$\mathsf{D}$ 

Е

SRS

# **CONTENTS**

PRECAUTIONS 3	FROM DIAGNOSTIC PROCEDURE 2)	30
Precautions for Supplemental Restraint System	DIAGNOSTIC PROCEDURE 5	30
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	Trouble Diagnosis Without CONSULT-II	37
SIONER" 3	DIAGNOSTIC PROCEDURE 6	37
Precautions for SRS "AIR BAG" and "SEAT BELT	WARNING LAMP FLASH CODE CHART	38
PRE-TENSIONER" Service 3	Trouble Diagnosis: "AIR BAG" Warning Lamp Does	
Occupant Classification System Precaution 3	Not Turn Off	43
PREPARATION 4	DIAGNOSTIC PROCEDURE 6	
Special Service Tools 4	Trouble Diagnosis: "AIR BAG" Warning Lamp Does	
SUPPLEMENTAL RESTRAINT SYSTEM (SRS) 5	Not Turn On	
SRS Configuration5	DIAGNOSTIC PROCEDURE 7	44
Front Seat Belt Pre-tensioner with Load Limiter 6	DRIVER AIR BAG MODULE	45
Front Side Air Bag 6	Removal and Installation	
Side Curtain Air Bag 6	REMOVAL	45
Occupant Classification System (OCS)6	INSTALLATION	
Direct-connect SRS Component Connectors 7	SPIRAL CABLE	47
TROUBLE DIAGNOSIS 8	Removal and Installation	47
Trouble Diagnosis Introduction 8	REMOVAL	47
DIAGNOSIS FUNCTION 8	INSTALLATION	48
HOW TO PERFORM TROUBLE DIAGNOSES	FRONT PASSENGER AIR BAG MODULE	50
FOR QUICK AND ACCURATE REPAIR 8	Removal and Installation	
WORK FLOW 9	REMOVAL	
SRS Components Parts Location 10	INSTALLATION	50
Schematic11	WIRING HARNESS MODIFICATION	51
Wiring Diagram — SRS — 12	SIDE CURTAIN AIR BAG MODULE	53
CONSULT-II Function (AIR BAG) 18	Removal and Installation	53
CONSULT-II Function	REMOVAL	53
HOW TO CHANGE SELF-DIAGNOSIS MODE	INSTALLATION	53
WITH CONSULT-II 18	CRASH ZONE SENSOR	. 54
HOW TO ERASE SELF-DIAGNOSIS RESULTS 19	Removal and Installation	54
Self-Diagnosis Function (Without CONSULT-II) 19	REMOVAL	54
HOW TO CHANGE SELF-DIAGNOSIS MODE 20	INSTALLATION	54
HOW TO ERASE SELF-DIAGNOSIS RESULTS 20	SIDE AIR BAG (SATELLITE) SENSOR	55
SRS Operation Check	Removal and Installation	
DIAGNOSTIC PROCEDURE 120	REMOVAL	55
Trouble Diagnosis With CONSULT-II	INSTALLATION	55
DIAGNOSTIC PROCEDURE 222	FRONT SEAT BELT PRE-TENSIONER	56
DIAGNOSTIC PROCEDURE 328	Removal and Installation	
DIAGNOSTIC PROCEDURE 4 (CONTINUED		

DIAGNOSIS SENSOR UNIT	57	SRS INSPECTION (FOR FRONTAL COLLI-	
Removal and Installation	57	SION)	59
REMOVAL	57	For Side and Rollover Collision	60
INSTALLATION	57	WHEN SRS IS ACTIVATED IN THE SIDE OR	
ECU DISCRIMINATED NO	57	ROLLOVER COLLISION	60
OCCUPANT CLASSIFICATION SYSTEM CON-		WHEN SRS IS NOT ACTIVATED IN THE SIDE	
TROL UNIT	58	OR ROLLOVER COLLISION	60
Removal and Installation	58	SRS INSPECTION (FOR SIDE AND ROLLOVER	
COLLISION DIAGNOSIS	59	COLLISION)	61
For Frontal Collision	59	•	

#### **PRECAUTIONS**

PRECAUTIONS PFP:00001

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

HS00151

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

EHS00152

- 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 bags and seat belt pre-tensioners to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have passed.
- The air bag diagnosis sensor unit must always be installed with the arrow mark "←" pointing toward the
  front of the vehicle for proper operation. Also check air bag 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 attempt to turn steering wheel or 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.

# **Occupant Classification System Precaution**

EHS00153

Replace control unit and passenger front seat cushion as an assembly.

SRS

D

Е

M

#### **PREPARATION**

# PREPARATION PFP:00002

# **Special Service Tools**

EHS00155

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description
— (J-42057-UPD) Air bag key set Part of kit (J-42057)	ERS210	Removing and installing air bag lock

#### SUPPLEMENTAL RESTRAINT SYSTEM (SRS) PFP:28556 **SRS Configuration** FHS00157 Front passenger Crash zone air bag module sensor Occupant classification Driver air bag system module Seat belt buckle Seat belt buckle pre-tensioner pre-tensioner assembly RH assembly LH Front RH seat belt Front LH seat belt pre-tensioner pre-tensioner LH side air bag RH side air bag Air bag diagnosis sensor unit (satellite) sensor (satellite) sensor (G sensor for front (G sensor for front · Auxiliary power source (condenser) LH side air bag) RH side air bag) · Drive circuit • CPU Front LH side air bag Front RH side air bag · G sensor (for driver and front passenger air module module (If equipped) (If equipped) bags, front seat belt pre-tensioner) · Safing sensor (for driver and front passenger air bags, front seat belt pre-tensioner) RH side front curtain LH side front curtain Safing sensor air bag module air bag module (for front side air bag and side

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

curtain air bag module)

LH side rear curtain

air bag module

The collision modes for which supplemental restraint systems are activated are different among the SRS systems. For example, the driver air bag module, front passenger air bag module, seat belt buckle pre-tensioner assemblies and the front seat belt pre-tensioners are activated in a frontal collision but not in a side collision. SRS configurations for some collision modes are as follows:

SRS configuration	Frontal collision	Left side collision	Right side colli- sion	Rollover
Driver air bag module	х	_	_	_
Front passenger air bag module	х	_	_	_
Front LH seat belt pre-tensioner	х	_	_	х
Seat belt buckle pre-tensioner assembly LH	х	_	_	х
Front RH seat belt pre-tensioner	х	_	_	х
Seat belt buckle pre-tensioner assembly RH	х	_	_	х
Front LH side air bag module (If equipped)	_	х	_	_
Front RH side air bag module (If equipped)	_	_	х	_
LH side front curtain air bag module	_	х	_	х
LH side rear curtain air bag module	_	х	_	х
RH side front curtain air bag module	_	_	х	х
RH side rear curtain air bag module	_	_	х	х

Revision: July 2007 SRS-5 2006 Armada

SRS

Е

Α

RH side rear curtain

air bag module

K

L

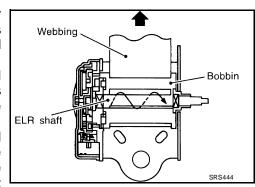
M

#### 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.

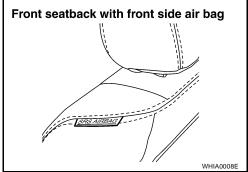


# Front Side Air Bag

EHS00159

EHS00158

Front side air bag modules are built into the front seatback assemblies. Vehicles with side air bags are equipped with labels as shown.



# Side Curtain Air Bag

EHS0015A

Side curtain air bag modules are located above the vehicle headlining. Vehicles with side curtain air bags are equipped with labels as shown.



# Occupant Classification System (OCS)

EHS001MK

The occupant classification system (OCS) identifies different size occupants, out of position occupants, and detects if child seat is present in the front passenger seat. The OCS 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 the passenger, the OCS sends a signal to the air bag diagnosis sensor unit. The air bag diagnosis sensor unit uses this signal and the seat belt buckle switch RH signal to determine deployment or non deployment of the passenger front air bag in the event of a collision. Depending on the signals received, the air bag diagnosis sensor unit can disable the passenger front air bag completely.

#### NOTE

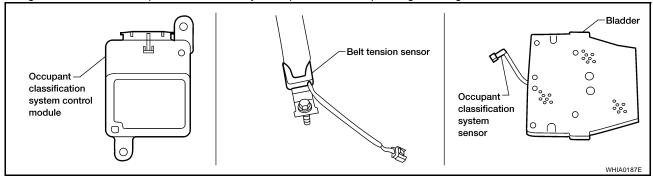
In case of customer concern, CONSULT-II can be used to confirm the passenger air bag status (readiness).

#### **Passenger Air Bag Status Conditions**

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 occupied NOTE	ON	Deactivated (disabled)	OFF
Seat empty	OFF	Deactivated (disabled)	OFF

#### NOTE:

Passenger does not meet Occupant Classification System specifications for passenger air bag activation.



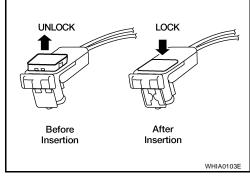
#### **Direct-connect SRS Component Connectors**

The following SRS components use direct-connect style harness connectors.

- Driver air bag module
- Front passenger air bag module
- LH side front curtain air bag module
- LH side rear curtain air bag module
- RH side front curtain air bag module
- RH side rear curtain air bag module
- Front LH seat belt pre-tensioner
- Front RH seat belt pre-tensioner
- Seat belt buckle pre-tensioner assembly LH
- Seat belt buckle pre-tensioner assembly RH

Always pull up to release black locking tab prior to removing connector from SRS component.

