SECTION SCS
SUSPENSION CONTROL SYSTEM

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000013599759

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

WARNING:

Always observe the following items for preventing accidental activation.

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that 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 “SRS AIR BAG”.**
- **Never 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:

Always observe the following items for preventing accidental activation.

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never 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 3 minutes before performing any service.**

Precautions for Performing 2-wheel Drive Test

INFOID:0000000013591298

A vehicle with 2.2L diesel engine or 2.0L turbo gasoline engine of this model limits torque when a difference occurs in each wheel speed. For this reason, it is necessary to use Chassis Dynamometer Mode when performing the 2-wheel drive test (e.g. with 2-wheel chassis dynamometer, speedometer tester).
For Chassis Dynamometer Mode, refer to ENGINE >> ENGINE CONTROL SYSTEM >> BASIC INSPECTION >> CHASSIS DYNAMOMETER MODE >> Description.

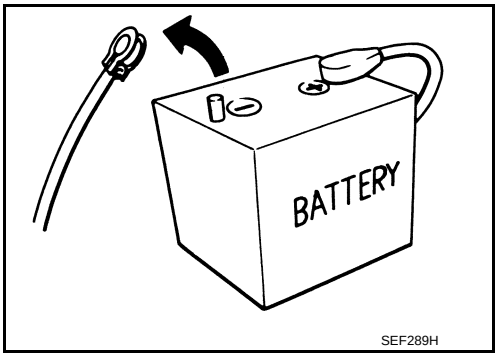
Precautions for Removing Battery Terminal

INFOID:0000000013591299

When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

BR08DE	: 4 minutes	V9X engine	: 4 minutes
D4D engine	: 20 minutes	YD25DDTi	: 2 minutes
HR09DET	: 12 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds



SEF289H

M9R engine : 4 minutes ZD30DDTT : 60 seconds
R9M engine : 4 minutes

NOTE:
ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.

NOTE:
- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
- Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
- Driving for 30 minutes or more on a steep slope.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:
If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:
The removal of 12V battery may cause a DTC detection error.

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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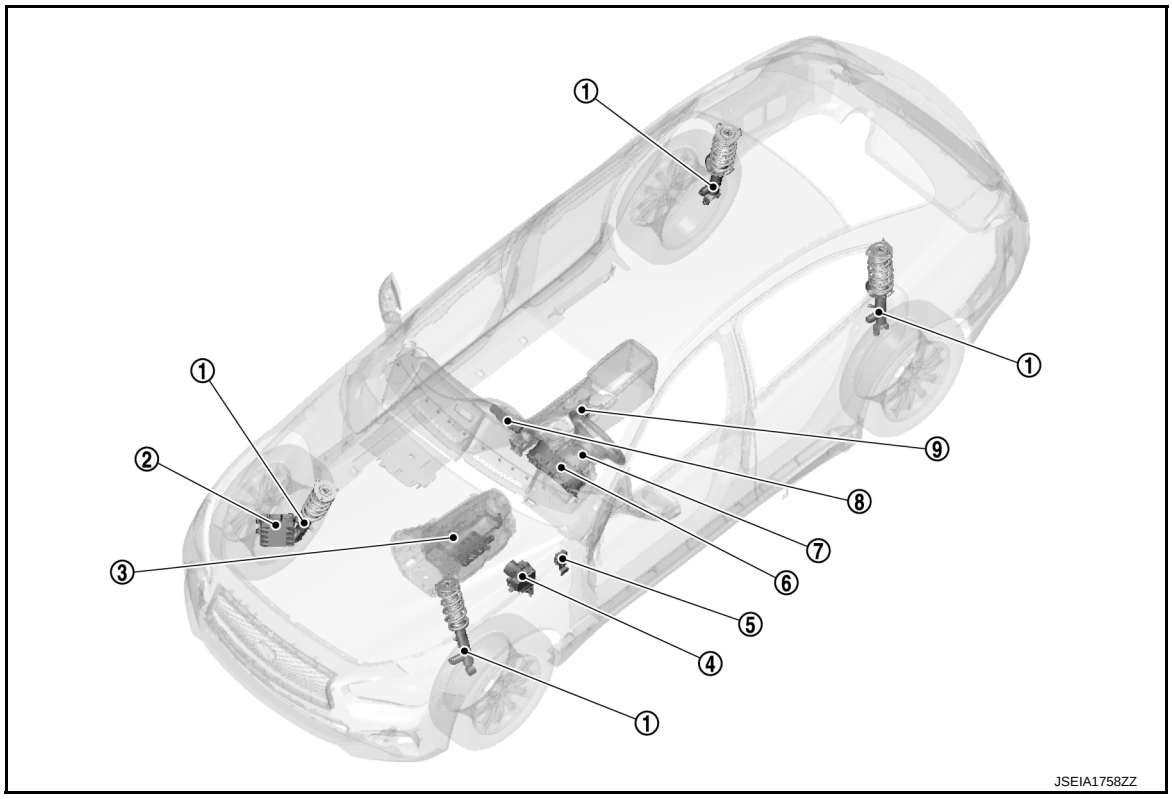

No.	Component parts	Function
①	Dynamic digital suspension	Refer to SCS-5, "Dynamic Digital Suspension".
②	ECM	Transmits each engine status to chassis control module via CAN communication. Refer to EC6-33, "ENGINE CONTROL SYSTEM : Component Parts Location" (USA and Canada), EC6-1024, "ENGINE CONTROL SYSTEM : Component Parts Location" (Mexico) for detailed installation location.
③	TCM	Transmits each transmission status to chassis control module via CAN communication. Refer to TM-13, "A/T CONTROL SYSTEM : Component Parts Location" for detailed installation location.
④	ABS actuator and electric unit (control unit)	Transmits braking and wheel speed status to chassis control module via CAN communication. Refer to BRC-10, "Component Parts Location" for detailed installation location.
⑤	Chassis control module	Mainly controls the Digital motion control. Refer to DAS-516, "Component Parts Location" for detailed installation location.
⑥	Combination meter	Indicates the “Chassis Control” status on information display Refer to MWI-8, "METER SYSTEM : Component Parts Location" for detailed installation location.
⑦	Steering angle sensor	Transmits steering angle status to chassis control module via CAN communication. Refer to BRC-10, "Component Parts Location" for detailed installation location.

No.	Component parts	Function
⑧	Display control unit	Transmits the setting state of “Infiniti InTuition” to chassis control module via CAN communication. Refer to AV-14, "Component Parts Location" for detailed installation location.
⑨	Drive mode select switch	Inputs the drive mode signal to chassis control module unit. Refer to DMS-4, "Component Parts Location" for detailed installation location.

Dynamic Digital Suspension

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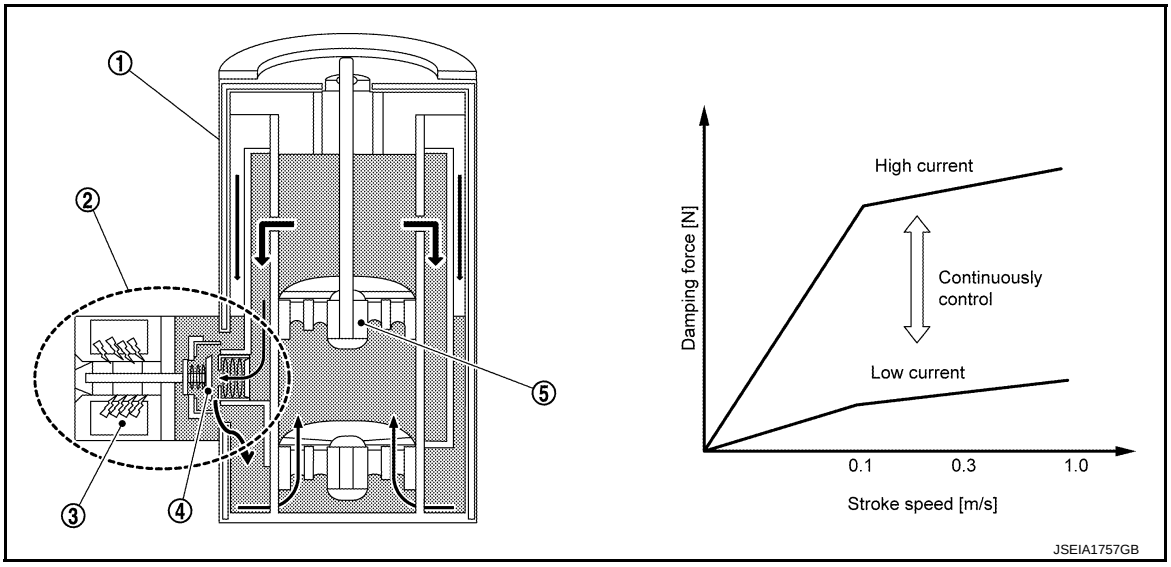
- Shock absorber actuator is integrated into the dynamic digital suspension on 4 wheels.
- Proportional solenoid valve that is able to operate in high speed is used for shock absorber actuator.
- Shock absorber actuator opens/closes the control valve by moving the solenoid core with the control current from chassis control module to regulate the damping force.



① Dynamic digital suspension ② Shock absorber actuator ③ Solenoid core
④ Control valve ⑤ Piston
⬅ Oil flow

SYSTEM

System Description

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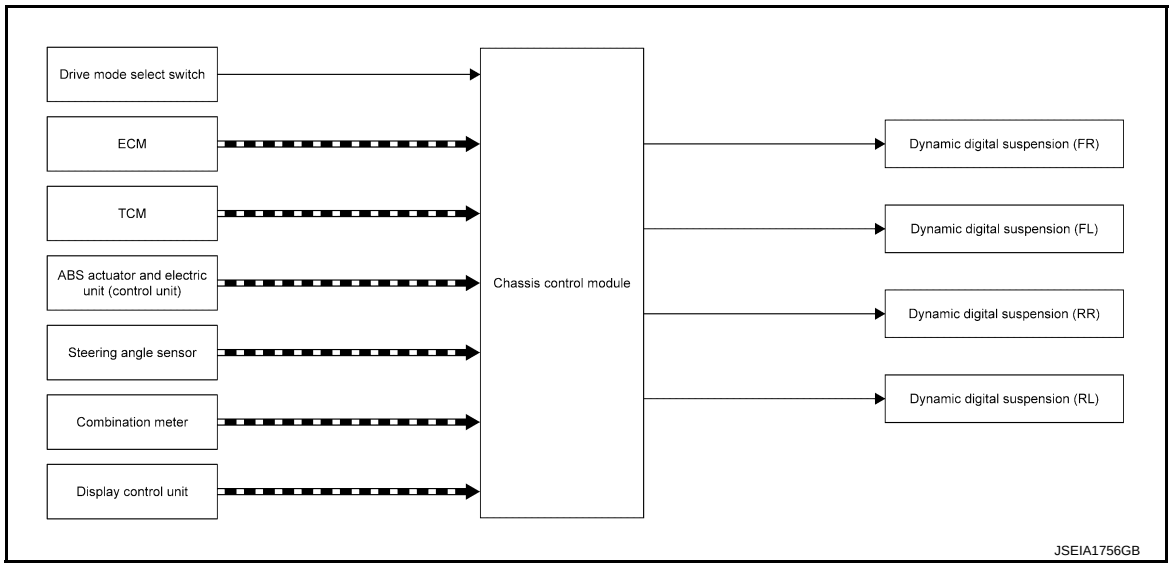
SYSTEM DIAGRAM

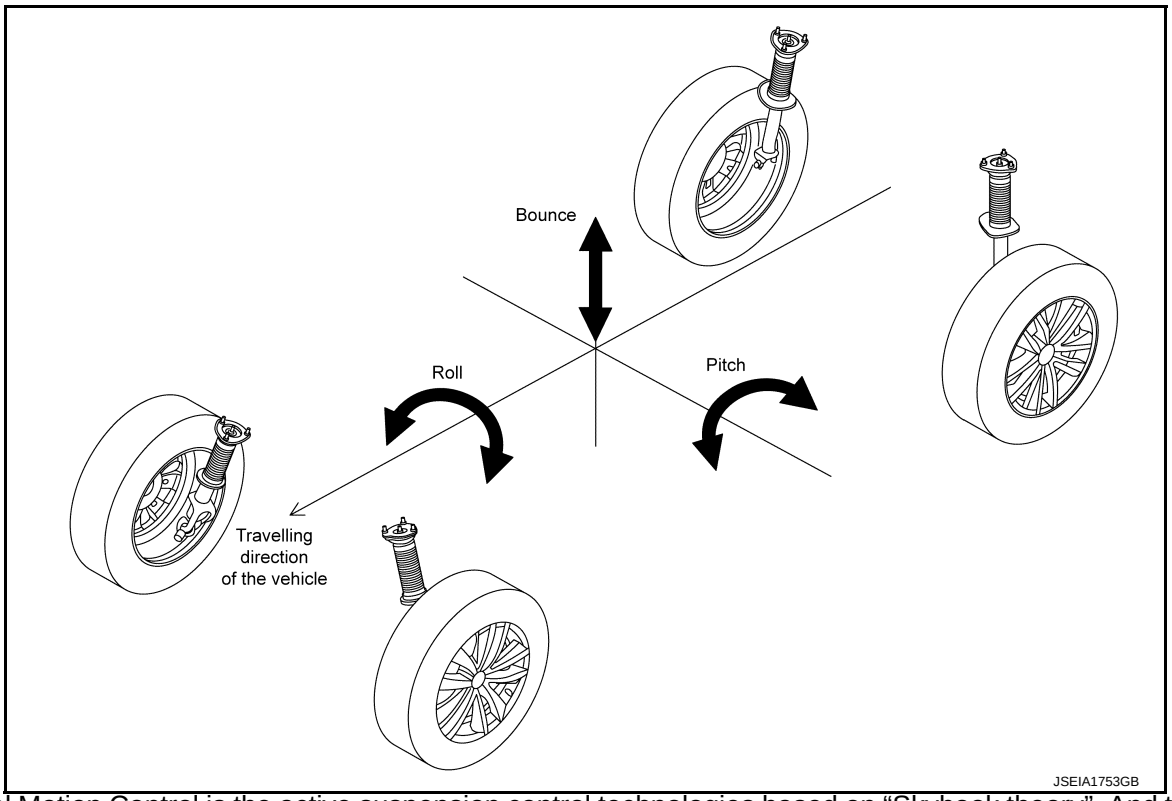


INPUT SIGNAL AND OUTPUT SIGNAL

Major signal transmission between each unit via communication lines is shown in the following table.

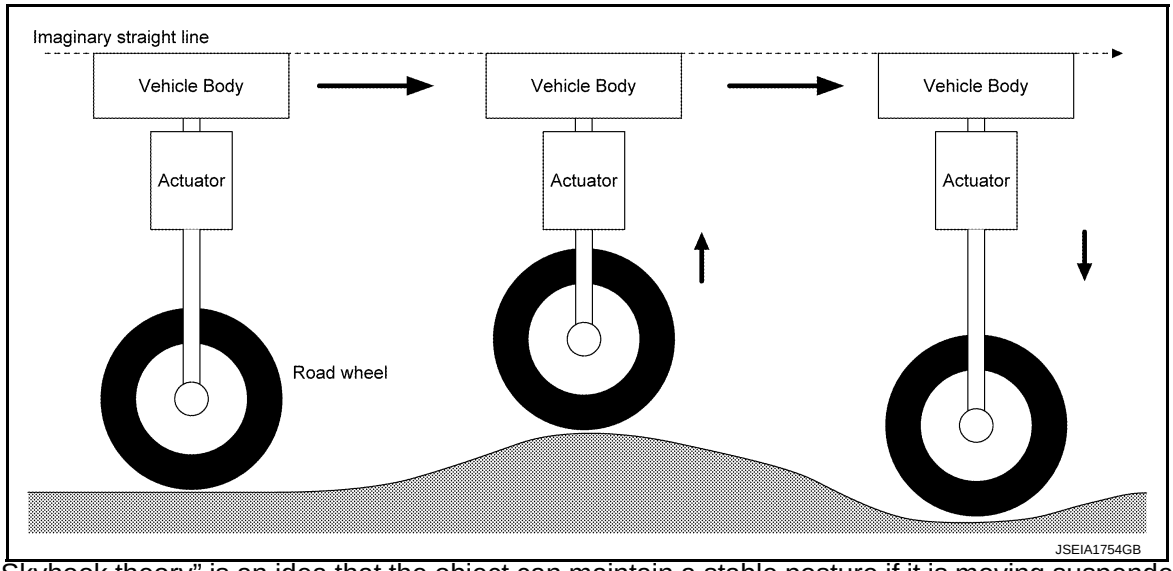
Component	Signal description
ECM	Mainly transmits the following signals to chassis control module via CAN communication. • Accelerator pedal position signal • Engine torque signal • Engine speed signal
TCM	Mainly transmits the following signals to chassis control module via CAN communication. • Current gear position signal
ABS actuator and electric unit (control unit)	Mainly transmits the following signals to chassis control module via CAN communication. • Front LH wheel speed signal • Front RH wheel speed signal • Rear LH wheel speed signal • Rear RH wheel speed signal • ABS operation signal • TCS operation signal • VDC operation signal • Stop lamp switch signal • Vehicle speed signal (ABS) • Yaw rate signal • Side G signal • VDC OFF switch signal
Steering angle sensor	Mainly transmits the following signals to chassis control module via CAN communication. • Steering angle sensor signal
Display control unit	Mainly transmits the following signals to chassis control module via CAN communication line. • System selection signal
Combination meter	Mainly receives the following signals from chassis control module via CAN communication. • Chassis control malfunction signal
Drive mode select switch	Mainly transmits the following signals to chassis control module. • Drive mode signal

OUTLINE



- Digital Motion Control is the active suspension control technologies based on “Skyhook theory”. And the system is controlled by chassis control module mainly.
- Chassis control module estimates the body motion (such as bounce, roll and pitch) by each wheel speed and the driving condition according to received signal from each unit via CAN communication.
- Chassis control module controls shock absorber actuator in the most suitable damping force every 1/100 second depending on the estimated body motion.
- High speed proportion solenoid valve is used for shock absorber actuator in the dynamic digital suspension. Thereby, the system is able to achieve “Skyhook Control” continuously.
- The characteristic of suspension control can be changed by “Infiniti InTuition” with each driver. For details, refer to DMS-13, "Infiniti InTuition : System Description".

