

SECTION

RS

RESTRAINT SYSTEM

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MODIFICATION NOTICE

< SERVICE INFORMATION >

SERVICE INFORMATION

MODIFICATION NOTICE

Major Modification Item

INFOID:000000003618520

- Crash zone sensor has been added.
- Wiring diagram has been changed.

DTC INDEX

< SERVICE INFORMATION >

DTC INDEX

B1001-B1015

INFOID:000000003774621

DTC	Items (CONSULT screen terms)	Reference
B1001	DIAGNOSIS SENSOR UNIT	—
B1002		
B1003		
B1004		
B1005		
B1006		
B1007		
B1008		
B1009		
B1010		
B1011		
B1012		
B1013		
B1014		
B1015		

B1023-B1036

INFOID:000000003774622

DTC	Items (CONSULT screen terms)	Reference
B1026	DIAGNOSIS SENSOR UNIT	RS-12, "Trouble Diagnosis with CONSULT-III"
B1027		
B1028		
B1029		
B1030		
B1031		
B1033	CRASH ZONE SEN	
B1034		
B1035		
B1036		

DTC INDEX

< SERVICE INFORMATION >

B1042-B1052

INFOID:000000003774623

DTC	Items (CONSULT screen terms)	Reference
B1042	DIAGNOSIS SENSOR UNIT	—
B1043		
B1044		
B1045		
B1046		
B1047		
B1049	DRIVER AIR BAG MODULE	
B1050		
B1051		
B1052		

B1058-B1068

INFOID:000000003774624

DTC	Items (CONSULT screen terms)	Reference
B1058	DIAGNOSIS SENSOR UNIT	—
B1059		
B1060		
B1061		
B1062		
B1063		
B1065	ASSIST A/B MODULE	
B1066		
B1067		
B1068		

B1074-B1089

INFOID:000000003774625

DTC	Items (CONSULT screen terms)	Reference
B1074	DIAGNOSIS SENSOR UNIT	—
B1075		
B1076		
B1077		
B1078		
B1079		
B1081	PRE-TEN FRONT RH	
B1082		
B1083		
B1084		
B1086	PRE-TEN FRONT LH	
B1087		
B1088		
B1089		

PRECAUTIONS

< SERVICE INFORMATION >

PRECAUTIONS

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

INFOID:000000003597499

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. Information necessary to service the system safely is included in the "SUPPLEMENTAL RESTRAINT SYSTEM" and "SEAT BELTS" 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 "SUPPLEMENTAL RESTRAINT SYSTEM".
- 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.

Precaution for SRS "AIR BAG" and "SEAT BELT PRE-TENSIONER" Service

INFOID:000000003597500

- Do not use electrical test equipment to check SRS circuits unless instructed in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect battery negative terminal. Then wait at least 3 minutes.
For approximately 3 minutes after the battery negative terminals removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have passed.
- Diagnosis sensor unit must always be installed with their arrow marks "⇐" pointing towards the front of the vehicle for proper operation. Also check diagnosis sensor unit for cracks, deformations or rust before installation and replace if required.
- The spiral cable must be set to the neutral position since its rotations are limited. Do not attempt to turn steering wheel or column, if steering gear was disconnected from the column shaft.
- Handle air bag module carefully. Always put a driver air bag module with the pad side facing upward.
- Conduct self-diagnosis to check entire SRS for proper function after replacing any components.
- After an air bag deployed, the front instrument panel assembly should be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

Precaution for Battery Service

INFOID:000000003597501

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.