Always push down to lock black locking tab after installing connector to SRS component. When locked, the black locking tab is level with the connector housing.



SRS

FHS0015C

Е

Α

Κ

L

M

#### TROUBLE DIAGNOSIS

PFP:00004

#### **Trouble Diagnosis Introduction**

EHS0015D

#### **CAUTION:**

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

Check that the following parts are in good order.

- Battery (Refer to SC-4, "How to Handle Battery" .)
- Fuse (Refer to <u>SRS-12</u>, "Wiring <u>Diagram SRS —"</u>.)
- System component-to-harness connections

# ACTION ITEM REFERENCE ITEM B Check in Check in Perform preliminary check. Preliminary check \*1 E Check for any service bulletin. Perform self-diagnosis using "AIR BAG" warning lamp. – User mode Inspect malfunctioning part. – Diagnosis mode \* DIAGNOSTIC PROCEDURE

Inspect malfunctioning part. – Diagnosis mode
Perform self-diagnosis using CONSULT-II.

OR
Perform self-diagnosis "AIR BAG" warning lamp.

Repair/Replace

OK

Check out

OK

Check out

WHIA0098E

\*1: <u>SRS-8</u>
\*4: SRS-37

\*2: <u>SRS-20</u>

\*3: <u>SRS-30</u>

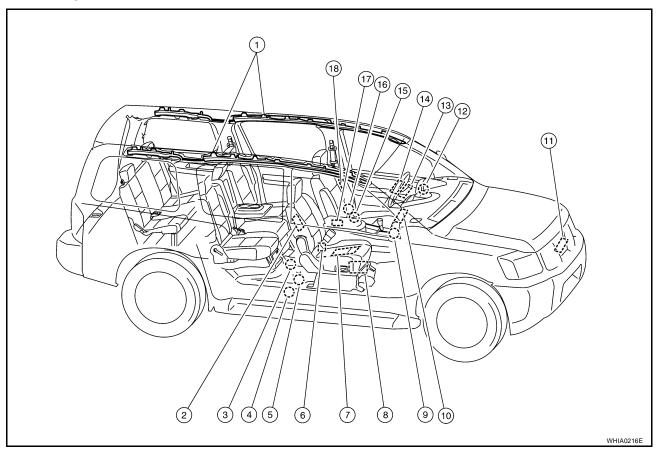
M

SRS

Revision: July 2007

# **SRS Components Parts Location**

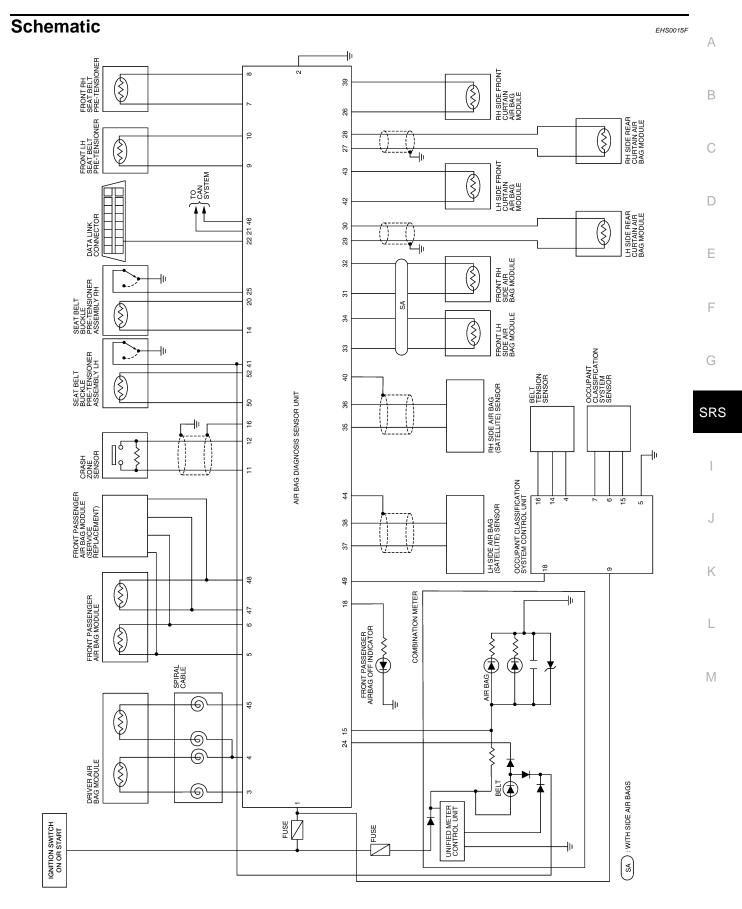
EHS001B8



- Side curtain air bag modules
- 4. Front RH seat belt pre-tensioner
- Occupant classification system sensor
- 10. Front passenger air bag module
- 13. Spiral cable
- 16. LH side air bag (satellite) sensor

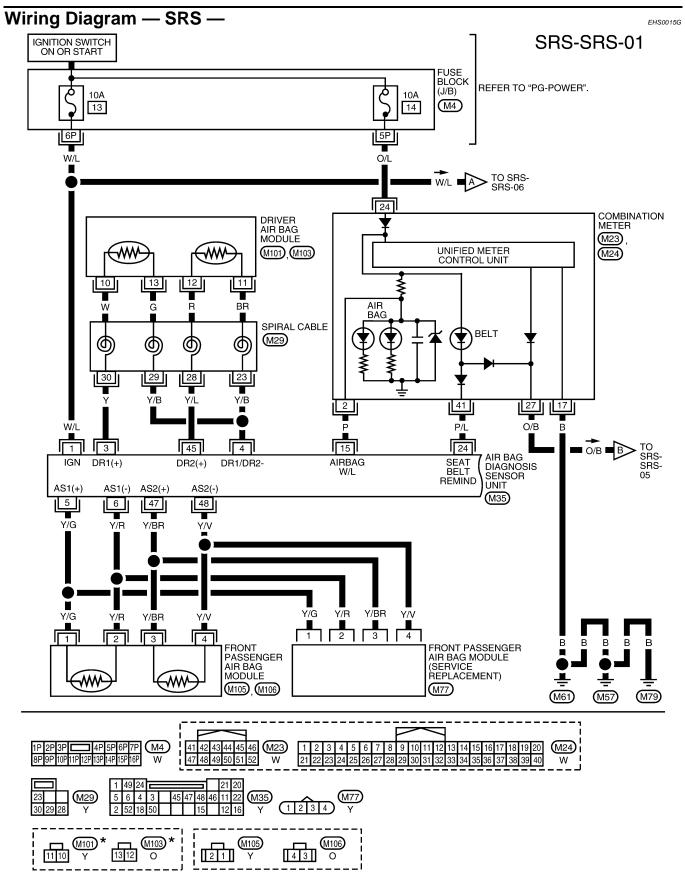
- 2. Front RH side air bag module (If equipped)
- 5. Belt tension sensor
- 8. Occupant classification system 9. control unit
- 11. Crash zone sensor
- 14. Driver air bag module
- 17. Air bag diagnosis sensor unit

- 3. RH side air bag (satellite) sensor
- 6. Seat belt buckle pre-tensioner assembly RH
- 9. Front passenger air bag off indicator
- 12. Air bag warning lamp
- 15. Front LH seat belt pre-tensioner
- 18. Front LH side air bag module (If equipped)



