SECTION SRS

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

CONTENTS

PRECAUTIONS 3	SRS Operation Check	
Precautions for Supplemental Restraint System	DIAGNOSTIC PROCEDURE 1	20
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	Trouble Diagnosis with CONSULT-II	22
SIONER" 3	DIAGNOSTIC PROCEDURE 2	22
Precautions for SRS "AIR BAG" and "SEAT BELT	DIAGNOSTIC PROCEDURE 3	27
PRE-TENSIONER" Service 3	DIAGNOSTIC PROCEDURE 4 (CONTINUED	
Occupant Classification System Precaution 3	FROM DIAGNOSTIC PROCEDURE 2)	29
PREPARATION 4	DIAGNOSTIC PROCEDURE 5	29
Commercial Service Tools 4	Trouble Diagnosis without CONSULT-II	35
SUPPLEMENTAL RESTRAINT SYSTEM (SRS) 5	DIAGNOSTIC PROCEDURE 6	35
SRS Configuration5	WARNING LAMP FLASH CODE CHART	35
Front Seat Belt Pre-Tensioner with Load Limiter 6	Trouble Diagnosis: "AIR BAG" Warning Lamp Does	
Front Side Air Bag 6	Not Turn OFF	39
Side Curtain Air Bag 6	DIAGNOSTIC PROCEDURE 7	39
Occupant Classification System (OCS) 7	Trouble Diagnosis: "AIR BAG" Warning Lamp Does	
Passenger Air Bag Status Condition 7	Not Turn ON	
Component Parts of Occupant Classification Sys-	DIAGNOSTIC PROCEDURE 8	40
tem 7	Trouble Diagnosis: Passenger Seatbelt Warning	
Passenger Seatbelt Warning System 8	System (Only with seat belt reminder)	41
TROUBLE DIAGNOSIS9	DRIVER AIR BAG MODULE	42
Trouble Diagnosis Introduction9	Removal and Installation	42
DIAGNOSIS FUNCTION9	REMOVAL	42
HOW TO PERFORM TROUBLE DIAGNOSIS	INSTALLATION	43
FOR QUICK AND ACCURATE REPAIR9	SPIRAL CABLE	44
WORK FLOW 10	Removal and Installation	
Component Parts Location11	REMOVAL	
Schematic12	INSTALLATION	
Wiring Diagram — SRS — 13	FRONT PASSENGER AIR BAG MODULE	
CONSULT-II Function	Removal and Installation	
DIAGNOSIS MODE FOR CONSULT-II18	REMOVAL	
HOW TO CHANGE SELF-DIAGNOSIS MODE	INSTALLATION	
WITH CONSULT-II18	SIDE CURTAIN AIR BAG MODULE	
HOW TO ERASE SELF-DIAGNOSTIC	Removal and Installation	
RESULTS 19	REMOVAL	
Self-Diagnosis Function (Without CONSULT-II) 19	INSTALLATION	
HOW TO CHANGE SELF-DIAGNOSIS MODE	CRASH ZONE SENSOR	
WITHOUT CONSULT-II19	Removal and Installation	
HOW TO ERASE SELF-DIAGNOSTIC	REMOVAL	
PESITITS 10	ΙΝΟΤΔΙΙ ΔΤΙΩΝΙ	10

G

D

Е

K

L

SIDE AIR BAG (SATELLITE) SENSOR	50	TROL UNIT	53
Removal and Installation	50	Removal and Installation	53
REMOVAL5	50	COLLISION DIAGNOSIS	54
INSTALLATION5	50	For Frontal Collision	54
FRONT SEAT BELT PRE-TENSIONER	51	SRS INSPECTION (FOR FRONTAL COLLI-	
Removal and Installation	51	SION)	54
DIAGNOSIS SENSOR UNIT	52	For Side Collision	56
Removal and Installation	52	WHEN THE SIDE AIR BAG IS ACTIVATED IN	
REMOVAL5	52	THE SIDE COLLISION:	56
INSTALLATION5	52	WHEN SRS IS NOT ACTIVATED IN THE SIDE	
ECU DISCRIMINATED NO5	52	COLLISION:	56
OCCUPANT CLASSIFICATION SYSTEM CON-		SRS INSPECTION (FOR SIDE COLLISION)	56

PRECAUTIONS

PRECAUTIONS PFP:00001

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

0002H

Α

В

F

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 and SB section 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 section.
- 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 for SRS "AIR BAG" and "SEAT BELT PRE-TENSIONER" Service

VHS00021

- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
 - For approximately 3 minutes after the cables are 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, deformities or rust before installation and replace as required.
- The spiral cable must be aligned with the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Conduct self-diagnosis to check entire SRS for proper function after replacing any components.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

Occupant Classification System Precaution

• Replace occupant classification system control unit and passenger front seat cushion as an assembly. Refer to SE-90, "FRONT SEAT".

SRS

G

J

K

M

Revision: 2006 August SRS-3 2006 G35 Sedan

NHS0002J

PREPARATION

PREPARATION PFP:00002

Commercial Service Tools

NHS0002L

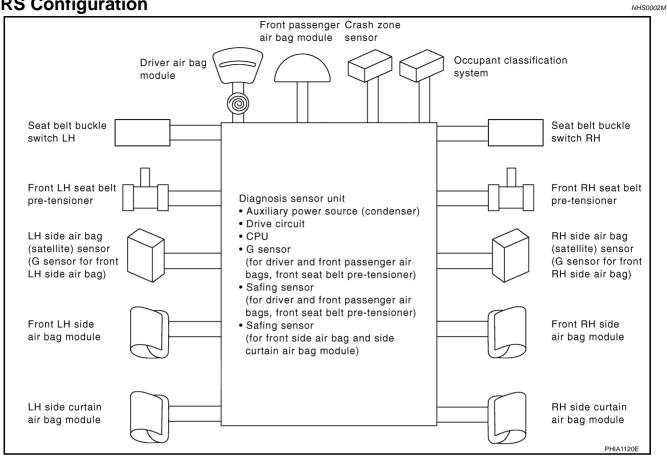
Tool name		Description
Tamper resistant TORX bit	S-NT757	Size: T30

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

PFP:28556

SRS Configuration

Α



The air bag deploys if the diagnosis sensor unit activates while the ignition switch is in the ON or START position.

The collision modes for which supplemental restraint systems are activated are different among the SRS systems. For example, the driver air bag module and front passenger air bag module are activated in a frontal collision but not in a side collision.

SRS configurations which are activated for some collision modes are as follows;

SRS configuration	Frontal collision	Left side collision	Right side collision
Driver air bag module	×	_	_
Front passenger air bag module	×	_	_
Front LH seat belt pre-tensioner	×	_	_
Front RH seat belt pre-tensioner	×	_	_
Front LH side air bag module	_	×	_
Front RH side air bag module	_	_	×
LH side curtain air bag module	_	×	_
RH side curtain air bag module	_	_	×

SRS-5 2006 G35 Sedan Revision: 2006 August

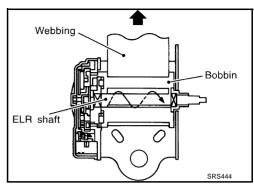
SRS

Front Seat Belt Pre-Tensioner with Load Limiter

The seat belt pre-tensioner system with load limiter is installed for both the driver's seat and the front passenger's seat. It operates simultaneously with the SRS air bag system in the event of a frontal collision with an impact exceeding a specified level.

When the frontal collision with an impact exceeding a specified level occurs, seat belt slack resulting from clothing or other factors is immediately taken up by the pre-tensioner. Vehicle passengers are securely restrained.

When passengers in a vehicle are thrown forward in a collision and the restraining force of the seat belt exceeds a specified level, the load limiter permits the specified extension of the seat belt by the twisting of the ELR shaft, and a relaxation of the chest-area seat belt web tension while maintaining force.



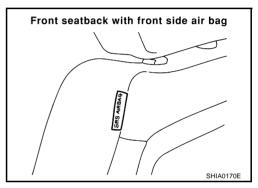
NHS0002O

NHS0002N

Front Side Air Bag

Front side air bag is built-in type.

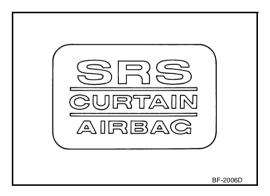
The front seatback with built-in type side air bag have the labels as shown.



NHS0002P

Side Curtain Air Bag

The side curtain air bags have the labels as shown.



Occupant Classification System (OCS)

NHS00061

Α

В

F

The occupant classification system identifies different size occupants, out of position occupants, and detects if child seat is present in the front passenger seat. The occupant classification system receives inputs from the occupant classification sensor (located inside the passenger seat cushion assembly) and belt tension sensor (part of the passenger front seat belt assembly and located at the belt anchor location). Depending on classification of passenger, the occupant classification system sends a signal to the diagnosis sensor unit. The diagnosis sensor unit uses this signal to determine full, partial, or non deployment of passenger front air bag in the event of a collision. Depending on the signal received, the diagnosis sensor unit can disable the passenger front air bag completely.

NOTE:

In case of customer concern, CONSULT-II can be used to confirm the passenger air bag status (readiness).

Passenger Air Bag Status Condition

NHSOOGS

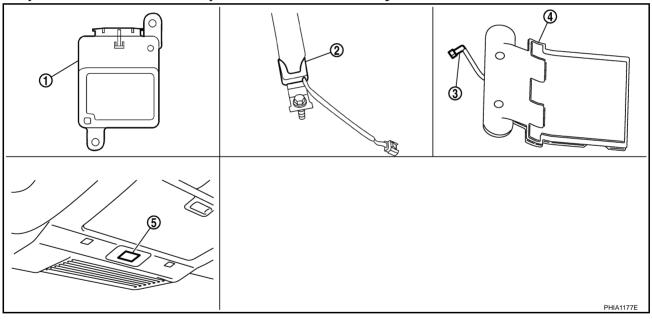
Front Passenger Seat (Condition)	PASS AIR BAG OFF Indicator (Status)	Passenger Air Bag Status (Readiness)	CONSULT-II Display
Seat occupied	OFF	Active (enabled)	ON
seat occupiedNOTE	ON	Deactivated (disabled)	OFF
Seat empty	OFF	Deactivated (disabled)	OFF

NOTE:

Passenger does not meet Ocuupant classification System specifications for passenger air bag activation.

Component Parts of Occupant Classification System

IS0006F



- Occupant classification system control unit
- 4. Bladder

- Belt tension sensor
- Front passenger air bag OFF indicator (Cut-off telltaile)
- Occupant classification system sen-

SRS

G

.1

Κ

L

Passenger Seatbelt Warning System

NHS0006L

SYSTEM DESCRIPTION

This system warns when passenger seatbelt is not fasten.