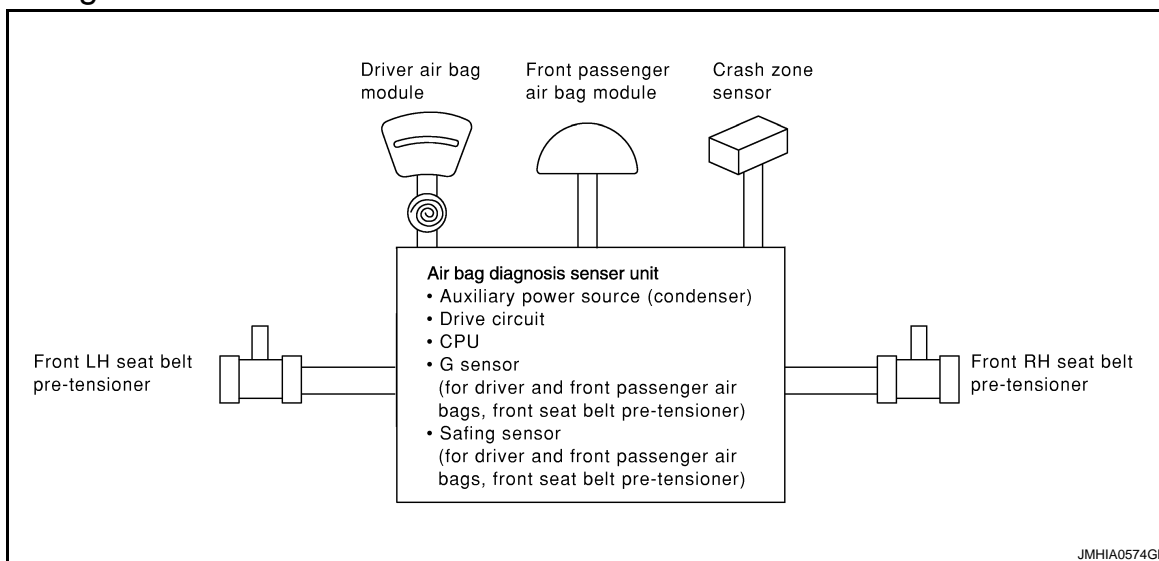
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

< SERVICE INFORMATION >

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

SRS Configuration

INFOID:000000003597504



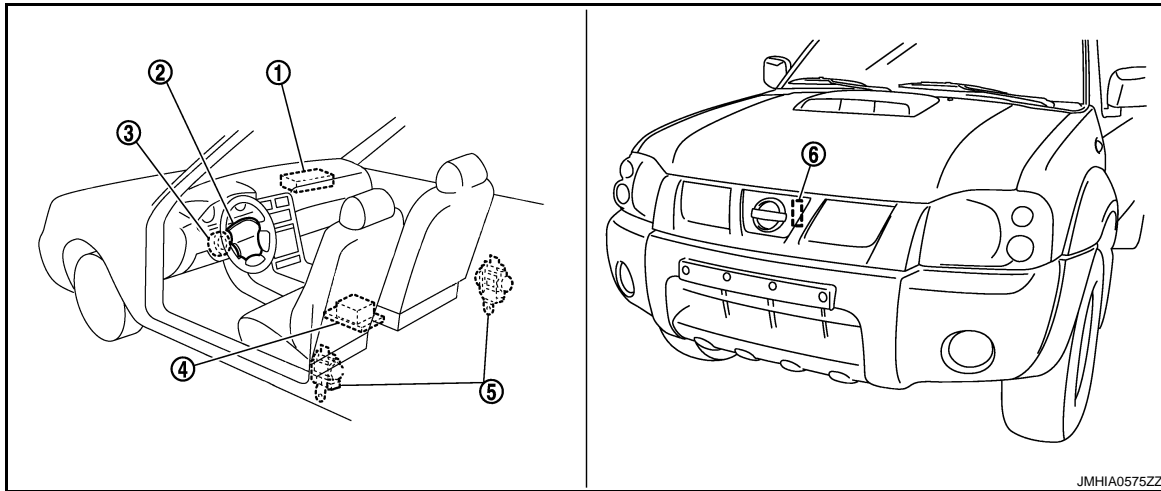
TROUBLE DIAGNOSIS

< SERVICE INFORMATION >

TROUBLE DIAGNOSIS

Component Parts Location

INFOID:000000003597509



- | | | |
|--|---|--------------------------|
| 1. Air bag module passenger side (squib) M43 | 2. Air bag module driver side (squib) M451 | 3. Spiral cable M25 |
| 4. Air bag diagnosis sensor unit M79,M80,M81 | 5. Seat belt pre-tensioner <ul style="list-style-type: none">• Driver side M127• Passenger side M128 | 6. Crash zone sensor E89 |