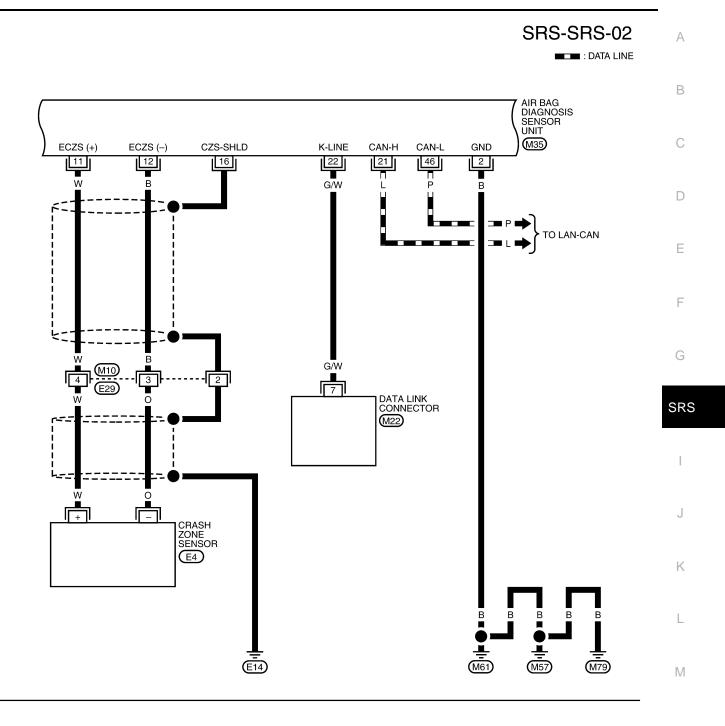
WHWA0204E

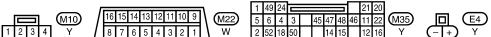
Revision: July 2007 SRS-11 2006 Armada



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

WHWA0329E

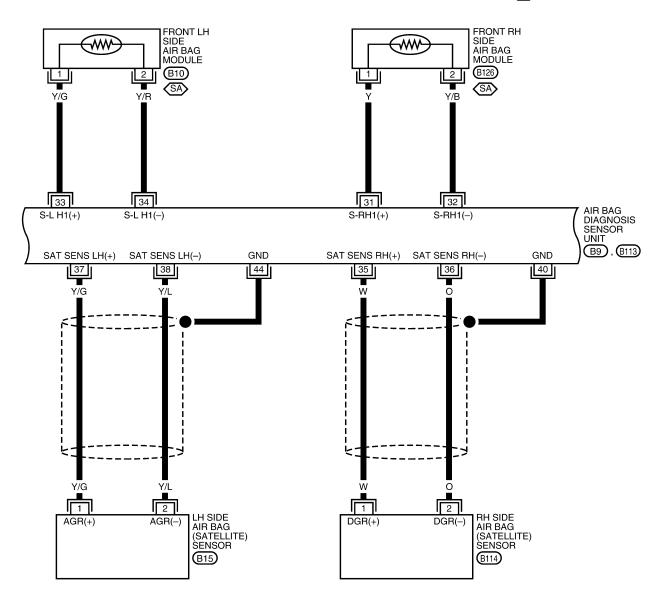


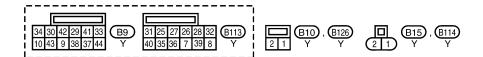


WHWA0206E

#### SRS-SRS-03

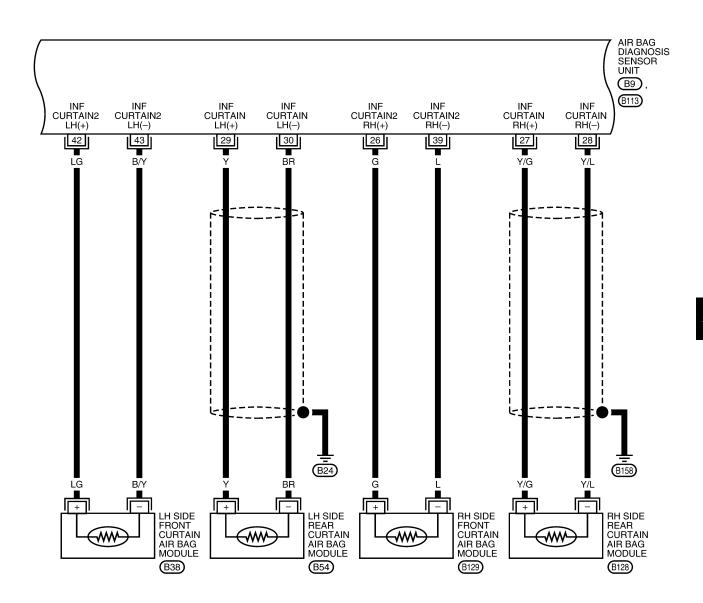
SA: WITH SIDE AIR BAGS

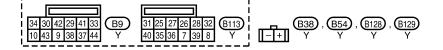




WHWA0220E

# SRS-SRS-04





WHWA0221E

В

Α

С

D

Е

F

G

SRS

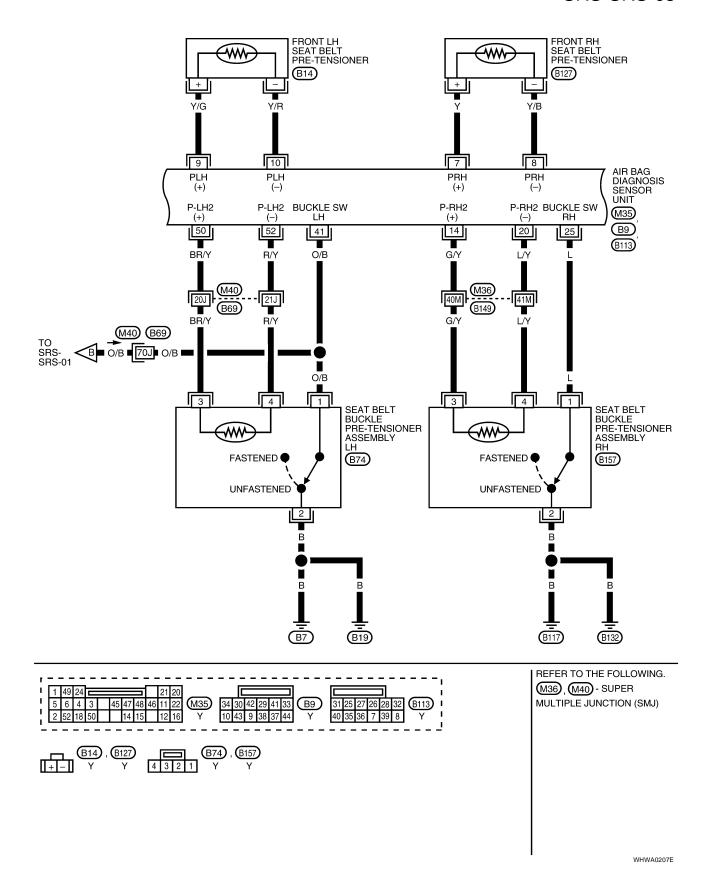
J

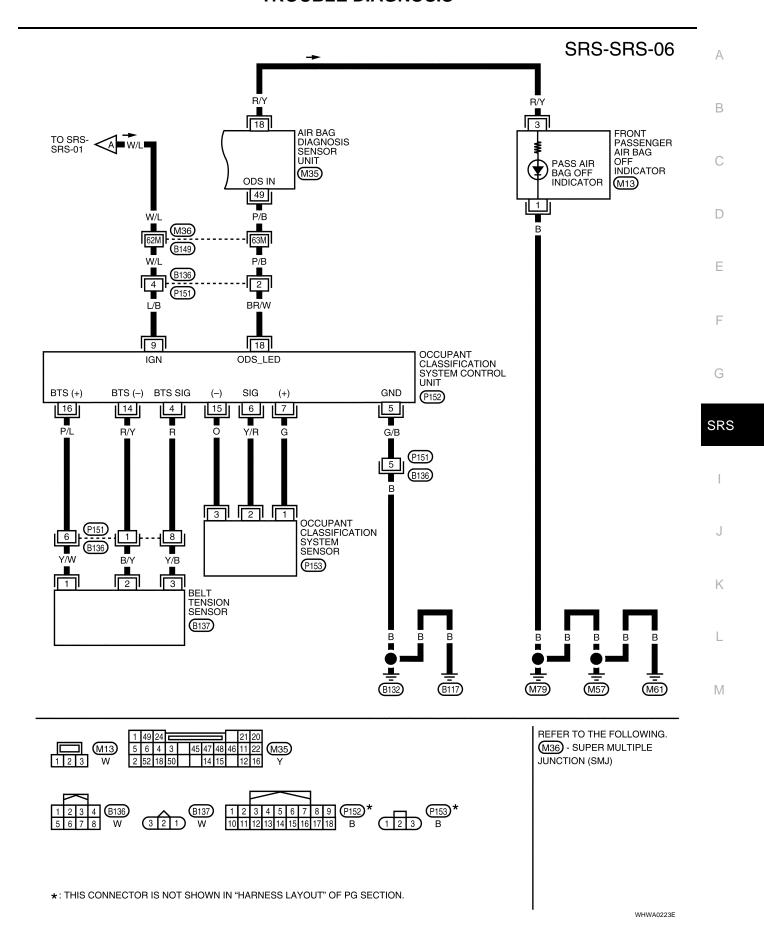
Κ

L

M

### SRS-SRS-05





# **CONSULT-II Function (AIR BAG)**

EHS001B9

CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

AIR BAG diagnostic mode	Descrip	ption	
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-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 will remain until memory erasing is executed.		
TROUBLE DIAG RECORD	With TROUBLE DIAG RECORD, diagnosis results p played on the CONSULT-II screen.	previously erased by a reset operation can be dis-	
ECU DISCRIMINATED NO.	The air bag 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 air bag 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.  The air bag diagnosis sensor unit discriminated numbers assigned are F62F with front side air bag modules and F62E without front side air bag modules.	ECU DISCRIMINATED NO.  ECU No.  XXXX  PRINT  BACK LIGHT COPY  ARS366	
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 SRS-6, "Occupant Classification System (OCS)"	PASSENGER AIRBAG STATUS OFF  MODE BACK LIGHT COPY WHIA0290E	

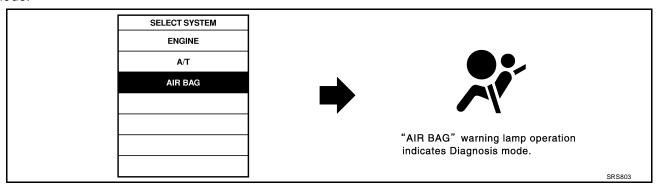
#### **CONSULT-II Function**

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

EHS0015H

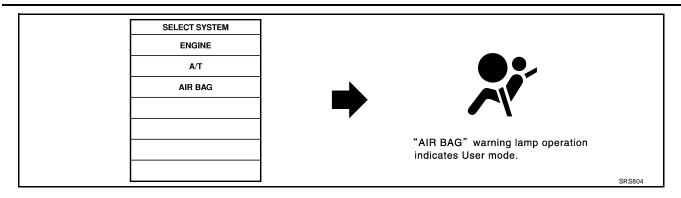
#### From User Mode to Diagnosis Mode

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, Diagnosis mode automatically changes to User mode.