This system is composed of the following items.

- Seatbelt warning lamp.
- Seatbelt buckle switch (passenger side).
- Air bag diagnosis sensor unit.
- Occupant classification system.

Seatbelt warning lamp is used for both driver seatbelt warning and passenger seatbelt warning. Seatbelt warning lamp turns ON when all conditions below are met.

- Driver seatbelt is fastened.
- Occupant is on passenger seat.
- Passenger seatbelt is not fasten.

TROUBLE DIAGNOSIS

PFP:00004

Trouble Diagnosis Introduction

NHS0002R

Α

CAUTION:

- Do not use electrical test equipment on any circuit related to the SRS unless instructed in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.
- Do not repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.
- Keep ground portion clean.

DIAGNOSIS FUNCTION

The SRS self-diagnosis results can be read by using "AIR BAG" warning lamp and/or CONSULT-II.

The User mode is exclusively prepared for the customer (driver). This mode warns the driver of a system malfunction through the operation of the "AIR BAG" warning lamp.

The Diagnosis mode allows the technician to locate and inspect the malfunctioning part.

The mode applications for the "AIR BAG" warning lamp and CONSULT-II are as follows:

	User mode	Diagnosis mode	Display type
"AIR BAG" warning lamp	X	X	ON-OFF operation
CONSULT-II	_	X	Monitoring

HOW TO PERFORM TROUBLE DIAGNOSIS FOR QUICK AND ACCURATE REPAIR

A good understanding of the malfunction conditions can make troubleshooting faster and more accurate. In general, each customer feels differently about a malfunction. It is important to fully understand the symptoms or conditions for a customer complaint.

Information from Customer

WHAT..... Vehicle model

WHEN..... Date, Frequencies

WHERE..... Road conditions

HOW..... Operating conditions, Symptoms

Preliminary Check

Make sure the following parts are in good order.

- Battery (Refer to <u>SC-4, "How to Handle Battery"</u>.)
- Fuse (Refer to <u>SRS-13, "Wiring Diagram SRS —"</u>.)
- System component-to-harness connections

SRS

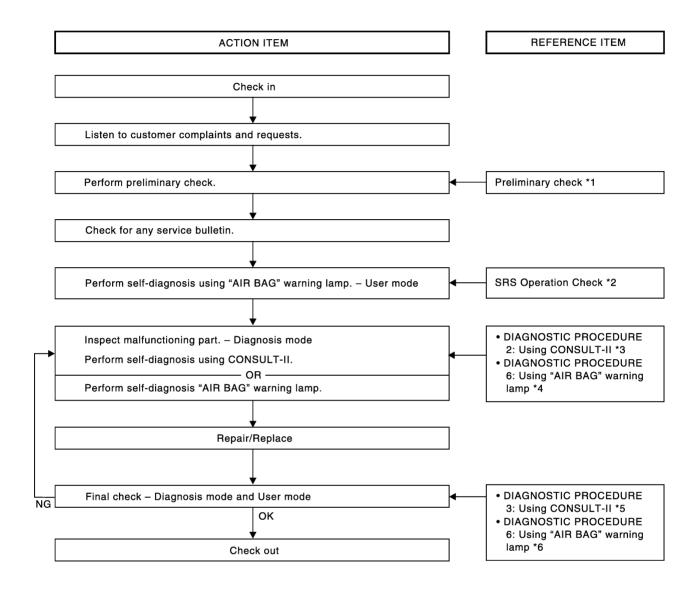
G

F

J

K

WORK FLOW

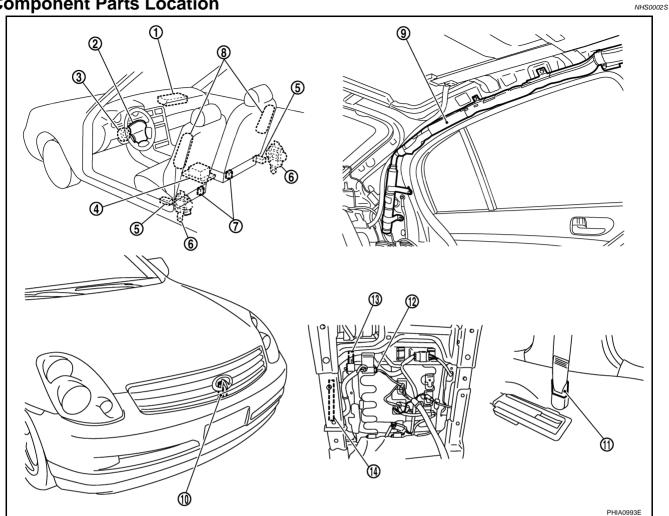


PHIA0217E

- *1: SRS-9, "Preliminary Check".
- *2: SRS-20, "SRS Operation Check".
- *3: SRS-22, "DIAGNOSTIC PROCE-DURE 2".

- *4: SRS-35, "DIAGNOSTIC PROCE-DURE 6".
- *5: SRS-27, "DIAGNOSTIC PROCE-DURE 3".
- *6: <u>SRS-35, "DIAGNOSTIC PROCE-DURE 6"</u>.

Component Parts Location



- 1. Front passenger air bag module
- 4. Diagnosis sensor unit
- 7. Seat belt buckle switch (LH/RH)
- 10. Crash zone sensor
- Occupant classification system sensor *
- 2. Driver air bag module
- 5. Side air bag (Satellite) sensor (LH/RH)
- 8. Front side air bag module (LH/RH)
- 11. Belt tension sensor
- 14. Occupant classification system control unit *
- 3. Spiral cable
- 6. Front seat belt pre-tensioner (LH/RH)
- 9. Side curtain air bag module
- 12. Belt tension sensor connector *