A
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C
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RS
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P

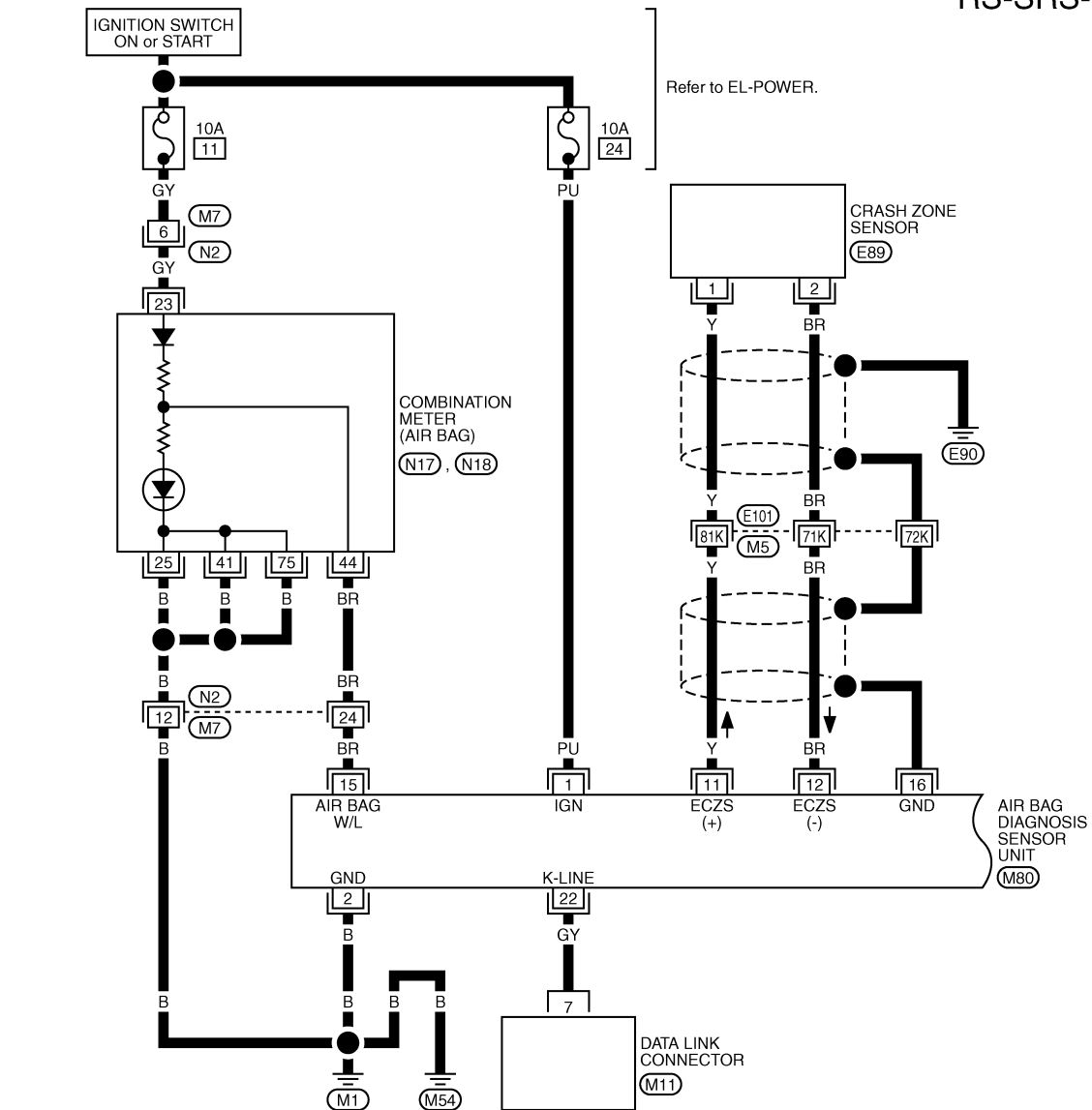
TROUBLE DIAGNOSIS

< SERVICE INFORMATION >

Wiring Diagram - SRS -

INFOID:000000003597511

RS-SRS-01



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

(M11)
W

