Е

D

Е

CONTENTS

REGULAR GRADE	Wheels & Tires26 F
HOW TO USE THIS MANUAL3	PRECAUTION28
HOW TO USE THIS MANUAL 3 Description 3 Terms 3 Units 3 Contents 3	PRECAUTIONS
Relation between Illustrations and Descriptions4 Components4 HOW TO FOLLOW TROUBLE DIAGNOSES6	Precautions For Xenon Headlamp Service28 Precautions Necessary for Steering Wheel Rotation After Battery Disconnection
Description6 How to Follow Test Groups in Trouble Diagnosis6 Key to Symbols Signifying Measurements or Pro-	Precaution for Battery Service
The connector Symbols	Cautions in Removing Battery Terminal and AV Control Unit (Models with AV Control Unit)
ABBREVIATIONS14 Abbreviation List14	Hoses
TIGHTENING TORQUE OF STANDARD BOLTS	Fuel
RECOMMENDED CHEMICAL PRODUCTS AND SEALANTS22 Recommended Chemical Products and Sealants22	TOW TRUCK TOWING37 Tow Truck Towing37 Vehicle Recovery (Freeing a Stuck Vehicle)37
VEHICLE INFORMATION23	BASIC INSPECTION39
IDENTIFICATION INFORMATION23Model Variation23Information About Identification or Model Code24Dimensions26	SERVICE INFORMATION FOR ELECTRICAL INCIDENT

How to Check Terminal 40	SPEC CHANGE INFORMATION	58
Intermittent Incident43		
Circuit Inspection46	IDENTIFICATION INFORMATION	58
	Model Variation	58
CONSULT-III/GST CHECKING SYSTEM 51		
Description51	DIMENSIONS AND WEIGHTS	59
CONSULT-III Function and System Application*1 51	Dimensions and Weights	59
CONSULT-III/GST Data Link Connector (DLC)		
Circuit 52	PRECAUTION	60
Wiring Diagram - CONSULT-III/GST CHECKING	LIFTING POINT	60
SYSTEM 53		
	Lifting Point	60
INSPECTION AND ADJUSTMENT57	TOW TRUCK TOWING	61
ADDITIONAL SERVICE WHEN REMOVING BAT-	Tow Truck Towing	61
TERY NEGATIVE TERMINAL57	Vehicle Recovery (Freeing a Stuck Vehicle)	
ADDITIONAL SERVICE WHEN REMOVING	DACK DOOD	
BATTERY NEGATIVE TERMINAL: Required	BACK DOOR	
Procedure After Battery Disconnection 57	Opening and Closing Back Door	63
Nismo 370Z		

HOW TO USE THIS MANUAL

HOW TO USE THIS MANUAL

Description INFOID:0000000006352879

This volume explains "Removal, Disassembly, Installation, Inspection and Adjustment" and "Trouble Diagnoses".

Terms INFOID:0000000006352880

 The captions WARNING and CAUTION warn you of steps that must be followed to prevent personal injury and/or damage to some part of the vehicle.

WARNING indicates the possibility of personal injury if instructions are not followed.

CAUTION indicates the possibility of component damage if instructions are not followed.

BOLD TYPED STATEMENTS except **WARNING** and **CAUTION** give you helpful information.

Standard value: Tolerance at inspection and adjustment.

Limit value: The maximum or minimum limit value that should not be exceeded at inspection and adjustment.

Units INFOID:0000000006352881

 The UNITS given in this manual are primarily expressed as the SI UNIT (International System of Unit), and alternatively expressed in the metric system and in the yard/pound system.

Also with regard to tightening torque of bolts and nuts, there are descriptions both about range and about the standard tightening torque.

"Example"

Range

Outer Socket Lock Nut : 59 - 78 N·m (6.0 - 8.0 kg-m, 43 - 58 ft-lb)

Standard

Drive Shaft Installation Bolt : 44.3 N-m (4.5 kg-m, 33 ft-lb)

Contents INFOID:0000000006352882

• A QUICK REFERENCE INDEX, a black tab (e.g. ER) is provided on the first page. You can quickly find the first page of each section by matching it to the section's black tab.

- THE CONTENTS are listed on the first page of each section.
- THE TITLE is indicated on the upper portion of each page and shows the part or system.
- THE PAGE NUMBER of each section consists of two or three letters which designate the particular section and a number (e.g. "BR-5").
- THE SMALL ILLUSTRATIONS show the important steps such as inspection, use of special tools, knacks of work and hidden or tricky steps which are not shown in the previous large illustrations. Assembly, inspection and adjustment procedures for the complicated units such as the automatic transaxle

or transmission, etc. are presented in a step-by-step format where necessary.

GI-3 Revision: 2011 October 2011 370Z

GΙ

D

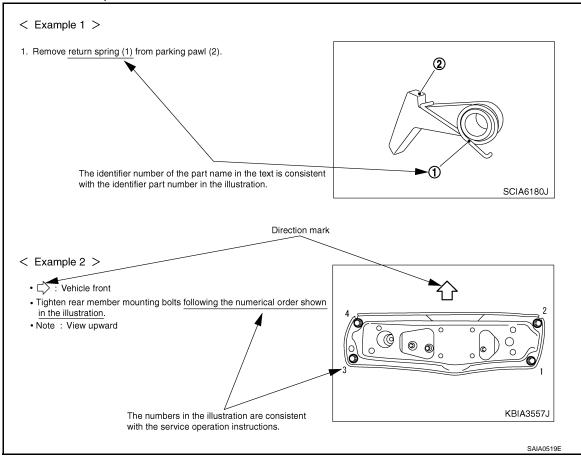
Е

Н

Relation between Illustrations and Descriptions

INFOID:0000000006352883

The following sample explains the relationship between the part description in an illustration, the part name in the text and the service procedures.

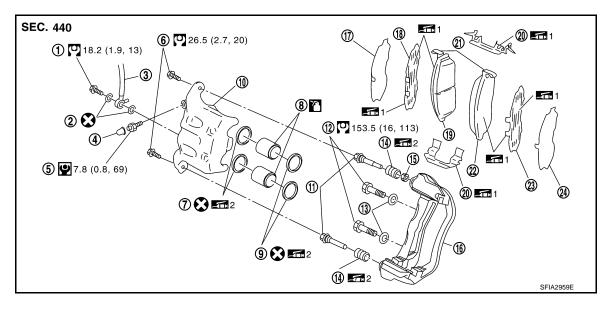


Components

THE LARGE ILLUSTRATIONS are exploded views (see the following) and contain tightening torques, lubrication points, section number of the PARTS CATALOG (e.g. SEC. 440) and other information necessary to perform repairs.

The illustrations should be used in reference to service matters only. When ordering parts, refer to the appropriate **PARTS CATALOG**.

Components shown in an illustration may be identified by a circled number. When this style of illustration is used, the text description of the components will follow the illustration.



- 1. Union bolt
- 4. Cap
- Piston seal 7.
- 10. Cylinder body
- Washer 13.
- 16. Torque member
- 19. Inner pad
- 22. Outer pad
- 1: PBC (Poly Butyl Cuprysil) grease 2: Rubber grease or silicone-based grease

- 2. Copper washer
- 5. Bleed valve
- Piston 8.
- 11. Sliding pin
- Sliding pin boot 14.
- Inner shim cover 17.
- Pad retainer 20.
- 23. Outer shim

- 3. Brake hose
- 6. Sliding pin bolt
- 9. Piston boot
- 12. Torque member mounting bolt
- 15. Bushing
- 18. Inner shim
- 21. Pad wear sensor
- Outer shim cover

: Brake fluid

Refer to GI section for additional symbol definitions.

SYMBOLS

SYMBOL	DESCRIPTIO	N	SYMBOL	DESCRIPTION
Ø	Tightening torque The tightening torque specifications of bolts and nuts may be presented	: N•m (kg-m, ft-lb)	3	Always replace after every disassembly.
•		P : N•m (kg-m, in-lb)	 P	Apply petroleum jelly.
5	Should be lubricated with grease. Un indicated, use recommended multi-p			Apply molybdenum added petroleum jelly.
7	Should be lubricated with oil.		ATF	Apply ATF.
	Sealing point		*	Select with proper thickness.
	Sealing point with locking sealant.		☆	Adjustment is required.
	Checking point			

SAIA0749E

GI

В

C

D

Е

F

Н

K

L

M

Ν

0

[REGULAR GRADE]

HOW TO FOLLOW TROUBLE DIAGNOSES

Description

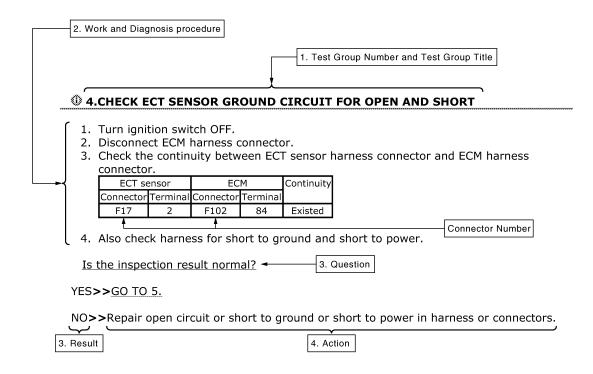
NOTICE:

Trouble diagnoses indicate work procedures required to diagnose problems effectively. Observe the following instructions before diagnosing.

- Before performing trouble diagnoses, read the "Work Flow" in each section.
- After repairs, re-check that the problem has been completely eliminated.
- Refer to Component Parts and Harness Connector Location for the Systems described in each section for identification/location of components and harness connectors.
- · When checking circuit continuity, ignition switch should be OFF.
- Refer to the Circuit Diagram for quick pinpoint check.
 - If you need to check circuit continuity between harness connectors in more detail, such as when a sub-harness is used, refer to Wiring Diagram in each individual section and Harness Layout in PG section for identification of harness connectors.
- Before checking voltage at connectors, check battery voltage.
- After accomplishing the Diagnosis Procedures and Electrical Components Inspection, check that all harness connectors are reconnected as they were.

How to Follow Test Groups in Trouble Diagnosis

INFOID:0000000006352886



JPAIA0021GB

- 1. Test group number and test group title
 - Test group number and test group title are shown in the upper portion of each test group.
- Work and diagnosis procedure
 - Start to diagnose a problem using procedures indicated in enclosed test groups.
- 3. Questions and results
 - Questions and required results are indicated in test group.
- 4. Action
 - Next action for each test group is indicated based on result of each guestion.

HOW TO FOLLOW TROUBLE DIAGNOSES

< HOW TO USE THIS MANUAL >

[REGULAR GRADE]

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
€ ₽	Check after disconnecting the connector to be measured.	(a)	Procedure with Generic Scan Tool. (GST, OBD-II scan tool)
€	Check after connecting the connector to be measured.	TOOLS	Procedure without CONSULT-II, CONSULT-III or GST
	Insert key into ignition switch.	A/C OFF	A/C switch is "OFF".
	Remove key from ignition switch.	A/C ON	A/C switch is "ON".
	Insert and remove key repeatedly.		REC switch is "ON".
	Turn ignition switch to "OFF" position.		REC switch is "OFF".
	Turn ignition switch to "ACC" position.		Fan switch is "ON". (At any position except for "OFF" position)
	Turn ignition switch to "ON" position.		Fan switch is "OFF".
C	Turn ignition switch to "START" position.	FUSE	Apply fuse.
CF ACC	Turn ignition switch from "OFF" to "ACC" position.	(FUSE)	
CACO ON	Turn ignition switch from "ACC" to "ON" position.	BAT	Apply positive voltage from battery with fuse directly to components.
	Turn ignition switch from "ACC" to "OFF" position.]'	

JPAIA0397GB

F G H

GI

В

С

D

Κ

J

L

M

Ν

0

HOW TO FOLLOW TROUBLE DIAGNOSES

[REGULAR GRADE]

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
OFF ON	Turn ignition switch from "OFF" to "ON" position.	= 6	Drive vehicle.
OFF	Turn ignition switch from "ON" to "OFF" position.		Brive verilide.
	Do not start engine, or check with engine stopped.	BAT	Disconnect battery negative cable.
	Start engine, or check with engine running.		Depress brake pedal.
	Apply parking brake.		Release brake pedal.
	Release parking brake.		Depress accelerator pedal.
СДРН	Check after engine is warmed up sufficiently.		Release accelerator pedal.
V ⊕ ⊖	Voltage should be measured with a voltmeter.	HS.	Pin terminal check for SMJ type ECM or TCM connectors. For details regarding the terminal
Ω • • • •	Circuit resistance should be measured with an ohmmeter.		arrangement, refer to the "ELECTRICAL UNITS" electrical reference page at the end of the manual.
A ⊕ ⊖	Current should be measured with an ammeter.		
₩ Θ	Pulse signal should be checked with an oscilloscope.	<u>÷</u>	
	Procedure with CONSULT-III		
	Procedure without CONSULT-III		
	Place selector lever in "P" position.		
0	Place selector lever in "N" position.		
	Jack up front portion.		
a de la constantina della cons	Jack up rear portion.		
	Inspect under engine room.		
	Inspect under floor.		
6	Inspect rear under floor.		

JPAIA0398GB

INFOID:0000000006352888

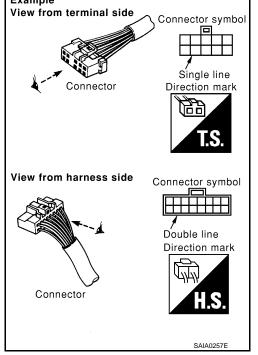
HOW TO READ WIRING DIAGRAMS

Connector Symbols

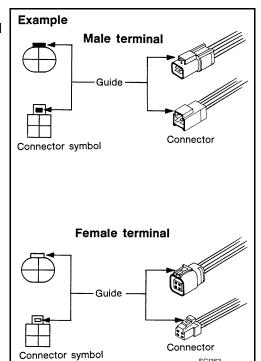
Most of connector symbols in wiring diagrams are shown from the terminal side.