В

D

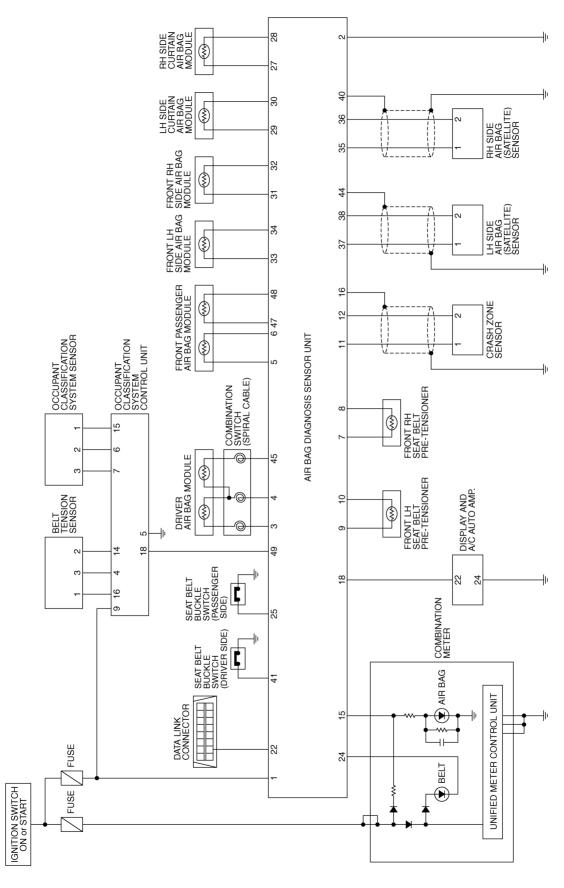
G

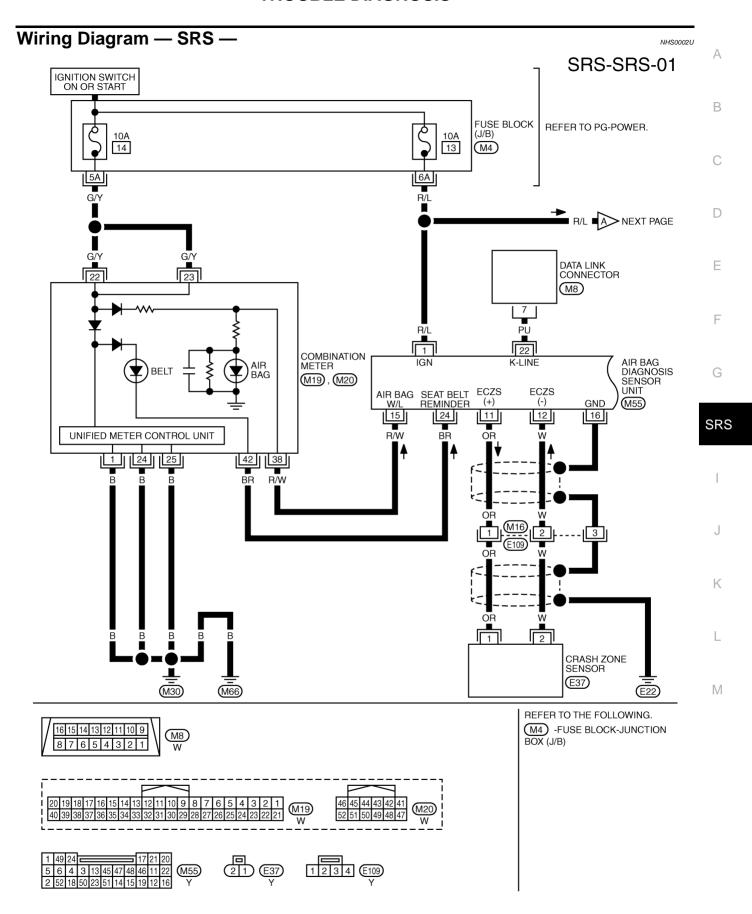
SRS

J

^{*: 12, 13, 14} \rightarrow The bottom of front passenger seat

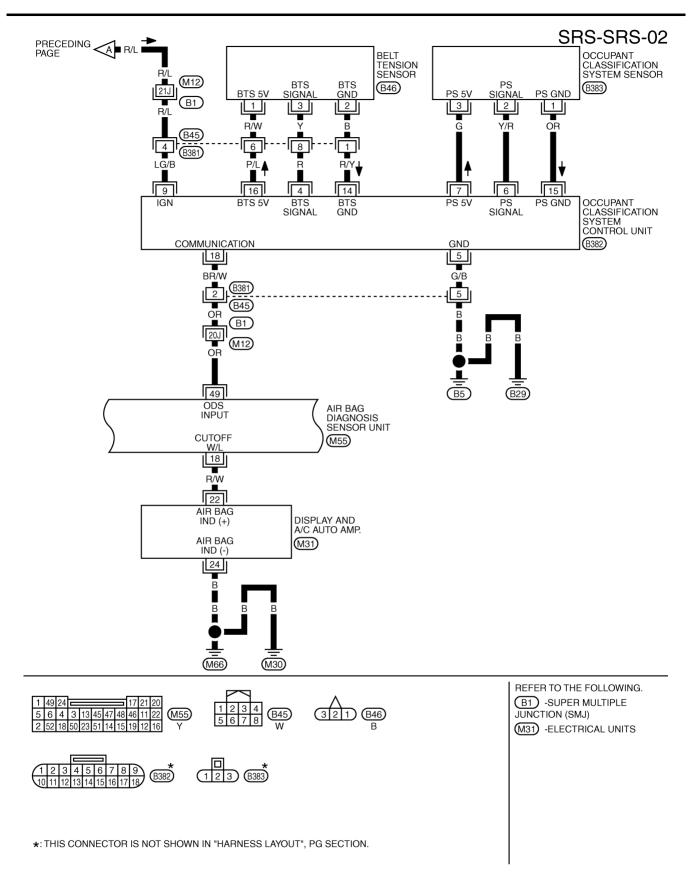






THWM0176E

Revision: 2006 August SRS-13 2006 G35 Sedan



THWM0208E

SRS-SRS-03 FRONT RH SEAT BELT PRE-TENSIONER SEAT BELT PRE-TENSIONER (W) (B16) (B22) Y/G γ/R $\lceil 7 \rceil$ 8 9 10 AIR BAG DIAGNOSIS SENSOR UNIT RH BUCKLE SW INPUT LH BUCKLE SW INPUT M55, B13, B14 GND 41 2 SB LG/R В SB LG/R SEAT BELT SEAT BELT BUCKLE SWITCH (DRIVER SIDE) BUCKLE SWITCH (PASSENGER SIDE) UNFASTENED . FASTENED UNFASTENED FASTENED (B8) 2 2 В В ┸ (B5) (B29) (M30) (M66)

THWM0134E

Α

В

D

Е

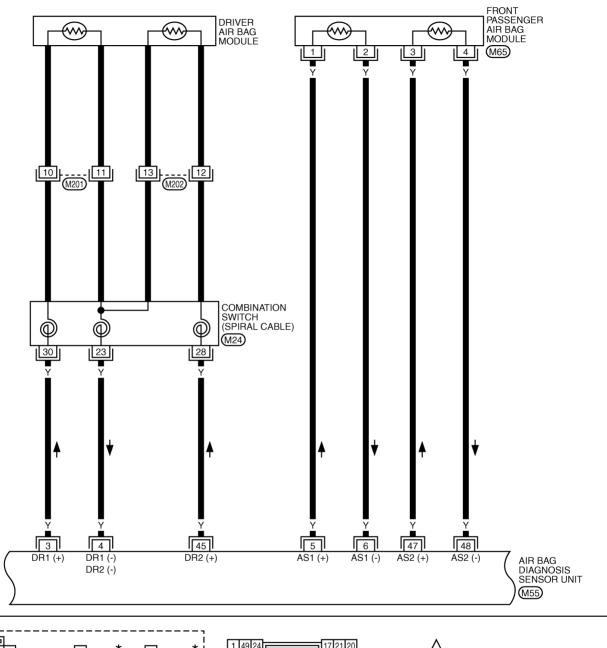
F

G

SRS

K

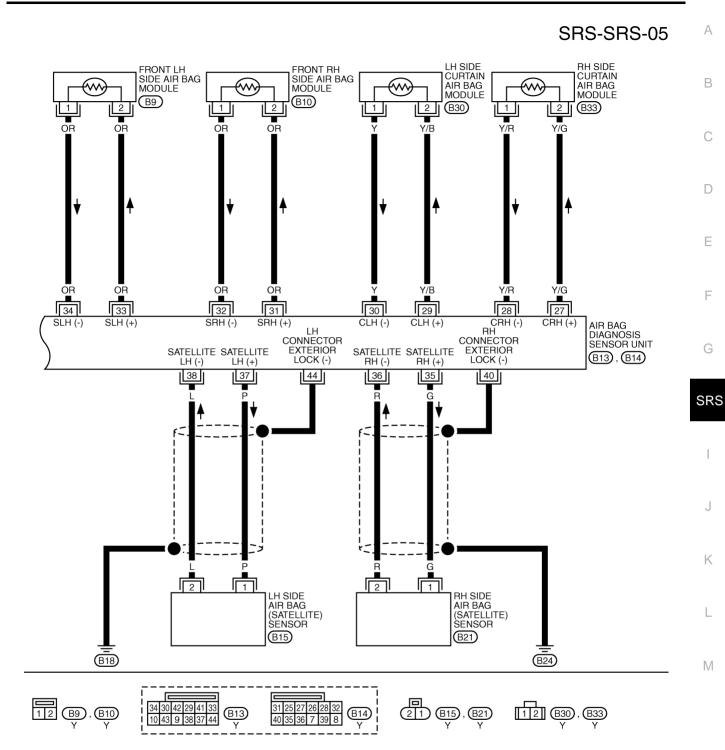
SRS-SRS-04





*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

THWM0105E



THWM0106E

CONSULT-II Function DIAGNOSIS MODE FOR CONSULT-II

NHS0002V

"SELF-DIAG [CURRENT]"

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

"SELF-DIAG [PAST]"

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

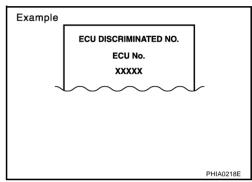
"TROUBLE DIAG RECORD"

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

After repair, make sure the discriminated number of diagnosis sensor unit installed to vehicle are same. Refer to SRS-52, "ECU DISCRIMINATED NO." .



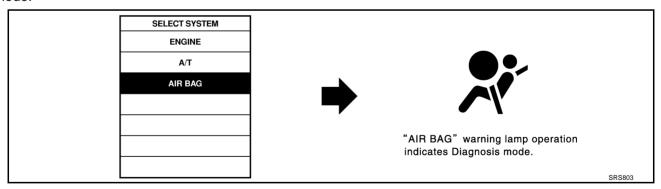
PASSENGER AIR BAG

The STATUS (readiness) of the front passenger air bag module is displayed. The STATUS displayed (ON/OFF) depends on the signals supplied to the occupant classification system control module and air bag diagnosis sensor unit. Refer to <u>SRS-7</u>, "Occupant Classification System (OCS)" for more information.

(A) HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

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-II until "SELECT SYSTEM" appears, then diagnosis mode automatically changes to User mode.



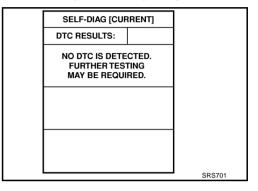
HOW TO ERASE SELF-DIAGNOSTIC RESULTS

- "SELF-DIAG [CURRENT]"
 A current self-diagnosis result is displayed on the CONSULT-II 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-II screen by touching "BACK" key of CONSULT-II 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.

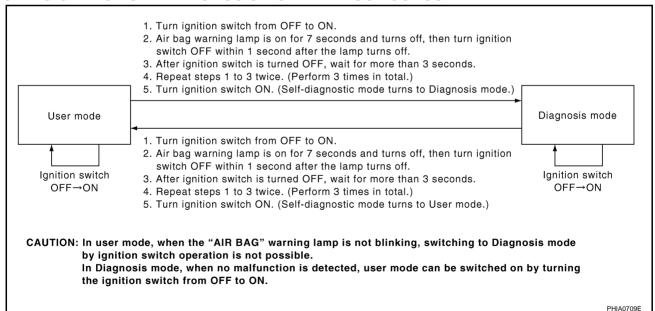


Self-Diagnosis Function (Without CONSULT-II)

NHS0002W

- 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-diagnosis result is cleared.

HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II



HOW TO ERASE SELF-DIAGNOSTIC RESULTS

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-diagnosis result is cleared.

SRS

Α

В

I

K

L

SRS Operation Check DIAGNOSTIC PROCEDURE 1

NHS0002X

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

- 1. Turn the ignition switch from OFF to ON, and make sure the air bag warning lamp blinks.
- 2. Compare the SRS air bag warning lamp blinking pattern with the examples.



AIR BAG" warning lamp operation — User mode -	SRS condition	Reference item
ON OFF 7 sec.	No malfunction is detected.No further action is necessary.	_
ON OFF 7 Sec. 0.5 Sec. 0.5 sec.	The system is malfunctioning and needs to be repaired as indicated.	Go to SRS-22, "DIAGNOSTIC PROCEDURE 2" or SRS-29, "DIAGNOSTIC PROCEDURE 5".
	 Air bag is deployed. Seat belt pre-tensioner is deployed.	Go to SRS-54, "COLLISION DIAGNOSIS".
ON OFF SHIA0013E	 Diagnosis sensor unit is malfunctioning. Air bag power supply circuit is malfunctioning. SRS air bag warning lamp circuit is malfunctioning. 	Go to SRS-39, "Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn OFF"
IGN ON ON OFF	 Diagnosis sensor unit is malfunctioning. Air bag warning lamp circuit is malfunctioning. 	Go to SRS-40, "Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn ON".
SHIA0014E		

Trouble Diagnosis with CONSULT-II DIAGNOSTIC PROCEDURE 2

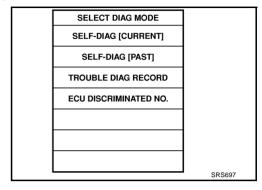
NHS0002Y

Refer to GI-38, "CONSULT-II Start Procedure".

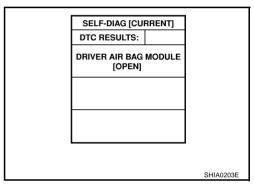
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Touch "SELF-DIAG [CURRENT]".



Diagnostic code is displayed on "SELF-DIAG [CURRENT]".



- a. If no malfunction is detected on "SELF-DIAG [CURRENT]" even though malfunction is detected in "SRS Operation Check", check the battery voltage. If the battery voltage is less than 9 V, charge or replace the battery. Then go to <u>SRS-27</u>, "<u>DIAGNOS-TIC PROCEDURE 3</u>". If the battery voltage is OK, go to <u>SRS-29</u>, "<u>DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)</u>" to diagnose the following cases:
 - Self-diagnosis result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair.
 - The SRS system malfunctions intermittently.

