination meter lens.

ASSEMBLY

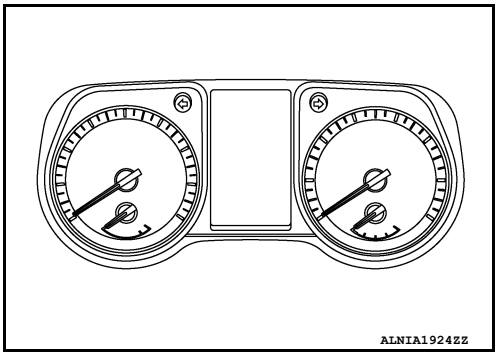
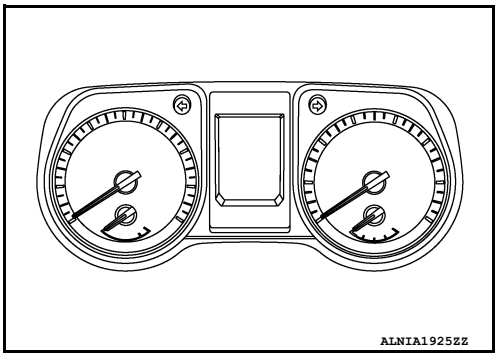
Assembly is in the reverse order of disassembly.

HOW TO USE THIS MANUAL

APPLICATION NOTICE

Information

INFOID:0000000014386617

Service information	Design of combination meter
TYPE A	 ALNIA1924ZZ
TYPE B	 ALNIA1925ZZ

PRECAUTION

PRECAUTIONS

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

INFOID:0000000014386618

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 collisions. Information necessary to service the system safely is included in the SR and SB sections 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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper repair, 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 SR 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 WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

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

Precaution for Work

INFOID:0000000014386619

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:

- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

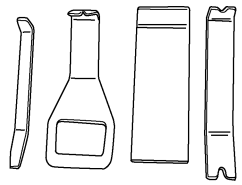
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000014386620

The actual shape of the tools may differ from those illustrated here.

Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim tool set  AWJIA0483ZZ	Removing trim components

Commercial Service Tools

INFOID:0000000014386621

Tool name	Description
Power tool  PIIB1407E	Loosening nuts, screws and bolts

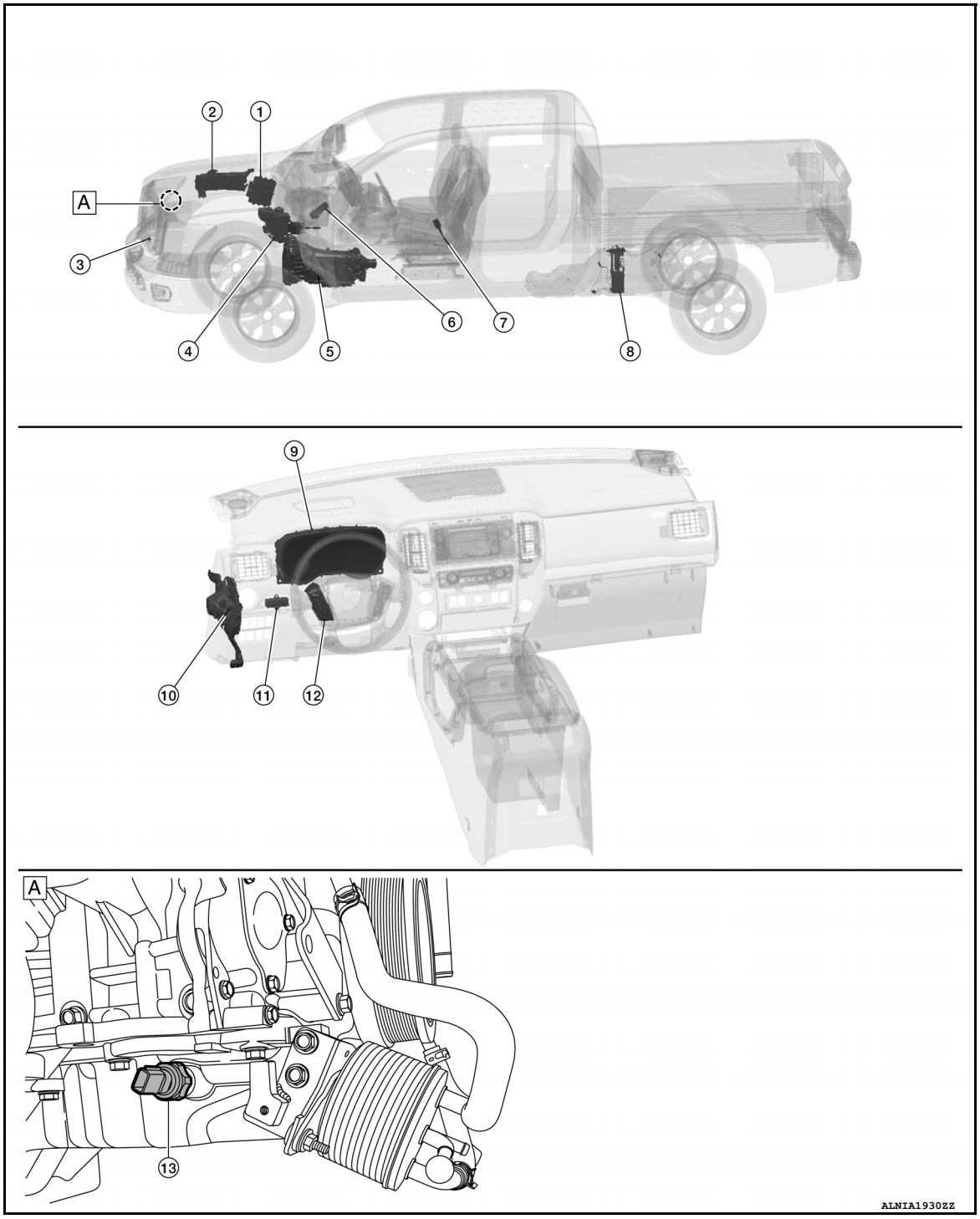
SYSTEM DESCRIPTION

COMPONENT PARTS

METER SYSTEM

METER SYSTEM : Component Parts Location

INFOID:0000000014386622



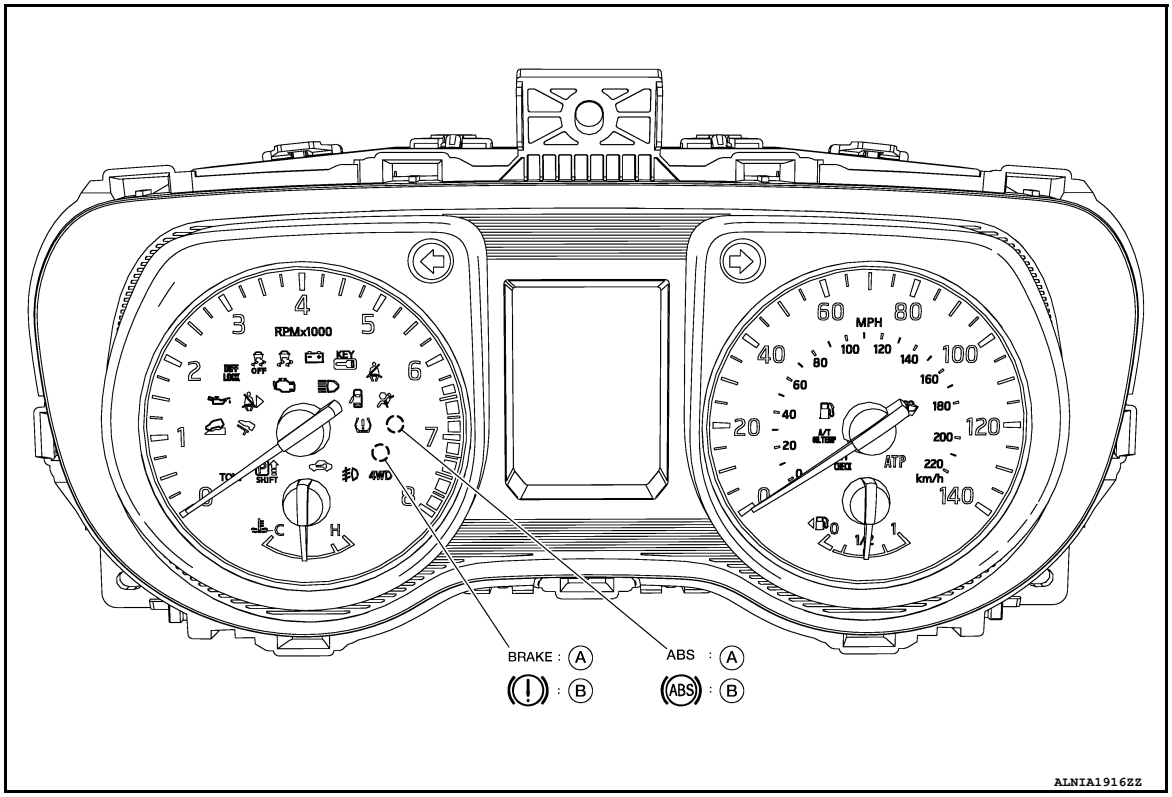
A. View of front engine assembly (view with engine removed)

No.	Component	Function
1.	ECM	• Transmits each signal to the combination meter via CAN communication. Refer to MWI-120, "METER SYSTEM : System Description". • Refer to EC-736, "Component Parts Location" for detailed installation location.
2.	Washer fluid level switch	• Transmits the washer fluid level switch signal to the combination meter. • Refer to WW-8, "Washer Fluid Level Switch" for detailed installation location.
3.	Ambient sensor	Transmits the ambient sensor signal to the combination meter. • Refer to HAC-140, "Component Parts Location" for detailed installation location.
4.	ABS actuator and electric unit (control unit)	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-120, "METER SYSTEM : System Description". • Refer to BRC-9, "Component Parts Location" for detailed installation location.
5.	TCM	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-120, "METER SYSTEM : System Description". • Refer to TM-15, "A/T CONTROL SYSTEM : Component Parts Location" for detailed installation location.
6.	BCM	• Transmits each signal to the combination meter via CAN communication. • Refer to MWI-120, "METER SYSTEM : System Description". • Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
7.	Seat belt buckle switch LH	Transmits the seat belt buckle switch LH signal to the combination meter.
8.	Fuel level sensor unit and fuel pump (fuel level sensor)	Transmits the fuel level sensor signal to the combination meter.
9.	Combination meter	Refer to MWI-120, "METER SYSTEM : System Description".
10.	Parking brake switch	Transmits the parking brake switch signal to the combination meter.
11.	Meter control switch	Refer to MWI-119, "METER SYSTEM : Meter Control Switch".
12.	Steering switches	Refer to MWI-118, "METER SYSTEM : Steering Switches".
13.	Engine oil pressure sensor	Transmits the engine oil pressure sensor signal to the ECM.

METER SYSTEM : Design

INFOID:0000000014386623

ARRANGEMENT OF COMBINATION METER



A: USA B: Except USA

METER SYSTEM : Combination Meter

INFOID:0000000014386624

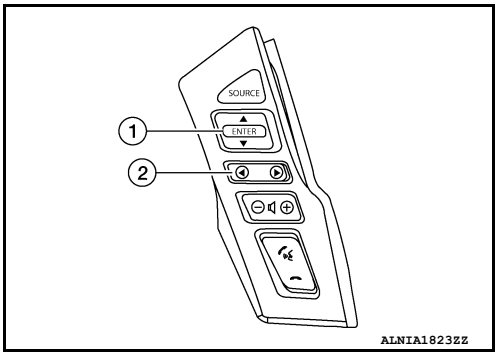
The combination meter controls the following items according to the signals received from each unit via CAN communication and the signals from switches and sensors:

- Speedometer
- Tachometer
- Engine coolant temperature gauge
- Fuel gauge
- Indicator lamps
- Warning lamps
- Meter illumination control
- Meter effect function
- Information display

METER SYSTEM : Steering Switches

INFOID:0000000014386625

- The steering switches are located on the steering wheel.
- The steering switch transmits the steering switch signal to the combination meter.



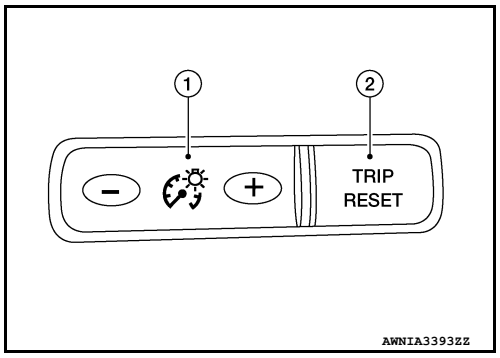
No.	Switch name	Operation	Description
1.	Enter/Up/Down switch	Press	The information display settings can be changed.
2.	Menu left/menu right switch		

METER SYSTEM : Meter Control Switch

INFOID:0000000014386626

- The meter control switch is located on the instrument lower panel LH.
- The meter control switch transmits the following signals to the combination meter:

- Trip reset switch signal
- Illumination control switch signal (+)
- Illumination control switch signal (−)

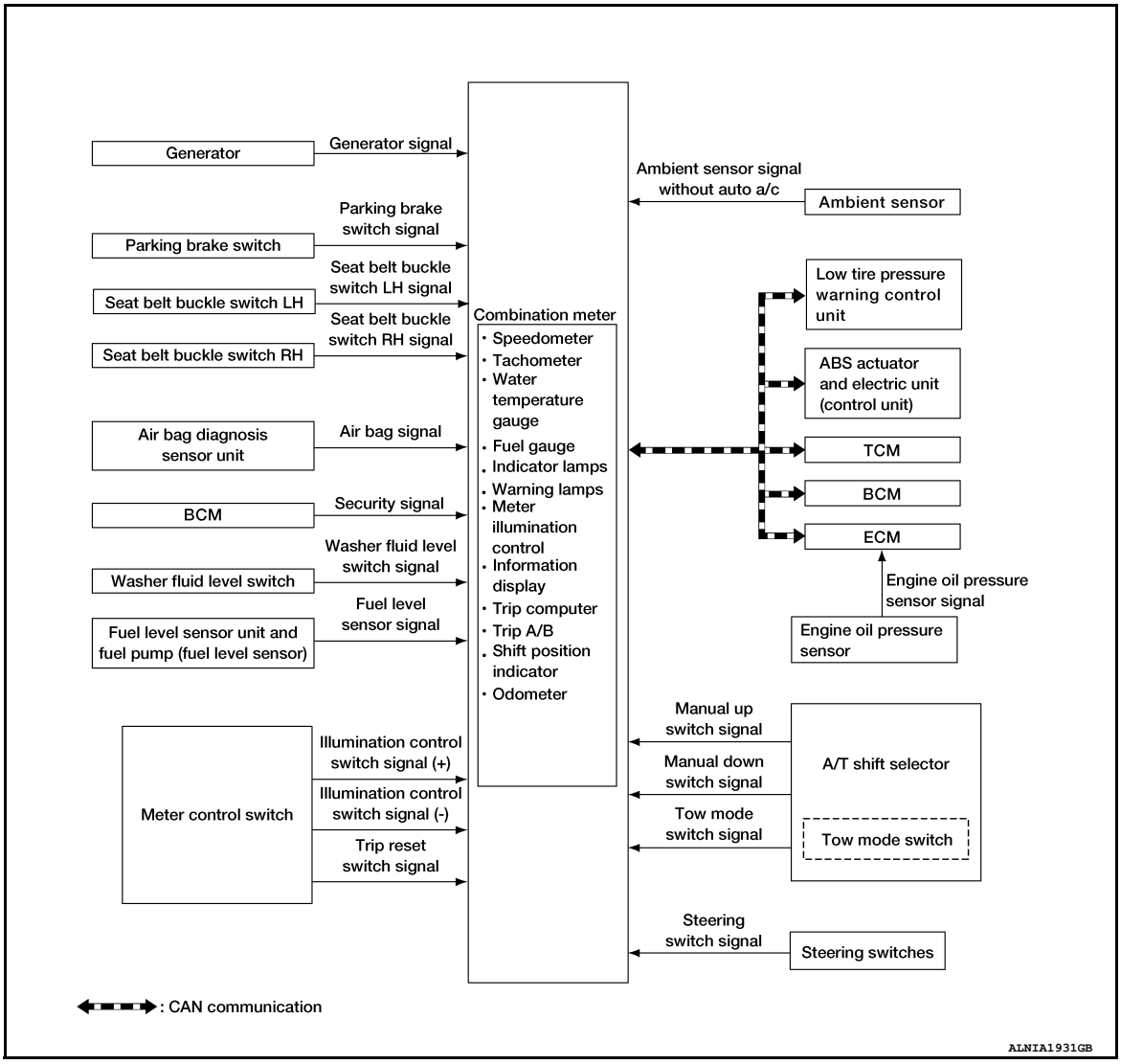


No.	Switch name	Operation	Description
1.	Illumination control switch	Press	The illumination level of the back light of the combination meter can be adjusted.
2.	Trip reset switch	Press	• The trip meter can be switched between A/ B and ODO. • Trip meter A/B can be reset by pressing and holding the trip reset switch. • A trip computer value displayed on the information display can be reset by pressing and holding the trip reset switch for 1 second or more. • All trip computer values can be reset by pressing and holding the trip reset switch for 3 seconds or more.

SYSTEM
METER SYSTEM
METER SYSTEM : System Description

INFOID:0000000014386627

SYSTEM DIAGRAM



Combination Meter Input Signal (CAN Communication Signal)

Transmit unit	Signal name
ABS actuator and electric unit (control unit)	Vehicle speed signal
	ABS warning lamp signal
	VDC warning lamp signal
	VDC OFF indicator lamp signal
	Brake warning lamp signal
	Hill descent indicator lamp signal
	Yaw rate/side/decel G sensor signal

Transmit unit	Signal name
BCM	Dimmer signal
	Position light request signal
	Door switch signal
	Front fog light request signal
	High beam request signal
	Meter display signal
	Sleep wake up signal
	Buzzer output signal
	Key ID signal
	Turn indicator signal
	Starter relay status signal
TCM	Shift position signal
	A/T check warning lamp signal
ECM	Engine speed signal
	ASCD status signal
	Engine coolant temperature signal
	Fuel consumption monitor signal
	Malfunctioning indicator lamp signal
	Engine status signal
	Engine oil pressure sensor signal
	Fuel-filler cap warning display signal
Low tire pressure warning control unit	TPMS malfunction warning lamp signal
	Tire pressure data signal
	Low tire pressure warning lamp signal

DESCRIPTION

Combination Meter

The combination meter controls the following items according to the signals received from each unit via CAN communication and the signals from switches and sensors:

- Speedometer
- Tachometer
- Engine coolant temperature gauge
- Fuel gauge
- Warning lamps
- Indicator lamps
- Meter illumination control
- Meter effect function
- Information display

The combination meter incorporates a buzzer function that sounds an audible alarm with the integrated buzzer. Refer to WCS-7, "WARNING CHIME SYSTEM : System Description" for further details.

The combination meter includes an on board diagnosis function.

The combination meter can be diagnosed with CONSULT.

METER CONTROL FUNCTION LIST

System		Description	Reference
Measuring instruments	Speedometer	Indicates vehicle speed.	MWI-123, "SPEEDOMETER : System Description"
	Tachometer	Indicates engine speed.	MWI-124, "TACHOMETER : System Description"
	Engine coolant temperature gauge	Indicates engine coolant temperature.	MWI-124, "ENGINE COOLANT TEMPERATURE GAUGE : System Description"
	Fuel gauge	Indicates fuel level.	MWI-124, "FUEL GAUGE : System Description"
Information display		The information display displays status according to system malfunction or vehicle condition.	MWI-126, "INFORMATION DISPLAY : System Description"
Meter illumination control	Meter illumination control function	Switches back and forth between daytime mode and nighttime mode according to a light switch position.	MWI-125, "METER ILLUMINATION CONTROL : System Description"
	Back light illumination control function	The operation of the illumination control switch allows the brightness adjustment of meter illumination.	
Meter effect function	Engine-start effect function	Controls pointers of combination meter, back light illumination and information display at engine start to produce illumination effects.	MWI-125, "METER EFFECT FUNCTION : System Description"
	Driver welcome function	Controls meter illumination to produce illumination effects when getting in the vehicle.	

METER SYSTEM : Fail-safe

INFOID:0000000014687455

The combination meter activates the fail-safe control if the CAN communication lines between each unit are malfunctioning.

Function	Specifications
Speedometer	Reset to zero by suspending communication.
Tachometer	
Engine coolant temperature gauge	
Meter illumination control	When suspending communication, it changes to nighttime mode.
Buzzer	Turns OFF by suspending communication.

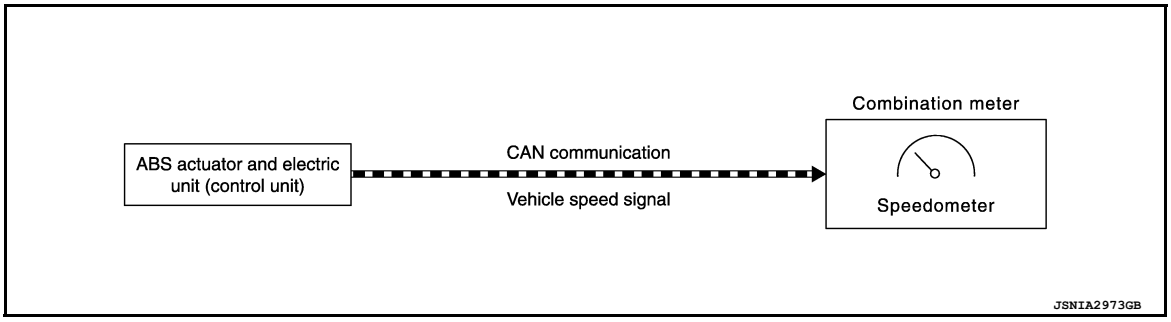
Function		Specifications
Information display	Current fuel consumption	The last result calculated during normal condition is indicated.
	Average fuel consumption	
	Average vehicle speed	
	Range (Distance to empty)	
	Driving distance	
	Low tire pressure warning	The display turns OFF by suspending communication.
	Fuel-filler cap warning	
	Oil pressure warning	
	Odo/trip meter	An indicated value is maintained at communications blackout.
	Shift selector position indicator	The indicator turns OFF by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	Turns ON by suspending communication.
	Brake warning lamp	
	VDC warning lamp	
	Malfunction indicator lamp	
	Air bag warning lamp	
	VDC OFF indicator lamp	Turns OFF by suspending communication.
	Charge warning lamp	
	High beam indicator lamp	
	Turn signal indicator lamp	
	Position lamp indicator lamp	
	Front fog lamp indicator lamp	
	Low tire pressure warning lamp	After blinking for 1 minute, the lamp remains ON.