- Connector symbols shown from the terminal side are enclosed by a single line and followed by the direction mark.

 Example
 View from
- Connector symbols shown from the harness side are enclosed by a double line and followed by the direction mark.
- Certain systems and components, especially those related to OBD, may use a new style slide-locking type harness connector.
 For description and how to disconnect, refer to PG section, "Description", "HARNESS CONNECTOR".



Male and female terminals
 Connector guides for male terminals are shown in black and female terminals in white in wiring diagrams.



Revision: 2011 October **GI-9** 2011 370Z

GI

В

D

Е

F

G

Н

J

K

L

M

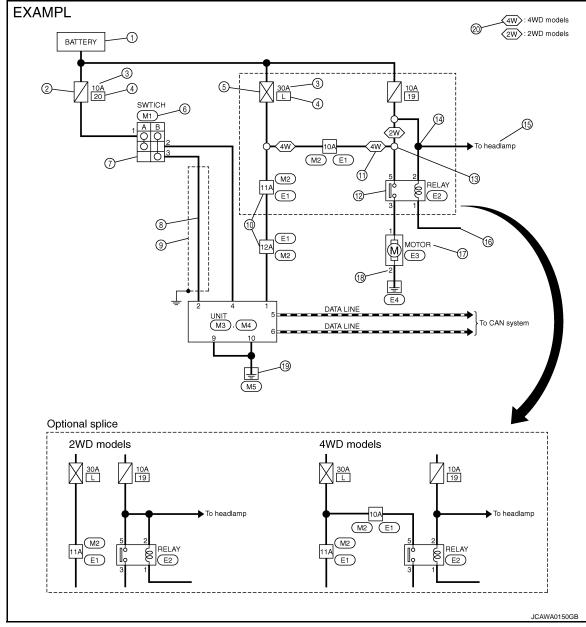
Ν

0

Sample/Wiring Diagram - Example-

INFOID:0000000006352889

Each section includes wiring diagrams.



escription			
Number	Item	Description	
1	Power supply	This means the power supply of fusible link or fuse.	
2	Fuse	"/" means the fuse.	
3	Current rating of fusible link/fuse	This means the current rating of the fusible link or fuse.	
4	Number of fusible link/ fuse	This means the number of fusible link or fuse location.	
5	Fusible link	"X" means the fusible link.	
6	Connector number	 Alphabetic characters show to which harness the connector is placed. Numeric characters show the identification number of connectors. 	
7	Switch	This shows that continuity exists between terminals 1 and 2 when the switch is in the A position. Continuity exists between terminals 1 and 3 when the switch is in the B position.	
8 Circuit (Wiring) • This means the wiring.		This means the wiring.	

HOW TO READ WIRING DIAGRAMS

< HOW TO USE THIS MANUAL >

[REGULAR GRADE]

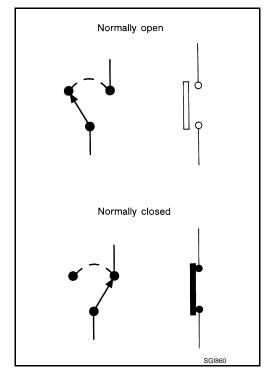
Number	Item	Description	
9	Shielded line	The line enclosed by broken line circle shows shield wire.	— Gl
10	Connectors	This means that a transmission line bypasses two connectors or more.	
11	Option abbreviation	This means the vehicle specifications which layouts the circuit between "O".	В
12	Relay	This shows an internal representation of the relay.	
13	Optional splice	The open circle shows that the splice is optional depending on vehicle application.	
14	Splice	The shaded circle " means the splice.	
15	System branch	This shows that the circuit is branched to other systems.	
16	Page crossing	This circuit continues to an adjacent page.	D
17	Component name	This shows the name of a component.	
18	Terminal number	This means the terminal number of a connector.	
19	Ground (GND)	This shows the ground connection.	
20	Explation of option description	This shows a explanation of the option abbreviation used on the same page.	

SWITCH POSITIONS

Switches are shown in wiring diagrams as if the vehicle is in the "normal" condition.

A vehicle is in the "normal" condition when:

- ignition switch is "OFF"
- · doors, hood and trunk lid/back door are closed
- · pedals are not depressed
- · parking brake is released



MULTIPLE SWITCH

The continuity of multiple switch is described in two ways as shown below.

• The switch chart is used in schematic diagrams.

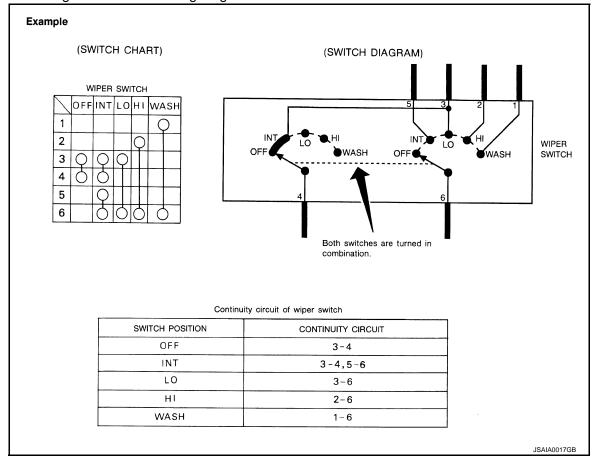
Н

M

Ν

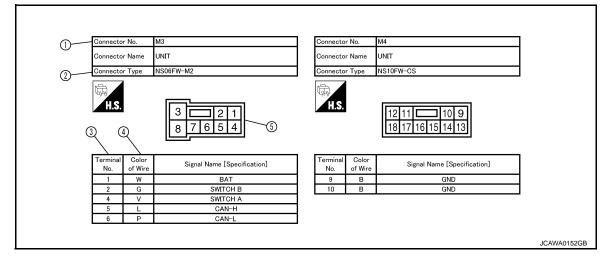
0

• The switch diagram is used in wiring diagrams.



Connector Information

INFOID:0000000006352890



Description

escription	scription				
Number Item		Description			
1	Connector number	 Alphabetic characters show to which harness the connector is placed. Numeric characters show the identification number of connectors. 			
Connector type This means the connector number. Refer to PG-88, "How		This means the connector number. Refer to PG-88, "How To Read Harness Layout".			
3	Terminal number	This means the terminal number of a connector.			

HOW TO READ WIRING DIAGRAMS

< HOW TO USE THIS MANUAL >

[REGULAR GRADE]

Number	Item		Description	
		This shows a code for	This shows a code for the color of the wire.	
4	Wire color	B = Black W = White R = Red G = Green L = Blue Y = Yellow LG = Light Green BG = Beige	BR = Brown OR or O = Orange P = Pink PU or V (Violet) = Purple GY or GR = Gray SB = Sky Blue CH = Dark Brown DG = Dark Green	
		When the wire color is shown below: Example: L/W = Blue was a shown below.	striped, the base color is given first, followed by the stripe color as with White Stripe	
5	Connector	This means the connector information.This unit-side is described by the connector symbols.		

F

GI

В

С

D

Е

G

Н

K

L

M

Ν

0

Ρ

Abbreviation List

The following **ABBREVIATIONS** are used:

Α		
	ABBREVIATION	DESCRIPTION
	A/C	Air conditioner
	A/C	Air conditioning
	A/F sensor	Air fuel ratio sensor
	A/T	Automatic transaxle/transmission
	ABS	Anti-lock braking system
	ACCS	Advance climate control system
	ACL	Air cleaner
	AP	Accelerator pedal
	APP	Accelerator pedal position
	ATF	Automatic transmission fluid
	AV	Audio visual
	AWD	All wheel drive
В		
	ABBREVIATION	DESCRIPTION
	BARO	Barometric pressure
	ВСМ	Body control module
	BLSD	Brake limited slip differential
	BPP	Brake pedal position
	BSW	Blind spot warning
С		
	ABBREVIATION	DESCRIPTION
	CKP	Crankshaft position
	CL	Closed loop
	CMP	Camshaft position
	CPP	Clutch pedal position
	CTP	Closed throttle position
	CVT	Continuously variable transaxle/transmission
D		
	ABBREVIATION	DESCRIPTION
	D1	Drive range first gear
	D2	Drive range second gear
	D3	Drive range third gear
	D4	Drive range fourth gear
	DCA	Distance control assist
	DDS	Downhill drive support
_	DFI	Direct fuel injection system
	DLC	Data link connector
	DTC	Diagnostic trouble code

< HOW TO USE THIS MANUAL >

<u>E</u>	ABBREVIATION	DESCRIPTION	- Gl
_	E/T	Exhaust temperature	- GI
	EBD	Electric brake force distribution	-
	EC	Engine control	В
	ECL	Engine coolant level	-
	ECM	Engine control module	=
	ECT	Engine coolant temperature	C
_	ECV	Electrical control valve	-
	EEPROM	Electrically erasable programmable read only memory	- D
	EFT	Engine fuel temperature	-
	EGR	Exhaust gas recirculation	-
_	EGRT	Exhaust gas recirculation temperature	_ E
_	EGT	Exhaust gas temperature	-
	EOP	Engine oil pressure	- _F
	EP	Exhaust pressure	- '
	EPR	Exhaust pressure regulator	-
	EPS	Electronically controlled power steering	- G
	ESP	Electronic stability program system	_
	EVAP canister	Evaporative emission canister	- Н
	EVSE	Electric vehicle supply equipment	-
	EXC	Exhaust control	=
_	LAC	Exhaust control	-
<u> </u>	ABBREVIATION	DESCRIPTION	-
	FC	Fan control	_
	FCW	Forward collision warning	_
	FIC	Fuel injector control	=
-	FP	Fuel pump	K
-	FR	Front	=
	FRP	Fuel rail pressure	_
	FRT	Fuel rail temperature	
	FTP	Fuel tank pressure	_
	FTT	Fuel tank temperature	M
G			-
	ABBREVIATION	DESCRIPTION	- N
	GND	Ground	
	GPS	Global positioning system	_
	GST	Generic scan tool	0
Н			_
	ABBREVIATION	DESCRIPTION	
	НВМС	Hydraulic body-motion control system	P
	HDD	Hard disk drive	_
	HO2S	Heated oxygen sensor	_
	HOC	Heated oxidation catalyst	_
	HPCM	Hybrid power train control module	_

< 1000 10 035	IT IIO IVIANUAL >	[REGOLAR GRADE]
ABBREVIATION	1	DESCRIPTION
I/M	Inspection and maintenance	
IA	Intake air	
IAC	Idle air control	
IAT	Intake air temperature	
IBA	Intelligent brake assist	
IC	Ignition control	
ICC	Intelligent cruise control	
ICM	Ignition control module	
IPDM E/R	Intelligent power distribution module engine ro	om
ISC	Idle speed control	
ISS	Input shaft speed	
 K		
ABBREVIATION]	DESCRIPTION
KS	Knock sensor	
L		
ABBREVIATION	1	DESCRIPTION
LBC	Li-ion battery controller	
LCD	Liquid crystal display	
LCU	Local control unit	
LDP	Lane departure prevention	
LDW	Lane departure warning	
LED	Light emitting diode	
LH	Left-hand	
LIN	Local interconnect network	
М		
ABBREVIATION		DESCRIPTION
M/T	Manual transaxle/transmission	
MAF	Mass airflow	
MAP	Manifold absolute pressure	
MDU	Multi display unit	
MI	Malfunction indicator	
MIL	Malfunction indicator lamp	
N		
ABBREVIATION		DESCRIPTION
NOX	Nitrogen oxides	_
O APPREVIATION		DESCRIPTION
ABBREVIATION O2		DESCRIPTION
02 02S	Oxygen	
OZS	Oxygen sensor	
OC	On board diagnostic	
OD	Oxidation catalytic converter Overdrive	
OL OL		
	Open loop	
OSS	Output shaft speed	

< HOW TO USE THIS MANUAL >

ABBREVIATION	DESCRIPTION	GI
P/S	Power steering	
PBR	Potentio balance resistor	
PCV	Positive crankcase ventilation	В
PNP	Park/Neutral position	
PSP	Power steering pressure	C
PTC	Positive temperature coefficient	
PTO	Power takeoff	
PWM	Pulse width modulation	D
?		
ABBREVIATION	DESCRIPTION	E
RAM	Random access memory	
RAS	Rear active steer	
RH	Right-hand	F
ROM	Read only memory	
RPM	Engine speed	
RR	Rear	G
3		
ABBREVIATION	DESCRIPTION	
SAE	Society of Automotive Engineers, Inc.	
SCK	Serial clock	
SDS	Service Data and Specifications	
SRT	System readiness test	
SST	Special Service Tools	
-		
ABBREVIATION	DESCRIPTION	
TC	Turbocharger	K
TCM	Transmission control module	
TCS	Traction control system	
TCU	Telematics communication unit	
TP	Throttle position	
TPMS	Tire pressure monitoring system	M
TSS	Turbine shaft speed	
TWC	Three way catalytic converter	
J		N
ABBREVIATION	DESCRIPTION	
USS	Uphill start support	0
1		
ABBREVIATION	DESCRIPTION	
VCM	Vehicle control module	Р
VDC	Vehicle dynamics control system	
VIN	Vehicle identification number	
VSS	Vehicle speed sensor	

< HOW TO USE THIS MANUAL >

W				
	ABBREVIATION		DESCRIPTION	
	WOT	Wide open throttle		
1				
	ABBREVIATION		DESCRIPTION	
	11	1st range first gear		
	12	1st range second gear		
	1GR	First gear		
2				
	ABBREVIATION		DESCRIPTION	
	21	2nd range first gear		
	22	2nd range second gear		
	2GR	Second gear		
	2WD	2-wheel drive		
3				
	ABBREVIATION		DESCRIPTION	
	3GR	Third gear		
4				
'	ABBREVIATION		DESCRIPTION	
	4GR	Fourth gear		
	4WAS	Four wheel active steer		
	4WD	Four wheel drive		
5				
	ABBREVIATION		DESCRIPTION	
	5GR	Fifth gear		
6				
	ABBREVIATION		DESCRIPTION	
	6GR	Sixth gear		
7				
	ABBREVIATION		DESCRIPTION	
	7GR	Seventh gear		
_				

TIGHTENING TORQUE OF STANDARD BOLTS

< HOW TO USE THIS MANUAL >

[REGULAR GRADE]

TIGHTENING TORQUE OF STANDARD BOLTS

Description INFOID:00000000006352892

This vehicle has both new standard based on ISO* and previous standard bolts/nuts. There are some differences between these two types of bolts/nuts: shape of the head, grade of strength, hexagonal width across flats and the standard tightening torque.