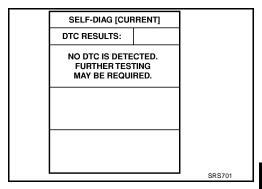


#### **HOW TO ERASE SELF-DIAGNOSIS RESULTS**

"SELF-DIAG [CURRENT]"

A current self-diagnosis result is displayed on the CONSULT-II screen in real time.

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



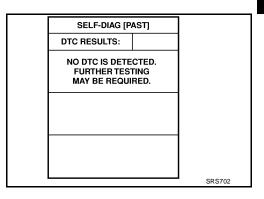
"SELF-DIAG [PAST]"

Patricip to the "SELF-DIAG"

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

#### NOTE:

If the memory of the malfunction in "SELF-DIAG [PAST]" is not erased, the User mode will continue to show 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)**

 The reading of these results is accomplished using one of two modes — "User mode" and "Diagnosis mode".

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.

Revision: July 2007 SRS-19 2006 Armada

С

Α

F

F

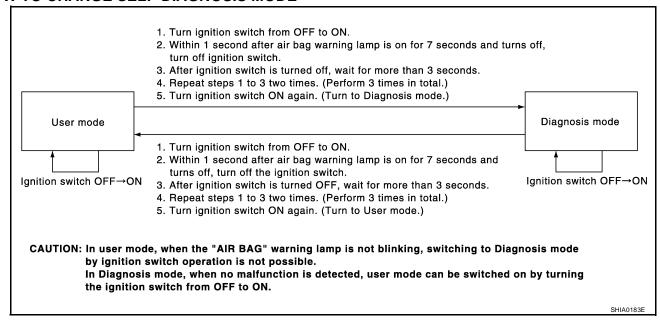
G

SRS

J

K

#### **HOW TO CHANGE SELF-DIAGNOSIS MODE**



#### **HOW TO ERASE SELF-DIAGNOSIS RESULTS**

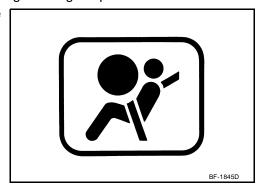
After a malfunction is repaired, turn the ignition switch OFF for at least one second, then back ON. Diagnosis mode returns to the User mode. At that time, the self-diagnostic result is cleared.

# SRS Operation Check DIAGNOSTIC PROCEDURE 1

EHS0015J

#### Checking SRS Operation Using "AIR BAG" Warning Lamp—User Mode

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



No further action is necessary.  Go to SRS-22. "DIAGNOSTIC PROCEDURE 2" or SRS-37. "DIAGNOSTIC PROCEDURE 6"  Air bag is deployed. Seat belt buckle pre-tensioner assembly is deployed. Seat belt pre-tensioner is deployed. Seat belt pre-tensioner is deployed. Air bag diagnosis sensor unit is malfunctioning. Air bag power supply circuit is malfunctioning. SRS air bag warning lamp circuit is malfunctioning.  Air bag diagnosis sensor unit is malfunctioning.  Air bag diagnosis sensor unit is malfunctioning.  Air bag diagnosis sensor unit is malfunctioning.	AIR BAG" warning lamp operation-User mode-	SRS condition	Reference item
The system is malfunctioning and needs to be repaired as indicated.  The system is malfunctioning and needs to be repaired as indicated.  The system is malfunctioning and needs to be repaired as indicated.  The system is malfunctioning and needs to be repaired as indicated.  The system is malfunctioning and needs to be repaired as indicated.  The system is malfunctioning and needs to be repaired as indicated.  Go to SRS-22. "DIAGNOSTIC PROCEDURE 6"  TO SRS-37. "DIAGNOSTIC PROCEDURE 6"  To SRS-37. "DIAGNOSTIC PROCEDURE 6"  To SRS-39. "COLLISION DIA NOSIS".  Air bag diagnosis sensor unit is malfunctioning.  Go to SRS-59, "COLLISION DIA NOSIS".  Go to SRS-43. "Trouble Diagnos "AIR BAG" Warning Lamp Does I Turn Off".  Turn Off".	OFF 7 sec.		_
Seat belt buckle pre-tensioner assembly is deployed.  Seat belt pre-tensioner is deployed.  Air bag diagnosis sensor unit is malfunctioning.  Air bag power supply circuit is malfunctioning.  SRS air bag warning lamp circuit is malfunctioning.  SRS air bag warning lamp circuit is malfunctioning.  Air bag diagnosis sensor unit is malfunctioning.  Air bag diagnosis sensor unit is malfunctioning.	ON OFF 7 sec. 0.5 sec. 0.5 sec.		
functioning.  Air bag power supply circuit is malfunctioning.  SRS air bag warning lamp circuit is malfunctioning.  SRS air bag warning lamp circuit is malfunctioning.  Go to SRS-43, "Trouble Diagnos "AIR BAG" Warning Lamp Does I Turn Off".	IGN ON	Seat belt buckle pre-tensioner assembly is deployed.	Go to SRS-59, "COLLISION DIAGNOSIS".
Air bag diagnosis sensor unit is mal-	OFF —	<ul><li>functioning.</li><li>Air bag power supply circuit is malfunctioning.</li><li>SRS air bag warning lamp circuit is</li></ul>	Go to SRS-43, "Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn Off".
	ON	functioning.  • Air bag warning lamp circuit is mal-	Go to SRS-44, "Trouble Diagnosis:  "AIR BAG" Warning Lamp Does Not Turn On".

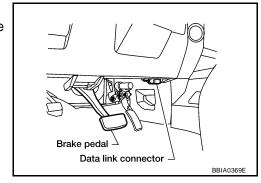
# Trouble Diagnosis With CONSULT-II DIAGNOSTIC PROCEDURE 2

EHS0015K

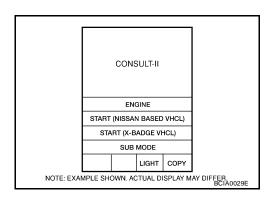
#### **CAUTION:**

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

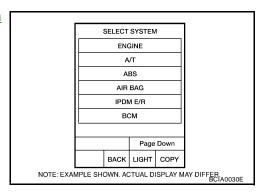
- 1. Turn ignition switch OFF.
- 2. Connect CONSULT-II and CONSULT-II CONVERTER to the data link connector.



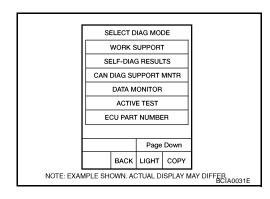
- 3. Turn ignition switch ON.
- 4. Touch "START (NISSAN BASED VHCL)".



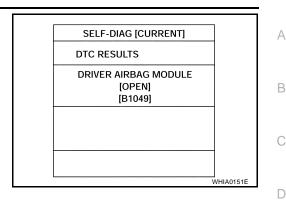
 Touch "AIR BAG".
 If "AIR BAG" is not indicated, refer to GI-39, "CONSULT-II Data Link Connector (DLC) Circuit".



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

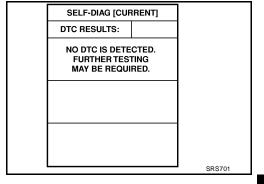


Diagnostic code is displayed on "SELF-DIAG [CURRENT]".



If no malfunction is detected on "SELF-DIAG [CURRENT]" even though malfunction is detected in "SRS Operation Check", refer to SRS-30, "DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM <u>DIAGNOSTIC PROCEDURE 2)</u>", to diagnose the following cases:

- Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair.
- The SRS system malfunctions intermittently.



#### CONSULT-II Diagnostic Code Chart ("SELF-DIAG [CURRENT]")

Diagnostic item	Explanation		Repair order Recheck SRS at each replacement	
	When malfunction is indicated by the "AIR	Low battery voltage (Less than 9V)	Go to <u>SRS-28</u> , " <u>DIAGNOSTIC PRO-CEDURE 3"</u> .	'
NO DTC IS DETECTED	BAG" warning lamp in User mode.	Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair.	Go to SRS-30, "DIAGNOSTIC PRO- CEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)"	J
		Intermittent malfunction has been detected in the past.	Go to <u>SRS-30, "DIAGNOSTIC PRO-CEDURE 5"</u> .	K
	No malfunction is detected.		<del>-</del>	
DRIVER AIRBAG MODULE [OPEN]	<ul> <li>Driver air bag module circuit is open (including the spiral cable).</li> </ul>		Visually check the wiring harness connection.	L
[B1049] or [B1054]			2. Replace the harness if it has visible	
DRIVER AIRBAG MODULE [VB-SHORT]	<ul> <li>Driver air bag module ply circuit (including)</li> </ul>	e circuit is shorted to some power sup-	damage.  3. Replace driver air bag module.	M
[B1050] or [B1055]	pry on our (morading	are opinal dable).	4. Replace the spiral cable.	
DRIVER AIRBAG MODULE [GND-SHORT] [B1051] or [B1056]	<ul> <li>Driver air bag module circuit is shorted to ground (including the spiral cable).</li> </ul>		Replace the air bag diagnosis sensor unit.	
	B:		6. Replace the related harness.	
DRIVER AIRBAG MODULE [SHORT] [B1052] or [B1057]	<ul> <li>Driver air bag module circuits are shorted to each other.</li> </ul>			