SPEEDOMETER

SPEEDOMETER : System Description

INFOID:0000000014386629

SYSTEM DIAGRAM



DESCRIPTION

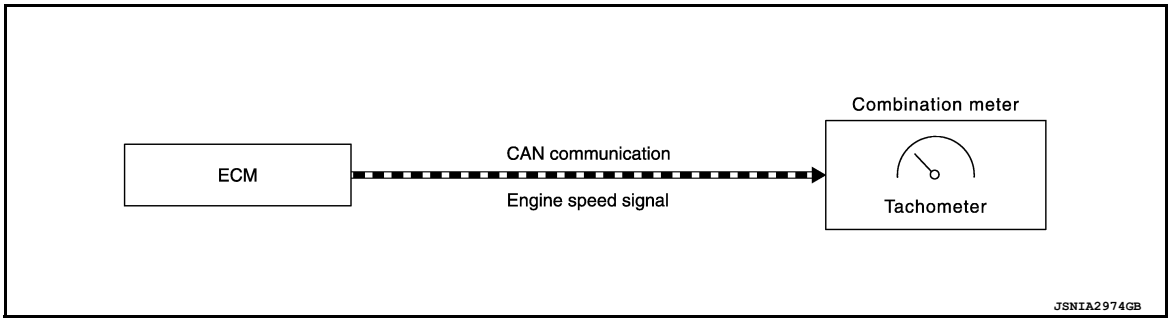
The ABS actuator and electric unit (control unit) receives each wheel speed sensor signal and provides a vehicle speed signal to the combination meter via CAN communication lines.

TACHOMETER

TACHOMETER : System Description

INFOID:0000000014386630

SYSTEM DIAGRAM



DESCRIPTION

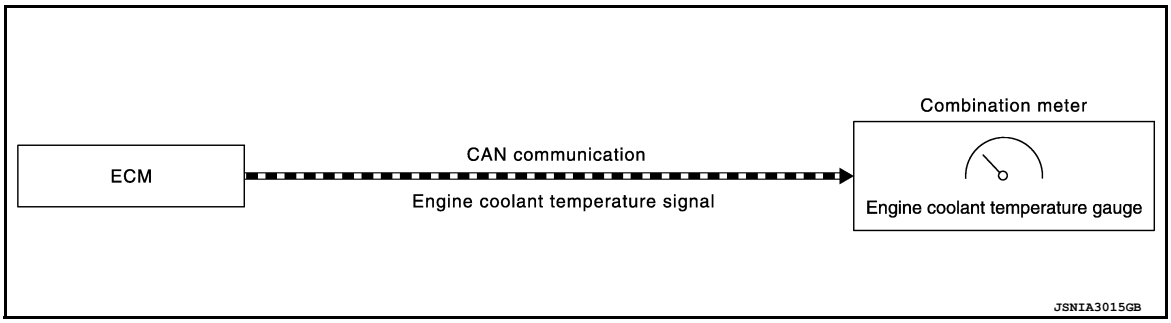
The crank position sensor sends a crankshaft position signal to the ECM. The ECM provides an engine speed signal to the combination meter via CAN communication lines. The tachometer indicates engine speed in revolutions per minute (rpm).

ENGINE COOLANT TEMPERATURE GAUGE

ENGINE COOLANT TEMPERATURE GAUGE : System Description

INFOID:0000000014386631

SYSTEM DIAGRAM



DESCRIPTION

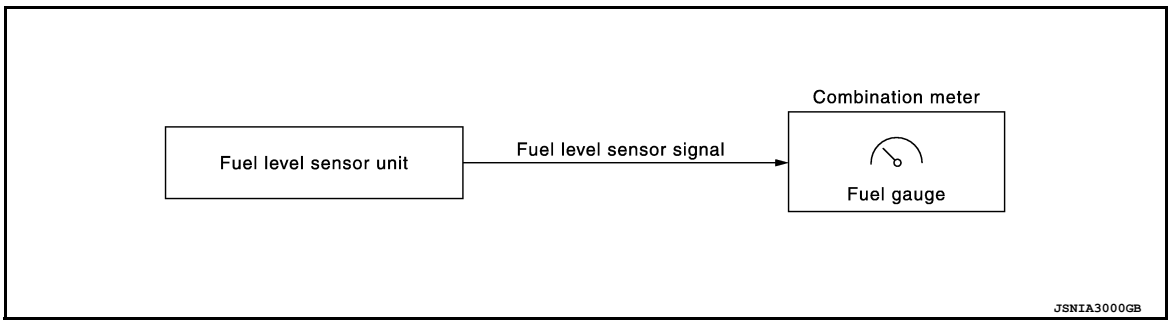
The engine coolant temperature sensor sends an engine coolant temperature signal to the ECM. The ECM provides an engine coolant temperature signal to the combination meter via CAN communication lines. The engine coolant temperature gauge indicates the engine coolant temperature.

FUEL GAUGE

FUEL GAUGE : System Description

INFOID:0000000014386632

SYSTEM DIAGRAM



DESCRIPTION

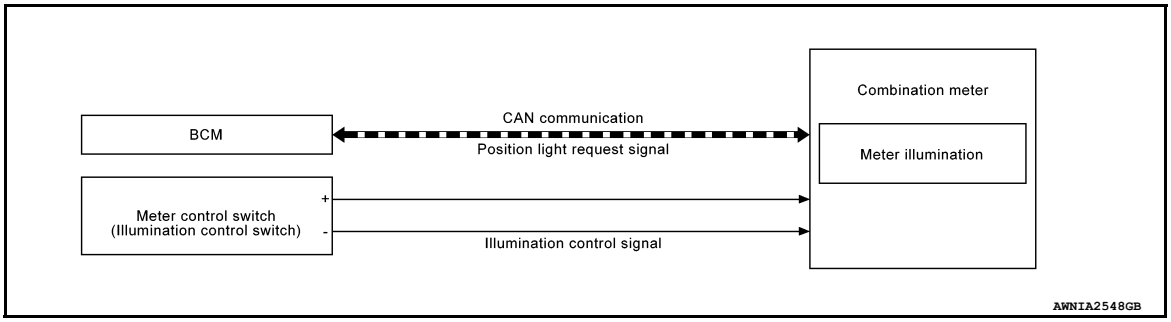
The fuel level sensor unit sends a variable resistor signal to the combination meter. The fuel gauge indicates the approximate fuel level in the fuel tank.

METER ILLUMINATION CONTROL

METER ILLUMINATION CONTROL : System Description

INFOID:0000000014386633

SYSTEM DIAGRAM



DESCRIPTION

Meter Illumination Control Function

The operation of the illumination control switch changes brightness of the meter illumination.

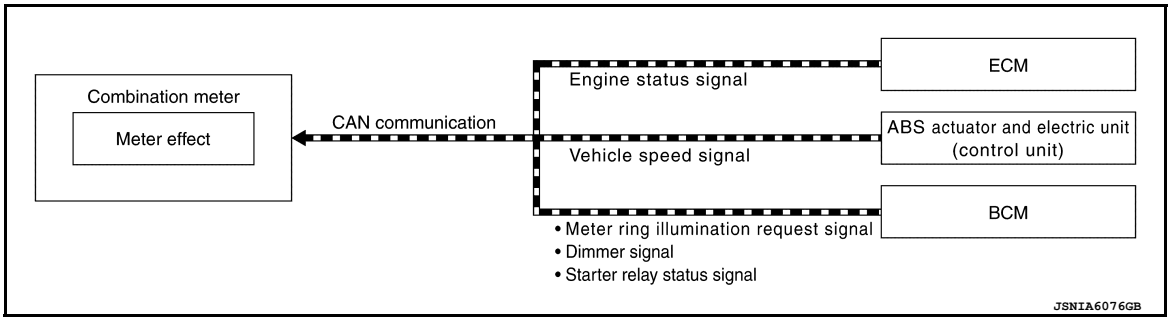
Meter illumination	The number of adjustable steps
Daytime	21
Nighttime	21

METER EFFECT FUNCTION

METER EFFECT FUNCTION : System Description

INFOID:0000000014386634

SYSTEM DIAGRAM



ENGINE-START EFFECT FUNCTION

When recognizing an engine start, the combination meter controls the following items for producing the effect:

- Speedometer
- Tachometer
- Engine coolant temperature gauge
- Fuel gauge
- Meter illumination

Meter and Illumination Operations During Engine-start Effect

The combination meter controls the following items during the engine-start effect:

Control item		Operation
Speedometer		Sweeps the pointer.
Tachometer		Sweeps the pointer.
Engine coolant temperature gauge		Stops the pointer.
Fuel gauge		Stops the pointer.
Meter illumination	Pointers	Turns on the illumination at the effect level.
	Information display	Turns on the illumination at the normal brightness level.
	Other than those above	Increases the brightness to the effect level in stages.

NOTE:
The pointers are stopped and illumination is turned off while cranking the engine.

Engine Start Judgment
The combination meter judges engine-start and activates the engine-start effect only once when the following operational conditions are all satisfied:

Condition	
Ignition switch	ON position
Vehicle speed	Less than 0.6 MPH (1 km/h)
Engine state	Other than the time of cranking the engine
	500 rpm or more
Information display (SETTING)	The setting of “EFFECT” is ON

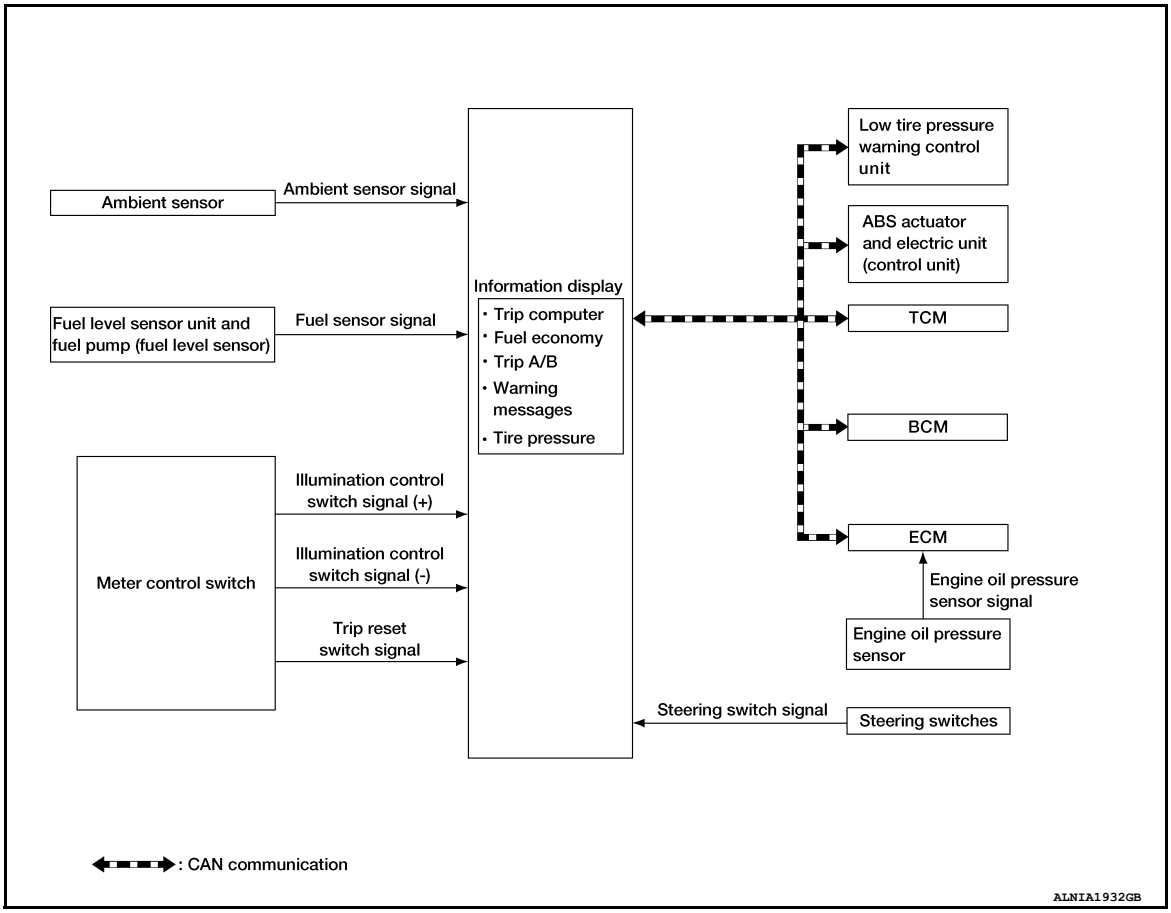
NOTE:
Engine-start effect exits when any of the above operational conditions are canceled during the engine-start effect.

INFORMATION DISPLAY

INFORMATION DISPLAY : System Description

INFOID:0000000014386635

SYSTEM DIAGRAM



FUNCTION

The information display can indicate the following items:
- Outside air temperature
- Trip computer
- Odometer
- Warning/Indication messages (low oil pressure, low fuel, low tire pressure and loose fuel cap).

OUTSIDE AIR TEMPERATURE INDICATION
Displays the ambient temperature based on the signal received from the ambient sensor.

LOOSE FUEL CAP MESSAGE
The LOOSE FUEL CAP message will display in the information display when the fuel-filler cap is not tightened correctly. The message will turn off as soon as the ECM detects the fuel-filler cap is properly tightened. The ECM provides a loose fuel cap signal to the combination meter via CAN communication.

LOW TIRE PRESSURE WARNING
This warning appears when the low tire pressure warning control unit detects low inflation pressure or a system malfunction. The low tire pressure warning control unit sends a signal to the combination meter via CAN communication to illuminate the low tire pressure warning lamp. In addition, a warning message will be displayed in the vehicle information display.

LOW FUEL WARNING
This warning appears when the fuel level in the fuel tank is low.

LOW OIL PRESSURE WARNING
This warning appears when the ECM detects low oil pressure. The ECM sends a signal to the combination meter via CAN communication to illuminate the low oil pressure warning lamp. In addition a warning message will be displayed in the vehicle information display.

WARNING CHECK INDICATION
The combination meter can cause an interruption on the information display to indicate a warning, based on signals received from each unit and switch.

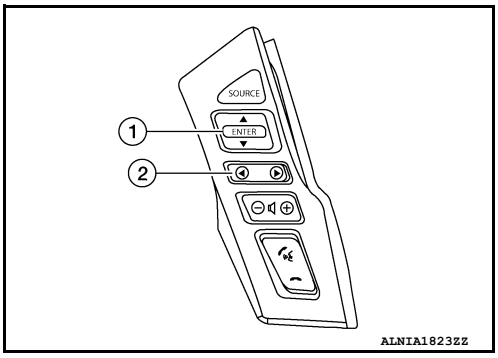
Refer to Owner’s Manual for additional information on the information display items.

OPERATION

Switch Name and Function

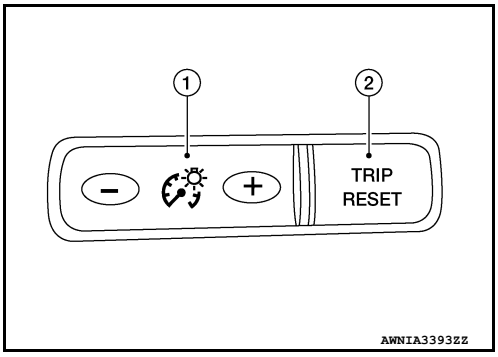
INFOID:0000000014386636

STEERING SWITCHES



No.	Switch name	Operation	Description
1.	Enter/Up/Down switch	Press	The information display settings can be changed.
2.	Menu left/menu right switch		

METER CONTROL SWITCH



No.	Switch name	Operation	Description
1.	Illumination control switch	Press	The illumination level of the back light of the combination meter can be adjusted.
2.	Trip reset switch	Press	• The trip meter can be switched between A/ B and ODO. • Trip meter A/B can be reset by pressing and holding the trip reset switch. • A trip computer value displayed on the information display can be reset by pressing and holding the trip reset switch for 1 second or more. • All trip computer values can be reset by pressing and holding the trip reset switch for 3 seconds or more.

DIAGNOSIS SYSTEM (COMBINATION METER)

On Board Diagnosis Function

INFOID:0000000014386637

COMBINATION METER SELF-DIAGNOSIS MODE

The following meter functions can be checked during Combination Meter Self-Diagnosis Mode:

- Pointer sweep of speedometer, tachometer and gauges
- Illumination of all LCD segments and color patterns for meter displays
- Illumination of all lamps/LEDs that are controlled by the combination meter (regardless of switch status)

STARTING COMBINATION METER SELF-DIAGNOSIS MODE

NOTE:

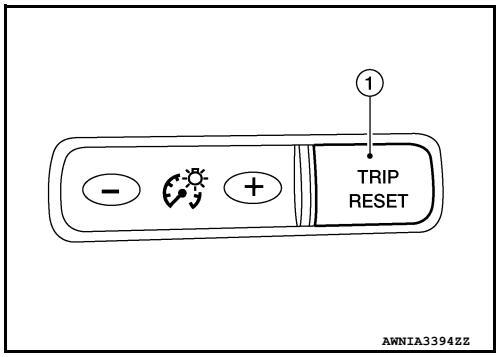
- Check combination meter power supply and ground circuits if self-diagnosis mode does not start. Refer to MWI-168, "COMBINATION METER : Diagnosis Procedure". Replace combination meter if power supply and ground circuits are found to be normal and self-diagnosis mode does not start. Refer to MWI-187, "Removal and Installation".
- Combination meter self-diagnosis mode will function with the ignition switch in ON. Combination meter self-diagnosis mode will exit upon turning the ignition switch to OFF.

How to Initiate Self-Diagnosis Mode

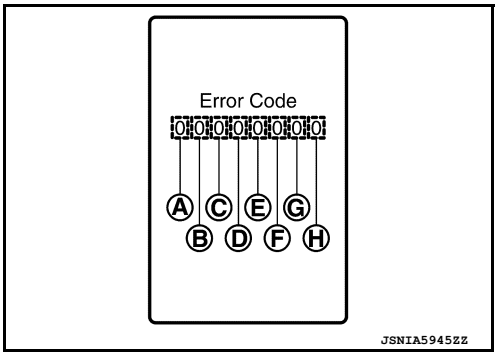
1. Turn ignition switch OFF.
2. While pressing the trip reset switch (1), turn ignition switch ON.
3. Keep pressing the trip reset switch for 1 second or more.
4. Press the trip reset switch at least 3 times within 7 seconds after the ignition switch is turned ON.
5. “Work instruction code” is indicated in the top portion of information display and self-diagnosis is started.
6. The mode switches in the order shown below each time the trip reset switch is pressed.

NOTE:

If the trip reset switch is not operated for 20 seconds or more, the self-diagnosis mode is automatically canceled.



Test order	Test item	Description
1	Work instruction code	This item is displayed, but not used.
2	Part number	
3	Software code	
4	EEPROM code	
5	Hardware code	
6	P.C.B code	
7	Circuit check	The pointer of the following items moves from 0 to MAX twice: • Speedometer • Tachometer • Engine coolant temperature gauge • Fuel gauge **NOTE:** If any of the pointers does not sweep, replace combination meter.
8	LCD segment check	Performs the LCD segment check of the information display.
9	Error code	Displays the error code of the following items: • Speedometer • Tachometer • Engine coolant temperature gauge • Fuel gauge • Meter control switch
10	Warning/indicator lamp check	All warning/indicator lamps illuminate.



Item		Code	Description	Action to take/Reference
Ⓐ	Speedometer	0	Normal	—
		1	A vehicle speed signal cannot be received from ABS actuator and electric unit (control unit).	Perform “Self Diagnostic Result” of “ABS.” Refer to MWI-139, "DTC Index".
		2	A vehicle speed signal received from the ABS actuator and electric unit (control unit) is abnormal.	
Ⓑ	Tachometer	0	Normal	—
		1	An engine speed signal cannot be received from ECM.	Perform “Self Diagnostic Result” of “ECM.” Refer to MWI-139, "DTC Index".
Ⓒ	Fuel gauge	0	Normal	—
		1	Fuel gauge circuit is shorted.	Refer to MWI-172, "Component Function Check".
		2	Fuel gauge circuit is open.	
Ⓓ	Engine coolant temperature gauge	0	Normal	—
		1	An engine coolant temperature signal cannot be received from ECM.	Perform “Self Diagnostic Result” of “ECM.” Refer to MWI-139, "DTC Index".
Ⓔ	Meter control switch	0	Normal	—
		1	When judging that the illumination control switch signal circuit is shorted for 5 minutes or more.	Refer to MWI-170, "Diagnosis Procedure".
		2	When judging that the trip reset switch signal circuit is shorted for 5 minutes or more.	
		3	When judging that both switch signal circuit are shorted for 5 minutes or more.	
Ⓕ	—	0	Displays “0” constantly.	—
Ⓖ	—	0	Displays “0” constantly.	—
Ⓗ	—	0	Displays “0” constantly.	—

How to Reset Error Code

Error codes stored in combination meter can be reset by following the instructions below:

1. Turn ignition switch OFF.
2. While pressing the trip reset switch, turn ignition switch ON.
3. Keep pressing the trip reset switch for 1 second or more.
4. Press the trip reset switch at least 3 times within 7 seconds after the ignition switch is turned ON.
5. Turn ignition switch OFF.
6. Perform self-diagnosis and check that the error codes are reset.

CONSULT Function (METER/M&A)

INFOID:0000000014386638

APPLICATION ITEMS

CONSULT can display each diagnostic item using the diagnostic test modes shown.

METER/M&A Diagnosis mode	Description
Self Diagnostic Result	Displays combination meter self-diagnosis results.
Data Monitor	Displays combination meter input/output data in real time.
Work support	Displays diagnosis procedure of each work item.
Warning History	Lighting history of the warning lamp and indicator lamp can be checked.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.

SELF DIAG RESULT

Refer to MWI-139, "DTC Index".

DATA MONITOR

Display Item List

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER	X	Displays the value of vehicle speed signal.
SPEED OUTPUT [mph or km/h]	X	Vehicle speed signal value transmitted to other units via CAN communication.
ODO OUTPUT [mph or km/h]		Odometer signal value transmitted to other units via CAN communication.
TACHO METER [rpm]	X	Value of the engine speed signal received from ECM via CAN communication.
FUEL METER [L]	X	Fuel level indicated on combination meter.
W TEMP METER [°F] or [°C]	X	Displays the value of engine coolant temperature signal, which is input from ECM.
ABS W/L [On/Off]		Displays [ON/OFF] condition of ABS warning indicator.
VDC/TCS IND [On/Off]		Displays [ON/OFF] condition of VDC OFF indicator lamp.
SLIP IND [On/Off]		Displays [ON/OFF] condition of SLIP indicator lamp.
BRAKE W/L [On/Off]		Displays [ON/OFF] condition of brake warning indicator.
DOOR W/L [On/Off]		Displays [ON/OFF] condition of door warning message in the information display.
HI-BEAM IND [On/Off]		Displays [ON/OFF] condition of high beam indicator.
TURN IND [On/Off]		Displays [ON/OFF] condition of turn indicator.
FR FOG IND [On/Off]		Displays [ON/OFF] condition of front fog lamp indicator.
OIL W/L [On/Off]		Displays [ON/OFF] condition of low oil pressure warning message in the information display.
MIL [On/Off]		Displays [ON/OFF] condition of malfunction indicator.
C-ENG2 W/L [On/Off]		Displays [ON/OFF] condition of malfunction indicator lamp (red).

