

# SECTION **SBC**

## SEAT BELT CONTROL SYSTEM

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# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

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## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000005142327

DETAILED FLOW

#### 1.OBTAIN INFORMATION ABOUT SYMPTOM

---

Interview the customer to obtain as much malfunction information (conditions and environment when the malfunction occurs) as possible when the customer brings the vehicle in.

>> GO TO 2.

#### 2.REPRODUCE THE MALFUNCTION INFORMATION

---

Check the malfunction on the vehicle that the customer describes.  
Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

#### 3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

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Use "Symptom diagnosis" from the symptom inspection result in step 2 and then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 4.

#### 4.IDENTIFY THE MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

---

Perform the diagnosis with "Component diagnosis" of the applicable system.

>> GO TO 5.

#### 5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

---

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

#### 6.FINAL CHECK

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Check that the malfunction is not reproduced, referring to the symptom inspection result in step 2.

Are the malfunctions corrected?

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

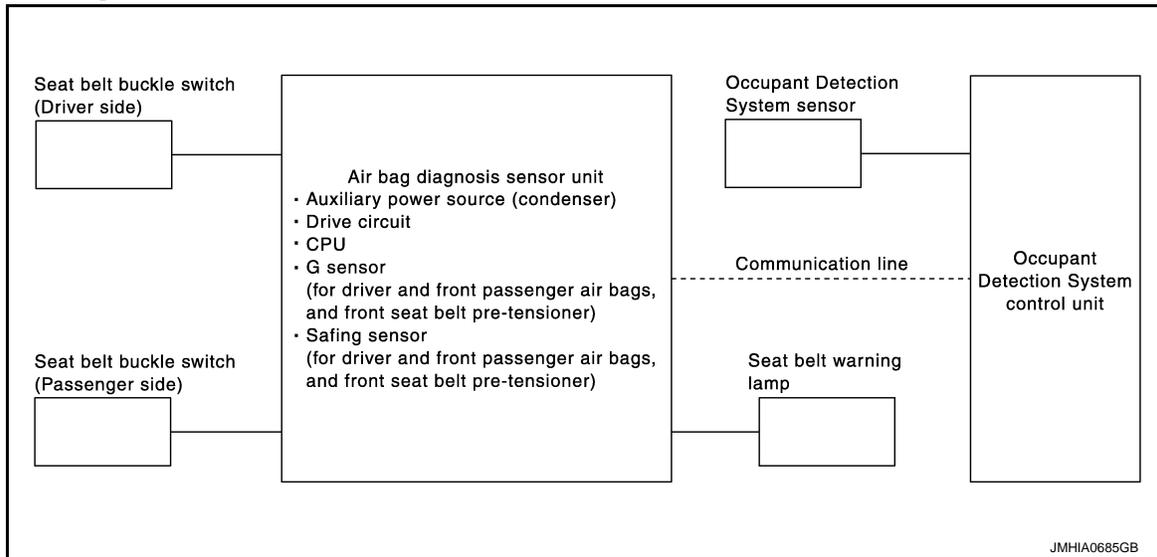
# SEAT BELT WARNING SYSTEM

< SYSTEM DESCRIPTION >

## SYSTEM DESCRIPTION

### SEAT BELT WARNING SYSTEM

#### System Diagram



#### System Description

INFOID:000000005142329

SBC

- Turns ON seat belt warning lamp, when the Occupant Detection System judges adult or child in the front passenger seat and the passenger seat belt buckle switch is OFF.
- Operation of air bag diagnosis sensor unit when air bag diagnosis sensor unit receives information from Occupant Detection System.
- In addition, seat belt warning lamp illuminates, when the driver side seat belt is not fasten. This does not relate to the air bag diagnosis sensor unit.
- For driver seat belt function, refer to [MWI-6. "METER SYSTEM : System Diagram"](#)

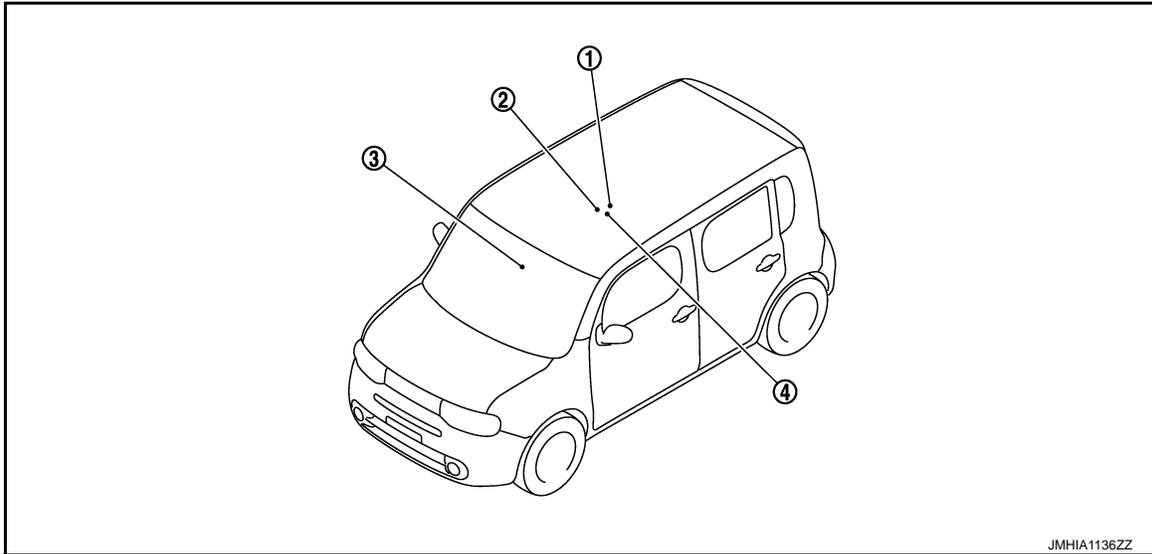
Status (front passenger seat)	Seat belt warning lamp (When front passenger seat is unbuckled)
Empty	OFF
An object	OFF
Child/ child-seat	ON
Adult	ON
Malfunction	OFF

