SUSPENSION CONTROL SYSTEM

SCS

D

CONTENTS

Bilstein DampTronic	C1D04, C1D05 TORQUE SIGNAL17
BASIC INSPECTION4	Description (GT-R certified NISSAN dealer)17 DTC Logic (GT-R certified NISSAN dealer)17
DIAGNOSIS AND REPAIR WORK FLOW 4 Work Flow (GT-R certified NISSAN dealer)4	Diagnosis Procedure (GT-R certified NISSAN dealer)17
SYSTEM DESCRIPTION7	C1D06 ENGINE SPEED SIGNAL18 Description (GT-R certified NISSAN dealer)18
Bilstein DampTronic SYSTEM	DTC Logic (GT-R certified NISSAN dealer)18 Diagnosis Procedure (GT-R certified NISSAN dealer)
er)	C1D07 STOP LAMP SWITCH
DIAGNOSIS SYSTEM (E-SUS CONTROL UNIT)	C1D08 ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
DTC/CIRCUIT DIAGNOSIS13	dealer)20
C1D01 VEHICLE SPEED SIGNAL	C1D09 BRAKE FLUID PRESSURE SIGNAL21 Description (GT-R certified NISSAN dealer)21 DTC Logic (GT-R certified NISSAN dealer)21 Diagnosis Procedure (GT-R certified NISSAN dealer)21
C1D02 YAW RATE/SIDE/DECEL G SENSOR14 Description (GT-R certified NISSAN dealer)14 DTC Logic (GT-R certified NISSAN dealer)14 Diagnosis Procedure (GT-R certified NISSAN dealer)	C1D10 FRONT VERTICAL G SENSOR22 Description (GT-R certified NISSAN dealer)22 DTC Logic (GT-R certified NISSAN dealer)22 Diagnosis Procedure (GT-R certified NISSAN dealer)22
C1D03 STEERING ANGLE SENSOR16 Description (GT-R certified NISSAN dealer)16	Component Inspection (GT-R certified NISSAN dealer)23
Description (GT-R certified NISSAN dealer)	C1D11 REAR VERTICAL G SENSOR24 Description (GT-R certified NISSAN dealer)24 DTC Logic (GT-R certified NISSAN dealer)24

Diagnosis Procedure (GT-R certified NISSAN		Diagnosis Procedure (GT-R certified NISSAN	
dealer)	24	dealer)	39
Component Inspection (GT-R certified NISSAN		Component Inspection (GT-R certified NISSAN	
dealer)	25	dealer)	40
C1D12 SHOCK ABSORBER ACTUATOR	26	C1D23 CONTROL UNIT	41
Description (GT-R certified NISSAN dealer)	26	Description (GT-R certified NISSAN dealer)	
DTC Logic (GT-R certified NISSAN dealer)		DTC Logic (GT-R certified NISSAN dealer)	
Diagnosis Procedure (GT-R certified NISSAN		Diagnosis Procedure (GT-R certified NISSAN	
dealer)	26	dealer)	41
Component Inspection (GT-R certified NISSAN			
dealer)	27	U1000 CAN COMM CIRCUIT	
CADAS CUOCIC ADCORDED ACTUATOR		Description (GT-R certified NISSAN dealer)	
C1D13 SHOCK ABSORBER ACTUATOR		DTC Logic (GT-R certified NISSAN dealer)	42
Description (GT-R certified NISSAN dealer)		Diagnosis Procedure (GT-R certified NISSAN	4.0
DTC Logic (GT-R certified NISSAN dealer)	28	dealer)	42
Diagnosis Procedure (GT-R certified NISSAN	20	U1010 CONTROL UNIT (CAN)	43
dealer) Component Inspection (GT-R certified NISSAN	20	Description (GT-R certified NISSAN dealer)	
dealer)	20	DTC Logic (GT-R certified NISSAN dealer)	
dealer)	29	Diagnosis Procedure (GT-R certified NISSAN	
C1D14 SHOCK ABSORBER ACTUATOR	30	dealer)	43
Description (GT-R certified NISSAN dealer)	30		
DTC Logic (GT-R certified NISSAN dealer)	30	POWER SUPPLY AND GROUND CIRCUIT	
Diagnosis Procedure (GT-R certified NISSAN		Description (GT-R certified NISSAN dealer)	44
dealer)	30	Diagnosis Procedure (GT-R certified NISSAN	
Component Inspection (GT-R certified NISSAN		dealer)	44
dealer)	31	ECU DIAGNOSIS INFORMATION	45
C1D15 SHOCK ABSORBER ACTUATOR	22		
Description (GT-R certified NISSAN dealer)		E-SUS CONTROL UNIT	45
DTC Logic (GT-R certified NISSAN dealer)		Reference Value (GT-R certified NISSAN dealer).	45
Diagnosis Procedure (GT-R certified NISSAN	52	Wiring Diagram - Bilstein DampTronic SYSTEM -	
dealer)	32	(GT-R certified NISSAN dealer)	
Component Inspection (GT-R certified NISSAN		Fail-safe (GT-R certified NISSAN dealer)	
dealer)	33	DTC Inspection Priority Chart (GT-R certified NIS-	
,		SAN dealer)	
C1D16 CONTROL UNIT		DTC Index	55
Description (GT-R certified NISSAN dealer)		SYMPTOM DIAGNOSIS	57
DTC Logic (GT-R certified NISSAN dealer)	34		
Diagnosis Procedure (GT-R certified NISSAN	0.4	E-SUS MODE LAMP DOES NOT TURN ON	57
dealer)	34	Description (GT-R certified NISSAN dealer)	57
C1D17 BATTERY POWER SUPPLY	35	Diagnosis Procedure (GT-R certified NISSAN	
Description (GT-R certified NISSAN dealer)		dealer)	57
DTC Logic (GT-R certified NISSAN dealer)		PRECAUTION	EC
Diagnosis Procedure (GT-R certified NISSAN		PRECAUTION	. ၁೪
dealer)	35	PRECAUTIONS	59
OADAA OADAA MADE OMITOU		Precaution for Supplemental Restraint System	
C1D19, C1D20 MODE SWITCH		(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	
Description (GT-R certified NISSAN dealer)		SIONER"	59
DTC Logic (GT-R certified NISSAN dealer)	37	Precaution for Battery Service	
Diagnosis Procedure (GT-R certified NISSAN	0.7	Precautions for Removing Battery Terminal	
dealer) Component Inspection (GT-R certified NISSAN	3/	General Precautions	
dealer)dealer)	20	Precautions for Terminology	60
doalor,	50	Precautions for Diagnosis	
C1D21, C1D22 MODE LAMP	39	Precautions for Harness Repair	60
Description (GT-R certified NISSAN dealer)		REMOVAL AND INSTALLATION	
DTC Logic (GT-R certified NISSAN dealer)		REIVIOVAL AIND INSTALLATION	. 61

E-SUS CONTROL UNIT	REAR VERTICAL G SENSOR	
FRONT VERTICAL G SENSOR	SHOCK ABSORBER ACTUATOR64 Removal and Installation (GT-R certified NISSAN dealer)64	

SCS

Α

В

С

D

G

F

Н

J

Κ

L

M

Ν

0

Р

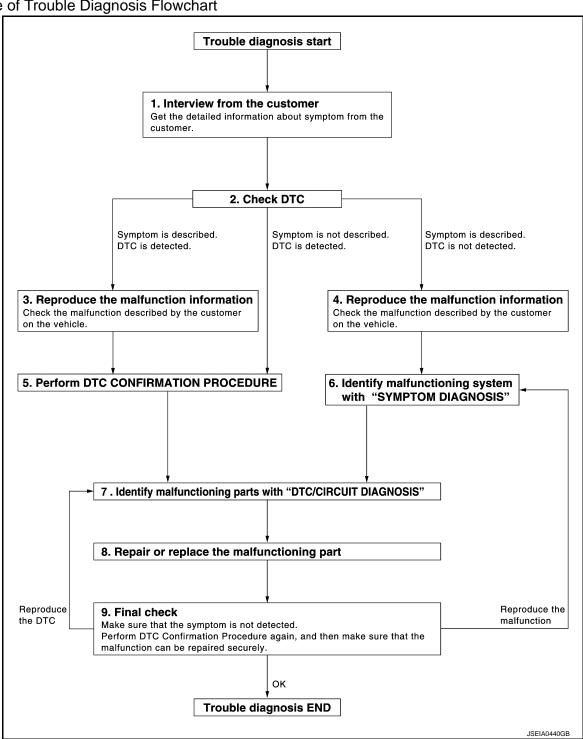
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow (GT-R certified NISSAN dealer)

INFOID:0000000011486050

Outline of Trouble Diagnosis Flowchart



Details of Trouble Diagnosis Flowchart

${f 1}$.OBTAIN INFORMATION ABOUT SYMPTOM

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

DIAGNOSIS AND REPAIR WORK FLOW

_	RASI	IQD	⊏∩⊐	_

[Bilstein DampTronic]

>> GO TO 2.

2.check dtc

Check for DTC.

- If a DTC exists, perform the following operations.
- Records the DTCs.
- **Erase DTCs**
- Check that the root cause clarified with DTC matches to the malfunction information described by the customer.
- Check also the related service information or others. 3.

Do malfunction information or DTC exist?

Malfunction information and DTC exist. >>Record or print DTC freeze frame data (FFD). GO TO 3.

Malfunction information exists but no DTC. >>GO TO 4.

No malfunction information, but DTC exists. >>Record or print DTC freeze frame data (FFD). GO TO 5.

$3.\mathsf{REPRODUCE}$ THE MALFUNCTION INFORMATION

Check the malfunction described by the customer on the vehicle.

Record the status of each signal when a symptom occurs with "Data Monitor" in CONSULT.

Inspect the relation of the information and the condition when it occurs.

>> GO TO 5.

f 4.CHECK THE MALFUNCTION

Check the malfunction described by the customer on the vehicle.

Record the status of each signal when a symptom occurs with "Data Monitor" in CONSULT.

Inspect the relation of the information and the condition when it occurs.

>> GO TO 6.

5. PERFORM "DTC CONFIRMATION PROCEDURE"

Perform the "DTC conformation procedure" to the detected DTC and check that the DTC is detected again. Refer to SCS-55, "DTC Inspection Priority Chart (GT-R certified NISSAN dealer)" when multiple DTCs are detected, and then judge the order for performing the diagnosis.

Is any DTC detected?

YES >> GO TO 7.

NO >> Follow GI-6, "How to Follow Test Groups in Trouble Diagnosis" to check.

$oldsymbol{\circ}$. IDENTIFY MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

Use the "Symptom diagnosis" from the symptom inspection result in step 4. Then identify where to start performing the diagnosis based on the possible causes and the symptoms.

>> GO TO 7.

IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

Perform the inspection with the "component diagnosis" of the applicable system.

NOTE:

The "component diagnosis" mainly consists of the check for an open circuit.

The circuit check in the diagnosis procedure also requires the check for a short circuit. Refer to GI-42, "Circuit Inspection" for details.

>> GO TO 8.

8.repair or replace the malfunctioning parts

1. Repair or replace the part detected as malfunctioning.

After repairing or replacing, reinstall/reconnect parts or connectors removed/disconnected in the "component diagnosis", and then erase the DTC.

SCS

D

Α

В

K

M

Ν

Р

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[Bilstein DampTronic]

>> GO TO 9.

9. FINAL CHECK

Perform the "DTC confirmation procedure" or "component Inspection" to check that the repair is correctly performed. Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 3 or 4.

Is the check result normal?

YES >> Trouble diagnosis is completed.

NO-1 >> The DTC is reproduced. GO TO 7.

NO-2 >> The symptom is reproduced. GO TO 6.

[Bilstein DampTronic]

INFOID:0000000011486051

Α

В

D

SCS

K

M

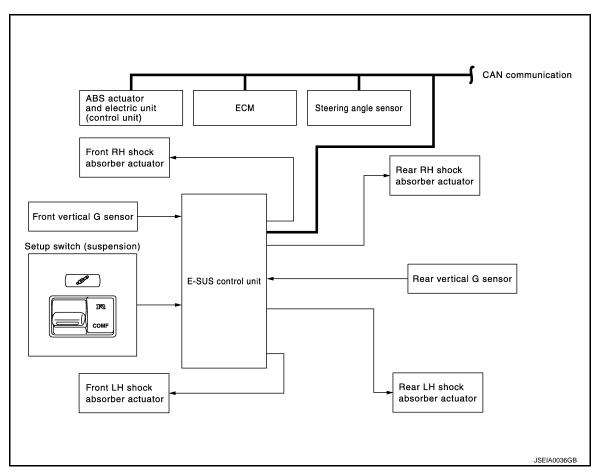
Ν

Р

SYSTEM DESCRIPTION

BILSTEIN DAMPTRONIC SYSTEM

System Diagram (GT-R certified NISSAN dealer)



System Description (GT-R certified NISSAN dealer)

INFOID:0000000011486052

Description

- The Bilstein DampTronic system mainly consists of the components such as the E-SUS control unit, front vertical G sensor, rear vertical G sensor, and shock absorber actuators on each wheel.
- It calculates the command values to be transmitted the shock absorber actuator on each wheel based on the
 information from ECM, ABS actuator and electric unit (control unit) and steering angle sensor and information from the front vertical G sensor and rear vertical G sensor via CAN communication.
- The shock absorber actuator on each wheel controls the damping force based on the command values calculated by E-SUS control unit.
- · Can perform the self-diagnosis with CONSULT.
- Communicates the signal from each control unit via CAN communication.