Display item [Unit]	MAIN SIGNALS	Description
ATC/T-AMT W/L [Off]		Displays [ON/OFF] condition of A/T check warning indicator.
4WD W/L [On/Off]		Displays [ON/OFF] condition of 4WD warning lamp.
FUEL W/L [On/Off]		Displays [ON/OFF] condition of low-fuel warning message in the information display.
WASHER W/L [On/Off]		Displays [ON/OFF] condition of low washer fluid warning message in the information display.
AIR PRES W/L [On/Off]		Displays [ON/OFF] condition of tire pressure warning lamp.
KEY G/Y W/L [On/Off]		Displays [ON/OFF] condition of key green warning lamp.
DDS W/L(Note 1) [On/Off]		Displays [ON/OFF] condition of hill descent control indicator lamp.
CHAGE W/L [On/Off]		Displays [ON/OFF] condition of charge warning lamp.
DPF W/L [On/Off]		Displays [ON/OFF] condition of DPF warning lamp detected from DPF (Diesel particulate filter) warning lamp signal is received from ECM via CAN communication.
ATP W/L [On/Off]		Displays [ON/OFF] condition of ATP warning lamp.
FILTER W/L [On/Off]		Displays [ON/OFF] condition of water in fuel warning lamp.
SHIFT IND [P, R, N, D]		Displays shift selector position.
LCD		Displays status of Intelligent Key system.
4WD IND [LOCK, 2W, 4L, 4H, MALF]		Displays status of 4WD.
TOW MODE IND [On/Off]		Displays [ON/OFF] condition of tow mode indicator.
M RANGE SW [On/Off]		Displays [ON/OFF] condition of manual mode switch.
NM RANGE SW [On/Off]		Displays [ON/OFF] condition of non-manual mode switch.
AT SFT UP SW [On/Off]		Displays [ON/OFF] condition of manual mode shift up switch.
AT SFT DWN SW [On/Off]		Displays [ON/OFF] condition of manual mode shift down switch.
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the engine coolant temperature and the acceleration degree.
FUEL CAP W/L [On/Off]		Displays [ON/OFF] condition of loose fuel cap warning message in the information display.
PKB SW [On/Off]		Displays [ON/OFF] condition of parking brake switch.
BUCKLE SW [On/Off]		Displays [ON/OFF] condition of seat belt buckle switch LH.
BRAKE OIL SW [On/Off]		Displays [ON/OFF] condition of brake fluid level switch.
PASS BUCKLE SW [On/Off]		Displays [ON/OFF] condition of seat belt buckle switch RH.
TOW MODE SW [On/Off]		Displays [ON/OFF] condition of tow mode switch.

Display item [Unit]	MAIN SIGNALS	Description
LED LMP R OPEN [On/Off]		Displays [ON/OFF] condition of LED headlamp (RH) warning message.
LED LMP L OPEN [On/Off]		Displays [ON/OFF] condition of LED headlamp (LH) warning message.
DIFF LOCK IND [On/Off]		Displays [ON/OFF] condition of electronic locking rear differential indicator.
DISTANCE [Mi] or [km]		Displays distance to empty.
OUTSIDE TEMP [°F or °C]		Displays the ambient air temperature which is input from the ambient sensor.
FUEL LOW SIG [On/Off]		Displays [ON/OFF] condition of low-fuel warning signal.
BUZZER [On/Off]	X	Buzzer status (in the combination meter) is detected from the buzzer output signal received from each unit via CAN communication and the warning output condition of the combination meter.
ASCD SPD BLNK [On/Off]		Displays [ON/OFF] condition of blinking status of ASCD or speed limiter set vehicle speed that is judged by the ASCD status signal received from ECM via CAN communication.
ASCD STATUS [Off, ASCD, CRUISE]		Display status of ASCD and speed limiter status display judged by the ASCD status signal received from ECM via CAN communication.
ASCD REQ SPD [km/h or mph]		ASCD set vehicle speed value judged by the ASCD status signal received from ECM via CAN communication.
E/O CHG TMNG RST [On/Off]		Displays [ON/OFF] condition of resetting remaining distance to the engine oil change time.
TPMS PRESS L [On/Off]		Displays [ON/OFF] condition of tire pressure low message in the information display.

Note 1: CONSULT will display DDS (Downhill Drive Support) when referring to the Hill descent control system.

WORK SUPPORT

Work support item	Description
Outside air temperature diagnosis	A possible malfunction can be narrowed down by following the displayed instructions.
Fuel meter diagnosis (Analog pointer)	
Warning/Indicator lamp diagnosis	

WARNING HISTORY

Special menu

Display item	Description
W/L ON HISTORY	Lighting history of warning lamp and indicator lamp can be checked.

W/L ON HISTORY

- "W/L ON HISTORY" indicates the "TIME" when the warning/indicator lamp is turned on.
- The "TIME" above is:
  - 0: The condition that the warning/indicator lamp has been turned on 1 or more times after starting the engine and waiting for 30 seconds.
  - 1 - 39: The number of times the engine was restarted after the 0 condition.
  - NO W/L ON HISTORY: No warning/indicator lamp history is stored.

NOTE:

- "W/L ON HISTORY" is not stored for approximately 30 seconds after the engine starts.
- Brake warning lamp does not store any history when the parking brake is applied or the brake fluid level gets low.

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

INFOID:0000000014386639

VALUES ON THE DIAGNOSIS TOOL

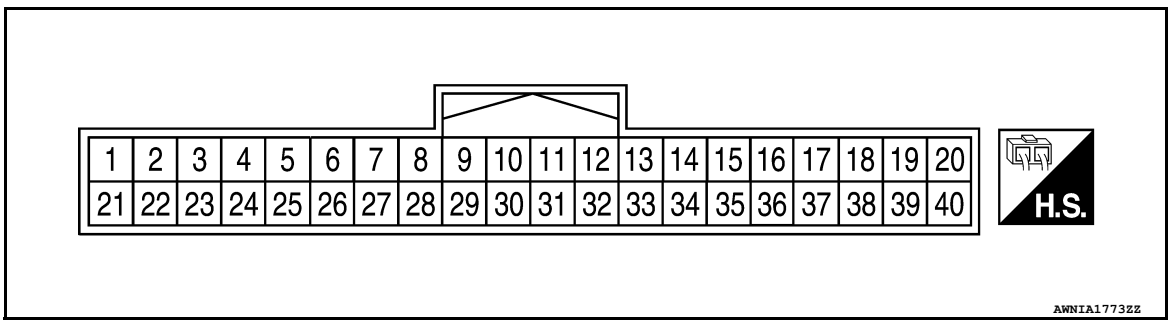
Monitor Item	Condition		Value/Status
SPEED METER [mph or km/h]	Ignition switch ON	While driving.	Input value of vehicle speed signal (CAN communication signal).
SPEED OUTPUT [mph or km/h]	Ignition switch ON	While driving.	Output value of vehicle speed signal (CAN communication signal).
ODO OUTPUT [mph or km/h]	Ignition switch ON	—	Output value of odometer signal (CAN communication signal).
TACHO METER [rpm]	Ignition switch ON	Engine running.	Input value of engine speed signal (CAN communication signal).
FUEL METER [L]	Ignition switch ON	—	Input value of fuel level sensor signal.
W TEMP METER [°F] or [°C]	Ignition switch ON	—	Input value of engine coolant temperature signal (CAN communication signal).
ABS W/L	Ignition switch ON	ABS warning lamp ON.	On
		ABS warning lamp OFF.	Off
VDC/TCS IND	Ignition switch ON	VDC OFF indicator lamp ON.	On
		VDC OFF indicator lamp OFF.	Off
SLIP IND	Ignition switch ON	VDC warning lamp ON.	On
		VDC warning lamp OFF.	Off
BRAKE W/L	Ignition switch ON	Brake warning lamp ON.	On*1
		Brake warning lamp OFF.	Off
DOOR W/L	Ignition switch ON	Door open warning displayed.	On
		Other than the above	Off
HI-BEAM IND	Ignition switch ON	High beam indicator lamp ON.	On
		High beam indicator lamp OFF.	Off
TURN IND	Ignition switch ON	Turn signal indicator lamp ON.	On
		Turn signal indicator lamp OFF.	Off
FR FOG IND	Ignition switch ON	Front fog lamp indicator lamp ON.	On
		Front fog lamp indicator lamp OFF.	Off
OIL W/L	Ignition switch ON	Engine oil pressure warning displayed.	On
		Other than the above.	Off
MIL	Ignition switch ON	Malfunction indicator lamp ON.	On
		Malfunction indicator lamp OFF.	Off
C-ENG2 W/L	Ignition switch ON	Malfunction indicator lamp (red) ON	On
		Malfunction indicator lamp (red) OFF	Off
ATC/T-AMT W/L	Ignition switch	A/T check warning indicator lamp ON.	On
		A/T check warning indicator lamp OFF.	Off
4WD W/L	Ignition switch ON	During 4WD warning indication	On
		Except during 4WD warning indication	Off
FUEL W/L	Ignition switch ON	Low fuel warning displayed.	On
		Low fuel warning lamp OFF.	Off

Monitor Item	Condition		Value/Status
WASHER W/L	Ignition switch ON	Low washer fluid warning displayed.	On
		Other than the above.	Off
AIR PRES W/L	Ignition switch ON	Low tire pressure warning lamp ON.	On
		Low tire pressure warning lamp OFF.	Off
KEY G/Y W/L	Ignition switch ON	Intelligent Key system warning indication.	On
		Other than the above.	Off
DDS W/L(Note 1)	Ignition switch ON	Hill descent control indicator lamp ON	On
		Hill descent control indicator lamp OFF	Off
CHAGE W/L	Ignition switch ON	Charge warning lamp ON	On
		Charge warning lamp OFF	Off
DPF W/L	Ignition switch ON	DPF (Diesel particulate filter) warning lamp ON	On
		DPF (Diesel particulate filter) warning lamp OFF	Off
ATP W/L	Ignition switch ON	ATP warning lamp ON	On
		ATP warning lamp OFF	Off
FILTER W/L	Ignition switch ON	Water-in-fuel-filter warning lamp ON	On
		Water-in-fuel-filter warning lamp OFF	Off
SHIFT IND	Ignition switch ON	Shift selector position indicator displayed.	[P, R, N, D, L]
4WD IND	Ignition switch ON	During LOCK indication	LOCK
		During 2W indication	2W
		During 4LO indication	4L
		During 4H indication	4H
		During MALF indication	MALF
TOW MODE IND	Ignition switch ON	Tow mode indicator lamp ON.	On
		Tow mode indicator lamp OFF.	Off
M RANGE SW	Ignition switch ON	Shift selector in manual mode position	On
		Other than the above	Off
NM RANGE SW	Ignition switch ON	Shift selector in manual mode position	Off
		Other than the above	On
AT SFT UP SW	Ignition switch ON	Shift selector operated in the up position	On
		Other than the above	Off
AT SFT DWN SW	Ignition switch ON	Shift selector operated in the down position	On
		Other than the above	Off
COMP F/B SIG	Ignition switch ON	A/C compressor activation condition	On
		Other than the above	Off
FUEL CAP W/L	Ignition switch ON	Fuel filler cap warning displayed.	On
		Other than the above.	Off
PKB SW	Ignition switch ON	Parking brake switch ON.	On
		Parking brake switch OFF.	Off
BUCKLE SW	Ignition switch ON	Driver seat belt not fastened.	On
		Driver seat belt fastened.	Off
BRAKE OIL SW	Ignition switch ON	Brake fluid level switch ON.	On
		Brake fluid level switch OFF.	Off

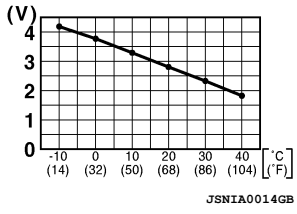
Monitor Item	Condition		Value/Status
PASS BUCKLE SW	Ignition switch ON	Passenger seat belt not fastened	On
		Passenger seat belt fastened	Off
TOW MODE SW	Ignition switch ON	TOW mode switch ON	On
		TOW mode switch OFF	Off
LED LMP R OPEN	Ignition switch ON	Front combination lamp RH malfunction	On
		Front combination lamp RH normal	Off
LED LMP L OPEN	Ignition switch ON	Front combination lamp LH malfunction	On
		Front combination lamp LH normal	Off
DIFF LOCK IND	Ignition switch ON	Diff lock switch ON	On
		Diff lock switch OFF	Off
DISTANCE [mi] or [km]	Ignition switch ON	—	Distance to empty.
OUTSIDE TEMP [°F] or [°C]	Ignition switch ON	—	Displays the ambient air temperature which is input from the ambient sensor.
FUEL LOW SIG	—	Low fuel level warning.	On
		Except during low fuel level warning.	Off
BUZZER	Ignition switch ON	Buzzer ON.	On
		Buzzer OFF.	Off
ASCD SPD BLNK	Ignition switch ON	Set vehicle speed indicator blinking	On
		Set vehicle speed indicator not blinking	Off
ASCD STATUS	Ignition switch ON	ASCD system OFF	Off
		ASCD system ON	ASCD
		ASCD set vehicle speed	CRUISE
ASCD REQ SPD	Ignition switch ON	While driving	Same value as ASCD set vehicle speed
E/O CHG TMNG RST	Ignition switch ON	Resetting of a remaining distance to the engine oil change time.	On
		Other than above	Off
LCD	Ignition switch ON	Intelligent key information.	B&P
TPMS PRESS L	Ignition switch ON	Tire pressure is low.	On
		Tire pressure is normal.	Off

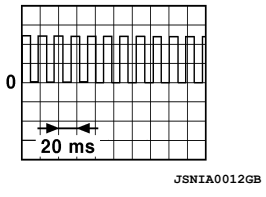
*1: Displays “Off” if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON.
Note 1: CONSULT will display DDS (Downhill Drive Support) when referring to the Hill descent control system.

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (B)	Ground	Ground	—	—	—	0 V
2 (B)	Ground	Ground	—	—	—	0 V
3 (B)	Ground	Ground	—	—	—	0 V
6 (R)	Ground	Battery power supply	—	—	—	Battery voltage
7 (V)	Ground	Security signal	Input	Ignition switch OFF	Security indicator ON	0 V
					Security indicator OFF	Battery voltage
8 (W)	Ground	Ignition signal	—	Ignition switch ON or START	—	Battery voltage
9 (BG)	Ground	Seat belt buckle switch RH signal (without ODS)	Input	Ignition switch ON	When passenger seat belt is fastened	Battery voltage
					When passenger seat belt is unfastened	0 V
10 (LG)	Ground	Tow mode switch	—	—	—	0 V
11 (BR)	Ground	Generator signal	—	Ignition switch ON	Charge warning lamp ON	2 V
					Charge warning lamp OFF	Battery voltage
12 (B)	Ground	Ground	—	—	—	0 V
13 (B)	Ground	Steering switch Ground	—	—	—	0 V
14 (R)	Ground	ACC power supply	—	Ignition switch ACC	—	Battery voltage
15 (W)	Ground	Ambient sensor signal	—	Ignition switch ON	Changes depending to ambient temperature.	 JSNIA0014GB
16 (O)	Ground	Air bag signal	—	—	—	—
18 (P)	Ground	Trip/reset switch signal	Input	Ignition switch ON	Trip/Reset switch is pressed	0 V
					Other than the above	5.0 V
20 (R)	Ground	Ambient sensor ground	—	—	—	0 V
22 (P)	Ground	Steering switch input 1	—	—	—	—
23 (R)	Ground	Steering switch input 2	—	—	—	—

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
24 (W)	Ground	Washer fluid level switch signal	Input	Ignition switch ON	Washer fluid level switch ON	0 V
					Washer fluid level switch OFF	Battery voltage
26 (G)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake applied	0 V
					Parking brake released	Battery voltage
27 (P/L)	Ground	Seat belt buckle switch RH signal (with ODS)	Input	Ignition switch ON	When passenger seat belt is fastened	Battery voltage
					When passenger seat belt is unfastened	0 V
28 (O/B)	Ground	Seat belt buckle switch LH signal	Input	Ignition switch ON	When driver seat belt is fastened	Battery voltage
					When driver seat belt is unfastened	0 V
30 (Y/V)	Ground	Fuel level sensor ground	—	Ignition switch ON	—	0 V
31 (BR/Y)	Ground	Fuel level sensor signal	—	Ignition switch ON	Fuel gauge indication position	Battery voltage
32 (BR)	Ground	Manual mode shift up signal	Input	Ignition switch ON	Manual mode UP operation	0 V
					Other than the above	Battery voltage
33 (V/W)	Ground	Manual mode shift down signal	Input	Ignition switch ON	Manual mode DOWN operation	0 V
					Other than the above	Battery voltage
34 (L)	Ground	CAN high	—	—	—	—
35 (P)	Ground	CAN low	—	—	—	—
36 (W)	Ground	Illumination control switch signal (+)	Input	Ignition switch ON	When illumination control switch (+) is pressed	0 V
					Other than the above	5.0 V
37 (R)	Ground	Illumination control switch signal (-)	Input	Ignition switch ON	When illumination control switch (-) is pressed	0 V
					Other than the above	5.0 V
38 (G)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 25 MPH (40 km/h)]	**NOTE:** The maximum voltage varies depending on the specification (destination unit). 
40 (GR)	Ground	Illumination control output signal	Output	Ignition switch ON	—	—

Fail-safe

INFOID:0000000014386640

The combination meter activates the fail-safe control if the CAN communication lines between each unit are malfunctioning.

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Engine coolant temperature gauge		
Meter illumination control		When suspending communication, it changes to nighttime mode.
Buzzer		Turns OFF by suspending communication.
Information display	Current fuel consumption	The last result calculated during normal condition is indicated.
	Average fuel consumption	
	Average vehicle speed	
	Range (Distance to empty)	
	Driving distance	
	Low tire pressure warning	The display turns OFF by suspending communication.
	Fuel-filler cap warning	
	Oil pressure warning	
	Odo/trip meter	An indicated value is maintained at communications blackout.
	Shift selector position indicator	The indicator turns OFF by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	Turns ON by suspending communication.
	Brake warning lamp	
	VDC warning lamp	
	Malfunction indicator lamp	
	Air bag warning lamp	
	VDC OFF indicator lamp	Turns OFF by suspending communication.
	Charge warning lamp	
	High beam indicator lamp	
	Turn signal indicator lamp	
	Position lamp indicator lamp	
	Front fog lamp indicator lamp	
	Low tire pressure warning lamp	After blinking for 1 minute, the lamp remains ON.

DTC Index

INFOID:0000000014386641

Display contents of CONSULT	Diagnostic item is detected when...	Refer to
CAN COMM CIRCUIT [U1000]	Combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-163
CONTROL UNIT (CAN) [U1010]	Detecting error during the initial diagnosis of CAN controller of combination meter.	MWI-164
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-165
ENGINE SPEED [B2267]	ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-166
WATER TEMP [B2268]	ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-167

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000014386642

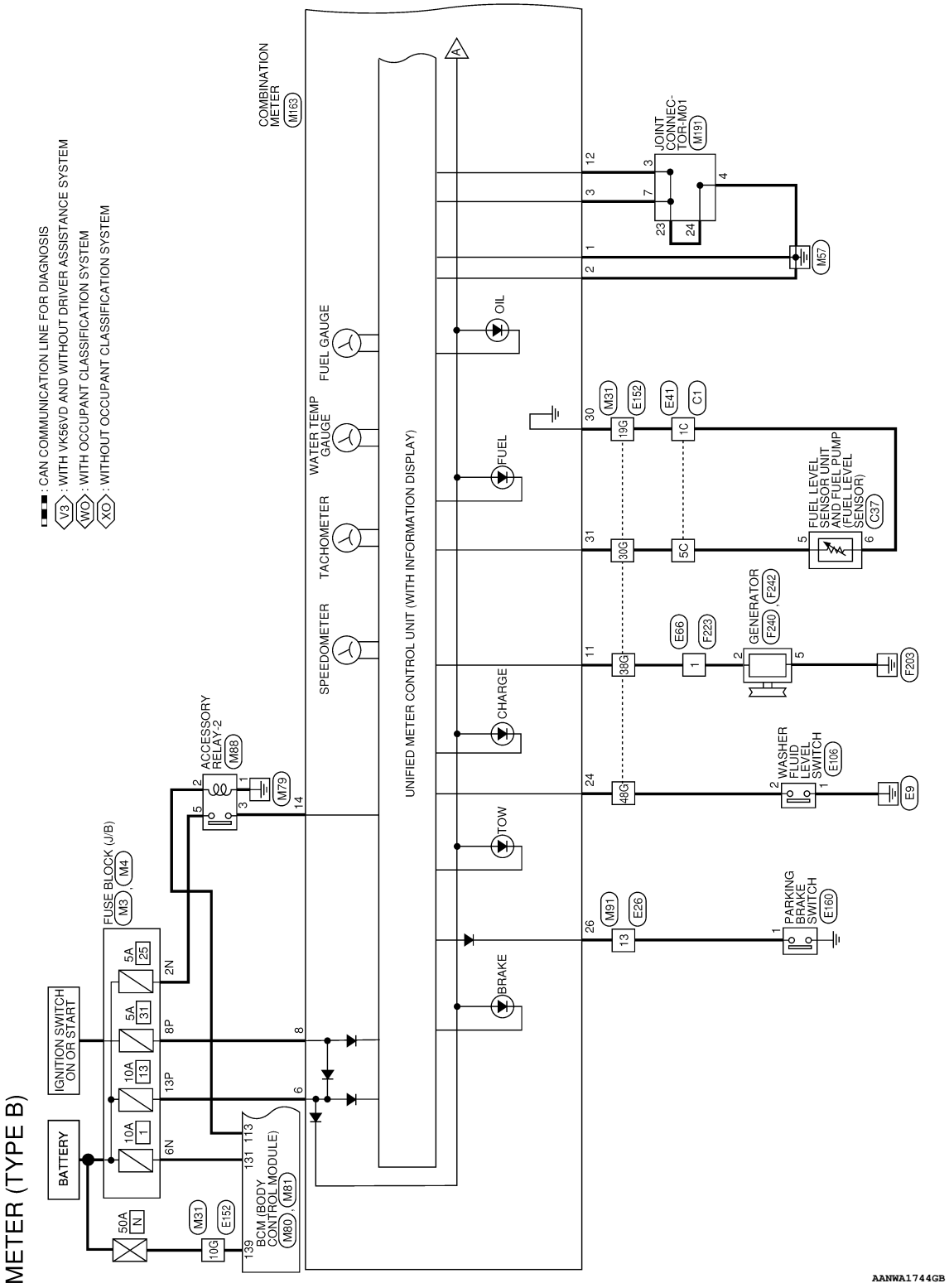
ECU	Reference
BCM	BCS-32, "Reference Value"
	BCS-51, "Fail Safe"
	BCS-51, "DTC Inspection Priority Chart"
	BCS-52, "DTC Index"