SKYHOOK THEORY



- The “Skyhook theory” is an idea that the object can maintain a stable posture if it is moving suspended by an imaginary straight line. The imaginary line (body velocity = 0) is calculated based on the value provided by each signal.
- The advantage by the skyhook theory is follows.

- Optimum damping force: Only when a body is moving, the damping force is produced to keep the movement of the body.
- Minimum exciting force: Damping force does not act for a change in road surface and does not effect for the body through damper.

Circuit Diagram

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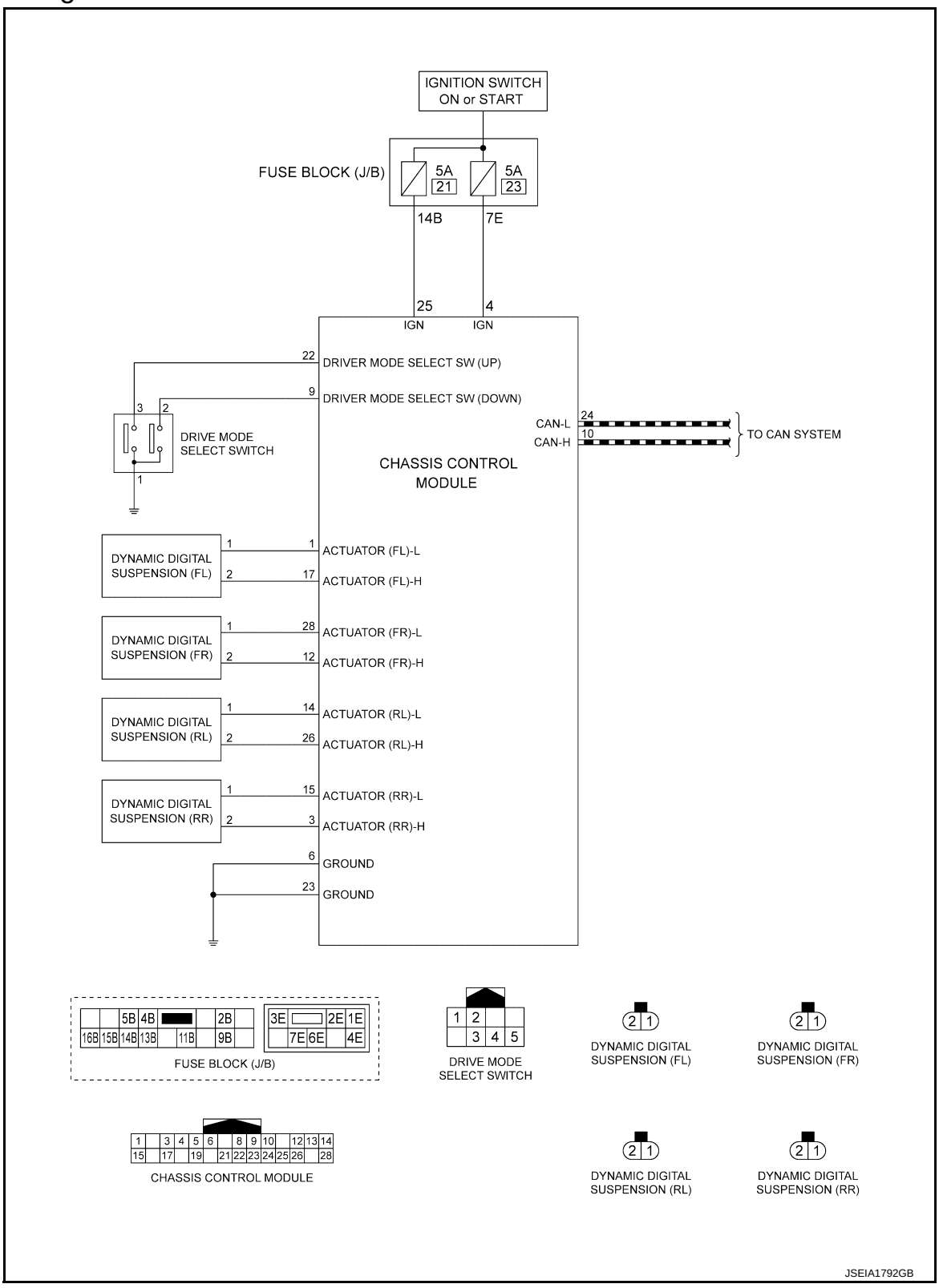

Fail-Safe (Chassis Control Module)

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When a malfunction occurs in the chassis control module, the master warning lamp turns ON and an interrupt is displayed on the information display of the combination meter.

DTC	Vehicle condition
C1B90-00 C1B91-00	The following functions are suspended. • Active lane control function • LDW function • LDP function • Blind spot intervention function
C1B92-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function
C1B93-00 C1B94-00	The following functions are suspended. • Active trace control function • LDW function • LDP function • Blind spot intervention function
C1B96-00	The following functions are suspended. • LDW function • LDP function • Blind spot intervention function • Intelligent cruise control function
C1B99-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function • Infiniti InTuition function • Digital motion control function
C1BA6-00	The following functions are suspended. • Infiniti InTuition function
C1BA7-00	The following functions are suspended. • Active lane control function
C1BA9-00 C1BAA-00	The following functions are suspended. • LDW function • LDP function • Blind spot intervention function
C1BAB-00	The following functions are suspended. • Active trace control function
C1BAC-00 C1BAD-00 C1BAE-00	The following functions are suspended. • LDP function • Blind spot intervention function
C1BAF-00	The following functions are suspended. • Blind spot intervention function
C1BB0-06	Normal control
C1BB2-00 C1BB3-00 C1BB4-00 C1BB5-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function • Infiniti InTuition function • Digital motion control function

DTC	Vehicle condition
C1BB6-00	The following functions are suspended. • Digital motion control function
C1BB7-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function • Infiniti InTuition function • Digital motion control function
C1BB8-00	
C1BB9-00	
C1BBA-00	
C1BBB-00	
C1BBC-00	Normal control
C1BBD-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function • Infiniti InTuition function • Digital motion control function
C1BBE-11	The following functions are suspended. • Digital motion control function
C1BBE-12	
C1BBE-19	
C1BBE-1D	
C1BEE-39	
C1BEE-64	
C1BBF-11	
C1BBF-12	
C1BBF-19	
C1BBF-1D	
C1BBF-39	
C1BBF-64	
C1BC0-00	The following functions are suspended. • Active trace control function • Active lane control function
C1BC1-00	
C1BC7-11	The following functions are suspended. • Digital motion control function
C1BC7-12	
C1BC7-19	
C1BC7-1D	
C1BC7-39	
C1BC7-64	
C1BC8-11	
C1BC8-12	
C1BC8-19	
C1BC8-1D	
C1BC8-39	
C1BC8-64	

DTC	Vehicle condition
U1000-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function
U1010-49	The following functions are suspended. • Active trace control function • Active lane control function
U1A31-00	The following functions are suspended. • Active lane control function • LDW function • LDP function • Blind spot intervention function
U1A35-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function
U1A3E-00	Normal control

DIAGNOSIS SYSTEM (CHASSIS CONTROL MODULE)

CONSULT Function

INFOID:0000000013599753

APPLICATION ITEM

CONSULT can display each diagnostic item using the diagnostic test modes as follows.

Mode	Function description
ECU identification	Parts number of chassis control module can be read.
Self Diagnostic Results	Self-diagnostic results and freeze frame data can be read and erased quickly.*1
DATA MONITOR	Input/Output data in chassis control module can be read.
ACTIVE TEST	Send the drive signal from CONSULT to the actuator. The operation check can be performed.
Work Support	Components can be quickly and accurately adjusted.
Re/programming, Configuration	• Read and save the vehicle specification (TYPE ID). • Write the vehicle specification (TYPE ID) when replacing chassis control module.

*1: The following diagnosis information is erased by erasing.
- DTC
- Freeze frame data (FFD)

ECU IDENTIFICATION

Chassis control module part number can be read.

SELF DIAGNOSTIC RESULT

Refer to SCS-36, "DTC Index".

When “CRNT” is displayed on self-diagnosis result
- The system is presently malfunctioning.

When “PAST” is displayed on self-diagnosis result
- System malfunction in the past is detected, but the system is presently normal.

Freeze frame data (FFD)

When DTC is detected, a vehicle state shown below is recorded and displayed on CONSULT.

Item name	Indication/Unit	Display item
Odometer/Trip meter	km	Total mileage (Odometer value) of the moment a particular.
DTC LOCAL CODE	—	DTC code is displayed but not used.
CAN DIAG PERMIS CONDITION	Off / On	Displays CAN network diagnosis status.
BRAKE SWITCH 1	Off / On	Displays brake pedal operating status.
BRAKE SWITCH 2	Off / On	Displays brake pedal operating status.
ABS	NORMAL / ABNOR	Displays ABS function status.
TCS	NORMAL / ABNOR	Displays TCS function status.
VDC	NORMAL / ABNOR	Displays VDC function status.
VEHICLE SPEED	km	Displays the vehicle speed.
FR WHEEL SPEED	rpm	Displays the rotational speed of front RH tire.
FL WHEEL SPEED	rpm	Displays the rotational speed of front LH tire.
RR WHEEL SPEED	rpm	Displays the rotational speed of rear RH tire.
RL WHEEL SPEED	rpm	Displays the rotational speed of rear LH tire.
STEERING ANG SENSOR	deg	Displays the steering angle from the steering angle sensor.
SIDE G SENSOR	G	Displays the side G.
DECEL G SENSOR	G	Displays the decel G.
YAW RATE SENSOR	deg/s	Displays the yaw rate.
THRTL OPENING	%	Displays the electric throttle position.

Item name	Indication/Unit	Display item
SHIFT POSITION	Off / P / R / N / D (A) / S / L / B / 1– 6 / M 1 –M 8 / A 1 – A 6	Displays the shift position.
PRESS SENSOR	bar	Displays the brake fluid pressure.
DRIVE MODE SELECTOR	STD / SPORT / ECO / SNOW / PERSO	Displays the drive mode select switch selection status.
LANE MARKER (LH)*1	NOT / DETECT	Displays the lane marker (LH) detection status.
LANE MARKER (RH)*1	NOT / DETECT	Displays the lane marker (RH) detection status.
TURN SIGNAL (LH)*1	Off / On	Displays the turn signal switch (LH) operating status.
TURN SIGNAL (RH)*1	Off / On	Displays the turn signal switch (RH) operating status.
TURN SIGNAL SWITCH*1	Off / LEFT / RIGHT / MALF	Displays the turn signal switch operating status.
DAST*1	Off / On	Displays the operation request status to Direct Adaptive Steering.
ROAD DISTORTION*1	1/m	Displays the road distortion rate radius.
ALC COMMAND ST ANG*1	rad	Displays the steering command value to Direct Adaptive Steering.
ST WHL FORCE TORQUE*1	Nm	Displays the estimated value for the steering wheel force torque.
ALC COMMAND ST WHL FORCE*1	N	Displays the steering reaction force command value to Direct Adaptive Steering.
ADAS COND*1	NORMAL / ABNOR	Displays the ADAS control unit function status.
WIPER STATUS*1	Off / LOW / HIGH / MALF	Displays the wiper operating status.
DDS operating condition*2	Off / On	Displays the dynamic digital suspension condition.
Engine rpm*2	rpm	Displays the engine speed.
DMC) CAN signal not receive*2	Non detection / Detection	Displays the CAN signal not receive of digital motion control.
DMC) CAN signal irregularity 1*2	Non detection / Detection	Displays the CAN signal irregularity (message counter) of digital motion control.
DMC) CAN signal irregularity 2*2	Non detection / Detection	Displays the CAN signal irregularity (checksum) of digital motion control.
DMC) CAN signal invalid*2	Non detection / Detection	Displays the CAN signal invalid of digital motion control.
Stop/Start*2	A	Displays the Stop/Start status.
FR shock ab command current*2	A	Displays the dynamic digital suspension (FR) command current.
FL shock ab command current*2	A	Displays the dynamic digital suspension (FL) command current.
RR shock ab command current*2	A	Displays the dynamic digital suspension (RR) command current.
RL shock ab command current*2	A	Displays the dynamic digital suspension (RL) command current.
DMC status*2	Inactive / Active 1 / Active 2 / Active 3 / Active 4 /Not connect current line / Active test 1 /Active test 2 / Other control unit / CAN communication / Control unit	Displays the digital motion control status.

*1: Models with Active Lane Control
*2: Models with Digital motion control

DATA MONITOR

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Item [Unit]		Description
IGN VOLT	[V]	Displays the ignition power supply voltage.
CONTROL MODULE MALF	[Off / On]	Displays chassis control module malfunction.
CAN DIAG STATUS	[Off / On]	Displays CAN network diagnosis status.
STP LAMP OFF RELAY 1	[Off / On]	Displayed but not used.
STP LAMP OFF RELAY 2	[Off / On]	Displayed but not used.
ESS RELAY	[Off / On]	Displayed but not used.
VEHICLE SPEED	[km/m]	Displays the vehicle speed.
FR WHEEL SPEED	[rpm]	Displays the rotational speed of front RH tire.
FL WHEEL SPEED	[rpm]	Displays the rotational speed of front LH tire.
RR WHEEL SPEED	[rpm]	Displays the rotational speed of rear RH tire.
RL WHEEL SPEED	[rpm]	Displays the rotational speed of rear LH tire.
STEERING ANG SENSOR	[deg]	Displays the steering angle from the steering angle sensor.
DECEL G SENSOR	[G]	Displays the decel G.
SIDE G SENSOR	[G]	Displays the side G.
YAW RATE SENSOR	[deg/s]	Displays the yaw rate.
ACCELE PEDAL POSITION	[%]	Displays the accelerator pedal position.
THROTTLE CONTROL	[NORMAL / INCORR / PREV / INPOSSI]	Displays the electric throttle status.
SHIFT POSITION	[Off / P / R / N / D (A) / S / L / B / 1– 6 / M 1 –M 8 / A 1 – A 6]	Displays the shift position.
BRAKE SWITCH 2	[Off / On]	Displays brake pedal operating status.
BRAKE SWITCH 1	[Off / On]	Displays brake pedal operating status.
PRESS SENSOR	[bar]	Displays the brake fluid pressure.
ABS	[NORMAL / ABNOR]	Displays ABS function status.
ABS MALF	[NORMAL / ABNOR]	Displays ABS function status.
EBD	[NORMAL / ABNOR]	Displays EBD function status.
TCS	[NORMAL / ABNOR]	Displays TCS function status.
TCS MALF	[NORMAL / ABNOR]	Displays TCS function status.
VDC	[NORMAL / ABNOR]	Displays VDC function status.
VDC MALF	[NORMAL / ABNOR]	Displays VDC function status.
VDC OFF SWITCH	[Off / On]	Displays VDC OFF switch status.
PARKING BRAKE	[Off / On]	Displays the parking brake operating status.
ACCELE PEDAL MALF	[NORMAL / ABNOR]	Displays the accelerator pedal status.
DRV TRQ CTRL MODE	[INITIAL / NORMAL / STOP 1 / STOP 2 / LIMIT 1 / PROHIBI]	Displays the status of correction to slightly increase/decrease the drive torque.
DRV TRQ CTRL PERMIS 1	[NO PER / PERMIS]	Displays the permission status (basic requirement) of correction to slightly increase/decrease drive torque.
DRV TRQ CTRL PERMIS 2	[NO PER / PERMIS]	Displays the permission status (system requirement) of correction to slightly increase/decrease drive torque.
DRV TRQ CTRL STOP	[REQ / NO REQ]	Displays the stop request status of correction to slightly increase/decrease drive torque.