# SEAT BELT WARNING SYSTEM

< SYSTEM DESCRIPTION >

## Component Parts Location

INFOID:000000005142330



JMHIA1136ZZ

1. Air bag diagnosis sensor unit B13, B14, M59  
Refer to [SRC-12. "Component Parts Location"](#)
2. Seat belt buckle switch (passenger side) B23
3. Occupant Detection System control unit B12  
Refer to [SRC-12. "Component Parts Location"](#)
4. Seat belt buckle switch (driver side) B22

## Component Description

INFOID:000000005142331

Component parts	Outline of function
Seat belt buckle switch (Driver side)	Detects if the seat belt buckle switch (driver side) is fastened or unfastened
Seat belt buckle switch (Passenger side)	Detects if the seat belt buckle switch (passenger side) is fastened or unfastened
Seat belt warning lamp	Turns the seat belt warning lamp ON when the seat belt is unfastened
Occupant Detection System control unit	Judges the passenger seat condition based on the information from Occupant Detection System control unit
Occupant Detection System seat sensor	Detects if the passenger seat is empty or occupied
Air bag diagnosis sensor unit	Turns ON seat belt warning lamp based on the information from Occupant Detection System control unit
Front passenger air bag OFF indicator	Turns the front passenger air bag OFF indicator lamp ON when the front passenger seat is occupied by a child or a child seat

# SEAT BELT BUCKLE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## DTC/CIRCUIT DIAGNOSIS

### SEAT BELT BUCKLE SWITCH DRIVER SIDE

#### DRIVER SIDE : Description

INFOID:000000005142332

- Detects whether or not the seat belt is fastened when the ignition switch turns ON. If the seat belt is not fastened, it illuminates the seat belt warning lamp on the combination meter.
- The seat belt buckle switch is installed in the seat belt buckle.

#### DRIVER SIDE : Component Function Check

INFOID:000000005142333

#### 1. CHECK SEAT BELT BUCKLE SWITCH

Ⓜ With CONSULT-III

When checking "BUCKLE SW" in DATA MONITOR in METER/M&A, check that ON/OFF display changes synchronized with the insertion operation to the seat belt buckle.

Monitor item	Condition
BUCKLE SW	When driver side seat belt is not fastened: ON
	When driver side seat belt is fastened: OFF

Is the inspection result normal?

- YES >> Seat belt buckle switch (driver side) circuit is normal.  
NO >> Refer to [SBC-5, "DRIVER SIDE : Diagnosis Procedure"](#).

#### DRIVER SIDE : Diagnosis Procedure

INFOID:000000005142334

#### 1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) CIRCUIT

1. Turn ignition switch ON.
2. Disconnect seat belt buckle switch (driver side) connector.
3. Check voltage between seat belt buckle switch (driver side) harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Seat belt buckle switch (driver side)				
Connector	Terminal	Ground	When driver side seat belt is fastened	Battery voltage
B22	1		When driver side seat belt is not fastened	0

Is the inspection result normal?

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

#### 2. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) CIRCUIT

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

Combination meter		Seat belt buckle switch (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M34	9	B22	1	Existed

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

# SEAT BELT BUCKLE SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

Combination meter		Ground	Continuity
Connector	Terminal		
M34	9		Not existed

Is the inspection result normal?

YES >> Replace combination meter. Refer to [MWI-97, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 3.CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check continuity between seat belt buckle switch (driver side) harness connector and ground.

Seat belt buckle switch (driver side)		Ground	Continuity
Connector	Terminal		
B22	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Check seat belt buckle switch (driver side). Refer to [SBC-6, "DRIVER SIDE : Component Inspection \(Belt Buckle Switch\)"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat belt buckle (driver side). Refer to [SB-8, "SEAT BELT BUCKLE : Removal and Installation"](#).

## DRIVER SIDE : Component Inspection (Belt Buckle Switch)

INFOID:000000005142335

### 1.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

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

Seat belt buckle switch (driver side)		Condition	Continuity
Terminal			
1	2	When driver side seat belt is not fastened	Existed
		When driver side seat belt is fastened	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat belt buckle (driver side). Refer to [SB-8, "SEAT BELT BUCKLE : Exploded View"](#)

## PASSENGER SIDE

### PASSENGER SIDE : Description

INFOID:000000005142336

- Detects whether or not the seat belt is fastened when the ignition switch turns ON. If the seat belt switch is not fastened, it illuminates the seat belt warning lamp on the combination meter.
- The seat belt buckle switch is installed in the seat belt buckle.

### PASSENGER SIDE : Component Function Check

INFOID:000000005142337

### 1.CHECK SEAT BELT WARNING FUNCTION

1. Sit down in passenger seat.
2. Check that seat belt warning lamp turns OFF when passenger seat belt is fastened, and then turns ON when passenger seat belt is unfastened.

Is the inspection result normal?

# SEAT BELT BUCKLE SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

- YES >> Seat belt buckle switch (passenger side) circuit is normal.  
 NO >> Refer to [SBC-7, "PASSENGER SIDE : Diagnosis Procedure"](#).

## PASSENGER SIDE : Diagnosis Procedure

INFOID:000000005142338

### 1. CHECK SEAT BELT BUCKLE SWITCH (PASSENGER SIDE) CIRCUIT

- Turn ignition switch ON.
- Disconnect seat belt buckle switch (passenger side) connector.
- Check that voltage between seat belt buckle switch (passenger side) and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Seat belt buckle switch (passenger side)				
Connector	Terminal			
B23	1	Ground	When passenger side seat belt is fastened	Battery voltage
			When passenger side seat belt is not fastened	0

Is the inspection result normal?

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

### 2. CHECK SEAT BELT BUCKLE SWITCH (PASSENGER SIDE) CIRCUIT

- Turn ignition switch OFF.
- Disconnect air bag diagnosis sensor unit connector.
- Check continuity between air bag diagnosis sensor unit harness connector and seat belt buckle switch (passenger side) harness connector.

Air bag diagnosis sensor unit		Seat belt buckle switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
B14	29	B23	1	Existed

- Check continuity between air bag diagnosis sensor unit harness connector and ground.

Air bag diagnosis sensor unit		Ground	Continuity
Connector	Terminal		
B14	29		Not existed

Is the inspection result normal?