24	23	17	18
3	4	12	11
21	22	20	15
19	1	16	2

(M80)
Y

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

(N2)
W

Refer to last page (Foldout page).

(M5), (E101)

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

(N17)
W

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

(N18)
W

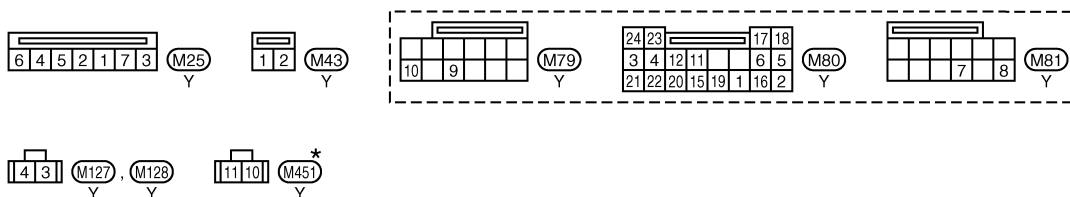
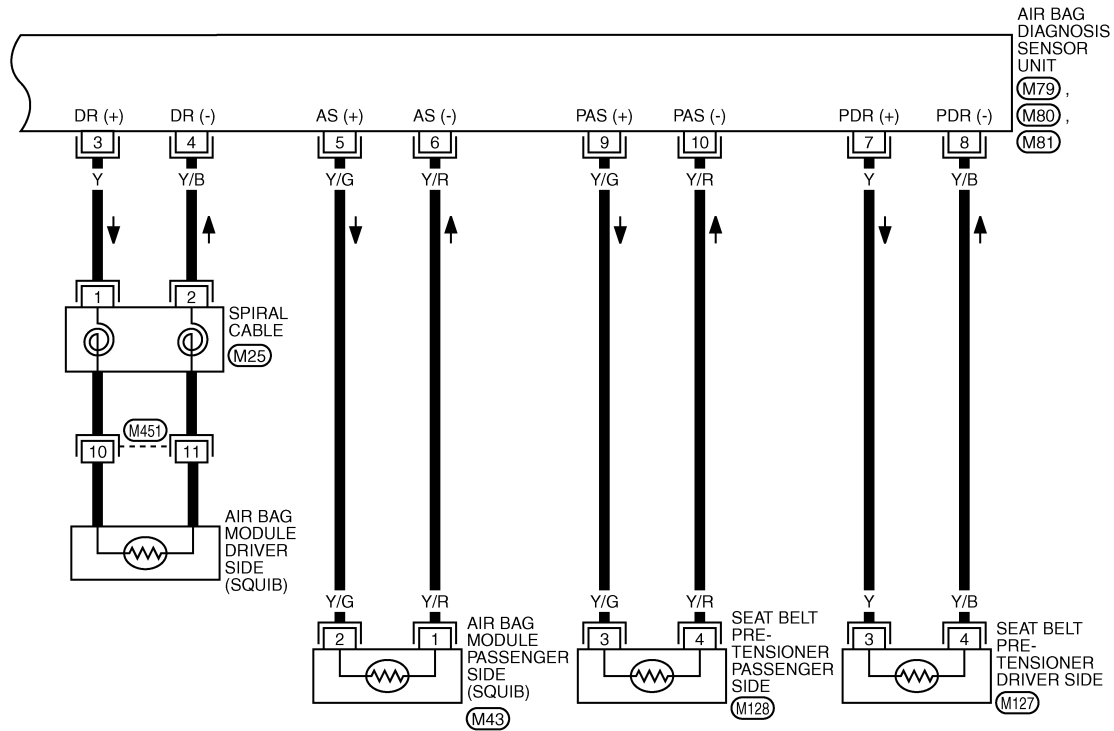