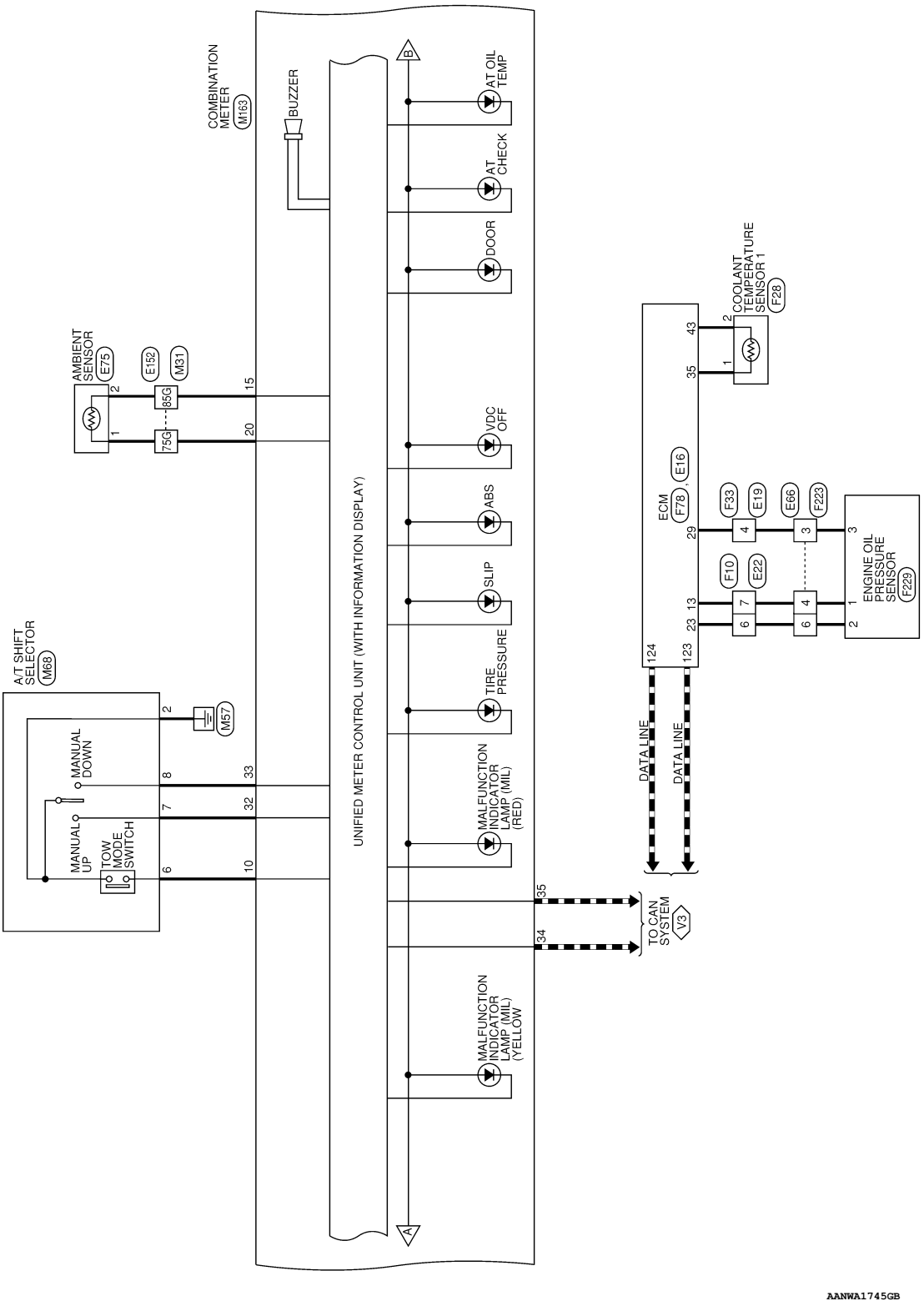
WIRING DIAGRAM

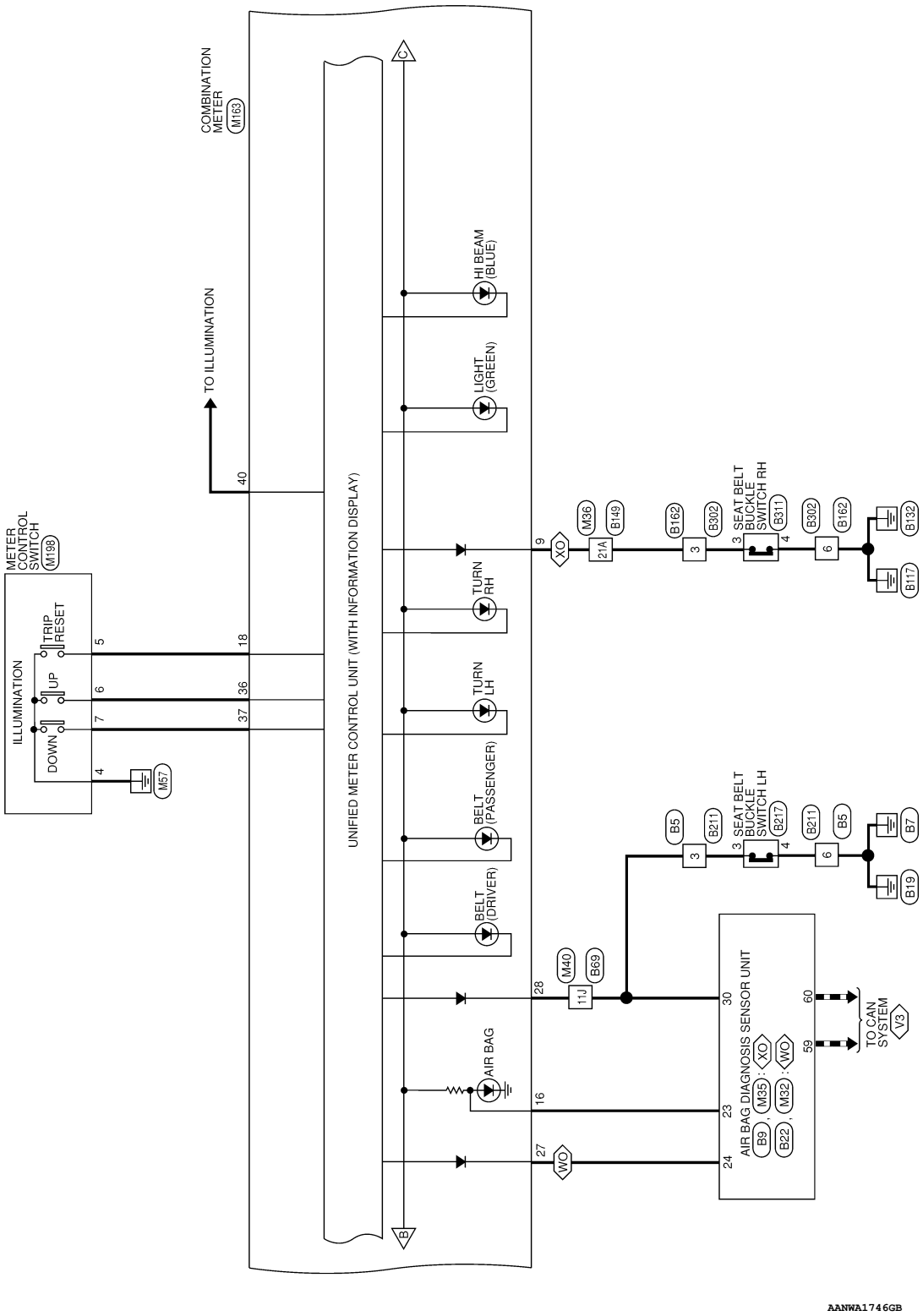
METER SYSTEM

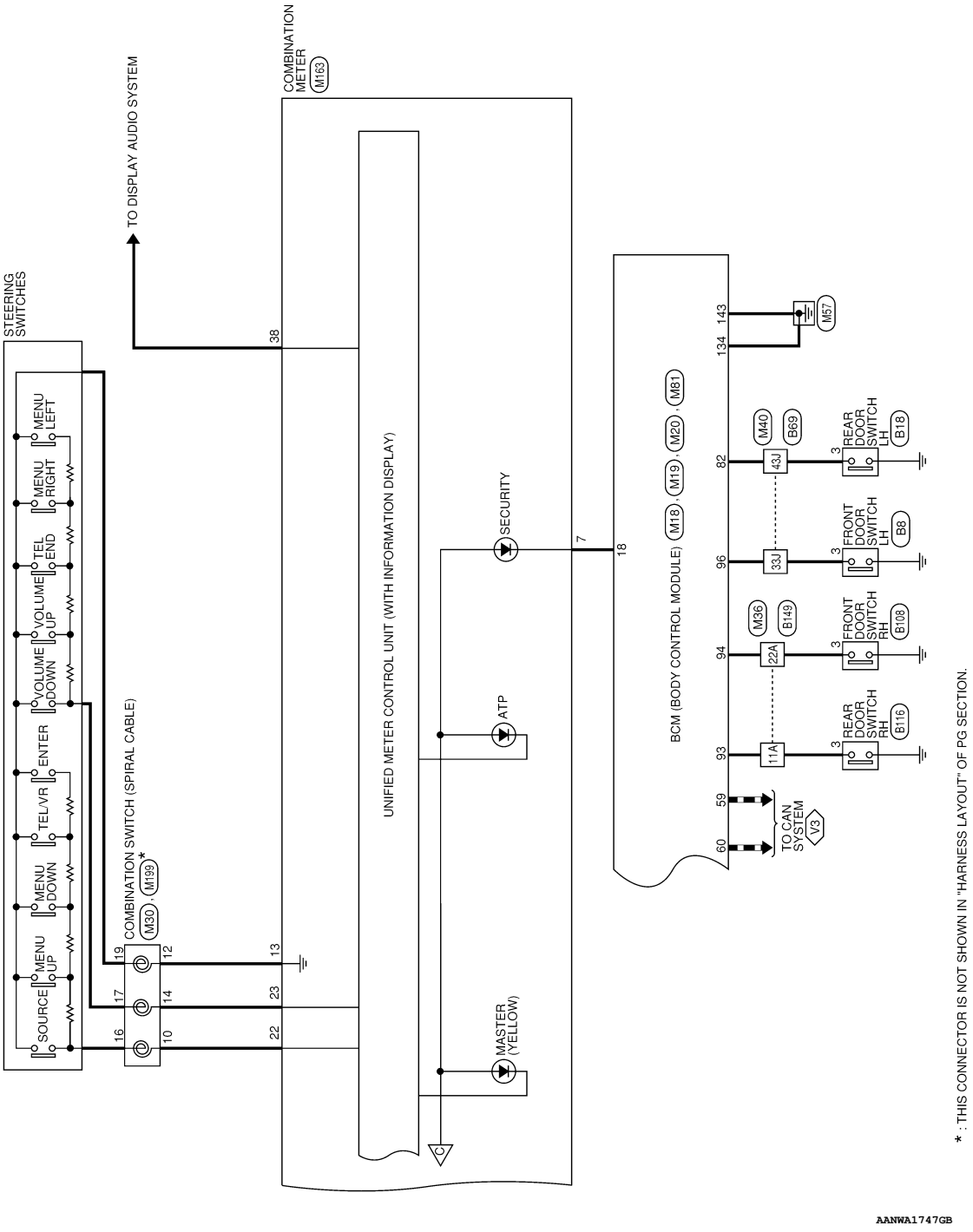
Wiring Diagram

INFOID:0000000014386643




COMBINATION METER
M163
BUZZER
AT OIL TEMP
AT CHECK
DOOR
VDC OFF
ABS
SLIP
TIRE PRESSURE
MALFUNCTION INDICATOR LAMP (MIL) (RED)
MALFUNCTION INDICATOR LAMP (MIL) (YELLOW)
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
AMBIENT SENSOR
E75
E152
M31
85G
75G
15
20
A/T SHIFT SELECTOR
M68
M57
MANUAL DOWN
MANUAL UP
TOW MODE SWITCH
8
7
6
2
33
32
10
35
34
TO CAN SYSTEM
V3
DATA LINE
DATA LINE
ECM
F78, E16
124
123
29
13
23
43
35
COOLANT TEMPERATURE SENSOR 1
F28
F33
E19
E66
F223
F10
E22
ENGINE OIL PRESSURE SENSOR
F229
AANWA1745GB

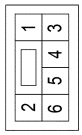

COMBINATION METER
M163
C
B
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
TO ILLUMINATION
40
HI BEAM (BLUE)
LIGHT (GREEN)
TURN RH
TURN LH
BELT (PASSENGER)
BELT (DRIVER)
AIR BAG
METER CONTROL SWITCH
M198
ILLUMINATION
TRIP RESET
UP
DOWN
5
6
7
4
M57
18
36
37
9
XO
M36
21A
B149
B162
3
B302
3 SEAT BELT BUCKLE SWITCH RH
B311
4
B302
6
B162
B132
B117
B5
3
B211
3 SEAT BELT BUCKLE SWITCH LH
B217
4
B211
6
B5
B7
B19
28
M40
11J
B69
16
27
WO
AIR BAG DIAGNOSIS SENSOR UNIT
30
23
24
B9 : M35 : XO
B22 : M32 : WO
60
59
TO CAN SYSTEM
V3
AANWA1746GB


STEERING SWITCHES
SOURCE
MENU UP
MENU DOWN
TEL/VR
ENTER
VOLUME DOWN
VOLUME UP
TEL END
MENU RIGHT
MENU LEFT
COMBINATION SWITCH (SPIRAL CABLE)
M30 , M199
TO DISPLAY AUDIO SYSTEM
COMBINATION METER
M163
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
SECURITY
ATP
MASTER (YELLOW)
BCM (BODY CONTROL MODULE)
M18 , M19 , M20 , M81
TO CAN SYSTEM
V3
M57
M40
B69
43J
REAR DOOR SWITCH LH
B18
33J
FRONT DOOR SWITCH LH
B8
M36
B149
22A
FRONT DOOR SWITCH RH
B108
11A
REAR DOOR SWITCH RH
B116
* : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.
AANWA1747GB

METER (TYPE B) CONNECTORS

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS
Connector Color	WHITE

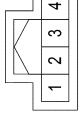
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	TO FRONT SEAT LH HARNESS
2	–	TO FRONT SEAT LH HARNESS
3	O/B	TO FRONT SEAT LH HARNESS
4	–	TO FRONT SEAT LH HARNESS
5	–	TO FRONT SEAT LH HARNESS
6	B	TO FRONT SEAT LH HARNESS

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

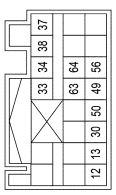
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	L	DR DOOR SW
4	–	–

Connector No.	B9
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITHOUT OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH22FY-2V-EX
Connector Color	YELLOW

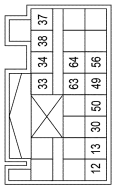
H.S.



Terminal No.	Color of Wire	Signal Name
12	G	P-LH (+)
13	BG	P-LH (-)
30	O/B	LH SEAT BELT BUCKLE SWITCH +
33	Y	S-LH (+)
34	BR	S-LH (-)
37	B	C-LH (+)
38	W	C-LH (-)
49	L/W	LH B-PILLAR SATELLITE SENSOR (+)
50	Y/B	LH B-PILLAR SATELLITE SENSOR (-)
56	SHIELD	GND
63	W	LH C-PILLAR SATELLITE SENSOR (+)
64	G	LH C-PILLAR SATELLITE SENSOR (-)

Connector No.	B22
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITH OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH22FY-2V-EX
Connector Color	YELLOW

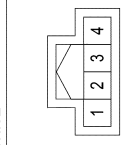
H.S.



Terminal No.	Color of Wire	Signal Name
12	G	P-LH (+)
13	BG	P-LH (-)
30	O/B	LH SEAT BELT BUCKLE SWITCH +
33	Y	S-LH (+)
34	BR	S-LH (-)
37	B	C-LH (+)
38	W	C-LH (-)
49	L/W	LH B-PILLAR SATELLITE SENSOR (+)
50	Y/B	LH B-PILLAR SATELLITE SENSOR (-)
56	SHIELD	GND
63	W	LH C-PILLAR SATELLITE SENSOR (+)
64	G	LH C-PILLAR SATELLITE SENSOR (-)

Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	SB	RL DOOR SW
4	–	–

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METER (TYPE B) CONNECTORS

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1J	P	TO MAIN HARNESS
2J	R/Y	TO MAIN HARNESS
3J	L	TO MAIN HARNESS
4J	L/B	TO MAIN HARNESS
5J	G/W	TO MAIN HARNESS
6J	LG/Y	TO MAIN HARNESS
7J	BR/LG	TO MAIN HARNESS
8J	SB/BR	TO MAIN HARNESS
9J	BR	TO MAIN HARNESS
10J	BR	TO MAIN HARNESS
11J	O/B	TO MAIN HARNESS
12J	L	TO MAIN HARNESS
13J	SB/O	TO MAIN HARNESS
14J	Y	TO MAIN HARNESS
15J	–	TO MAIN HARNESS
16J	R	TO MAIN HARNESS
17J	G	TO MAIN HARNESS
18J	SB	TO MAIN HARNESS
19J	O	TO MAIN HARNESS
20J	O/B	TO MAIN HARNESS
21J	Y/R	TO MAIN HARNESS
22J	P	TO MAIN HARNESS
23J	W	TO MAIN HARNESS
24J	W/R	TO MAIN HARNESS
25J	V	TO MAIN HARNESS
26J	L	TO MAIN HARNESS
27J	R	TO MAIN HARNESS
28J	L	TO MAIN HARNESS
29J	G/O	TO MAIN HARNESS
30J	SB	TO MAIN HARNESS
31J	LG	TO MAIN HARNESS
32J	R	TO MAIN HARNESS
33J	L	TO MAIN HARNESS
34J	Y	TO MAIN HARNESS
35J	P	TO MAIN HARNESS
36J	G/R	TO MAIN HARNESS
37J	LG/B	TO MAIN HARNESS
38J	SB	TO MAIN HARNESS
39J	Y/L	TO MAIN HARNESS
40J	BR	TO MAIN HARNESS
41J	L	TO MAIN HARNESS
42J	L	TO MAIN HARNESS
43J	SB	TO MAIN HARNESS
44J	BR	TO MAIN HARNESS
45J	BG	TO MAIN HARNESS
46J	P/Y	TO MAIN HARNESS
47J	Y/GR	TO MAIN HARNESS
48J	V	TO MAIN HARNESS
49J	BR/Y	TO MAIN HARNESS
50J	G/W	TO MAIN HARNESS
51J	–	TO MAIN HARNESS
52J	SHIELD	TO MAIN HARNESS
53J	R	TO MAIN HARNESS
54J	L	TO MAIN HARNESS
55J	R	TO MAIN HARNESS
56J	W	TO MAIN HARNESS
57J	L/G	TO MAIN HARNESS
58J	O	TO MAIN HARNESS
59J	–	TO MAIN HARNESS
60J	SHIELD	TO MAIN HARNESS
61J	G	TO MAIN HARNESS
62J	–	TO MAIN HARNESS
63J	R/W	TO MAIN HARNESS
64J	L/W	TO MAIN HARNESS
65J	SHIELD	TO MAIN HARNESS
66J	B	TO MAIN HARNESS
67J	SHIELD	TO MAIN HARNESS
68J	O/L	TO MAIN HARNESS
69J	SHIELD	TO MAIN HARNESS
70J	BR	TO MAIN HARNESS
71J	L/W	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
73J	–	TO MAIN HARNESS
74J	SHIELD	TO MAIN HARNESS
75J	LG/B	TO MAIN HARNESS
76J	R	TO MAIN HARNESS
77J	SHIELD	TO MAIN HARNESS
78J	GR/B	TO MAIN HARNESS
79J	B	TO MAIN HARNESS
80J	W	TO MAIN HARNESS
81J	SHIELD	TO MAIN HARNESS
82J	L/R	TO MAIN HARNESS
83J	–	TO MAIN HARNESS
84J	–	TO MAIN HARNESS
85J	Y/B	TO MAIN HARNESS
86J	G	TO MAIN HARNESS
87J	B/R	TO MAIN HARNESS
88J	SHIELD	TO MAIN HARNESS
89J	GR/R	TO MAIN HARNESS
90J	L	TO MAIN HARNESS
91J	L/B	TO MAIN HARNESS
92J	SB	TO MAIN HARNESS
93J	B	TO MAIN HARNESS
94J	L	TO MAIN HARNESS
95J	LG	TO MAIN HARNESS
96J	R	TO MAIN HARNESS
97J	B/Y	TO MAIN HARNESS
98J	L/B	TO MAIN HARNESS
99J	W/L	TO MAIN HARNESS
100J	SB	TO MAIN HARNESS