Item [Unit]		Description
DRV TRQ CTRL PROHIBIT	[REQ / NO REQ]	Displays the prohibition request status of correction to slightly increase/decrease drive torque.
DRIVE MODE SELECTOR	[STD / SPORT / SNOW / ECO / SPORT+ / PERSO / NOT / NOT SET]	Displays the drive mode select switch selection status.
LOG-IN PERMIS	[NO PER / PERMIS]	Displays the login authority status of Infiniti InTuition function.
I-KEY LINK	[Off / On]	Displays the Intelligent Key linking status of Infiniti InTuition function.
USER	[USER A / USER B / USER C / GUEST]	Displays the current user status of Infiniti InTuition function.
ENGINE/TM SETTING	[SPORT / STD / ECO / SNOW]	Displays the engine/transmission setting status with Infiniti drive mode selector function.
ALC SETTING	[Off / LOW / HIGH]	Displays Active Lane Control setting status with Infiniti drive mode selector function.
ATC SETTING	[Off / On]	Displays active trace control function setting status with Infiniti drive mode selector function.
COMBI METER	[STD / SPORT / SNOW / ECO / PERSO]	Displays the combination meter function setting status with Infiniti drive mode selector function.
ATC 1	[Off / On]	Displays active trace control function operating status.
ATC 2	[Off / On]	Displays active trace control function operating status.
ATC 4	[Off / On]	Displays active trace control function operating status.
FL TIRE DISP	[DEF / 1]	Displays the status of front LH tire displayed on the information display in the combination meter.
FR TIRE DISP	[DEF / 1]	Displays the status of front RH tire displayed on the information display in the combination meter.
RL TIRE DISP	[DEF / 1]	Displays the status of rear LH tire displayed on the information display in the combination meter.
RR TIRE DISP	[DEF / 1]	Displays the status of rear RH tire displayed on the information display in the combination meter.
TURN DISP	[N STEER / LEFT / RIGHT]	Displays the turning direction of active trace control function on the information display in the combination meter.
ALC LEVEL	[0 – 4]	Displays active/inactive status of Active Lane Control.
ALC STATUS	[INACT / ACT]	Display Active Lane Control operating status.
ATC DISP	[Off / On]	Displays the operating status of active trace control function on the information display in the combination meter.
ALC DISP	[Off / On]	Displays the operating status of Active Lane Control on the information display in the combination meter.
ALC SYSTEM	[Off / On]	Display Active Lane Control activation status.
LANE MARKER (LH)	[NOT / DETECT]	Displays the lane marker (LH) detection status.
LANE MARKER (RH)	[NOT / DETECT]	Displays the lane marker (RH) detection status.
TURN SIGNAL (LH)	[Off / On]	Displays the turn signal switch (LH) operating status.
TURN SIGNAL (RH)	[Off / On]	Displays the turn signal switch (RH) operating status.
TURN SIGNAL SWITCH	[Off / LEFT / RIGHT / MALF]	Displays the turn signal switch operating status.
DAST	[Off / On]	Displays Direct Adaptive Steering operating status.
ROAD DISTORTION	[1/m]	Displays the road curvature.
COMMAND ST ANG	[rad]	Displays the steering command value to Direct Adaptive Steering.
ST PINION ANG	[rad]	Displays the steering pinion angle.
ST WHL FORCE TORQUE	[Nm]	Displays the steering wheel force torque.
COMMAND ST WHL FORCE	[N]	Displays the reaction force command value to Direct Adaptive Steering.

Item [Unit]		Description
LDW DISP	[On / MALF]	Displays LDW status received from ADAS control unit.
LDP DISP	[On / MALF]	Displays LDP status received from ADAS control unit.
BSI DISP	[On / MALF]	Displays Blind spot intervention function status received from ADAS control unit.
ST SWITCH COND	[OK / NG 1 / NG 2]	Displays the steering switch status received from ADAS control unit.
BSW COND	[NORMAL / ABNOR]	Displays BSW status received from ADAS control unit.
ADAS COND	[NORMAL / ABNOR]	Displays ADAS status received from ADAS control unit.
COLLISION WARN	[Off / On]	Displays collision warning status received from ADAS control unit.
ICC ACTIVE	[Off / On]	Displays ICC operating status received from ADAS control unit.
IBA ACTIVE	[Off / On]	Displays intelligent brake assist operating status received from ADAS control unit.
DR BUZZER STATUS	[NO / 1 / 2 / 3 / 1, 2 / 2, 3 / 1, 3 / 4]	Displayed but not used.
LDW COND	[On / MALF]	Displays LDW status transmitted to ADAS control unit.
LDP COND	[On / MALF]	Displays LDP status transmitted to ADAS control unit.
BSI COND	[On / MALF]	Displays blind spot intervention function status transmitted to ADAS control unit.
LDP BRAKE CANCEL	[NONE / SLIP / SNOW / VDC OF]	Displays LDP cancel cause transmitted to ADAS control unit.
BSI BRAKE CANCEL	[NONE / SLIP / SNOW / VDC OF]	Displays blind spot intervention function cancel cause transmitted to ADAS control unit.
CAMERA COND	[NORMAL / ABNOR]	Displays the lane camera unit status.
CAMERA TEMP COND	[NORMAL / ABNOR]	Displays the lane camera unit status by temperature.
CAMERA COMM COND	[NORMAL / ABNOR]	Displays the communication status with the lane camera unit status.
CAMERA AIMING	[INCOMP / COMP]	Displays the lane camera unit aiming status.
CAMERA HIGH TEMP (LDW)	[NORMAL / ABNOR]	Displays the lane camera unit system cancel request due to high temperature (LDW).
CAMERA HIGH TEMP (LDP)	[NORMAL / ABNOR]	Displays the lane camera unit system cancel request due to high temperature (LDP)
CAMERA HIGH TEMP (BSI)	[NORMAL / ABNOR]	Displays the lane camera unit system cancel request due to high temperature (Blind spot intervention)
SIDE RADAR BLOCK CANCEL	[NORMAL / BLOCK]	Displays the side radar status.
BSI LAMP REQ (LH)	[Off / On]	Displays blind spot intervention indicator blink request at blind spot intervention operation (LH).
BSI LAMP REQ (RH)	[Off / On]	Displays blind spot intervention indicator blink request at blind spot intervention operation (RH).
LANE DEPARTURE DISP (LH)	[NO DISP / DEVIAT]	Displays the deviating status on the LH side lane.
LANE DEPARTURE DISP (RH)	[NO DISP / DEVIAT]	Displays the deviating status on the RH side lane.
LDP/BSI ACTIVE	[Off / On]	Displays LDP/blind spot intervention function operation status.
ADAS COND	[NORMAL / ABNOR]	Displayed, but not used
DR BUZZER COND	[NORMAL / ABNOR]	Displayed, but not used
OUTSIDE TEMP	[°C]	Displays the ambient temperature.
WIPER STATUS	[Off / LOW / HIGH / MALF]	Displays the front wiper operating status.
Engine rpm	[rpm]	Displays the engine speed.
FR shock ab drive current	[A]	Displays the dynamic digital suspension (FR) drive current.
FL shock ab drive current	[A]	Displays the dynamic digital suspension (FL) drive current.

Item [Unit]		Description
RR shock ab drive current	[A]	Displays the dynamic digital suspension (RR) drive current.
RL shock ab drive current	[A]	Displays the dynamic digital suspension (RL) drive current.
Shock absorber control 1	[Off / On]	Displays the dynamic digital suspension control condition.
Shock absorber control 2	[Off / On]	Displays the dynamic digital suspension control condition.
Shock absorber control 3	[Off / On]	Displays the dynamic digital suspension control condition.
FR shock ab command current	[A]	Displays the dynamic digital suspension (FR) command current.
FL shock ab command current	[A]	Displays the dynamic digital suspension (FL) command current.
RR shock ab command current	[A]	Displays the dynamic digital suspension (RR) command current.
RL shock ab command current	[A]	Displays the dynamic digital suspension (RL) command current.

ACTIVE TEST

The active test is used to determine and identify details of a malfunction, based on self-diagnosis test results and data obtained in the DATA MONITOR. In response to instructions from CONSULT, instead of those from chassis control module on the vehicle, a drive signal is sent to the actuator to check its operation.

CAUTION:

- **Never perform ACTIVE TEST while driving the vehicle.**
- **Always bleed air from brake system before active test.**
- **Never perform active test when system is malfunctioning.**

NOTE:

- When active test is performed while depressing the brake pedal, the brake pedal depressing stroke may change. This is not a malfunction.
- During an active test, sometimes a chassis control warning is displayed and the master warning lamp illuminates on the information display in the combination meter; however, this is not a malfunction.

Test item	Operation	Description
BRAKE ACTUATOR 1 MODE 1	Start	Controls brake fluid pressure.
BRAKE ACTUATOR 1 MODE 2	Start	Controls brake fluid pressure.
BRAKE ACTUATOR 1 MODE 3	Start	Controls brake fluid pressure.
BRAKE ACTUATOR 2 MODE 1	Start	Controls brake fluid pressure.
BRAKE ACTUATOR 2 MODE 2	Start	Controls brake fluid pressure.
BRAKE ACTUATOR 2 MODE 3	Start	Controls brake fluid pressure.
BRAKE ACTUATOR 3 MODE 1	Start	Controls brake fluid pressure.
BRAKE ACTUATOR 3 MODE 2	Start	Controls brake fluid pressure.
BRAKE ACTUATOR 3 MODE 3	Start	Controls brake fluid pressure.
COMMAND STEERING ANGLE	Start	Transmits the steering command value 0 deg → 0.00349 deg (hold it for approximately 2 seconds) → 0 deg (hold it for approximately 2 seconds) → 0.00349 deg (hold it for approximately 2 seconds) → 0 deg to the steering force control module.
COMMAND ST WHL FORCE	Start	Transmits the steering reaction force command value 0 N → 0.6 N (hold it for approximately 2 seconds) → 0 N (hold it for approximately 2 seconds)→ 0.6 N (hold it for approximately 2 seconds) → 0 N to the steering force control module.
MASTER WARNING ACTIVE	On	If touching “On” with the master warning lamp not illuminated, the master warning lamp illuminates. Stops in approximately 1 minute.
	Off	The master warning lamp turns OFF. (vehicle in normal state)
ALC DISP	On	Displays Active Lane Control active status on the information display in the combination meter.
	Off	Displays Active Lane Control inactive status on the information display in the combination meter.

Test item	Operation	Description
FL TIRE DISP	On	Displays the front LH tire on the information display in the combination meter.
	Off	Does not display the front LH tire on the information display in the combination meter.
FR TIRE DISP	On	Displays the front RH tire on the information display in the combination meter.
	Off	Does not display the front RH tire on the information display in the combination meter.
RL TIRE DISP	On	Displays the rear LH tire on the information display in the combination meter.
	Off	Does not display the rear LH tire on the information display in the combination meter.
RR TIRE DISP	On	Displays the rear RH tire on the information display in the combination meter.
	Off	Does not display the rear RH tire on the information display in the combination meter.
TURN DISP	NO DISP	Does not display the turning status on the information display in the combination meter.
	LH	Displays the LH turning status on the information display in the combination meter.
	RH	Displays the RH turning status on the information display in the combination meter.
ALC LEVEL	LEVEL 1	Displays Active Lane Control corresponding to the selected level on the information display in the combination meter.
	LEVEL 2	
	LEVEL 3	
	LEVEL 4	
ALC SETTING	On	Displays Active Lane Control active status on the information display in the combination meter.
	Off	Displays Active Lane Control inactive status on the information display in the combination meter.
ATC 1 DISP	On	Displays active trace control function active status on the information display in the combination meter.
	Off	Displays active trace control function inactive status on the information display in the combination meter.
ATC 2 DISP	On	Displays active trace control function active status on the information display in the combination meter.
	Off	Displays active trace control function inactive status on the information display in the combination meter.
ATC 4 DISP	On	Displays active trace control function active status on the information display in the combination meter.
	Off	Displays active trace control function inactive status on the information display in the combination meter.
FR shock absorber*	Soft	Controls dynamic digital suspension (FR).
	Medium	
	Hard	
FL shock absorber*	Soft	Controls dynamic digital suspension (FL).
	Medium	
	Hard	

Test item	Operation	Description
RR shock absorber*	Soft	Controls dynamic digital suspension (RR).
	Medium	
	Hard	
RL shock absorber*	Soft	Controls dynamic digital suspension (RL).
	Medium	
	Hard	
All shock absorber*	Soft	Controls all dynamic digital suspension.
	Medium	
	Hard	

*: Models with digital motion control

WORK SUPPORT

Work support items	Description
ERASE LAST DRIVER INFORMATION	Erases the information for the previous driver.
ERASE KEY ALLOTEMENT USER	Erases all user information.
ERASE PERSONAL SETTINGS	Erases all user information (personal settings only).
CAUSE OF AUTO-CANCEL 1	Displays causes of automatic system cancellation occurred during control of the following systems • Lane Departure Prevention (LDP) • Blind Spot Intervention

NOTE:
- Causes of the maximum five cancellations (system cancel) are displayed.
- The displayed cancellation causes display the number of the ignition switch ON/OFF up to 254. It is fixed to 254 if it is over 254. It returns to 0 when the same cancellation cause is detected again.

Display Items for The Cause of Automatic Cancellation 1

Cause of cancellation	Lane departure prevention	Blind spot intervention	Description
OPE VDC/TCS/ABS 1	×		The activation of VDC, TCS, or ABS during LDP system control
Vehicle dynamics	×		Vehicle behavior exceeds specified value
Steering speed	×		Steering speed was more than the specified value in evasive direction
End by yaw angle	×		Yaw angle was the end of LDP control
Departure yaw large	×		Detected more than the specified value of yaw angle in departure direction
ICC WARNING	×		Target approach warning of ICC system, IBA system, or FCW system was activated
CURVATURE	×		Road curve was more than the specified value
Steering angle large	×		Steering angle was more than the specified value
Brake is operated	×		Brake pedal was operated
IGN LOW VOLT	×		Decrease in ADAS control unit IGN voltage
Lateral offset	×		Distance of vehicle and lane was detached in lateral direction more than the specified value
Lane marker lost	×		Lane camera unit lost the trace of lane marker
Lane marker unclear	×		Detected lane marker was unclear

Cause of cancellation	Lane departure prevention	Blind spot intervention	Description
Yaw acceleration	×		Detected yawing speed was more than the specified value
Deceleration large	×		Deceleration in a longitudinal direction was more than the specified value
Accel is operated	×		Accelerator pedal was depressed
Departure steering	×		Steering wheel was steered more than the specified value in departure direction
Evasive steering	×		Steering wheel was steered more than the specified value in the evasive direction
R range	×		Selector lever was operated to R range
Parking brake drift	×		Rear wheels lock was detected
Not operating condition	×		Did not meet the operating condition (vehicle speed, turn signal operation, etc.)
SNOW MODE SW	×		Shifting of the drive mode selector to SNOW position
VDC OFF SW	×		VDC OFF switch was pressed
OPE VDC/ABS 2	×		The activation of VDC or ABS during a standby time of LDP or blind spot intervention system control
BSI) OPE VDC/TCS/ ABS 1		×	The activation of VDC, TCS, or ABS during blind spot intervention system control
BSI) Vehicle dynamics		×	Vehicle behavior exceeds specified value
BSI) Steering speed		×	Steering speed was more than the specified value in evasive direction
BSI) End by yaw angle		×	Yaw angle was the end of blind spot intervention control
BSI) Departure yaw large		×	Detected more than the specified value of yaw angle in departure direction
BSI) ICC WARNING		×	Target approach warning of ICC system, FEB system or FCW system was activated
BSI) CURVATURE		×	Road curve was more than the specified value
BSI) Steering angle large		×	Steering angle was more than the specified value
BSI) Brake is operated		×	Brake pedal was operated
BSI) IGN LOW VOLT		×	Decrease in chassis control module IGN voltage
BSI) Lateral offset		×	Distance of vehicle and lane was detached in lateral direction more than the specified
BSI) Lane marker lost		×	Lane camera unit lost the trace of lane marker
BSI) Lane marker un-clear		×	Detected lane marker was unclear
BSI) Yaw acceleration		×	Detected yawing speed was more than the specified value
BSI) Deceleration large		×	Deceleration in a longitudinal direction was more than the specified value
BSI) Accel is operated		×	Accelerator pedal was depressed
BSI) Departure steering		×	Steering wheel was steered more than the specified value in departure direction
BSI) Evasive steering		×	Steering wheel was steered more than the specified value in the evasive direction
BSI) R range		×	Selector lever was operated to R range
BSI) Parking brake drift		×	Rear wheels lock was detected
BSI) SNOW MODE SW		×	Shifting of the drive mode selector to SNOW position
BSI) VDC OFF SW		×	VDC OFF switch was pressed
BSI) OPE VDC/ABS 2		×	The activation of VDC or ABS during a standby time of blind spot intervention system control

Cause of cancellation	Lane departure prevention	Blind spot intervention	Description
BSI) Not operating condition		×	Did not meet the operating condition (vehicle speed, turn signal operation, etc.)
Side Radar Lost		×	Unrecognized side radar LH or RH by the ADAS control unit
NO RECORD	×	×	—

RE/PROGRAMMING, CONFIGURATION

Configuration includes the following functions.