Control unit	Signal status
Steering angle sensor	Transmits mainly the following signals to E-SUS control unit via CAN communication. • Steering angle speed signal

Revision: 2015 June SCS-7 GT-R

BILSTEIN DAMPTRONIC SYSTEM

< SYSTEM DESCRIPTION >

[Bilstein DampTronic]

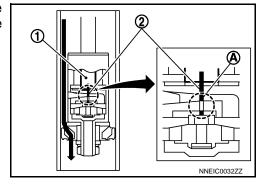
Control unit	Signal status
ABS actuator and electric unit (control unit)	Transmits mainly the following signals to E-SUS control unit via CAN communication. • Vehicle speed signal • Brake pressure control signal • Stop lamp switch signal • ABS operation signal • Side G sensor signal
ECM	Transmits mainly the following signals to E-SUS control unit via CAN communication. Engine speed signal

Operation principle

• When the shutter is closed

Because the shutter (2) is closed (A) by the solenoid core (1), the maximum oil channel resistance and high damping force are obtained.

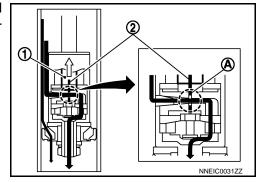
: Oil passage



• When the shutter is open

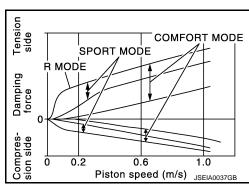
Because the shutter (2) is opened (A) by the activated solenoid core (1) and the oil flows through 2 different passages, the minimum oil flow rate and low damping force are obtained.

: Oil passage



Operation characteristics

• Changes the damping force range image of the shock absorber by switching the switch.

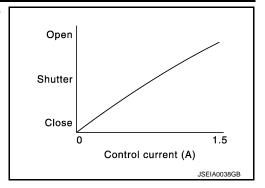


BILSTEIN DAMPTRONIC SYSTEM

< SYSTEM DESCRIPTION >

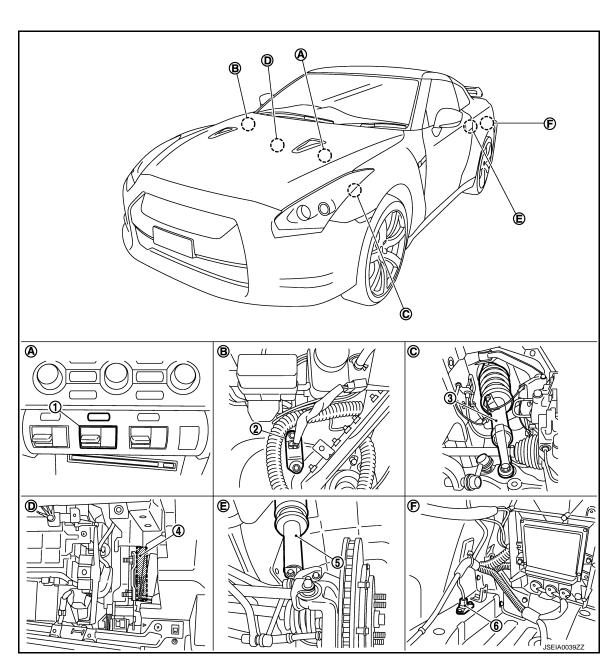
[Bilstein DampTronic]

• Changes the damping force depending on the output current to the shock absorber actuators.



Component Parts Location (GT-R certified NISSAN dealer)

INFOID:0000000011486053



SCS

D

Α

В

F

G

Н

K

M

Ν

0

Р

BILSTEIN DAMPTRONIC SYSTEM

< SYSTEM DESCRIPTION >

[Bilstein DampTronic]

1.	Set-up switch (suspension)	2.	Front vertical G sensor	3.	Front shock absorber (with integrated shock absorber actuator)
4.	E-SUS control unit	5.	Rear shock absorber (with integrated shock absorber actuator)	6.	Rear vertical G sensor
A.	Instrument center panel	B.	Right strut tower	C.	In front wheel well
D.	Rear of glove box	E.	In rear wheel well	F.	Trunk room left back

Component Description (GT-R certified NISSAN dealer)

INFOID:0000000011486054

Component	Reference/function
E-SUS control unit	SCS-34, "Description (GT-R certified NISSAN dealer)"
Front vertical G sensor	SCS-22, "Description (GT-R certified NISSAN dealer)"
Rear vertical G sensor	SCS-24, "Description (GT-R certified NISSAN dealer)"
Shock absorber actuator	SCS-26, "Description (GT-R certified NISSAN dealer)"
Set-up switch (suspension)	SCS-37, "Description (GT-R certified NISSAN dealer)"
Steering angle sensor	Transmits the steering angle sensor signal to E-SUS control unit via CAN communication.
ABS actuator and electric unit (control unit)	Transmits mainly the following signal to E-SUS control unit via CAN communication. • Vehicle speed signal • Brake pressure control signal • Stop lamp switch signal • ABS operation signal • Side G sensor signal
ECM	Transmits mainly the following signals to E-SUS control unit via CAN communication. Engine speed signal

DIAGNOSIS SYSTEM (E-SUS CONTROL UNIT)

< SYSTEM DESCRIPTION >

[Bilstein DampTronic]

DIAGNOSIS SYSTEM (E-SUS CONTROL UNIT)

CONSULT Function (GT-R certified NISSAN dealer)

INFOID:0000000011486055

FUNCTION

The CONSULT performs the following functions using the CAN combination of data reception, command instruction, and transmission from E-SUS control unit via the communication line.

Diagnostic test mode	Function
ECU identification	E-SUS control unit part number can be read.
Self-diagnosis result	Self-diagnostic results can be read and erased quickly. *
Data monitor	Input/Output data in the E-SUS control unit can be read.
Active test	CONSULT drives some actuators via E-SUS, and changes some command signal values within the specified range.

^{*:} If the memory in E-SUS control unit is erased, the DTC diagnosis result is also erased.

ECU IDENTIFICATION

Displays the part number stored in the control unit.

SELF-DIAGNOSIS RESULT

Display Item List

Refer to SCS-55, "DTC Index".

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.

Display Item List

Monitor item (Unit)	Remarks
VEHICLE SPEED (km/h) or (MPH)	Vehicle speed recognized by E-SUS control unit
SIDE G-SENSOR (G)	Side G recognized by E-SUS control unit
ST ANGLE SPD (deg/s)	Steering angle speed recognized by E-SUS control unit
ESTIMATED TRQ (Nm)	Estimated torque recognized by E-SUS control unit
REQUESTED TRQ (Nm)	Required torque recognized by E-SUS control unit
ENGINE SPEED (rpm)	Engine speed recognized by E-SUS control unit
F G-SEN OUT VOL (V)	Output voltage from front vertical G sensor
R G-SEN OUT VOL (V)	Output voltage from rear vertical G sensor
F G-SEN VOLTAGE (V)	Power supply voltage for front G sensor
R G-SEN VOLTAGE (V)	Power supply voltage for rear G sensor
FR ACTUATOR CRNT (A)	Control current for front RH wheel shock absorber actuator operation
FL ACTUATOR CRNT (A)	Control current for front LH wheel shock absorber actuator operation
RR ACTUATOR CRNT (A)	Control current for rear RH wheel shock absorber actuator operation
RL ACTUATOR CRNT (A)	Control current for rear LH wheel shock absorber actuator operation
BATTERY VOLT (V)	Battery voltage supplied to E-SUS control unit
MODE SW UP (V)	Signal voltage for mode change switch UP operation
MODE SW DOWN (V)	Signal voltage for mode change switch DOWN operation
BRK FLD PRESS (bar)	Fluid pressure recognized by E-SUS control unit when brake is applied
STP LAMP SW (On/Off)	Brake pedal operation status recognized by E-SUS control unit
ABS SIGNAL (On/Off)	ABS operation status recognized by E-SUS control unit
FAIL MODE SIG (On/Off)	E-SUS control unit is in fail-safe status.

SCS-11 Revision: 2015 June GT-R

SCS

Α

В

C

D

F

Н

L

Ν

Р

DIAGNOSIS SYSTEM (E-SUS CONTROL UNIT)

< SYSTEM DESCRIPTION >

[Bilstein DampTronic]

R MODE LAMP (On/Off)	Illumination status of R mode lamp
COMF MODE LAMP (On/Off)	Illumination status of COMFORT mode lamp
IGN (On/Off)	Ignition switch status recognized by E-SUS control unit
CONTROL MODE (R/SPORT/COMF)	Each control mode status R: R mode SPORT: SPORT mode COMF: COMFORT mode

ACTIVE TEST

CAUTION:

- · Always perform while the vehicle is stopped.
- When the shock absorber actuator active test is performed, a DTC may be detected, therefore be always erase the malfunction history after the operation is completed.
- Shock absorber actuator
 The control signal from CONSULT forces activation of the shock absorber actuator. The check can be performed by confirming the operation noise.

Test item Display Item	Display	
iest item	Display Item	Operation half cycle
	FRONT RIGHT ACTUATOR	
SHOCK ABSORBER ACTUATOR	FRONT LEFT ACTUATOR	0.1 seconds- 1 second (cycles 0.1 seconds)
	REAR RIGHT ACTUATOR	
	REAR LEFT ACTUATOR	

• Mode lamp

The control signal from CONSULT forces activation of the mode lamp (ON/OFF) for check.

		Display		
Test item	Display Item	Illumination status		
		ON	OFF	
MODE LAMP	R	ON	OFF	
WOOL LAWIF	COMF	ON	OFF	

C1D01 VEHICLE SPEED SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

DTC/CIRCUIT DIAGNOSIS

C1D01 VEHICLE SPEED SIGNAL

Description (GT-R certified NISSAN dealer)

The vehicle speed signal is transmitted from the ABS actuator and electric unit (control unit) to E-SUS control unit via CAN communication.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486057

INFOID:0000000011486056

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D01	VEHICLE SPEED SIG	 A malfunction is detected in the vehicle speed signal output from the ABS actuator and electric unit (control unit) to CAN communication. No transmission of vehicle speed signal from the ABS actuator and electric unit (control unit). 	Harness or connector (CAN communication line) ABS actuator and electric unit (control unit) E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D01" detected?

YES >> Proceed to diagnosis procedure. Refer to SCS-13, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

>> INSPECTION END NO

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486058

${f 1}$.PERFORM SELF-DIAGNOSIS OF ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

(P)With CONSULT

Perform "ABS" self-diagnosis.

Is DTC detected?

YES >> Check the detected DTC items. Refer to BRC-133, "DTC No. Index (GT-R certified NISSAN dealer)".

NO >> GO TO 2.

2 PERFORM SELF-DIAGNOSIS

(P)With CONSULT

Perform "E-SUS" self-diagnosis.

Is another DTC detected?

YES >> Check the detected DTC items. Refer to SCS-55, "DTC Index".

NO >> GO TO 3.

3.CHECK INFORMATION

(P)With CONSULT

Check the "VEHICLE SPEED" of "DATA MONITOR" for "E-SUS". Refer to SCS-45, "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

>> Check pin terminal and connection of each harness connector for damage or loose connection. YES Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)". SCS

D

Α

В

Н

L

K

M

Ν

C1D02 YAW RATE/SIDE/DECEL G SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D02 YAW RATE/SIDE/DECEL G SENSOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486059

The side G sensor signal is transmitted from the ABS actuator and electric unit (control unit) to E-SUS control unit via CAN communication.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486060

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D02	SIDE G-SENSOR SIG	 A malfunction is detected in the side G sensor signal output from the yaw rate/side/decel G sensor to CAN communication. No transmission from the yaw rate/side/decel G sensor. 	Harness or connector (CAN communication line) ABS actuator and electric unit (control unit) E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Turn the ignition switch OFF to ON.
- 2. Perform "E-SUS" self-diagnosis.
- 3. Perform "ERASE MEMORY" in self-diagnosis.
- Perform self-diagnosis of "E-SUS" again.

Is DTC "C1D02" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-14, "Diagnosis Procedure (GT-R certified NISSAN dealer)".</u>

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486061

CAUTION:

In the Bilstein DampTronic system, because it is difficult to distinguish a sensor malfunction from normal operation when the vehicle turns sharply such as spin turning, turning while accelerating, or drift driving, or when CONSULT is connected to the vehicle, the vehicle enters the fail-safe status and a DTC is stored once. If the normal operation is restored later, it is not a malfunction. At that time, erase the self-diagnosis memory. If the normal operation is not restored, perform the following diagnosis procedure.

 ${f 1}$.PERFORM SELF-DIAGNOSIS OF ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

(P)With CONSULT

Perform "ABS" self-diagnosis.

Is DTC detected?

YES >> Check the detected DTC items. Refer to <u>BRC-133</u>, "DTC No. Index (GT-R certified NISSAN dealer)".

NO >> GO TO 2.

2. PERFORM SELF-DIAGNOSIS

(P)With CONSULT

Perform "E-SUS" self-diagnosis.

Is another DTC detected?

YES >> Check the detected DTC items. Refer to SCS-55, "DTC Index".

NO >> GO TO 3.

3. CHECK INFORMATION

C1D02 YAW RATE/SIDE/DECEL G SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

(P)With CONSULT

Check the "SIDE G-SENSOR" of "DATA MONITOR" for "E-SUS". Refer to SCS-45, "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

- YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.
- NO >> Replace E-SUS control unit. Refer to <u>SCS-61</u>, "Exploded View (GT-R certified NISSAN dealer)".