SELF-DIAG [CURRENT] DTC RESULTS: NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED. SRS701

DTC No. Index ("SELF-DIAG [CURRENT]")

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	Low battery voltage (Less than 9V)	Go to <u>SRS-27</u> , " <u>DIAGNOSTIC PROCEDURE 3</u> " . after charging the battery.
	User mode.	 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. 	Go to SRS-29, "DIAGNOSTIC PRO- CEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)". Go to SRS-29, "DIAGNOSTIC PRO- CEDURE 5".
No malfunction is detected.		_	

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
DRIVER AIR BAG MODULE [OPEN] [B1054]	Driver air bag module circuit is open (including the spiral cable).	Visually check the wiring harness connection. Replace the harness if it has visible damage.
DRIVER AIR BAG MODULE [VB-SHORT] [B1055]	Driver air bag module circuit is shorted to a power supply circuit (including the spiral cable).	3. Replace the driver air bag module. 4. Replace the spiral cable. 5. Replace the diagnosis sensor unit.
DRIVER AIR BAG MODULE [GND-SHORT] [B1056]	Driver air bag module circuit is shorted to ground (including the spiral cable).	6. Replace the related harness.
DRIVER AIR BAG MODULE [SHORT] [B1057]	Driver air bag module circuit is shorted between lines.	
ASSIST A/B MODULE [OPEN] [B1070]	Front passenger air bag module circuit is open.	Visually check the wiring harness connection.
ASSIST A/B MODULE [VB-SHORT] [B1071]	Front passenger air bag module circuit is shorted to a power supply circuit.	2. Replace the harness if it has visible damage.3. Replace the front passenger air bag module.
ASSIST A/B MODULE [GND-SHORT] [B1072]	Front passenger air bag module circuit is shorted to ground.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.
ASSIST A/B MODULE [SHORT] [B1073]	Front passenger air bag module circuit is shorted between lines.	
CRASH ZONE SEN [UNIT FAIL]	Crash zone sensor	Visually check the wiring harness connection.
[B1033] [B1034] CRASH ZONE SEN		Replace the harness if it has visible damage.
[COMM FAIL] [B1035]		3. Replace the crash zone sensor.4. Replace the diagnosis sensor unit.
CRASH ZONE SEN [UNMATCH] [B1036]		5. Replace the related harness.
SIDE MODULE LH [OPEN] [B1134]	Front LH side air bag module circuit is open.	Visually check the wiring harness connection.
SIDE MODULE LH [VB-SHORT] [B1135]	Front LH side air bag module circuit is shorted to a power supply circuit.	Replace the harness if it has visible damage. Replace the front LH seatback
SIDE MODULE LH [GND-SHORT] [B1136]	Front LH side air bag module circuit is shorted to ground.	assembly (front LH side air bag module). 4. Replace the diagnosis sensor unit.
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuit is shorted between lines.	5. Replace the related harness.

SRS-23 Revision: 2006 August 2006 G35 Sedan

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"	
SIDE MODULE RH [OPEN] [B1129]	Front RH side air bag module circuit is open.	Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the front RH seatback assembly (front RH side air bag module). Replace the diagnosis sensor unit	
SIDE MODULE RH [VB-SHORT] [B1130]	Front RH side air bag module circuit is shorted to a power supply circuit.		
SIDE MODULE RH [GND-SHORT] [B1131]	Front RH side air bag module circuit is shorted to ground.		
SIDE MODULE RH [SHORT] [B1132]	Front RH side air bag module circuit is shorted between lines.	5. Replace the related harness.	
SATELLITE SENS LH [UNIT FAIL] [B1118]	LH side air bag (Satellite) sensor	Visually check the wiring harness connection.	
[B1119] SATELLITE SENS LH		2. Replace the harness if it has visible damage.	
[COMM FAIL] [B1120]		3. Replace the LH side air bag (Satellite) sensor.	
SATELLITE SENS LH [UNMATCH] [B1121]		4. Replace the diagnosis sensor unit.5. Replace the related harness.	
SATELLITE SENS RH [UNIT FAIL]	RH side air bag (Satellite) sensor	Visually check the wiring harness connection.	
[B1113] [B1114]		Replace the harness if it has visible damage.	
SATELLITE SENS RH [COMM FAIL] [B1115]		3. Replace the RH side air bag (Satellite) sensor.	
SATELLITE SENS RH [UNMATCH]		4. Replace the diagnosis sensor unit.	
[B1116]		5. Replace the related harness.	
PRE-TEN FRONT LH [OPEN]	Front LH pre-tensioner circuit is open.	Visually check the wiring harness connections.	
[B1086] PRE-TEN FRONT LH	Front LH pre-tensioner circuit is shorted to a power supply cir-	2. Replace the harness if it has visible damage.	
[VB-SHORT] [B1087]	cuit.	3. Replace the front LH seat belt.	
PRE-TEN FRONT LH [GND-SHORT] [B1088]	Front LH pre-tensioner circuit is shorted to ground.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.	
PRE-TEN FRONT LH [SHORT] [B1089]	Front LH pre-tensioner circuit is shorted between lines.		
PRE-TEN FRONT RH [OPEN] [B1081]	Front RH pre-tensioner circuit is open.	Visually check the wiring harness connections. Penlage the harness if it has visible.	
PRE-TEN FRONT RH [VB-SHORT] [B1082]	Front RH pre-tensioner circuit is shorted to a power supply circuit.	Replace the harness if it has visible damage. Replace the front RH seat belt.	
PRE-TEN FRONT RH [GND-SHORT] [B1083]	Front RH pre-tensioner circuit is shorted to ground.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.	
PRE-TEN FRONT RH [SHORT] [B1084]	Front RH pre-tensioner circuit is shorted between lines.		

Diagnostic item	Explanation	Repair order
	·	"Recheck SRS at each replacement"
CURTAIN MODULE LH [OPEN] [B1150]	LH side curtain air bag module circuit is open.	Visually check the wiring harness connection.
CURTAIN MODULE LH		Replace the harness if it has visible damage.
[VB-SHORT] [B1151]	 LH side curtain air bag module circuit is shorted to a power sup- ply circuit. 	Replace the LH side curtain air bag module.
CURTAIN MODULE LH [GND-SHORT]	LH side curtain air bag module circuit is shorted to ground.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.
[B1152] CURTAIN MODULE LH [SHORT] [B1153]	LH side curtain air bag module circuit is shorted between lines.	
CURTAIN MODULE RH [OPEN]	RH side curtain air bag module circuit is open.	Visually check the wiring harness connection.
[B1145] CURTAIN MODULE RH		2. Replace the harness if it has visible
[VB-SHORT] [B1146]	 RH side curtain air bag module circuit is shorted to a power sup- ply circuit. 	damage. 3. Replace the RH side curtain air bag module.
CURTAIN MODULE RH	RH side curtain air bag module circuit is shorted to ground.	4. Replace the diagnosis sensor unit.
[GND-SHORT] [B1147]		5. Replace the related harness.
CURTAIN MODULE RH [SHORT] [B1148]	RH side curtain air bag module circuit is shorted between lines.	
CONTROL UNIT [B1001-B1015]	Diagnosis sensor unit is malfunctioning.	Visually check the wiring harness connection.
[B1026-B1031] [B1042-B1047] [B1058-B1063] [B1074-B1079] [B1106-B1111] [B1122-B1127] [B1138-B1143] [B1202-B1207]		2. Replace the diagnosis sensor unit.
PASS A/B INDCTR CKT	Cutoff telltale circuit is open or shorted to grand or the circuits are shorted each other.	Visually check the wiring harness connection.
[B1023]		Replace the harness if it has visible damage.
		3. Replace cut off telltale indicator.
		4. Replace the diagnosis sensor unit.
OCCUPANT SENS C/U [UNIT FAIL] [B1017] [B1020] [B1021]	Trouble occurs in Occupant Classification System-CU.	Replace passenger side seat cushion assembly.
OCCUPANT SENS [UNIT FAIL] [B1018]	Trouble occurs in Occupant Classification System-SENS.	Replace passenger side seat cushion assembly.
BELT TENSION SENS [UNIT FAIL]	Trouble occurs in belt tension sensor (BTS), circuit of BTS— Occupant Classification System-CU, or Occupant Classification	Visually check the wiring harness connection.
[B1019]	System-CU.	Replace the harness if it has visible damage.
		Replace passenger side seat belt assembly.
		4. Replace the diagnosis sensor unit.

SRS-25 Revision: 2006 August 2006 G35 Sedan

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
OCCUPANT SENS C/U [COMM FAIL]	FAIL] Occupant Classification System-CU—Diagnosis Sensor Unit or Diagnosis Sensor Unit.	Visually check the wiring harness connection.
[B1022]		Replace the harness if it has visible damage.
		Replace passenger side seat cushion assembly.
		4. Replace the diagnosis sensor unit.
FRONTAL COLLISION DETECTION [B1209]	Seat belt pre-tensioner and front air bag are deployed.	Go to <u>SRS-54</u> , "For Frontal Collision" .
SIDE COLLISION DETECTION [B1210]	Side and curtain air bag is deployed.	Go toSRS-56, "For Side Collision".

NOTE:

Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using air bag warning lamp or CONSULT-II 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.

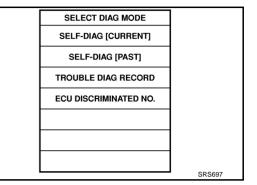
DIAGNOSTIC PROCEDURE 3

Final inspection after repairing SRS by using CONSULT-II — Diagnosis mode Refer to GI-38. "CONSULT-II Start Procedure".

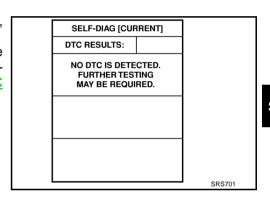
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Touch "SELF-DIAG [CURRENT]".



a. If no malfunction is detected on "SELF-DIAG [CURRENT]", repair of SRS is completed. Go to step 2. If any malfunction is detected on "SELF-DIAG [CURRENT]", the malfunctioning part is not repaired completely or another malfunctioning part is detected. Go to <u>SRS-22</u>, "<u>DIAGNOSTIC PROCEDURE 2</u>", and repair malfunctioning part completely.

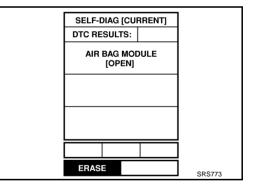


2. Touch "ERASE".

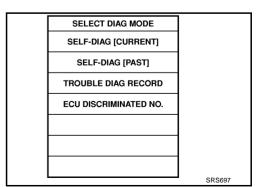
NOTE:

Touch "ERASE" to clear the memory of the malfunction ("SELF-DIAG [PAST]").

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.



Touch "BACK" key of CONSULT-II to "SELECT DIAG MODE" screen. Touch "SELF-DIAG [PAST]".