Function		Description
Read/Write Configuration	Before replacing ECU	Allows the reading of vehicle specification (Type ID) written in chassis control module to store the specification in CONSULT.
	After replacing ECU	Allows the writing of vehicle information (Type ID) stored in CONSULT into the chassis control module.
Manual Configuration		Allows the writing of vehicle specification (Type ID) into the chassis control module by hand.

CAUTION:

Use “Manual Configuration” only when “TYPE ID” of chassis control module cannot be read.

ECU DIAGNOSIS INFORMATION

CHASSIS CONTROL MODULE

Reference Value

INFOID:0000000013599754

CONSULT DATA MONITOR STANDARD VALUE

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item	Condition	Reference values in normal operation
IGN VOLT	Ignition switch ON	10 – 16 V
CONTROL MODULE MALF	When chassis control module is normal	Off
	When chassis control module malfunction is detected	On
CAN DIAG STATUS	When diagnosis of CAN communication malfunction is detected	Off
	When diagnosis of CAN communication is normal	On
STP LAMP OFF RELAY 1	Displayed but not used.	—
STP LAMP OFF RELAY 2	Displayed but not used.	—
ESS RELAY	Displayed but not used.	—
VEHICLE SPEED	Vehicle Stopped	0 km/h (0 MPH)
	Driving*	Almost same reading as speedometer (within ±10%)
FR WHEEL SPEED	Vehicle stopped	0 rpm
	Driving*	Increases according to vehicle speed
FL WHEEL SPEED	Vehicle stopped	0 rpm
	Driving*	Increases according to vehicle speed
RR WHEEL SPEED	Vehicle stopped	0 rpm
	Driving*	Increases according to vehicle speed
RL WHEEL SPEED	Vehicle stopped	0 rpm
	Driving*	Increases according to vehicle speed
STEERING ANG SENSOR	When driving straight	0±3.5 deg
	When steering wheel is steered to RH by 90°	Approx. +90 deg
	When steering wheel is steered to LH by 90°	Approx. –90 deg
DECEL G SENSOR	Vehicle stopped	Approx. 0 G
	When during acceleration	Positive value
	When during deceleration	Negative value
SIDE G SENSOR	Vehicle stopped	Approx. 0 G
	When right turn	Negative value
	When left turn	Positive value
YAW RATE SENSOR	Vehicle stopped	Approx. 0 deg/s
	When right turn	Negative value
	When left turn	Positive value

Monitor item	Condition	Reference values in normal operation
ACCELE PEDAL POSITION	When accelerator pedal is released	0%
	When accelerator pedal is depressed	0 – 100%
THROTTLE CONTROL	When electric throttle control actuator is normal	NORMAL
	When the electric throttle control actuator does not achieve the requirement (measured value is inaccurate)	INCORR
	When the electric throttle control actuator does not achieve the requirement (temporary prevention)	PREV
	When the electric throttle control actuator does not achieve the requirement (impossible)	INPOSSI
SHIFT POSITION	Selector lever in any position	Indicates selected selector lever position
BRAKE SWITCH 2	When brake pedal is not depressed	Off
	When brake pedal is depressed	On
BRAKE SWITCH 1	When brake pedal is not depressed	Off
	When brake pedal is depressed	On
PRESS SENSOR	When brake pedal is not depressed	Approx. 0 bar
	when brake pedal is depressed	0 – 255 bar
ABS	When ABS function is normal	NORMAL
	When ABS function malfunction is detected	ABNOR
ABS MALF	When ABS function is normal	NORMAL
	When ABS function malfunction is detected	ABNOR
EBD	When EBD function is normal	NORMAL
	When EBD function malfunction is detected	ABNOR
ACCELE PEDAL MALF	When accelerator pedal is normal	NORMAL
	When accelerator pedal malfunction is detected	ABNOR
TCS	When TCS function is normal	NORMAL
	When TCS function malfunction is detected	ABNOR
TCS MALF	When TCS function is normal	NORMAL
	When TCS function malfunction is detected	ABNOR
VDC	When VDC function is normal	NORMAL
	When VDC function malfunction is detected	ABNOR
VDC MALF	When VDC function is normal	NORMAL
	When VDC function malfunction is detected	ABNOR
VDC OFF SWITCH	When VDC OFF switch is OFF	Off
	When VDC OFF switch is ON	On
PARKING BRAKE	When parking brake is inactive	Off
	When parking brake is active	On

Monitor item	Condition	Reference values in normal operation
DRV TRQ CTRL MODE	When correction coefficients are initialized	INITIAL
	When correction is executed	NORMAL
	When correction is stopped (computing is impossible)	STOP 1
	When correction is stopped (computing is possible)	STOP 2
	When correction is limited	LIMIT 1
	When correction is prohibited	PROHIBI
DRV TRQ CTRL PERMIS 1	When correction is permitted (basic requirement)	PERMIS
	When correction is not permitted (basic requirement)	NO PER
DRV TRQ CTRL PERMIS 2	When correction is permitted (system requirement)	PERMIS
	When correction is not permitted (system requirement)	NO PER
DRV TRQ CTRL STOP	When correction is requested to stop	REQ
	When correction is not requested to stop	NO REQ
DRV TRQ CTRL PROHIBIT	When prohibition of correction is requested	REQ
	When prohibition of correction is not requested	NO REQ
DRIVE MODE SELECTOR	When drive mode select switch is “STANDARD” mode	STD
	When drive mode select switch is “SPORT” mode	SPORT
	When drive mode select switch is “SNOW” mode	SNOW
	When drive mode select switch is “ECO” mode	ECO
	When drive mode select switch is “SPORT+” mode	SPORT+
	When drive mode select switch is “PERSONAL” mode	PERSO
	When drive mode select switch is not use	NOT
	When drive mode select switch is not select	NOT SET
LOG-IN PERMIS	When log-in is possible	NO PER
	When log-in is not possible	PERMIS
I-KEY LINK	When Intelligent Key is not linked	Off
	When Intelligent Key is linked	On
USER	When logged in with “USER A” Intelligent Key	USER A
	When logged in with “USER B” Intelligent Key	USER B
	When logged in with “USER C” Intelligent Key	USER C
	When logged in with an Intelligent Key without user registration	GUEST

Monitor item	Condition	Reference values in normal operation
ENGINE/TM SETTING	When the engine/transmission setting with drive mode select switch is in “SPORT” mode	SPORT
	When the engine/transmission setting with drive mode select switch is in “STANDARD” mode	STD
	When the engine/transmission setting with drive mode select switch is in “ECO” mode	ECO
	When the engine/transmission setting with drive mode select switch is in “SNOW” mode	SNOW
ALC SETTING	When Active Lane Control setting with drive mode select switch is “OFF”	Off
	When Active Lane Control setting with drive mode select switch is “LOW”	LOW
	When Active Lane Control setting with drive mode select switch is “HIGH”	HIGH
ATC SETTING	When active trace control function setting with drive mode select switch is “OFF”	Off
	When active trace control function setting with drive mode select switch is “ON”	On
COMBI METER	When drive mode select switch is “STANDARD” mode	STD
	When drive mode select switch is “SNOW” mode	SNOW
	When drive mode select switch is “PERSONAL” mode	PERSO
	When drive mode select switch is “SPORT” mode	SPORT
	When drive mode select switch is “ECO” mode	ECO
ATC 1	When active trace control function is inactive	Off
	When active trace control function is active	On
ATC 2	When active trace control function is inactive	Off
	When active trace control function is active	On
ATC 4	When active trace control function is inactive	Off
	When active trace control function is active	On
FL TIRE DISP	When the front LH tire is not displayed on the information display in the combination meter	DEF
	When the front LH tire is displayed on the information display in the combination meter	1
FR TIRE DISP	When the front RH tire is not displayed on the information display in the combination meter	DEF
	When the front RH tire is displayed on the information display in the combination meter	1
RL TIRE DISP	When the rear LH tire is not displayed on the information display in the combination meter	DEF
	When the rear LH tire is displayed on the information display in the combination meter	1
RR TIRE DISP	When the rear RH tire is not displayed on the information display in the combination meter	DEF
	When the rear RH tire is displayed on the information display in the combination meter	1

Monitor item	Condition	Reference values in normal operation
TURN DISP	When the straight-ahead status is displayed on the information display in the combination meter	N STEER
	When the left turning status is displayed on the information display in the combination meter	LEFT
	When the right turning status is displayed on the information display in the combination meter	RIGHT
ALC LEVEL	When Active Lane Control is turned ON.	0
	When Active Lane Control is operational or is operating.	1 – 4
ALC STATUS	When Active Lane Control is OFF	INACT
	When Active Lane Control is ON	ACT
ATC DISP	When the activation of active trace control function is not displayed on the information display in the combination meter	Off
	When the activation of active trace control function is displayed on the information display in the combination meter	On
ALC DISP	When the activation of Active Lane Control is not displayed on the information display in the combination meter	Off
	When the activation of Active Lane Control is displayed on the information display in the combination meter	On
ALC SYSTEM	When Active Lane Control is OFF	Off
	When Active Lane Control is ON	On
LANE MARKER (LH)	When left side lane marker is not detected.	NOT
	when left side lane marker is detected.	DETECT
LANE MARKER (RH)	When right side lane marker is not detected.	NOT
	When right side lane marker is detected.	DETECT
TURN SIGNAL (LH)	When turn signal lamps is OFF	Off
	When turn signal lamp LH is blinking	On
TURN SIGNAL (RH)	When turn signal lamps is OFF	Off
	When turn signal lamp RH is blinking	On
TURN SIGNAL SWITCH	When turn signal lamps is OFF	Off
	When turn signal lamp LH is blinking	LEFT
	When turn signal lamp RH is blinking	RIGHT
	When turn signal lamp system malfunction is detected.	MALF
DAST	When the Active Lane Control request to transmit to the steering force control module is OFF	Off
	When the Active Lane Control request to transmit to the steering force control module is ON	On
ROAD DISTORTION	Driving	Depends on the radius of curve

Monitor item	Condition	Reference values in normal operation
COMMAND ST ANG	When the Active Lane Control is inactive or when the Active Lane Control is active and the vehicle is driving straight around the center of the lane	Approx. 0 rad
	Active Lane Control is active with yaw angle formed on the left of the lane.	Max 0.05 rad
	Active Lane Control is active with yaw angle formed on the right of the lane.	Max –0.05 rad
ST PINION ANG	When driving straight	Approx. 0 rad
	when steering wheel is steered to LH by 90°	Approx. –1.6 rad
	when steering wheel is steered to RH by 90°	Approx. 1.6 rad
ST WHL FORCE TORQUE	When driving straight	0 N·m
	When steering wheel is steered	MAX ± 32 N·m
COMMAND ST WHL FORCE	When the Active Lane Control is inactive or when the Active Lane Control is active and the vehicle is driving straight around the center of the lane	0 N·m
	When the Active Lane Control is active and the vehicle is drifting to the left end of the lane	Approx. –6 N
	When the Active Lane Control is active and the vehicle is drifting to the right end of the lane	Approx. 6 N
LDW DISP	When LDW function is ON	On
	When LDW function malfunction is detected	MALF
LDP DISP	When LDP function is ON	On
	When LDP function malfunction is detected	MALF
BSI DISP	When blind spot intervention function is ON	On
	When blind spot intervention function malfunction is detected	MALF
ST SWITCH COND	When steering switch is normal	OK
	ADAS control unit sends malfunction information of the steering switch to the chassis control module. (During the judgment of malfunction.)	NG 1
	ADAS control unit sends malfunction information of the steering switch to the chassis control module. (Malfunction confirmed)	NG 2
BSW COND	When BSW function is normal	NORMAL
	When BSW function malfunction is detected	ABNOR
ADAS COND	When ADAS control unit is normal	NORMAL
	When ADAS control malfunction is detected	ABNOR
COLLISION WARN	When the collision warning is OFF	Off
	When the collision warning is ON	On
ICC ACTTIVE	When ICC function is inactive	Off
	When ICC function is active	On
IBA ACTIVE	When forward emergency brake function is inactive	Off
	When forward emergency brake function is active	On
DR BUZZER STATUS	Displayed but not used	—
LDW COND	When LDW function is ON	On
	When LDW function malfunction is detected	MALF

Monitor item	Condition	Reference values in normal operation
LDP COND	When LDP function is ON	On
	When LDP function malfunction is detected	MALF
BSI COND	When blind spot intervention function is ON	On
	When blind spot intervention function malfunction is detected	MALF
LDP BRAKE CANCEL	When not cancel	NONE
	When slippery road	SLIP
	When drive mode select switch is “SNOW” mode	SNOW
	When VDC OFF switch is OFF	VDC OF
BSI BRAKE CANCEL	When not cancel	NONE
	When slippery road	SLIP
	When drive mode select switch is “SNOW” mode	SNOW
	When VDC OFF switch is OFF	VDC OF
CAMERA COND	When Lane camera unit is normal	NORMAL
	When Lane camera unit malfunction is detected.	ABNOR
CAMERA TEMP COND	When the temperature around lane camera unit is normal	NORMAL
	When the temperature around the lane camera unit is high	ABNOR
CAMERA COMM COND	When communication between chassis control module and lane camera unit is normal	NORMAL
	When communication between chassis control module and lane camera unit malfunction is detected	ABNOR
CAMERA AIMING	When lane camera aiming is completed	COMP
	When lane camera aiming is not completed	INCOMP
CAMERA HIGH TEMP (LDW)	When the temperature around lane camera unit is normal. (LDW ON)	NORMAL
	When the temperature around the lane camera unit is high. (LDW ON)	ABNOR
CAMERA HIGH TEMP (LDP)	When the temperature around lane camera unit is normal. (LDP ON)	NORMAL
	When the temperature around the lane camera unit is high. (LDP ON)	ABNOR
CAMERA HIGH TEMP (BSI)	When the temperature around lane camera unit is normal. (Blind spot intervention ON)	NORMAL
	When the temperature around the lane camera unit is high. (Blind spot intervention ON)	ABNOR
SIDE RADAR BLOCK CANCEL	When the side radar is normal	NORMAL
	Side radar is blocked and temporarily deactivated.	BLOCK
BSI LAMP REQ (LH)	When blind spot intervention function (LH) is inactive	Off
	When blind spot intervention function (LH) is active	On