SCS

Α

В

C

D

F

Н

1

Κ

L

M

Ν

0

Р

Revision: 2015 June SCS-15 GT-R

C1D03 STEERING ANGLE SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D03 STEERING ANGLE SENSOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486062

The steering angle sensor signal is transmitted from the steering angle sensor to E-SUS control unit via CAN communication.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486063

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D03	ST ANGLE SPEED SIG	 A malfunction is detected in the steering angle speed sensor signal output from the steering angle sensor to CAN communication. No transmission of the steering angle speed signal from the steering angle sensor. 	 Harness or connector (CAN communication line) Steering angle sensor E-SUS control unit

DTC REPRODUCTION PROCEDURE

1. DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Turn the ignition switch OFF to ON.
- 2. Perform "E-SUS" self-diagnosis.

Is DTC "C1D03" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-16</u>, "<u>Diagnosis Procedure (GT-R certified NISSAN dealer)</u>".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486064

1. PERFORM SELF-DIAGNOSIS OF ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

(P)With CONSULT

Perform "ABS" self-diagnosis.

Is DTC detected?

YES >> Check the detected DTC items. Refer to <u>BRC-133</u>, "DTC No. Index (GT-R certified NISSAN dealer)".

NO \Rightarrow GO TO 2.

2.PERFORM SELF-DIAGNOSIS

(P)With CONSULT

Perform "E-SUS" self-diagnosis.

Is another DTC detected?

YES >> Check the detected DTC items. Refer to SCS-55, "DTC Index".

NO >> GO TO 3.

3.CHECK INFORMATION

(P)With CONSULT

Check "ST ANGLE SPD" of "DATA MONITOR" for "E-SUS". Refer to SCS-45, "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to <u>SCS-61</u>, "Exploded View (GT-R certified NISSAN dealer)".

C1D04, C1D05 TORQUE SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D04, C1D05 TORQUE SIGNAL

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486065

The estimated torque signal and required torque are transmitted from ECM to E-SUS control unit via CAN communication.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486066

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D04	ESTIMATED TORQUE	 A malfunction is detected in the estimated torque signal output from ECM to CAN communication. No transmission of the estimated torque signal from ECM. 	Harness or connector (CAN communication line) ECM E-SUS control unit
C1D05	REQUESTED TORQUE	No transmission of the required torque signal from ECM.	Harness or connector (CAN communication line) ECM E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D04" or "C1D05"detected?

YES >> Proceed to diagnosis procedure. Refer to SCS-17, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486067

1.PERFORM SELF-DIAGNOSIS OF ECM

With CONSULT

Perform "ENGINE" self-diagnosis.

Is DTC detected?

YES >> Check the detected DTC items. Refer to EC-592, "DTC Index".

NO >> GO TO 2.

2.perform self-diagnosis

(P)With CONSULT

Perform "E-SUS" self-diagnosis.

Is another DTC detected?

YES >> Check the detected DTC items. Refer to SCS-55, "DTC Index".

NO >> GO TO 3.

3.CHECK INFORMATION

(P)With CONSULT

Check "ESTIMATED TRQ" and "REQUESTED TRQ" of "DATA MONITOR" for "E-SUS". Refer to SCS-45. "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

>> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)". NO

SCS-17 Revision: 2015 June GT-R

SCS

D

Α

Ν

C1D06 ENGINE SPEED SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D06 ENGINE SPEED SIGNAL

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486068

The engine speed signal is transmitted from ECM to E-SUS control unit via CAN communication.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486069

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D06	ENG SPEED SIG	 A malfunction is detected in the engine speed signal output from ECM to CAN communication. No transmission of the engine speed signal from ECM. 	Harness or connector (CAN communication line) ECM E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Turn the ignition switch OFF to ON.
- 2. Perform "E-SUS" self-diagnosis.

Is DTC "C1D06" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-18, "Diagnosis Procedure (GT-R certified NISSAN</u> dealer)".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486070

1.PERFORM SELF-DIAGNOSIS OF ECM

(P) With CONSULT

Perform "ENGINE" self-diagnosis.

Is DTC detected?

YES >> Check the detected DTC items. Refer to EC-592, "DTC Index".

NO >> GO TO 2.

2.perform self-diagnosis

(P)With CONSULT

Perform self-diagnosis of "E-SUS".

Is another DTC detected?

YES >> Check the detected DTC items. Refer to SCS-55, "DTC Index".

NO >> GO TO 3.

3.CHECK INFORMATION

(P)With CONSULT

Check the "ENGINE SPEED" of "DATA MONITOR" for "E-SUS". Refer to <u>SCS-45</u>, "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

C1D07 STOP LAMP SWITCH

< D.	TC/CIR	CHIT	DIA	GNO	SIS S
ヽレ	I C/CII	COLL	יחוט	GIVO	

[Bilstein DampTronic]

C1D07 STOP LAMP SWITCH

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486071

The stop lamp switch signal is transmitted from the ABS actuator and electric unit (control unit) to E-SUS control unit via CAN communication.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486072

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D07	STOP LAMP SW SIG	No transmission of stop lamp switch signal from the ABS actuator and electric unit (control unit).	Harness or connector (CAN communication line) ABS actuator and electric unit (control unit) E-SUS control unit

scs

D

Α

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

G

Н

(P)With CONSULT

- 1. Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D07" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-19</u>, "<u>Diagnosis Procedure (GT-R certified NISSAN dealer</u>)".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486073

${f 1}$.PERFORM SELF-DIAGNOSIS OF ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

(P)With CONSULT

Perform "ABS" self-diagnosis

is DTC detected?

YES >> Check the detected DTC items. Refer to <u>BRC-133</u>, "<u>DTC No. Index (GT-R certified NISSAN dealer)"</u>.

NO >> GO TO 2.

2.PERFORM SELF-DIAGNOSIS

M

K

(P)With CONSULT

Perform "E-SUS" self-diagnosis.

Is another DTC detected?

YES >> Check the detected DTC items. Refer to SCS-55, "DTC Index".

NO >> GO TO 3.

3. CHECK INFORMATION

N

(P)With CONSULT

Check "STP LAMP SW" of "DATA MONITOR" for "E-SUS". Refer to SCS-45, "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

Revision: 2015 June SCS-19 GT-R

C1D08 ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D08 ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486074

The ABS operation signal is transmitted from the ABS actuator and electric unit (control unit) to E-SUS control unit via CAN communication.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486075

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D08	ABS SIGNAL	No transmission of ABS operation signal from the ABS actuator and electric unit (control unit)	Harness or connector (CAN communication line) ABS actuator and electric unit (control unit) E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D08" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-20, "Diagnosis Procedure (GT-R certified NISSAN dealer)".</u>

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486076

1.PERFORM SELF-DIAGNOSIS OF ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

(P)With CONSULT

Perform ABS" self-diagnosis.

Is DTC detected?

YES >> Check the detected DTC items. Refer to <u>BRC-133</u>, "<u>DTC No. Index (GT-R certified NISSAN dealer)"</u>.

NO >> GO TO 2.

2.PERFORM SELF-DIAGNOSIS

(P)With CONSULT

Perform "E-SUS" self-diagnosis.

Is another DTC detected?

YES >> Check the detected DTC items, Refer to SCS-55, "DTC Index",

NO >> GO TO 3.

3. CHECK INFORMATION

(P)With CONSULT

Check "ABS SIGNAL" of "DATA MONITOR" for "E-SUS". Refer to SCS-45, "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

C1D09 BRAKE FLUID PRESSURE SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D09 BRAKE FLUID PRESSURE SIGNAL

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486077

The brake pressure control signal is transmitted from the ABS actuator and electric unit (control unit) to E-SUS control unit via CAN communication.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486078

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D09	BRK FLD PRESS SIG	 A malfunction is detected in the brake pressure control signal output from the ABS actuator and electric unit (control unit) to CAN communication. No transmission of brake pressure control signal from the ABS actuator and electric unit (control unit). 	Harness or connector (CAN communication line) ABS actuator and electric unit (control unit) E-SUS control unit

SCS

D

Α

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D09" detected?

YES >> Proceed to diagnosis procedure. Refer to SCS-21, "Diagnosis Procedure (GT-R certified NISSAN dealer)".

>> INSPECTION END NO

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486079

${f 1}$.PERFORM SELF-DIAGNOSIS OF ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

(P)With CONSULT

Perform"ABS" self-diagnosis.

Is DTC detected?

YES >> Check the detected DTC items. Refer to BRC-133, "DTC No. Index (GT-R certified NISSAN dealer)".

NO >> GO TO 2.

2 PERFORM SELF-DIAGNOSIS

(P)With CONSULT

Perform "E-SUS" self-diagnosis.

Is another DTC detected?

YES >> Check the detected DTC items. Refer to SCS-55, "DTC Index".

NO >> GO TO 3.

3.check information

(P)With CONSULT

Check "BRK FLD PRESS" of "DATA MONITOR" for "E-SUS". Refer to SCS-45, "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

SCS-21 Revision: 2015 June GT-R

Н

K

M

N

C1D10 FRONT VERTICAL G SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D10 FRONT VERTICAL G SENSOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486080

Detects the vertical G applied at vehicle front, and outputs it to E-SUS control unit in analog voltage.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486081

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D10	F VERTICAL G-SEN	 A malfunction occurs in the output voltage from the front vertical G sensor. A malfunction occurs in the supply voltage to the front vertical G sensor. 	Harness or connector Front vertical G sensor E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D10" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-22, "Diagnosis Procedure (GT-R certified NISSAN</u> dealer)".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486082

1. CHECK FRONT VERTICAL G SENSOR POWER SUPPLY CIRCUIT

1. Turn the ignition switch OFF to ON.

CAUTION:

Never start the engine.

2. Check the voltage between the E-SUS control unit harness connector and ground.

E-SUS co	E-SUS control unit		Voltage
Connector	Terminal	_	vollage
M110	15	Ground	Approx. 4.75 – 5.25 V

- Turn the ignition switch OFF.
- 4. Check the continuity between the E-SUS control unit harness connector and ground.

E-SUS control unit			Continuity
Connector	Terminal		Continuity
M110	8	Ground	Existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

2.CHECK FRONT VERTICAL G SENSOR HARNESS

- Disconnect the E-SUS control unit harness connector and front vertical G sensor harness connector.
- Check the continuity between the E-SUS control unit harness connector and front vertical G sensor harness connector terminals.

C1D10 FRONT VERTICAL G SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

E-SUS c	E-SUS control unit		al G sensor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	15		3	
M110	4	E50	1	Existed
	8		2	

Α

В

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

3.CHECK FRONT VERTICAL G SENSOR

SCS

D

Check the front vertical G sensor. Refer to <u>SCS-23</u>, "Component Inspection (GT-R certified NISSAN dealer)". <u>Is the inspection result normal?</u>

YES >> GO TO 4.

NO

>> Replace the front vertical G sensor. Refer to <u>SCS-62</u>, "<u>Exploded View (GT-R certified NISSAN dealer)</u>".

4. PERFORM DATA MONITOR

(P)With CONSULT

Start the engine.

G

Н

- 2. Select "F G-SEN OUT VOL" and "F G-SEN VOLTAGE" in "DATA MONITOR" for "E-SUS".
- 3. Drive the vehicle and check whether it is within the following range.

F G-SEN OUT VOL : Approx. 2.35 – 2.77 V F G-SEN VOLTAGE : Approx. 4.75 – 5.25 V

Is the inspection result normal?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection.

NO >> Replace E-SUS control unit. Refer to <u>SCS-61</u>. "Exploded View (GT-R certified NISSAN dealer)".

Component Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011486083

1. CHECK FRONT VERTICAL G SENSOR OUTPUT VOLTAGE

- 1. Connect the E-SUS control unit harness connector and front vertical G sensor harness connector.
- Turn the ignition switch ON.

CAUTION:

ector.

Never start the engine.

3. Check the voltage between the E-SUS control unit harness connector and ground.

E-SUS control unit		_	Voltage
Connector	Terminal		vollage
M110	4	Ground	Approx. 2.35 – 2.65 V

M

Ν

K

Is the inspection result normal?

YES >> INSPECTION END

NO

>> Replace the front vertical G sensor. Refer to <u>SCS-62</u>, "Exploded View (GT-R certified NISSAN dealer)".

Р

Revision: 2015 June SCS-23 GT-R

C1D11 REAR VERTICAL G SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D11 REAR VERTICAL G SENSOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486084

Detects the vertical G applied at vehicle rear, and outputs it to E-SUS control unit in analog voltage.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486085

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D11	R VERTICAL G-SEN	 A malfunction occurs in the output voltage from the rear vertical G sensor. A malfunction occurs in the supply voltage to the rear vertical G sensor. 	Harness or connector Rear vertical G sensor E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D11" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-24, "Diagnosis Procedure (GT-R certified NISSAN</u> dealer)".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486086

1.CHECK REAR VERTICAL G SENSOR POWER SUPPLY CIRCUIT

Turn the ignition switch OFF to ON.

CAUTION:

Never start the engine.

2. Check the voltage between the E-SUS control unit harness connector and ground.

E-SUS control unit		_	Voltage
Connector	Terminal		voltage
M110	21	Ground	Approx. 4.75 – 5.25 V

- Turn the ignition switch OFF.
- 4. Check for continuity between the E-SUS control unit harness connector and ground.

E-SUS control unit			Continuity
Connector	Terminal		Continuity
M110	13	Ground	Existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

2.CHECK REAR VERTICAL G SENSOR HARNESS

- Disconnect the E-SUS control unit harness connector and rear vertical G sensor harness connector.
- 2. Check the continuity between the E-SUS control unit harness connector and rear vertical G sensor harness connector terminals.