- YES >> Replace air bag diagnosis sensor unit. Refer to [SR-20, "Removal and Installation"](#).  
 NO >> Repair or replace harness between air bag diagnosis sensor unit and seat belt buckle switch (passenger side).

### 3. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check continuity between seat belt buckle switch (passenger side) harness connector and ground.

Seat belt buckle switch (passenger side)		Ground	Continuity
Connector	Terminal		
B23	2		Existed

Is the inspection result normal?

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

### 4. CHECK SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Check seat belt buckle switch (passenger side). Refer to [SBC-8, "PASSENGER SIDE : Component Inspection \(Belt Buckle Switch\)"](#).

Is the inspection result normal?

- YES >> INSPECTION END

# SEAT BELT BUCKLE SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

NO >> Replace seat belt buckle (passenger side). Refer to [SB-8, "SEAT BELT BUCKLE : Removal and Installation"](#).

## PASSENGER SIDE : Component Inspection (Belt Buckle Switch)

INFOID:000000005142339

### 1. CHECK SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

1. Turn ignition switch OFF.
2. Disconnect seat belt buckle switch connector.
3. Check continuity of seat belt (passenger side).

Seat belt buckle switch (passenger side)		Condition	Continuity
Terminal			
1	2	When passenger side seat belt is not fastened	Existed
		When passenger side seat belt is fastened	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat belt buckle switch (passenger side). Refer to [SB-8, "SEAT BELT BUCKLE : Removal and Installation"](#).

# SEAT BELT WARNING LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## SEAT BELT WARNING LAMP CIRCUIT

### Diagnosis Procedure

INFOID:000000005142340

#### 1. CHECK SEAT BELT WARNING LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector.
3. Turn ignition switch ON.
4. Check that voltage between combination meter harness connector and ground.

Combination meter		Ground	Voltage (V) (Approx.)
Connector	Terminal		Battery voltage
M34	29		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace combination meter. Refer to [MWI-97, "Removal and Installation"](#).

#### 2. CHECK SEAT BELT WARNING LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect air bag diagnosis sensor unit connector.
3. Check continuity between combination meter harness connector and air bag diagnosis sensor unit harness connector.

Combination meter		Air bag diagnosis sensor unit		Continuity
Connector	Terminal	Connector	Terminal	
M34	29	M59	24	Existed

4. Check continuity between combination meter and ground.

Combination meter		Ground	Continuity
Connector	Terminal		Not existed
M34	29		

Is the inspection result normal?

YES >> Replace air bag diagnosis sensor unit. Refer to [SR-20, "Removal and Installation"](#).

NO >> Repair or replace harness.

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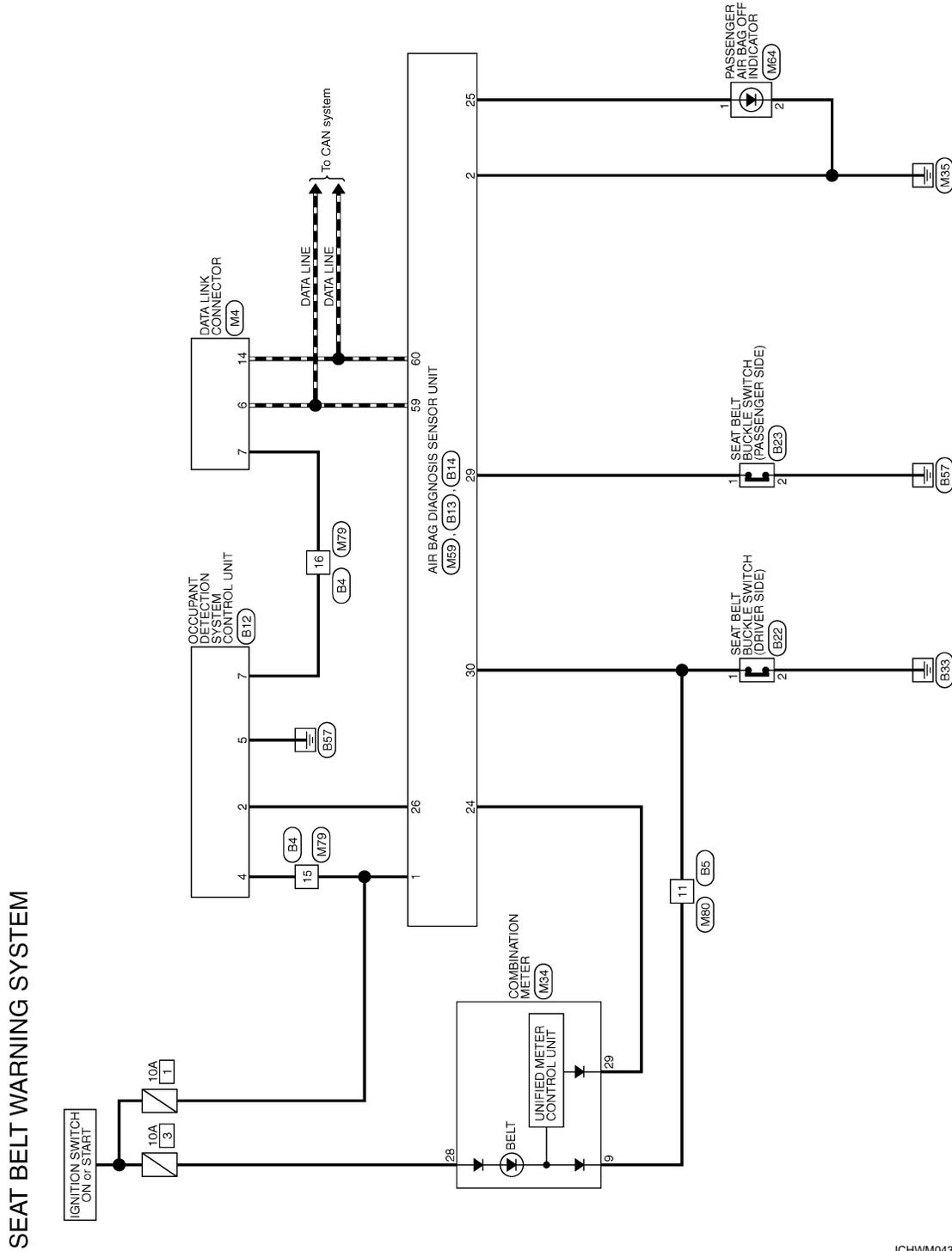
# SEAT BELT WARNING SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