GRS038A

TROUBLE DIAGNOSIS

< SERVICE INFORMATION >

RS-SRS-02



★: This connector is not shown in "HARNESS LAYOUT", EL section.

CONSULT-III Function

DIAGNOSIS MODE FOR CONSULT-III

• "SELF-DIAG [CURRENT]"

A current Self-diagnosis result (also indicated by the number of warning lamp flashes in the Diagnosis mode) is displayed on the CONSULT-III screen in real time. This refers to a malfunctioning part requiring repairs.

• "SELF-DIAG [PAST]"

TROUBLE DIAGNOSIS

< SERVICE INFORMATION >

Diagnosis results previously stored in the memory are displayed on the CONSULT-III screen. The stored results are not erased until memory erasing is executed.

- “TROUBLE DIAG RECORD”

With TROUBLE DIAG RECORD, diagnosis results previously erased by a reset operation can be displayed on the CONSULT-III screen.

- “ECU DISCRIMINATED NO.”

The diagnosis sensor unit for each vehicle model is assigned with its own, individual classification number. This number will be displayed on the CONSULT-III screen, as shown. When replacing the diagnosis sensor unit, refer to the part number for the compatibility. After installation, replacement with a correct unit can be checked by confirming this classification number on the CONSULT-III screen.

After repair, make sure the discriminated number of diagnosis sensor unit installed to vehicle are same.

Ⓢ HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-III

From User Mode to Diagnosis Mode

After selecting “AIR BAG” on the “SELECT SYSTEM” screen, User mode automatically changes to Diagnosis mode.

From Diagnosis Mode to User Mode

To return to User mode from Diagnosis mode, touch “BACK” key of CONSULT-III until “SELECT SYSTEM” appears, then diagnosis mode automatically changes to User mode.

HOW TO ERASE SELF-DIAGNOSIS RESULTS

- “SELF-DIAG [CURRENT]”

A current Self-diagnosis result is displayed on the CONSULT-III screen in real time.

After the malfunction is repaired completely, no malfunction is detected on “SELF-DIAG [CURRENT]”.

- “SELF-DIAG [PAST]”

Return to the “SELF-DIAG [CURRENT]” CONSULT-III screen by touching “BACK” key of CONSULT-III and select “SELF-DIAG [CURRENT]” in SELECT DIAG MODE. Touch “ERASE” in “SELF-DIAG [CURRENT]” mode.

NOTE:

If the memory of the malfunction in “SELF-DIAG [PAST]” is not erased, the User mode shows the system malfunction by the operation of the warning lamp even if the malfunction is repaired completely.

- “TROUBLE DIAG RECORD”