- For guidance in discriminating, refer to GI-19, "Tightening Torque Table (New Standard Included)".
- The new standard machine screws and tapping screws have a head of ISO standard torx recess.
- If the tightening torque is not described in the description or figure, refer to <u>GI-19</u>, "<u>Tightening Torque Table</u> (<u>New Standard Included</u>)".
- *ISO: International Organization for Standardization

Tightening Torque Table (New Standard Included)

INFOID:0000000006352893

CAUTION:

- The special parts are excluded.
- The bolts/nuts in these tables have a strength (discrimination) number/symbol assigned to the head or the like. As to the relation between the strength grade in these tables and the strength (discrimination) number/symbol, refer to "DISCRIMINATION OF BOLTS AND NUTS".

PREVIOUS STANDARD

Tightening torque (Without lubricant) Hexagonal Bolt di-Grade Bolt Pitch width Hexagon head bolt (Strength Hexagon flange bolt ameter size across flats mm grade) mm ft-lb N·m kg-m in-lb N·m kg-m ft-lb in-lb mm M6 6.0 10 1.0 5.5 0.56 4 49 7 0.71 5 62 10 17 1.25 13.5 1.4 1.7 13 8.0 **M8** 12 1.0 13.5 1.4 10 17 1.7 13 2.9 1.5 28 21 35 3.6 26 4T M₁₀ 10.0 14 2.9 1.25 28 21 35 3.6 26 1.75 45 4.6 33 55 5.6 41 M12 12.0 17 1.25 4.6 45 33 65 6.6 48 M14 14.0 19 1.5 80 8.2 59 100 10 74 M6 6.0 10 1.0 9 0.92 7 11 1.1 8 97 80 1.25 22 2.2 16 28 2.9 21 8.0 **M8** 12 1.0 22 2.2 16 28 2.9 21 1.5 45 4.6 33 55 5.6 41 7T 10.0 M₁₀ 14 1.25 4.6 33 41 45 55 5.6 1.75 80 8.2 59 100 10 74 M12 12.0 17 1.25 80 8.2 59 100 10 74 M14 14.0 19 1.5 130 13 96 170 17 125 M6 6.0 10 1.0 11 1.1 8 13.5 1.4 10 1.25 28 2.9 21 35 3.6 26 **M8** 8.0 12 1.0 28 2.9 21 35 3.6 26 5.6 8.2 1.5 55 41 80 59 9T 10.0 M₁₀ 14 1.25 55 5.6 41 8.2 59 80 1.75 100 74 10 130 13 96 M12 12.0 17 1.25 100 10 74 130 13 96 M14 14.0 19 170 125 210

CAUTION:

G

Н

D

Е

GΙ

I

. .

M

Ν

TIGHTENING TORQUE OF STANDARD BOLTS

< HOW TO USE THIS MANUAL >

[REGULAR GRADE]

The parts with aluminum or the cast iron washer surface/thread surface are excluded.

NEW STANDARD BASED ON ISO

Grade		Bolt di-	Hexagonal width across flats		Tightening torque							
(Strength	Bolt size	ameter		Pitch mm		Hexagon head bolt				Hexagon	flange bo	lt
grade)	0120	mm	mm		N⋅m	kg-m	ft-lb	in-lb	N∙m	kg-m	ft-lb	in-lb
	M6	6.0	10	1.0	5.5	0.56	4	49	7	0.71	5	62
	MO	9.0	12	1.25	13.5	1.4	10	_	17	1.7	13	_
	M8	8.0	13	1.0	13.5	1.4	10	_	17	1.7	13	_
4.8 (Without	M10	10.0	16	1.5	28	2.9	21	_	35	3.6	26	_
(without lubricant)	IVITO	10.0	16	1.25	28	2.9	21	_	35	3.6	26	_
	M12	12.0	18	1.75	45	4.6	33	_	55	5.6	41	_
	IVI I ∠	12.0	10	1.25	45	4.6	33	_	65	6.6	48	_
	M14	14.0	21	1.5	80	8.2	59	_	100	10	74	_
	M6	6.0	10	1.0	4	0.41	3	35	5.5	0.56	4	49
	MO	9.0	12	1.25	11	1.1	8	_	13.5	1.4	10	_
	M8	8.0	13	1.0	11	1.1	8	_	13.5	1.4	10	_
4.8 (With lu-	M10	10.0	16	1.5	22	2.2	16	_	28	2.9	21	_
bricant)	M10		16	1.25	22	2.2	16	_	28	2.9	21	_
	M12 12	12.0	18	1.75	35	3.6	26	_	45	4.6	33	_
		12.0		1.25	35	3.6	26	_	45	4.6	33	_
	M14	14.0	21	1.5	65	6.6	48	_	80	8.2	59	_
	M6	6.0	10	1.0	8	0.82	6	71	10	1.0	7	89
	Mo	9.0	13	1.25	21	2.1	15	_	25	2.6	18	_
	M8	8.0		1.0	21	2.1	15	_	25	2.6	18	_
8.8 (With lu-	M10	10.0	16	1.5	40	4.1	30	_	50	5.1	37	_
bricant)	IVITO	10.0	16	1.25	40	4.1	30	_	50	5.1	37	_
	M12	12.0	18	1.75	70	7.1	52	_	85	8.7	63	_
	IVI I Z	12.0	10	1.25	70	7.1	52	_	85	8.7	63	_
	M14	14.0	21	1.5	120	12	89	_	140	14	103	_
	M6	6.0	10	1.0	10	1.0	7	89	12	1.2	9	106
	M8	8.0	13	1.25	27	2.8	20	_	32	3.3	24	_
	IVIO	6.0	13	1.0	27	2.8	20	_	32	3.3	24	_
10.9 (With lu-	M10	10.0	16	1.5	55	5.6	41	_	65	6.6	48	_
(vvitn iu- bricant)	M10	10.0	16	1.25	55	5.6	41	_	65	6.6	48	_
,	M12	12.0	10	1.75	95	9.7	70	_	110	11	81	_
	M12	12.0	18	1.25	95	9.7	70	_	110	11	81	_
	M14	14.0	21	1.5	160	16	118	_	180	18	133	_

CAUTION:

- 1. Use tightening torque with lubricant for the new standard bolts/nuts in principle. Friction coefficient stabilizer is applied to the new standard bolts/nuts.
- 2. However, use tightening torque without lubricant for the following cases. Friction coefficient stabilizer is not applied to the following bolts/nuts.
- Grade 4.8, M6 size bolt, Conical spring washer installed
- Paint removing nut (Size M6 and M8) for fixing with weld bolt

TIGHTENING TORQUE OF STANDARD BOLTS

< HOW TO USE THIS MANUAL >

[REGULAR GRADE]

DISCRIMINATION OF BOLTS AND NUTS

BOLTS

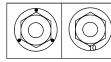
	Grade (Strength)	Discrim	nination
	4T (392N/mm²)	4	(No number/ symbol)
Previous standard	7T (686N/mm²)	7	
	9T (883N/mm²)	9	
New Standard	4.8 (420N/mm²)	4.8	(No number/symbol)
	8.8 (800N/mm²)	8.8	
	10.9 (1040N/mm²)	10.9	

NUTS

	Grade (Proof load stress)	Discrimination					
Previous	7N (686N/mm²)	(No number/symbol)					
standard	9N (883N/mm²)						
New	8 (800N/mm²)			(No number/symbol)			
Standard	10 (1040N/mm²)						

NOTICE:

- A number is assigned on the side of the nuts in some cases.
- A number or symbol is assigned on the upper surface of the flange for the nut with flange.



MACHINE SCREWS AND TAPPING SCREWS

Shape of the head:

Cross recess for the previous standard Torx recess for the new standard

Screw	Screw	Torx size
size	diameter	TOTA SIZE
M4	4.0	T20
M5	5.0	T20
M6	6.0	T30

NOTICE:

Use torx size T20 (united with M4 screw) for M5 screw although ISO standard specifies T25.

GI

В

C

D

Е

F

G

Н

K

M

Ν

SAIA0453E

RECOMMENDED CHEMICAL PRODUCTS AND SEALANTS

< HOW TO USE THIS MANUAL >

[REGULAR GRADE]

RECOMMENDED CHEMICAL PRODUCTS AND SEALANTS

Recommended Chemical Products and Sealants

INFOID:0000000006352894

Refer to the following chart for help in selecting the appropriate chemical product or sealant.

	Product Description	Purpose	Nissan North America Part No. (USA)	Nissan Canada Part No. (Canada)	Aftermarket Cross- reference Part Nos.
1	Rear View Mirror Adhesive	Used to permanently remount rear view mirrors to windows.	999MP-AM000P	99998-50505	Permatex 81844
2	Anaerobic Liquid Gas- ket	For metal-to-metal flange sealing. Can fill a 0.38 mm (0.015 inch) gap and provide instant sealing for most powertrain applications.	999MP-AM001P	99998-50503	Permatex 51813 and 51817
3	High Performance Thread Sealant	Provides instant sealing on any threaded straight or parallel threaded fitting. (Thread sealant only, no locking ability.) • Do not use on plastic.	999MP-AM002P	999MP-AM002P	Permatex 56521
4	Silicone RTV	Gasket Maker	999MP-AM003P (Ultra Grey)	99998-50506 (Ultra Grey)	Permatex Ultra Grey 82194: Three Bond 1207,1215, 1216, 1217F, 1217G and 1217H Nissan RTV Part No. 999MP-A7007
		Gasket Maker for Maxima/ Quest 5-speed automatic transmission (RE5F22A)	_	-	Three Bond 1281B or exact equivalent in its quality
5	High Temperature, High Strength Thread Locking Sealant (Red)	Threadlocker	999MP-AM004P	999MP-AM004P	Permatex 27200: Three Bond 1360, 1360N, 1305 N&P, 1307N, 1335, 1335B, 1363B, 1377C, 1386B, D&E and 1388 Loctite 648
6	Medium Strength Thread Locking Seal- ant (Blue)	Threadlocker (service tool removable)	999MP-AM005P	999MP-AM005P	Permatex 24200, 24206, 24240, 24283 and 09178: Three Bond 1322, 1322N, 1324 D&N, 1333D, 1361C, 1364D, 1370C and 1374

[REGULAR GRADE]

GI

В

С

D

Е

F

G

Н

VEHICLE INFORMATION

IDENTIFICATION INFORMATION

Model Variation

Destination	Body	Engine	Transmission	Axle	Grade	Model
			6M/T		Base	GLSALQY-EUA
			7A/T		Base	GLSALQL-EUA
			6M/T		Door : Charte	GLSALTY-EUA
	Coupo		7A/T	•	Base + Sports	GLSALTL-EUA
	Coupe		6M/T	•	Touring	GLSALVY-EUA
			7A/T		rouning	GLSALVL-EUA
USA			6M/T	•	Touring + Sports	GLSALWY-EUA
USA			7A/T	•	rouring + Sports	GLSALWL-EUA
			6M/T	•	Base	2LSALQY-EUA
	Roadster	VQ37VHR	7A/T	†	Dase	2LSALQL-EUA
			6M/T		Touring	2LSALVY-EUA
			7A/T	2WD		2LSALVL-EUA
			6M/T		Touring + Sports	2LSALWY-EUA
			7A/T		rouning + Sports	2LSALWL-EUA
			6M/T		Base	GLSALQY-ENA
					Touring	GLSALVY-ENA
	Coupe		7A/T	†		GLSALVL-ENA
			6M/T	•	Tavalia a v. Oa asta	GLSALWY-ENA
Canada			7A/T	•	Touring + Sports	GLSALWL-ENA
			6M/T	•	Touring	2LSALVY-ENA
	Roadster		7A/T		louring	2LSALVL-ENA
	Roausiel		6M/T		Touring L Sports	2LSALWY-ENA
			7A/T		Touring + Sports	2LSALWL-ENA
	Coupo		6M/T		Touring	GLSALVY-EJA
Mexico	Coupe		7A/T		Touring	GLSALVL-EJA

Ν

M

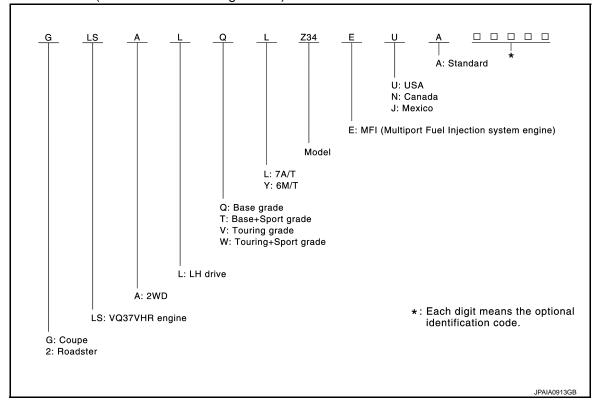
K

L

0

Р

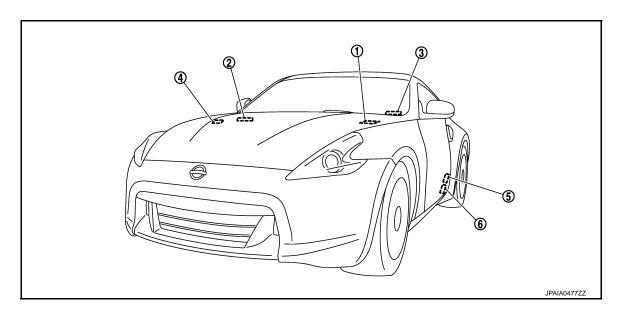
 Model variation code (Prefix and suffix designations)