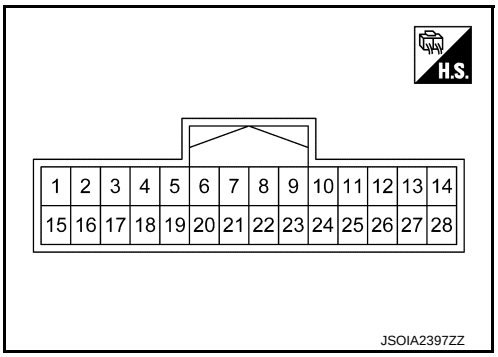
Monitor item	Condition	Reference values in normal operation
BSI LAMP REQ (RH)	When blind spot intervention function (RH) is inactive	Off
	When blind spot intervention function (RH) is active	On
LANE DEPARTURE DISP (LH)	When not deviating the LH side lane	NO DISP
	When deviating the LH side lane	DEVIAT
LANE DEPARTURE DISP (RH)	When not deviating the RH side lane	NO DISP
	When deviating the RH side lane	DEVIAT
LDP/BSI ACTIVE	When LDP function and blind spot intervention function are inactive	Off
	When LDP function or blind spot intervention function are active	On
ADAS COND	When diagnosis of ADAS control unit is normal	NORMAL
	When diagnosis of ADAS control unit malfunction is detected	ABNOR
DR BUZZER COND	When driver assistance buzzer is normal	NORMAL
	When driver assistance buzzer malfunction is detected	ABNOR
OUTSIDE TEMP	Ignition switch ON	(–40°C) – (+72°C)
WIPER STATUS	When front wiper is inactive	Off
	When front wiper is active (low and intermittent)	LOW
	When front wiper is active (high)	HIGH
	When front wiper malfunction is detected	MALF
Engine rpm	Engine stopped	0 rpm
	Engine running	Almost sase reading as tachometer
FR shock ab drive current	When select the “Soft” in “FR shock absober” of “ACTIVE TEST”	Approx. 0.38 A
	When select the “Medium” “FR shock absorber” in of “ACTIVE TEST”	Approx. 0.85 A
	When select the “Hard” in “FR shock absorber” of “ACTIVE TEST”	Approx. 1.15 A
FL shock ab drive current	When select the “Soft” in “FL shock absorber” of “ACTIVE TEST”	Approx. 0.38 A
	When select the “Medium” in “FL shock absorber” of “ACTIVE TEST”	Approx. 0.85 A
	When select the “Hard” in “FL shock absorber” of “ACTIVE TEST”	Approx. 1.15 A
RR shock ab drive current	When select the “Soft” in “RR shock absorber” of “ACTIVE TEST”	Approx. 0.38 A
	When select the “Medium” in “RR shock absorber” of “ACTIVE TEST”	Approx. 0.85 A
	When select the “Hard” in “RR shock absorber” of “ACTIVE TEST”	Approx. 1.15 A
RL shock ab drive current	When select the “Soft” in “RL shock absorber” of “ACTIVE TEST”	Approx. 0.38 A
	When select the “Medium” in “RL shock absorber” of “ACTIVE TEST”	Approx. 0.85 A
	When select the “Hard” in “RL shock absorber” of “ACTIVE TEST”	Approx. 1.15 A

Monitor item	Condition	Reference values in normal operation
Shock absorber control 1	When vehicle estimation (control 1) is normal	Off
	When vehicle estimation (control 1) is canceled	On
Shock absorber control 2	When vehicle estimation (control 2) is normal	Off
	When vehicle estimation (control 2) is canceled	On
Shock absorber control 3	When vehicle estimation (control 3) is normal	Off
	When vehicle estimation (control 3) is canceled	On
FR shock ab command current	When select the “Soft” in “FR shock absorber” of “ACTIVE TEST”	Approx. 0.38 A
	When select the “Medium” in “FR shock absorber” of “ACTIVE TEST”	Approx. 0.85 A
	When select the “Hard” in “FR shock absorber” of “ACTIVE TEST”	Approx. 1.15 A
FL shock ab command current	When select the “Soft” in “FL shock absorber” of “ACTIVE TEST”	Approx. 0.38 A
	When select the “Medium” in “FL shock absorber” of “ACTIVE TEST”	Approx. 0.85 A
	When select the “Hard” in “FL shock absorber” of “ACTIVE TEST”	Approx. 1.15 A
RR shock ab command current	When select the “Soft” in “RR shock absorber” of “ACTIVE TEST”	Approx. 0.38 A
	When select the “Medium” in “RR shock absorber” of “ACTIVE TEST”	Approx. 0.85 A
	When select the “Hard” in “RR shock absorber” of “ACTIVE TEST”	Approx. 1.15 A
RL shock ab command current	When select the “Soft” in “RL shock absorber” of “ACTIVE TEST”	Approx. 0.38 A
	When select the “Medium” in “RL shock absorber” of “ACTIVE TEST”	Approx. 0.85 A
	When select the “Hard” in “RL shock absorber” of “ACTIVE TEST”	Approx. 1.15 A

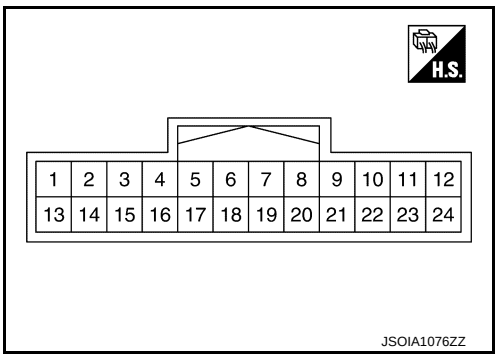
*: Check tire pressure under normal conditions.

TERMINAL LAYOUT

Models with Digital Motion Control



Models without Digital Motion Control



PHYSICAL VALUES

Models with Digital Motion Control

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (LG)	—	ACTUATOR (FL)-L	—	—	—	—
3 (BR)	—	ACTUATOR (RR)-H	—	—	—	—
4 (BG)	Ground	IGNITION POWER SUPPLY	Input	Ignition switch ON		6.4 – 16 V
5 (W)	Ground	CHASSIS COMM-L	—	—	—	—
6 (B)	Ground	GROUND	—	Ignition switch ON	—	0 V
8 (BR)*1 (L)*1	Ground	CHASSIS COMM-H	—	—	—	—
9 (G)*1 (Y)*1	Ground	DRIVE MODE SELECT SWITCH (DOWN)	Input	Ignition switch ON	Down switch is not pressed	6.4 – 16 V
					Down switch is pressed	0 V
10 (L)	Ground	CAN-H	—	—	—	—
12 (G)	—	ACTUATOR (FR)-H	—	—	—	—
13*2 (G)	Ground	ESS RELAY	Output	Ignition switch ON		6.4 – 16 V
14 (L)	—	ACTUATOR (RL)-L	—	—	—	—
15 (Y)	—	ACTUATOR (RR)-L	—	—	—	—
17 (V)	—	ACTUATOR (FL)-H	—	—	—	—
19 (L)	Ground	CHASSIS COMM-H	—	—	—	—
21 (W)	Ground	CHASSIS COMM-L	—	—	—	—

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
22 (V)	Ground	DRIVE MODE SELECT SWITCH (UP)	Input	Ignition switch ON	Up switch is not pressed	6.4 – 16 V
					Up switch is pressed	0 V
23 (B)	Ground	GROUND	—	Ignition switch ON	—	0 V
24 (R)*3 (P)*4	Ground	CAN-L	—	—	—	—
25 (G)	Ground	IGNITION POWER SUPPLY	Input	Ignition switch ON		6.4 – 16 V
26 (V)	—	ACTUATOR (RL)-H	—	—	—	—
28 (R)	—	ACTUATOR (FR)-L	—	—	—	—

*1: Color of wire differs depending on production.
*2: Although the harness is connected, it is not functioning.
*3: With Gateway
*4: Without Gateway

Models without Digital Motion Control

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
3 (R)*1 (P)*2	Ground	CAN-L	—	—	—	—
4 (L)	Ground	CAN-H	—	—	—	—
5 (V)*3 (Y)*4	Ground	DRIVE MODE SELECT SWITCH (UP)	Input	Ignition switch ON	Up switch is not pressed	6.4 – 16 V
					Up switch is pressed	0 V
6 (Y)*3 (G)*4	Ground	DRIVE MODE SELECT SWITCH (DOWN)	Input	Ignition switch ON	Down switch is not pressed	6.4 – 16 V
					Down switch is pressed	0 V
7 (W)	Ground	CHASSIS COMM-L	—	—	—	—
8 (W)	Ground	CHASSIS COMM-L	—	—	—	—
10 (G)*3 (BG)*4	Ground	IGNITION POWER SUPPLY	Input	Ignition switch ON		6.4 – 16 V
11 (L)	Ground	CHASSIS COMM-H	—	—	—	—
12 (B)*3 (B/W)*4	Ground	GROUND	—	Ignition switch ON	—	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
19 (BR)[*3] (L)[*4]	Ground	CHASSIS COMM-H	—	—	—	—
23[*5] (G)[*3] (R)[*4]	Ground	ESS RELAY	Output	Ignition switch ON		6.4 – 16 V

*1: With Gateway
*2: Without Gateway
*3: VR30DDTT engine models
*4: 2.0L turbo gasoline engine models
*5: Although the harness is connected, it is not functioning.

Fail-Safe (Chassis Control Module)

INFOID:0000000013599755

When a malfunction occurs in the chassis control module, the master warning lamp turns ON and an interrupt is displayed on the information display of the combination meter.

DTC	Vehicle condition
C1B90-00 C1B91-00	The following functions are suspended. • Active lane control function • LDW function • LDP function • Blind spot intervention function
C1B92-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function
C1B93-00 C1B94-00	The following functions are suspended. • Active trace control function • LDW function • LDP function • Blind spot intervention function
C1B96-00	The following functions are suspended. • LDW function • LDP function • Blind spot intervention function • Intelligent cruise control function
C1B99-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function • Infiniti InTuition function • Digital motion control function
C1BA6-00	The following functions are suspended. • Infiniti InTuition function
C1BA7-00	The following functions are suspended. • Active lane control function
C1BA9-00 C1BAA-00	The following functions are suspended. • LDW function • LDP function • Blind spot intervention function

DTC	Vehicle condition
C1BAB-00	The following functions are suspended. • Active trace control function
C1BAC-00	The following functions are suspended. • LDP function • Blind spot intervention function
C1BAD-00	
C1BAE-00	
C1BAF-00	The following functions are suspended. • Blind spot intervention function
C1BB0-06	Normal control
C1BB2-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function • Infiniti InTuition function • Digital motion control function
C1BB3-00	
C1BB4-00	
C1BB5-00	
C1BB6-00	The following functions are suspended. • Digital motion control function
C1BB7-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function • Infiniti InTuition function • Digital motion control function
C1BB8-00	
C1BB9-00	
C1BBA-00	
C1BBB-00	
C1BBC-00	Normal control
C1BBD-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function • Infiniti InTuition function • Digital motion control function
C1BBE-11	The following functions are suspended. • Digital motion control function
C1BBE-12	
C1BBE-19	
C1BBE-1D	
C1BEE-39	
C1BEE-64	
C1BBF-11	
C1BBF-12	
C1BBF-19	
C1BBF-1D	
C1BBF-39	
C1BBF-64	
C1BC0-00	The following functions are suspended. • Active trace control function • Active lane control function
C1BC1-00	

DTC	Vehicle condition
C1BC7-11	The following functions are suspended. • Digital motion control function
C1BC7-12	
C1BC7-19	
C1BC7-1D	
C1BC7-39	
C1BC7-64	
C1BC8-11	
C1BC8-12	
C1BC8-19	
C1BC8-1D	
C1BC8-39	
C1BC8-64	
U1000-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function
U1010-49	The following functions are suspended. • Active trace control function • Active lane control function
U1A31-00	The following functions are suspended. • Active lane control function • LDW function • LDP function • Blind spot intervention function
U1A35-00	The following functions are suspended. • Active trace control function • Active lane control function • LDW function • LDP function • Blind spot intervention function
U1A3E-00	Normal control

DTC Inspection Priority Chart

INFOID:0000000013599756

When multiple DTCs are displayed simultaneously, check them one by one according to the following priority list.

Priority	Detected item (DTC)
1	• U1000-00 CAN COMM CIRCUIT • U1010-49 CONTROL UNIT (CAN)
2	• U1A31-00 DAST COMM • U1A35-00 BRAKE CONTROL COMM • U1A3E-00 ADAS COMM
3	• C1BBD-00 VARIANT CODING

Priority	Detected item (DTC)
4	• C1B90-00 DAST SYSTEM • C1B91-00 CAMERA SYSTEM • C1B92-00 BRAKE CONTROL SYSTEM • C1B93-00 ENGINE/HEV SYSTEM • C1B94-00 TM SYSTEM • C1B96-00 ADAS SYSTEM • C1BA6-00 AV SYSTEM • C1BA7-00 ALC SYSTEM • C1BA9-00 NP RANGE • C1BAA-00 GEAR POSITION • C1BAB-00 STOP LAMP SW • C1BAC-00 OPERATION SW CIRC • C1BAD-00 ACCELERATER PEDAL • C1BAE-00 ACCELERATER PEDAL • C1BAF-00 BSW SYSTEM • C1BB0-06 DR BUZZER SYSTEM • C1BBE-11 Front right shock absorber circuit • C1BBE-12 Front right shock absorber circuit • C1BBE-19 Front right shock absorber circuit • C1BBE-1D Front right shock absorber circuit • C1BBE-39 Front right shock absorber circuit • C1BBE-64 Front right shock absorber circuit • C1BBF-11 Front left shock absorber circuit • C1BBF-12 Front left shock absorber circuit • C1BBF-19 Front left shock absorber circuit • C1BBF-1DFront left shock absorber circuit • C1BBF-39 Front left shock absorber circuit • C1BBF-64 Front left shock absorber circuit • C1BC0-00 FR WHEEL SENSOR • C1BC1-00 FL WHEEL SENSOR • C1BC7-11 Rear right shock absorber circuit • C1BC7-12 Rear right shock absorber circuit • C1BC7-19 Rear right shock absorber circuit • C1BC7-1D Rear right shock absorber circuit • C1BC7-39 Rear right shock absorber circuit • C1BC7-64 Rear right shock absorber circuit • C1BC8-11 Rear left shock absorber circuit • C1BC8-12 Rear left shock absorber circuit • C1BC8-19 Rear left shock absorber circuit • C1BC8-1D Rear left shock absorber circuit • C1BC8-39 Rear left shock absorber circuit • C1BC8-64 Rear left shock absorber circuit
5	• C1BB5-00 IGN POWER SUPPLY • C1BB6-00 IGN POWER SUPPLY
6	• C1B99-00 CONTROL MODULE • C1BB2-00 CONTROL MODULE • C1BB3-00 CONTROL MODULE • C1BB4-00 CONTROL MODULE • C1BB7-00 CONTROL MODULE • C1BB8-00 CONTROL MODULE • C1BB9-00 CONTROL MODULE • C1BBA-00 CONTROL MODULE • C1BBB-00 CONTROL MODULE • C1BBC-00 CONTROL MODULE

DTC Index

INFOID:0000000013599757

DTC	Display item	Refer to
C1B90-00	DAST SYSTEM	DAS-580, "DTC Description"
C1B91-00	CAMERA SYSTEM	DAS-582, "DTC Description"
C1B92-00	BRAKE CONTROL SYSTEM	DAS-584, "DTC Description"