## SEAT BELT WARNING SYSTEM

Wiring Diagram - SRS AIR BAG CONTROL SYSTEM -

INFOID:000000005142341



SEAT BELT WARNING SYSTEM

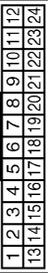
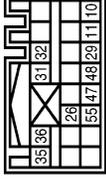
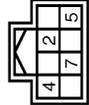
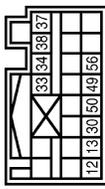
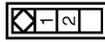
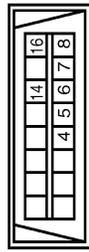
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# SEAT BELT WARNING SYSTEM

## < DTC/CIRCUIT DIAGNOSIS >

### SEAT BELT WARNING SYSTEM

Connector No.	B4	Connector No.	B13	Connector No.	B12	Connector No.	B5	Connector No.	B14	Connector No.	B23	Connector No.	B22	Connector No.	B21
Connector Name	WIRE TO WIRE	Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT	Connector Name	OCCUPANT DETECTION SYSTEM CONTROL UNIT	Connector Name	WIRE TO WIRE	Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT	Connector Name	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)	Connector Name	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)	Connector Name	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
Connector Type	TH24MW-NH	Connector Type	NH22FY-IV-EX	Connector Type	TH26FW-NH	Connector Type	TH16MW-NH	Connector Type	NH22FY-2V-EX	Connector Type	A03FW	Connector Type	A03FW	Connector Type	A03FW
															
Terminal No.	15	Terminal No.	26	Terminal No.	2	Terminal No.	11	Terminal No.	30	Terminal No.	6	Terminal No.	1	Terminal No.	14
Color of Wire	R	Color of Wire	V	Color of Wire	V	Color of Wire	O	Color of Wire	O	Color of Wire	L	Color of Wire	O	Color of Wire	P
Signal Name [Specification]	-	Signal Name [Specification]	ODS INPUT	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	LH BUCKLE SW INPUT	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	DATA LINK CONNECTOR
	GR		LG		GR		-		LH BUCKLE SW INPUT		B		-		BD16FW

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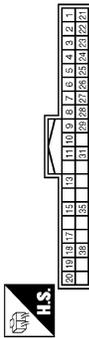
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# SEAT BELT WARNING SYSTEM

## < DTC/CIRCUIT DIAGNOSIS >

### SEAT BELT WARNING SYSTEM

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FV-NH



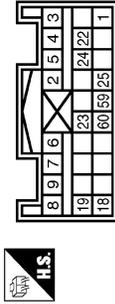
Terminal No.	Color of Wire	Signal Name [Specification]
9	O	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
28	GR	IGNITION SIGNAL
29	BR	PASSENGER SEAT BELT WARNING SIGNAL

Connector No.	M80
Connector Name	WIRE TO WIRE
Connector Type	TH16FV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
11	O	---

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	NH28FY-EX



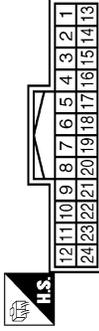
Terminal No.	Color of Wire	Signal Name [Specification]
1	R/L	IGN
2	B	GND
24	BR	SEAT BELT W/L
25	R/B	CUTOFF TELLTALE
59	L	CAN-H
60	P	CAN-L

Connector No.	M64
Connector Name	PASSENGER AIR BAG OFF INDICATOR
Connector Type	JAB05FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R/B	---
2	B	---

Connector No.	M79
Connector Name	WIRE TO WIRE
Connector Type	TH24FV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	R/L	---
16	GR/R	---

# DIAGNOSIS SENSOR UNIT

< ECU DIAGNOSIS INFORMATION >

## ECU DIAGNOSIS INFORMATION

### DIAGNOSIS SENSOR UNIT

#### DTC Index

INFOID:000000005175400

DTC	Diagnostic item	Explanation	Reference page
—	NO DTC IS DETECTED.	Low battery voltage (Less than 9 V)	<a href="#">SRC-23, "CONSULT-III Function"</a> .
		When malfunction is indicated by the "AIR BAG" warning lamp in the user mode	<a href="#">SRC-17, "Diagnosis with Air Bag Warning Lamp"</a> , <a href="#">SRC-23, "CONSULT-III Function"</a> .
		Self-diagnostic result is not erased after repair	<a href="#">GI-34, "Intermittent Incident"</a>
		Intermittent malfunction is detected in the past	
	No malfunction is detected	—	
B1001-B1015	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<ul style="list-style-type: none"> <li><a href="#">SRC-25, "DTC Logic"</a>.</li> <li><a href="#">SRC-27, "DTC Logic"</a>.</li> <li><a href="#">SRC-29, "DTC Logic"</a>.</li> </ul>
B1017 B1020 B1021	OCCUPANT SENS C/U [UNIT FAIL]	Malfunction occurs in Occupant Detection System control unit	<a href="#">SRC-31, "DTC Logic"</a> .
B1018	OCCUPANT SENS [UNIT FAIL]	Malfunction occurs in Occupant Detection System sensor	<a href="#">SRC-33, "DTC Logic"</a> .
B1022	OCCUPANT SENS C/U [COMM FAIL]	Malfunction occurs in Occupant Detection System control unit, circuit of Occupant Detection System control unit air bag diagnosis sensor unit, or air bag diagnosis sensor unit	<a href="#">SRC-35, "DTC Logic"</a> .
B1023	PASS A/B INDCTR CKT	Passenger air bag OFF indicator circuit is open or shorted to ground or the circuits are shorted each other	<a href="#">SRC-37, "DTC Logic"</a> .
B1025 B1032 B1048	OCS SENSOR	Malfunction occurs in Occupant Detection System control unit, circuit of Occupant Detection System control unit air bag diagnosis sensor unit, or air bag diagnosis sensor unit	<a href="#">SRC-39, "DTC Logic"</a> .
B1026-B1031	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	<a href="#">SRC-41, "DTC Logic"</a> .
B1033 B1034	CRASH ZONE SEN [UNIT FAIL]	Crash zone sensor is malfunctioning	<a href="#">SRC-43, "DTC Logic"</a> .
B1035	CRASH ZONE SEN [COMM FAIL]	Crash zone sensor is malfunctioning	<a href="#">SRC-45, "DTC Logic"</a> .
B1036	CRASH ZONE SEN [UNMATCH]	Crash zone sensor is out of the specified specification	<a href="#">SRC-47, "DTC Logic"</a> .
B1037 B1039 B1041	CRASH ZONE SEN1	Crash zone sensor is malfunctioning	<a href="#">SRC-49, "DTC Logic"</a> .
B1042-B1047	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-51, "DTC Logic"</a> .
B1049 B1054	DRIVER AIRBAG MODULE [OPEN]	Driver air bag module circuit is open (including the spiral cable)	<a href="#">SRC-53, "DTC Logic"</a> .
B1050 B1055	DRIVER AIRBAG MODULE [VB-SHORT]	Driver air bag module circuit is shorted to power supply circuit (including the spiral cable)	<a href="#">SRC-55, "DTC Logic"</a> .