Information About Identification or Model Code

INFOID:0000000006352896

IDENTIFICATION NUMBER



- 1. Emission control information label
- Vehicle identification number (Chassis number)
- . Vehicle identification number plate

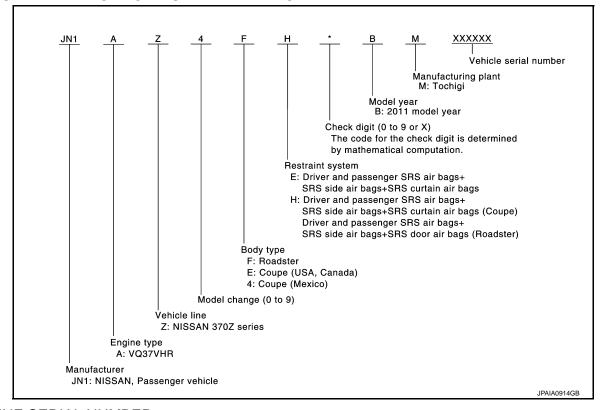
- 4. Air conditioner specification label
- 5. Tire and loading information label
- 6. FMVSS certification label

IDENTIFICATION INFORMATION

< VEHICLE INFORMATION >

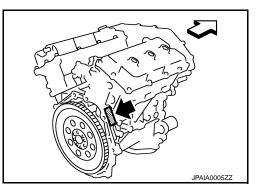
[REGULAR GRADE]

VEHICLE IDENTIFICATION NUMBER ARRANGEMENT



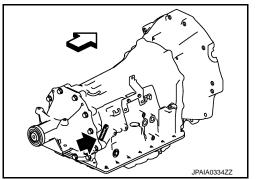
ENGINE SERIAL NUMBER

⟨⇒ : Vehicle front



AUTOMATIC TRANSMISSION NUMBER

⟨□ : Vehicle front



MANUAL TRANSMISSION NUMBER

GΙ

В

D

Е

F

G

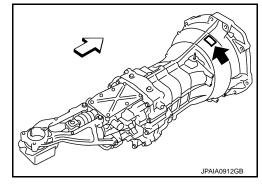
Н

1 \

M

Ν

0



Dimensions INFOID:00000000006352897

Unit: mm (in)

	4,246 (167.2)* ^{1, *7}
Overall length	4,253 (167.4)* ^{2, *7}
Overall length	4,245 (167.1)* ^{1, *8}
	4,250 (167.3)* ^{2, *8}
Overall width	1,845 (72.6)
December 1 to 1 t	1,325 (52.2) ^{*3}
Overall height	1,315 (51.8) ^{*4}
Front tread	1,550 (61.0) ^{*5}
Front tread	1,540 (60.6) ^{*6}
Decretand	1,595 (62.8) ^{*5}
Rear tread	1,565 (61.6)*6
Wheelbase	2,550 (100.4)

^{*1:} Without front license plate bracket

Wheels & Tires

FOR USA AND CANADA

			Tire		225/50R18 95W
		Front	Road wheel	Size	18 × 8J
	10 in ah		(Aluminum)	Offset	43 mm (1.69 in)
	18 inch	Rear	Tire		245/45R18 96W
			Road wheel (Aluminum)	Size	18×9J
Conventional				Offset	15 mm (0.59 in)
Conventional	40:	Front	Tire		245/40R19 94W
			Road wheel (Aluminum)	Size	19×9J
				Offset	47 mm (1.85 in)
	19 inch	Rear	Tire	1	275/35R19 96W
			Road wheel	Size	19 × 10J
			(Aluminum)	Offset	30 mm (1.18 in)

^{*2:} With front license plate bracket

^{*3:} Roadster models

^{*4:} Coupe models

^{*5: 18-}inch wheel models

^{*6: 19-}inch wheel models

^{*7:} For USA and Canada

^{*8:} For Mexico

IDENTIFICATION INFORMATION

< VEHICLE INFORMATION >

[REGULAR GRADE]

GI

В

С

D

Е

F

G

Н

		Tire		T145/80D17 ^{*1}		
	17 inch	Road wheel	Size	17 × 4T		
		(Steel)	Offset	30 mm (1.18 in)		
		Tire	'	T145/70R18 ^{*1}		
Spare	18 inch	Road wheel	Size	18 × 4T		
		(Aluminum)	Offset	0 mm (0 in)		
	Tire	•	•			
	Pood whool	Road wheel		The emergency tire puncture repair kit is supplied.*2		
	Noau Wileel					

^{*1:} If so equipped

FOR MEXICO

			Tire		225/50R18 95W	
		Front	Road wheel	Size	18 × 8J	
	40 in ah		(Aluminum)	Offset	43 mm (1.69 in)	
Conventional	18 inch	Rear	Tire		245/45R18 96W	
			Road wheel (Aluminum)	Size	18 × 9J	
				Offset	15 mm (0.59 in)	
		Tire			T145/80D17	
Spare	17 inch	Road wheel		Size	17 × 4T	
			(Steel)	Offset	30 mm (1.18 in)	

K

L

M

Ν

0

Ρ

^{*2:} Roadster models

< PRECAUTION > [REGULAR GRADE]

PRECAUTION

PRECAUTIONS

Description INFOID:0000000006352899

Observe the following precautions to ensure safe and proper servicing. These precautions are not described in each individual section.

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.

Precautions For Xenon Headlamp Service

INFOID:0000000006840243

WARNING:

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- · Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)
- Never perform HID circuit inspection with a tester.
- Never touch the xenon bulb glass with hands. Never put oil and grease on it.
- · Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.
- Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).

< PRECAUTION > [REGULAR GRADE]

Precautions Necessary for Steering Wheel Rotation After Battery Disconnection

INFOID:0000000006840240

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- Before removing and installing any control units, first turn the ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

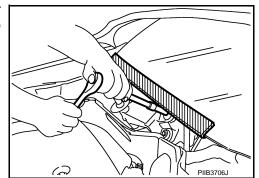
- Turn the ignition switch to ACC position. (At this time, the steering lock will be released.)
- Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
- 4. Perform the necessary repair operation.
- When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn
 the ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock
 when the ignition switch is turned to LOCK position.)
- 6. Perform self-diagnosis check of all control units using CONSULT.

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.

Precaution for Procedure without Cowl Top Cover

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



Service notice or Precautions for Rear Propeller Shaft

- If the propeller shaft is dropped, replace the propeller shaft assembly.
- Never tap the tube. Avoid impacts and scratching.
- Replace the propeller shaft assembly if there are cracks or deflection on the tube.
- Protect the propeller shaft tube from damage with a tube protector during repair service.

Cautions in Removing Battery Terminal and AV Control Unit (Models with AV Control

GΙ

С

D

Е

F

9

I

INFOID:0000000006840242

INFOID:0000000006840241

INFOID:0000000006352918

M

Ν

0

Unit)

CAUTION:

Remove battery terminal and AV control unit after a lapse of 30 seconds or more after turning the ignition switch OFF.

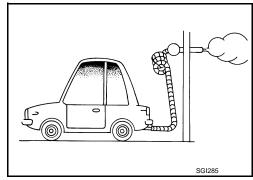
NOTE:

After the ignition switch is turned OFF, the AV control unit continues operating for approximately 30 seconds. Therefore, data corruption may occur if battery voltage is cut off within 30 seconds.

General Precautions

 Do not operate the engine for an extended period of time without proper exhaust ventilation.

Keep the work area well ventilated and free of any inflammable materials. Special care should be taken when handling any inflammable or poisonous materials, such as gasoline, refrigerant gas, etc. When working in a pit or other enclosed area, be sure to properly ventilate the area before working with hazardous materials. Do not smoke while working on the vehicle.

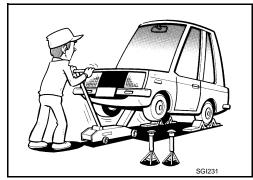


INFOID:0000000006352912

 Before jacking up the vehicle, apply wheel chocks or other tire blocks to the wheels to prevent the vehicle from moving. After jacking up the vehicle, support the vehicle weight with safety stands at the points designated for proper lifting before working on the vehicle.

These operations should be done on a level surface.

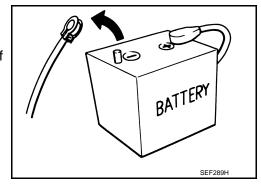
 When removing a heavy component such as the engine or transaxle/transmission, be careful not to lose your balance and drop them. Also, do not allow them to strike adjacent parts, especially the brake tubes and master cylinder.



 Before starting repairs which do not require battery power: Turn off ignition switch.

Disconnect the negative battery terminal.

• If the battery terminals are disconnected, recorded memory of radio and each control unit is erased.



• To prevent serious burns:

Avoid contact with hot metal parts.

Do not remove the radiator cap when the engine is hot.

- Dispose of drained oil or the solvent used for cleaning parts in an appropriate manner.
- Do not attempt to top off the fuel tank after the fuel pump nozzle shuts off automatically.
 - Continued refueling may cause fuel overflow, resulting in fuel spray and possibly a fire.
- Clean all disassembled parts in the designated liquid or solvent prior to inspection or assembly.

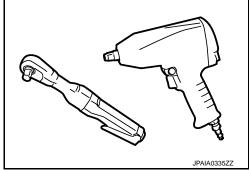


PRECAUTIONS

< PRECAUTION > [REGULAR GRADE]

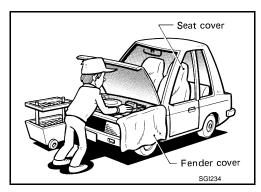
 Replace oil seals, gaskets, packings, O-rings, locking washers, cotter pins, self-locking nuts, etc. with new ones.

- Replace inner and outer races of tapered roller bearings and needle bearings as a set.
- Arrange the disassembled parts in accordance with their assembled locations and sequence.
- Do not touch the terminals of electrical components which use microcomputers (such as ECM).
 Static electricity may damage internal electronic components.
- After disconnecting vacuum or air hoses, attach a tag to indicate the proper connection.
- Use only the fluids and lubricants specified in this manual.
- · Use approved bonding agent, sealants or their equivalents when required.
- Use hand tools, power tools (disassembly only) and recommended special tools where specified for safe and efficient service repairs.
- When repairing the fuel, oil, water, vacuum or exhaust systems, check all affected lines for leakage.



• Before servicing the vehicle:

Protect fenders, upholstery and carpeting with appropriate covers. Take caution that keys, buckles or buttons do not scratch paint.



WARNING:

To prevent ECM from storing the diagnostic trouble codes, never carelessly disconnect the harness connectors which are related to the engine control system and TCM (transmission control module) system. The connectors should be disconnected only when working according to the WORK FLOW of TROUBLE DIAGNOSES in EC and TM sections.

Three Way Catalyst

If a large amount of unburned fuel flows into the catalyst, the catalyst temperature will be excessively high. To prevent this, follow the instructions.

- Use unleaded gasoline only. Leaded gasoline will seriously damage the three way catalyst.
- When checking for ignition spark or measuring engine compression, make tests quickly and only when necessary.
- Do not run engine when the fuel tank level is low, otherwise the engine may misfire, causing damage to the catalyst.

Do not place the vehicle on flammable material. Keep flammable material off the exhaust pipe and the three way catalyst.

GI

3

Е

Н

INFOID:0000000006352913

N

< PRECAUTION > [REGULAR GRADE]

Multiport Fuel Injection System or Engine Control System

INFOID:0000000006352914

 Before connecting or disconnecting any harness connector for the multiport fuel injection system or ECM:

Turn ignition switch to "OFF" position.

Disconnect negative battery terminal.

Otherwise, there may be damage to ECM.

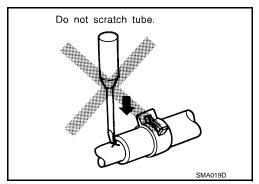
- Before disconnecting pressurized fuel line from fuel pump to injectors, be sure to release fuel pressure.
- Be careful not to jar components such as ECM and mass air flow sensor.



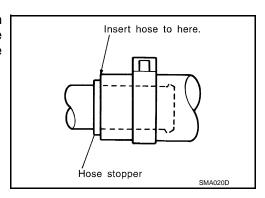
Hoses

HOSE REMOVAL AND INSTALLATION

 To prevent damage to rubber hose, do not pry off rubber hose with tapered tool or screwdriver.

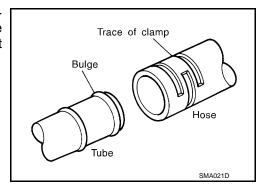


 To reinstall the rubber hose securely, check that hose insertion length and orientation is correct. (If tube is equipped with hose stopper, insert rubber hose into tube until it butts up against hose stopper.)



HOSE CLAMPING

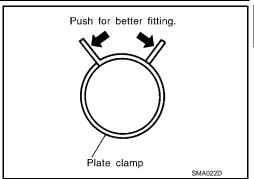
- If old rubber hose is re-used, install hose clamp in its original position (at the indentation where the old clamp was). If there is a trace of tube bulging left on the old rubber hose, align rubber hose at that position.
- · Discard old clamps: replace with new ones.