DTC	Display item	Refer to
C1B93-00	ENGINE/HEV SYSTEM	DAS-586, "DTC Description"
C1B94-00	TM SYSTEM	DAS-588, "DTC Description"
C1B96-00	ADAS SYSTEM	DAS-590, "DTC Description"
C1B99-00	CONTROL NODULE	DAS-592, "DTC Description"
C1BA6-00	AV SYSTEM	DAS-593, "DTC Description"
C1BA7-00	ALC SYSTEM	DAS-595, "DTC Description"
C1BA9-00	NP RANGE	DAS-597, "DTC Description"
C1BAA-00	GEAR POSITION	DAS-599, "DTC Description"
C1BAB-00	STOP LAMP SW	DAS-601, "DTC Description"
C1BAC-00	OPERATION SW CIRC	DAS-603, "DTC Description"
C1BAD-00	ACCELERATER PEDAL	DAS-605, "DTC Description"
C1BAE-00	ACCELERATER PEDAL	DAS-607, "DTC Description"
C1BAF-00	BSW SYSTEM	DAS-609, "DTC Description"
C1BB0-06	DR BUZZER SYSTEM	DAS-611, "DTC Description"
C1BB2-00	CONTROL MODULE	DAS-612, "DTC Description"
C1BB3-00	CONTROL MODULE	DAS-613, "DTC Description"
C1BB4-00	CONTROL MODULE	DAS-614, "DTC Description"
C1BB5-00	IGN POWER SUPPLY	DAS-615, "DTC Description"
C1BB6-00	IGN POWER SUPPLY	DAS-620, "DTC Description"
C1BB7-00	CONTROL MODULE	DAS-623, "DTC Description"
C1BB8-00	CONTROL MODULE	DAS-624, "DTC Description"
C1BB9-00	CONTROL MODULE	DAS-625, "DTC Description"
C1BBA-00	CONTROL MODULE	DAS-626, "DTC Description"
C1BBB-00	CONTROL MODULE	DAS-627, "DTC Description"
C1BBC-00	CONTROL MODULE	DAS-628, "DTC Description"
C1BBD-00	VARIANT CODING	DAS-629, "DTC Description"
C1BBE-11	Front right shock absorber circuit	DAS-630, "DTC Description"
C1BBE-12	Front right shock absorber circuit	DAS-633, "DTC Description"
C1BBE-19	Front right shock absorber circuit	DAS-636, "DTC Description"
C1BBE-1D	Front right shock absorber circuit	DAS-639, "DTC Description"
C1BBE-39	Front right shock absorber circuit	DAS-642, "DTC Description"
C1BBE-64	Front right shock absorber circuit	DAS-644, "DTC Description"
C1BBF-11	Front left shock absorber circuit	DAS-647, "DTC Description"
C1BBF-12	Front left shock absorber circuit	DAS-650, "DTC Description"
C1BBF-19	Front left shock absorber circuit	DAS-653, "DTC Description"
C1BBF-1D	Front left shock absorber circuit	DAS-656, "DTC Description"
C1BBF-39	Front left shock absorber circuit	DAS-659, "DTC Description"
C1BBF-64	Front left shock absorber circuit	DAS-661, "DTC Description"
C1BC0-00	FR WHEEL SENSOR	DAS-664, "DTC Description"
C1BC1-00	FL WHEEL SENSOR	DAS-666, "DTC Description"
C1BC7-11	Rear right shock absorber circuit	DAS-668, "DTC Description"
C1BC7-12	Rear right shock absorber circuit	DAS-671, "DTC Description"
C1BC7-19	Rear right shock absorber circuit	DAS-674, "DTC Description"
C1BC7-1D	Rear right shock absorber circuit	DAS-677, "DTC Description"

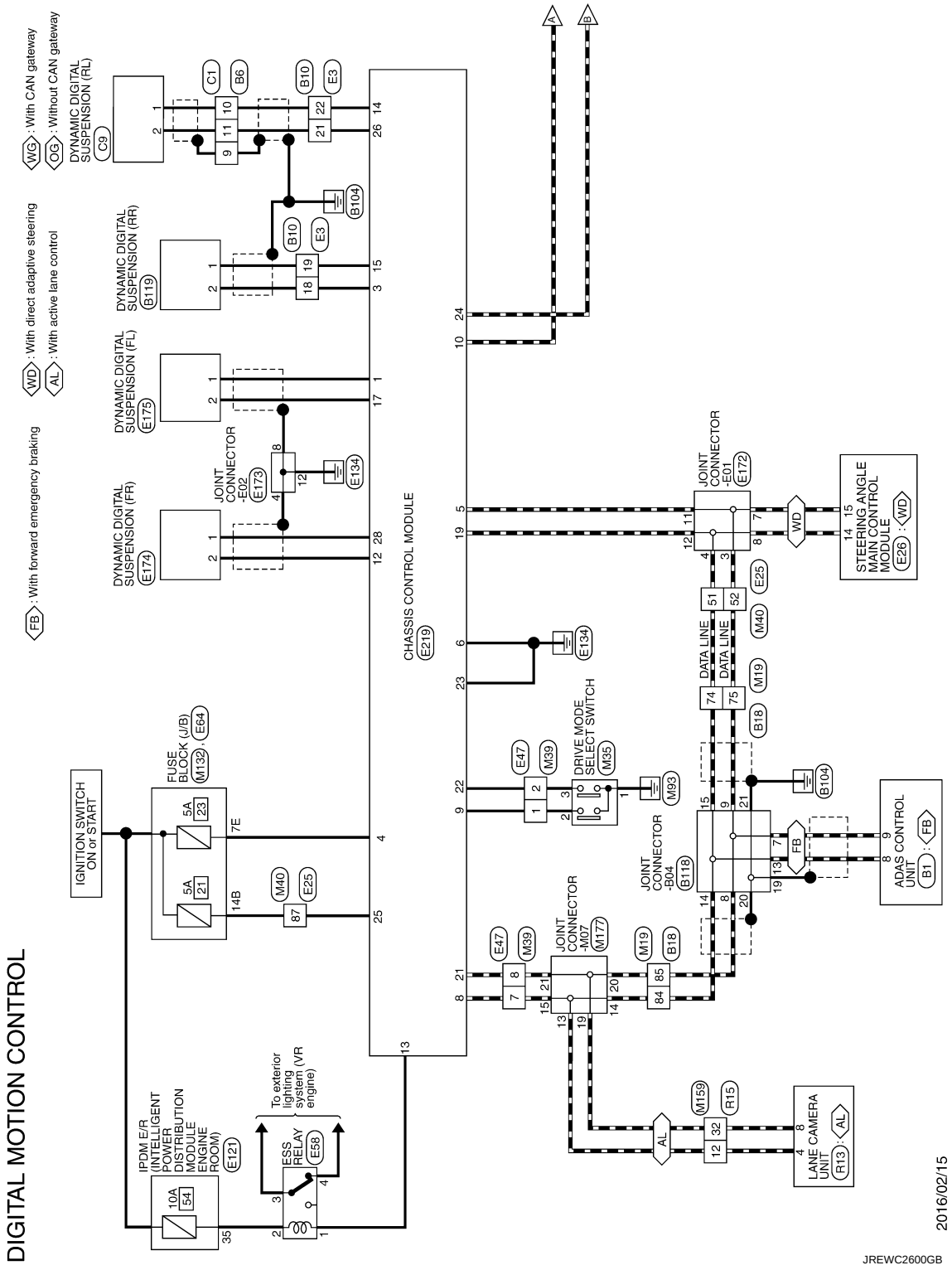
DTC	Display item	Refer to
C1BC7-39	Rear right shock absorber circuit	DAS-680, "DTC Description"
C1BC7-64	Rear right shock absorber circuit	DAS-682, "DTC Description"
C1BC8-11	Rear left shock absorber circuit	DAS-685, "DTC Description"
C1BC8-12	Rear left shock absorber circuit	DAS-688, "DTC Description"
C1BC8-19	Rear left shock absorber circuit	DAS-691, "DTC Description"
C1BC8-1D	Rear left shock absorber circuit	DAS-694, "DTC Description"
C1BC8-39	Rear left shock absorber circuit	DAS-697, "DTC Description"
C1BC8-64	Rear left shock absorber circuit	DAS-699, "DTC Description"
U1000-00	CAN COMM CIRCUIT	DAS-702, "DTC Description"
U1010-49	CONTROL UNIT (CAN)	DAS-703, "DTC Description"
U1A31-00	DAST COMM	DAS-704, "DTC Description"
U1A35-00	BRAKE CONTROL COMM	DAS-706, "DTC Description"
U1A3E-00	ADAS COMM	DAS-708, "DTC Description"

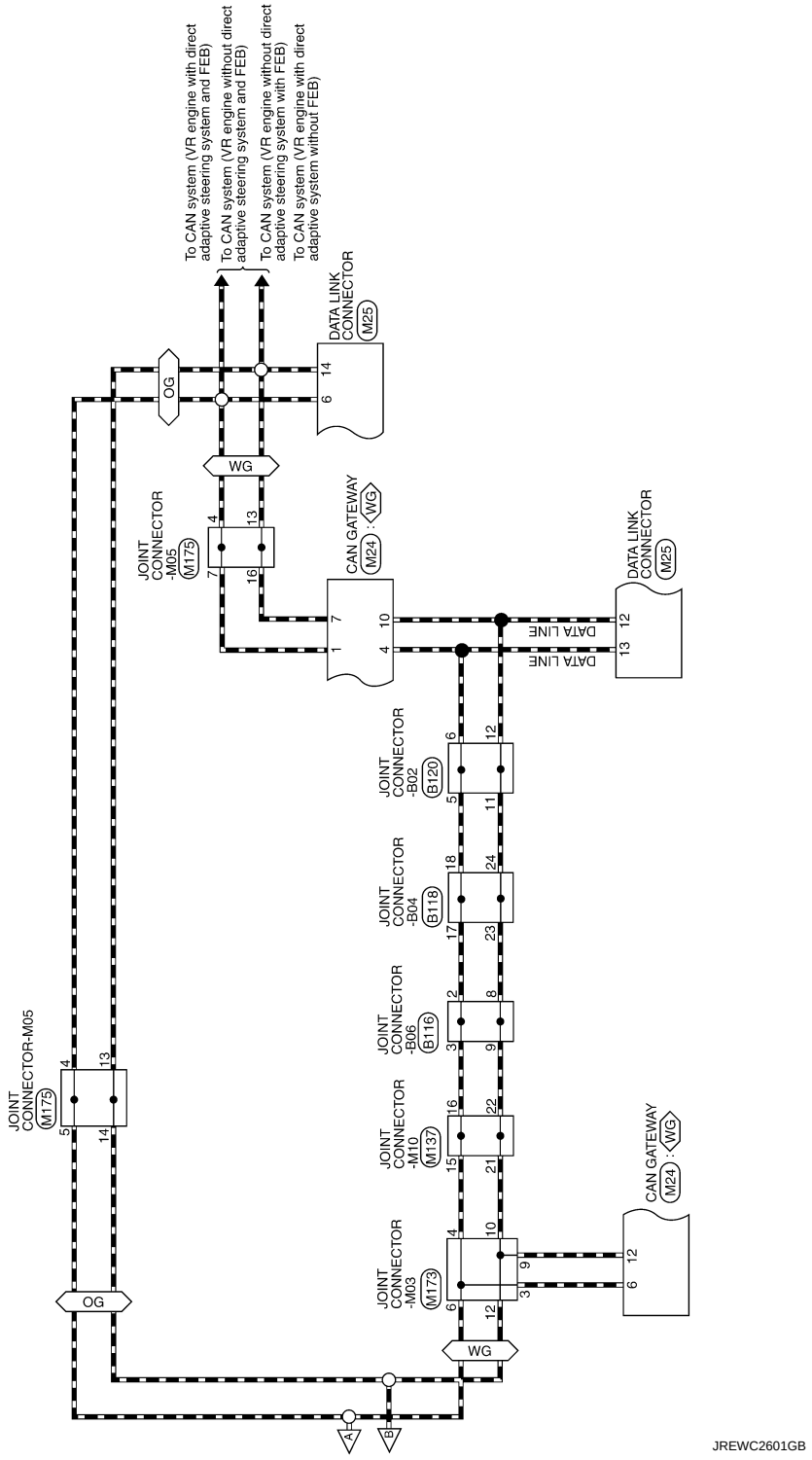
WIRING DIAGRAM

DIGITAL MOTION CONTROL

Wiring Diagram

INFOID:0000000013583980




To CAN system (VR engine with direct adaptive steering system and FEB)
To CAN system (VR engine without direct adaptive steering system and FEB)
To CAN system (VR engine without direct adaptive steering system with FEB)
To CAN system (VR engine with direct adaptive system without FEB)
DATA LINK CONNECTOR M25
OG
WG
JOINT CONNECTOR -M05 M175
CAN GATEWAY M24 : WG
DATA LINE
JOINT CONNECTOR -B02 B120
JOINT CONNECTOR -B04 B118
JOINT CONNECTOR -B06 B116
JOINT CONNECTOR -M10 M137
JOINT CONNECTOR -M03 M173
JOINT CONNECTOR-M05
A
B
JREWC2601GB

DIGITAL MOTION CONTROL

Connector No.	B1
Connector Name	ADAS CONTROL UNIT
Connector Type	TH24FW-NH

H.S.

12	9	8	7	6	5			2	1
24	23						17		

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	CAN-H
2	R	CAN-L
5	B	GROUND
6	L	ITS COMM-H
7	Y	ITS COMM-L
8	L	CHASSIS COMM-H
9	R	CHASSIS COMM-L
12	G	IGNITION [Except with VR30 engine and without ISS]
12	GR	IGNITION [VR30 engine and without ISS]
17	V	BRAKE HOLD RLY DRIVE SIGNAL
23	Y	STEERING SW SIGNAL GROUND
24	SB	STEERING SW SIGNAL

Connector No.	B6
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

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 [Specification]
7	LG	-
8	GR	-
9	SHIELD	-
10	L	- [With VR30 engine]
10	V	- [With 2.0L turbo gasoline engine]
11	G	- [With 2.0L turbo gasoline engine]
11	V	- [With VR30 engine]
12	GR	-
13	BG	-
14	LG	-
15	BR	-
16	BG	-

Connector No.	B10
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

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 [Specification]
1	LG	- [With 2.0L turbo gasoline engine]
1	Y	- [With VR30 engine]
2	W	-
3	LG	-
4	P	- [With VR30 engine]
4	SB	- [With 2.0L turbo gasoline engine]
5	L	-
6	V	-
7	LG	-
8	R	-
9	W	-
10	B	-
11	G	-
12	R	-
13	GR	-
14	BG	-
15	BR	-
16	LG	-
17	V	-
18	BR	-
19	LG	- [With 2.0L turbo gasoline engine]
19	Y	- [With VR30 engine]
20	Y	-
21	R	- [With 2.0L turbo gasoline engine]
21	V	- [With VR30 engine]
22	L	-
23	V	-
24	B	- [With VR30 engine]
24	R	- [With 2.0L turbo gasoline engine]

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	G	-
3	L	-
4	LG	-
5	Y	-
6	R	-
7	V	-
8	LG	-
10	BG	-
11	BG	-
12	LG	-
13	GR	-
14	R	-
15	L	-
16	V	-
18	W	-
19	BR	-
20	W	-
22	R	-
23	V	-
24	R	- [With 2.0L turbo gasoline engine]
24	Y	- [With VR30 engine]
25	P	- [With 2.0L turbo gasoline engine and without gateway]
25	V	- [With 2.0L turbo gasoline engine and with gateway]
25	W	- [With VR30 engine]
26	G	-
27	R	-
28	R	-
31	B	- [With VR30 engine]
31	BR	- [With 2.0L turbo gasoline engine]
32	B	-
33	B	-
34	LG	-
35	P	-
36	W	-
37	SB	-
38	LG	-
40	P	-
41	SB	-
42	BR	-
43	BG	-
44	BG	-
46	R	-
50	W	-
51	SB	-
52	V	-
53	LG	-
54	R	-
55	R	-
57	W	-
58	V	-
59	GR	-
60	G	-
61	G	-
62	BG	-
63	BR	-
64	Y	-
66	R	-
70	R	-
71	W	-
72	B	-
73	W	-
74	L	-
75	R	- [Without paddle shift]
75	V	- [With paddle shift]
76	BR	-
77	B	-
78	SB	-
79	V	- [With VR30 engine]
79	W	- [With 2.0L turbo gasoline engine]
81	B	-
82	R	-
83	BG	-
84	L	-
85	R	- [Without paddle shift]
85	V	- [With paddle shift]
86	B	-
88	G	-
89	V	- [With 2.0L turbo gasoline engine]
89	W	- [With VR30 engine]
91	GR	-

JREWC2602GB

DIGITAL MOTION CONTROL

94	GR	-
96	Y	-
97	V	-
98	BR	- [With VR30 engine and with BOSE system]
98	Y	- [Except with VR30 engine and with BOSE system]

Connector No.	B116
Connector Name	JOINT CONNECTOR-B06
Connector Type	24342_4GA2A

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	L	-
3	L	-
4	L	-
5	L	-
6	L	-
7	R	-
8	R	- [With Gateway]
8	V	- [Without Gateway]
9	R	- [With Gateway]
9	V	- [Without Gateway]
10	R	- [With VR30 engine]
10	V	- [With 2.0L turbo gasoline engine]
11	V	-
12	P	- [With Gateway]
12	R	- [Without Gateway]
13	SHIELD	-
14	SHIELD	-
15	B	- [With 2.0L turbo gasoline engine]
15	SHIELD	- [With VR30 engine]
16	L	- [With VR30 engine]
16	SHIELD	- [With 2.0L turbo gasoline engine]
17	L	- [With VR30 engine]
17	SHIELD	- [With 2.0L turbo gasoline engine]
18	L	- [With VR30 engine]
18	SHIELD	- [With 2.0L turbo gasoline engine]
19	L	- [With 2.0L turbo gasoline engine]
19	SHIELD	- [With VR30 engine]
20	L	- [With 2.0L turbo gasoline engine]
20	SHIELD	- [With VR30 engine]
21	P	-
22	L	-
23	P	-
24	P	- [With VR30 engine]
24	Y	- [With 2.0L turbo gasoline engine]

Connector No.	B118
Connector Name	JOINT CONNECTOR-B04
Connector Type	24342_4GA2A

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	- [With VR30 engine]
1	SHIELD	- [With 2.0L turbo gasoline engine]
2	LG	- [With VR30 engine]
2	SHIELD	- [With 2.0L turbo gasoline engine]
3	SHIELD	-
4	LG	- [With VR30 engine]
4	SHIELD	- [With 2.0L turbo gasoline engine]
5	LG	- [With VR30 engine]
5	SHIELD	- [With 2.0L turbo gasoline engine]
6	LG	- [With VR30 engine]
6	SHIELD	- [With 2.0L turbo gasoline engine]
7	R	- [Color of wire differs depending on production]
7	V	- [Color of wire differs depending on production]
8	LG	- [With 2.0L turbo gasoline engine]
8	R	- [With VR30 engine and without paddle shift]
8	V	- [With VR30 engine and with paddle shift]
9	LG	- [With 2.0L turbo gasoline engine]
9	R	- [With VR30 engine and without paddle shift]
9	V	- [With VR30 engine and with paddle shift]
10	LG	- [With 2.0L turbo gasoline engine]
10	SHIELD	- [With VR30 engine]
11	LG	- [With 2.0L turbo gasoline engine]
11	SHIELD	- [With VR30 engine]
12	LG	- [With 2.0L turbo gasoline engine]
12	SHIELD	- [With VR30 engine]
13	L	- [With 2.0L turbo gasoline engine]
13	P	- [With 2.0L turbo gasoline engine and without gateway]
13	R	- [With 2.0L turbo gasoline engine and with gateway]
14	L	- [With VR30 engine]
14	P	- [With 2.0L turbo gasoline engine and without gateway]
14	R	- [With 2.0L turbo gasoline engine and with gateway]
15	L	- [With VR30 engine]
15	R	- [With 2.0L turbo gasoline engine]
16	L	-
17	L	-
18	L	-
19	L	- [With 2.0L turbo gasoline engine]
19	SHIELD	- [With VR30 engine]
20	L	- [With 2.0L turbo gasoline engine]
20	SHIELD	- [With VR30 engine]
21	L	- [With 2.0L turbo gasoline engine]
21	SHIELD	- [With VR30 engine]
22	R	-
23	R	-
24	R	-

Connector No.	B119
Connector Name	DYNAMIC DIGITAL SUSPENSION (RR)
Connector Type	AFZ02FB-1V

H.S.