**SRS-23** Revision: July 2007 2006 Armada

**SRS** 

Е

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement
ASSIST A/B MODULE [OPEN] [B1065] or [B1070]	Front passenger air bag module circuit is open.	Visually check the wiring harness connection.     Replace the harness if it has visible.
ASSIST A/B MODULE [VB-SHORT] [B1066] or [B1071]	Front passenger air bag module circuit is shorted to some power supply circuit.	damage.  3. Replace front passenger air bag module.
ASSIST A/B MODULE [GND-SHORT] [B1067] or [B1072]	Front passenger air bag module circuit is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
ASSIST A/B MODULE [SHORT] [B1068] or [B1073]	Front passenger air bag module circuits are shorted to each other.	
CRASH ZONE SEN [UNIT FAIL] [B1033] or [B1034] CRASH ZONE SEN [COMM FAIL] [B1035]	Crash zone sensor	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the crash zone sensor.</li> <li>Replace the air bag diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>
SIDE MODULE LH [OPEN] [B1134]	Front LH side air bag module circuit is open.	Visually check the wiring harness connection.     Replace the harness if it has visible.
SIDE MODULE LH [VB-SHORT] [B1135]	Front LH side air bag module circuit is shorted to some power supply circuit.	damage.  3. Replace front LH seat back assembly (front LH side air bag module).
SIDE MODULE LH [GND-SHORT] [B1136]	Front LH side air bag module circuit is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuits are shorted to each other.	J. Neplace the related framess.
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.
SIDE MODULE RH [VB-SHORT] [B1130]	Front RH side air bag module circuit is shorted to some power supply circuit.	<ol> <li>Replace the harness if it has visib damage.</li> <li>Replace front RH seat back asser bly (front RH side air bag module)</li> <li>Replace the air bag diagnosis sen sor unit.</li> <li>Replace the related harness.</li> </ol>
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 circuits are shorted to each other.	
SATELLITE SENS LH [UNIT FAIL] [B1118] or [B1119] SATELLITE SENS LH [COMM FAIL] [B1120]	LH side air bag (satellite) sensor	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the LH side air bag (satellite) sensor.</li> <li>Replace the air bag diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement
	RH side air bag (satellite) sensor	Visually check the wiring harness connection.
SATELLITE SENS RH [UNIT FAIL]		Replace the harness if it has visible damage.
[B1113] or [B1114] SATELLITE SENS RH [COMM FAIL]		3. Replace the RH side air bag (satellite) sensor.
[B1115]		Replace the air bag diagnosis sensor unit.
		5. Replace the related harness.
PRE-TEN FRONT LH [OPEN]	The circuit for front LH seat belt pre-tensioner is open.	Visually check the wiring harness connections.
[B1086]	T	2. Replace the harness if it has visible damage.
PRE-TEN FRONT LH [VB-SHORT] [B1087]	The circuit for front LH seat belt pre-tensioner is shorted to some power supply circuit.	Replace front LH seat belt pre-tensioner.
PRE-TEN FRONT LH [GND-SHORT]	The circuit for front LH seat belt pre-tensioner is shorted to ground.	Replace the air bag diagnosis sensor unit.
[B1088]	-	5. Replace the related harness.
PRE-TEN FRONT LH [SHORT] [B1089]	The circuits for the front LH seat belt pre-tensioner are shorted to each other.	
PRE-TEN FRONT RH [OPEN]	The circuit for front RH seat belt pre-tensioner is open.	Visually check the wiring harness connections.
[B1081]	The sixuality for front DLL good hold are developed in shorted to	2. Replace the harness if it has visible damage.
PRE-TEN FRONT RH [VB-SHORT] [B1082]	The circuit for front RH seat belt pre-tensioner is shorted to some power supply circuit.	Replace front RH seat belt pre-tensioner.
PRE-TEN FRONT RH [GND-SHORT]	The circuit for front RH seat belt pre-tensioner is shorted to ground.	Replace the air bag diagnosis sensor unit.
[B1083]		5. Replace the related harness.
PRE-TEN FRONT RH [SHORT] [B1084]	<ul> <li>The circuits for the front RH seat belt pre-tensioner are shorted to each other.</li> </ul>	
PRE-TEN2 FRONT LH [OPEN]	The circuit for front LH seat belt buckle pre-tensioner is open.	Visually check the wiring harness connections.
[B1182]		2. Replace the harness if it has visible
PRE-TEN2 FRONT LH [VB-SHORT] [B1183]	<ul> <li>The circuit for front LH seat belt buckle pre-tensioner is shorted to some power supply circuit.</li> </ul>	damage.  3. Replace front LH seat belt buckle pre-tensioner.
PRE-TEN2 FRONT LH [GND-SHORT]	The circuit for front LH seat belt buckle pre-tensioner is shorted to ground.	Replace the air bag diagnosis sensor unit.
[B1184]	-	5. Replace the related harness.
PRE-TEN2 FRONT LH [SHORT] [B1185]	The circuits for the front LH seat belt buckle pre-tensioner are shorted to each other.	

Revision: July 2007 SRS-25 2006 Armada

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement
PRE-TEN2 FRONT RH [OPEN] [B1177]	The circuit for front RH seat belt buckle pre-tensioner is open.	Visually check the wiring harness connections.     Replace the harness if it has visible
PRE-TEN2 FRONT RH [VB-SHORT] [B1178]	The circuit for front RH seat belt buckle pre-tensioner is shorted to some power supply circuit.	damage.  3. Replace front RH seat belt buckle pre-tensioner.
PRE-TEN2 FRONT RH [GND-SHORT] [B1179]	The circuit for front RH seat belt buckle pre-tensioner is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN2 FRONT RH [SHORT] [B1180]	The circuits for the front RH seat belt buckle pre-tensioner are shorted to each other.	
FR CURTN MODULE LH [OPEN] [B1198]	The LH side front curtain air bag module circuit is open.	Visually check the wiring harness connection.
FR CURTN MODULE LH [VB-SHORT] [B1199]	The LH side front curtain air bag module circuit is shorted to some power supply circuits.	Replace the harness if it has visible damage.      Replace LH side curtain air bag module.
FR CURTN MODULE LH [GND-SHORT] [B1200]	The LH side front curtain air bag module circuit is shorted to ground.	Replace the air bag diagnosis sensor unit.
FR CURTN MODULE LH [SHORT] [B1201]	The circuits for the LH side front curtain air bag module are shorted to each other.	5. Replace the related harness.
FR CURTN MODULE RH [OPEN] [B1193]	The RH side front curtain air bag module circuit is open.	Visually check the wiring harness connection.     Replace the harness if it has visible
FR CURTN MODULE RH [VB-SHORT] [B1194]	The RH side front curtain air bag module circuit is shorted to some power supply circuits.	damage.  3. Replace RH side curtain air bag module.
FR CURTN MODULE RH [GND-SHORT] [B1195]	The RH side front curtain air bag module circuit is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
FR CURTN MODULE RH [SHORT] [B1196]	The circuits for the RH side front curtain air bag module are shorted to each other.	
CURTAIN MODULE LH [OPEN] [B1150]	The LH side rear 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]	The LH side rear curtain air bag module circuit is shorted to some power supply circuits.	damage.  3. Replace LH side curtain air bag module.
CURTAIN MODULE LH [GND-SHORT] [B1152]	The LH side rear curtain air bag module circuit is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
CURTAIN MODULE LH [SHORT] [B1153]	The circuits for the LH side rear curtain air bag module are shorted to each other.	

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement	
CURTAIN MODULE RH [OPEN]	The RH side rear curtain air bag module circuit is open.	Visually check the wiring harness connection.	
[B1145]		2. Replace the harness if it has visible	
CURTAIN MODULE RH [VB-SHORT] [B1146]	<ul> <li>The RH side rear curtain air bag module circuit is shorted to some power supply circuits.</li> </ul>	damage.  3. Replace RH side curtain air bag module.	
CURTAIN MODULE RH [GND-SHORT]	The RH side rear curtain air bag module circuit is shorted to ground.	Replace the air bag diagnosis sensor unit.	
[B1147] CURTAIN MODULE RH [SHORT] [B1148]	The circuits for the RH side rear curtain air bag module are shorted to each other.	5. Replace the related harness.	
CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning.	Visually check the wiring harness connection.	
[B1XXX]		Replace the air bag diagnosis sensor unit.	
OCCUPANT SENS C/U [UNIT FAIL] B1017], [B1020] or [B1021]	Occupant classification system is malfunctioning.	Replace RH front seat cushion/ occupant classification system con- trol unit assembly.	
	Communication between the occupant classification system control unit and air bag diagnosis sensor unit is inter-	Visually check the wiring harness connection.	
OCCUPANT OF NO OWN	rupted.	2. Replace the harness if it has visible damage.	
OCCUPANT SENS C/U [COMM FAIL] [B1022]		<ol><li>Replace RH front seat cushion/ occupant classification system con- trol unit assembly.</li></ol>	
		<ol><li>Replace the air bag diagnosis sensor unit.</li></ol>	
		5. Replace the related harness.	
OCCUPANT SENS [UNIT FAIL] [B1018]	Occupant classification sensor is malfunctioning.	<ol> <li>Replace RH front seat cushion/ occupant classification system con- trol unit assembly.</li> </ol>	
	Belt tension sensor is malfunctioning.	Visually check the wiring harness connection.	
DELT TENCION CENO		2. Replace the harness if it has visible damage.	
BELT TENSION SENS [UNIT FAIL] [B1019]		3. Replace RH front seat belt assembly.	
[51010]		<ol> <li>Replace RH front seat cushion/ occupant classification system con- trol unit assembly.</li> </ol>	
		5. Replace the related harness.	
PASS A/B INDCTR CKT [B1023]	Front passenger air bag off indicator is malfunctioning.	Visually check the wiring harness connection.	
		Replace the harness if it has visible damage.	
		Replace front passenger air bag off indicator.	
		Replace the air bag diagnosis sensor unit.	
		5. Replace the related harness.	
FRONTAL COLLISION DETECTION [B1209]	Driver and front passenger air bag modules are deployed.	1. Refer to <u>SRS-59, "COLLISION</u> <u>DIAGNOSIS"</u> .	