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	LG/R	AS DOOR SW
4	–	–

Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	LG	RR DOOR SW
4	–	–

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METER (TYPE B) CONNECTORS

Connector No.	B149
Connector Name	WIRE TO WIRE
Connector Type	TH80MDGY-CS16-TM4
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1A	SB/G	TO MAIN HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
1A	SB	TO MAIN HARNESS -(WITH CLIMATE CONTROLLED SEATS)
2A	L	TO MAIN HARNESS
3A	V	TO MAIN HARNESS
4A	SB/R	TO MAIN HARNESS
5A	–	TO MAIN HARNESS
6A	LG/Y	TO MAIN HARNESS -(WITHOUT CLIMATE CONTROLLED SEATS)
6A	LG	TO MAIN HARNESS -(WITH CLIMATE CONTROLLED SEATS)
7A	W	TO MAIN HARNESS
8A	B	TO MAIN HARNESS
9A	L/B	TO MAIN HARNESS
10A	W	TO MAIN HARNESS
11A	LG	TO MAIN HARNESS
12A	BR/O	TO MAIN HARNESS
13A	Y/W	TO MAIN HARNESS
14A	R/G	TO MAIN HARNESS
15A	Y/L	TO MAIN HARNESS
16A	O/L	TO MAIN HARNESS
17A	L	TO MAIN HARNESS
18A	Y	TO MAIN HARNESS
19A	LG	TO MAIN HARNESS
20A	R	TO MAIN HARNESS
21A	BG	TO MAIN HARNESS
22A	LG/R	TO MAIN HARNESS
23A	Y/LG	TO MAIN HARNESS
24A	BR/Y	TO MAIN HARNESS
25A	–	TO MAIN HARNESS
26A	GR	TO MAIN HARNESS
27A	LG	TO MAIN HARNESS
28A	LG/B	TO MAIN HARNESS
29A	–	TO MAIN HARNESS
30A	BR	TO MAIN HARNESS
31A	W/R	TO MAIN HARNESS
32A	G/R	TO MAIN HARNESS
33A	–	TO MAIN HARNESS
34A	SHIELD	TO MAIN HARNESS
35A	P	TO MAIN HARNESS
36A	B	TO MAIN HARNESS
37A	–	TO MAIN HARNESS
38A	R/B	TO MAIN HARNESS
39A	G/O	TO MAIN HARNESS
40A	V	TO MAIN HARNESS
41A	SHIELD	TO MAIN HARNESS
42A	SHIELD	TO MAIN HARNESS
43A	R	TO MAIN HARNESS
44A	G	TO MAIN HARNESS
45A	–	TO MAIN HARNESS
46A	–	TO MAIN HARNESS
47A	Y	TO MAIN HARNESS
48A	R/W	TO MAIN HARNESS
49A	R/L	TO MAIN HARNESS
50A	B	TO MAIN HARNESS
51A	–	TO MAIN HARNESS
52A	–	TO MAIN HARNESS
53A	–	TO MAIN HARNESS
54A	–	TO MAIN HARNESS
55A	–	TO MAIN HARNESS
56A	–	TO MAIN HARNESS
57A	–	TO MAIN HARNESS
58A	–	TO MAIN HARNESS
59A	–	TO MAIN HARNESS
60A	G/W	TO MAIN HARNESS
61A	–	TO MAIN HARNESS
62A	–	TO MAIN HARNESS
63A	–	TO MAIN HARNESS
64A	–	TO MAIN HARNESS
65A	–	TO MAIN HARNESS
66A	–	TO MAIN HARNESS
67A	–	TO MAIN HARNESS
68A	–	TO MAIN HARNESS
69A	Y/R	TO MAIN HARNESS
70A	R/G	TO MAIN HARNESS
71A	–	TO MAIN HARNESS
72A	Y/B	TO MAIN HARNESS
73A	G	TO MAIN HARNESS
74A	B/R	TO MAIN HARNESS
75A	SHIELD	TO MAIN HARNESS
76A	GR/R	TO MAIN HARNESS
77A	L	TO MAIN HARNESS
78A	SHIELD	TO MAIN HARNESS
79A	Y	TO MAIN HARNESS
80A	L	TO MAIN HARNESS
81A	R	TO MAIN HARNESS
82A	SHIELD	TO MAIN HARNESS
83A	LG/B	TO MAIN HARNESS
84A	R	TO MAIN HARNESS
85A	SHIELD	TO MAIN HARNESS
86A	GR/B	TO MAIN HARNESS
87A	B	TO MAIN HARNESS
88A	W	TO MAIN HARNESS
89A	SHIELD	TO MAIN HARNESS
90A	G	TO MAIN HARNESS
91A	W/L	TO MAIN HARNESS
92A	BR	TO MAIN HARNESS
93A	L/Y	TO MAIN HARNESS
94A	R/L	TO MAIN HARNESS
95A	BR	TO MAIN HARNESS
96A	R	TO MAIN HARNESS
97A	LG	TO MAIN HARNESS
98A	B/V	TO MAIN HARNESS
99A	O/L	TO MAIN HARNESS
100A	BR/W	TO MAIN HARNESS

Connector No.	B162
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	TO FRONT SEAT RH HARNESS
2	–	TO FRONT SEAT RH HARNESS
3	BG	TO FRONT SEAT RH HARNESS
4	LG/Y	TO FRONT SEAT RH HARNESS
5	SB/G	TO FRONT SEAT RH HARNESS
6	B	TO FRONT SEAT RH HARNESS

Connector No.	B211
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	TO BODY HARNESS LH
2	–	TO BODY HARNESS LH
3	BR	TO BODY HARNESS LH
4	–	TO BODY HARNESS LH
5	–	TO BODY HARNESS LH
6	P	TO BODY HARNESS LH

Connector No.	B217
Connector Name	SEAT BELT BUCKLE SWITCH LH (WITHOUT DRIVER POWER SEAT)
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	BR	BUCKLE SW (+)
4	P	BUCKLE SW (-)

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METER (TYPE B) CONNECTORS

Connector No.	B302
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	TO BODY HARNESS RH
2	–	TO BODY HARNESS RH
3	BR	TO BODY HARNESS RH
4	R	TO BODY HARNESS RH
5	LG	TO BODY HARNESS RH
6	P	TO BODY HARNESS RH

Connector No.	B311
Connector Name	SEAT BELT BUCKLE SWITCH RH (WITHOUT FRONT PASSENGER POWER SEAT)
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	BR	BUCKLE SW (+)
4	P	BUCKLE SW (-)

Connector No.	C1
Connector Name	WIRE TO WIRE
Connector Type	RK26FGY-RS20-X6
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1C	Y/V	TO ENGINE ROOM HARNESS
2C	W/L	TO ENGINE ROOM HARNESS
3C	B	TO ENGINE ROOM HARNESS
4C	BR/W	TO ENGINE ROOM HARNESS
5C	BR/Y	TO ENGINE ROOM HARNESS
6C	Y	TO ENGINE ROOM HARNESS
7C	G/R	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
7C	R	TO ENGINE ROOM HARNESS - (WITH VK56VD)
8C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
8C	O/B	TO ENGINE ROOM HARNESS - (WITH VK56VD)
9C	W/L	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
9C	SB	TO ENGINE ROOM HARNESS - (WITH VK56VD)
10C	GR/R	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
10C	GR	TO ENGINE ROOM HARNESS - (WITH VK56VD)
11C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
11C	R/W	TO ENGINE ROOM HARNESS - (WITH VK56VD)
12C	Y	TO ENGINE ROOM HARNESS
13C	B	TO ENGINE ROOM HARNESS
14C	BG	TO ENGINE ROOM HARNESS
15C	Y	TO ENGINE ROOM HARNESS
16C	B	TO ENGINE ROOM HARNESS
17C	V	TO ENGINE ROOM HARNESS
18C	BG	TO ENGINE ROOM HARNESS
19C	L	TO ENGINE ROOM HARNESS
20C	W	TO ENGINE ROOM HARNESS
21C	LG	TO ENGINE ROOM HARNESS

22C	SHIELD	TO ENGINE ROOM HARNESS
23C	G/B	TO ENGINE ROOM HARNESS
24C	G/B	TO ENGINE ROOM HARNESS
25C	W	TO ENGINE ROOM HARNESS
26C	B	TO ENGINE ROOM HARNESS
27C	LG	TO ENGINE ROOM HARNESS
28C	G/W	TO ENGINE ROOM HARNESS
29C	R/LG	TO ENGINE ROOM HARNESS
30C	R/L	TO ENGINE ROOM HARNESS
31C	B	TO ENGINE ROOM HARNESS
32C	R	TO ENGINE ROOM HARNESS
33C	L/W	TO ENGINE ROOM HARNESS
34C	L	TO ENGINE ROOM HARNESS
35C	R/W	TO ENGINE ROOM HARNESS
36C	L	TO ENGINE ROOM HARNESS
37C	Y	TO ENGINE ROOM HARNESS
38C	GR	TO ENGINE ROOM HARNESS
39C	R	TO ENGINE ROOM HARNESS
40C	P	TO ENGINE ROOM HARNESS
41C	V	TO ENGINE ROOM HARNESS
42C	LG/B	TO ENGINE ROOM HARNESS
43C	Y/B	TO ENGINE ROOM HARNESS
44C	R	TO ENGINE ROOM HARNESS
45C	G	TO ENGINE ROOM HARNESS
46C	BR	TO ENGINE ROOM HARNESS
47C	B	TO ENGINE ROOM HARNESS
48C	Y/R	TO ENGINE ROOM HARNESS
49C	R/Y	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
49C	V	TO ENGINE ROOM HARNESS - (WITH VK56VD)
50C	B	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
50C	B/Y	TO ENGINE ROOM HARNESS - (WITH VK56VD)
51C	V	TO ENGINE ROOM HARNESS - (WITH CUMMINS 5.0L)
51C	B	TO ENGINE ROOM HARNESS - (WITH VK56VD)
52C	V/W	TO ENGINE ROOM HARNESS

Connector No.	C37
Connector Name	FUEL LEVEL SENSOR UNIT AND FUEL PUMP
Connector Type	E06FGY-RS
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR	PUMP +
2	L	PUMP -
3	V/W	TEMP +
4	R	TEMP -
5	BR/Y	SENDER +
6	Y/V	SENDER -

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METER (TYPE B) CONNECTORS

Connector No.	E16
Connector Name	ECM (WITH VK56VD)
Connector Type	MAA24FB-MEA8-RH
Connector Color	BLACK

H.S.

121	125	129	133	137	141	145	149
122	126	130	134	138	142	146	150
123	127	131	135	139	143	147	151
124	128	132	136	140	144	148	152

Terminal No.	Color of Wire	Signal Name
121	O/B	EVAP CONTROL SYSTEM PRESSURE SENSOR
122	–	–
123	P	CAN COMMUNICATION LINE (CAN-L)
124	L	CAN COMMUNICATION LINE (CAN-H)
125	SB	SENSOR POWER SUPPLY
126	–	–
127	–	–
128	V/W	FUEL TEMPERATURE SENSOR
129	–	–
130	R/W	FUEL PUMP CONTROL MODULE (FPCM) CHECK
131	–	–
132	–	–
133	W	IGNITION SWITCH
134	G/Y	ASCD STEERING SWITCH
135	B/Y	SENSOR GROUND
136	GR	FUEL PUMP CONTROL MODULE (FPCM)
137	R/W	ENG COMMUNICATION LINE
138	W	ENG COMMUNICATION LINE
139	R/G	STOP LAMP SWITCH
140	G/Y	BRAKE PEDAL POSITION SWITCH
141	Y	EVAP CANISTER VENT CONTROL VALVE
142	L/W	SENSOR POWER SUPPLY
143	O	ACCELERATOR PEDAL POSITION SENSOR 2
144	P/L	SENSOR GROUND
145	W	POWER SUPPLY FOR ECM
146	W/G	SENSOR POWER SUPPLY
147	B	ECM GROUND
148	R	SENSOR GROUND
149	B	ECM GROUND
150	W/R	ACCELERATOR PEDAL POSITION SENSOR 1
151	R/Y	SENSOR GROUND
152	B	ECM GROUND

Connector No.	E19
Connector Name	WIRE TO WIRE
Connector Type	NS04MW-CS
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	L	TO ENGINE CONTROL HARNESS
2	W	TO ENGINE CONTROL HARNESS
3	P	TO ENGINE CONTROL HARNESS
4	SB	TO ENGINE CONTROL HARNESS

Connector No.	E22
Connector Name	WIRE TO WIRE
Connector Type	M08MB-LC
Connector Color	BLACK

H.S.

1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name
1	V	TO ENGINE CONTROL HARNESS
2	L	TO ENGINE CONTROL HARNESS
3	W	TO ENGINE CONTROL HARNESS
4	L	TO ENGINE CONTROL HARNESS
5	L	TO ENGINE CONTROL HARNESS
6	L/Y	TO ENGINE CONTROL HARNESS
7	W/L	TO ENGINE CONTROL HARNESS
8	R	TO ENGINE CONTROL HARNESS

Connector No.	E26
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
1	LG/B	TO MAIN HARNESS
2	R/W	TO MAIN HARNESS
3	Y/R	TO MAIN HARNESS
4	G/R	TO MAIN HARNESS
5	G/W	TO MAIN HARNESS
6	P	TO MAIN HARNESS
7	O	TO MAIN HARNESS
8	R	TO MAIN HARNESS
9	G	TO MAIN HARNESS
10	LG	TO MAIN HARNESS
11	BR	TO MAIN HARNESS
12	GR	TO MAIN HARNESS
13	G	TO MAIN HARNESS
14	BR	TO MAIN HARNESS
15	–	TO MAIN HARNESS
16	–	TO MAIN HARNESS
17	W	TO MAIN HARNESS
18	–	TO MAIN HARNESS
19	Y/R	TO MAIN HARNESS
20	G/W	TO MAIN HARNESS
21	–	TO MAIN HARNESS
22	–	TO MAIN HARNESS
23	–	TO MAIN HARNESS
24	O/L	TO MAIN HARNESS

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METER (TYPE B) CONNECTORS

Connector No.	E41
Connector Name	WIRE TO WIRE
Connector Type	RK26MGY-RS20-X6
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1C	Y/V	TO CHASSIS HARNESS
2C	W/L	TO CHASSIS HARNESS
3C	B	TO CHASSIS HARNESS
4C	BR/W	TO CHASSIS HARNESS
5C	BR/Y	TO CHASSIS HARNESS
6C	Y	TO CHASSIS HARNESS
7C	G/R	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
7C	R	TO CHASSIS HARNESS - (WITH VK56VD)
8C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
8C	O/B	TO CHASSIS HARNESS - (WITH VK56VD)
9C	W/L	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
9C	SB	TO CHASSIS HARNESS - (WITH VK56VD)
10C	GR/R	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
10C	GR	TO CHASSIS HARNESS - (WITH VK56VD)
11C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
11C	R/W	TO CHASSIS HARNESS - (WITH VK56VD)
12C	Y	TO CHASSIS HARNESS
13C	B	TO CHASSIS HARNESS
14C	BG	TO CHASSIS HARNESS
15C	Y	TO CHASSIS HARNESS
16C	B	TO CHASSIS HARNESS
17C	V	TO CHASSIS HARNESS
18C	BG	TO CHASSIS HARNESS
19C	L	TO CHASSIS HARNESS
20C	BG	TO CHASSIS HARNESS
21C	B	TO CHASSIS HARNESS
22C	SHIELD	TO CHASSIS HARNESS
23C	G/B	TO CHASSIS HARNESS
24C	G/Y	TO CHASSIS HARNESS
25C	W	TO CHASSIS HARNESS
26C	B	TO CHASSIS HARNESS
27C	LG	TO CHASSIS HARNESS
28C	G/W	TO CHASSIS HARNESS
29C	R/G	TO CHASSIS HARNESS - (WITHOUT BULB CHECK)
29C	G/R	TO CHASSIS HARNESS - (WITH BULB CHECK)
30C	R/L	TO CHASSIS HARNESS
31C	B	TO CHASSIS HARNESS
32C	R	TO CHASSIS HARNESS
33C	L/W	TO CHASSIS HARNESS
34C	L	TO CHASSIS HARNESS
35C	R/W	TO CHASSIS HARNESS
36C	L	TO CHASSIS HARNESS
37C	Y	TO CHASSIS HARNESS
38C	BR	TO CHASSIS HARNESS
39C	R	TO CHASSIS HARNESS
40C	P	TO CHASSIS HARNESS
41C	V	TO CHASSIS HARNESS
42C	G/B	TO CHASSIS HARNESS
43C	Y/B	TO CHASSIS HARNESS
44C	R	TO CHASSIS HARNESS
45C	G	TO CHASSIS HARNESS
46C	BR	TO CHASSIS HARNESS
47C	B	TO CHASSIS HARNESS
48C	Y/R	TO CHASSIS HARNESS
49C	R/Y	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
49C	V	TO CHASSIS HARNESS - (WITH VK56VD)
50C	B	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
50C	B/Y	TO CHASSIS HARNESS - (WITH VK56VD)
51C	V	TO CHASSIS HARNESS - (WITH CUMMINS 5.0L)
51C	B	TO CHASSIS HARNESS - (WITH VK56VD)
52C	B	TO CHASSIS HARNESS - (WITHOUT FFV)
52C	L	TO CHASSIS HARNESS - (WITH FFV)
52C	V/W	TO CHASSIS HARNESS

Connector No.	E66
Connector Name	WIRE TO WIRE
Connector Type	RS06MGY
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR	TO ENGINE ROOM SUB-HARNESS
2	Y	TO ENGINE ROOM SUB-HARNESS
3	SB	TO ENGINE ROOM SUB-HARNESS
4	W/L	TO ENGINE ROOM SUB-HARNESS
5	Y/B	TO ENGINE ROOM SUB-HARNESS
6	L/Y	TO ENGINE ROOM SUB-HARNESS

Connector No.	E75
Connector Name	AMBIENT SENSOR
Connector Type	RS02FB
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	R	SENS GND
2	W/B	AMB SENS

Connector No.	E106
Connector Name	WASHER FLUID LEVEL SWITCH
Connector Type	YEZ02FLGY
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GND
2	W	WASHER SW

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METER (TYPE B) CONNECTORS

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1G	G	TO MAIN HARNESS
2G	B/R	TO MAIN HARNESS
3G	W/B	TO MAIN HARNESS
4G	BR/W	TO MAIN HARNESS
5G	BR	TO MAIN HARNESS
6G	P	TO MAIN HARNESS - (WITH VK56VD)
6G	R/W	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
7G	Y	TO MAIN HARNESS
8G	G	TO MAIN HARNESS
9G	R	TO MAIN HARNESS
10G	W	TO MAIN HARNESS
11G	R/G	TO MAIN HARNESS
12G	W/B	TO MAIN HARNESS
13G	BR	TO MAIN HARNESS
14G	Y/B	TO MAIN HARNESS
15G	G/W	TO MAIN HARNESS
16G	G	TO MAIN HARNESS
17G	G/Y	TO MAIN HARNESS
18G	G/Y	TO MAIN HARNESS
19G	Y/V	TO MAIN HARNESS
20G	G/Y	TO MAIN HARNESS
21G	B/Y	TO MAIN HARNESS
22G	G/R	TO MAIN HARNESS
23G	Y/R	TO MAIN HARNESS
24G	G/B	TO MAIN HARNESS
25G	R/W	TO MAIN HARNESS
26G	R	TO MAIN HARNESS
27G	LG	TO MAIN HARNESS
28G	G/B	TO MAIN HARNESS
29G	G/B	TO MAIN HARNESS
30G	BR/Y	TO MAIN HARNESS
31G	P	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
31G	R	TO MAIN HARNESS - (WITH VK56VD)
32G	P	TO MAIN HARNESS
33G	Y/L	TO MAIN HARNESS
34G	GR	TO MAIN HARNESS
35G	G/R	TO MAIN HARNESS
36G	SB	TO MAIN HARNESS
37G	R/W	TO MAIN HARNESS
38G	BR	TO MAIN HARNESS
39G	BR	TO MAIN HARNESS
40G	–	TO MAIN HARNESS
41G	R/G	TO MAIN HARNESS
42G	O	TO MAIN HARNESS
43G	B	TO MAIN HARNESS - (WITH CUMMINS 5.0L)
43G	G	TO MAIN HARNESS - (WITH VK56VD)
44G	R/Y	TO MAIN HARNESS
45G	G	TO MAIN HARNESS
46G	LG	TO MAIN HARNESS
47G	R	TO MAIN HARNESS
48G	W	TO MAIN HARNESS
49G	–	TO MAIN HARNESS
50G	BR	TO MAIN HARNESS
51G	R	TO MAIN HARNESS
52G	L	TO MAIN HARNESS
53G	W	TO MAIN HARNESS
54G	W	TO MAIN HARNESS
55G	G	TO MAIN HARNESS
56G	W	TO MAIN HARNESS
57G	Y	TO MAIN HARNESS
58G	BG	TO MAIN HARNESS
59G	BG	TO MAIN HARNESS
60G	BG	TO MAIN HARNESS
61G	B	TO MAIN HARNESS
62G	W	TO MAIN HARNESS
63G	R	TO MAIN HARNESS
64G	W/L	TO MAIN HARNESS
65G	W/R	TO MAIN HARNESS
66G	BG	TO MAIN HARNESS
67G	BG	TO MAIN HARNESS
68G	B	TO MAIN HARNESS
69G	Y	TO MAIN HARNESS
70G	L	TO MAIN HARNESS
71G	R/W	TO MAIN HARNESS
72G	L/W	TO MAIN HARNESS
73G	SHIELD	TO MAIN HARNESS
74G	W	TO MAIN HARNESS
75G	R	TO MAIN HARNESS
76G	R/G	TO MAIN HARNESS
77G	G	TO MAIN HARNESS
78G	W	TO MAIN HARNESS
79G	–	TO MAIN HARNESS
80G	R	TO MAIN HARNESS
81G	L	TO MAIN HARNESS
82G	R	TO MAIN HARNESS
83G	L	TO MAIN HARNESS
84G	L	TO MAIN HARNESS
85G	W/B	TO MAIN HARNESS
86G	B/R	TO MAIN HARNESS
87G	W/B	TO MAIN HARNESS
88G	P	TO MAIN HARNESS
89G	L	TO MAIN HARNESS
90G	G	TO MAIN HARNESS
91G	G	TO MAIN HARNESS
92G	V/W	TO MAIN HARNESS
93G	BR	TO MAIN HARNESS
94G	G	TO MAIN HARNESS
95G	G	TO MAIN HARNESS
96G	W	TO MAIN HARNESS
97G	R	TO MAIN HARNESS
98G	W/B	TO MAIN HARNESS
99G	BR	TO MAIN HARNESS
100G	GR/W	TO MAIN HARNESS

Connector No.	E160
Connector Name	PARKING BRAKE SWITCH
Connector Type	P01FB-A
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	PKB SW

Connector No.	F10
Connector Name	WIRE TO WIRE
Connector Type	M08FB-LC
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	V	TO ENGINE ROOM HARNESS
2	L/LG	TO ENGINE ROOM HARNESS
3	W	TO ENGINE ROOM HARNESS
4	L	TO ENGINE ROOM HARNESS
5	L/G	TO ENGINE ROOM HARNESS
6	L/Y	TO ENGINE ROOM HARNESS
7	W/L	TO ENGINE ROOM HARNESS
8	R	TO ENGINE ROOM HARNESS

Connector No.	F28
Connector Name	ENGINE COOLANT TEMPERATURE SENSOR 1
Connector Type	E02FGY-RS
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	R/W	OUT
2	R	GNDA OTHER

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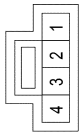
METER (TYPE B) CONNECTORS

Connector No.	F33
Connector Name	WIRE TO WIRE
Connector Type	NS04FW-CS
Connector Color	WHITE

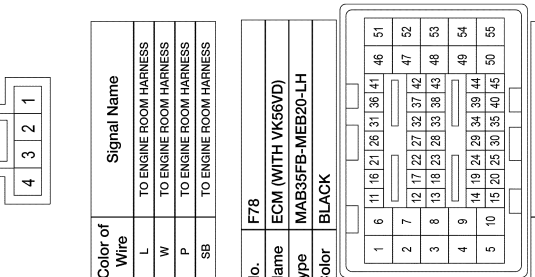
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	TO ENGINE ROOM HARNESS
2	W	TO ENGINE ROOM HARNESS
3	P	TO ENGINE ROOM HARNESS
4	SB	TO ENGINE ROOM HARNESS