C1D11 REAR VERTICAL G SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

E-SUS c	E-SUS control unit		al G sensor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M110	21	B51	3	
M110	6	B51	1	Existed
M110	13	B51	2	

Α

В

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

3.CHECK REAR VERTICAL G SENSOR

SCS

D

Check the rear vertical G sensor. Refer to <u>SCS-25</u>, "Component Inspection (GT-R certified NISSAN dealer)". <u>Is the inspection result normal?</u>

YES >> GO TO 4.

NO

F

>> Replace the rear vertical G sensor. Refer to <u>SCS-63</u>, "Exploded View (GT-R certified NISSAN dealer)".

4. PERFORM DATA MONITOR

(P)With CONSULT

1. Start the engine.

G

Н

- 2. Select "R G-SEN OUT VOL" and "R G-SEN VOLTAGE" in "DATA MONITOR" for "E-SUS".
- 3. Drive the vehicle and check whether it is within the following range.

R G-SEN OUT VOL : Approx. 2.35 – 2.77 V R G-SEN VOLTAGE : Approx. 4.75 – 5.25 V

Is the inspection result normal?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection.

NO >> Replace E-SUS control unit. Refer to <u>SCS-61, "Exploded View (GT-R certified NISSAN dealer)"</u>.

Component Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011486087

1. CHECK REAR VERTICAL G SENSOR OUTPUT VOLTAGE

- 1. Connect the E-SUS control unit harness connector and rear vertical G sensor harness connector.
- 2. Turn the ignition switch OFF to ON.

CAUTION:

Never start the engine.

3. Check the voltage between the E-SUS control unit harness connector and ground.

E-SUS control unit		_	Voltage
Connector	Terminal		voltage
M110	6	Ground	Approx. 2.35 – 2.65 V

M

Ν

K

Is the inspection result normal?

YES >> INSPECTION END

NO

>> Replace the rear vertical G sensor. Refer to SCS-63, "Exploded View (GT-R certified NISSAN dealer)".

Р

Revision: 2015 June SCS-25 GT-R

C1D12 SHOCK ABSORBER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D12 SHOCK ABSORBER ACTUATOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486088

Integrated into each the shock absorbers on 4 wheels opens or closes the shutter by moving the solenoid core vertically with the control current from E-SUS control unit to regulate the damping force.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486089

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D12	FR ACTUATOR SIG	An open or short circuit is detected in the front RH shock absorber actuator.	Harness or connector Malfunction of the front RH shock absorber actuator E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Start the engine and drive. Or perform "SHOCK ABSORBER ACTUATOR" in "ACTIVE TEST" for "E-SUS". Refer to SCS-11, "CONSULT Function (GT-R certified NISSAN dealer)".
- 2. Perform self-diagnosis of "E-SUS".

Is DTC "C1D12" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-26, "Diagnosis Procedure (GT-R certified NISSAN dealer)"</u>.

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486090

1. CHECK SHOCK ABSORBER ACTUATOR CIRCUIT (1)

- 1. Disconnect the E-SUS control unit harness connector.
- 2. Check the resistance between the E-SUS control unit harness connector.

E-SUS c	ontrol unit	Resistance
Connector	Terminal	Nesisiance
M110	11	Approx. 2.4 Ω
	10	Αρριολ. 2.4 32

Is the inspection result normal?

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

2.check shock absorber actuator circuit (2)

- 1. Disconnect the front RH shock absorber actuator harness connector.
- Check the continuity between the E-SUS control unit harness connector and front RH shock absorber actuator harness connector.

E-SUS c	E-SUS control unit		absorber actuator	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M110	11	E134	1	Existed
WITTO	10	L134	2	LXISIEU

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

Revision: 2015 June SCS-26 GT-R

C1D12 SHOCK ABSORBER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

3.check shock absorber actuator

Perform the front RH shock absorber actuator. Refer to <u>SCS-27, "Component Inspection (GT-R certified NIS-SAN dealer)"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace the front RH shock absorber. Refer to <u>SCS-64, "Removal and Installation (GT-R certified NISSAN dealer)"</u>.

4. PERFORM DATA MONITOR

(I) With CONSULT

- 1. Start the engine and drive the vehicle at 5 km/h (3 MPH) or more.
- 2. Switch between "SPORT mode" or "COMFORT mode" of the set-up switch (suspension).
- Select "FR ACTUATOR CRNT" of "DATA MONITOR" for "E-SUS".
- 4. Drive the vehicle and check whether it is within the following range.

FR ACTUATOR CRNT : Approx. 0 – 1.5 A

Is the inspection result normal?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

Component Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011486091

1. PERFORM ACTIVE TEST

(P)With CONSULT

- Connect the E-SUS control unit harness connector and front RH shock absorber actuator harness connector.
- 2. Select "SHOCK ABSORBER ACTUATOR" in "ACTIVE TEST".
- 3. On the display, change the "Operation half cycle", and check that the operation noise is heard from the actuator.

Test item Display Item	Display Itom	Display
	Display Item	Operation half cycle
SHOCK ABSORBER ACTUATOR	FRONT RIGHT ACTUA- TOR	0.1 seconds – 1 second (cycle in 0.1 seconds)

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the front RH shock absorber. Refer to <u>SCS-64, "Removal and Installation (GT-R certified NISSAN dealer)"</u>.

Р

Revision: 2015 June SCS-27 GT-R

SCS

D

Α

В

K

Н

L

M

 \cap

Ν

C1D13 SHOCK ABSORBER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D13 SHOCK ABSORBER ACTUATOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486092

Integrated into each the shock absorbers on 4 wheels opens or closes the shutter by moving the solenoid core vertically with the control current from E-SUS control unit to regulate the damping force.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486093

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D13	FL ACTUATOR SIG	An open or short circuit is detected in the front LH shock absorber actuator.	Harness or connector Malfunction of the front LH shock absorber actuator E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Start the engine and drive. Or perform "SHOCK ABSORBER ACTUATOR" in "ACTIVE TEST" for "E-SUS". Refer to SCS-11, "CONSULT Function (GT-R certified NISSAN dealer)".
- 2. Perform self-diagnosis of "E-SUS".

Is DTC "C1D13" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-28, "Diagnosis Procedure (GT-R certified NISSAN</u> dealer)".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486094

1. CHECK SHOCK ABSORBER ACTUATOR CIRCUIT (1)

- 1. Disconnect the E-SUS control unit harness connector.
- 2. Check the resistance between the E-SUS control unit harness connector.

E-SUS c	ontrol unit	Resistance	
Connector	Terminal	ivesistance	
M110	17	Approx. 2.4 Ω	
WITTO	12	Αρριολ. 2.4 32	

Is the inspection result normal?

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

2.CHECK SHOCK ABSORBER ACTUATOR CIRCUIT (2)

- 1. Disconnect the front LH shock absorber actuator harness connector.
- Check the continuity between the E-SUS control unit harness connector and front LH shock absorber actuator harness connector.

E-SUS c	E-SUS control unit		absorber actuator	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M110	17	E132	1	Existed	
WITTO	12	LIJZ	2	LXISIEU	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

C1D13 SHOCK ABSORBER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

3.check shock absorber actuator

Perform the front LH shock absorber actuator. Refer to SCS-29, "Component Inspection (GT-R certified NIS-SAN dealer)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace the front LH shock absorber. Refer to <u>SCS-64, "Removal and Installation (GT-R certified NISSAN dealer)"</u>.

4. PERFORM DATA MONITOR

(P)With CONSULT

- 1. Start the engine and drive the vehicle at 5 km/h (3 MPH) or more.
- 2. Switch between "SPORT mode" or "COMFORT mode" of the set-up switch (suspension).
- Select "FL ACTUATOR CRNT" of "DATA MONITOR" for "E-SUS".
- 4. Drive the vehicle and check whether it is within the following range.

FL ACTUATOR CRNT : Approx. 0 – 1.5 A

Is the inspection result normal?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to <u>SCS-61</u>, "Exploded View (GT-R certified NISSAN dealer)".

Component Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011486095

1. PERFORM ACTIVE TEST

(P)With CONSULT

- Connect the E-SUS control unit harness connector and front LH shock absorber actuator harness connector.
- Select "SHOCK ABSORBER ACTUATOR" in "ACTIVE TEST".
- 3. On the display, change the "Operation half cycle", and check that the operation noise is heard from the actuator.

Test item	Display Item	Display	
rest item	Display Item	Operation half cycle	
SHOCK ABSORBER ACTUATOR	FRONT LEFT ACTUA- TOR	0.1 seconds – 1 second (cycle in 0.1 seconds)	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the front LH shock absorber. Refer to <u>SCS-64, "Removal and Installation (GT-R certified NISSAN dealer)"</u>.

I

Н

Α

В

D

SCS

K

L

Ν

O

Р

Revision: 2015 June SCS-29 GT-R

C1D14 SHOCK ABSORBER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D14 SHOCK ABSORBER ACTUATOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486096

Integrated into each the shock absorbers on 4 wheels opens or closes the shutter by moving the solenoid core vertically with the control current from E-SUS control unit to regulate the damping force.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486097

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D14	RR ACTUATOR SIG	An open or short circuit is detected in the rear RH shock absorber actuator.	Harness or connector Malfunction of the rear RH shock absorber actuator E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- 1. Start the engine and drive. Or perform "SHOCK ABSORBER ACTUATOR" in "ACTIVE TEST" for "E-SUS". Refer to SCS-11, "CONSULT Function (GT-R certified NISSAN dealer)".
- 2. Perform self-diagnosis of "E-SUS".

Is DTC "C1D14" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-30, "Diagnosis Procedure (GT-R certified NISSAN</u> dealer)".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486098

1. CHECK SHOCK ABSORBER ACTUATOR CIRCUIT (1)

- 1. Disconnect the E-SUS control unit harness connector.
- 2. Check the resistance between the E-SUS control unit harness connector.

E-SUS c	ontrol unit	Resistance	
Connector	Terminal	Nesisiance	
M110	20	Approx. 2.4 Ω	
WITTO	14	Αρριολ. 2.4 32	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK SHOCK ABSORBER ACTUATOR CIRCUIT (2)

- Disconnect the rear RH shock absorber actuator harness connector.
- Check the continuity between the E-SUS control unit harness connector and rear RH shock absorber actuator harness connector.

E-SUS c	E-SUS control unit		absorber actuator	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M110	20	E302	1	Existed
WITTO	14	L302	2	LXISIGU

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

C1D14 SHOCK ABSORBER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

3. CHECK SHOCK ABSORBER ACTUATOR

Perform the rear RH shock absorber actuator. Refer to <u>SCS-31, "Component Inspection (GT-R certified NIS-SAN dealer)"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace the rear RH shock absorber. Refer to <u>SCS-64, "Removal and Installation (GT-R certified NISSAN dealer)".</u>

4. PERFORM DATA MONITOR

(P)With CONSULT

- 1. Start the engine and drive the vehicle at 5 km/h (3 MPH) or more.
- Switch between "SPORT mode" or "COMFORT mode" of the set-up switch (suspension).
- Select "RR ACTUATOR CRNT" of "DATA MONITOR" for "E-SUS".
- 4. Drive the vehicle and check whether it is within the following range.

RR ACTUATOR CRNT : Approx. 0 – 1.5 A

Is the inspection result normal?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

Component Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011486099

1.PERFORM ACTIVE TEST (E-SUS CONTROL UNIT)

(P)With CONSULT

- Connect the E-SUS control unit harness connector and rear RH shock absorber actuator harness connector.
- Select "SHOCK ABSORBER ACTUATOR" in "ACTIVE TEST".
- 3. On the display, change the "Operation half cycle", and check that the operation noise is heard from the actuator.

Test item	Display Item	Display
rest item	Display Item	Operation half cycle
SHOCK ABSORBER ACTUATOR	REAR RIGHT ACTUA- TOR	0.1 seconds – 1 second (cycle in 0.1 seconds)

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the rear RH shock absorber. Refer to <u>SCS-64, "Removal and Installation (GT-R certified NISSAN dealer)"</u>.

SCS

D

Α

В

K

Н

Ν

Р

Revision: 2015 June SCS-31 GT-R

C1D15 SHOCK ABSORBER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D15 SHOCK ABSORBER ACTUATOR

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486100

Integrated into each the shock absorbers on 4 wheels opens or closes the shutter by moving the solenoid core vertically with the control current from E-SUS control unit to regulate the damping force.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486101

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D15	RL ACTUATOR SIG	An open or short circuit is detected in the rear LH shock absorber actuator.	Harness or connector Malfunction of the rear LH shock absorber actuator E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- Start the engine and drive. Or perform "SHOCK ABSORBER ACTUATOR" in "ACTIVE TEST" for "E-SUS". Refer to <u>SCS-11</u>, "CONSULT Function (GT-R certified NISSAN dealer)".
- 2. Perform self-diagnosis of "E-SUS".

Is DTC "C1D15" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-32</u>, "<u>Diagnosis Procedure (GT-R certified NISSAN dealer)</u>".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486102

1. CHECK SHOCK ABSORBER ACTUATOR CIRCUIT (1)

- 1. Disconnect the E-SUS control unit harness connector.
- 2. Check the resistance between the E-SUS control unit harness connector.

E-SUS c	ontrol unit	Resistance	
Connector	Terminal	1\esistance	
M110	16	Approx. 2.4 Ω	
	18	Αρριολ. 2.4 32	

Is the inspection result normal?