Revision: 2006 August SRS-27 2006 G35 Sedan

С

Α

В

D

F

F

SRS

J

Κ

L

- 4. Make sure no malfunction is detected on "SELF-DIAG [PAST]".
- 5. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 6. Turn ignition switch OFF then turn off and disconnect CON-SULT-II.
- 7. Refer to <u>SRS-20</u>, "Checking Air Bag Operation by Using "AIR <u>BAG" Warning Lamp User Mode"</u>.

SELF-DIAG [P/	AST]	
DTC RESULTS:		
NO DTC IS DETE FURTHER TEST MAY BE REQUI	ΓING	
		SRS702

DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2) Inspecting SRS malfunctioning record

1. CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING

Is it the first time for maintenance of SRS?

YES or NO

YES >> Go to SRS-22, "DIAGNOSTIC PROCEDURE 2".

NO >> Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to SRS-27, "DIAGNOSTIC PROCEDURE 3".

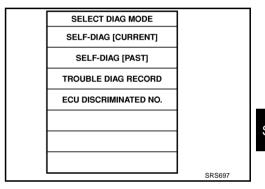
DIAGNOSTIC PROCEDURE 5

Inspecting SRS intermittent malfunction by using CONSULT-II — Diagnosis mode Refer to $\underline{\text{GI-38}}$, "CONSULT-II Start Procedure".

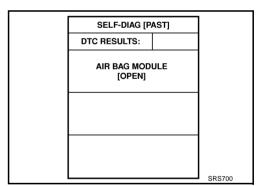
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Touch "SELF-DIAG [PAST]".



 If diagnostic codes are displayed on "SELF-DIAG [PAST]", go to step 4.



b. If no malfunction is detected on "SELF-DIAG [PAST]", touch "BACK" and go back to "SELECT DIAG MODE".

SELF-DIAG [PAST]	
DTC RESULTS:	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	
·	SRS702

SRS

Α

В

D

Е

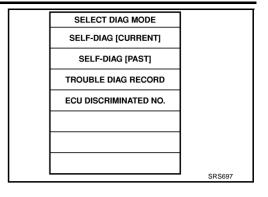
M

Revision: 2006 August SRS-29 2006 G35 Sedan

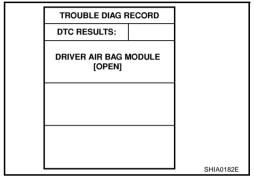
2. Touch "TROUBLE DIAG RECORD".

NOTE:

With "TROUBLE DIAG RECORD", diagnosis results previously erased by a reset operation can be displayed.



- 3. Diagnostic code is displayed on "TROUBLE DIAG RECORD".
- 4. Touch "PRINT".
- 5. Compare diagnostic codes to <u>SRS-30, "DTC No. Index ("SELF-DIAG [PAST]" or "TROUBLE DIAG RECORD")"</u>.
- 6. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.
- 7. Turn ignition switch OFF, then turn off and disconnect CON-SULT-II, and both battery cables.
- 8. Repair the system as outlined by the "Repair order" in "Intermittent Malfunction Diagnostic Code Chart", that corresponds to the self-diagnosis result. For replacement procedure of component parts, refer to the Removal and Installation procedure for the appropriate component.



9. Go to SRS-27, "DIAGNOSTIC PROCEDURE 3", for final checking.

DTC No. Index ("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.	ltage (Less than 9V)	Go to <u>SRS-27</u> , " <u>DIAGNOSTIC PRO-CEDURE 3</u> " .
	No malfunction is detected.		Go to <u>SRS-27</u> , " <u>DIAGNOSTIC PRO-CEDURE 3</u> " .
DRIVER AIR BAG MODULE	Driver air bag module circuit is open (incl	uding the spiral cable).	Visually check the wiring harness connection.
[OPEN] [B1054]			2. Replace the harness if it has visible damage.
DRIVER AIR BAG MODULE [VB-SHORT] [B1055]	Driver air bag module circuit is shorted to a power supply circuit (including the spiral cable).		If the harness check result is OK, replace driver air bag module diagnosis sensor unit and spiral cable.
DRIVER AIR BAG MODULE [GND-SHORT] [B1056]	Driver air bag module circuit is shorted to ground (including the spiral cable).		
DRIVER AIR BAG MODULE [SHORT] [B1057]	Driver air bag module circuit is shorted be	etween lines.	

Diagnostic item	Explanation	Repair order
ASSIST A/B MODULE	Front passenger air bag module circuit is open.	"Recheck SRS at each replacement" 1. Visually check the wiring harness
[OPEN] [B1070]	Tronk passenger an bag module chour to open.	connection. 2. Replace the harness if it has visible
ASSIST A/B MODULE VB-SHORT]	Front passenger air bag module circuit is shorted to a power supply circuit.	damage. 3. If the harness check result is OK,
[B1071] ASSIST A/B MODULE [GND-SHORT]	Front passenger air bag module circuit is shorted to ground.	replace the diagnosis sensor unit and front passenger air bag module.
B1072]		
ASSIST A/B MODULE SHORT] B1073]	Front passenger air bag module circuit is shorted between lines.	
CRASH ZONE SEN UNIT FAIL]	Crash zone sensor	Visually check the wiring harness connection.
B1033] B1034] CRASH ZONE SEN		Replace the harness if it has visible damage.
[COMM FAIL] [B1035] CRASH ZONE SEN [UNMATCH] [B1036]		If the harness check result is OK, replace crash zone sensor and diagnosis sensor unit.
SIDE MODULE LH OPEN]	Front LH side air bag module circuit is open.	Visually check the wiring harness connection.
B1134] SIDE MODULE LH	Front LH side air bag module circuit is shorted to a power sup-	Replace the harness if it has visible damage.
VB-SHORT] B1135]	ply circuit.	If the harness check result is OK, replace the diagnosis sensor unit
SIDE MODULE LH [GND-SHORT] [B1136]	Front LH side air bag module circuit is shorted to ground.	and LH side air bag module.
SIDE MODULE LH SHORT] B1137]	Front LH side air bag module circuit is shorted between lines.	
SIDE MODULE RH	Front RH side air bag module circuit is open.	Visually check the wiring harness connection.
B1129] SIDE MODULE RH	Front RH side air bag module circuit is shorted to a power sup-	Replace the harness if it has visible damage.
VB-SHORT] B1130]	ply circuit.	If the harness check result is OK, replace the diagnosis sensor unit
SIDE MODULE RH GND-SHORT] B1131]	Front RH side air bag module circuit is shorted to ground.	and RH side air bag module.
SIDE MODULE RH SHORT] B1132]	Front RH side air bag module circuit is shorted between lines.	
SATELLITE SENS LH UNIT FAIL]	LH side air bag (Satellite) sensor	Visually check the wiring harness connection.
B1118] B1119] SATELLITE SENS LH		Replace the harness if it has visible damage.
SATELLITE SENS LH [COMM FAIL] [B1120] SATELLITE SENS LH [UNMATCH] [B1121]		If the harness check result is OK, replace the diagnosis sensor unit and LH side air bag (Satellite) sensor.

SRS-31 Revision: 2006 August 2006 G35 Sedan

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
SATELLITE SENS RH [UNIT FAIL] [B1113] [B1114] SATELLITE SENS RH	RH side air bag (Satellite) sensor	Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check result is OK,
[COMM FAIL] [B1115] SATELLITE SENS RH [UNMATCH] [B1116]		replace the diagnosis sensor unit and RH side air bag (Satellite) sensor.
PRE-TEN FRONT LH [OPEN] [B1086]	Front LH pre-tensioner circuit is open.	Visually check the wiring harness connections. Replace the harness if it has visible
PRE-TEN FRONT LH [VB-SHORT] [B1087]	Front LH pre-tensioner circuit is shorted to a power supply circuit.	damage. 3. If the harness check result is OK, replace the diagnosis sensor unit
PRE-TEN FRONT LH [GND-SHORT] [B1088]	Front LH pre-tensioner circuit is shorted to ground.	and front LH seat belt.
PRE-TEN FRONT LH [SHORT] [B1089]	Front LH pre-tensioner circuit is shorted between lines.	
PRE-TEN FRONT RH [OPEN] [B1081]	Front RH pre-tensioner circuit is open.	Visually check the wiring harness connections.
PRE-TEN FRONT RH [VB-SHORT] [B1082]	Front RH pre-tensioner circuit is shorted to a power supply circuit.	Replace the harness if it has visible damage. If the harness check result is OK, replace the diagnosis sensor unit
PRE-TEN FRONT RH [GND-SHORT] [B1083]	Front RH pre-tensioner circuit is shorted to ground.	and front RH seat belt.
PRE-TEN FRONT RH [SHORT] [B1084]	Front RH pre-tensioner circuit is shorted between lines.	
CURTAIN MODULE LH [OPEN] [B1150]	LH side curtain air bag module circuit is open.	Visually check the wiring harness connection. Replace the harness if it has visible
CURTAIN MODULE LH [VB-SHORT] [B1151]	LH side curtain air bag module circuit is shorted to a power supply circuit.	damage. 3. If the harness check result is OK, replace the diagnosis sensor unit and LH side curtain air bag module.
CURTAIN MODULE LH [GND-SHORT] [B1152]	LH side curtain air bag module circuit is shorted to ground.	
CURTAIN MODULE LH [SHORT] [B1153]	LH side curtain air bag module circuit is shorted between lines.	

		Repair order	
Diagnostic item	Explanation	"Recheck SRS at each replacement"	А
CURTAIN MODULE RH [OPEN] [B1145]	RH side curtain air bag module circuit is open.	Visually check the wiring harness connection.	Б
CURTAIN MODULE RH [VB-SHORT] [B1146]	RH side curtain air bag module circuit is shorted to a power supply circuit.	Replace the harness if it has visible damage. If the harness check result is OK,	В
CURTAIN MODULE RH [GND-SHORT] [B1147]	RH side curtain air bag module circuit is shorted to ground.	replace the diagnosis sensor unit and RH side curtain air bag module.	С
CURTAIN MODULE RH [SHORT] [B1148]	RH side curtain air bag module circuit is shorted between lines.		D
CONTROL UNIT [B1001-B1015]	Diagnosis sensor unit is malfunctioning.	Visually check the wiring harness connection.	Е
[B1026-B1031] [B1042-B1047] [B1058-B1063] [B1074-B1079] [B1106-B1111] [B1122-B1127] [B1138-B1143] [B1202-B1207]		2. Replace the diagnosis sensor unit.	F
PASS A/B INDCTR CKT [B1023]	Cutoff telltale circuit is open or shorted to grand or the circuits are shorted each other.	Nisually check the wiring harness connection. Replace the harness if it has visible	SR
		damage.	ı
		3. Replace cut-off telltale indicator.4. Replace the diagnosis sensor unit.	
OCCUPANT SENS C/U [UNIT FAIL] [B1017] [B1020] [B1021]	Trouble occurs in Occupant Classification System-CU.	Replace passenger side seat cushion assembly.	J
OCCUPANT SENS [UNIT FAIL] [B1018]	Trouble occurs in Occupant Classification System-SENS.	Replace passenger side seat cushion assembly.	K
BELT TENSION SENS [UNIT FAIL]	Trouble occurs in belt tension sensor (BTS), circuit of BTS— Occupant Classification System-CU, or Occupant Classification	Visually check the wiring harness connection.	L
[B1019]	System-CU.	Replace the harness if it has visible damage.	M
		Replace passenger side seat belt assembly.	
		4. Replace the diagnosis sensor unit.	
OCCUPANT SENS C/U [COMM FAIL]	Trouble occurs in Occupant Classification System-CU, circuit of Occupant Classification System-CU—Diagnosis Sensor Unit or	Visually check the wiring harness connection.	
[B1022]	Diagnosis Sensor Unit.	Replace the harness if it has visible damage.	
		Replace passenger side seat cushion assembly.	
		4. Replace the diagnosis sensor unit.	