PRECAUTIONS

[REGULAR GRADE] < PRECAUTION >

 After installing plate clamps, apply force to them in the direction of the arrow, tightening rubber hose equally all around.



Engine Oils

INFOID:0000000006352916

Prolonged and repeated contact with used engine oil may cause skin cancer. Try to avoid direct skin contact with used oil.

If skin contact is made, wash thoroughly with soap or hand cleaner as soon as possible.

HEALTH PROTECTION PRECAUTIONS

- Avoid prolonged and repeated contact with oils, particularly used engine oils.
- Wear protective clothing, including impervious gloves where practicable.
- Do not put oily rags in pockets.
- Avoid contaminating clothes, particularly underpants, with oil.
- Heavily soiled clothing and oil-impregnated footwear should not be worn. Overalls must be cleaned regu-
- First aid treatment should be obtained immediately for open cuts and wounds.
- Use barrier creams, applying them before each work period, to help the removal of oil from the skin.
- Wash with soap and water to ensure all oil is removed (skin cleansers and nail brushes will help). Preparations containing lanolin replace the natural skin oils which have been removed.
- Do not use gasoline, kerosene, diesel fuel, gas oil, thinners or solvents for cleaning skin.
- If skin disorders develop, obtain medical advice without delay.
- Where practical, degrease components prior to handling.
- Where there is a risk of eye contact, eye protection should be worn, for example, chemical goggles or face shields: in addition an eye wash facility should be provided.

ENVIRONMENTAL PROTECTION PRECAUTIONS

Dispose of used oil and used oil filters through authorized waste disposal contractors to licensed waste disposal sites, or to the waste oil reclamation trade. If in doubt, contact the local authority for advice on disposal facilities.

It is illegal to pour used oil on to the ground, down sewers or drains, or into water sources.

The regulations concerning pollution vary between regions.

Air Conditioning INFOID:0000000006352917

Use an approved refrigerant recovery unit any time the air conditioning system must be discharged. Refer to HA section "REFRIGERANT" for specific instructions.

Fuel INFOID:0000000006352919

FOR USA AND CANADA

Use unleaded premium gasoline with an octane rating of at least 91 AKI (Anti-Knock Index) number (Research octane number 96).

If premium gasoline is not available, unleaded regular gasoline with an octane rating of 87 AKI number (Research octane number 91) may be temporarily used, but only under the following precautions:

- · Have the fuel tank filled only partially with unleaded regular gasoline, and fill up with unleaded premium gasoline as soon as possible.
- Avoid full throttle driving and abrupt acceleration.

However, for maximum vehicle performance, the use of unleaded premium gasoline is recommended. CAUTION:

 Using a fuel other than that specified could adversely affect the emission control system, and may also affect warranty coverage.

GI-33 Revision: 2011 October 2011 370Z

GΙ

F

Н

M

Ν

PRECAUTIONS

< PRECAUTION > [REGULAR GRADE]

- Under no circumstances should a leaded gasoline be used, because this will damage the three-way catalyst.
- Do not use E-85 fuel in the vehicle. The vehicle is not designed to run on E-85 fuel. Using E-85 fuel can damage the fuel system components and is not covered by the NISSAN vehicle limited warranty.

FOR MEXICO

CAUTION:

Do not use leaded gasoline. Using leaded gasoline will damage the three-way catalyst.

Use unleaded premium gasoline with an octane rating of at least 95 (RON).

If unleaded premium gasoline is not available, unleaded regular gasoline with an octane rating of 91 (RON) or above may be temporarily used, but only under the following precautions:

- Have the fuel tank filled only partially with unleaded regular gasoline, and fill up with unleaded premium gasoline as soon as possible.
- Avoid full throttle driving and abrupt acceleration.

However, for maximum vehicle performance and the best driveability, the use of unleaded premium gasoline is recommended.

< PRECAUTION > [REGULAR GRADE]

LIFTING POINT

Commercial Service Tools

INFOID:0000000006352920

Tool name	Description
Board on attachment	S-NT001
Safety stand attachment	S-NT002

CAUTION:

- Every time the vehicle is lifted up, maintain the complete vehicle curb condition.
- Since the vehicle's center of gravity changes when removing main parts on the front side (engine, transmission, suspension etc.), support a jack up point on the rear side garage jack with a mission jack or equivalent.
- Since the vehicle's center of gravity changes when removing main parts on the rear side (rear axle, suspension, etc.), support a jack up point on the front side garage jack with a mission jack or equivalent.
- Be careful not to smash or never do anything that would affect piping parts.

Garage Jack and Safety Stand and 2-Pole Lift

WARNING:

- Park the vehicle on a level surface when using the jack. Check to avoid damaging pipes, tubes, etc. under the vehicle.
- Never get under the vehicle while it is supported only by the jack. Always use safety stands when
 you have to get under the vehicle.
- Place wheel chocks at both front and back of the wheels on the ground.
- When lifting the vehicle, open the lift arms as wide as possible and ensure that the front and rear of the vehicle are well balanced.
- When setting the lift arm, never allow the arm to contact the brake tubes, brake cable, fuel lines and sill spoiler.

GI

В

0

D

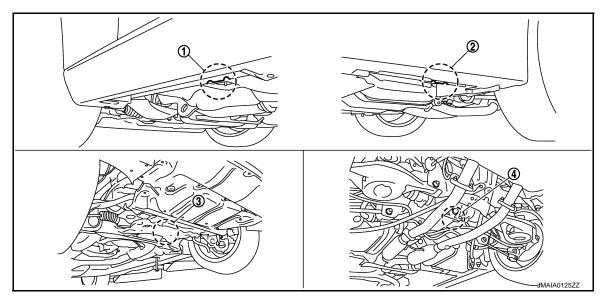
Е

G

M

INFOID:0000000006352921

Ν



- Safety stand point and lift up point (front)
 Safety stand point and lift up point 3. Garage jack point (front) (rear)
- 4. Garage jack point (rear)

CAUTION:

There is canister just behind Garage jack point rear. Jack up carefully.

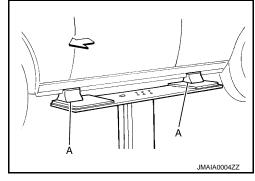
Board-On Lift

CAUTION:

Check vehicle is empty when lifting.

- The board-on lift attachment (A) set at front end of vehicle should be set on the front of the sill under the front door opening.
- Position attachments at front and rear ends of board-on lift.





[REGULAR GRADE] < PRECAUTION >

TOW TRUCK TOWING

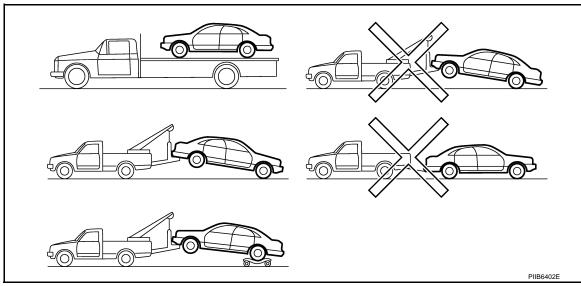
Tow Truck Towing

INFOID:0000000006352923

CAUTION:

- All applicable state or Provincial (in Canada) laws and local laws regarding the towing operation must be obeyed.
- It is necessary to use proper towing equipment to avoid possible damage to the vehicle during towing operation. Towing is in accordance with Towing Procedure Manual at dealer.
- Always attach safety chains before towing.
- When towing, check that the transmission, steering system and powertrain are in good order. If any unit is damaged, dollies must be used.
- · Never tow an automatic transmission model from the rear (that is backward) with four wheels on the ground. This may cause serious and expensive damage to the transmission.

2WD MODELS



NISSAN recommends that vehicle be towed with the driving (rear) wheels off the ground or that a dolly be used as illustrated.

CAUTION:

- Never tow automatic transmission models with the rear wheels on the ground or four wheels on the ground (forward or backward), as this may cause serious and expensive damage to the transmission.
 - If it is necessary to tow the vehicle with the front wheels raised, always use towing dollies under the rear wheels.
- When towing rear wheel drive models with the front wheels on the ground or on towing dollies:
- Turn the ignition switch to the OFF position, and secure the steering wheel in a straight ahead position with a rope or similar device. Never secure the steering wheel by turning the ignition switch to the LOCK position. This may damage the steering lock mechanism.
- Move the selector lever to the N (Neutral) position.
- When the battery of vehicle equipped with the Intelligent Key system is discharged, your vehicle should be towed with the front wheels on towing dollies or place the vehicle on a flat bed truck.

If the speed or distance must necessarily be greater, remove the propeller shaft before towing to prevent damage to the transmission.

Vehicle Recovery (Freeing a Stuck Vehicle)

INFOID:0000000006352924

FRONT

GI-37 Revision: 2011 October 2011 370Z

GΙ

D

Е

F

Ν

TOW TRUCK TOWING

< PRECAUTION > [REGULAR GRADE]

Securely install the vehicle recovery hook stored with jacking tools. Check that the hook is properly secured in the stored place after use.

WARNING:

- Stand clear of a stuck vehicle.
- Never spin your tires at high speed. This could cause them to explode and result in serious injury. Parts of your vehicle could also overheat and be damaged.

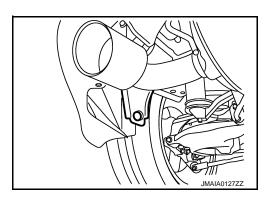
CAUTION:

- Tow chains or cables must be attached only to the vehicle recovery hooks or main structural members of the vehicle. Otherwise, the vehicle body will be damaged.
- Never use the vehicle tie downs to free a vehicle stuck in sand, snow, mud, etc. Never tow the vehicle using the vehicle tie downs or recovery hooks.
- Always pull the cable straight out from the front of the vehicle. Never pull on the hook at an angle.
- Pulling devices should be routed so they never touch any part of the suspension, steering, brake or cooling systems.
- Pulling devices such as ropes or canvas straps are not recommended for use in vehicle towing or recovery.

REAR

WARNING:

Rear hook is not available.



AUTOMATIC TRANSMISSION

To tow a vehicle equipped with an automatic transmission, an appropriate vehicle dolly **MUST** be placed under the towed vehicle's drive wheels. **Always** follow the dolly manufacture's recommendations when using their product.

If the vehicle is stuck in sand, snow, mud, etc., use the following procedure:

- Turn off the Vehicle Dynamic Control System.
- 2. Check the area in front and behind the vehicle is clear of obstructions.
- 3. Turn the steering wheel right and left to clear an area around the front tires.
- 4. Slowly rock the vehicle forward and backward.
 - Shift back and forth between R (reverse) and D (drive).
 - Apply the accelerator as little as possible to maintain the rocking motion.
 - Release the accelerator pedal before shifting between R and D.
 - Do not spin the tires above 35 mph (55 km/h).
- 5. If the vehicle can not be freed after a few tries, contact a professional towing service to remove the vehicle.

< BASIC INSPECTION >

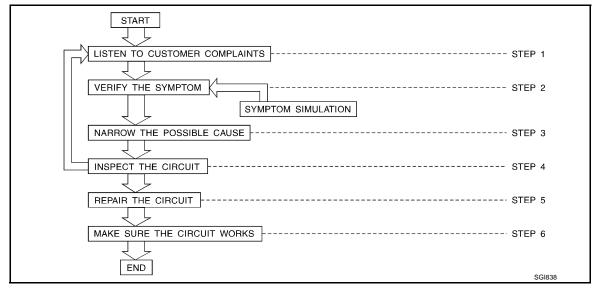
[REGULAR GRADE]

BASIC INSPECTION

SERVICE INFORMATION FOR ELECTRICAL INCIDENT

Work Flow

WORK FLOW



STEP	DESCRIPTION						
Get detailed information about the conditions and the environment when the incident occurred. The following are key pieces of information required to make a good analysis:							
WHAT Vehicle Model, Engine, Transmission/Transaxle and the System (i.e. Radio).							
STEP 1 WHEN Date, Time of Day, Weather Conditions, Frequency.							
	WHERE	Road Conditions, Altitude and Traffic Situation.					
	HOW	System Symptoms, Operating Conditions (Other Components Interaction). Service History and if any After Market Accessories have been installed.					
STEP 2	Verify the para	rstem, road test if necessary. meter of the incident. cannot be duplicated, refer to "Incident Simulation Tests".					
STEP 3	Power SuppSystem OpeApplicable SCheck for ar	diagnosis materials together including: ly Routing ration Descriptions ervice Manual Sections by Service Bulletins to begin diagnosis based upon your knowledge of the system operation and the customer comments.					
STEP 4	Inspect the system for mechanical binding, loose connectors or wiring damage. Determine which circuits and components are involved and diagnose using the Power Supply Routing and Harness Layouts.						
STEP 5	Repair or replace the incident circuit or component.						
STEP 6	Operate the system in all modes. Verify the system works properly under all conditions. Check you have not inadvertently created a new incident during your diagnosis or repair steps.						

Control Units and Electrical Parts

PRECAUTIONS

- Never reverse polarity of battery terminals.
- Install only parts specified for a vehicle.
- Before replacing the control unit, check the input and output and functions of the component parts.
- Do not apply excessive force when disconnecting a connector.

GI

D

Е

F

Н

Ν

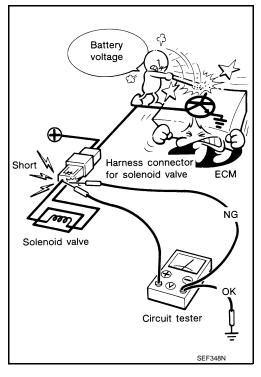
INFOID:0000000006352926

< BASIC INSPECTION > [REGULAR GRADE]

- Do not apply excessive shock to the control unit by dropping or hitting it.
- Be careful to prevent condensation in the control unit due to rapid temperature changes and do not let water or rain get on it. If water is found in the control unit, dry it fully and then install it in the vehicle
- Be careful not to let oil to get on the control unit connector.
- Avoid cleaning the control unit with volatile oil.
- Do not disassemble the control unit, and do not remove the upper and lower covers.