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## DIAGNOSIS SENSOR UNIT

### < ECU DIAGNOSIS INFORMATION >

DTC	Diagnostic item	Explanation	Reference page
B1051 B1056	DRIVER AIRBAG MODULE [GND-SHORT]	Driver air bag module circuit is shorted to ground (including the spiral cable)	<a href="#">SRC-57, "DTC Logic"</a> .
B1052 B1057	DRIVER AIRBAG MODULE [SHORT]	Driver air bag module circuits are shorted to each other (including spiral cable)	<a href="#">SRC-59, "DTC Logic"</a> .
B1058-B1063	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-61, "DTC Logic"</a> .
B1065 B1070	ASSIST A/B MODULE [OPEN]	Passenger air bag module circuit is open	<a href="#">SRC-63, "DTC Logic"</a> .
B1066 B1071	ASSIST A/B MODULE [VB-SHORT]	Passenger air bag module circuit is shorted to power supply circuit	<a href="#">SRC-65, "DTC Logic"</a> .
B1067 B1072	ASSIST A/B MODULE [GND-SHORT]	Passenger air bag module circuit is shorted to ground	<a href="#">SRC-67, "DTC Logic"</a> .
B1068 B1073	ASSIST A/B MODULE [SHORT]	Passenger air bag module circuits are shorted to each other	<a href="#">SRC-69, "DTC Logic"</a> .
B1074-B1079	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-71, "DTC Logic"</a> .
B1080 B1096	DRIVER AIRBAG MODULE [SHORT]	Driver air bag module circuits are shorted to each other (including spiral cable)	<a href="#">SRC-73, "DTC Logic"</a> .
B1081	PRE-TEN FRONT RH [OPEN]	Seat belt pre-tensioner RH circuit is open	<a href="#">SRC-75, "DTC Logic"</a> .
B1082	PRE-TEN FRONT RH [VB-SHORT]	Seat belt pre-tensioner RH circuit is shorted to power supply circuit	<a href="#">SRC-77, "DTC Logic"</a> .
B1083	PRE-TEN FRONT RH [GND-SHORT]	Seat belt pre-tensioner RH circuit is shorted to ground	<a href="#">SRC-79, "DTC Logic"</a> .
B1084	PRE-TEN FRONT RH [SHORT]	Seat belt pre-tensioner RH circuits are shorted to each other	<a href="#">SRC-81, "DTC Logic"</a> .
B1086	PRE-TEN FRONT LH [OPEN]	Seat belt pre-tensioner LH circuit is open	<a href="#">SRC-83, "DTC Logic"</a> .
B1087	PRE-TEN FRONT LH [VB-SHORT]	Seat belt pre-tensioner LH circuit is shorted to power supply circuit	<a href="#">SRC-85, "DTC Logic"</a> .
B1088	PRE-TEN FRONT LH [GND-SHORT]	Seat belt pre-tensioner LH circuit is shorted to ground	<a href="#">SRC-87, "DTC Logic"</a> .
B1089	PRE-TEN FRONT LH [SHORT]	Seat belt pre-tensioner LH circuits are shorted to each other	<a href="#">SRC-89, "DTC Logic"</a> .
B1090-B1095	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-91, "DTC Logic"</a> .
B1106-B1111	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-93, "DTC Logic"</a> .
B1113 B1114	SATELLITE SENS RH [UNIT FAIL]	Satellite sensor RH is malfunctioning	<a href="#">SRC-95, "DTC Logic"</a> .
B1115	SATELLITE SENS RH [COMM FAIL]	Satellite sensor RH is malfunctioning	<a href="#">SRC-97, "DTC Logic"</a> .
B1116	SATELLITE SENS RH [UNMATCH]	Satellite sensor RH is out of the specified specification	<a href="#">SRC-99, "DTC Logic"</a> .
B1118 B1119	SATELLITE SENS LH [UNIT FAIL]	Satellite sensor LH is malfunctioning	<a href="#">SRC-101, "DTC Logic"</a> .
B1120	SATELLITE SENS LH [COMM FAIL]	Satellite sensor LH is malfunctioning	<a href="#">SRC-103, "DTC Logic"</a> .
B1121	SATELLITE SENS LH [UNMATCH]	Satellite sensor LH is out of the specified specification	<a href="#">SRC-105, "DTC Logic"</a> .
B1122-B1127	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-107, "DTC Logic"</a> .