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

2.CHECK SHOCK ABSORBER ACTUATOR CIRCUIT (2)

- 1. Disconnect the rear LH shock absorber actuator harness connector.
- Check the continuity between the E-SUS control unit harness connector and rear LH shock absorber actuator harness connector.

E-SUS o	E-SUS control unit		absorber actuator	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M110	16	E102	1	Existed	
IVITIO	18	L 102	2	LXISIEU	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

Revision: 2015 June SCS-32 GT-R

C1D15 SHOCK ABSORBER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

3.check shock absorber actuator

Perform the rear LH shock absorber actuator. Refer to SCS-33, "Component Inspection (GT-R certified NIS-SAN dealer)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace the rear LH shock absorber. Refer to SCS-64, "Removal and Installation (GT-R certified NISSAN dealer)".

4. PERFORM DATA MONITOR

(P)With CONSULT

- Start the engine and drive the vehicle at 5 km/h (3 MPH) or more.
- Switch between "SPORT mode" or "COMFORT mode" of the set-up switch (suspension).
- Select "RL ACTUATOR CRNT" of "DATA MONITOR" for "E-SUS".
- Drive the vehicle and check whether it is within the following range.

RL ACTUATOR CRNT : Approx. 0 – 1.5 A

Is the inspection result normal?

>> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

Component Inspection (GT-R certified NISSAN dealer)

PERFORM ACTIVE TEST

(P)With CONSULT

- Connect the E-SUS control unit harness connector and rear LH shock absorber actuator harness connec-
- Select "SHOCK ABSORBER ACTUATOR" in "ACTIVE TEST".
- On the display, change the "Operation half cycle", and check that the operation noise is heard from the actuator.

Test item	Display Item	Display
rest item	Display Item	Operation half cycle
SHOCK ABSORBER ACTUATOR	REAR LEFT ACTUATOR	0.1 seconds – 1 second (cycle in 0.1 seconds)

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the rear LH shock absorber. Refer to SCS-64, "Removal and Installation (GT-R certified NISSAN dealer)".

SCS

D

Α

В

Н

INFOID:0000000011486103

K

Ν

Р

SCS-33 Revision: 2015 June GT-R

[Bilstein DampTronic]

C1D16 CONTROL UNIT

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486104

- Controls the shock absorber actuators on 4 wheels according to the signals from each sensor.
- If any malfunction occurs in the electrical system, stops the control signal to the shock absorber, making it in the equivalent status to R mode (fixed damping force).

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486105

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D16	CONTROL UNIT	A malfunction occurs inside the E-SUS control unit.	E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(I) With CONSULT

- 1. Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D16" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-34, "Diagnosis Procedure (GT-R certified NISSAN dealer)"</u>.

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486106

1.PERFORM SELF-DIAGNOSIS

(P)With CONSULT

- 1. Turn the ignition switch OFF to ON.
- Perform self-diagnosis of "E-SUS" and check whether DTC "C1D16" is detected. CAUTION:

Even when a record exists in the diagnosis history, replace E-SUS control unit.

Is DTC "C1D16" detected?

YES >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

NO >> Check pin terminal and connection of each harness connector for damage or loose connection. Repair or replace error-detected parts.

C1D17 BATTERY POWER SUPPLY

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D17 BATTERY POWER SUPPLY

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486107

Power supply for E-SUS control unit.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486108

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D17	BATTERY VOLT	A malfunction is detected in the battery supply voltage to E-SUS control unit.	Harness or connector E-SUS control unit

SCS

F

Н

M

N

D

Α

В

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

- Turn the ignition switch OFF to ON.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D17" detected?

>> Proceed to diagnosis procedure. Refer to SCS-35. "Diagnosis Procedure (GT-R certified NISSAN YES dealer)".

>> INSPECTION END NO

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486109

1. CHECK E-SUS CONTROL UNIT GROUND

- Turn the ignition switch OFF.
- Disconnect the E-SUS control unit harness connector. 2.
- Check the continuity between the E-SUS control unit harness connector and ground.

E-SUS c	ontrol unit		Continuity	
Connector	Terminal			
M110	22	Ground	Existed	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace an applicable harness or connector.

> Between terminals 23 - 22

> > 19 - 22

2.CHECK E-SUS CONTROL UNIT POWER SUPPLY

E-SUS control unit

Start the engine.

CAUTION:

Connector

M110

Always hold the vehicle stopped.

2. Check the voltage between the E-SUS control unit harness connector terminals.

Voltage		0
Battery voltage	•	Р

Is the measured value "9.5 V" or less?

YES Check the following items, and repair or replace the malfunctioning parts.

- Open circuit in 15 A fuse (#37)
- Short circuit between the 15 A fuse (#37) connector and E-SUS control unit harness connector
- Open circuit between the battery and E-SUS control unit harness connector terminal 23

C1D17 BATTERY POWER SUPPLY

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

- Open circuit in 10 A fuse (#45)
- Short circuit between the 10 A fuse (#45) connector and E-SUS control unit harness connector terminal 19
- Short circuit between the 10 A fuse (#45) connector and set-up switch (suspension) harness connector terminal 18
- Open circuit between the ignition switch and E-SUS control unit harness connector terminal 19
- Battery or ignition switch

NO >> GO TO 3.

3. CHECK TERMINAL

Check that there is no malfunction in the pin terminals and connection of the E-SUS control unit harness connector.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace error-detected parts.

4. CHECK E-SUS CONTROL UNIT SIGNAL

(P)With CONSULT

- 1. Connect the E-SUS control unit harness connector.
- 2. Start the engine.

CAUTION:

Always hold the vehicle stopped.

3. Check the value of "BATTERY VOL" on "DATA MONITOR" screen for "E-SUS".

Is the value in "DATA MONITOR" "16 V" or more?

YES >> Perform the diagnosis by symptom for the charging system. Refer to CHG-23, "Symptom Table".

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

C1D19, C1D20 MODE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

C1D19, C1D20 MODE SWITCH

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486110

The set-up switch (suspension) can be switched to R mode, SPORT mode, or COMFORT mode manually.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486111

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D19	MODE SW UP	 An open or short circuit occurs within the set-up switch (suspension) circuit. A malfunction occurs in the power supply for the set-up switch (suspension). 	Harness or connector Internal malfunction of the set-up switch (suspension) E-SUS control unit
C1D20	MODE SW DOWN	 An open or short circuit occurs within the set-up switch (suspension) circuit. A malfunction occurs in the power supply for the set-up switch (suspension). 	Harness or connector Internal malfunction of the set-up switch (suspension) E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

1. Turn the ignition switch OFF to ON.

Switch between "R mode" and "COMFORT mode" of the set-up switch (suspension) at least once for each mode.

3. Perform "E-SUS" self-diagnosis.

Is DTC "C1D19" or "C1D20" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-37</u>, "<u>Diagnosis Procedure (GT-R certified NISSAN dealer)</u>".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

1.check set-up switch (suspension)

Check the set-up switch (suspension). Refer to SCS-38, "Component Inspection (GT-R certified NISSAN dealer)".

Is the inspection result normal?

YES >> GO TO 2.

M

NO >> Replace the set-up switch (suspension).

2.CHECK SET-UP SWITCH (SUSPENSION) CIRCUIT (1)

Check the continuity between the set-up switch (suspension) harness connector and ground.

Set-up switch	n (suspension)		Continuity
Connector Terminal			Continuity
M73	17	Ground	Existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

3.CHECK SET-UP SWITCH (SUSPENSION) CIRCUIT (2)

Disconnect the E-SUS control unit harness connector.

Α

В

SCS

D

C

Н

K

INFOID:0000000011486112

Р

N

C1D19, C1D20 MODE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

Check the continuity between the E-SUS control unit harness connector and set-up switch (suspension) harness connector.

E-SUS control unit		Set-up switch (suspension)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M110	2	M73	6	Existed
IVITIO	7	IVI73	24	Existed

3. Check the continuity between the E-SUS control unit harness connector and ground.

E-SUS c	ontrol unit	_	Continuity
Connector	Terminal		
M110	2	Ground	Not existed
IVITIO	7	Giodila	Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning harness or connector.

4. CHECK E-SUS CONTROL UNIT OUTPUT SIGNAL

- 1. Connect the E-SUS control unit harness connector.
- 2. Turn the ignition switch ON.

CAUTION:

Never start the engine.

3. Check the voltage between the set-up switch (suspension) harness connector.

Set-up switc	h (suspension)	Voltage	
Connector	Terminal	voltage	
M73	6 – 17	Approx. 3.48 – 3.57 – 3.66 V	
IVI73	24 – 17	Appιοx. 3.46 – 3.57 – 3.66 V	

Is the inspection result normal?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

Component Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011486113

1. CHECK SET-UP SWITCH (SUSPENSION)

- 1. Turn the ignition switch OFF.
- 2. Remove the set-up switch (suspension) harness connector.
- 3. Check the resistance between the set-up switch (suspension) harness connector.

	Se	et-up switch (suspension)	Resistance	
Terr	Terminal Condition		Resistance	
6	17	Set-up switch (suspension): Up	Approx. 950 – 1000 – 1050 Ω	
0	6 17	Set-up switch (suspension): Neutral or down	0 Ω	
24	24 17	Set-up switch (suspension): Down	Approx. 950 – 1000 – 1050 Ω	
24		Set-up switch (suspension): Neutral or up	0 Ω	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the set-up switch (suspension).

[Bilstein DampTronic]

C1D21, C1D22 MODE LAMP

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486114

The mode lamp illuminates in R mode or COMFORT mode by switching the set-up switch (suspension).

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486115

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1D21	R MODE LAMP	An open or short circuit occurs within the set-up switch (suspension) mode lamp circuit. A malfunction occurs within the set-up switch (suspension) mode lamp circuit.	Harness or connector Internal malfunction of the set-up switch (suspension) E-SUS control unit
C1D22	COMF MODE LAMP	An open or short circuit occurs within the set-up switch (suspension) mode lamp circuit. A malfunction occurs within the set-up switch (suspension) mode lamp circuit.	Harness or connector Internal malfunction of the set-up switch (suspension) E-SUS control unit

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT

1. Turn the ignition switch OFF to ON.

- Switch between "R mode" and "COMFORT mode" of the set-up switch (suspension) at least once for each mode.
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D21" or "C1D22" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-39</u>, "<u>Diagnosis Procedure (GT-R certified NISSAN dealer)</u>".

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486116

1. CHECK SET-UP SWITCH (SUSPENSION) MODE LAMP POWER SUPPLY

- Turn the ignition switch OFF.
- Disconnect the set-up switch (suspension) harness connector.
- 3. Check the voltage between the set-up switch (suspension) harness connector.

Set-up switch (suspension)		_	Measuring con-	Voltage
Connector	Terminal		dition	i emage
M73	18	Ground	Ignition switch: ON	Battery voltage
1017 3	10		Ignition switch: OFF	Approx. 0 V

Is the inspection result normal?

YES >> GO TO 2.

NO

>> Check the following items, and repair or replace the malfunctioning parts.

- Open circuit in 10 A fuse (#45)
- Short circuit between the 10 Å fuse (#45) connector and set-up switch (suspension) harness connector terminal 18
- Open circuit between the ignition switch and set-up switch (suspension) harness connector terminal 18
- Battery or ignition switch

F

SCS

Α

В

D

- 1 1

20000044400440

IV.

Ν

C1D21, C1D22 MODE LAMP

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

2.check set-up switch (suspension) mode lamp circuit

- 1. Disconnect the E-SUS control unit harness connector.
- Check the continuity between the E-SUS control unit harness connector and set-up switch (suspension) harness connector.

E-SUS control unit		Set-up switch (suspension)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M110	5	M73	19	Existed
WITTO	9	IVITS	8	Existed

3. Check the continuity between the E-SUS control unit harness connector and ground.

E-SUS c	ontrol unit	_	Continuity
Connector	Terminal		Continuity
M110	5	Ground	Not existed
IVITIO	9	Giodila	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

3.check set-up switch (suspension) mode Lamp

Check the set-up switch (suspension) mode lamp. Refer to <u>SCS-40, "Component Inspection (GT-R certified NISSAN dealer)"</u>.

Is the inspection result normal?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection.

NO >> Replace the set-up switch (suspension).

Component Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011486117

1. PERFORM ACTIVE TEST

(P)With CONSULT

- 1. Connect the E-SUS control unit harness connector.
- 2. Connect the set-up switch (suspension) connector.
- 3. Select "MODE LAMP" in "ACTIVE TEST".
- 4. On the display, touch "ON" or "OFF", and check that the system operates as shown in the table below.

Test item		Display Item		
	Display Item	Illumination status		
		ON	OFF	
MODE LAMP	R	ON	OFF	
WODE EAWIP	COMF	ON	OFF	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the set-up switch (suspension).

	C1	D23 CONTROL UNIT	
< DTC/CIRCUIT			[Bilstein DampTronic]
C1D23 CON	ITROL UNIT		
Description (C	GT-R certified NISS	AN dealer)	INFOID:0000000011486118
Performs good/no	good judgment of the E	-SUS control unit reprogramming.	
DTC Logic (G	T-R certified NISSA	N dealer)	INFOID:0000000011486119
DTC DETECTION	ON LOGIC		
DTC	Display Item	Malfunction detected condition	Possible causes
C1D23	C/U REPRO ERROR	A malfunction is detected at E-SUS control unit re-	E-SUS control unit
C1D23	C/O REPRO ERROR	programming.	E-303 Control unit
With CONSUL 1. Turn the ignit 2. Perform "E-S IS DTC "C1D23" (YES >> Proce deale NO >> INSP	ion switch OFF to ON. US" self-diagnosis. detected? eed to diagnosis proceduer)". ECTION END	re. Refer to SCS-41, "Diagnosis Procedure	e (GT-R certified NISSAN
	sus control unit ri	ied NISSAN dealer) EPROGRAMMING	INFOID:000000011486120
With CONSUL Reprogram "E-SU			
Is it been complete			
YES >> GO T	O 2.		
NO >> GO T 2.PERFORM SE			

(P)With CONSULT

Perform "E-SUS" self-diagnosis.