Connector No.	F78
Connector Name	ECM (WITH VK56VD)
Connector Type	MAB35FB-MEB20-LH
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	R	FUEL INJECTOR DRIVER POWER SUPPLY
2	SB	HIGH PRESSURE FUEL PUMP DRIVER POWER SUPPLY
3	B/R	FUEL INJECTOR NO. 8 (LO)
4	O	FUEL INJECTOR NO. 3 (LO)
5	G	FUEL INJECTOR NO. 2, 3 (HI)
6	R	FUEL INJECTOR DRIVER POWER SUPPLY
7	V/B	FUEL INJECTOR NO. 5, 8 (HI)
8	B/W	FUEL INJECTOR NO. 5 (LO)
9	R/W	INJ-L #2
10	B	ECM GROUND
11	-	-
12	L/Y	REFRIGERANT PRESSURE SENSOR
13	W/L	SENSOR GROUND
14	SHIELD	SHIELD
15	W	KNOCK SENSOR (BANK 1)
16	-	-
17	V	EXHAUST GAS TEMPERATURE SENSOR (BANK 2)
18	W	KNOCK SENSOR (BANK 2)
19	GR/R	EXHAUST GAS TEMPERATURE SENSOR (BANK 1)
20	SHIELD	SENSOR GROUND
21	-	-
22	L/Y	ENGINE OIL TEMPERATURE SENSOR
23	L/Y	ENGINE OIL PRESSURE SENSOR
24	P/GR	POWER STEERING PRESSURE SENSOR
25	V/W	FUEL RAIL PRESSURE SENSOR
26	-	-
27	W/G	SENSOR POWER SUPPLY
28	Y/R	SENSOR POWER SUPPLY
29	SB	SENSOR POWER SUPPLY
30	SB	SENSOR POWER SUPPLY
31	BR	COOLING FAN SPEED
32	LG	BATTERY TEMPERATURE SENSOR
33	R/W	CRANKSHAFT POSITION SENSOR (POS)
34	-	-
35	R/W	ENGINE COOLANT TEMPERATURE SENSOR 1
36	G/O	INTAKE AIR TEMPERATURE SENSOR
37	G/B	MASS AIR FLOW SENSOR
38	V	BATTERY CURRENT SENSOR
39	-	-
40	L/R	CAMSHAFT POSITION SENSOR (PHASE) (BANK 1)
41	P	EXHAUST VALVE TIMING CONTROL POSITION SENSOR (BANK 1)
42	R	SENSOR GROUND
43	R	SENSOR GROUND
44	G/W	SENSOR GROUND
45	BR/W	SENSOR GROUND
46	SB	HIGH PRESSURE FUEL PUMP DRIVER POWER SUPPLY
47	BR	FUEL INJECTOR NO. 1, 6 (HI)
48	Y	FUEL INJECTOR NO. 1 (LO)
49	L	FUEL INJECTOR NO. 4 (LO)
50	B	ECM GROUND
51	P	HIGH PRESSURE FUEL PUMP DRIVER POWER SUPPLY
52	R	FUEL INJECTOR NO. 6 (LO)
53	V	FUEL INJECTOR NO. 7 (LO)
54	W	FUEL INJECTOR NO. 4, 7 (HI)
55	B	ECM GROUND

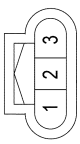
Connector No.	F223
Connector Name	WIRE TO WIRE
Connector Type	RS06FGY-PR
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR	TO ENGINE ROOM HARNESS
2	Y	TO ENGINE ROOM HARNESS
3	SB	TO ENGINE ROOM HARNESS
4	W/L	TO ENGINE ROOM HARNESS
5	Y/B	TO ENGINE ROOM HARNESS
6	L/Y	TO ENGINE ROOM HARNESS

Connector No.	F229
Connector Name	ENGINE OIL PRESSURE SENSOR
Connector Type	RH03FB
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	W/L	GND
2	L/Y	VOUT
3	SB	VCC

Connector No.	F240
Connector Name	GENERATOR (WITH VK56VD)
Connector Type	E-LA6
Connector Color	-

H.S.

Terminal No.	Color of Wire	Signal Name
5	B	GROUND

Connector No.	F242
Connector Name	GENERATOR (WITH VK56VD)
Connector Type	HS03FB
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
2	BR	CHG
3	Y/B	BATTERY
4	Y	ALT-C

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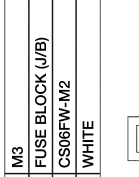
METER (TYPE B) CONNECTORS

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2
Connector Color	WHITE

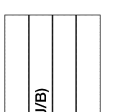
H.S.



Terminal No.	Color of Wire	Signal Name
1N	–	–
2N	W	BATTERY
3N	W	BLOWER FAN RELAY OUT
4N	V	BATTERY
5N	Y	BATTERY
6N	W	BATTERY
7N	L	ACC RELAY OUT
8N	W	IGNITION

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1P	R	IGNITION
2P	Y	IGNITION
3P	G	IGNITION RELAY OUT
4P	B/W	RR DEF RLY
5P	B/W	RR DEF RLY
6P	O	RR DEF RLY OUT
7P	G	IGNITION
8P	W	IGNITION
9P	L	BATTERY
10P	–	–
11P	–	–
12P	–	–
13P	R	BATTERY
14P	Y	BATTERY
15P	Y/LG	BATTERY

16P	W	BLOWER FAN RELAY OUT

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH
Connector Color	GREEN

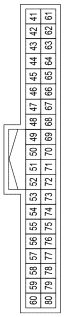
H.S.

Terminal No.	Color of Wire	Signal Name
1	G	ENG START SW NO ESCL
2	–	–
3	R	A/L POWER SUPPLY 5V
4	W/R	A/L SIGNAL
5	–	–
6	–	–
7	–	–
8	–	–
9	–	–
10	SB	COMBI SW IN 5
11	G/Y	COMBI SW IN 4
12	Y	COMBI SW IN 3
13	G/B	COMBI SW IN 2
14	V	COMBI SW IN 1
15	–	–
16	–	–
17	P	GND RF A/L
18	V	SECURITY INDICATOR
19	–	–
20	R	SHIFT P
21	R/W	STEP LAMP CONT
22	–	–
23	Y	AIRCON SW
24	–	–
25	W	BRAKE SW FUSE
26	L	SHORT IN PIN INPUT
27	R/G	BRAKE SW LAMP
28	–	–
29	W	BLOWER FAN SW
30	P	DR DOOR LOCK STATUS
31	–	–
32	Y	REAR DEFOGGER SW
33	–	–
34	–	–
35	R/G	REVERSE SW
36	W/B	HAZARD SW

37	–	–
38	–	–
39	B/R	SHIFT N/P
40	–	–

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK

H.S.

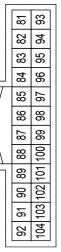


Terminal No.	Color of Wire	Signal Name
41	Y/L	TRAILER LIGHT CHECK RELAY OUT
42	R/Y	CARGO LAMP OUT
43	–	–
44	–	–
45	–	–
46	–	–
47	–	–
48	R	HIGH SIDE START SW LED
49	–	–
50	–	–
51	–	–
52	W	AUDIO DONGLE
53	–	–
54	W/L	PW UART
55	W/B	L&R SENSOR K-LINE
56	–	–
57	–	–
58	–	–
59	P	CAN-L
60	L	CAN-H
61	O	REAR DEFOGGER RELAY OUT
62	W	STARTER RELAY OUT
63	–	–
64	P	BUZZER OUT
65	–	–
66	W	BLOWER FAN RELAY OUT
67	G	IGN ELEC RELAY OUT 2
68	L	MR OUTPUT
69	R/B	AT DEVICE OUT
70	P	IGN USM OUT 1
71	O	DR REQUEST SW
72	G	AS REQUEST SW

73	–	–
74	–	–
75	L/W	COMBI SW OUT 5
76	P	COMBI SW OUT 4
77	L	COMBI SW OUT 3
78	O/B	COMBI SW OUT 2
79	R/W	COMBI SW OUT 1
80	–	–

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FGY-NH
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
81	–	–
82	W	RL DOOR SW
83	–	–
84	–	–
85	–	–
86	G/B	TRAILER FLASHER RL
87	Y/B	TRAILER FLASHER RR
88	–	–
89	–	–
90	–	–
91	–	–
92	O	RR FLASHER
93	R	RR DOOR SW
94	G	AS DOOR SW
95	–	–
96	B/G	DR DOOR SW
97	P/L	CARGO LAMP SW
98	–	–
99	–	–
100	–	–
101	–	–
102	–	–
103	G/B	RL FLASHER
104	–	–

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METER (TYPE B) CONNECTORS

Connector No.	M30
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-1V
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
7	B/Y	ASCD GND -(WITH HEATED STEERING WHEEL)
8	GR	ILL (-) - (WITHOUT HEATED STEERING WHEEL)
8	R	AUDIO STRG SW REMOTE B - (WITH HEATED STEERING WHEEL)
9	G/Y	ASCD SW - (WITHOUT HEATED STEERING WHEEL)
9	P	AUDIO STRG SW REMOTE A - (WITH HEATED STEERING WHEEL)
10	P	AUDIO STRG SW REMOTE A - (WITHOUT HEATED STEERING WHEEL)
10	G/Y	ASCD SW - (WITH HEATED STEERING WHEEL)
11	R/W	HORN SWITCH OUTPUT - (WITHOUT HEATED STEERING WHEEL)
11	B	AUDIO STRG SW GND - (WITH HEATED STEERING WHEEL)
12	B	AUDIO STRG SW GND -(WITHOUT HEATED STEERING WHEEL)
13	B/Y	ASCD GND -(WITHOUT HEATED STEERING WHEEL)
14	R	AUDIO STRG SW REMOTE B - (WITHOUT HEATED STEERING WHEEL)

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1G	G	TO ENGINE ROOM HARNESS
2G	B/R	TO ENGINE ROOM HARNESS
3G	W	TO ENGINE ROOM HARNESS
4G	BR/W	TO ENGINE ROOM HARNESS
5G	–	TO ENGINE ROOM HARNESS
6G	R/W	TO ENGINE ROOM HARNESS
7G	Y	TO ENGINE ROOM HARNESS
8G	G	TO ENGINE ROOM HARNESS
9G	R	TO ENGINE ROOM HARNESS
10G	W	TO ENGINE ROOM HARNESS
11G	R/G	TO ENGINE ROOM HARNESS
12G	W/B	TO ENGINE ROOM HARNESS
13G	BR	TO ENGINE ROOM HARNESS
14G	Y/B	TO ENGINE ROOM HARNESS
15G	G/W	TO ENGINE ROOM HARNESS
16G	G	TO ENGINE ROOM HARNESS
17G	O	TO ENGINE ROOM HARNESS
18G	G/Y	TO ENGINE ROOM HARNESS
19G	Y/V	TO ENGINE ROOM HARNESS
20G	G/Y	TO ENGINE ROOM HARNESS
21G	B/Y	TO ENGINE ROOM HARNESS
22G	G/R	TO ENGINE ROOM HARNESS
23G	Y/R	TO ENGINE ROOM HARNESS
24G	G/B	TO ENGINE ROOM HARNESS
25G	R/W	TO ENGINE ROOM HARNESS
26G	R	TO ENGINE ROOM HARNESS
27G	LG	TO ENGINE ROOM HARNESS
28G	G/B	TO ENGINE ROOM HARNESS
29G	G/B	TO ENGINE ROOM HARNESS
30G	BR/Y	TO ENGINE ROOM HARNESS
31G	R	TO ENGINE ROOM HARNESS
32G	R	TO ENGINE ROOM HARNESS
33G	Y/L	TO ENGINE ROOM HARNESS
34G	GR	TO ENGINE ROOM HARNESS
35G	G/R	TO ENGINE ROOM HARNESS
36G	SB	TO ENGINE ROOM HARNESS
37G	R/W	TO ENGINE ROOM HARNESS
38G	BR	TO ENGINE ROOM HARNESS
39G	BR	TO ENGINE ROOM HARNESS
40G	–	TO ENGINE ROOM HARNESS
41G	R/G	TO ENGINE ROOM HARNESS
42G	O	TO ENGINE ROOM HARNESS
43G	G	TO ENGINE ROOM HARNESS
44G	R/Y	TO ENGINE ROOM HARNESS
45G	G	TO ENGINE ROOM HARNESS
46G	LG	TO ENGINE ROOM HARNESS
47G	R	TO ENGINE ROOM HARNESS
48G	W	TO ENGINE ROOM HARNESS
49G	–	TO ENGINE ROOM HARNESS
50G	BR	TO ENGINE ROOM HARNESS
51G	R	TO ENGINE ROOM HARNESS
52G	L	TO ENGINE ROOM HARNESS
53G	W	TO ENGINE ROOM HARNESS
54G	W	TO ENGINE ROOM HARNESS
55G	G	TO ENGINE ROOM HARNESS
56G	W	TO ENGINE ROOM HARNESS
57G	Y	TO ENGINE ROOM HARNESS
58G	BG	TO ENGINE ROOM HARNESS
59G	BG	TO ENGINE ROOM HARNESS
60G	BG	TO ENGINE ROOM HARNESS
61G	O	TO ENGINE ROOM HARNESS
62G	W	TO ENGINE ROOM HARNESS
63G	O	TO ENGINE ROOM HARNESS
64G	W/L	TO ENGINE ROOM HARNESS
65G	W/R	TO ENGINE ROOM HARNESS
66G	BG	TO ENGINE ROOM HARNESS
67G	O	TO ENGINE ROOM HARNESS
68G	B	TO ENGINE ROOM HARNESS
69G	Y	TO ENGINE ROOM HARNESS
70G	L	TO ENGINE ROOM HARNESS
71G	R/W	TO ENGINE ROOM HARNESS
72G	L/W	TO ENGINE ROOM HARNESS
73G	SHIELD	TO ENGINE ROOM HARNESS
74G	W	TO ENGINE ROOM HARNESS
75G	R	TO ENGINE ROOM HARNESS
76G	R/G	TO ENGINE ROOM HARNESS
77G	BG	TO ENGINE ROOM HARNESS
78G	P	TO ENGINE ROOM HARNESS
79G	–	TO ENGINE ROOM HARNESS
80G	R	TO ENGINE ROOM HARNESS
81G	L	TO ENGINE ROOM HARNESS
82G	R	TO ENGINE ROOM HARNESS
83G	L	TO ENGINE ROOM HARNESS
84G	L	TO ENGINE ROOM HARNESS
85G	W	TO ENGINE ROOM HARNESS
86G	B/R	TO ENGINE ROOM HARNESS
87G	W	TO ENGINE ROOM HARNESS
88G	G	TO ENGINE ROOM HARNESS
89G	P	TO ENGINE ROOM HARNESS
90G	G	TO ENGINE ROOM HARNESS
91G	P	TO ENGINE ROOM HARNESS
92G	V/W	TO ENGINE ROOM HARNESS
93G	BR	TO ENGINE ROOM HARNESS
94G	B	TO ENGINE ROOM HARNESS
95G	G	TO ENGINE ROOM HARNESS
96G	R	TO ENGINE ROOM HARNESS
97G	R	TO ENGINE ROOM HARNESS
98G	W/B	TO ENGINE ROOM HARNESS
99G	R	TO ENGINE ROOM HARNESS
100G	GR/W	TO ENGINE ROOM HARNESS

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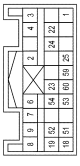
METER (TYPE B) CONNECTORS

Connector No.	M32
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITH OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH28FY-EX
Connector Color	YELLOW

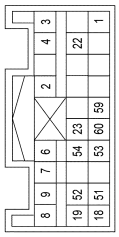
H.S.



Terminal No.	Color of Wire	Signal Name
1	R	IGN
2	B	GND
3	Y	DR1 (+)
4	Y/B	DR1 (-)
6	O	AS1 (+)
7	G	AS1 (-)
8	P	AS2 (+)
9	Y	AS2 (-)
18	GR/R	ECZS (+)
19	GR/B	ECZS (-)
22	SHIELD	ECZS GND
23	O	AIRBAG WARN LAMP
24	P/L	SEATBELT REMINDER
25	R/Y	TELLTALE LAMP A
51	LG/B	RH DOOR SATELLITE SENSOR+
52	Y/B	RH DOOR SATELLITE SENSOR -
53	L	LH DOOR SATELLITE SENSOR+
54	W	LH DOOR SATELLITE SENSOR -
59	L	CAN-H
60	P	CAN-L

Connector No.	M35
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT (WITHOUT OCCUPANT CLASSIFICATION SYSTEM)
Connector Type	NH28FY-EX
Connector Color	YELLOW

H.S.



Terminal No.	Color of Wire	Signal Name
1	R	IGN
2	B	GND
3	Y	DR1 (+)
4	Y/B	DR1 (-)
6	O	AS1 (+)
7	G	AS1 (-)
8	P	AS2 (+)
9	Y	AS2 (-)
18	GR/R	ECZS (+)
19	GR/B	ECZS (-)
22	SHIELD	ECZS GND
23	O	AIRBAG WARN LAMP
51	LG/B	RH DOOR SATELLITE SENSOR+
52	Y/B	RH DOOR SATELLITE SENSOR -
53	L	LH DOOR SATELLITE SENSOR+
54	W	LH DOOR SATELLITE SENSOR -
59	L	CAN-H
60	P	CAN-L

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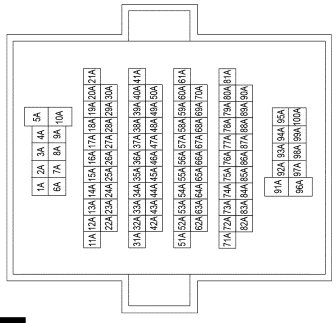
METER (TYPE B) CONNECTORS

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	TH80FDGY-CS16-TM4
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1A	W	TO BODY NO. 2 HARNESS
2A	LG	TO BODY NO. 2 HARNESS
3A	V	TO BODY NO. 2 HARNESS
4A	SB	TO BODY NO. 2 HARNESS
5A	–	TO BODY NO. 2 HARNESS
6A	BG	TO BODY NO. 2 HARNESS - (WITH CLIMATE CONTROLLED SEAT)
6A	LG	TO BODY NO. 2 HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
7A	W	TO BODY NO. 2 HARNESS
8A	B	TO BODY NO. 2 HARNESS
9A	L/B	TO BODY NO. 2 HARNESS
10A	W	TO BODY NO. 2 HARNESS
11A	R	TO BODY NO. 2 HARNESS
12A	BR	TO BODY NO. 2 HARNESS
13A	G	TO BODY NO. 2 HARNESS
14A	R/G	TO BODY NO. 2 HARNESS
15A	O	TO BODY NO. 2 HARNESS
16A	O/L	TO BODY NO. 2 HARNESS
17A	L	TO BODY NO. 2 HARNESS
18A	Y	TO BODY NO. 2 HARNESS
19A	B/W	TO BODY NO. 2 HARNESS
20A	R	TO BODY NO. 2 HARNESS
21A	BG	TO BODY NO. 2 HARNESS
22A	G	TO BODY NO. 2 HARNESS
23A	Y	TO BODY NO. 2 HARNESS
24A	L	TO BODY NO. 2 HARNESS
25A	–	TO BODY NO. 2 HARNESS
26A	GR	TO BODY NO. 2 HARNESS
27A	LG	TO BODY NO. 2 HARNESS
28A	LG	TO BODY NO. 2 HARNESS
29A	GR	TO BODY NO. 2 HARNESS
30A	BR	TO BODY NO. 2 HARNESS
31A	W/R	TO BODY NO. 2 HARNESS
32A	G/R	TO BODY NO. 2 HARNESS
33A	–	TO BODY NO. 2 HARNESS
34A	SHIELD	TO BODY NO. 2 HARNESS
35A	P	TO BODY NO. 2 HARNESS
36A	B	TO BODY NO. 2 HARNESS
37A	–	TO BODY NO. 2 HARNESS
38A	R/B	TO BODY NO. 2 HARNESS
39A	G/O	TO BODY NO. 2 HARNESS
40A	V	TO BODY NO. 2 HARNESS
41A	SHIELD	TO BODY NO. 2 HARNESS
42A	SHIELD	TO BODY NO. 2 HARNESS
43A	R	TO BODY NO. 2 HARNESS
44A	G	TO BODY NO. 2 HARNESS
45A	–	TO BODY NO. 2 HARNESS
46A	–	TO BODY NO. 2 HARNESS
47A	Y	TO BODY NO. 2 HARNESS
48A	R/W	TO BODY NO. 2 HARNESS
49A	R/L	TO BODY NO. 2 HARNESS
50A	B	TO BODY NO. 2 HARNESS
51A	–	TO BODY NO. 2 HARNESS
52A	–	TO BODY NO. 2 HARNESS
53A	–	TO BODY NO. 2 HARNESS
54A	–	TO BODY NO. 2 HARNESS
55A	–	TO BODY NO. 2 HARNESS
56A	–	TO BODY NO. 2 HARNESS
57A	–	TO BODY NO. 2 HARNESS
58A	–	TO BODY NO. 2 HARNESS
59A	–	TO BODY NO. 2 HARNESS
60A	G/W	TO BODY NO. 2 HARNESS
61A	–	TO BODY NO. 2 HARNESS
62A	–	TO BODY NO. 2 HARNESS
63A	–	TO BODY NO. 2 HARNESS
64A	–	TO BODY NO. 2 HARNESS
65A	–	TO BODY NO. 2 HARNESS
66A	–	TO BODY NO. 2 HARNESS
67A	–	TO BODY NO. 2 HARNESS
68A	–	TO BODY NO. 2 HARNESS
69A	Y/R	TO BODY NO. 2 HARNESS
70A	R/G	TO BODY NO. 2 HARNESS
71A	–	TO BODY NO. 2 HARNESS
72A	W	TO BODY NO. 2 HARNESS
73A	G	TO BODY NO. 2 HARNESS
74A	W	TO BODY NO. 2 HARNESS
75A	SHIELD	TO BODY NO. 2 HARNESS
76A	R	TO BODY NO. 2 HARNESS
77A	L	TO BODY NO. 2 HARNESS
78A	SHIELD	TO BODY NO. 2 HARNESS
79A	GR	TO BODY NO. 2 HARNESS
80A	V	TO BODY NO. 2 HARNESS
81A	R	TO BODY NO. 2 HARNESS
82A	SHIELD	TO BODY NO. 2 HARNESS
83A	R	TO BODY NO. 2 HARNESS
84A	O	TO BODY NO. 2 HARNESS
85A	SHIELD	TO BODY NO. 2 HARNESS
86A	W	TO BODY NO. 2 HARNESS
87A	B	TO BODY NO. 2 HARNESS
88A	W	TO BODY NO. 2 HARNESS
89A	SHIELD	TO BODY NO. 2 HARNESS
90A	G	TO BODY NO. 2 HARNESS
91A	W/L	TO BODY NO. 2 HARNESS
92A	BR	TO BODY NO. 2 HARNESS
93A	L/Y	TO BODY NO. 2 HARNESS
94A	R/L	TO BODY NO. 2 HARNESS
95A	BR	TO BODY NO. 2 HARNESS
96A	R	TO BODY NO. 2 HARNESS
97A	LG	TO BODY NO. 2 HARNESS
98A	B/V	TO BODY NO. 2 HARNESS
99A	O/L	TO BODY NO. 2 HARNESS
100A	BR/W	TO BODY NO. 2 HARNESS