- When using a DMM, be careful not to let test probes get close to each other to prevent the power transistor in the control unit from damaging battery voltage because of short circuiting.
- When checking input and output signals of the control unit, use the specified check adapter.



How to Check Terminal

INFOID:0000000006352927

CONNECTOR AND TERMINAL PIN KIT

- Use the connector and terminal pin kits listed below when replacing connectors or terminals.
- The connector and terminal pin kits contain some of the most commonly used NISSAN/INFINITI connectors and terminals. For detailed connector and terminal pin replacement procedures, refer to the latest NISSAN/ INFINITI CONNECTOR AND TERMINAL PIN SERVICE MANUAL.

< BASIC INSPECTION >

[REGULAR GRADE]

Tool number (Kent-Moore No.) Tool name		Desc	cription	
- (J38751-95NI) Connector and terminal pin kit (NISSAN) - (J38751-95INF)	J38751-95NI	J38751-95INF	J42992-98KIT	J42992-2000UPD
Connector and terminal pin kit (INFINITI) - (J42992-98KIT) OBD and terminal repair kit				
- (J42992-2000UPD) OBD-II Connector Kit Update		WAIA0004E		WAIA0005E

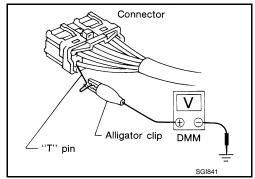
HOW TO PROBE CONNECTORS

- Connector damage and an intermittent connection can result from improperly probing of the connector during circuit checks.
- The probe of a digital multimeter (DMM) may not correctly fit the connector cavity. To correctly probe the connector, follow the procedures below using a "T" pin. For the best contact grasp the "T" pin using an alligator clip.

Probing from Harness Side

Standard type (not waterproof type) connector should be probed from harness side with "T" pin.

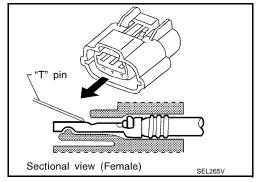
- If the connector has a rear cover such as a ECM connector, remove the rear cover before probing the terminal.
- Do not probe waterproof connector from harness side. Damage to the seal between wire and connector may result.



Probing from Terminal Side

FEMALE TERMINAL

 There is a small notch above each female terminal. Probe each terminal with the "T" pin through the notch.
 Do not insert any object other than the same type male terminal into female terminal.



GI

В

D

Е

7

Н

J

K

M

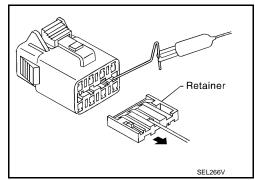
Ν

0

Р

< BASIC INSPECTION > [REGULAR GRADE]

 Some connectors do not have a notch above each terminal. To probe each terminal, remove the connector retainer to make contact space for probing.

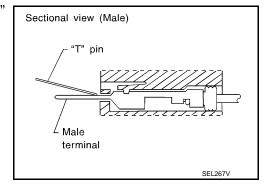


MALE TERMINAL

 Carefully probe the contact surface of each terminal using a "T" pin.

CAUTION:

Never bend terminal.

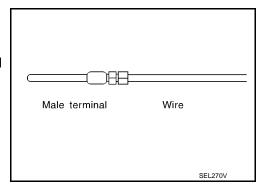


How to Check Enlarged Contact Spring of Terminal

- An enlarged contact spring of a terminal may create intermittent signals in the circuit.
- If the intermittent open circuit occurs, follow the procedure below to inspect for open wires and enlarged contact spring of female terminal.
- 1. Assemble a male terminal and approx. 10 cm (3.9 in) of wire. **NOTE:**

Use a male terminal which matches the female terminal.

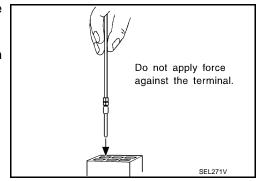
2. Disconnect the suspected faulty connector and hold it terminal side up.



3. While holding the wire of the male terminal, try to insert the male terminal into the female terminal.

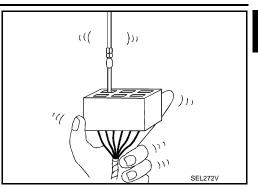
CAUTION:

Never force the male terminal into the female terminal with your hands.



< BASIC INSPECTION > [REGULAR GRADE]

4. While moving the connector, check whether the male terminal can be easily inserted or not.

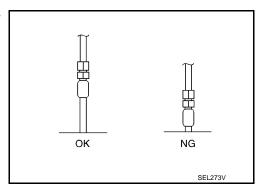


GΙ

Е

Н

If the male terminal can be easily inserted into the female terminal, replace the female terminal.



Waterproof Connector Inspection

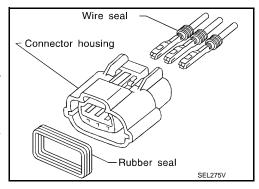
If water enters the connector, it can short interior circuits. This may lead to intermittent problems. Check the following items to maintain the original waterproof characteristics.

RUBBER SEAL INSPECTION

- Most waterproof connectors are provided with a rubber seal between the male and female connectors. If the seal is missing, the waterproof performance may not meet specifications.
- The rubber seal may come off when connectors are disconnected.
 Whenever connectors are reconnected, check the rubber seal is properly installed on either side of male or female connector.

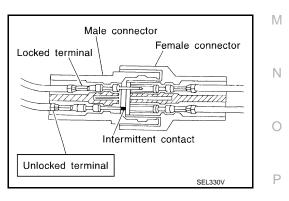
WIRE SEAL INSPECTION

 The wire seal must be installed on the wire insertion area of a waterproof connector. Be sure that the seal is installed properly.



Terminal Lock Inspection

Check for unlocked terminals by pulling wire at the end of connector. An unlocked terminal may create intermittent signals in the circuit.



Intermittent Incident

INFOID:0000000006352928

DESCRIPTION

Sometimes the symptom is not present when the vehicle is brought in for service. If possible, re-create the conditions present at the time of the incident. Doing so may help avoid a No Trouble Found Diagnosis. The fol-

[REGULAR GRADE]

< BASIC INSPECTION >

lowing section illustrates ways to simulate the conditions/environment under which the owner experiences an electrical incident.

The section is broken into the six following topics:

- Vehicle vibration
- Heat sensitive
- Freezing
- · Water intrusion
- Electrical load
- Cold or hot start up

Get a thorough description of the incident from the customer. It is important for simulating the conditions of the problem.

VEHICLE VIBRATION

The problem may occur or become worse while driving on a rough road or when engine is vibrating (idle with A/C on). In such a case, you will want to check for a vibration related condition. Refer to the following illustration.

Connector & Harness

Determine which connectors and wiring harness would affect the electrical system you are inspecting. Gently shake each connector and harness while monitoring the system for the incident you are trying to duplicate. This test may indicate a loose or poor electrical connection.

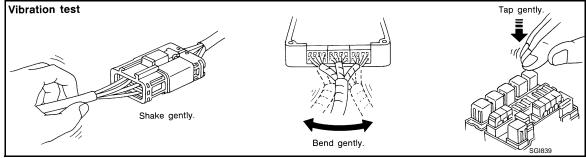
Hint

Connectors can be exposed to moisture. It is possible to get a thin film of corrosion on the connector terminals. A visual inspection may not reveal this without disconnecting the connector. If the problem occurs intermittently, perhaps the problem is caused by corrosion. It is a good idea to disconnect, inspect and clean the terminals on related connectors in the system.

Sensor & Relay

Gently apply a slight vibration to sensors and relays in the system you are inspecting.

This test may indicate a loose or poorly mounted sensor or relay.



Engine Compartment

There are several reasons a vehicle or engine vibration could cause an electrical complaint. Some of the things to check for are:

- · Connectors not fully seated.
- Wiring harness not long enough and is being stressed due to engine vibrations or rocking.
- Wires laying across brackets or moving components.
- Loose, dirty or corroded ground wires.
- Wires routed too close to hot components.

To inspect components under the hood, start by verifying the integrity of ground connections. (Refer to Ground Inspection described later.) First check that the system is properly grounded. Then check for loose connection by gently shaking the wiring or components as previously explained. Using the wiring diagrams inspect the wiring for continuity.

Behind the Instrument Panel

An improperly routed or improperly clamped harness can become pinched during accessory installation. Vehicle vibration can aggravate a harness which is routed along a bracket or near a screw.

Under Seating Areas

< BASIC INSPECTION >

[REGULAR GRADE]

GΙ

Е

Ν

Р

An unclamped or loose harness can cause wiring to be pinched by seat components (such as slide guides) during vehicle vibration. If the wiring runs under seating areas, inspect wire routing for possible damage or pinching.

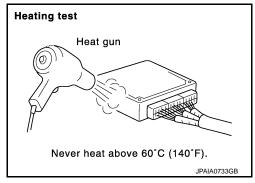
HEAT SENSITIVE

- The customer's concern may occur during hot weather or after car has sat for a short time. In such cases you will want to check for a heat sensitive condition.
- To determine if an electrical component is heat sensitive, heat the component with a heat gun or equivalent.

CAUTION:

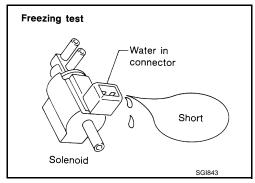
Never heat components above 60°C (140°F).

 If incident occurs while heating the unit, either replace or properly insulate the component.



FREEZING

- The customer may indicate the incident goes away after the car warms up (winter time). The cause could be related to water freezing somewhere in the wiring/electrical system.
- There are two methods to check for this. The first is to arrange for the owner to leave his car overnight. Check it will get cold enough to demonstrate his complaint. Leave the car parked outside overnight. In the morning, do a quick and thorough diagnosis of those electrical components which could be affected.
- The second method is to put the suspect component into a freezer long enough for any water to freeze. Reinstall the part into the car and check for the reoccurrence of the incident. If it occurs, repair or replace the component.

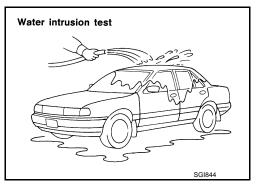


WATER INTRUSION

The incident may occur only during high humidity or in rainy/snowy weather. In such cases the incident could be caused by water intrusion on an electrical part. This can be simulated by soaking the car or running it through a car wash.

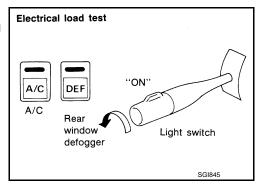
CAUTION:

Never spray water directly on any electrical components.



ELECTRICAL LOAD

The incident may be electrical load sensitive. Perform diagnosis with all accessories (including A/C, rear window defogger, radio, fog lamps) turned on.



COLD OR HOT START UP

On some occasions an electrical incident may occur only when the car is started cold, or it may occur when the car is restarted hot shortly after being turned off. In these cases you may have to keep the car overnight to make a proper diagnosis.

Revision: 2011 October **GI-45** 2011 370Z

< BASIC INSPECTION > [REGULAR GRADE]

Circuit Inspection

INFOID:0000000006352929

DESCRIPTION

- In general, testing electrical circuits is an easy task if it is approached in a logical and organized method. Before beginning it is important to have all available information on the system to be tested. Also, get a thorough understanding of system operation. Then you will be able to use the appropriate equipment and follow the correct test procedure.
- You may have to simulate vehicle vibrations while testing electrical components. Gently shake the wiring harness or electrical component to do this.

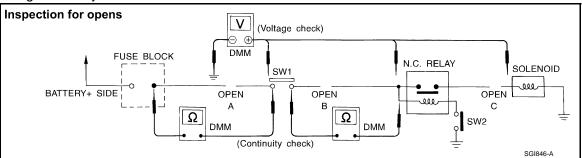
OPEN	A circuit is open when there is no continuity through a section of the circuit.						
	There are two types of shorts.						
SHORT	SHORT CIRCUIT	When a circuit contacts another circuit and causes the normal resistance to change.					
	SHORT TO GROUND	When a circuit contacts a ground source and grounds the circuit.					

NOTE:

Refer to GI-40, "How to Check Terminal" to probe or check terminal.

TESTING FOR "OPENS" IN THE CIRCUIT

Before you begin to diagnose and test the system, you should rough sketch a schematic of the system. This will help you to logically walk through the diagnosis process. Drawing the sketch will also reinforce your working knowledge of the system.



Continuity Check Method

The continuity check is used to find an open in the circuit. The digital multimeter (DMM) set on the resistance function will indicate an open circuit as over limit (no beep tone or no ohms symbol). Check to always start with the DMM at the highest resistance level.

To help in understanding the diagnosis of open circuits, please refer to the previous schematic.

- Disconnect the battery negative cable.
- Start at one end of the circuit and work your way to the other end. (At the fuse block in this example)
- Connect one probe of the DMM to the fuse block terminal on the load side.
- Connect the other probe to the fuse block (power) side of SW1. Little or no resistance will indicate that portion of the circuit has good continuity. If there were an open in the circuit, the DMM would indicate an over limit or infinite resistance condition. (point A)
- Connect the probes between SW1 and the relay. Little or no resistance will indicate that portion of the circuit has good continuity. If there were an open in the circuit, the DMM would indicate an over limit or infinite resistance condition. (point B)
- Connect the probes between the relay and the solenoid. Little or no resistance will indicate that portion of the
 circuit has good continuity. If there were an open in the circuit, the DMM would indicate an over limit or infinite resistance condition. (point C)

Any circuit can be diagnosed using the approach in the previous example.

Voltage Check Method

To help in understanding the diagnosis of open circuits please refer to the previous schematic.