**SRS-27** Revision: July 2007 2006 Armada

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement
SIDE COLLISION DETECTION [B1210]	Side or curtain air bag modules are deployed (with side air bags only).	1. Refer to SRS-59, "COLLISION DIAGNOSIS" .
ROLLOVER DETECTION [B1211]	Curtain air bag module and seat belt pre-tensioner are deployed.	1. Refer to <u>SRS-59</u> , "COLLISION <u>DIAGNOSIS"</u> .

#### 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.

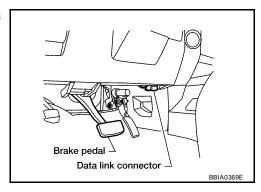
#### **DIAGNOSTIC PROCEDURE 3**

#### Final Check of SRS Using CONSULT-II—Diagnosis Mode

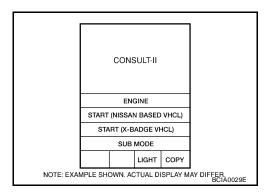
#### **CAUTION:**

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

- 1. After repairing SRS, connect both battery cables.
- 2. Connect CONSULT-II and CONSULT-II CONVERTER to data link connector.
- 3. Turn ignition switch ON.

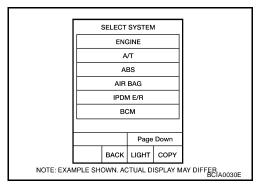


4. Touch "START (NISSAN BASED VHCL)".

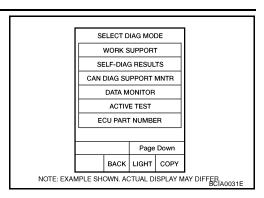


5. Touch "AIR BAG".

If "AIR BAG" is not indicated, refer to GI-39, "CONSULT-II Data Link Connector (DLC) Circuit".



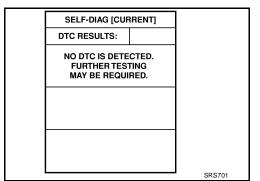
6. Touch "SELF-DIAG [CURRENT]".



7. If no malfunction is detected on "SELF-DIAG [CURRENT]", repair of SRS is completed. Go to step 8.

If any malfunction is detected on "SELF-DIAG [CURRENT]", the

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.

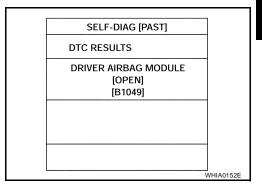


8. Touch "ERASE".

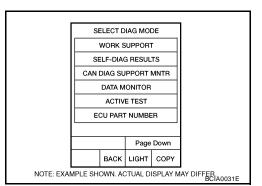
#### NOTE:

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

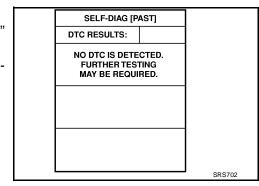
If the memory of the malfunction in "SELF-DIAG [PAST]" is not erased, the User mode shows the system malfunction by the operation of the warning lamp even if the malfunction is repaired completely.



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



- 10. Check that no malfunction is detected on "SELF-DIAG [PAST]".
- 11. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 12. Turn ignition switch OFF then turn off and disconnect CON-SULT-II.
- 13. Go to SRS-20, "DIAGNOSTIC PROCEDURE 1".



Revision: July 2007 SRS-29 2006 Armada

SRS

Α

I

L

M

#### DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2) Check SRS Repair History

# 1. CONSIDER POSSIBILITY THAT SELF-DIAGNOSTIC RESULT WAS NOT ERASED AFTER REPAIR

Check repair history of the SRS.

Have any previous repairs been made to the SRS?

Yes >> Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to <a href="SRS-28">SRS-28</a>, "DIAGNOSTIC PROCEDURE 3"</a>.

No >> Go to <u>SRS-22</u>, "<u>DIAGNOSTIC PROCEDURE 2</u>".

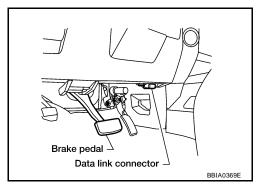
#### **DIAGNOSTIC PROCEDURE 5**

#### Check SRS Intermittent Malfunction Using CONSULT-II—Diagnosis Mode

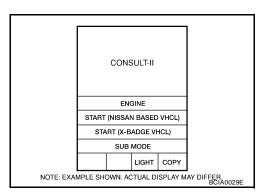
#### CAUTION:

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

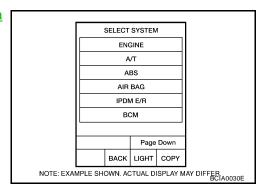
- 1. Turn ignition switch OFF.
- Connect CONSULT-II and CONSULT-II CONVERTER to data link connector.



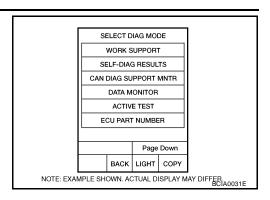
- 3. Turn ignition switch ON.
- 4. Touch "START (NISSAN BASED VHCL)".



 Touch "AIR BAG".
 If "AIR BAG" is not indicated, refer to GI-39, "CONSULT-II Data Link Connector (DLC) Circuit".



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

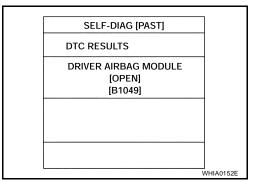


Α

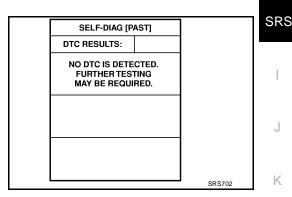
Е

M

7. If diagnostic codes are displayed on "SELF-DIAG [PAST]", go to step 10.



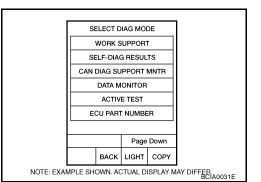
If no malfunction is detected on "SELF-DIAG [PAST]", touch "BACK" and go back to "SELECT DIAG MODE".



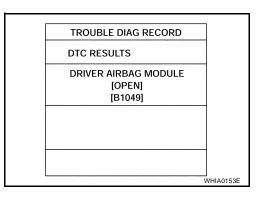
8. Touch "TROUBLE DIAG RECORD".

#### NOTF:

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



- 9. Diagnostic code is displayed on "TROUBLE DIAG RECORD".
- 10. Touch "PRINT".
- 11. Compare diagnostic codes to <u>SRS-32</u>, "CONSULT-II <u>Diagnostic</u> <u>Code Chart</u> ("SELF-DIAG [PAST]" or "TROUBLE <u>DIAG</u> <u>RECORD")"</u>.
- 12. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.
- 13. Turn ignition switch OFF, then turn off and disconnect CON-SULT-II, and both battery cables.



Revision: July 2007 SRS-31 2006 Armada

- 14. Repair the system as outlined by the "Repair order" in "Intermittent Malfunction Diagnostic Code Chart", that corresponds to the self-diagnostic result. For replacement procedure of component parts, refer to the Removal and Installation procedure for the appropriate component.
- 15. Go to SRS-28, "DIAGNOSTIC PROCEDURE 3", for final checking.

# **CONSULT-II Diagnostic Code Chart ("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.	<ul> <li>Low battery voltage (Less than 9V)</li> <li>Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair.</li> <li>Intermittent malfunction has been detected in the past.</li> </ul>	Go to SRS-28, "DIAGNOSTIC PROCEDURE 3"  Go to SRS-30, "DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)"  Go to SRS-30, "DIAGNOSTIC PROCEDURE 5"  CEDURE 5"	
	No malfunction is de	tected.	_	
DRIVER AIRBAG MODULE [OPEN] [B1049] or [B1054]	<ul> <li>Driver air bag module circuit is open (including the spiral cable).</li> <li>Driver air bag module circuit is shorted to some power supply circuit (including the spiral cable).</li> </ul>		<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace driver air bag module.</li> <li>Replace the spiral cable.</li> </ol>	
DRIVER AIRBAG MODULE [VB-SHORT] [B1050] or [B1055]				
DRIVER AIRBAG MODULE [GND-SHORT] [B1051] or [B1056]	Driver air bag module circuit is shorted to ground (including the spiral cable).		<ul><li>5. Replace the air bag diagnosis sensor unit.</li><li>6. Replace the related harness.</li></ul>	
DRIVER AIRBAG MODULE [SHORT] [B1052] or [B1057]	Driver air bag modul	e circuits are shorted to each other.	o. Replace the related Harriess.	
ASSIST A/B MODULE [OPEN] [B1065] or [B1070]	Front passenger air bag module circuit is open.		Visually check the wiring harness connection.     Replace the harness if it has visible	
ASSIST A/B MODULE [VB-SHORT] [B1066] or [B1071]	Front passenger air bag module circuit is shorted to some power supply circuit.		damage.  3. Replace front passenger air bag module.	
ASSIST A/B MODULE [GND-SHORT] [B1067] or [B1072]	Front passenger air bag module circuit is shorted to ground.		Replace the air bag diagnosis sensor unit.     Replace the related harness.	
ASSIST A/B MODULE [SHORT] [B1068] or [B1073]	<ul> <li>Front passenger air bag module circuits are shorted to each other.</li> </ul>			
CRASH ZONE SEN [UNIT FAIL] [B1033] or [B1034] CRASH ZONE SEN [COMM FAIL] [B1035]	Crash zone sensor		<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the crash zone sensor.</li> <li>Replace the air bag diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>	