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METER (TYPE B) CONNECTORS

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1J	G	TO BODY HARNESS
2J	R/Y	TO BODY HARNESS
3J	L	TO BODY HARNESS
4J	L/B	TO BODY HARNESS
5J	B	TO BODY HARNESS
6J	BR	TO BODY HARNESS
7J	BG	TO BODY HARNESS
8J	SB	TO BODY HARNESS
9J	BR	TO BODY HARNESS
10J	R	TO BODY HARNESS
11J	O/B	TO BODY HARNESS
12J	L	TO BODY HARNESS
13J	W	TO BODY HARNESS
14J	Y	TO BODY HARNESS
15J	–	TO BODY HARNESS
16J	R	TO BODY HARNESS
17J	G	TO BODY HARNESS
18J	SB	TO BODY HARNESS
19J	O	TO BODY HARNESS
20J	O/B	TO BODY HARNESS
21J	Y	TO BODY HARNESS
22J	P	TO BODY HARNESS
23J	W	TO BODY HARNESS
24J	W/R	TO BODY HARNESS
25J	P	TO BODY HARNESS
26J	L	TO BODY HARNESS
27J	R	TO BODY HARNESS
28J	L	TO BODY HARNESS
29J	G/O	TO BODY HARNESS
30J	SB	TO BODY HARNESS
31J	L/G	TO BODY HARNESS
32J	R	TO BODY HARNESS
33J	BG	TO BODY HARNESS
34J	Y	TO BODY HARNESS
35J	P	TO BODY HARNESS
36J	G/R	TO BODY HARNESS
37J	LG	TO BODY HARNESS
38J	SB	TO BODY HARNESS
39J	Y	TO BODY HARNESS
40J	SB	TO BODY HARNESS
41J	L	TO BODY HARNESS
42J	L	TO BODY HARNESS
43J	W	TO BODY HARNESS
44J	BR	TO BODY HARNESS
45J	BG	TO BODY HARNESS
46J	P	TO BODY HARNESS
47J	O	TO BODY HARNESS
48J	V	TO BODY HARNESS
49J	BR	TO BODY HARNESS
50J	G/W	TO BODY HARNESS
51J	–	TO BODY HARNESS
52J	SHIELD	TO BODY HARNESS
53J	R	TO BODY HARNESS
54J	L	TO BODY HARNESS
55J	R	TO BODY HARNESS
56J	W	TO BODY HARNESS
57J	R	TO BODY HARNESS
58J	B	TO BODY HARNESS
59J	–	TO BODY HARNESS
60J	SHIELD	TO BODY HARNESS
61J	G	TO BODY HARNESS
62J	–	TO BODY HARNESS
63J	R/W	TO BODY HARNESS
64J	L/W	TO BODY HARNESS
65J	SHIELD	TO BODY HARNESS
66J	B	TO BODY HARNESS
67J	SHIELD	TO BODY HARNESS
68J	W	TO BODY HARNESS
69J	SHIELD	TO BODY HARNESS
70J	B/R	TO BODY HARNESS
71J	L/W	TO BODY HARNESS
72J	–	TO BODY HARNESS
73J	–	TO BODY HARNESS
74J	SHIELD	TO BODY HARNESS
75J	R	TO BODY HARNESS
76J	O	TO BODY HARNESS
77J	SHIELD	TO BODY HARNESS
78J	W	TO BODY HARNESS
79J	B	TO BODY HARNESS
80J	W	TO BODY HARNESS
81J	SHIELD	TO BODY HARNESS
82J	L/R	TO BODY HARNESS
83J	–	TO BODY HARNESS
84J	–	TO BODY HARNESS
85J	W	TO BODY HARNESS
86J	G	TO BODY HARNESS
87J	W	TO BODY HARNESS
88J	SHIELD	TO BODY HARNESS
89J	R	TO BODY HARNESS
90J	L	TO BODY HARNESS
91J	L/B	TO BODY HARNESS
92J	SB	TO BODY HARNESS
93J	B	TO BODY HARNESS
94J	LG	TO BODY HARNESS
95J	L	TO BODY HARNESS
96J	G	TO BODY HARNESS
97J	B/Y	TO BODY HARNESS
98J	L/B	TO BODY HARNESS
99J	W/L	TO BODY HARNESS
100J	Y	TO BODY HARNESS

Connector No.	M68
Connector Name	A/T SHIFT SELECTOR
Connector Type	TK08FW
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GND
2	B	GND
3	L/R	SHIFT LOCK SOL OUT
4	R	SHIFT P
5	R/B	AT DEVICE OUT
6	LG	TOW MODE SW
7	BR	SHIFT UP
8	V/W	SHIFT DOWN

Connector No.	M80
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FB-NH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
105	G/Y	FR FLASHER
106	–	–
107	W	LOW SIDE START SW LED
108	L/R	SHIFT LOCK SOLENOID OUT
109	–	–
110	–	–
111	P	ACC LED
112	–	–
113	L	ACC RELAY OUT
114	W	AS DOOR ANT A
115	BG	AS DOOR ANT B
116	W	ROOM ANT 2 A
117	G/B	FL FLASHER
118	–	–
119	R	RF NIMOCO
120	–	–
121	G	DR DOOR ANT B
122	P	DR DOOR ANT A
123	W	ROOM ANT 1 A
124	G	ROOM ANT 1 B
125	–	–
126	P	IMMO START BUTTON ANT B
127	BG	IMMO START BUTTON ANT A
128	B	ROOM ANT 2 B

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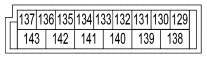
METER (TYPE B) CONNECTORS

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
129	R/G	BATTERY SAVER OUT
130	LG	SUPER LOCK/DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	Y	DOOR LOCK AS/RR/RL
133	BR	DOOR UNLOCK AS/RR/RL
134	B	GND2
135	O	DOOR LOCK DR/AS/FL
136	L	ROOM LAMP CONT
137	V	DOOR UNLOCK DR/AS/FL
138	V	BAT REAR DOOR
139	W	BAT-POWER F/L
140	LG	P/W POWER SUPPLY IGN
141	V	P/W POWER SUPPLY BAT
142	Y	BAT FRONT DOOR
143	B	GND1

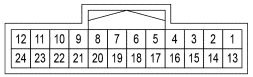
Connector No.	M88
Connector Name	ACCESSORY RELAY-2
Connector Type	MS02FL-M2-LC
Connector Color	BLUE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	L	RELAY CONTROL
3	R	RELAY OUTPUT
5	W	BATTERY

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

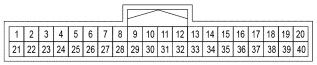
H.S.



Terminal No.	Color of Wire	Signal Name
1	G/W	TO ENGINE ROOM HARNESS
2	R/W	TO ENGINE ROOM HARNESS
3	Y/R	TO ENGINE ROOM HARNESS
4	G/R	TO ENGINE ROOM HARNESS
5	G	TO ENGINE ROOM HARNESS
6	P	TO ENGINE ROOM HARNESS
7	O	TO ENGINE ROOM HARNESS
8	R	TO ENGINE ROOM HARNESS
9	G	TO ENGINE ROOM HARNESS
10	LG	TO ENGINE ROOM HARNESS
11	BR	TO ENGINE ROOM HARNESS
12	GR	TO ENGINE ROOM HARNESS
13	G	TO ENGINE ROOM HARNESS
14	BR	TO ENGINE ROOM HARNESS
15	–	TO ENGINE ROOM HARNESS
16	–	TO ENGINE ROOM HARNESS
17	W	TO ENGINE ROOM HARNESS
18	–	TO ENGINE ROOM HARNESS
19	Y/R	TO ENGINE ROOM HARNESS
20	G/W	TO ENGINE ROOM HARNESS
21	–	TO ENGINE ROOM HARNESS
22	–	TO ENGINE ROOM HARNESS
23	–	TO ENGINE ROOM HARNESS
24	O/L	TO ENGINE ROOM HARNESS

Connector No.	M163
Connector Name	COMBINATION METER (WITH TYPE B)
Connector Type	TH40FW-NH
Connector Color	WHITE

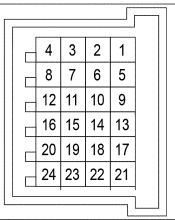
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	GND (ILL)
2	B	GND (CIRCUIT)
3	B	GND (POWER)
4	–	–
5	–	–
6	R	BAT
7	V	SECURITY
8	W	IGN
9	BG	AS BELT SW (W/O ODS)
10	LG	TOW MODE SW
11	BR	CHG
12	B	SATELLITE SW GND
13	B	STRG SW GND
14	R	ACC
15	W	OUTSIDE TEMP SENSOR
16	O	AIR BAG
17	–	–
18	P	TRIP RESET SW
19	–	–
20	R	OUTSIDE TEMP GND
21	–	–
22	P	STRG SW A
23	R	STRG SW B
24	W	WASHER SW
25	–	–
26	G	PKB SW
27	P/L	AS BELT SW (WITH ODS)
28	O/B	DR BELT SW
29	–	–
30	Y/V	FUEL SENSOR GND
31	BR/Y	FUEL SENSOR
32	BR	AT SHIFT UP
33	V/W	AT SHIFT DOWN
34	L	CAN-H
35	P	CAN-L
36	W	ILL UP SW
37	R	ILL DOWN SW
38	G	8P/R OUTPUT
39	–	–
40	GR	ILL CONT OUT

Connector No.	M191
Connector Name	JOINT CONNECTOR-M01
Connector Type	NH24FW-J
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	–	–
2	B	GND
3	B	GND
4	B	GROUND
5	–	–
6	B	GND
7	B	GND
8	B	GND
9	–	–
10	B	GND
11	B	GND
12	B	GND
13	B	GND
14	B	GND
15	B	GND
16	–	–
17	B	GND
18	B	GND
19	SHIELD	GROUND
20	B	GND
21	B	GND
22	B	GND
23	B	GROUND
24	B	GROUND

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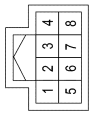
METER (TYPE B) CONNECTORS

Connector No.	M198
Connector Name	METER CONTROL SWITCH
Connector Type	TH08FW-NH
Connector Color	WHITE

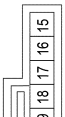
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	ILL +
2	GR	ILL GND
3	–	–
4	B	GROUND
5	P	TRIP RESET SW
6	W	ILL UP SW
7	R	ILL DOWN SW
8	–	–

Connector No.	M199
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
15	R	ASCD SW
16	W	AUDIO STRG SW REMOTE A
17	L	AUDIO STRG SW REMOTE B
18	B	ASCD GND
19	BR	AUDIO STRG SW GND
20	G	HORN SWITCH OUTPUT
21	P	ILL -
22	Y	ILL +

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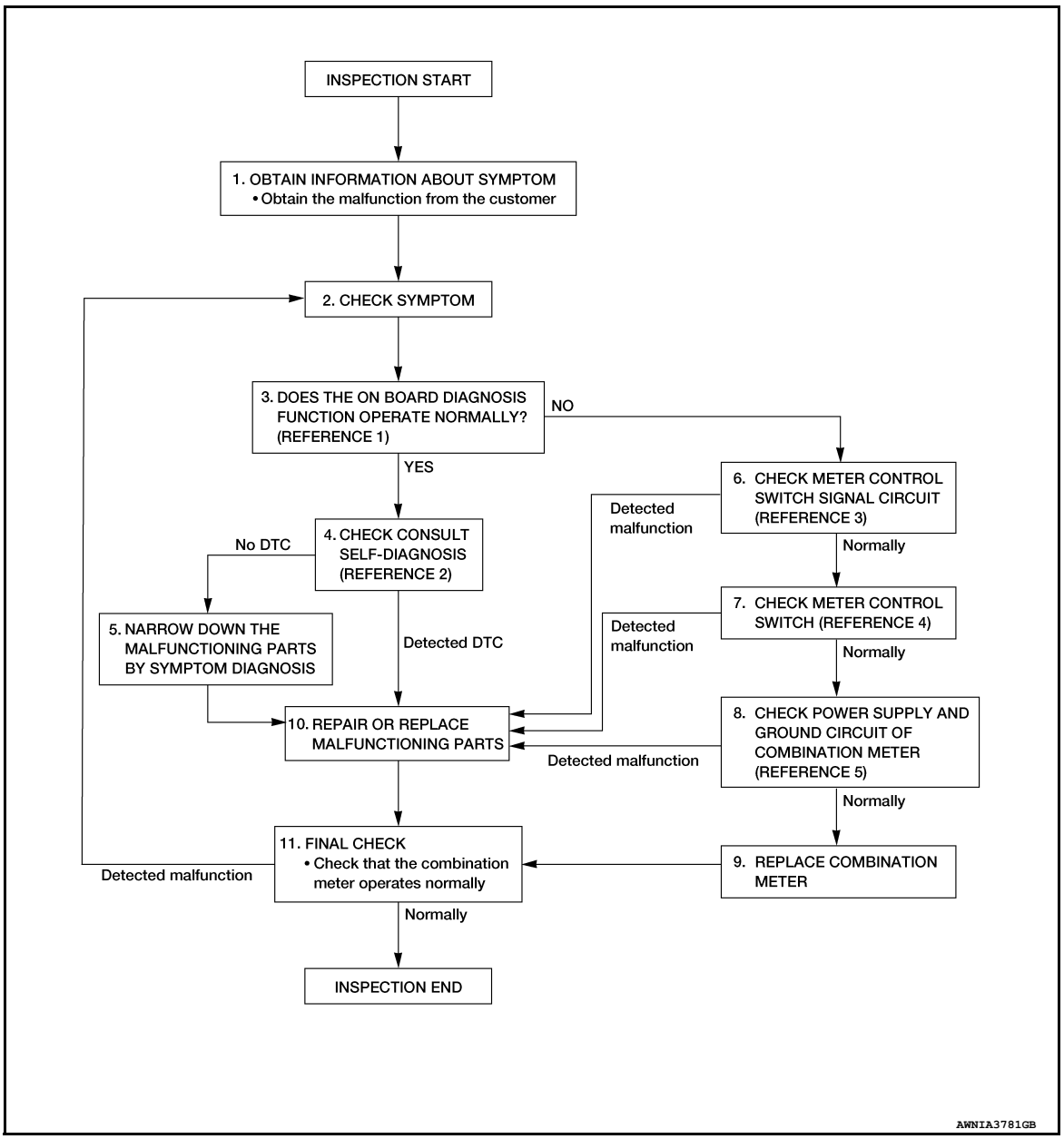
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work flow

INFOID:0000000014386644

OVERALL SEQUENCE



- Reference 1: MWI-129, "On Board Diagnosis Function"
- Reference 2: MWI-139, "DTC Index"
- Reference 3: MWI-170, "Diagnosis Procedure"
- Reference 4: MWI-171, "Component Inspection"
- Reference 5: MWI-168, "COMBINATION METER : Diagnosis Procedure"

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK SYMPTOM

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

>> GO TO 3.

3.CHECK ON BOARD DIAGNOSIS OPERATION

Check that the on board diagnosis function operates. Refer to MWI-129, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 6.

4.CHECK CONSULT SELF-DIAGNOSIS RESULTS

1. Perform “Self Diagnostic Result”. Refer to MWI-139, "DTC Index".
2. When DTC is detected, follow the instructions below:

- Record DTC and Freeze Frame Data.

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 10.

5.NARROW DOWN THE MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 10.

6.CHECK METER CONTROL SWITCH SIGNAL CIRCUIT

Check meter control switch signal circuit. Refer to MWI-170, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 10.

7.CHECK METER CONTROL SWITCH

Check meter control switch. Refer to MWI-171, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> GO TO 10.

8.CHECK COMBINATION METER POWER SUPPLY AND GROUND CIRCUITS

Check combination meter power supply and ground circuits. Refer to MWI-168, "COMBINATION METER : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 9.
NO >> GO TO 10.

9.REPLACE COMBINATION METER

Replace combination meter. Refer to MWI-187, "Removal and Installation".

>> GO TO 11.

10.REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace the malfunctioning parts.

NOTE:
If DTC is displayed, erase DTC after repairing or replacing malfunctioning parts.

>> GO TO 11.

11. FINAL CHECK

Check that the combination meter operates normally.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 2.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

DTC Description

INFOID:0000000014386645

Refer to LAN-44, "CAN COMMUNICATION SYSTEM : System Description".

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U1000	CAN COMM CIRCUIT (CAN COMM CIRCUIT)	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	-
		Threshold	When combination meter is not transmitting or receiving CAN communication signals
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

CAN communication system

FAIL-SAFE

The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning. Refer to MWI-139, "Fail-safe".

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT
1. Turn ignition switch ON and wait for 2 seconds or more.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-163, "Diagnosis Procedure".
NO >> Refer to GI-47, "Intermittent Incident".

Diagnosis Procedure

INFOID:0000000014386646

1.CHECK CAN COMMUNICATION SYSTEM

Check CAN communication system. Refer to LAN-53, "Trouble Diagnosis Flow Chart".

>> Inspection End.

U1010 CONTROL UNIT (CAN)

DTC Description

INFOID:0000000014386647

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U1010	CONTROL UNIT (CAN) [CONTROL UNIT (CAN)]	Diagnosis condition	When Ignition switch is ON.
		Signal (terminal)	-
		Threshold	-
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

Combination meter

FAIL-SAFE

The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning. Refer to MWI-139, "Fail-safe".

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT
1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-164, "Diagnosis Procedure".
NO >> Refer to GI-47, "Intermittent Incident".

Diagnosis Procedure

INFOID:0000000014386648

1.REPLACE COMBINATION METER

Replace combination meter. Refer to MWI-187, "Removal and Installation".

>> Inspection End.

B2205 VEHICLE SPEED

DTC Description

INFOID:0000000014386649

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
B2205	VEHICLE SPEED CIRC [VEHICLE SPEED CIRC]	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	-
		Threshold	When an erroneous speed signal is received
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- Wheel speed sensor
- ABS actuator and electric unit (control unit)

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-165, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000014386650

1.PERFORM SELF DIAGNOSTIC RESULT

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “ABS”.
3. Check DTC.

Is DTC detected?

YES >> Perform diagnosis procedure on the detected DTC. Refer to BRC-55, "DTC Index".
NO >> Inspection End.

B2267 ENGINE SPEED

DTC Description

INFOID:0000000014386651

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
B2267	ENGINE SPEED [ENGINE SPEED]	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	-
		Threshold	ECM continuously transmits abnormal engine speed signals
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- Crankshaft position sensor
- ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-166, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000014386652

1.PERFORM SELF DIAGNOSTIC RESULT

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “ECM”.
3. Check DTC.

Is DTC detected?

YES >> Perform diagnosis procedure on the detected DTC. Refer to EC-837, "DTC Index".
NO >> Inspection End.

B2268 WATER TEMP

DTC Description

INFOID:0000000014386653

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
B2268	WATER TEMP [WATER temperature]	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	-
		Threshold	ECM continuously transmits abnormal engine coolant temperature signals
		Diagnosis delay time	60 seconds or more

POSSIBLE CAUSE

- Engine coolant temperature sensor
- ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM SELF-DIAGNOSIS

CONSULT
1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “METER/M&A”.
3. Check DTC.

Is DTC detected?

YES >> Refer to MWI-167, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000014386654

1.PERFORM SELF DIAGNOSTIC RESULT

CONSULT
1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “ECM”.
3. Check DTC.

Is DTC detected?

YES >> Perform diagnosis procedure on the detected DTC. Refer to EC-837, "DTC Index".
NO >> Inspection End.

POWER SUPPLY AND GROUND CIRCUIT
COMBINATION METER
COMBINATION METER : Diagnosis Procedure

INFOID:0000000014386655

Regarding Wiring Diagram information, refer to MWI-141, "Wiring Diagram".

1.CHECK FUSES

Check that the following fuses are not blown:

Unit	Power source	Fuse No.
Combination meter	Battery	13 (5A)
	Ignition switch ON or ACC	25 (5A)
	Ignition switch ON or START	31 (5A)

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect combination meter harness connectors M136.
2. Check voltage between combination meter harness connectors M136 and ground.

Combination meter		Ground	Ignition switch position		
Connector	Terminal		OFF	ON or ACC	START
M163	14	(–)	0 V	Battery voltage	Battery voltage
	8		0 V	Battery voltage	Battery voltage
	6		Battery voltage	Battery voltage	Battery voltage

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between combination meter harness connector M163 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M163	1	(–)	Yes
	2		
	3		
	12		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

BCM (BODY CONTROL MODULE)
BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:0000000014687456

Regarding Wiring Diagram information, refer to BCS-54, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
	Cummins 5.0L	VK56VD
Fusible link battery power	R (50A)	N (50A)
BCM battery fuse	1 (10A)	1 (10A)

Is the fuse or fusible link blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M81.
2. Check voltage between BCM connector M81 terminals 131, 139 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M81	131	(—)	Battery voltage
	139		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M81 terminals 134, 143 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	134	—	Yes
	143		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

METER CONTROL SWITCH SIGNAL CIRCUIT

Diagnosis Procedure

INFOID:0000000014386657

Regarding Wiring Diagram information, refer to MWI-141, "Wiring Diagram".

1.CHECK METER CONTROL SWITCH SIGNAL

1. Turn ignition switch ON.
2. Check voltage between the following terminals of the meter control switch harness connector M198.

Meter control switch			Condition	Voltage (Approx.)
Connector	Terminals			
	(+)	(−)		
M198	7	4	When illumination control switch (−) is pressed	0 V
			Other than the above	5 V
	5		When trip reset switch is pressed	0 V
			Other than the above	5 V
	6		When illumination control switch (+) is pressed	0 V
			Other than the above	5 V

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 2.

2.CHECK METER CONTROL SWITCH CIRCUITS

1. Turn ignition switch OFF.
2. Disconnect combination meter harness connector M163 and meter control switch harness connector M198.
3. Check continuity between combination meter harness connector M163 and meter control switch harness connector M198.