In any powered circuit, an open can be found by methodically checking the system for the presence of voltage. This is done by switching the DMM to the voltage function.

- Connect one probe of the DMM to a known good ground.
- Begin probing at one end of the circuit and work your way to the other end.
- With SW1 open, probe at SW1 to check for voltage. voltage: open is further down the circuit than SW1.

[REGULAR GRADE] < BASIC INSPECTION >

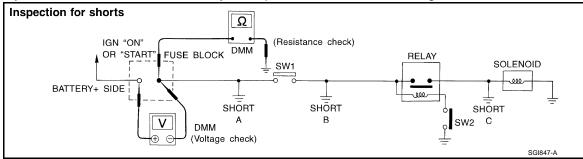
no voltage: open is between fuse block and SW1 (point A).

- Close SW1 and probe at relay. voltage: open is further down the circuit than the relay. no voltage: open is between SW1 and relay (point B).
- Close the relay and probe at the solenoid. voltage: open is further down the circuit than the solenoid. no voltage: open is between relay and solenoid (point C).

Any powered circuit can be diagnosed using the approach in the previous example.

TESTING FOR "SHORTS" IN THE CIRCUIT

To simplify the discussion of shorts in the system, please refer to the following schematic.



Resistance Check Method

- Disconnect the battery negative cable and remove the blown fuse.
- Disconnect all loads (SW1 open, relay disconnected and solenoid disconnected) powered through the fuse.
- Connect one probe of the DMM to the load side of the fuse terminal. Connect the other probe to a known good ground.
- With SW1 open, check for continuity. continuity: short is between fuse terminal and SW1 (point A). no continuity: short is further down the circuit than SW1.
- Close SW1 and disconnect the relay. Put probes at the load side of fuse terminal and a known good ground. Then, check for continuity.
 - continuity: short is between SW1 and the relay (point B).
 - no continuity: short is further down the circuit than the relay.
- Close SW1 and jump the relay contacts with jumper wire. Put probes at the load side of fuse terminal and a known good ground. Then, check for continuity. continuity: short is between relay and solenoid (point C).

no continuity: check solenoid, retrace steps.

Voltage Check Method

- Remove the blown fuse and disconnect all loads (i.e. SW1 open, relay disconnected and solenoid disconnected) powered through the fuse.
- Turn the ignition switch to the ON or START position. Verify battery voltage at the battery + side of the fuse terminal (one lead on the battery + terminal side of the fuse block and one lead on a known good ground).
- With SW1 open and the DMM leads across both fuse terminals, check for voltage. voltage: short is between fuse block and SW1 (point A).
- no voltage: short is further down the circuit than SW1.
- With SW1 closed, relay and solenoid disconnected and the DMM leads across both fuse terminals, check for
 - voltage: short is between SW1 and the relay (point B).
 - no voltage: short is further down the circuit than the relay.
- With SW1 closed, relay contacts jumped with fused jumper wire check for voltage. voltage: short is down the circuit of the relay or between the relay and the disconnected solenoid (point C). no voltage: retrace steps and check power to fuse block.

GROUND INSPECTION

- Ground connections are very important to the proper operation of electrical and electronic circuits. Ground connections are often exposed to moisture, dirt and other corrosive elements. The corrosion (rust) can become an unwanted resistance. This unwanted resistance can change the way a circuit works.
- Electronically controlled circuits are very sensitive to proper grounding. A loose or corroded ground can drastically affect an electronically controlled circuit. A poor or corroded ground can easily affect the circuit. Even when the ground connection looks clean, there can be a thin film of rust on the surface.

GΙ

Е

D

Н

K

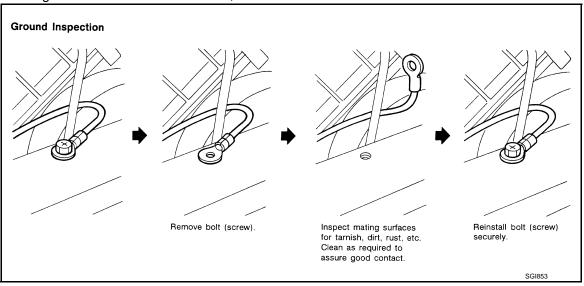
M

Ν

Р

< BASIC INSPECTION > [REGULAR GRADE]

- When inspecting a ground connection follow these rules:
- Remove the ground bolt or screw.
- Inspect all mating surfaces for tarnish, dirt, rust, etc.
- Clean as required to assure good contact.
- Reinstall bolt or screw securely.
- Inspect for "add-on" accessories which may be interfering with the ground circuit.
- If several wires are crimped into one ground eyelet terminal, check for proper crimps. Check all of the wires are clean, securely fastened and providing a good ground path. If multiple wires are cased in one eyelet check no ground wires have excess wire insulation.
- For detailed ground distribution information, refer to "Ground Distribution" in PG section.



VOLTAGE DROP TESTS

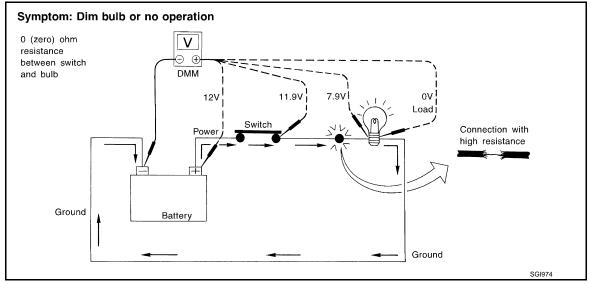
- Voltage drop tests are often used to find components or circuits which have excessive resistance. A voltage
 drop in a circuit is caused by a resistance when the circuit is in operation.
- Check the wire in the illustration. When measuring resistance with DMM, contact by a single strand of wire will give reading of 0 ohms. This would indicate a good circuit. When the circuit operates, this single strand of wire is not able to carry the current. The single strand will have a high resistance to the current. This will be picked up as a slight voltage drop.
- Unwanted resistance can be caused by many situations as follows:
- Undersized wiring (single strand example)
- Corrosion on switch contacts
- Loose wire connections or splices.
- If repairs are needed always use wire that is of the same or larger gauge.

Measuring Voltage Drop — Accumulated Method

- Connect the DMM across the connector or part of the circuit you want to check. The positive lead of the DMM should be closer to power and the negative lead closer to ground.
- Operate the circuit.
- The DMM will indicate how many volts are being used to "push" current through that part of the circuit.

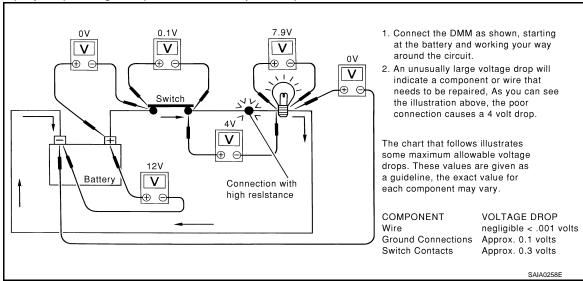
< BASIC INSPECTION > [REGULAR GRADE]

Note in the illustration that there is an excessive 4.1 volt drop between the battery and the bulb.



Measuring Voltage Drop — Step-by-Step

- The step-by-step method is most useful for isolating excessive drops in low voltage systems (such as those in "Computer Controlled Systems").
- Circuits in the "Computer Controlled System" operate on very low amperage.
- The (Computer Controlled) system operations can be adversely affected by any variation in resistance in the system. Such resistance variation may be caused by poor connection, improper installation, improper wire gauge or corrosion.
- The step by step voltage drop test can identify a component or wire with too much resistance.

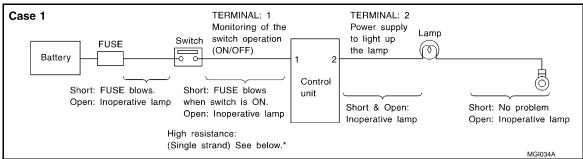


CONTROL UNIT CIRCUIT TEST

System Description

When the switch is ON, the control unit lights up the lamp.

CASE 1



GI

В

С

D

Е

F

G

Н

Н

J

K

L

B //

IVI

Ν

Р

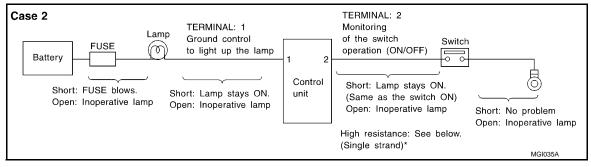
< BASIC INSPECTION >

[REGULAR GRADE]

INPUT-0	DUTPUT VO	LTAGE CHART					
Terminal No.		Description				In case of high resistance such as single	
+	_	Signal name	Input/ Output	Condition	Value (Approx.)	strand (V) *	
1	1 Body Switch		Input	Switch ON	Battery voltage	Lower than battery voltage Approx. 8 (Example)	
	ground			Switch OFF	0 V	Approx. 0	
2	Body	Lamp	Output	Switch ON	Battery voltage	Approx. 0 (Inoperative lamp)	
2	2 ground Lamp		Output	Switch OFF	0 V	Approx. 0	

- · The voltage value is based on the body ground.
- *: If high resistance exists in the switch side circuit (caused by a single strand), terminal 1 does not detect battery voltage. Control unit does not detect the switch is ON even if the switch does not turn ON. Therefore, the control unit does not supply power to light up the lamp.

CASE 2



INPUT-OUTPUT VOLTAGE CHART

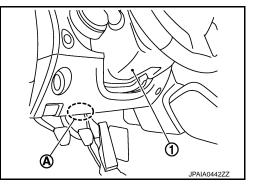
Terminal No.		Descrip	Description			In case of high resistance such as single	
 +	_	Signal name	Input/ Output	Condition	Value (Approx.)	strand (V) *	
1	Body	Lamp	Output	Switch ON	0 V	Battery voltage (Inoperative lamp)	
	ground	Lamp	Output	Switch OFF	Battery voltage	Battery voltage	
2	Body	Switch	Input	Switch ON	0 V	Higher than 0 Approx. 4 (Example)	
 ۷	ground	OWIGH	input	Switch OFF	5 V	Approx. 5	

- · The voltage value is based on the body ground.
- *: If high resistance exists in the switch side circuit (caused by a single strand), terminal 2 does not detect approx. 0 V. Control unit does not detect the switch is ON even if the switch does not turn ON. Therefore, the control unit does not control ground to light up the lamp.

CONSULT-III/GST CHECKING SYSTEM

Description

- When CONSULT-III/GST is connected with a data link connector (A) equipped on the vehicle side, it will communicate with the control unit equipped in the vehicle and then enable various kinds of diagnostic tests.
 - 1 : Steering column lower cover
- Refer to "CONSULT-III Software Operation Manual" for more information.



INFOID:0000000006840246

CONSULT-III Function and System Application*1

FUNCTION

Mode	Function
All DTC Reading	Display all DTCs or diagnostic items that all ECUs are recording and judging.
Work Support	This mode enables a technician to adjust some devices faster and more accurately.
Self Diagnostic Results	Retrieve DTC from ECU and display diagnostic items.
Data Monitor	Monitor the input/output signal of the control unit in real time.
CAN Diagnosis	This mode displays a network diagnosis result about CAN by diagram.
CAN Diagnosis Support Monitor	It monitors the status of CAN communication.
Active Test	Send the drive signal from CONSULT-III to the actuator. The operation check can be performed.
DTC & SRT confirmation	The status of system monitoring tests and the self-diagnosis status/result can be confirmed.
ECU Identification	Display the ECU identification number (part number etc.) of the selected system.
Function Test	This mode can show results of self-diagnosis of ECU with either "OK" or "NG". For engines, more practical tests regarding sensors/switches and/or actuators are available.
Configuration	Function to READ/WRITE vehicle configuration.
Special Function	Other results or histories, etc. that are recorded in ECU are displayed.

SYSTEM APPLICATION*1

System	All DTC Reading	Work Support	Self Diagnostic Results	Data Monitor	CAN Diagnosis	CAN Diagnosis Support Monitor	Active Test	DTC & SRT confirmation	ECU Identification	Function Test	Configuration	Special Function
ENGINE	х	х	х	х	Х	х	х	х	х	х	-	-
TRANSMISSION	х	-	х	х	Х	х	-	х	х	х	-	х
AIR BAG	х	-	х	-	х	х	-	-	Х	х	-	х
METER / M&A	х	-	х	х	х	х	-	-	-	-	-	х
BCM	х	х	х	х	х	х	х	-	Х	-	х	-
ABS	х	Х	х	х	Х	Х	х	-	Х	х	-	-

D

GI

В

Е

F

Н

J

<

M

L

Ν

0

Ρ

System	All DTC Reading	Work Support	Self Diagnostic Results	Data Monitor	CAN Diagnosis	CAN Diagnosis Support Monitor	Active Test	DTC & SRT confirmation	ECU Identification	Function Test	Configuration	Special Function
IPDM E/R	Х	-	Х	Х	Х	Х	Х	-	Х	-	-	-
MULTI AV	х	х	х	х	х	х	-	-	х	-	х	-
HVAC	-	х	х	х	х	х	х	-	х	-	-	-
CONVERTIBLE ROOF	х	-	х	х	х	х	х	-	х	-	-	-

x: Applicable

CONSULT-III/GST Data Link Connector (DLC) Circuit

INFOID:0000000006352932

INSPECTION PROCEDURE

If the CONSULT-III/GST cannot diagnose the system properly, check the following items.

Symptom	Check item
CONSULT-III/GST cannot access any system.	CONSULT-III/GST DLC power supply circuit (Terminal 8 and 16) and ground circuit (Terminal 4 and 5)
CONSULT-III cannot access in- dividual system. (Other sys- tems can be accessed.)	 Power supply and ground circuit for the control unit of the system (For detailed circuit, refer to wiring diagram for each system.) Open or short circuit between the system and CONSULT-III DLC (For detailed circuit, refer to wiring diagram for each system.) Open or short circuit CAN communication line. Refer to LAN-15, "Trouble Diagnosis Flow Chart".