Is DTC "C1D23" detected?

YES >> GO TO 3.

NO >> INSPECTION END

3.perform e-sus control unit reprogramming again

(I) With CONSULT

- 1. Reprogram "E-SUS".
- Perform "E-SUS" self-diagnosis.

Is DTC "C1D23" detected?

YES >> Replace E-SUS control unit. Refer to <u>SCS-61, "Exploded View (GT-R certified NISSAN dealer)"</u>. NO >> GO TO 4.

M

Ν

0

4. ERASE ERROR RECORD

Erase the memory of "E-SUS" self-diagnosis result (history).

>> END

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

U1000 CAN COMM CIRCUIT

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486121

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-board multiplex communication line with high data communication speed and excellent error detachability. A modern vehicle is equipped with many electronic control units, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, 2 control units are connected with 2 communication lines (CAN H-line and CAN L-line) allowing a high rate of information communication with less wiring. Each control unit communicates data but selectively reads required data only.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486122

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
U1000	CAN COMM CIRCUIT	E-SUS control unit does not communicates the CAN communication signal for 2 seconds or more.	CAN communication malfunction

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(I) With CONSULT

- 1. Turn the ignition switch OFF to ON.
- 2. Perform "E-SUS" self-diagnosis.

Is DTC "U1000" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-42, "Diagnosis Procedure (GT-R certified NISSAN dealer)".</u>

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486123

1.PERFORM SELF-DIAGNOSIS

(II) With CONSULT

Perform "E-SUS" self-diagnosis.

Is DTC "U1000" detected?

YES >> Perform the CAN diagnosis. Refer to LAN-15, "Trouble Diagnosis Flow Chart".

NO >> INSPECTION END

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

U1010 CONTROL UNIT (CAN)

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486124

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-board multiplex communication line with high data communication speed and excellent error detachability. A modern vehicle is equipped with many electronic control units, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, 2 control units are connected with 2 communication lines (CAN H-line and CAN L-line) allowing a high rate of information communication with less wiring. Each control unit communicates data but selectively reads required data only.

DTC Logic (GT-R certified NISSAN dealer)

INFOID:0000000011486125

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
U1010	CONTROL UNIT (CAN)	A malfunction is detected at the initial diagnosis of CAN controller for E-SUS control unit.	E-SUS control unit mal- function

DTC REPRODUCTION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(I) With CONSULT

- Turn the ignition switch OFF to ON.
- 2. Perform "E-SUS" self-diagnosis.

Is DTC "U1010" detected?

YES >> Proceed to diagnosis procedure. Refer to <u>SCS-43, "Diagnosis Procedure (GT-R certified NISSAN dealer)"</u>.

NO >> INSPECTION END

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486126

1. CHECK E-SUS CONTROL UNIT

Check that there is no malfunction in the pin terminals and connection of the E-SUS control unit harness connector.

Is the inspection result normal?

YES >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

NO >> Repair or replace the malfunctioning harness or connector.

SCS

D

Α

Н

K

N

0

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[Bilstein DampTronic]

POWER SUPPLY AND GROUND CIRCUIT

Description (GT-R certified NISSAN dealer)

INFOID:0000000011486127

E-SUS control unit that controls the Bilstein DampTronic system is powered through a fuse or fusible link.

Diagnosis Procedure (GT-R certified NISSAN dealer)

INFOID:0000000011486128

1. CHECK E-SUS CONTROL UNIT POWER SUPPLY

- 1. Turn the ignition switch OFF.
- 2. Disconnect the E-SUS control unit harness connector.
- 3. Check the voltage between the E-SUS control unit harness connector.

	E-SUS control unit	Voltage
Connector	Between terminals	voltage
M110	23 – 22	Battery voltage
IVITIO	19 – 22	0 V

4. Turn the ignition switch ON.

CAUTION:

Never start engine.

5. Check the voltage between the E-SUS control unit harness connector.

	E-SUS control unit	Voltage
Connector	Between terminals	voltage
M110	23 – 22	Pottony voltogo
WITTO	19 – 22	Battery voltage

Is the inspection result normal?

YES

>> GO TO 2.

NO

- >> Check the following items, and repair or replace the malfunctioning parts.
 - Open circuit in 15 A fuse (#37)
 - Short circuit between the 15 Å fuse (#37) connector and E-SUS control unit harness connector terminal 23
 - Open circuit between the battery and E-SUS control unit harness connector terminal 23
 - Open circuit in 10 A fuse (#45)
 - Short circuit between the 10 Å fuse (#45) connector and E-SUS control unit harness connector terminal 19
 - Short circuit between the 10 A fuse (#45) connector and set-up switch (suspension) harness connector terminal 18
 - Open circuit between the ignition switch and E-SUS control unit harness connector terminal 19
 - Battery or ignition switch

2.CHECK E-SUS CONTROL UNIT GROUND

- Turn the ignition switch OFF.
- Check the continuity between the E-SUS control unit harness connector and ground.

	E-SUS control unit	Continuity
Connector	Terminal	Continuity
M110	22 – Ground	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace the malfunctioning harness or connector.

ECU DIAGNOSIS INFORMATION

E-SUS CONTROL UNIT

Reference Value (GT-R certified NISSAN dealer)

INFOID:0000000011486129

VALUES ON THE DIAGNOSIS TOOL

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	Value/Status
	Vehicle stopped	0 km/h (MPH)
VEHICLE SPEED	While driving for a time after the engine starts. CAUTION: Check tire pressure in normal condition.	Almost in accordance with the speedometer display. (Within ±10%)
CIDE C CENCOD	When stopped	Approx. 0 G
SIDE G-SENSOR	At cornering	-2.0 - 2.0 G
ST ANGLE SPD	steering and holding	Approx. 0 deg/s
ST ANGLE SPD	Steering	0 – 1000 deg/s
ESTIMATED TRQ	Engine: At idle speed after warm-up Selector lever: P or N position	Approx. 4 – 20 Nm
REQUESTED TRQ	Engine: At idle speed after warm-up Selector lever: P or N position	Approx. 26 Nm
	Engine stop	0 rpm
ENGINE SPEED	Engine speed: 400 rpm or more	Almost in accordance with ta- chometer display (Within ±10%)
F G-SEN OUT VOL	When stopped	Approx. 2.23 – 2.77 V
F G-SEN OUT VOL	While driving	Approx. 0.95 – 4.2 V
R G-SEN OUT VOL	When stopped	Approx. 2.23 – 2.77 V
K G-SEN OUT VOL	While driving	Approx. 0.95 – 4.2 V
F G-SEN VOLTAGE	Always	Approx. 4.75 – 5.25 V
R G-SEN VOLTAGE	Always	Approx. 4.75 – 5.25 V
FR ACTUATOR CRNT	Vehicle stopped or R mode	0 A
TRACTORIOR CRIVI	While driving	Approx. 0 – 1.5 A
FL ACTUATOR CRNT	Vehicle stopped or R mode	0 A
I E NOTONION ONIVI	While driving	Approx. 0 – 1.5 A
RR ACTUATOR CRNT	Vehicle stopped or R mode	0 A
IN ACTUATOR CINT	While driving	Approx. 0 – 1.5 A
RL ACTUATOR CRNT	Vehicle stopped or R mode	0 A
IL NOTONI OR ORIVI	While driving	Approx. 0 – 1.5 A
BATTERY VOLT	Always	Battery voltage
MODE SW UP	UP operation	Approx. 1.34 – 2.08 – 2.79 V
	Neutral	Approx. 3.48 – 3.57 – 3.66 V
MODE SW DOWN	DOWN operation	Approx. 1.34 – 2.08 – 2.79 V
INICOL OVV DOVVIN	Neutral	Approx. 3.48 – 3.57 – 3.66 V
BRK FLD PRESS	Brake deactivated	Approx. 0 bar
DIXIX I ED I IXEOU	Brake activated	-40 - 300 bar

SCS

D

Α

В

F

G

Н

J

K

L

M

Ν

0

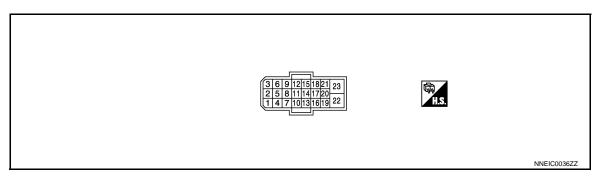
Ρ

< ECU DIAGNOSIS INFORMATION >

[Bilstein DampTronic]

Monitor item	Condition	Value/Status
STP LAMP SW	Depress the brake	On
STP LAIMP SW	Do not depress the brake	Off
ABS SIGNAL	ABS is activated	On
ADS SIGNAL	ABS is not activated	Off
FAIL MODE SIG	In fail-safe mode	On
FAIL WODE SIG	Normal	Off
R MODE LAMP	R mode	On
R MODE LAMP	Other than R mode	Off
CONF MODE LAMP	COMFORT mode	On
CONF WODE LAWP	Other than COMFORT mode	Off
IGN	Ignition switch: ON	On
IGN	Ignition switch: OFF	Off
	R mode	R
CONTROL MODE	SPORT mode	SPORT
	COMFORT mode	COMF

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. color)	Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output	Condition	value (Approx.)
1 (P)	_	CAN-L	_	_	_
2 (P)	Ground	Set-up switch (suspension) upside output voltage	Output	Set-up switch UP operation	Approx. 1.34 – 2.08 – 2.79 V
(F)		side odiput voltage		Set-up switch neutral	Approx. 3.48 – 3.57 – 3.66 V
3 (L)		CAN-H	_	_	_
4 (W)	Ground	Front vertical G sensor output voltage	Input	Ignition switch ON	Approx. 2.35 – 2.65 V
5 (BG)	_	Set-up switch (suspension) R mode lamp voltage		_	_
6 (BR)	Ground	Rear vertical G sensor output voltage	Input	Ignition switch ON	Approx. 2.35 – 2.65 V
7 (R)	Ground	Set-up switch (suspension) down-side output voltage	Output	Set-up switch DOWN operation	Approx. 1.34 – 2.08 – 2.79 V
(11)		down side output voltage		Set-up switch neutral	Approx. 3.48 – 3.57 – 3.66 V

< ECU DIAGNOSIS INFORMATION >

[Bilstein DampTronic]

Α

В

D

SCS

F

G

Н

Κ

L

M

	nal No. color)	Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output	Condition	value (Approx.)
8 (G)	Ground	Front vertical G sensor ground	_	Always	0 V
9 (LG)		Set-up switch (suspension) COM- FORT mode lamp voltage	_	_	_
10 (R)	_	Front RH shock absorber actuator LOW terminal	_	_	_
11 (G)	_	Front RH shock absorber actuator HI terminal	_	_	_
12 (L)	_	Front LH shock absorber actuator LOW terminal	_	_	_
13 (G)	Ground	Rear vertical G sensor ground	_	Always	0 V
14 (SB)	_	Rear RH shock absorber actuator LOW terminal	_	_	_
15 (R)	Ground	Front vertical G sensor power supply	Output	Ignition switch ON	Approx. 4.75 – 5.25 V
16 (BR)	_	Rear LH shock absorber actuator HI terminal	_	_	_
17 (P)	_	Front LH shock absorber actuator HI terminal	_	_	_
18 (Y)	_	Rear LH shock absorber actuator LOW terminal	_	_	_
19	0	landida a a companyo	la acet	Ignition switch: ON	Battery voltage
(R)	Ground	Ignition power supply	Input	Ignition switch: OFF	0 V
20 (V)	_	Rear RH shock absorber actuator HI terminal	_	_	_
21 (R)	Ground	Rear vertical G sensor power supply	Output	Ignition switch ON	Approx. 4.75 – 5.25 V
22 (B)	Ground	Ground	_	Always	0 V
23 (L)	Ground	E-SUS control unit power supply	Input	Always	Battery voltage

CAUTION:

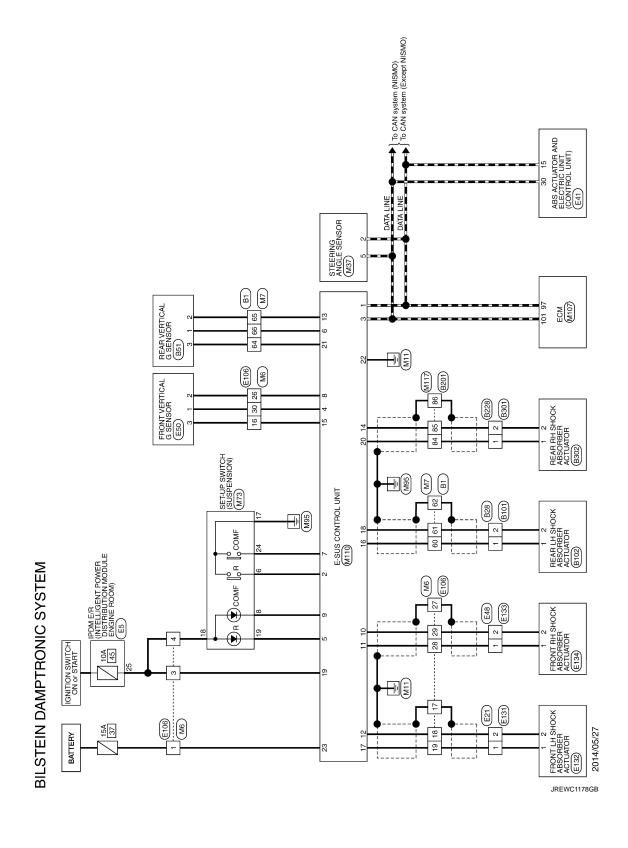
Never extend connector terminals forcibly, when checking voltage using a circuit tester for voltage inspection.