SRS-33 Revision: 2006 August 2006 G35 Sedan

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
FRONTAL COLLISION DETECTION [B1209]	Seat belt pre-tensioner and front air bag are deployed.	Go to SRS-54, "For Frontal Collision" .
SIDE COLLISION DETECTION [B1210]	Side and curtain air bag is deployed.	Go to SRS-56, "For Side Collision".

Trouble Diagnosis without CONSULT-II DIAGNOSTIC PROCEDURE 6

NHS0002Z

Α

В

D

F

F

G

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

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

- Turn ignition switch ON.
- After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch OFF within 1 second.
- 3. Wait more than 3 seconds.
- Repeat the steps 1 to 3 twice. (Perform three times in all.)
- 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 7 sec. 2 sec. 2 sec.	Erase memory. (Once key switch is turned from OFF to ON, TROUBLE DIAG RECORD will be erased.)

PHIA0532E

<driver air="" bag="" module=""></driver>	
Flash pattern	Repair order
a through d are repeated. d: Two flashes indicate malfunctioning driver air bag module circuit. 2 flashes	Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the spiral cable. Replace the related harness.
ON 7 sec. 3 sec. 2 sec. 2 sec. 2 sec. 2 sec.	PHIA1233E

<Diagnosis sensor unit> Flash pattern Repair order a through d are repeated. 1. Visually check the wiring harness connections. d: Seven flashes indicate malfunctioning diagnosis sensor unit 2. Replace the harness if it has visible damage. circuit. 3. Replace the diagnosis sensor unit. 4. Replace the related harness. 7 flashes b а b ON 7 sec 3 sec OFF 2 sec. 2 sec 2 sec. 0.5 sec

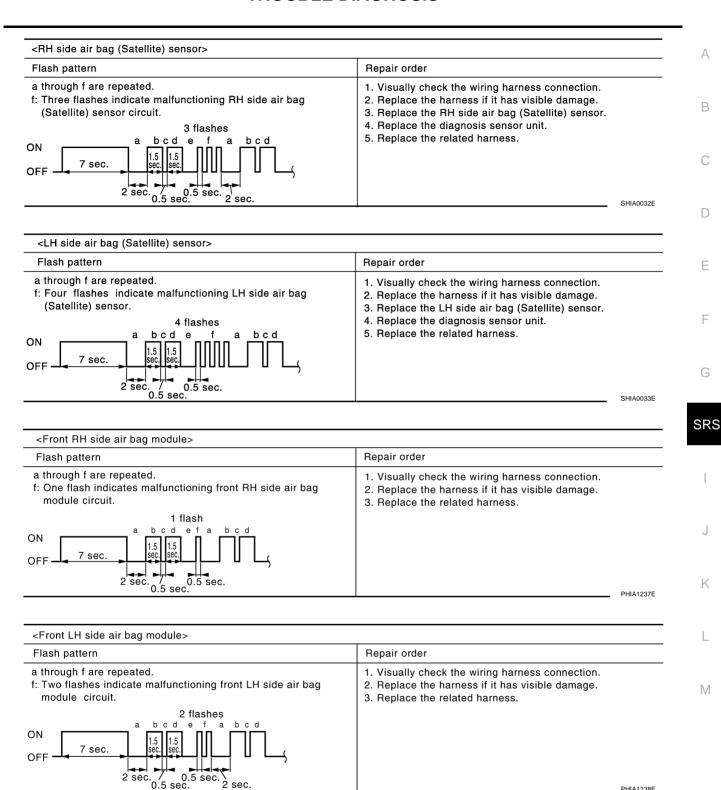
SRS

<Front passenger air bag module> Flash pattern Repair order a through d are repeated. 1. Visually check the wiring harness connection. d: Eight flashes indicate malfunctioning front passenger air bag 2. Replace the harness if it has visible damage. module circuit. 3. Replace the related harness. 8 flashes b ON 7 sec OFF 2 sec. 2 sec. 2 sec. PHIA1234E

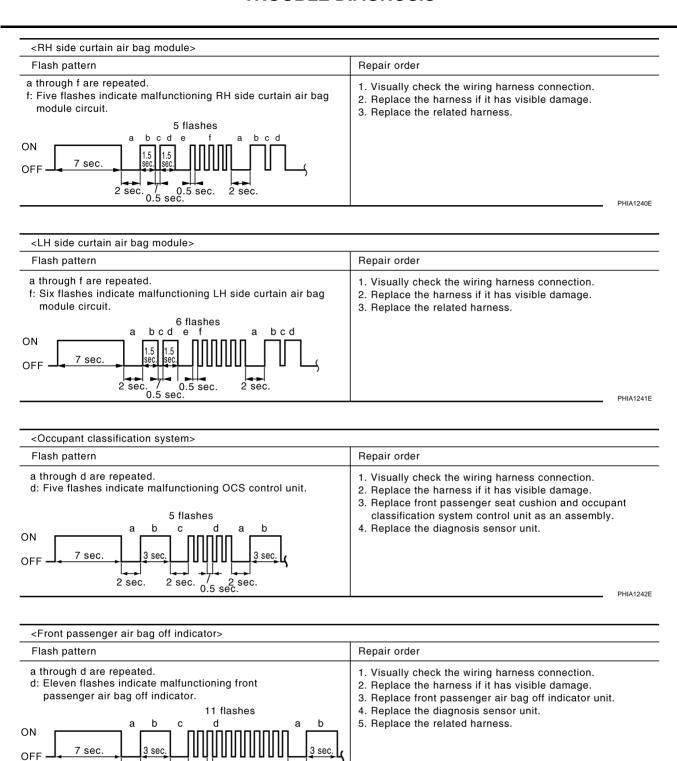
<crash sensor="" zone=""></crash>	
Flash pattern	Repair order
a through d are repeated. d: Six flashes indicate malfunctioning crash zone sensor circuit. ON OFF 7 sec. 2 sec. 2 sec. 0.5 sec. 0.5 sec.	Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the crash zone sensor. Replace the diagnosis sensor unit. Replace the related harness.

•	Repair order
a through d are repeated. d: One flash indicates malfunctioning front RH seat belt pre-tensioner circuit.	 Visually check the wiring harness connections. Replace the harness if it has visible damage. Replace the related harness.
DN 7 sec. 3 sec. 2 sec. 2 sec. 2 sec.	

<front belt="" lh="" pre-tensioner="" seat=""></front>		
Flash pattern	Repair order	
a through d are repeated. d: Three flashes indicate malfunctioning front LH seat belt pre-tensioner circuit.	 Visually check the wiring harness connections. Replace the harness if it has visible damage. Replace the related harness. 	
ON 7 sec. 3 flashes a b c d a b 0		



Revision: 2006 August SRS-37 2006 G35 Sedan



PHIA1243E

2 sec.

2 sec

2 sec.

0.5 sec

Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn OFF **DIAGNOSTIC PROCEDURE 7**

NHS00030

Α

В

F

F

1. CHECK THE DEPLOYMENT OF AIR BAG MODULE

Is air bag module deployed?

YES or NO

>> Refer to SRS-54, "COLLISION DIAGNOSIS". YES

NO >> GO TO 2.

2. CHECK THE AIR BAG FUSE

Check 10A fuse [No.13, located in fuse block (J/B)]. Refer to PG-3, "POWER SUPPLY ROUTING CIRCUIT".

OK or NG

OK >> GO TO 4. NG >> GO TO 3.

3. CHECK AIR BAG FUSE AGAIN

Replace "AIR BAG" fuse and turn ignition switch ON.

Does the "AIR BAG" fuse blow again?

>> Repair or replace main harness.

>> INSPECTION END NO

4. CHECK DIAGNOSIS SENSOR UNIT

Connect CONSULT-II and touch "START".

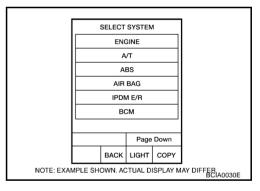
Is "AIR BAG" displayed on CONSULT-II?

YES or NO

YES >> GO TO 5.

NO

>> Visually check the wiring harness connection of diagnosis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.



5. CHECK HARNESS CONNECTION

Is harness connection between warning lamp and diagnosis sensor unit OK?

OK or NG

OK >> Replace diagnosis sensor unit.

NG

>> Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.

SRS

Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn ON DIAGNOSTIC PROCEDURE 8

VHS0003

1. CHECK METER FUSE

Check 10A fuse [No.14, located in fuse block (J/B)]. Refer to PG-3, "POWER SUPPLY ROUTING CIRCUIT" .

OK or NG

OK >> GO TO 3. NG >> GO TO 2.

2. CHECK METER FUSE AGAIN

Replace 10A fuse [No.14, located in fuse block (J/B)] and turn ignition switch ON.

Does the meter fuse blow again?

YES >> Repair or replace the related harness.

NO >> INSPECTION END

3. CHECK HARNESS CONNECTION BETWEEN DIAGNOSIS SENSOR UNIT AND COMBINATION METER

Disconnect diagnosis sensor unit connector and turn ignition switch ON.

Does "AIR BAG" warning lamp turn ON?

YES or NO

YES >> Replace diagnosis sensor unit.

NO >> Replace combination meter assembly.