Diagnostic item Explanation		Repair order Recheck SRS at each replacement
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 some	2. Replace the harness if it has visible damage.
[VB-SHORT] [B1135]	power supply circuit.	Replace front LH seat back assembly (front LH side air bag module).
SIDE MODULE LH [GND-SHORT] [B1136]	Front LH side air bag module circuit is shorted to ground.	4. Replace the air bag diagnosis sensor unit.
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuits are shorted to each other.	5. Replace the related harness.
SIDE MODULE RH [OPEN] [B1129]	Front RH side air bag module circuit is open.	Visually check the wiring harness connection.
SIDE MODULE RH	Front RH side air bag module circuit is shorted to some	2. Replace the harness if it has visible damage.
[VB-SHORT] [B1130]	power supply circuit.	Replace front RH seat back assembly (front RH side air bag module).
SIDE MODULE RH [GND-SHORT]	Front RH side air bag module circuit is shorted to ground.	4. Replace the air bag diagnosis sensor unit.
[B1131] SIDE MODULE RH	Erent PH cide air hag module circuite are charted to see h	5. Replace the related harness.
[SHORT] [B1132]	<ul> <li>Front RH side air bag module circuits are shorted to each other.</li> </ul>	
	LH side air bag (satellite) sensor	Visually check the wiring harness connection.
SATELLITE SENS LH [UNIT FAIL]		Replace the harness if it has visible damage.
[B1118] or [B1119] SATELLITE SENS LH [COMM FAIL]		3. Replace the LH side air bag (satellite) sensor.
[B1120]		4. Replace the air bag diagnosis sensor unit.
		5. Replace the related harness.
	RH side air bag (satellite) sensor	1. Visually check the wiring harness connection.
SATELLITE SENS RH [UNIT FAIL]		Replace the harness if it has visible damage.
[B1113] or [B1114] SATELLITE SENS RH [COMM FAIL]		3. Replace the RH side air bag (satellite) sensor.
[B1115]		4. Replace the air bag diagnosis sensor unit.
		5. Replace the related harness.
PRE-TEN FRONT LH [OPEN] [B1086]	The circuit for front LH seat belt pre-tensioner is open.	Visually check the wiring harness connections.
PRE-TEN FRONT LH	The circuit for front LH seat belt pre-tensioner is shorted to	2. Replace the harness if it has visible damage.
[VB-SHORT] [B1087]	some power supply circuit.	Replace front LH seat belt pre-tensioner.
PRE-TEN FRONT LH [GND-SHORT] [B1088]	The circuit for front LH seat belt pre-tensioner is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT LH [SHORT] [B1089]	The circuits for the front LH seat belt pre-tensioner are shorted to each other.	S. Topiaco de folatou Harriess.

Revision: July 2007 SRS-33 2006 Armada

Diagnostic item	Diagnostic item Explanation	
PRE-TEN FRONT RH [OPEN] [B1081]	[OPEN]	
PRE-TEN FRONT RH [VB-SHORT] [B1082]	The circuit for front RH seat belt pre-tensioner is shorted to some power supply circuit.	Replace the harness if it has visible damage.     Replace front RH seat belt pre-tensioner.
PRE-TEN FRONT RH [GND-SHORT] [B1083]	The circuit for front RH seat belt pre-tensioner is shorted to ground.	4. Replace the air bag diagnosis sensor unit.     5. Replace the related harness.
PRE-TEN FRONT RH [SHORT] [B1084]	The circuits for the front RH seat belt pre-tensioner are shorted to each other.	
PRE-TEN2 FRONT LH [OPEN] [B1182]	The circuit for front LH seat belt buckle pre-tensioner is open.	Visually check the wiring harness connections.     Replace the harness if it has visible
PRE-TEN2 FRONT LH [VB-SHORT] [B1183]	The circuit for front LH seat belt buckle pre-tensioner is shorted to some power supply circuit.	damage.  3. Replace front LH seat belt buckle pre-tensioner.
PRE-TEN2 FRONT LH [GND-SHORT] [B1184]	The circuit for front LH seat belt buckle pre-tensioner is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN2 FRONT LH [SHORT] [B1185]	The circuits for the front LH seat belt buckle pre-tensioner are shorted to each other.	J. Neplace the related harriess.
PRE-TEN2 FRONT RH [OPEN] [B1177]	The circuit for front RH seat belt buckle pre-tensioner is open.	Visually check the wiring harness connections.     Replace the harness if it has visible
PRE-TEN2 FRONT RH [VB-SHORT] [B1178]	The circuit for front RH seat belt buckle pre-tensioner is shorted to some power supply circuit.	damage.  3. Replace front RH seat belt buckle pre-tensioner.
PRE-TEN2 FRONT RH [GND-SHORT] [B1179]	The circuit for front RH seat belt buckle pre-tensioner is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN2 FRONT RH [SHORT] [B1180]	The circuits for the front RH seat belt buckle pre-tensioner are shorted to each other.	
FR CURTN MODULE LH [OPEN] [B1198]	The LH side front curtain air bag module circuit is open.	Visually check the wiring harness connection.     Replace the harness if it has visible
FR CURTN MODULE LH [VB-SHORT] [B1199]	The LH side front curtain air bag module circuit is shorted to some power supply circuits.	damage.  3. Replace LH side curtain air bag module.
FR CURTN MODULE LH [GND-SHORT] [B1200]	The LH side front curtain air bag module circuit is shorted to ground.	4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
FR CURTN MODULE LH [SHORT] [B1201]	The circuits for the LH side front curtain air bag module are shorted to each other.	

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement
FR CURTN MODULE RH	The RH side front curtain air bag module circuit is open.	Visually check the wiring harness connection.
[B1193] FR CURTN MODULE RH	The RH side front curtain air bag module circuit is shorted	Replace the harness if it has visible damage.
[VB-SHORT] [B1194]	to some power supply circuits.	Replace RH side curtain air bag module.
FR CURTN MODULE RH [GND-SHORT]	The RH side front curtain air bag module circuit is shorted to ground.	Replace the air bag diagnosis sensor unit.
[B1195] FR CURTN MODULE RH	The circuits for the RH side front curtain air bag module are	5. Replace the related harness.
[SHORT] [B1196]	shorted to each other.	
CURTAIN MODULE LH [OPEN]	The LH side rear curtain air bag module circuit is open.	Visually check the wiring harness connection.
[B1150]  CURTAIN MODULE LH	The LH side rear curtain air bag module circuit is shorted to	2. Replace the harness if it has visible damage.
[VB-SHORT] [B1151]	some power supply circuits.	Replace LH side curtain air bag module.
CURTAIN MODULE LH [GND-SHORT]	The LH side rear curtain air bag module circuit is shorted to ground.	Replace the air bag diagnosis sensor unit.
[B1152]	The circuits for the LUI side and contains sin her and the	5. Replace the related harness.
CURTAIN MODULE LH [SHORT] [B1153]	The circuits for the LH side rear curtain air bag module are shorted to each other.	
CURTAIN MODULE RH [OPEN]	The RH side rear curtain air bag module circuit is open.	Visually check the wiring harness connection.
[B1145]  CURTAIN MODULE RH	The RH side rear curtain air bag module circuit is shorted	2. Replace the harness if it has visible damage.
[VB-SHORT] [B1146]	to some power supply circuits.	Replace RH side curtain air bag module.
CURTAIN MODULE RH [GND-SHORT]	The RH side rear curtain air bag module circuit is shorted to ground.	Replace the air bag diagnosis sensor unit.
[B1147]	The circuits for the DU side was contained by a second side.	5. Replace the related harness.
CURTAIN MODULE RH [SHORT] [B1148]	The circuits for the RH side rear curtain air bag module are shorted to each other.	
CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning.	Visually check the wiring harness connection.
[B1XXX]		Replace the air bag diagnosis sensor unit.
OCCUPANT SENS C/U [UNIT FAIL] [B1017], [B1020] or [B1021]	Occupant classification system is malfunctioning.	Replace RH front seat cushion/ occupant classification system con- trol unit assembly.
	Communication between the occupant classification system control unit and air bag diagnosis sensor unit is inter-	Visually check the wiring harness connection.
000000000000000000000000000000000000000	rupted.	Replace the harness if it has visible damage.
OCCUPANT SENS C/U [COMM FAIL] [B1022]		Replace RH front seat cushion/ occupant classification system con- trol unit assembly.
		Replace the air bag diagnosis sensor unit.
		5. Replace the related harness.
OCCUPANT SENS [UNIT FAIL] [B1018]	Occupant classification sensor is malfunctioning.	Replace RH front seat cushion/     occupant classification system control unit assembly.