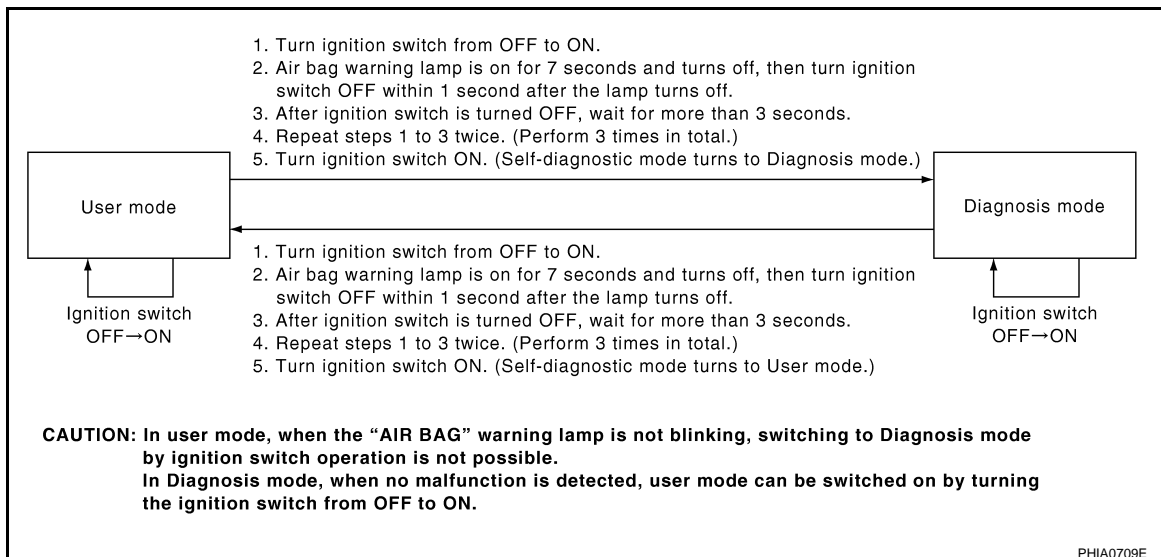
The memory of “TROUBLE DIAG RECORD” cannot be erased.

Self-Diagnosis Function (Without CONSULT-III)

INFOID:000000003597514

- The reading of these results is accomplished “User mode” and “Diagnosis mode”.
- After a malfunction is repaired, turn ignition switch ON. Diagnosis mode returns to the User mode. At that time, the self-diagnostic result is cleared.

HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-III



HOW TO ERASE SELF-DIAGNOSIS RESULTS

TROUBLE DIAGNOSIS

< SERVICE INFORMATION >

After a malfunction is repaired, turn the ignition switch OFF for at least one second, then back ON. Diagnosis mode returns to the User mode. At that time, the self-diagnostic result is cleared.

SRS Operation Check

INFOID:000000003597515

DIAGNOSTIC PROCEDURE

Checking Air Bag Operation by Using "AIR BAG" Warning Lamp — User Mode

- Turn the ignition switch from OFF to ON, and check that the air bag warning lamp blinks.
- Compare the SRS air bag warning lamp blinking pattern with the examples.

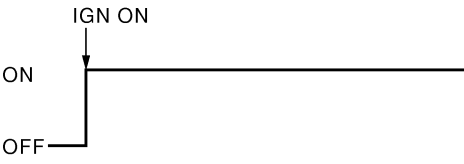
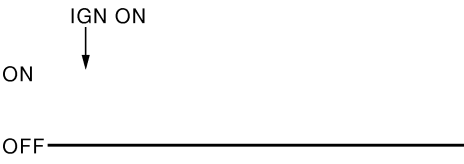


Warning lamp examples

"AIR BAG" warning lamp operation-User mode-	SRS condition	Reference item
<p>SHIA0011E</p>	<ul style="list-style-type: none"> No malfunction is detected. No further action is necessary. 	—
<p>SHIA0012E</p>	<ul style="list-style-type: none"> The system is malfunctioning and needs to be repaired as indicated. 	Refer to RS-12, "Trouble Diagnosis with CONSULT-III" or RS-13, "Trouble Diagnosis without CONSULT-III" .