Ν

0

Wiring Diagram - Bilstein DampTronic SYSTEM - (GT-R certified NISSAN dealer)

INFOID:0000000011486130



Connector No. Bito: Connector Name Wife TO WIFE Connector Type RH02FB (12)	Terminal Color OI Signal Name (Specification)	2 B · · ·	Connector No. B102	Connector Name REAR LH SHOCK ABSORBER ACTUATOR	Connector Type HIRSCHMANN_905-242-001		(6)			Terminal Color Of Signal Name [Specification] No.	1 W HISIGNAL												
99 R	H.S.	Tarrina Cylor Oi	No. Wire Signal Name [Specification]	2 Y	Connector No. B51	Connector Name REAR VERTICAL G SENSOR	Connector Type AAZ03FB1-S		H.S.	1 5		Terminal Color Of Signal Name [Specification]	BR		-								
					- [Without active noise control unit] - [With active noise control unit]					- [Without active noise control unit] - [With active noise control unit]	[With active noise control unit] [Without active noise control unit]		- [Without active noise control unit]	- [With active noise control unit]							•	ı	
SHELD SB	SHELD Y BR R	ar 0 8	B G	SHIELD	SHIELD	SB R	SB	> 0	rσ	E o	œ >-	SHIELD	> B	> -	۵.	SHIELD	> 8	88	GB	BG	>	> !	p]
50 51 52 53 54 54 55 56 57 58	8 8 6 8	65 64	69 67	70	72	73	77	62	8 8	82 83	8 8	88	8 8	86	8	88	8	93	8	92	96	97	8
BILSTEIN DAMPTRONIC SYSTEM Connector No. Bit Connector Name Wife TO Wife Connector Type THEOPHY CS16-TM4	Vame (Speci																				•		
Connector Name Connector Type	Color Of Wire	- 4 >	× ×	> ac	≻ a	BG	BB B	> 6	GR BR	SB	9 S	_ (η R	8 6	5 -	>	g (9 9	>	SB	۵	æ	m
BILSTE Connector Na. Connector Typ	Terminal No.	0 8 0	0 1 0	e 6	12	13	15	12	2 2	22	23	52	27	58	32	33	충용	8 4	14	42	43	47	84

JREWC1594GB

Revision: 2015 June SCS-49 GT-R

Α

В

С

D

SCS

G

F

Н

K

L

M

Ν

 \cup

BLS	STEIN	BILSTEIN DAMPTRONIC SYSTEM	ŀ		_			
Connector No.	for No.	B201	+	Connector No.	B302	Connector No.	o. E21	
Connec	Connector Name	WIRE TO WIRE	99 BR .	Connector Name	REAR RH SHOCK ABSORBER ACTUATOR	Connector N	Connector Name WIRE TO WIRE	
Connect	Connector Type	TH80FW-CS16-TM4	-	Connector Type	П	Connector T	Connector Type RH02MB	
Q.		rH.		1		ą.		
事		0 5 0 0	Connector Name WIRE TO WIRE	多		S F		
	_	2 0 5	Opposed to the District Time D	2	(6)	2		
Terminal	Color Of	Signal Name [Specification]	H.S.	Terminal Color Of	Of Signal Name [Specification]	Terminal Color Of	Solor Of Signal Name [Specification]	
ی	c			t	ENGINE II	t		
_	>			- Z		2		
80	BG							
σ :	≥ (la I					
၉	œ:		No. Wire	Connector No.	E5	Connector No.	o. E41	
E 8	> 9		> 5	Connector Name	PDM ER (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	
32 82	2 8		1	Connector Type	THOOFW.CS12.M4.1V	Toppedor T	Connector Tune AF243EB. A 174	
8 8	-			ON INCIDENT			ype meetal proset	
40	٦ ۵		Connector No B301	40		Œ		
5 14	99			Ŧ.		手	20 20 30 30 30 30 30 30 30 30 30 30 30 30 30	
45	>		Connector Name WIRE TO WIRE	8	10/11/12/13 28 27/28 30 32/33	2	20 00 10 00 00 00	
43	>		Connector Type RH02FB		4 5 6 7 14 38		E	
44	۸		Ġ					
45	M							
51	SB		K					
25	G			la la	Of Signal Name [Specification]	nal	Color Of Signal Name [Specification]	
23	BB		((1 2))	No. Wire		o N		
ξ,	>		9)	4		-		
9	r			2		2		
19	1.			۸ 9		m	VDC	
29 8	١,		Signal Name [Specification]	+		4 (W BLS	
20	2 5		+	2 3		٥ ;	S VIDCUP SW	
\$ 8	5 0		M a	+	,	- 4		
8 6	-		+	$^{+}$		2 4		
2 2	ء ا			2 9		2 8		
- 6	-			+		07 60	100	
8 2	3			+		$^{+}$		
<u></u> ε	g ;			+		+	70 07	
28 5	> 6			+		S 5		
3 3	<u>م</u>			30 GH	-	8 8	BG UBVR	
6	- 6			32 00		3 3	1	
8 8	SHE D			- S		¥ %	V VDC TOP POSITION FD	
87	3			+		8 %		
98	>					3 28	+	
3	-					ò		

JREWC1595GB

Α

В

С

D

SCS

F

G

Н

Κ

L

M

Ν

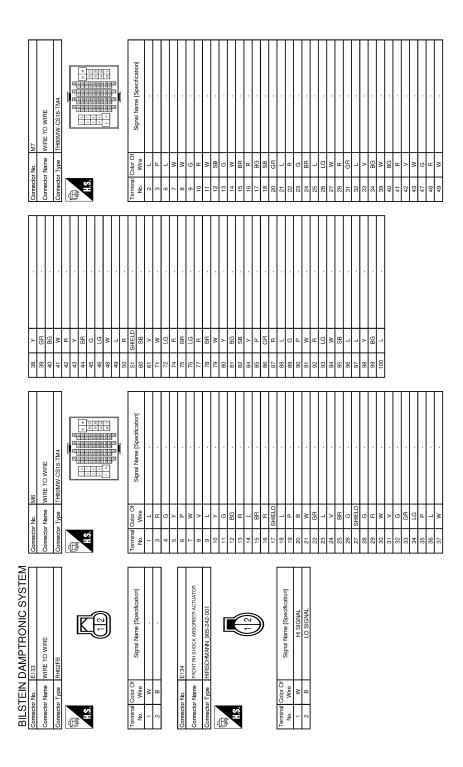
0

Ρ

- N	_	Connector Name WIRE TO WIRE	Connector Type RH02FB	4		K		((1 2))	9)			hal Color Of	No. Wire Signal Name [Specification]		S 8	ł		Connector No. E132		Connector Name FRONT LH SHOCK ABSORBER ACTUATOR	Connector Type HIRSCHMANN 905-242-001				Cen Cen	((1 2)))		Signal Name [Specification]	A ANII A	s a																			
					•	i		•		•					,				ı		,			•		•								,		,					-										
5	8 8	5 0	>	^	٦	BR	g	SB	BG	٦	н	SHIELD	۵	7	9	SB	۵	BB	9	>	BB	>	\	GR	BG	۵	۵.	GR	œ .	_ {	2 0	5 8	<u> </u>		ρŢ	g	GR	7	ÐΠ	BG	٦										
8	8 8	8 04	41	42	43	44	45	46	48	49	20	51	09	19	7	72	74	72	76	77	78	79	80	81	82	8	92	88	87	88 8	88	90	6	88	95	32	96	46	86	66	100										
1400	$\overline{}$	Name WIRE TO WIRE	Type TH80FW-CS16-TM4				X (4) (4) (4) (4) (4) (4) (4) (4	20 00 00 00 00 00 00 00 00 00 00 00 00 0	0 2 0 0 8 9 9 9 0 0 0 0 8 8				Wire Signal Name [Specification]	^	BG	Bg			. BG		. ·		SB .	BG .		- 1	SB	BG .	SHELD							BB.		SHIELD .	. 9			۸ .		GR .	Р .	LG .	. 9				
	1000000	Connector Name	Connector Type		F	Ę	2					Terminal C	ġ	-	9	4	15	9	7	8	6	10	11	12	13	14	15	┑	Т	8 9	e 6	3 5	2 8	8	24	52	56		28	53	30	31	32	33	34	35	36	37	;		
-]≅	Τ	DS RR					GROUND			E48	DOLLAR OF HOUSE	WIRE IO WIRE	RH02MB)		Constitution Of second			,			E50	FRONT VERTICAL G SENSOR	0 100000	AAZU3FB1-S	ָר ֓֓֩֩֩				-)	Signal Namo (Specification)		SENSOR SIG	SENSOR-	SENSOR+						IJ		
		>	LG	SB	W	ж	В			Connector No.	Commontor Nome	Tor Ivame	Connector Type									Terminal Color Of	Wire	G	œ			Connector No.	Connector Name	- 1	Connector Type								II Color Of	Wire	W	L	BG								
2],	g	2 2	43	44	45	46	47			mect		IJeCI	lec			4	15					mina	o.	-	2			ğ	ect	- 13	ĕ	1		1.5.					Terminal	o.	-	2	8								

JREWC1596GB

Revision: 2015 June SCS-51 GT-R



JREWC1597GB

	Connector No. M110	Connector Name E-SUS CONTROL UNIT	Т	Connector Type FEC21FB-FHC2	4	ŀ	[3 6 9 12 15 18 21 23	0 5 8 11 14 17 90	-	[1 4 7 10 13 16 19 22]		펻	n		2 P R MODE SW SIG	3 L CAN-H	4 W FRONT G SENSOR SIG	5 BG R MODE LAMP SIG	6 BR REARG SENSOR SIG	7 R COMF MODE SW SIG	8 G FRONT G SENSOR-	9 LG COMF MODE LAMP SIG	10 R FR SHOCK ABSORBER ACTUATOR LOW SIG	11 G FR SHOCK ABSORBER ACTUATOR HI SIG	12 L FL SHOCK ABSORBER ACTUATOR LOW SIG	9	14 SB RR SHOCK ABSORBER ACTUATOR LOW SIG	15 R FRONT G SENSOR+	16 BR RL SHOCK ABSORBER ACTUATOR HI SIG	۵.	Y RL SHOCK ABSORB	œ	V RR SHOCK	R REAR	8	23 L BAT												
-	24 R E-SUS COMF MODE SW SIG			Connector No. M107	Connector Name ECM	Т	Connector Type RH24FGY-RZ8-R-LH-Z			[128 124 129 108 104 100		66 011 VIII III V21	201 001 011 611 011 721 021			-	a a	No. Wire	97 P CAN COMMUNICATION LINE	99 SB SENSOR POWER SUPPLY	100 BR SENSOR POWER SUPPLY	101 L CAN COMMUNICATION LINE	102 G ASCD STEERING SWITCH	103 GR SENSOR GROUND	104 P ACCELERATOR PEDAL POSITION SENSOR 1	105 W ECM RELAY (SELF SHUT-OFF)	106 LG IGNITION SWITCH	BG	108 L ACCELERATOR PEDAL POSITION SENSOR 2	7	STC	GR	SB	>	œ	W POWER SUP	HH HH	: ۵	V POWE	n .		G IHROILE	128 B ECM GROUND							
	Connector No. M37	Connector Name STEERING ANGLE SENSOR		Connector Type TH08FW-NH						ıc				<u>a</u>	0	GROUND		4 BG IGN	5 L CAN-H			Connector No. M73	OTIVO GI FLO	COLLECTOL MATTER SET-OF SWITCH	Connector Type TK24FW-1V				1 2 3 4 5 6 8 10 11	12 13 16 17 18 19 23 24				멸	No. Wire	+	æ	W VBCTO	> .		a <u>c</u>	E E		W R MOD	12 GR VDC DN SW	13 G HAZARD SW	16 R MODE LAMP SIGNAL	17 B SW GND		0.0 0.0 0.0 0.0 0.0
BILSTEIN DAMPTRONIC SYSTEM																						- [Without active noise control unit]	- [With active noise control unit]								 [Without active noise control unit] 	 [With active noise control unit] 	- [With active noise control unit]	- [Without active noise control unit]			 [Without active noise control unit] 	- [With active noise control unit]												
BILSTEIN	έ	+	97. B	+	+	4	57 G	58 G	H	F	$^{+}$	T	ח	4	-	\dashv	66 BR	67 BG	e9 b	70 L	71 SHIELD	72 SHIELD	72 V	73 LG			-	H	80 R	Н		82 G	83	T	84 SHELD	+	98	+	+	Т	Se SHIELD	+	92 LG	\dashv	\dashv	95 R	. ∀ 96	97 R	98 G	

JREWC1598GB

Revision: 2015 June SCS-53 GT-R

Α

В

С

D

SCS

F

G

Н

ī

J

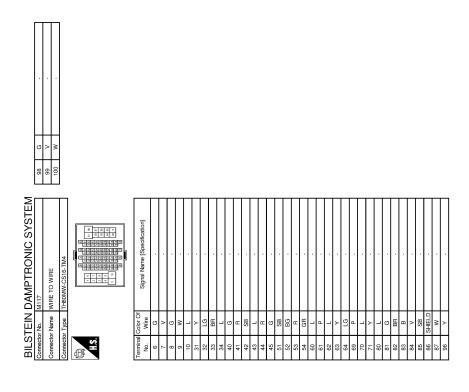
Κ

L

M

Ν

 \circ



JREWC1599GB

Fail-safe (GT-R certified NISSAN dealer)

INFOID:0000000011486131

Bilstein DampTronic system

- When detecting any malfunction in each component of the system, it enters the fail-safe status (the Bilstein DampTronic system control is deactivated).
- At the same time when the system enters the control stop status, it becomes the equivalent status to R mode (fixed damping status).