Trouble Diagnosis: Passenger Seatbelt Warning System (Only with seat belt reminder) NHS0006M 1. CHECK THE SYSTEM 1 В Check seatbelt warning lamp function. Seatbelt warning lamp turns ON in the following conditions. Driver seatbelt is fastened. Occupant is on passenger seat. Passenger seatbelt is not fasten. D OK or NG OK >> GO TO 2. F NG >> Check the followings. Harness between air bag diagnosis sensor unit and combination meter. Seatbelt buckle switch (passenger side) circuit. Seatbelt buckle switch (passenger side). If these are OK, replace air bag diagnosis sensor unit. G 2. CHECK THE SYSTEM 2 Check seatbelt warning lamp function. **SRS** Seatbelt warning lamp turns OFF in the following conditions. Driver seatbelt is fastened. Occupant is on passenger seat. Passenger seatbelt is fastened. OK or NG OK >> System is OK. NG >> Check the followings. Seatbelt buckle switch (passenger side) circuit. Seatbelt buckle switch (passenger side). If these are OK, replace air bag diagnosis sensor unit.

M

Revision: 2006 August SRS-41 2006 G35 Sedan

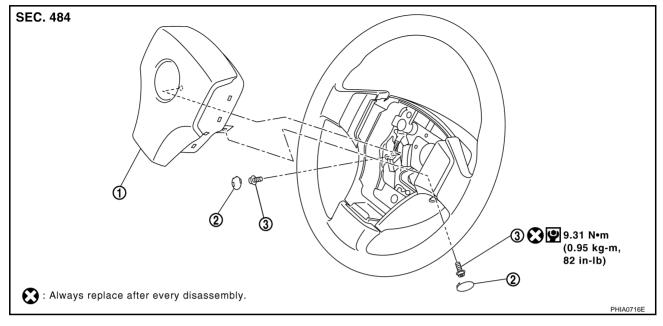
DRIVER AIR BAG MODULE

DRIVER AIR BAG MODULE

PFP:K8510

Removal and Installation

NHS00032



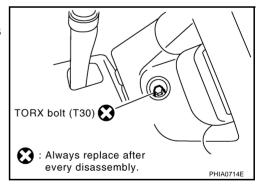
- 1. Driver air bag module
- 2. Side lid

3. TORX bolt (T30)

REMOVAL

CAUTION:

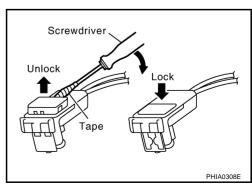
- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of driver air bag module.
- Do not use air tools or electric tools for servicing.
- 1. Remove the side lids (LH/RH).
- 2. Using Tamper resistant TORX bit (T30), remove the TORX bolts (T30) at right and left.



- 3. Disconnect the steering wheel switch sub-harness connector.
- 4. Disconnect the air bag harness connector, and remove the driver air bag module.

CAUTION:

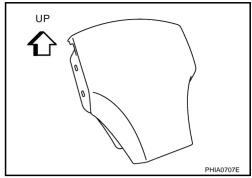
- For installing / removing driver air bag module connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove connector.
- Install connector with lock raised, and push lock into connector.
- After installing the connector, make sure that the lock is pushed securely into it.



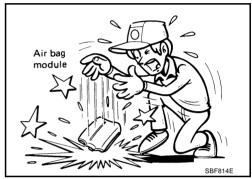
DRIVER AIR BAG MODULE

CAUTION:

- Always place driver air bag module with pad side facing upward.
- Do not insert any foreign objects (screwdriver, etc.) into driver air bag module.
- Do not disassemble driver air bag module.
- Do not use old bolts after removal; replace with new bolts.



- Do not expose the driver air bag module to temperatures exceeding 90°C (194°F).
- Replace driver air bag module if it has been dropped or sustained an impact.
- Do not allow oil, grease or water to come in contact with the front passenger air bag module.



SRS

В

D

F

INSTALLATION

Install in the reverse order of removal.

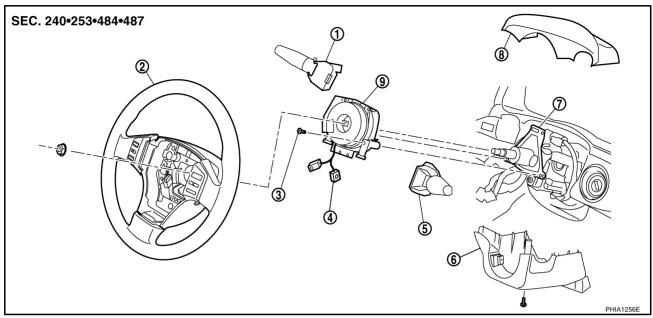
CAUTION:

- For installing the air bag module, tighten the TORX bolts (T30).
- After the work is completed, perform self-diagnosis to make sure no malfunction is detected. Refer to SRS-20, "SRS Operation Check".

SPIRAL CABLE PFP:25554

Removal and Installation

NHS00033



- 1. Lighting switch
- 4. Driver air bag module connector
- 7. Steering column assembly
- 2. Steering wheel
- 5. Wiper washer switch
- 8. Steering column cover (upper)
- 3. Screw (Do not remove)
- 6. Steering column cover (lower)
- 9. Spiral cable

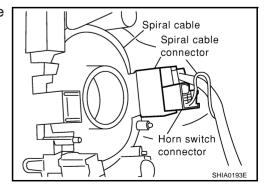
REMOVAL

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Remove driver air bag module. Refer to SRS-42, "Removal and Installation".
- 2. Set the steering wheel in the neutral position.
- 3. Disconnect steering horn switch connector.
- 4. Remove steering wheel. Refer to PS-9, "STEERING WHEEL".
- 5. Remove steering column cover upper and lower. Refer to IP-12, "REMOVAL".
- 6. Loosen the spiral cable fixing screws, then remove the spiral cable.

CAUTION:

- Do not disassemble spiral cable.
- Do not apply lubricant to the spiral cable.
- 7. Disconnect the horn switch connector, and then the spiral cable connector.



Remove the wiper washer switch and lighting switch from the spiral cable.

SPIRAL CABLE

CAUTION:

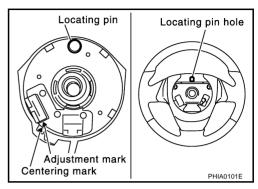
The spiral cable may snap due to steering operation if the cable is installed in an improper position.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- The spiral cable may snap due to steering operation if the cable is installed in an improper position.
- Also, with the steering linkage disconnected the cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned counterclockwise about 2.5 turns from the right end position.
- After the work is completed, perform self-diagnosis to make sure that no malfunction is detected. Refer to <u>SRS-20, "SRS</u> Operation Check".



SRS

G

В

D

F

ı

FRONT PASSENGER AIR BAG MODULE

FRONT PASSENGER AIR BAG MODULE

PFP:K8515

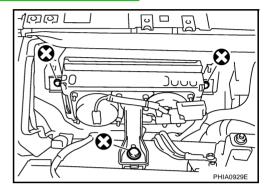
Removal and Installation REMOVAL

NHS00034

CAUTION:

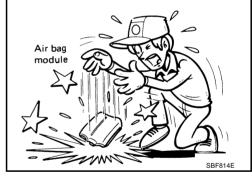
- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3
 minutes.
- Always work from the side of front passenger air bag module.
- Do not use air tools or electric tools for servicing.
- Remove instrument panel & pad. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY".
- 2. Remove the bolt, then remove front passenger air bag module.

Hex bolt (M8) : 24.5 N·m (2.5 kg-m, 18 ft-lb) Fixing bolts (M6) : 6 N·m (0.6 kg-m, 53 in-lb)



CAUTION:

- Always place front passenger air bag module with deployment side facing upward.
- Do not insert any foreign objects (screwdriver, etc.) into front passenger air bag module.
- Do not disassemble front passenger air bag module.
- Do not use old bolts after removal; replace with new bolts.
- Replace front passenger air bag module if it has been dropped or sustained an impact.
- Do not expose the front passenger air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the front passenger air bag module.
- After front passenger air bag module inflates, the instrument panel assembly should be replaced.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Always work from the side of or under front passenger air bag module.
- After the work is completed, perform self-diagnosis to make sure no malfunction is detected.
 Refer to <u>SRS-20</u>, "<u>SRS Operation Check</u>".

SIDE CURTAIN AIR BAG MODULE

SIDE CURTAIN AIR BAG MODULE

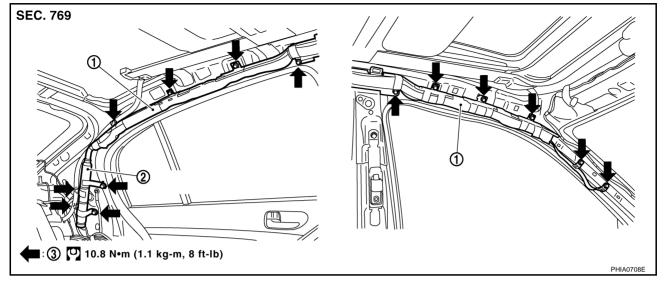
Removal and Installation

PFP:985P0

NHS00035

Α

В



- 1. Side curtain air bag
- 2. Side curtain air bag module
- 3. Bolt

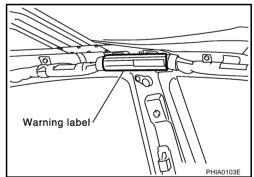
REMOVAL

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of the side curtain air bag module.
- Do not use air tools or electric tools for servicing.
- Remove headlining. Refer to <u>EI-45, "HEADLINING"</u>.
- 2. Disconnect side curtain air bag connector.
- 3. Remove side curtain air bag module fixing bolts, and remove the side curtain air bag module.

CAUTION:

- Always place the side curtain air bag module with the warning label facing upward.
- Do not disassemble side curtain air bag module.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module connector.



- Replace side curtain air bag module if it has been dropped or sustained an impact.
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the side curtain air bag module.



SRS

J

Λ

L

SIDE CURTAIN AIR BAG MODULE

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Always work from the side of the side curtain air bag module.
- After replacement of side curtain air bag module, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-20</u>, "<u>SRS Operation Check"</u>.

CRASH ZONE SENSOR

CRASH ZONE SENSOR

PFP:98531

Removal and Installation REMOVAL

NHS00036

Α

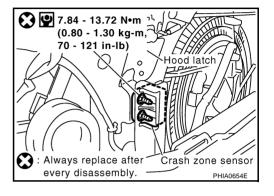
В

C

F

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Remove front grille. Refer to EI-20, "FRONT GRILLE".
- Remove crash zone sensor connector.
- 3. Remove crash zone sensor fixing nuts.



CAUTION:

- Replace crash zone sensor if it has been dropped or sustained an impact.
- Do not 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 make sure no malfunction is detected. Refer to SRS-20, "SRS Operation Check".