# DIAGNOSIS SENSOR UNIT

## < ECU DIAGNOSIS INFORMATION >

DTC	Diagnostic item	Explanation	Reference page
B1129	SIDE MODULE RH [OPEN]	Side air bag module RH circuit is open	<a href="#">SRC-109, "DTC Logic"</a> .
B1130	SIDE MODULE RH [VB-SHORT]	Side air bag module RH circuit is shorted to power supply circuit	<a href="#">SRC-111, "DTC Logic"</a> .
B1131	SIDE MODULE RH [GND-SHORT]	Side air bag module RH circuit is shorted to ground	<a href="#">SRC-113, "DTC Logic"</a> .
B1132	SIDE MODULE RH [SHORT]	Seat belt pre-tensioner RH circuits are shorted to each other	<a href="#">SRC-115, "DTC Logic"</a> .
B1134	SIDE MODULE LH [OPEN]	Side air bag module LH circuit is open	<a href="#">SRC-117, "DTC Logic"</a> .
B1135	SIDE MODULE LH [VB-SHORT]	Side air bag module LH circuit is shorted to power supply circuit	<a href="#">SRC-119, "DTC Logic"</a> .
B1136	SIDE MODULE LH [GND-SHORT]	Side air bag module LH circuit is shorted to ground	<a href="#">SRC-121, "DTC Logic"</a> .
B1137	SIDE MODULE LH [SHORT]	Side air bag module LH circuits are shorted to each other	<a href="#">SRC-123, "DTC Logic"</a> .
B1138-B1143	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-125, "DTC Logic"</a>
B1144	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	<a href="#">SRC-127, "DTC Logic"</a> .
B1145	CURTAIN MODULE RH [OPEN]	Curtain air bag module RH circuit is open	<a href="#">SRC-128, "DTC Logic"</a> .
B1146	CURTAIN MODULE RH [VB-SHORT]	Curtain air bag module RH circuit is shorted to power supply circuit	<a href="#">SRC-130, "DTC Logic"</a> .
B1147	CURTAIN MODULE RH [GND-SHORT]	Curtain air bag module RH circuit is shorted to ground	<a href="#">SRC-132, "DTC Logic"</a> .
B1148	CURTAIN MODULE RH [SHORT]	Curtain air bag module RH circuits are shorted to each other	<a href="#">SRC-134, "DTC Logic"</a> .
B1150	CURTAIN MODULE LH [OPEN]	Curtain air bag module LH circuit is open	<a href="#">SRC-136, "DTC Logic"</a> .
B1151	CURTAIN MODULE LH [VB-SHORT]	Curtain air bag module LH circuit is shorted to power supply circuits	<a href="#">SRC-138, "DTC Logic"</a> .
B1152	CURTAIN MODULE LH [GND-SHORT]	Curtain air bag module LH circuit is shorted to ground	<a href="#">SRC-140, "DTC Logic"</a> .
B1153	CURTAIN MODULE LH [SHORT]	Curtain air bag module LH circuits are shorted to each other	<a href="#">SRC-142, "DTC Logic"</a> .
B1154-B1159	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-144, "DTC Logic"</a> .
B1170-B1175	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-146, "DTC Logic"</a> .
B1186-B1191	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-148, "DTC Logic"</a> .
B1202-B1207	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-150, "DTC Logic"</a> .
B1209	FRONTAL COLLISION DETECTION	Seat belt pre-tensioner, driver side air bag and passenger air bag are deployed	<a href="#">SRC-152, "DTC Logic"</a> .
B1210	SIDE COLLISION DETECTION	Side air bag and curtain air bag are deployed	<a href="#">SRC-154, "DTC Logic"</a> .
B1211	ROLLOVER DETECTION	Seat belt pre-tensioner side curtain air bag module are deployed because of rollover detection	<a href="#">SRC-156, "DTC Logic"</a> .
B1212-B1214	RH1 SAT-SENS	Satellite sensor RH is malfunctioning	<a href="#">SRC-158, "DTC Logic"</a> .

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## DIAGNOSIS SENSOR UNIT

### < ECU DIAGNOSIS INFORMATION >

DTC	Diagnostic item	Explanation	Reference page
B1215-B1217	LH1 SAT-SENS	Satellite sensor LH is malfunctioning	<a href="#">SRC-160, "DTC Logic"</a> .
B1218-B1223	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-162, "DTC Logic"</a> .
B1239	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	<a href="#">SRC-164, "DTC Logic"</a> .