2	1

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	BR	-

Connector No.	B120
Connector Name	JOINT CONNECTOR-B02
Connector Type	24342_4GA2A

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	R	-
3	L	- [With VR30 engine]
3	R	- [With 2.0L turbo gasoline engine]
4	L	- [With VR30 engine]
4	R	- [With 2.0L turbo gasoline engine]
5	L	-
6	L	-
7	L	-
8	L	-
9	L	- [With 2.0L turbo gasoline engine]
9	R	- [With VR30 engine]
10	L	- [With 2.0L turbo gasoline engine]
10	R	- [With VR30 engine]
11	R	-
12	R	-
13	W	-
14	W	-
15	W	-
17	SHIELD	-
18	B	-
19	B	- [With 2.0L turbo gasoline engine]
19	GR	- [With VR30 engine]
20	GR	- [With VR30 engine]
20	SHIELD	- [With 2.0L turbo gasoline engine]
21	B	- [With 2.0L turbo gasoline engine]
21	GR	- [With VR30 engine]
22	W	-
23	W	-
24	W	-

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Connector No.	C1
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
7	LG	-
8	GR	-
9	SHIELD	-
10	L	- [With VR30 engine]
10	V	- [With 2.0L turbo gasoline engine]
11	G	-
12	GR	-
13	BG	-
14	LG	-
15	BR	-
16	BG	-

Connector No.	C9
Connector Name	DYNAMIC DIGITAL SUSPENSION (RL)
Connector Type	AF02FB-1V

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	G	-

Connector No.	E3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	- [With 2.0L turbo gasoline engine]
1	Y	- [With VR30 engine]
2	W	-
3	LG	-
4	P	- [With VR30 engine]
4	SB	- [With 2.0L turbo gasoline engine]
5	L	-
6	Y	-
7	LG	-
8	BG	-
9	W	-
10	B	-
11	G	-
12	R	-
13	GR	-
14	G	-
15	LG	- [With 2.0L turbo gasoline engine]
15	V	- [With VR30 engine]
16	Y	-
17	P	-
18	BR	-
19	LG	- [With 2.0L turbo gasoline engine]
19	Y	- [With VR30 engine]
20	GR	-
21	R	- [With 2.0L turbo gasoline engine]
21	V	- [With VR30 engine]
22	L	-
23	P	-
24	B	- [With VR30 engine]
24	BR	- [With 2.0L turbo gasoline engine]

Connector No.	E25
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	-
6	V	-
7	L	-
8	BG	- [With VR30 engine]
8	BR	- [With 2.0L turbo gasoline engine]
9	B	- [With 2.0L turbo gasoline engine]
9	GR	- [With VR30 engine] [Color of wire differs depending on production]
9	LG	[With VR30 engine] [Color of wire differs depending on production]
10	BR	-
11	L	-
12	GR	- [With VR30 engine]
12	P	- [With 2.0L turbo gasoline engine]
13	SHIELD	- [With 2.0L turbo gasoline engine]
13	W	- [With VR30 engine]
14	B	-
15	GR	- [With 2.0L turbo gasoline engine]
15	SB	- [With VR30 engine]
16	BR	- [With 2.0L turbo gasoline engine]
16	Y	- [With VR30 engine]
17	BR	- [With VR30 engine]
17	GR	- [With 2.0L turbo gasoline engine]
18	G	- [With 2.0L turbo gasoline engine]
18	P	- [With VR30 engine]
19	Y	-
31	W	- [With 2.0L turbo gasoline engine]
31	Y	- [With VR30 engine]
32	G	- [With 2.0L turbo gasoline engine]
32	GR	- [With VR30 engine]
33	L	- [With VR30 engine]
33	Y	- [With 2.0L turbo gasoline engine]
34	P	-
35	GR	-
36	R	-
37	L	- [With 2.0L turbo gasoline engine]
37	V	- [With VR30 engine]
38	L	- [With VR30 engine]
38	P	- [With 2.0L turbo gasoline engine and without gateway]
38	R	- [With 2.0L turbo gasoline engine and with gateway]
39	BR	- [With 2.0L turbo gasoline engine]
39	Y	- [With VR30 engine]
40	SB	-
41	LG	-
44	Y	-
45	L	- [With 2.0L turbo gasoline engine]
45	W	- [With VR30 engine]
46	B	- [With VR30 engine]
46	Y	- [With 2.0L turbo gasoline engine]
47	G	-
48	SHIELD	-
49	R	-
50	BR	- [With VR30 engine]
50	GR	- [With 2.0L turbo gasoline engine]
51	L	-
52	W	-
53	V	-
54	P	- [With VR30 engine]
54	W	- [With 2.0L turbo gasoline engine]
55	B	- [With 2.0L turbo gasoline engine]
55	W	- [With VR30 engine]
56	BG	- [With 2.0L turbo gasoline engine]
56	SB	- [With VR30 engine]
57	BG	-
57	W	- [With 2.0L turbo gasoline engine]
58	B	- [Color of wire differs depending on production]
58	B/W	- [Color of wire differs depending on production]
59	W	-
61	R	-
64	Y	-
65	BR	- [Color of wire differs depending on production]
65	GR	- [Color of wire differs depending on production]
66	GR	-
67	LG	-
68	BG	-
69	L	-
70	R	-
71	G	- [With 2.0L turbo gasoline engine]
71	LG	- [With VR30 engine]
72	L	- [With 2.0L turbo gasoline engine]
72	V	- [With VR30 engine]
73	G	- [With 2.0L turbo gasoline engine]
73	W	- [With VR30 engine]
74	BR	-
74	L	- [With 2.0L turbo gasoline engine]
75	P	- [With 2.0L turbo gasoline engine and without gateway]
75	R	- [With 2.0L turbo gasoline engine and with gateway]
75	V	- [With VR30 engine]

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76	G	-
77	Y	-
78	LG	- [With 2.0L turbo gasoline engine and with ADAS]
78	P	- [With VR30 engine]
78	V	- [With 2.0L turbo gasoline engine and without ADAS]
79	SB	-
80	G	-
81	R	-
82	V	-
83	BR	- [With 2.0L turbo gasoline engine]
83	R	- [With VR30 engine]
84	LG	-
86	BG	-
87	G	-
89	LG	-
90	G	- [With VR30 engine]
90	GR	- [With 2.0L turbo gasoline engine]
91	G	-
93	BG	-
94	GR	- [With VR30 engine]
94	L	- [With 2.0L turbo gasoline engine]
95	BG	- [With VR30 engine]
95	P	- [With 2.0L turbo gasoline engine and without gateway]
95	R	- [With 2.0L turbo gasoline engine and with gateway]
96	W	-
97	LG	-
98	L	-
99	LG	- [With 2.0L turbo gasoline engine]
99	P	- [With VR30 engine]
100	SHIELD	-

5	W	STEERING ANGLE MAIN MOTOR RESOLVER SIGNAL (S2-S4)
6	L	STEERING ANGLE MAIN MOTOR RESOLVER SIGNAL (S2-S4)
7	SB	TORQUE SENSOR GROUND
8	P	TORQUE SENSOR POWER SUPPLY
10	R	STEERING ANGLE MAIN MOTOR RESOLVER SIGNAL (R1-R2)
11	BR	STEERING ANGLE MAIN MOTOR RESOLVER SIGNAL (R1-R2)
14	L	CHASSIS COMMUNICATION-H
15	W	CHASSIS COMMUNICATION-L
17	BG	BACK UP SIGNAL [FROM STEERING ANGLE SUB CONTROL MODULE]
18	SB	BACK UP SIGNAL [FROM STEERING FORCE CONTROL MODULE]
19	Y	FLEXRAY COMMUNICATION-H
20	GR	FLEXRAY COMMUNICATION-L
22	GR	BACK UP SIGNAL [TO STEERING ANGLE SUB CONTROL MODULE]
23	BR	CAN WAKE UP
24	P	BACK UP SIGNAL [TO STEERING FORCE CONTROL MODULE]
25	G	IGNITION POWER SUPPLY [FROM STEERING ANGLE SUB CONTROL MODULE]
30	B	GROUND
32	GR	GROUND

13	G	-
15	BR	-
16	P	-
17	SHIELD	-
18	L	-
19	Y	-
20	W	-
21	G	-
22	R	-
23	BR	-
24	R	-
25	L	-
26	BG	-
27	LG	-
28	BR	-
29	W	-
30	Y	-
31	G	-
32	GR	-

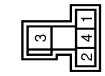
Connector No.	E64
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-CS

Terminal No.	Color Of Wire	Signal Name [Specification]
1E	G	-
2E	P	-
3E	V	-
4E	GR	-
6E	L	-
7E	BG	-

Connector No.	E121
Connector Name	(PDM FOR INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH32FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
19	L	- [With 2.0L turbo gasoline engine]
19	P	- [With VR30 engine]
22	BG	-
23	GR	- [With VR30 engine]
23	LG	[With 2.0L turbo gasoline engine and without Anti-theft diode]
23	P	- [With 2.0L turbo gasoline engine and with Anti-theft diode]
27	GR	-
28	P	-
29	L	-
31	G	-
32	SB	-
33	SB	-
34	Y	-
35	G	-

Connector No.	E58
Connector Name	ESS RELAY
Connector Type	MS03FB-M2-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	- [With VR30 engine]
1	R	- [With 2.0L turbo gasoline engine]
2	G	-
3	W	-
4	LG	-

Connector No.	E47
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	- [Color of wire differs depending on production]
1	Y	- [Color of wire differs depending on production]
2	V	-
3	L	-
4	P	- [Without Gateway]
4	R	- [With Gateway]
5	W	-
6	SB	-
7	BR	- [Color of wire differs depending on production]
7	L	- [Color of wire differs depending on production]
8	W	-
9	BG	- [Without BOSE system]
9	V	- [With BOSE system]
10	V	-
11	SB	-
12	G	-

Connector No.	E26
Connector Name	STEERING ANGLE MAIN CONTROL MODULE
Connector Type	RH24FB-RZ8-L-LH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	TORQUE SENSOR MAIN SIGNAL
2	Y	STEERING ANGLE MAIN MOTOR RESOLVER SIGNAL (S1-S3)
3	LG	TORQUE SENSOR SUB SIGNAL
4	G	STEERING ANGLE MAIN MOTOR RESOLVER SIGNAL (S1-S3)

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36	SB	- [With VR30 engine]
36	W	- [With 2.0L turbo gasoline engine]
37	GR	-
38	BR	-
41	GR	-
43	V	-

Connector No.	E172
Connector Name	JOINT CONNECTOR-E01
Connector Type	SGA28FL8R-J

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	Y	-
3	W	-
4	L	-
5	GR	-
6	Y	-
7	W	-
8	L	-
9	GR	-
10	Y	-
11	W	-
12	L	-
15	W	-
16	BG	-
17	P	-
18	L	-
19	W	-
20	BG	-
21	P	-
22	L	-
23	SB	- [Color of wire differs depending on production]
23	W	- [Color of wire differs depending on production]
24	BG	- [Color of wire differs depending on production]
24	LG	- [Color of wire differs depending on production]
25	P	-
26	L	-
27	Y	-
28	L	-

Connector No.	E173
Connector Name	JOINT CONNECTOR-E02
Connector Type	SGA28FB0GY-J

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	- [Color of wire differs depending on production]
1	R	- [Color of wire differs depending on production]
3	B	-
4	B	-
5	G	-
6	BR	-
7	B	-
8	B	-
9	G	-
10	L	-
12	B	-
13	G	-
14	BR	-
17	G	-
21	G	-
25	R	-
26	L	-

Connector No.	E174
Connector Name	DYNAMIC DIGITAL SUSPENSION (FR)
Connector Type	AFZ02FB-1V

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	G	-

Connector No.	E175
Connector Name	DYNAMIC DIGITAL SUSPENSION (FL)
Connector Type	AFZ02FB-1V

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	V	-

Connector No.	E219
Connector Name	CHASSIS CONTROL MODULE
Connector Type	TH28FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	ACTUATOR (FL)-L
3	BR	ACTUATOR (RR)-H
4	BG	IGN
5	W	CHASSIS COMM-L
6	B	GROUND
8	BR	CHASSIS COMM-H [Color of wire differs depending on production]
8	L	CHASSIS COMM-H [Color of wire differs depending on production]
9	G	DRIVE MODE SELECT SW (DOWN) [Color of wire differs depending on production]
9	Y	DRIVE MODE SELECT SW (DOWN) [Color of wire differs depending on production]
10	L	CAN-H
12	G	ACTUATOR (FR)-H
13	G	ESS RELAY
14	L	ACTUATOR (RL)-L
15	Y	ACTUATOR (RR)-L
17	V	ACTUATOR (FL)-H
19	L	CHASSIS COMM-H
21	W	CHASSIS COMM-L
22	V	DRIVE MODE SELECT SWITCH (UP)
23	B	GROUND
24	P	CAN-L [Without Gateway]
24	R	CAN-L [With Gateway]
25	G	IGN
26	V	ACTUATOR (RL)-H
28	R	ACTUATOR (FR)-L

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	G	-
3	SB	-
4	BR	-
5	Y	-
6	R	-
7	W	-
8	V	-
10	BG	-
11	BR	-
12	LG	-
13	GR	-
14	R	-
15	L	-
16	V	-
18	W	-
19	BR	-
20	W	-
22	SB	-
23	R	-
24	R	- [With 2.0L turbo gasoline engine]
24	Y	- [With VR30 engine]
25	P	- [With 2.0L turbo gasoline engine]
25	W	- [With VR30 engine]
26	G	-
27	R	-
28	R	-
31	BR	-

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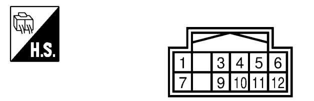
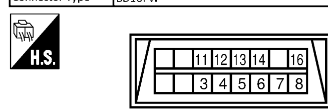
32	B	-
33	B	-
34	V	-
35	P	-
36	W	-
37	SB	-
38	LG	-
40	P	-
41	G	-
42	BR	-
43	BR	-
44	BR	-
46	BG	-
50	W	-
51	Y	-
52	V	-
53	LG	-
54	R	-
55	R	-
57	W	-
58	V	-
59	BG	-
60	G	-
61	G	-
62	BG	-
63	BR	-
64	Y	-
66	R	-
70	LG	-
71	W	-
72	B	-
73	W	-
74	L	-
75	W	-
76	BR	-
77	B	-
78	SB	-
79	P	- [With VR30 engine]
79	W	- [With 2.0L turbo gasoline engine]
81	B	-
82	R	-
83	BG	-
84	L	-
85	W	-
86	B	-
88	G	-
89	V	- [With 2.0L turbo gasoline engine]
89	W	- [With VR30 engine]
91	GR	-
94	GR	-
96	W	-
97	V	-
98	BR	- [With VR30 engine and with BOSE system]
98	Y	- [Except with VR30 engine and with BOSE system]