SRS

G

K

L

SIDE AIR BAG (SATELLITE) SENSOR

SIDE AIR BAG (SATELLITE) SENSOR

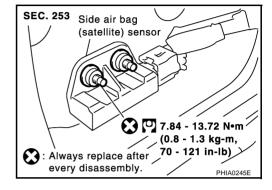
PFP:98830

Removal and Installation REMOVAL

NHS00037

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3
 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Remove seat belt pre-tensioner. Refer to SB-3, "Removal and Installation of Front Seat Belt".
- Remove side air bag (Satellite) sensor fixing nuts.
- 3. Remove the side air bag (Satellite) sensor connector.



CAUTION:

- Do not use old nuts; replace with new ones.
- Check side air bag (Satellite) sensor to ensure it is free of deformities, dents, cracks or rust. If it shows any visible signs of damage, replace it with new one.
- Do not disassemble side air bag (Satellite) sensor.
- Replace side air bag (Satellite) sensor if it has been dropped or sustained an impact.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check side air bag (Satellite) sensor for proper installation.
- After replacement of side air bag (Satellite) sensor, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-20</u>, "<u>SRS Operation Check"</u>.

FRONT SEAT BELT PRE-TENSIONER

FRONT SEAT BELT PRE-TENSIONER

PFP:86884

Removal and Installation

NHS00038

For removal and installation procedures, refer to SB-3, "Removal and Installation of Front Seat Belt".

В

Α

С

D

Е

F

G

SRS

J

Κ

.

DIAGNOSIS SENSOR UNIT

DIAGNOSIS SENSOR UNIT

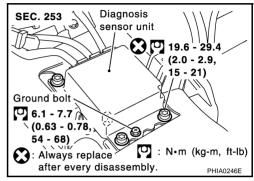
PFP:28556

Removal and Installation

NHS00039

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3
 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Disconnect each harness connector for the air bag module and seat belt pre-tensioner.
- 2. Remove center console. Refer to IP-11, "Removal and Installation".
- 3. Disconnect diagnosis sensor unit connector.
- Remove hex bolts and ground bolt from the diagnosis sensor unit.



CAUTION:

- Do not use old bolts. Replace with new ones.
- Check diagnosis sensor unit bracket to ensure it is free of deformities, dents, cracks or rust. If it shows any visible signs of damage, replace with new one.
- Replace diagnosis sensor unit if it has been dropped or sustained an impact.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check the diagnosis sensor unit for proper installation.
- After replacement of diagnosis sensor unit, perform self-diagnosis to make sure no malfunction is detected. Refer to SRS-20, "SRS Operation Check".

ECU DISCRIMINATED NO.

After replacing the diagnosis sensor unit, confirm that the diagnosis sensor unit identification is correct for the vehicle as equipped.

	Specification	ECU DISCRIMINATED No.
2WD AWD		FAB8H

OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

PFP:98852

Removal and Installation

NHS0003A

The occupant classification system control unit, occupant classification sensor, and bladder are an integral part of the front passenger seat cushion and are replaced as an assembly. Refer to <u>SE-90</u>, "FRONT SEAT".

С

Α

В

D

Е

F

G

SRS

Κ

.

COLLISION DIAGNOSIS

PFP:00015

For Frontal Collision

NHS0003B

To repair the SRS, perform the following steps.

When SRS (except the front side air bag and side curtain air bag modules) is activated in a collision:

- Replace the diagnosis sensor unit.
- 2. Remove the air bag modules (except the front side air bag modules and side curtain air bag modules), crash zone sensor assembly, bracket and seat belt pre-tensioner assemblies.
- 3. Check the SRS components using the table below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 4. Install new air bag modules (except the front side air bag modules and side curtain air bag modules) crash zone sensor assembly, bracket and seat belt pre-tensioner assemblies.
- 5. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation Check"</u> for details. Ensure entire SRS operates properly.

When SRS is not activated in a collision:

- 1. Check the SRS components using the table below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 2. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation Check"</u> for details. Ensure entire SRS operates properly.

When only one front air bag module is activated in a collision:

- 1. Replace the following components:
- Diagnosis sensor unit
- Crash zone sensor
- Activated front air bag and seat belt pre-tensioner.
- 2. Check the other SRS components using the table below (Refer to "SRS is NOT activated").
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 3. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation Check"</u> for details. Ensure entire SRS operates properly.

Only one front air bag may inflate a crash, depending on the crash severity and whether the front occupants are belted or unbelted. This does not indicate improper performance of the system. Perform self-diagnosis to make sure the entire SRS operates properly.

SRS INSPECTION (FOR FRONTAL COLLISION)

Part	SRS is activated	SRS is NOT activated
Driver airbag module	If the Driver airbag has deployed: REPLACE. Install with new fasteners.	If the Driver air bag has NOT been activated: [same text as in current manual]
Passenger front airbag module	If the Passenger front airbag has deployed: REPLACE. Install with new fasteners.	If the Passenger front air bag has NOT been activated: [same text as in current manual]
Crash zone sensor	If any of the front airbags or seat belt pretensionsers have been activated: REPLACE the crash zone sensor and bracket with new fasteners.	If the front airbags or seat belt pre-tensionsers have NOT been activated: [same text as in current manual]
Seat belt pre-ten- sioner assemblies	If the driver or passenger Seat belt pre-ten- sioner has been activated: REPLACE the seat belt pre-tensioner assemblies with new fasteners.	If the pre-tensioners have NOT been activated: [same text as in current manual]
Diagnosis sensor unit	If any of the SRS components have been activated: REPLACE the Diagnosis sensor unit. Install with new fasteners.	If none of the SRS components have been activated: [same text as in current manual]

Part	SRS is activated	SRS is NOT activated	
Steering wheel	[same tex	t as in current manual]	
0			
Spiral cable	If the Driver airbag has deployed: REPLACE the spiral cable.	If the Driver airbag has not deployed: [same text as in current manual]	
	THE ETTOE THE OPHIAL CASIO.	[came text as in carrent manual]	
Harness and con-	Check connectors for poor connection, d.	amage, and terminals for deformities.	
nectors	2. Check harness for binding, chafing, cuts, or deformities.		
	3. If no damage is found, reinstall the harness and connectors.		
	4. If damaged—REPLACE damaged sectio	n of harness. Do not repair, splice or modify any SRS harness.	
Instrument panel	Visually check instrument panel for damage.		
	2. If no damage is found, reinstall the instrument panel.		
	3. If damaged—REPLACE the instrument panel with bolts.		

SRS

G

K

For Side Collision WHEN THE SIDE AIR BAG IS ACTIVATED IN THE SIDE COLLISION:

NHS0003C

- Replace the following components:
- All parts of front seatback (including front seatback frame) with front side air bag module (on the side on which front side air bag is activated)
- Curtain air bag module (on the side on which side curtain air bag is activated)
- Diagnosis sensor unit
- Satellite sensor (on the side on which side air bag and side curtain air bag is activated)
- 2. Check the SRS components and the related parts using the following table.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
- 3. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation Check"</u>. Ensure entire SRS operates properly.

WHEN SRS IS NOT ACTIVATED IN THE SIDE COLLISION:

- Check the SRS components and the related parts using the following table.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
- 2. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation Check"</u>. Ensure entire SRS operates properly.

SRS INSPECTION (FOR SIDE COLLISION)

Part	Front side air bag and side curtain air bag is activated	Front side air bag and side curtain air bag is NOT activated
LH or RH side curtain air bag module	tain air bag module. (Repair the center pil-	Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side.
_		2. If damaged— Remove the LH or RH side curtain air bag module.
	lar inner, etc. before installing new one if damaged.)	3. Check for visible signs of damaged (tears etc.) of the LH or RH side curtain air bag module.
		4. Check harness and connectors for damage, and terminals for deformities.
		5. If no damage is found, reinstall the LH or RH side curtain air bag module with new bolts.
		6. If damaged—REPLACE the LH or RH side curtain air bag module with new bolts.
Front LH or RH side air bag module	REPLACE all parts of seatback with deployed front side air bag module.	Check for visible signs of damage (dents, tears, deformation) of the seatback on the collision side.
		2. Check harness and connectors for damage, and terminals for deformities.
		3. If damaged—REPLACE the front seatback assembly.
LH or RH side air bag (Satellite) sensor	bag REPLACE the side air bag (Satellite) sensor on the collision side with new nuts. (Repair the center pillar inner, etc. before	Remove the LH or RH side air bag (Satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding
		Check for visible signs of damage (dents, cracks, deformation) of the LH or RH side air bag (Satellite) sensor.
		3. Install the LH or RH side air bag (Satellite) sensor to check fit.
	installing new one if damaged.)	 If no damage is found, reinstall the LH or RH side sir bag (Satellite) sensor with new nuts.
		5. If damaged—REPLACE the LH or RH side air bag (Satellite) sensor with new nuts
Diagnosis sensor unit	REPLACE the diag- nosis sensor unit with the new bolts.	Check case and bracket for dents, cracks or deformities.
		2. Check connectors for damage, and terminals for deformities.
	the new poits.	3. If no damage is found, reinstall the diagnosis sensor unit with new bolts and ground bolt.
		4. If damaged—REPLACE the diagnosis sensor unit with new bolts and ground bolt.

Part	Front side air bag and side curtain air bag is activated	Front side air bag and side curtain air bag is NOT activated	А	
Seat belt pre-ten- sioner assembly	Check if the seat belt can be extended smoothly. If the seat belt cannot be extended smoothly,			
	- Check for deformities of the center pillar inner.			
	- If the center pillar inner has no damage, REPLACE the seat belt pre-tensioner assembly.			
		It pre-tensioner assembly on the collision side. Check harness cover and connectors Is for deformities, and harness for binding.	C	
	3. Check for visible sig	ns of damage (dents, cracks, deformation) of the seat belt pre-tensioner assembly.		
	4. Check seat belt adju	ster for damage.		
	5. If no damage is four	d, reinstall the seat belt pre-tensioner assembly.		
	6. If damaged—REPLACE the seat belt pre-tensioner assembly with new bolts.			
Seat with front side	de REPLACE all parts of front seatback (including front seatback frame)	1. Visually check the seat on the collision side.	Е	
air bag		Remove the seat on the collision side and check the following for damage and deformities.		
		- Harness, connectors and terminals	F	
		 Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat) 		
		3. If no damage is found, reinstall the seat.	G	
		4. If damaged—REPLACE the damaged seat parts using new bolts.		
Center inner pillar	1. Check the center inner pillar on the collision side for damage (dents, cracks, deformation).		SF	
	2. If damaged—REPAIR the center inner pillar.			
Trim/headlining	1. Check for visible sign	ns of damage (dents, cracks, deformation) of the interior trim on the collision side.		
	2. If damaged—REPLACE the damaged trim parts.			

J

Κ

L