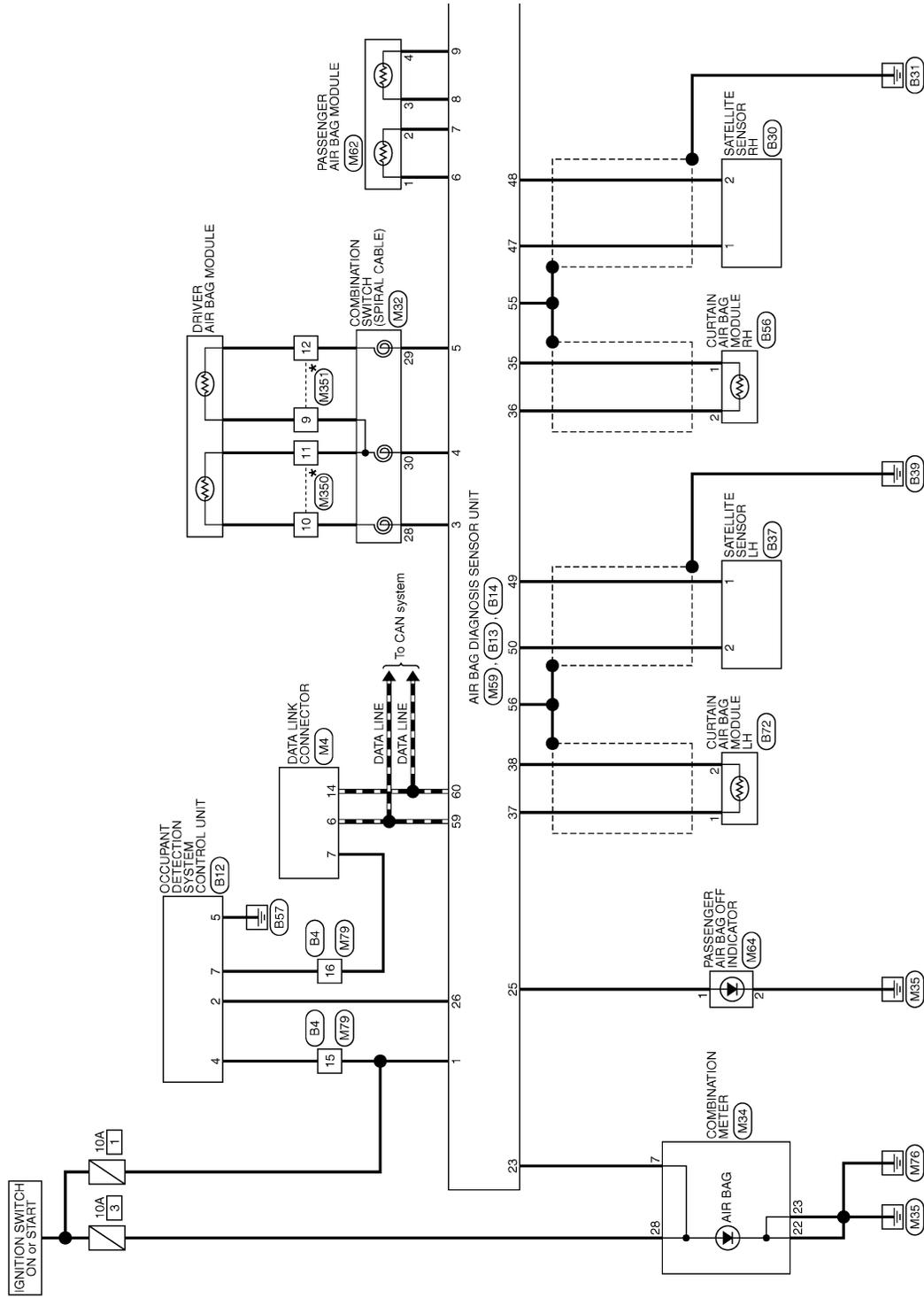
# DIAGNOSIS SENSOR UNIT

< ECU DIAGNOSIS INFORMATION >

## Wiring Diagram - SRS AIR BAG CONTROL SYSTEM -

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### SRS AIR BAG CONTROL SYSTEM



\*: This connector is not shown in "Harness Layout".

2009/02/27

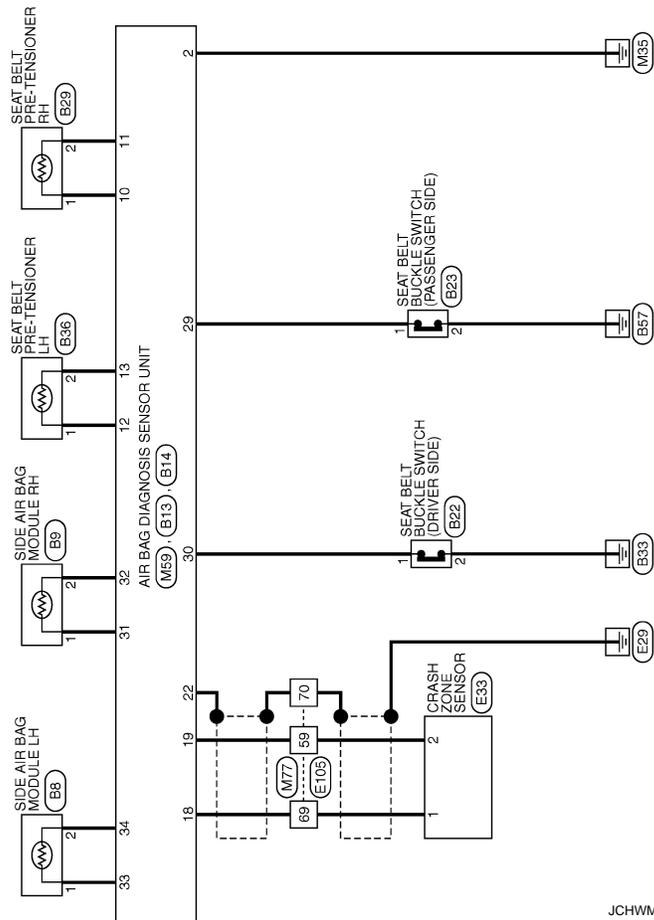
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# DIAGNOSIS SENSOR UNIT

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# DIAGNOSIS SENSOR UNIT

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## SRS AIR BAG CONTROL SYSTEM

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	R	-
16	GR	-

Connector No.	B8
Connector Name	SIDE AIR BAG MODULE LH
Connector Type	TK02FY-EX-1V



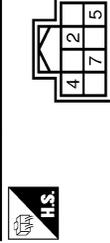
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	Y	-

Connector No.	B9
Connector Name	SIDE AIR BAG MODULE RH
Connector Type	TK02FY-EX-1V



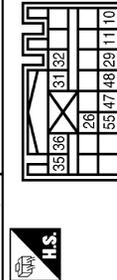
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	Y	-

Connector No.	B12
Connector Name	OCCUPANT DETECTION SYSTEM CONTROL UNIT
Connector Type	TH03FW-NH



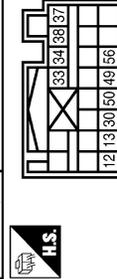
Terminal No.	Color of Wire	Signal Name [Specification]
2	V	-
4	R	-
5	B	-
7	GR	-

Connector No.	B13
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	NH22FY-1V-EX



Terminal No.	Color of Wire	Signal Name [Specification]
10	Y	PRH (+)
11	Y	PRH (-)
26	V	ODS INPUT
29	LG	RH BUCKLE SW INPUT
31	Y	SRH (+)
32	Y	SRH (-)
35	P	GRH (+)
36	L	GRH (-)
47	G	SATELLITE RH (+)
48	R	SATELLITE RH (-)
55	SHIELD	GND

Connector No.	B14
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	NH22FY-2V-EX



Terminal No.	Color of Wire	Signal Name [Specification]
12	Y	PLH (+)
13	Y	PLH (-)
30	O	LH BUCKLE SW INPUT
33	Y	SLH (-)
34	Y	SLH (+)
37	G	QLH (+)
38	R	QLH (-)
49	P	SATELLITE LH (+)
50	L	SATELLITE LH (-)
56	SHIELD	GND

Connector No.	B22
Connector Name	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
Connector Type	A03FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-

Connector No.	B23
Connector Name	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
Connector Type	A03FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-