< ECU DIAGNOSIS INFORMATION >

[Bilstein DampTronic]

• Even if the set-up switch (suspension) is operated in the fail-safe status, no lamp illuminates in R mode or COMFORT mode.

DTC Inspection Priority Chart (GT-R certified NISSAN dealer)

NFOID:0000000011486132

When multiple DTCs are detected simultaneously, check one by one depending on the following priority list.

Priority	Priority order item (DTC)
1	U1000 CAN COMM CIRCUIT U1010 CONTROL UNIT (CAN)
2	Other than the above

DTC Index

DTC	Display Items	Reference
C1D01	VEHICLE SPEED SIG	SCS-13, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D02	SIDE G-SENSOR SIG	SCS-14, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D03	ST ANGLE SPEED SIG	SCS-16, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D04	ESTIMATE TRQ SIG	SCS-17, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D05	REQST TRQ SIG	SCS-17, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D06	ENG SPEED SIG	SCS-18, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D07	STOP LAMP SW SIG	SCS-19, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D08	ABS SIGNAL	SCS-20, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D09	BRK FLD PRESS SIG	SCS-21, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D10	F VERTICAL G-SEN	SCS-22, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D11	R VERTICAL G-SEN	SCS-24, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D12	FR ACTUATOR SIG	SCS-26, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D13	FL ACTUATOR SIG	SCS-28, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D14	RR ACTUATOR SIG	SCS-30, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D15	RL ACTUATOR SIG	SCS-32, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D16	CONTROL UNIT	SCS-34, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D17	BATTERY VOLT	SCS-35, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D19	MODE SW UP	SCS-37, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D20	MODE SW DOWN	SCS-37, "DTC Logic (GT-R certi- fied NISSAN dealer)"

SCS

Α

В

C

D

G

Н

.

K

L

/|

Ν

0

Ρ

< ECU DIAGNOSIS INFORMATION >

[Bilstein DampTronic]

DTC	Display Items	Reference
C1D21	R MODE LAMP	SCS-39, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D22	COMF MODE LAMP	SCS-39, "DTC Logic (GT-R certi- fied NISSAN dealer)"
C1D23	C/U REPRO ERROR	SCS-41, "DTC Logic (GT-R certi- fied NISSAN dealer)"
U1000	CAN COMM CIRCUIT	SCS-42, "DTC Logic (GT-R certi- fied NISSAN dealer)"
U1010	CONTROL UNIT (CAN)	SCS-43, "DTC Logic (GT-R certi- fied NISSAN dealer)"

E-SUS MODE LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

[Bilstein DampTronic]

INFOID:0000000011486134

INFOID:0000000011486135

SYMPTOM DIAGNOSIS

E-SUS MODE LAMP DOES NOT TURN ON

Description (GT-R certified NISSAN dealer)

No mode lamp illuminates when the set-up switch (suspension) is switched to "R mode"or "COMFORT mode".

Diagnosis Procedure (GT-R certified NISSAN dealer)

1. CHECK SET-UP SWITCH (SUSPENSION) MODE LAMP POWER SUPPLY

- Turn the ignition switch OFF.
- Remove the set-up switch (suspension).
- Check the voltage between the set-up switch (suspension) connector terminals.

Set-up switch (suspension)	_	Measuring condi- tion	Voltage			
Terminal		HOH				
		Ignition switch: ON	Battery voltage			
18	Ground	Ignition switch: OFF	Approx. 0 V			

Is the inspection result normal?

YES >> GO TO 2.

NO

- >> Check the following items, and repair or replace the malfunctioning parts.
 - Open circuit in 10 A fuse (#45)
 - Short circuit between the 10 A fuse (#45) connector and set-up switch (suspension) harness connector terminal 18
 - Open circuit between the ignition switch and set-up switch (suspension) harness connector terminal 18
 - · Battery or ignition switch

2.check set-up switch (suspension) circuit

- Disconnect the E-SUS control unit harness connector.
- Check the continuity between the E-SUS control unit connector and set-up switch (suspension) harness connector.

E-	SUS c	ontrol unit	Set-up switch	n (suspension)	Continuity
Conne	ector	Terminal	Connector	Terminal	Continuity
M1	10	5	M73	19	Existed
	10	9	IVITO	8	LABIEU

Check the continuity between the E-SUS control unit harness connector and ground.

E-SUS c	ontrol unit		Continuity				
 Connector	Terminal	_	Continuity				
 M110	5	Ground	Not existed				
WITTO	9	Ground	Not existed				

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

3.PERFORM ACTIVE TEST

(P)With CONSULT

- Connect the E-SUS control unit harness connector.
- Connect the set-up switch (suspension) connector.

SCS

D

Α

K

L

N

E-SUS MODE LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

[Bilstein DampTronic]

- 3. Select "MODE LAMP" in "ACTIVE TEST".
- 4. On the display, touch "ON" or "OFF", and check that the system operates as shown in the table below.

		Display Item			
Test item	Display Item	Illuminat	ion status		
		ON	OFF		
MODE LAMP	R	ON	OFF		
	COMF	JIV	011		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace the set-up switch (suspension).

4. PERFORM SELF-DIAGNOSIS

(P)With CONSULT

1. Perform "E-SUS" self-diagnosis.

Is DTC "D1D21" or "D1D22"detected?

YES >> Go to SCS-55, "DTC Index".

NO >> GO TO 5.

5. CHECK INFORMATION

Check the information and malfunction history of "DATA MONITOR" for each DTC. Refer to <u>SCS-45</u>, "Reference Value (GT-R certified NISSAN dealer)".

Is each data within standard values?

YES >> Check pin terminal and connection of each harness connector for damage or loose connection.

NO >> Replace E-SUS control unit. Refer to SCS-61, "Exploded View (GT-R certified NISSAN dealer)".

PRECAUTION

PRECAUTIONS

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

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, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "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, and wait at least 3 minutes before performing any service.

Precaution for Battery Service

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

Precautions for Removing Battery Terminal

 When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

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.

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.

BATTERY

SCS

D

Α

В

Н

K

INFOID:0000000011486137

INFOID:0000000011486138

M

Ν

 \cap

General Precautions

INFOID:0000000011486139

CAUTION:

After finishing servicing, check that all the tools and waste are stored in a customary place.

Precautions for Terminology

INFOID:0000000011486140

The Bilstein DampTronic is the trademark owned by ThyssenKrupp Bilstein Suspension GmbH, Germany.

Precautions for Diagnosis

INFOID:0000000011486141

- In the Bilstein DampTronic system, when CONSULT active test is performed, a DTC may be detected, therefore always erase the malfunction history after the operation is completed.
- In the Bilstein DampTronic system, because it is difficult to distinguish a sensor malfunction from normal operation when the vehicle turns sharply such as spin turning, turning while accelerating, or drift driving, or when CONSULT is connected to the vehicle, the vehicle enters the fail-safe status and a DTC is stored once. If the normal operation is restored later, it is not a malfunction. At that time, erase the self-diagnosis memory. Perform "Diagnosis Procedure" SCS-4. "Work Flow (GT-R certified NISSAN dealer)" if the normal condition is not restored.
- When disconnecting the harness connector from E-SUS control unit, disconnect it only after checking that the lock lever on the harness connector is opened.

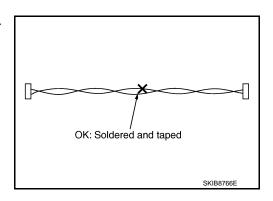
Precautions for Harness Repair

INFOID:0000000011486142

COMMUNICATION LINE

Solder the repaired area and wrap tape around the soldered area.
 NOTE:

A fray of twisted lines must be within 110 mm (4.33 in).

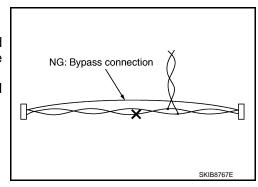


• Bypass connection is never allowed at the repaired area.

NOTE:

Bypass connection may cause communication error as spliced wires that are separate from the main line or twisted lines lose noise immunity.

 Replace the applicable harness as an assembly if error is detected on the shield lines of communication line.



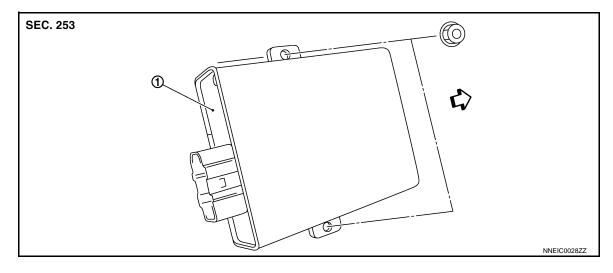
[Bilstein DampTronic]

INFOID:0000000011486143

REMOVAL AND INSTALLATION

E-SUS CONTROL UNIT

Exploded View (GT-R certified NISSAN dealer)



1. E-SUS control unit

∀
 : Vehicle front

Removal and Installation (GT-R certified NISSAN dealer)

REMOVAL

- Turn the ignition switch OFF.
- Remove instrument lower cover. Refer to IP-12, "Exploded View".
- Remove the glove box assembly. Refer to <u>IP-12, "Exploded View"</u>.
- 4. Remove instrument lower panel (assist). Refer to IP-12, "Exploded View".
- 5. Remove the ECM.
- Disconnect the E-SUS control unit connector.

CAUTION:

Always open the lock lever on the harness connector before disconnecting it.

- 7. Remove the E-SUS control unit mounting nuts.
- 8. Remove E-SUS control unit.

INSTALLATION

Install in the reverse order of removal.

SCS

D

Α

В

Н

K

L

M

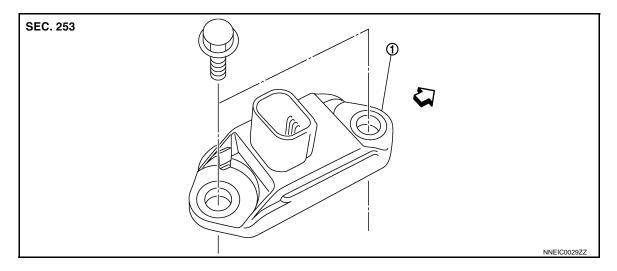
INFOID:0000000011486144

Ν

FRONT VERTICAL G SENSOR

Exploded View (GT-R certified NISSAN dealer)

INFOID:0000000011486145



1. Front vertical G sensor

: Vehicle front

Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011486146

REMOVAL

CAUTION:

Never drop or strike front vertical G sensor, or do not use power tool etc., because front vertical G sensor is sensitive to the impact.

- 1. Turn the ignition switch OFF.
- 2. Remove the hood ledge cover RH. Refer to EXT-28, "Exploded View".
- 3. Disconnect the front vertical G sensor connector.
- 4. Remove the front vertical G sensor mounting bolts.
- Remove the front vertical G sensor.

INSTALLATION

Install in the reverse order of removal.

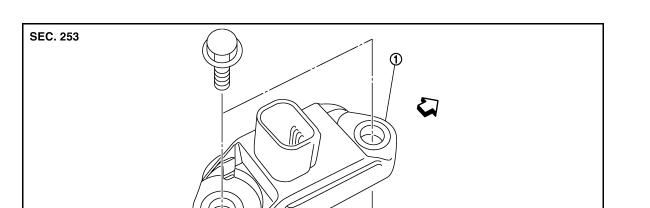
CAUTION:

Never drop or strike front vertical G sensor, or do not use power tool etc., because front vertical G sensor is sensitive to the impact.

INFOID:0000000011486147

REAR VERTICAL G SENSOR

Exploded View (GT-R certified NISSAN dealer)



1. Rear vertical G sensor

: Vehicle front

Removal and Installation (GT-R certified NISSAN dealer)

REMOVAL

CAUTION:

Never drop or strike rear vertical G sensor, or do not use power tool etc., because rear vertical G sensor is sensitive to the impact.

- 1. Turn the ignition switch OFF.
- Remove the trunk side finisher lower LH. Refer to <u>INT-27</u>, "Exploded View".
- 3. Disconnect the rear vertical G sensor connector.
- 4. Remove the rear vertical G sensor mounting bolts.
- Remove the rear vertical G sensor.

INSTALLATION

Installation is the reverse order of removal.

CAUTION:

Never drop or strike rear vertical G sensor, or do not use power tool etc., because rear vertical G sensor is sensitive to the impact.

SCS

D

Α

В

Н

INFOID:0000000011486148

L

Ν

SHOCK ABSORBER ACTUATOR

< REMOVAL AND INSTALLATION >

[Bilstein DampTronic]

SHOCK ABSORBER ACTUATOR

Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011486149

Refer to <u>FSU-15</u>, "<u>Exploded View</u>" (front shock absorber), <u>RSU-14</u>, "<u>Exploded View</u>" (rear shock absorber) for removal and installation.

CAUTION:

Never disassemble the shock absorber because the shock absorber actuator is integrated into the shock absorber.