TROUBLE DIAGNOSIS

< SERVICE INFORMATION >

"AIR BAG" warning lamp operation-User mode-	SRS condition	Reference item
 <p>SHIA0013E</p>	<ul style="list-style-type: none"> Air bag is deployed. Seat belt pre-tensioner is deployed. 	—
 <p>SHIA0014E</p>	<ul style="list-style-type: none"> Diagnosis sensor unit is malfunctioning. Air bag power supply circuit is malfunctioning. SRS air bag warning lamp circuit is malfunctioning. 	—
	<ul style="list-style-type: none"> Diagnosis sensor unit is malfunctioning. Air bag warning lamp circuit is malfunctioning. 	—

Trouble Diagnosis with CONSULT-III

INFOID:000000003597516

DIAGNOSTIC PROCEDURE

Diagnostic mode	Description
SELF-DIAG RESULT	The self-diagnosis result is displayed. (SELF-DIAG [CURRENT], [PAST], [RECORRD]).
ECU DISCRIMINATED No.	The parts number of diagnosis sensor unit is displayed.

DTC No.Index ("SELF-DIAG [CURRENT]" "SELF-DIAG [PAST]" or TROUBLE DIAG RECORD)

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode.	Low battery voltage (Less than 9 V)
	<ul style="list-style-type: none"> Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Intermittent malfunction has been detected in the past. 	Refer to RS-9, "CONSULT-III Function" .
	No malfunction is detected.	—

TROUBLE DIAGNOSIS

< SERVICE INFORMATION >

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
CONTROL UNIT [B1026-B1031]	Diagnosis sensor unit is malfunctioning.	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the diagnosis sensor unit.
CRASH ZONE SEN [UNIT FAIL] [B1033] [B1034] CRASH ZONE SEN [COMM FAIL] [B1035] [UNMATCH] [B1036]	Crash zone sensor is malfunctioning.	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the crash zone sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.

NOTE:

Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using air bag warning lamp or CONSULT-III each time repair is finished. If malfunction is still observed, proceed to the next step. When malfunction is eliminated, further repair work is not required.

Trouble Diagnosis without CONSULT-III

INFOID:000000003597517

DIAGNOSTIC PROCEDURE

Inspecting SRS Malfunctioning Parts by Using "AIR BAG" Warning Lamp — Diagnosis Mode

NOTE:

SRS will not enter Diagnosis mode if no malfunction is detected in User mode.

1. Turn ignition switch ON.
2. After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch OFF within 1 second.
3. Wait more than 3 seconds.
4. Repeat the steps 1 to 3 two times.
5. Turn ignition switch ON.

SRS is now in Diagnosis mode.

"AIR BAG" warning lamp operates in Diagnosis mode as follows:

WARNING LAMP FLASH CODE CHART

<Diagnosis results (previously stored in the memory) might not be erased after repair or intermittent malfunctions have been detected in the past.>	
Flash pattern	Repair order
a through b are repeated. IGN ON ON OFF	<ol style="list-style-type: none"> 1. Erase memory. (Once key switch is turned from OFF to ON, TROUBLE DIAG RECORD will be erased.)

PHIA0532E

< SERVICE INFORMATION >

SHIA0028E- SHIA0083E

CRASH ZONE SENSOR

< SERVICE INFORMATION >

CRASH ZONE SENSOR

Removal and Installation

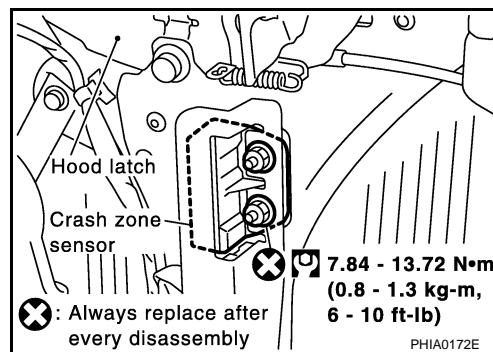
INFOID:000000003597525

REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

1. Remove crash zone sensor harness connector.
2. Remove crash zone sensor fixing nuts.



CAUTION:

- Replace crash zone sensor if it has been dropped or sustained an impact.
- Do not attempt to disassemble crash zone sensor.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check crash zone sensor for proper installation.
- After the work is complete, perform self-diagnosis to check that no malfunction is detected. Refer to [RS-11, "SRS Operation Check"](#).