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# DIAGNOSIS SENSOR UNIT

< ECU DIAGNOSIS INFORMATION >

## SRS AIR BAG CONTROL SYSTEM

Connector No.	B29
Connector Name	SEAT BELT PRE-TENSIONER RH
Connector Type	ACA02FY-2V



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

Connector No.	B30
Connector Name	SATELLITE SENSOR RH
Connector Type	HK02FY-1V-EX



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

Connector No.	B36
Connector Name	SEAT BELT PRE-TENSIONER LH
Connector Type	ACA02FY-2V



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

Connector No.	B37
Connector Name	SATELLITE SENSOR LH
Connector Type	HK02FY-1V-EX



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	L	-

Connector No.	B56
Connector Name	CURTAIN AIR BAG MODULE RH
Connector Type	ACA02FY-2V



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	L	-

Connector No.	B72
Connector Name	CURTAIN AIR BAG MODULE LH
Connector Type	ACA02FY-2V



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

Connector No.	E33
Connector Name	CRASH ZONE SENSOR
Connector Type	HK02FY-1V-EX



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	L	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TR80MY-C516-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	L	-
69	P	-
70	SHIELD	-

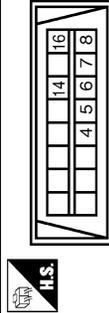
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# DIAGNOSIS SENSOR UNIT

< ECU DIAGNOSIS INFORMATION >

## SRS AIR BAG CONTROL SYSTEM

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



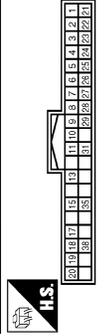
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
7	GF/R	-
14	P	-

Connector No.	M32
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FY-EX-TV



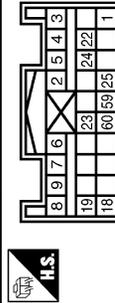
Terminal No.	Color of Wire	Signal Name [Specification]
23	Y	-
29	L/Y	-
30	Y/R	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
7	R/G	AIR BAG SIGNAL
22	B	GROUND
23	B	GROUND
28	GR	IGNITION SIGNAL

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	NH28FY-EX



Terminal No.	Color of Wire	Signal Name [Specification]
1	R/L	IGN
2	B	GND
3	Y	DR1 (+)
4	Y/R	DR1 (-) DR2 (-)
5	L/Y	DR2 (+)
6	Y/G	AS1 (+)
7	Y/B	AS1 (-)
8	Y/L	AS2 (+)
9	G/Y	AS2 (-)
18	LG	EGS2 (+)
18	Y	EGS2 (-)

Terminal No.	22	SHIELD	SHIELD
Terminal No.	23	R/G	AIR BAG W/L
Terminal No.	25	R/B	OUTOFF TELLTALE
Terminal No.	59	L	CAN-H
Terminal No.	60	P	CAN-L

Connector No.	M62
Connector Name	PASSENGER AIR BAG MODULE
Connector Type	RK04FY-BD



Connector No.	M64
Connector Name	PASSENGER AIR BAG OFF INDICATOR
Connector Type	LJ40GFB



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y/G	-
2	Y/B	-
3	Y/L	-
4	G/Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/B	-
2	B	-

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# SEAT BELT WARNING LAMP DOES NOT TURN OFF

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### SEAT BELT WARNING LAMP DOES NOT TURN OFF

#### Diagnosis Procedure

INFOID:000000005142344

#### 1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Check seat belt buckle switch (driver side). Refer to [SBC-5. "DRIVER SIDE : Component Function Check"](#)

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. CHECK SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Check seat belt buckle switch (passenger side). Refer to [SBC-6. "PASSENGER SIDE : Component Function Check"](#)

#### NOTE:

Except for Mexico

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### 3. CHECK SEAT BELT WARNING LAMP CIRCUIT

Check seat belt warning lamp circuit. Refer to [SBC-9. "Diagnosis Procedure"](#)

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

#### 4. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-34. "Intermittent Incident"](#).

NO >> GO TO 1.

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# SEAT BELT WARNING LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

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## SEAT BELT WARNING LAMP DOES NOT TURN ON

### Diagnosis Procedure

INFOID:000000005142345

#### 1. CHECK SELF-DIAGNOSIS RESULT

Perform "COMBINATION METER" self-diagnosis result. Refer to [MWI-30, "CONSULT-III Function \(METER/M&A\)"](#)

Is DTC detected?

- YES >> Repair or replace the malfunctioning parts.
- NO >> GO TO 2.

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#### 2. CHECK POWER SUPPLY

Check that fuses are not blown.

Check ignition power supply of combination meter. Refer to [MWI-39, "COMBINATION METER : Diagnosis Procedure"](#)

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace the malfunctioning parts.

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#### 3. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Check seat belt buckle switch (driver side). Refer to [SBC-5, "DRIVER SIDE : Component Function Check"](#)

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Repair or replace the malfunctioning parts.

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#### 4. CHECK SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Check seat belt buckle switch (passenger side). Refer to [SBC-6, "PASSENGER SIDE : Component Function Check"](#)

#### **NOTE:**

Except for Mexico

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Repair or replace the malfunctioning parts.

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#### 5. CHECK SEAT BELT WARNING LAMP CIRCUIT

Check seat belt warning lamp circuit. Refer to [SBC-9, "Diagnosis Procedure"](#)

Is the inspection result normal?

- YES >> GO TO 6.
- NO >> Repair or replace the malfunctioning parts.

---

#### 6. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-34, "Intermittent Incident"](#).
- NO >> GO TO 1.

# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

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

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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:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

#### PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### **WARNING:**

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

#### Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:000000005142551

#### **NOTE:**

- Before removing and installing any control units, first turn the push-button 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-III 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.

This vehicle is equipped with a push-button ignition switch and a 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 procedure below before starting the repair operation.

#### OPERATION PROCEDURE

1. Connect both battery cables.

#### **NOTE:**

Supply power using jumper cables if battery is discharged.

2. Turn the push-button ignition switch to ACC position.  
(At this time, the steering lock will be released.)
3. 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.

## PRECAUTIONS

### < PRECAUTION >

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5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.