Connector No.	M24
Connector Name	CAN GATEWAY
Connector Type	TH12FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	CAN-H (CAN COMMUNICATION CIRCUIT 1)
3	W	BATTERY POWER SUPPLY
4	L	CAN-H (CAN COMMUNICATION CIRCUIT 2)
5	B	GROUND
6	L	CAN-H (CAN COMMUNICATION CIRCUIT 2)
7	P	CAN-L (CAN COMMUNICATION CIRCUIT 1)
9	R	IGNITION POWER SUPPLY [With VR30 engine and without ISS]
9	W	IGNITION POWER SUPPLY [Except with VR30 engine and without ISS]
10	R	CAN-L (CAN COMMUNICATION CIRCUIT 2)
11	B	GROUND
12	R	CAN-L (CAN COMMUNICATION CIRCUIT 2)

Connector No.	M25
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



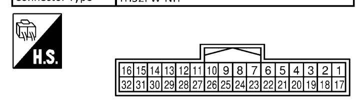
Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	M_CAN_L
4	B	EARTH
5	B	EARTH

6	L	CAN-H
7	V	KLINE [With 2.0L turbo gasoline engine]
7	W	KLINE [With VR30 engine]
8	W	IGN_SW
11	SB	M_CAN_H
12	R	CAN-L
13	L	CAN-H
14	P	CAN-L
16	W	POWER

Connector No.	M35
Connector Name	DRIVE MODE SELECT SWITCH
Connector Type	TH08FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	W/B	-
3	SB	-
4	R	-
5	B	-

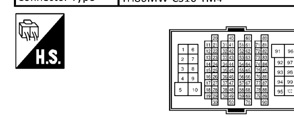
Connector No.	M39
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W/B	-
2	SB	-
3	L	-
4	P	- [Without Gateway]

4	R	- [With Gateway]
5	BR	-
6	SB	-
7	L	-
8	W	-
9	P	- [Without BOSE system]
9	V	- [With BOSE system]
10	V	-
11	SB	-
12	G	-
13	G	-
15	R	-
16	SB	-
17	SHIELD	-
18	W	-
19	Y	-
20	L	-
21	G	-
22	R	-
23	BR	-
24	R	-
25	L	-
26	Y	-
27	LG	-
28	BR	-
29	W/B	-
30	Y	-
31	W	-
32	L	- [With Anti-theft diode]
32	LG	- [Without Anti-theft diode]

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	-
6	W/B	-
7	V	-
8	BG	- [With VR30 engine]

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8	BR	- [With 2.0L turbo gasoline engine]
9	LG	- [With VR30 engine]
9	P	- [With 2.0L turbo gasoline engine]
10	W	-
11	W	- [With VR30 engine]
11	Y	- [With 2.0L turbo gasoline engine]
12	B	- [With VR30 engine]
12	BR	- [With 2.0L turbo gasoline engine]
13	GR	- [With VR30 engine]
13	SHIELD	- [With 2.0L turbo gasoline engine]
14	B	-
15	BG	- [With 2.0L turbo gasoline engine]
15	SB	- [With VR30 engine]
16	B	- [With VR30 engine]
16	BR	- [With 2.0L turbo gasoline engine]
17	LG	-
18	B	- [With VR30 engine]
18	W/B	- [With 2.0L turbo gasoline engine]
19	Y	-
31	W	-
32	G	- [With 2.0L turbo gasoline engine]
32	V	- [With VR30 engine]
33	L	- [With 2.0L turbo gasoline engine]
33	Y	- [With VR30 engine]
34	P	-
35	BG	-
36	G	- [With VR30 engine]
37	B	- [With 2.0L turbo gasoline engine]
37	L	- [With VR30 engine]
38	L	[With 2.0L turbo gasoline engine and without gateway]
38	P	[With 2.0L turbo gasoline engine and with gateway]
38	R	- [With 2.0L turbo gasoline engine]
39	R	- [With VR30 engine]
39	Y	-
40	GR	-
41	L	-
44	BR	-
45	L	- [With 2.0L turbo gasoline engine]
45	W	- [With VR30 engine]
46	G	- [With 2.0L turbo gasoline engine]
46	Y	- [With VR30 engine]
47	BG	- [With 2.0L turbo gasoline engine]
47	R	- [With VR30 engine]
48	SHIELD	-
49	B	- [With VR30 engine]
49	G	- [With 2.0L turbo gasoline engine]
50	B	- [With 2.0L turbo gasoline engine]
50	BR	- [With VR30 engine]
51	L	-
52	W	-
53	G	-
54	SB	- [With 2.0L turbo gasoline engine]
54	Y	- [With VR30 engine]
55	B	- [With 2.0L turbo gasoline engine]
55	P	- [With VR30 engine]
56	BG	-
56	GR	- [With 2.0L turbo gasoline engine]
57	GR	- [With VR30 engine]
57	P	- [With 2.0L turbo gasoline engine]
58	B	-
59	SB	-
61	W/B	-
64	Y	-
65	R	-
66	P	- [Color of wire differs depending on production]
66	V	- [Color of wire differs depending on production]
67	LG	-
68	BG	-
69	L	-
70	R	-
71	V	- [With VR30 engine]
71	W	- [With 2.0L turbo gasoline engine]
72	L	- [With 2.0L turbo gasoline engine]
72	LG	- [With VR30 engine]
73	R	- [With VR30 engine]
73	W	- [With 2.0L turbo gasoline engine]
74	BR	- [With VR30 engine]
74	L	- [With 2.0L turbo gasoline engine]
75	B	- [With VR30 engine]
75	P	- [With 2.0L turbo gasoline engine and without gateway]
75	R	- [With 2.0L turbo gasoline engine and with gateway]
76	W/B	-
77	SB	-
78	G	- [With VR30 engine]
78	LG	- [With 2.0L turbo gasoline engine]
79	R	-
80	G	-
81	R	-
82	LG	-
83	BR	- [With 2.0L turbo gasoline engine]
83	R	- [With VR30 engine]
84	V	-
86	V	-
87	G	-
89	V	-
90	G	- [With VR30 engine]
90	V	- [With 2.0L turbo gasoline engine]
91	W	-
92	G	-
93	BR	-
94	GR	- [With VR30 engine]
94	L	- [With 2.0L turbo gasoline engine]
95	BR	- [With VR30 engine]
95	P	[With 2.0L turbo gasoline engine and without gateway]
95	R	- [With 2.0L turbo gasoline engine and with gateway]
96	W	-
97	LG	-
98	Y	-
99	BR	- [With VR30 engine]
99	LG	- [With 2.0L turbo gasoline engine]
100	SHIELD	-

Connector No.	M132
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS

Terminal No.	Color Of Wire	Signal Name [Specification]
11B	LG	-
13B	P	-
14B	G	-
15B	Y	-
16B	Y	-
2B	B	-
4B	W	-
5B	R	-
9B	Y	-

Connector No.	M137
Connector Name	JOINT CONNECTOR-M10
Connector Type	24342_4GA2A

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	B	-
3	B	-
4	B	-
5	B	-
7	B	-
8	B	-
9	B	-
10	B	-
11	B	-
13	L	-
14	L	-
15	L	-
16	L	-
19	R	-
20	R	-
21	R	-
22	R	-

Connector No.	M159
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH

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Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-
3	BR	-
4	R	-
5	GR	-
6	R	- [With VR30 engine and with ISS]
6	W	- [Except with VR30 engine and with ISS]
7	L	-
9	SHIELD	-
10	W	-
11	R	-
12	L	-
13	G	-
14	Y	-
15	B	-
17	B	-
19	R	-
20	BG	- [Except with VR30 engine and with BOSE system]
20	BR	- [With VR30 engine and with BOSE system]
21	R	-
22	G	-
24	B	-
25	W	-
26	R	-
27	P	-
28	B	-
29	G	-
30	L	-
31	W	-
32	W	-
33	L	-
36	V	-
38	LG	-
40	W	-

Connector No.	M173
Connector Name	JOINT CONNECTOR-M03
Connector Type	24342_4GA2A

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	L	-
3	L	-
4	L	-
5	L	-
6	L	-
7	R	-
8	R	-
9	R	-
10	R	-
11	R	-
12	R	-
13	SB	-
14	SB	-
15	SB	-
16	L	- [With 2.0L turbo gasoline engine]
16	SB	- [With VR30 engine]
17	L	- [With 2.0L turbo gasoline engine]
17	SB	- [With VR30 engine]
18	L	- [With 2.0L turbo gasoline engine]
18	SB	- [With VR30 engine]
19	BR	- [With VR30 engine]
19	LG	- [With 2.0L turbo gasoline engine]
20	BR	- [With VR30 engine]
20	LG	- [With 2.0L turbo gasoline engine]
21	BR	- [With VR30 engine]
21	LG	- [With 2.0L turbo gasoline engine]
22	R	- [With 2.0L turbo gasoline engine]
22	SB	- [With VR30 engine and without ISS]
22	V	- [With VR30 engine and with ISS]
23	R	- [With 2.0L turbo gasoline engine]
23	SB	- [With VR30 engine and without ISS]
23	V	- [With VR30 engine and with ISS]
24	R	- [With 2.0L turbo gasoline engine]
24	SB	- [With VR30 engine and without ISS]
24	V	- [With VR30 engine and with ISS]

Connector No.	M175
Connector Name	JOINT CONNECTOR-M05
Connector Type	NH20FL-DC

H.S.

	8	7	6	5	4	3	2	1
20	19	17	16	15	14	13	12	11	10

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	L	-
3	L	-
4	L	-
5	L	-
6	L	-
7	L	-
8	L	-
9	P	-
10	P	-
11	P	-
12	P	-
13	P	-
14	P	-
15	P	-
16	P	- [With VR30 engine]
16	R	- [With 2.0L turbo gasoline engine]
17	P	- [With VR30 engine]
17	R	- [With 2.0L turbo gasoline engine]
19	R	- [With VR30 engine and with ISS]
19	W	- [Except with VR30 engine and with ISS]
20	R	- [With VR30 engine and with ISS]
20	W	- [Except with VR30 engine and with ISS]

Connector No.	M177
Connector Name	JOINT CONNECTOR-M07
Connector Type	24342_4GA2A

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	L	-
3	L	-
4	L	-
5	L	-
6	L	-
7	P	-
8	P	-
9	P	-
10	P	-
11	P	-
12	P	-
13	L	-
14	L	-
15	L	-
16	L	-
17	L	-
18	L	-
19	W	-
20	W	-
21	W	-
22	P	-
23	P	-
24	P	-

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Connector No.	R13
Connector Name	LANE CAMERA UNIT
Connector Type	TH08FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	CAN_GND
4	L	CAN-H
5	B	GND
7	V	IGN
8	W	CAN-L

19	BG	-
20	BG	- [Without BOSE system]
20	BR	- [With BOSE system]
21	R	-
22	G	-
24	B	-
25	BG	- [Color of wire differs depending on production]
25	P	- [Color of wire differs depending on production]
26	BR	-
27	GR	-
28	B	-
29	R	-
30	L	-
31	V	-
32	W	-
33	L	-
36	BR	-
38	SB	-
40	W	-

Connector No.	R15
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	LG	-
3	BR	-
4	V	-
5	BG	-
6	GR	-
7	BR	-
9	SHIELD	-
10	GR	-
11	R	-
12	L	-
13	G	-
14	Y	-
15	B	-
17	SB	-

JREWC2610GB

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000013583981

DETAILED FLOW

1.INTERVIEW FROM THE CUSTOMER

Clarify customer complaints before inspection. First of all, perform an interview utilizing SCS-51, "Diagnostic Work Sheet" and reproduce the symptom as well as fully understand it. Ask customer about his/her complaints carefully. Check symptoms by driving vehicle with customer, if necessary.

CAUTION:

Customers are not professional. Never guess easily like “maybe the customer means that...,” or “maybe the customer mentions this symptom”.

>> GO TO 2.

2.CHECK SYMPTOM

Reproduce the symptom that is indicated by the customer, based on the information from the customer obtained by the interview. Also check that the symptom is not caused by fail-safe mode. Refer to SCS-33, "Fail-Safe (Chassis Control Module)".

CAUTION:

When the symptom is caused by normal operation, fully inspect each portion and obtain the understanding of customer that the symptom is not caused by a malfunction.

>> GO TO 3.

3.PERFORM SELF-DIAGNOSIS

With CONSULT

1. Perform self-diagnosis for “CHASSIS CONTROL”.

Is DTC detected?

YES >> Record or print self-diagnosis results and freeze frame data (FFD). GO TO 4.
NO >> INSPECTION END

4.RECHECK THE SYMPTOM

With CONSULT

Perform DTC confirmation procedures for the error-detected system.Refer to SCS-36, "DTC Index".

NOTE:

If some DTCs are detected at the some time, determine the order for performing the diagnosis based on SCS-35, "DTC Inspection Priority Chart".

Is DTC detected?

YES >> GO TO 5.
NO >> Check harness and connectors based on the information obtained by the interview.

5.REPAIR OR REPLACE ERROR-DETECTED PARTS

1. Repair or replace error-detected parts.
2. Reconnect part or connector after repairing or replacing.
3. When DTC is detected, erase self-diagnosis results for “CHASSIS CONTROL”.

>> GO TO 6.

6.FINAL CHECK

With CONSULT

1. Check the reference value for “CHASSIS CONTROL”.
2. Recheck the symptom and check that the symptom is not reproduced on the same conditions.

Is the symptom reproduced?

YES >> GO TO 3.
NO >> INSPECTION END

Diagnostic Work Sheet

INFOID:0000000013583982

Description

- In general, customers have their own criteria for a symptom. Therefore, it is important to understand the symptom and status well enough by interviewing the customer about the symptom carefully. To systemize all the information for the diagnosis, prepare the interview sheet referring to the interview points.
- In some cases, multiple conditions that appear simultaneously may cause a DTC to be detected.

INTERVIEW SHEET SAMPLE

Interview sheet					
Customer name	MR/MS	Registration number		Initial year registration	
		Vehicle type		VIN	
Storage date		Engine, Traction motor		Mileage	km (Mile)
Symptom		☐ Does not operate ( ) function			
		☐ Warning lamp for ( ) turns ON.			
		☐ Noise ☐ Vibration			
		☐ Other ( )			
First occurrence		☐ Recently ☐ Other ( )			
Frequency of occurrence		☐ Always ☐ Under a certain conditions of ☐ Sometimes (time(s)/day)			
Climate conditions		☐ Irrelevant			
	Weather	☐ Fine ☐ Cloud ☐ Rain ☐Snow ☐ Others ( )			
	Temperature	☐ Hot ☐Warm ☐ Cool ☐ Cold ☐ Temperature [Approx. °C (°F)]			
	Relative humidity	☐ High ☐ Moderate ☐ Low			
Road conditions		☐ Urban area ☐ Suburb area ☐ Highway ☐ Mountainous road (uphill or downhill) ☐ Rough road			
Operating condition, etc.		☐Irrelevant ☐When traction motor starts ☐ During idling ☐ During driving ☐ During acceleration ☐ At constant speed driving ☐ During deceleration ☐ During cornering (right curve or left curve) ☐ When steering wheel is steered (to right or to left)			
Other conditions					

Interview sheet

Customer name	MR/MS	Registration number		Initial year registration	
		Vehicle type		VIN	
Storage date		Engine, Traction motor		Mileage	km (Mile)

Vehicle equipment

Memo

REMOVAL AND INSTALLATION

DYNAMIC DIGITAL SUSPENSION

Removal and Installation

INFOID:0000000013591296

Removal and installation procedure of dynamic digital suspension, refer to following list.
- 2WD: FSU-32, "Removal and Installation" (Front), RSU-9, "Removal and Installation" (Rear).
- AWD: FSU-58, "Removal and Installation" (Front), RSU-9, "Removal and Installation" (Rear).

CHASSIS CONTROL MODULE

Removal and Installation

INFOID:0000000013591328

Removal and installation procedure of chassis control module. Refer to DAS-713, "Removal and Installation".