Combination meter		Meter control switch		Continuity
Connector	Terminal	Connector	Terminal	
M163	18	M198	5	Yes
	37		7	
	36		6	

4. Check continuity between meter control switch harness connector M198 and ground.

Meter control switch		Ground	Continuity
Connector	Terminal		
M198	4		Yes

5. Check continuity between combination meter harness connector M163 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M163	18		No
	37		
	36		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000014386658

1.CHECK METER CONTROL SWITCH

1. Turn ignition switch OFF.
2. Disconnect meter control switch harness connector.
3. Check meter control switch.

Meter control switch		Condition	Continuity
Terminals			
7	4	When illumination control switch (–) is pressed	Yes
		Other than the above	No
5		When trip reset switch is pressed	Yes
		Other than the above	No
6		When illumination control switch (+) is pressed	Yes
		Other than the above	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace meter control switch. Refer to MWI-190, "Removal and Installation".

FUEL LEVEL SENSOR SIGNAL CIRCUIT

Component Function Check

INFOID:0000000014386659

1.COMBINATION METER INPUT SIGNAL

CONSULT
1. Select “Data Monitor” mode of “METER/M&A”.
2. Select “FUEL METER”.
3. Compare the “FUEL METER” value and the fuel gauge reading of the combination meter. Fuel gauge and data monitor indications should be close.

Combination meter	Monitor item
Fuel gauge	FUEL METER [L] (Approx.)
Full	102.10
3/4	78.52
1/2	51.30
1/4	31.0
Empty	10.0

Does the data monitor value approximately match the fuel gauge indication?

YES >> Inspection End.
NO >> Replace combination meter. Refer to MWI-187, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000014386660

Regarding Wiring Diagram information, refer to MWI-141, "Wiring Diagram".

1.CHECK HARNESS CONNECTOR

1. Turn ignition switch OFF.
2. Check combination meter and fuel level sensor unit and fuel pump (fuel level sensor) terminals (meter-side and harness-side) for poor connection.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace terminals or connectors.

2.CHECK FUEL LEVEL SENSOR CIRCUIT

1. Disconnect combination meter harness connector M163 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37.
2. Check continuity between combination meter harness connector M163 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37.

Fuel level sensor unit and fuel pump (fuel level sensor)		Combination meter		Continuity
Connector	Terminal	Connector	Terminal	
C37	5	M163	31	Yes

3. Check continuity between fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37 and ground.

Fuel level sensor unit and fuel pump (fuel level sensor)		Ground	Continuity
Connector	Terminal		
C37	5		No

Is the inspection result normal?

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

3.CHECK FUEL LEVEL SENSOR GROUND CIRCUIT

1. Check continuity between combination meter harness connector M163 and fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37.

Fuel level sensor unit and fuel pump (fuel level sensor)		Combination meter		Continuity
Connector	Terminal	Connector	Terminal	
C37	6	M163	30	Yes

2. Check continuity between fuel level sensor unit and fuel pump (fuel level sensor) harness connector C37 and ground.

Fuel level sensor unit and fuel pump (fuel level sensor)		Ground	Continuity
Connector	Terminal		
C37	6		No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4.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.

Is the inspection result normal?

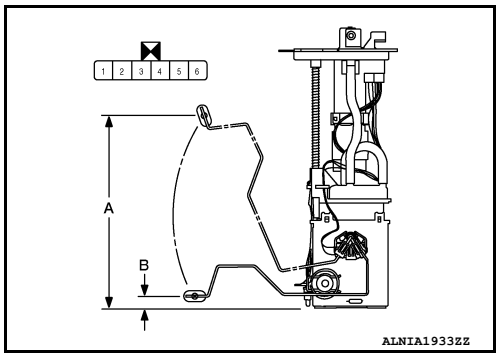
YES >> Inspection End.
NO >> Install the fuel level sensor unit properly. Refer to FL-6, "Removal and Installation".

Component Inspection

INFOID:0000000014386661

1.CHECK FUEL LEVEL SENSOR UNIT AND FUEL PUMP (FUEL LEVEL SENSOR)

1. Remove the fuel level sensor unit and fuel pump (fuel level sensor). Refer to FL-6, "Removal and Installation".
2. Check the resistance between fuel level sensor unit and fuel pump (fuel level sensor) terminals.



Fuel level sensor unit and fuel pump (fuel level sensor)		Condition	Resistance (Ω) (Approx.)	Height [mm (in)]
Terminals				
5	6	Full* (A)	51	256.34 (10.1)
		Empty* (B)	278	19.34 (0.8)

*: When float rod is in contact with stopper.

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace fuel level sensor unit and fuel pump (fuel level sensor). Refer to FL-6, "Removal and Installation".

WASHER FLUID LEVEL SWITCH CIRCUIT

Diagnosis Procedure

INFOID:0000000014386662

Regarding Wiring Diagram information, refer to MWI-141, "Wiring Diagram".

1.CHECK WASHER FLUID LEVEL SWITCH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter harness connector M163 and washer fluid level switch harness connector E106.
3. Check continuity between combination meter harness connector M163 and washer fluid level switch harness connector E106.

Combination meter		Washer fluid level switch		Continuity
Connector	Terminal	Connector	Terminal	
M163	24	E106	2	Yes

4. Check continuity between combination meter harness connector M163 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M163	24		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK WASHER FLUID LEVEL SWITCH GROUND CIRCUIT

Check continuity between washer fluid level switch harness connector E106 and ground.

Washer fluid level switch		Ground	Continuity
Connector	Terminal		
E106	1		Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000014386663

1.CHECK WASHER FLUID LEVEL SWITCH

1. Turn ignition switch OFF.
2. Disconnect washer fluid level switch connector.
3. Check washer fluid level switch.

Washer fluid level switch		Condition	Continuity
Terminals			
1	2	Washer fluid level switch ON	Yes
		Washer fluid level switch OFF	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace washer fluid level switch. Refer to WW-53, "Removal and Installation".

STEERING SWITCH

Diagnosis Procedure

INFOID:0000000014386664

Regarding Wiring Diagram information, refer to MWI-141, "Wiring Diagram".

1.CHECK STEERING SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter harness connector M163 and spiral cable harness connector M30.
3. Check continuity between combination meter harness connector M163 and spiral cable harness connector M30.

Combination meter		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M163	13	M30	12	Yes
	22		10	
	23		14	

4. Check continuity between combination meter harness connector M163 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M163	13		No
	22		
	23		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000014386665

1.CHECK STEERING SWITCH RESISTANCE

Check resistance between the following steering switch terminals:

Steering switches		Condition	Resistance (Ω) (Approx.)
Terminals			
17	19	Depress ▷ switch.	723
		Depress ◁ switch.	2023
16		Depress ENTER switch.	2023
		Depress △ switch.	121
		Depress ▽ switch.	321

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace steering wheel switch. Refer to AV-70, "Removal and Installation".

2.CHECK COMBINATION SWITCH (SPIRAL CABLE)

Check continuity between the following combination switch (spiral cable) terminals:

Combination switch (spiral cable)		Continuity
Terminals		
16	10	Yes
17	14	
19	12	

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace spiral cable. Refer to SR-14, "Removal and Installation".

AMBIENT SENSOR SIGNAL CIRCUIT

Description

INFOID:0000000014386666

It detects outside air temperature and converts it into a resistance value which is then input into the combination meter.

Diagnosis Procedure

INFOID:0000000014386667

Regarding Wiring Diagram information, refer to MWI-141, "Wiring Diagram".

1.CHECK AMBIENT SENSOR SIGNAL CIRCUIT

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

Combination meter		Ambient sensor		Continuity
Connector	Terminal	Connector	Terminal	
M163	15	E75	2	Yes

4. Check continuity between combination meter harness connector and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M163	15		No

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK AMBIENT SENSOR SIGNAL GROUND CIRCUIT

Check continuity between combination meter harness connector and ambient sensor harness connector.

Combination meter		Ambient sensor		Continuity
Connector	Terminal	Connector	Terminal	
M163	20	E75	1	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000014386668

1.CHECK AMBIENT SENSOR

1. Turn ignition switch OFF.
2. Disconnect ambient sensor connector.
3. Check resistance between ambient sensor terminals.

Terminal		Condition	Resistance: kΩ
		Temperature: °C (°F)	
1	2	−15 (5)	12.73
		−10 (14)	9.92
		−5 (23)	7.80
		0 (32)	6.19
		5 (41)	4.95
		10 (50)	3.99
		15 (59)	3.24
		20 (68)	2.65
		25 (77)	2.19
		30 (86)	1.81
		35 (95)	1.51
		40 (104)	1.27
		45 (113)	1.07

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace ambient sensor. Refer to MWI-190, "Removal and Installation".

SYMPTOM DIAGNOSIS

THE FUEL GAUGE INDICATOR DOES NOT OPERATE

Description

INFOID:0000000014386669

Fuel gauge will not indicate from a certain position.

Diagnosis Procedure

INFOID:0000000014386670

1. PERFORM COMBINATION METER SELF-DIAGNOSIS MODE

Perform the self-diagnosis mode of combination meter, and then check that the fuel gauge operates normally. Refer to MWI-129, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the combination meter. Refer to MWI-187, "Removal and Installation".

2. CHECK COMBINATION METER INPUT SIGNAL

Perform component function check. Refer to MWI-172, "Component Function Check".

Does data monitor value match fuel gauge reading?

YES >> GO TO 3.
NO >> Replace combination meter. Refer to MWI-187, "Removal and Installation".

3. CHECK FUEL LEVEL SENSOR UNIT CIRCUITS

Check the fuel level sensor circuits. Refer to MWI-172, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4. CHECK FUEL LEVEL SENSOR UNIT

Check the fuel level sensor unit. Refer to MWI-173, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace fuel level sensor unit. Refer to FL-36, "Removal and Installation".

5. CHECK FLOAT INTERFERENCE

Check that the float arm does not interfere with or bind to other components in the fuel tank.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".
NO >> Repair or replace malfunctioning parts.

THE METER CONTROL SWITCH IS INOPERATIVE

Description

INFOID:0000000014386671

The meter control switches are inoperative when pressed.

Diagnosis Procedure

INFOID:0000000014386672

1.CHECK METER CONTROL SWITCH

Check the meter control switch. Refer to MWI-173, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace meter control switch. Refer to MWI-189, "Removal and Installation".

2.CHECK METER CONTROL SWITCH SIGNAL

Check the meter control switch signal. Refer to MWI-170, "Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-187, "Removal and Installation".
NO >> Repair or replace harness or connector.

THE OIL PRESSURE WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000014386673

- The low oil pressure warning lamp stays on when oil pressure is normal.
- The low oil pressure warning lamp stays off when oil pressure is low.

Diagnosis Procedure

INFOID:0000000014386674

1.CHECK COMBINATION METER INPUT

CONSULT
1. Start the engine.
2. Select “Data Monitor” mode of “METER/M&A”.
3. Select “OIL W/L”.
4. Check that the function operates normally according to the following conditions:

Monitor item	Condition	CONSULT
OIL W/L	Engine running	Off

Is the inspection result normal?

YES >> Perform “Self Diagnostic Result” of “ECM”. Refer to EC-94, "CONSULT Function".
NO >> Replace combination meter. Refer to MWI-187, "Removal and Installation".

THE PARKING BRAKE RELEASE WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000014386675

- The parking brake warning is displayed during vehicle travel, even though the parking brake is released.
- The parking brake warning is not displayed, even while driving the vehicle with the parking brake applied.

Diagnosis Procedure

INFOID:0000000014386676

1.CHECK PARKING BRAKE WARNING LAMP OPERATION

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

Condition	Warning lamp status
Parking brake applied	ON
Parking brake released	OFF

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Check the parking brake switch signal circuit. Refer to WCS-49, "Diagnosis Procedure".

Is the inspection result normal?

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

3.CHECK PARKING BRAKE SWITCH UNIT

Check the parking brake switch. Refer to WCS-49, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-187, "Removal and Installation".
NO >> Replace parking brake switch. Refer to PB-12, "Removal and Installation".

THE LOW WASHER FLUID WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000014386677

- The warning is still displayed even after washer fluid is added.
- The warning is not displayed even though the washer tank is empty.

Diagnosis Procedure

INFOID:0000000014386678

1.CHECK WASHER FLUID LEVEL SWITCH SIGNAL CIRCUIT

Check the washer fluid level switch signal circuit. Refer to MWI-174, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK WASHER FLUID LEVEL SWITCH UNIT

Check the washer fluid level switch. Refer to MWI-174, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-187, "Removal and Installation".
NO >> Replace washer fluid level switch. Refer to WW-53, "Removal and Installation".

THE DOOR OPEN WARNING CONTINUES DISPLAYING, OR DOES NOT DISPLAY

Description

INFOID:0000000014386679

- The door open warning is displayed even though all of the doors are closed.
- The door open warning is not displayed even though a door is ajar.

Diagnosis Procedure

INFOID:0000000014386680

1.CHECK BCM INPUT SIGNAL

Check the BCM input signal. Refer to DLK-98, "Component Function Check".

Is the inspection result normal?

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

2.CHECK COMBINATION METER INPUT SIGNAL

CONSULT
1. Select “Data Monitor” mode of “METER/M&A”.
2. Select “DOOR W/L”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition	Status
DOOR W/L	Door open	On
	Door closed	Off

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-187, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

3.CHECK DOOR SWITCH SIGNAL CIRCUIT

Check the door switch signal circuit. Refer to DLK-98, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4.CHECK DOOR SWITCH

Check the door switch. Refer to DLK-99, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-187, "Removal and Installation".
NO >> Replace applicable door switch. Refer to DLK-191, "Removal and Installation".

THE STEERING SWITCHES ARE INOPERATIVE

Description

INFOID:0000000014386681

One or more of the steering switches to control the information display are inoperative.

Diagnosis Procedure

INFOID:0000000014386682

1.CHECK STEERING SWITCH CIRCUIT

Check steering switch circuit. Refer to MWI-175, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK STEERING SWITCH RESISTANCE

Check steering switch resistance. Refer to MWI-175, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace steering switch. Refer to AV-70, "Removal and Installation".

3.CHECK COMBINATION SWITCH (SPIRAL CABLE)

Check combination switch (spiral cable) for continuity. Refer to MWI-175, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-187, "Removal and Installation".
NO >> Replace spiral cable. Refer to SR-14, "Removal and Installation".

THE AMBIENT TEMPERATURE DISPLAY IS INCORRECT

Description

INFOID:0000000014386683

- The displayed outside air temperature is higher than the actual temperature.
- The displayed outside air temperature is lower than the actual temperature.
- Outside air temperature is not indicated.

Diagnosis Procedure

INFOID:0000000014386684

1.CHECK AMBIENT SENSOR SIGNAL CIRCUIT

Check the ambient sensor signal circuit. Refer to MWI-177, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.CHECK AMBIENT SENSOR

Check the ambient sensor. Refer to MWI-177, "Component Inspection".

Is the inspection result normal?

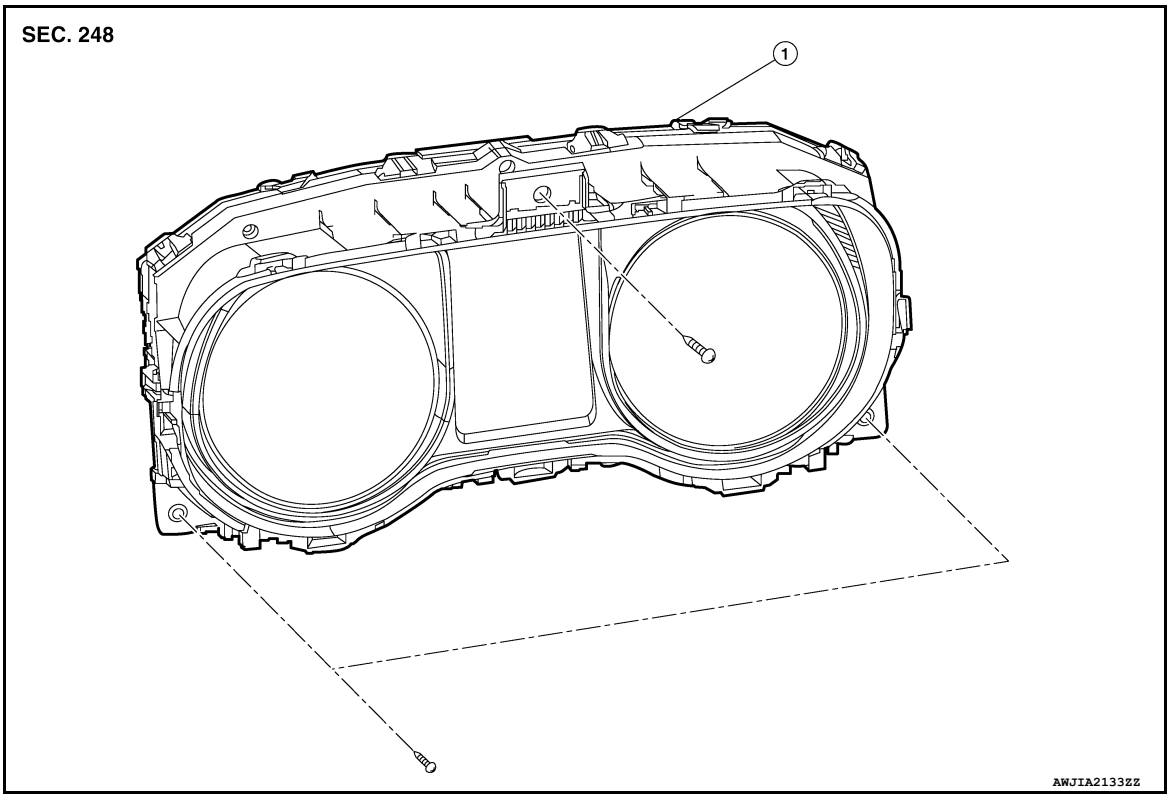
YES >> Replace combination meter. Refer to MWI-187, "Removal and Installation".
NO >> Replace ambient sensor. Refer to MWI-190, "Removal and Installation".

REMOVAL AND INSTALLATION

COMBINATION METER

Exploded View

INFOID:0000000014386685



1. Combination meter

Removal and Installation

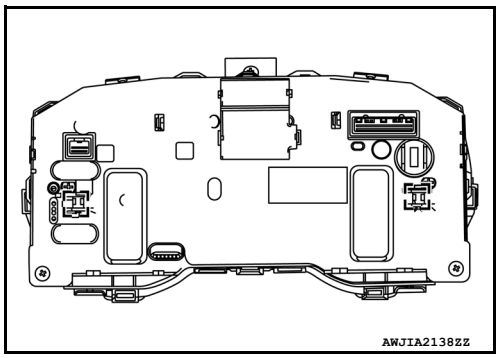
INFOID:0000000014386686

CAUTION:
Do not damage the combination meter front cover.

REMOVAL

1. Remove cluster lid A. Refer to IP-19, "Removal and Installation".
2. Remove combination meter screws.
3. Release combination meter clips.

: Metal clip



4. Disconnect harness connectors from combination meter.
5. Remove combination meter.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
After replacing the combination meter, perform the decel G sensor calibration. Refer to MWI-80, "Description".

METER CONTROL SWITCH

Removal and Installation

INFOID:0000000014386687

For removal and installation of the meter control switch, refer to INL-73, "Removal and Installation".

AMBIENT SENSOR

Removal and Installation

INFOID:0000000014386688

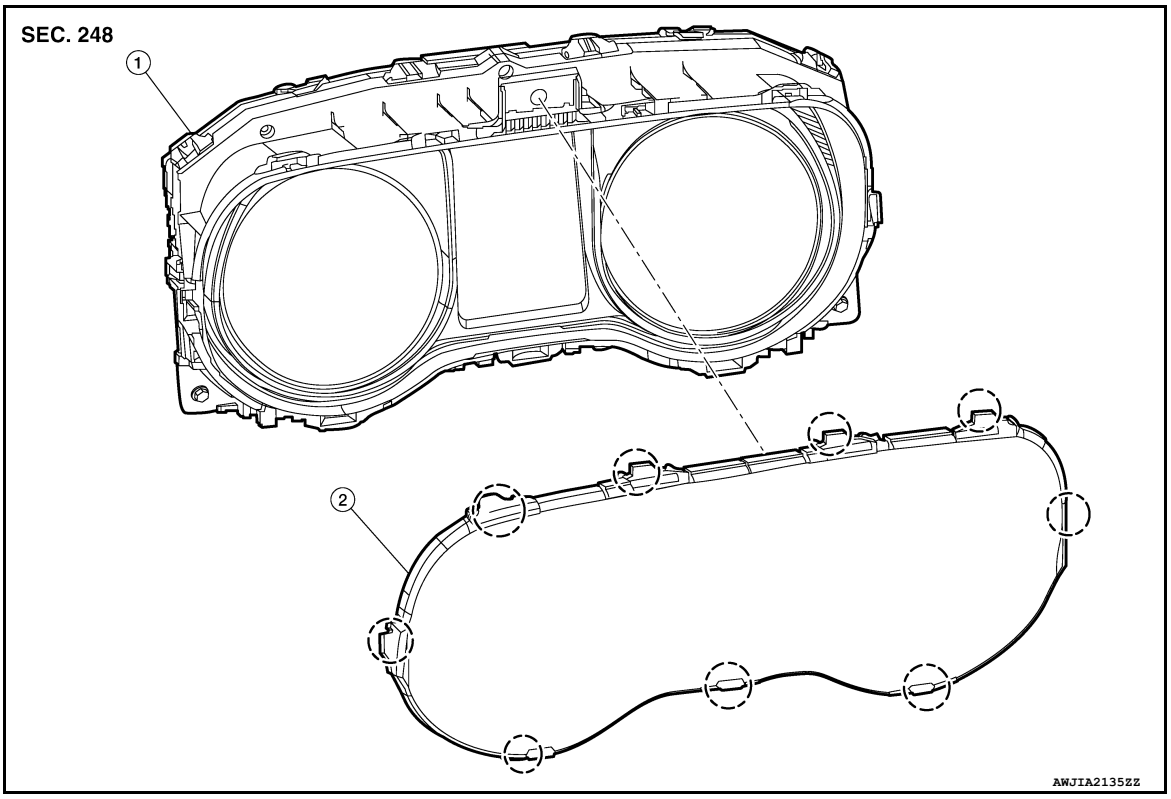
For removal and installation of the ambient sensor, refer to HAC-123, "Removal and Installation" (AUTOMATIC AIR CONDINDITIONER) or HAC-231, "Removal and Installation" (MANUAL AIR CONDITIONER).

UNIT DISASSEMBLY AND ASSEMBLY

COMBINATION METER

Exploded View

INFOID:0000000014386689



1. Combination meter
2. Combination meter lens

Pawl

Disassembly and Assembly

INFOID:0000000014386690

CAUTION:

- **Do not touch the display, pointer, or the inside of the front cover and printed area of the dial during the work.**
- **Keep away from magnetic sources.**
- **Do not damage the combination meter front cover.**

DISASSEMBLY

1. Remove the combination meter. Refer to MWI-187, "Removal and Installation".
2. Using a suitable tool, release the pawls on the combination meter lens and remove the combination meter lens.

ASSEMBLY

Assembly is in the reverse order of disassembly.