NOTE:

The DDL1 and DDL2 circuits from DLC pins 12, 13, 14 and 15 may be connected to more than one system. A short in a DDL circuit connected to a control unit in one system may affect CONSULT-III access to other systems.

If the GST cannot operate properly, check the circuit based on the information of SAE J1962 and ISO 15031-3.

^{*1:} If GST application is equipped, functions in accordance with SAE J1979 and ISO 15031-5 can be used.

INFOID:0000000006352933

GΙ

Wiring Diagram - CONSULT-III/GST CHECKING SYSTEM -

В DATA LINK CONNECTOR (M24) IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) FUSE BLOCK (J/B) (M1), (M2) C CPU IGNITION SWITCH ON or START 10A D ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) (E41) Е 10A BATTERY F TCM (TRANSMISSION CONTROL MODULE) A/T ASSEMBLY (F51): < A JOINT G *: This connector is not shown in "Harness Layout". F301)* Н SOFT TOP CONTROL UNIT STEERING ANGLE SENSOR (M37) BCM (BODY CONTROL MODULE) (M122) COMBINATION METER (M53) J A/C AUTO AMP. K AV CONTROL UNIT (M86): (NV) CONSULT-III CHECKING SYSTEM L AIR BAG DIAGNOSIS SENSOR UNIT (M147) A: CAN communication line for diagnosis A: With AT

(RS): Roadster models

(NV): With NAVI M Ν ECM M107 2010/09/22 0 JCAWA0238GB Р

CONSULT-III/GST CHECKING SYSTEM

CONSULT—III CHECKING SYSTEM Connector No. 18303 Connector Name SOFT TOP CONTROL UNIT Connector Type TH40FB-18H	43 SB	Connector No. F51 Connector Name A.T ASSEMBLY Connector Type RK10FG-DGY	Connector No. MI Connector Name FUSE BLOCK (J/B) Connector Type NSOGRW-M2
1.3.	Connector No. E41 Connector Name Ass xrtuktos ave EECITEC UNIT CONTECL UNIT) Connector Type BAA42FB-AHZ4-LH	(18) (10) 9) 8 7 6	H3. 3A
Ferminal Goldr Signal Name [Specification]	4.8. (2.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	Terminal Golor Signal Name [Specification] 1	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 1.4
SB POWER CONDITION (POWER WINDOW) O TRUNK LID OPEN SIGNAL O ROOF STATUS SIGNAL (INDICATOR)	Terminal Color Signal Name [Specification] No. of Wire GND 1 B GND	5 B	5A L 7A BR
Н	0 2	\mathbb{H}	Н
LG ROOF OPEN / CLOSE SWITCH (OPEN) V TRUNK ROOM LAMP SWITCH CAN-H	4 B GND 5ND 6ND 6ND 6ND 6ND 6ND 6ND 6ND 6ND 6ND 6	10 B	П
LOCAL COMMUNI	BR B	П	Connector Name FUSE BLOCK (J/B) Connector Type NSI0FW-OS
ш	M d	Connector Name ICM (I MANSMISSION CON I MOL MODULE) Connector Type SP10FG	1
DG GND ROOF OPEN / CLOSE SWITCH (GND)	25 Y BUS-L 26 LG DP.FL 27 GR DS.RL 28 G I7	**	48.38 — 28.18 109.988 78.68 58
Connector No. E6 Connector Name provide overtal court Porine Ostringuition Module Connector Name THISEPLAH	SB S	(1 2 3 4 5) (6 7 8 9 10)	Terminal Color Signal Name [Specification] No. of Wire
		ro Signal Nam	+++++
Color Signal Name [Specification] Color Signal Name [Specification] State State		6 GR REV LAMP RLY 8 BR CAN-L 9 V STARTER RLY 10 W/B GND	

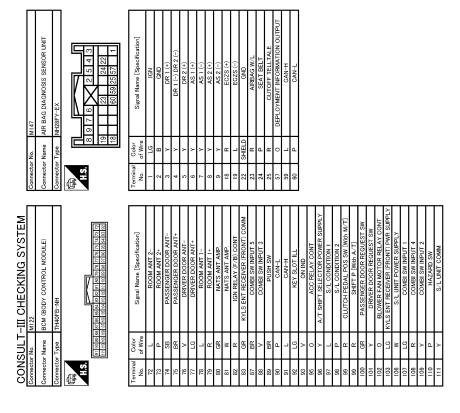
JCAWA0239GB

CONSULT-III/GST CHECKING SYSTEM

< BASIC INSPECTION >

[REGULAR GRADE]

	GI
MICROPHONE SIGNAL COMM (DISPL-)-CONT) CAN-H (Roadster models) AV COMM (H) (Coupe models) AV COMM (H) (Model mo	В
RH124 E CM M107 128 128 128 128 128 128 128 128 128 128	С
10 10 10 10 10 10 10 10	D
MPPCONT) ONT. JAMP) 1 SIGNAL ENGS RESUPLY ENGS RESUPLY ROUND CORRES LIPPLY ROUND COMER SUPPLY ROUND COMER SUPPLY FOR SUPPLY ROUND COMER SUPPLY FOR SUPPLY ROUND COMER SUPPLY FOR SUPP	Е
TX (A	F
Color Colo	G
	Н
THEAPW-NIH	I
New	J
Connector Name Color Connector Name Color Co	К
	L
CONSULT - III CHECKING SYSTEM Connector No. M44	М
No. M24 Name DATA LINK Type BDI 6FW Color Y Y Y Y Color No. M37 No.	N
Connector Name Color Name Connector Name Connector Name Color Name Colo	0
	JCAWA0240GB



JCAWA0241GB

[REGULAR GRADE]

GI

В

C

D

Е

F

Н

J

K

L

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Required Procedure After Battery Disconnection

SYSTEM	ITEM	REFERENCE			
	Towns and two coddings trimmed	WITHOUT 7 INCH DISPLAY	HAC-8, "Temperature Setting Trimmer"		
	Temperature setting trimmer	WITH 7 INCH DISPLAY	HAC-97, "Temperature Set- ting Trimmer"		
	Fact position setting trimmer	WITHOUT 7 INCH DISPLAY	HAC-8, "Foot Position Setting Trimmer"		
	Foot position setting trimmer	WITH 7 INCH DISPLAY	HAC-98, "Foot Position Set- ting Trimmer"		
	Inlet port memory function*		_		
Automatic air conditioning sys-	Inlet port memory function (FRE)	WITHOUT 7 INCH DISPLAY	HAC-9, "Inlet Port Memory Function (FRE)"		
Automatic air conditioning system	inlet port memory function (FKL)	WITH 7 INCH DISPLAY	HAC-98, "Inlet Port Memory Function (FRE)"		
	Inlet port memory function (REC)	WITHOUT 7 INCH DISPLAY	HAC-9, "Inlet Port Memory Function (REC)"		
	met port memory function (REC)	WITH 7 INCH DISPLAY	HAC-99, "Inlet Port Memory Function (REC)"		
	Gas sensor sensitivity adjustment function*	_			
	Auto intake switch Interlocking movement change*	_			
	Clean switch interlocking movement change*	_			
Automatic drive positioner*	Automatic drive positioner system	_			
Power window control	Power window control system	PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BAT- TERY NEGATIVE TERMINAL : Description"			
Sunroof system*	Sunroof system				
Sunshade system*	Sunshade system				
Rear view monitor*	Rear view monitor predictive course line center position adjustment		_		
Around view monitor*	Predictive course line center position adjustment	_			
Automatic back door system*	Automatic back door system		_		
Engine oil level read*	Engine oil level read		_		

^{*:} Not equipped.

M

U

Ν

Ρ

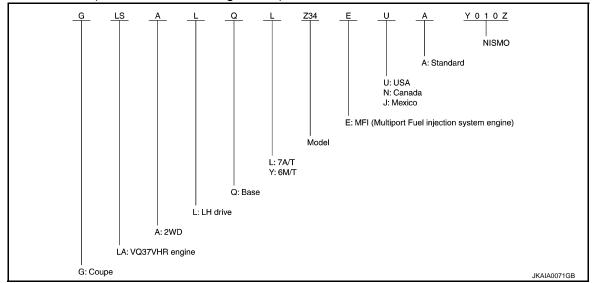
SPEC CHANGE INFORMATION

IDENTIFICATION INFORMATION

Model Variation

Destination	Body	Engine	Transmission	Axle	Grade	Model
USA	COUPE	VQ37VHR	6M/T	2WD	nismo	GLSALQY-EUA

Model variation code (Prefix and suffix designations)



DIMENSIONS AND WEIGHTS

< SPEC CHANGE INFORMATION >

[Nismo 370Z]

DIMENSIONS AND WEIGHTS

Dimensions and Weights

INFOID:0000000006352936

Vehicle body		NISMO models	
Overall length	mm(in)	4,405 (173.4)*1, 4,407 (173.5)*2	
Overall width	mm(in)	1,845 (72.6)	
Overall height	mm(in)	1,315 (51.8)	
Front tread	mm(in)	1,555 (61.2)	
Rear tread	mm(in)	1,580 (62.2)	
Wheelbase mm(i		2,550 (100.4)	
Gross vehicle weight rating (GVWR)	lb(kg)		
Gross axle weight rating (GAWR)		See the F.M.V.S.S. or C.M.V.S.S. certification label on the drive	
Front	lb(kg)	side lock pillar.	
Rear	lb(kg)		

^{*1:} Without front license plate bracket

D

GI

В

C

Е

F

G

Н

Κ

L

M

Ν

0

Р

^{*2:} With front license plate bracket

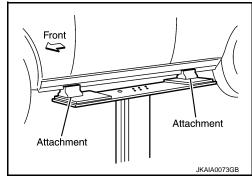
< PRECAUTION > [Nismo 370Z]

PRECAUTION

LIFTING POINT

Lifting Point INFOID:0000000006352937

For information about Lift-up, see GI in "LIFTING POINT" section. The Lift-up points for the NISMO models are the same as the 370Z. The NISMO models Lift-up points are located behind the extended side sills. NISSAN recommends the NISMO models be used on "Board on" type Lift as illustrated. Using unsuitable Lift may damage the Extended Side Sills.



< PRECAUTION > [Nismo 370Z]

TOW TRUCK TOWING

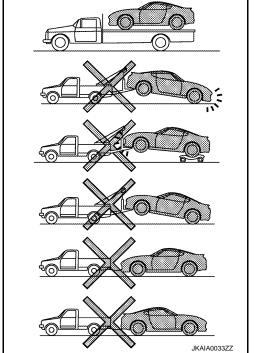
Tow Truck Towing

For complete information regarding tow truck towing, see GI in "TOW TRUCK TOWING" section.

CAUTION:

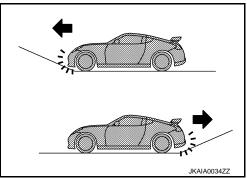
- All applicable state laws and local laws regarding the towing operation must be obeyed.
- It is necessary to use proper towing equipment to avoid possible damage to the vehicle during towing operation. Towing is in accordance with Towing Procedure Manual at dealer.
- Always attach safety chains before towing.
- Only place the vehicle on a flat bed type tow truck. Other towing methods may damage the front splitter or rear diffuser.

NISSAN recommends that the NISMO models be placed on a flat bed truck as illustrated.



CAUTION:

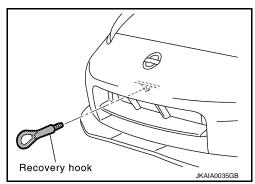
 The approach and departure angles are small. Reduce vehicle speed when the vehicle approaches or leaves a steep hill. Otherwise, the aerodynamic front splitter, aerodynamic rear diffuser and exhaust pipes may contact the road surface and be damaged.



Vehicle Recovery (Freeing a Stuck Vehicle)

For complete information regarding vehicle recovery, see "Vehicle recovery (Freeing a stuck vehicle)" in the "TOW TRUCK TOWING" section. Use the recovery hook by installing it in front of the vehicle. (The rear has no towing points.)

- 1. Remove the front license plate (if so equipped).
- 2. Securely install the recovery hook stored with jacking tools. Make sure that the hook is properly secured in the stored place after use.



CAUTION:

GI

INFOID:0000000006352938

В

С

D

Е

F

G

Н

L

INFOID:0000000006352939

K

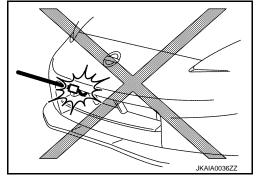
Ν

Р

TOW TRUCK TOWING

[Nismo 370Z] < PRECAUTION >

- Always pull the cable straight out from the front of the vehicle.
 The tow line should be horizontally even. Do not tow the vehicle at an angle.
- Do not tow the vehicle at an angle in the right or left direction.



< PRECAUTION > [Nismo 370Z]

BACK DOOR

Opening and Closing Back Door

INFOID:0000000006352940

GI

В

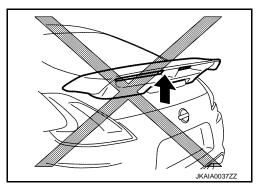
D

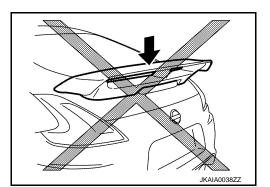
Е

Н

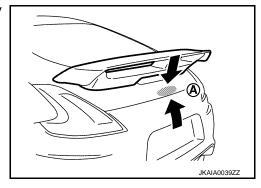
CAUTION:

Do not pull or push on the NISMO models rear spoiler to open or close the back door. Doing so may damage it.





To open or close the back door, lift or push on the area indicated by the arrow A in the illustration.



M

K

Ν

0

Р