Revision: July 2007 SRS-35 2006 Armada

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement
	Belt tension sensor is malfunctioning.	Visually check the wiring harness connection.
		Replace the harness if it has visible damage.
BELT TENSION SENS [UNIT FAIL] [B1019]		Replace RH front seat belt assembly.
[B1019]		Replace RH front seat cushion/ occupant classification system con- trol unit assembly.
		5. Replace the related harness.
	Front passenger air bag off indicator is malfunctioning.	Visually check the wiring harness connection.
		Replace the harness if it has visible damage.
PASS A/B INDCTR CKT [B1023]		Replace front passenger air bag off indicator.
		Replace the air bag diagnosis sensor unit.
		5. Replace the related harness.
FRONTAL COLLISION DETECTION [B1209]	Driver and front passenger air bag modules are deployed.	1. Refer to <u>SRS-59</u> , "COLLISION <u>DIAGNOSIS"</u> .
SIDE COLLISION DETECTION [B1210]	Side or curtain air bag modules are deployed (with side air bags only).	1. Refer to <u>SRS-59</u> , "COLLISION <u>DIAGNOSIS"</u> .
ROLLOVER DETECTION [B1211]	Curtain air bag module and seat belt pre-tensioner are deployed.	1. Refer to <u>SRS-59</u> , " <u>COLLISION</u> <u>DIAGNOSIS</u> ".

# **Trouble Diagnosis Without CONSULT-II** EHS0015L **DIAGNOSTIC PROCEDURE 6** Inspect SRS Malfunction Using "AIR BAG" Warning Lamp—Diagnosis Mode 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 steps 1 to 3 two more times (3 times total). 5. Turn ignition switch ON. SRS is now in Diagnosis mode. "AIR BAG" warning lamp operates in Diagnosis mode as follows:

SRS

Α

В

C

D

Е

F

K

M

#### WARNING LAMP FLASH CODE CHART

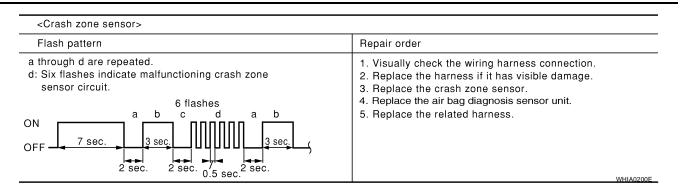
<Diagnosis results (previously stored in the memory) might not be erased after repair or intermittent malfunctions have been detected in the past.>

Flash pattern	Repair order
a through b are repeated.	1. Go to DIAGNOSTIC PROCEDURES 2 and 3.
OFF 7 sec. 2 sec. 2 sec.	SHIA0026E

<Driver air bag module> Flash pattern Repair order a through d are repeated. 1. Visually check the wiring harness connection. d: Two flashes indicate malfunctioning driver air bag 2. Replace the harness if it has visible damage. module circuits. 3. Replace the spiral cable. 4. Replace driver air bag module. 2 flashes 5. Replace the air bag diagnosis sensor unit. а ON 6. Replace the related harness. 7 sec 3 sec 2 sec. 2 sec. 0.5 sec WHIA0260E

#### <Air bag 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 air bag diagnosis sensor unit. 4. Replace the related harness. 7 flashes а b ON 3 sec 7 sec 2 sec. 2 sec. WHIA0198E

<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 front passenger air bag module. 4. Replace the air bag diagnosis sensor unit. 8 flashes 5. Replace the related harness. а b ON OFF 2 sec. 2 sec WHIA0261E



Flash pattern	Repair order	
a through d are repeated. d: One flash indicates malfunctioning front RH seat belt pre-tensioner circuit.  ON  7 sec.  2 sec.  0.5 sec.  2 sec.	<ol> <li>Visually check the wiring harness connections.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace front RH seat belt pre-tensioner.</li> <li>Replace the air bag diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>	

#### < Seat belt buckle pre-tensioner assembly RH>

Flash pattern	Repair order
a through d are repeated. d: Twelve flashes indicate malfunctioning seat belt buckle pre-tenstioner assembly RH circuit  12 flashes  ON  OFF  7 sec. 2 sec. 2 sec. 0.5 sec.	1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace seat belt buckle pre-tensioner assembly RH. 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.

Flash pattern	Repair order	
a through d are repeated. d: Three flashes indicate malfunctioning front LH seat belt pre-tensioner circuit.  3 flashes b c d a b OFF 7 sec. 3 sec. 2 sec. / 2 sec. 0.5 sec.	Visually check the wiring harness connections.     Replace the harness if it has visible damage.     Replace front LH seat belt pre-tensioner.     Replace the air bag diagnosis sensor unit.     Replace the related harness.	

**SRS-39** Revision: July 2007 2006 Armada

В

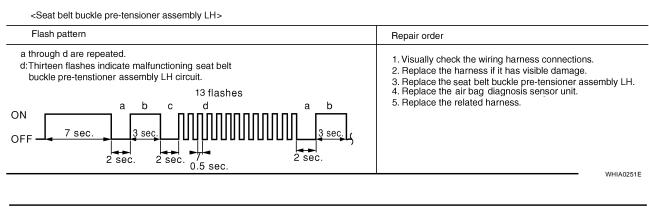
С

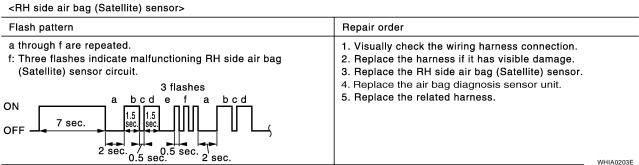
 $\mathsf{D}$ 

Е

G

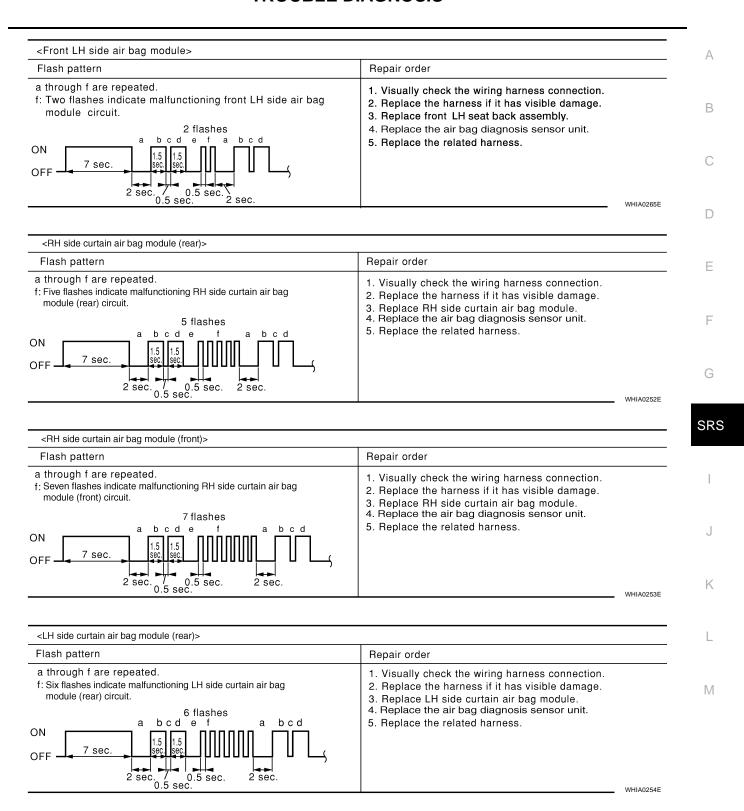
M





Repair order
1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the LH side air bag (Satellite) sensor. 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.

<front air="" bag="" module="" rh="" side=""></front>	
Flash pattern	Repair order
a through f are repeated.  f: One flash indicate malfunctioning front RH side air bag module circuit.  1 flash ON OFF 7 sec. 2 sec. 0.5 sec.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace front RH seat back assembly. 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
0.5 sec.	WHIAD264E



#### <LH side curtain air bag module (front)> Flash pattern Repair order a through f are repeated. 1. Visually check the wiring harness connection. f: Eight flashes indicate malfunctioning LH side curtain air bag 2. Replace the harness if it has visible damage. module (front) circuit. 3. Replace LH side curtain air bag module. 4. Replace the air bag diagnosis sensor unit. 8 flashes a bcd e f a bcd 5. Replace the related harness. ON 7 sec. OFF 2 sec. / 0.5 sec. 0.5 sec. 2 sec.

#### <Occupant classification system>

Flash pattern	Repair order
a through d are repeated. d: Five flashes indicate malfuntioning occupant classification system control unit.  ON  OFF  7 sec.  2 sec.  2 sec.  0.5 sec.	Visually check the wiring harness connection.     Replace the harness if it has visible damage.     Replace the RH front seat cushion occupant classification system control unit assembly.     Replace the air bag diagnosis sensor unit.
	WHIA0211E

#### <Front passenger air bag off indicator>

Flash pattern	Repair order
a through d are repeated. d:Eleven flashes indicate malfunctioning front passenger air bag off indicator.  ON  OFF  7 sec.  2 sec.  2 sec.  0.5 sec.	1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace front passenger air bag off indicator. 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.

# Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn Off DIAGNOSTIC PROCEDURE 6

EHS0015

Α

1. CHECK CONDITION OF AIR BAG MODULE

Inspect for any deployed air bag modules or seat belt pre-tensioners.

Are any air bag modules or seat belt pre-tensioners deployed?

Yes >> Refer to <u>SRS-59</u>, "COLLISION DIAGNOSIS".

No >> GO TO 2.

## 2. CHECK THE AIR BAG FUSE

Check 10A fuse [No. 13, located in the fuse block (J/B)]. Refer to PG-4, "POWER SUPPLY ROUTING CIRCUIT".

OK or NG

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

## 3. CHECK AIR BAG FUSE AGAIN

Replace 10A fuse [No. 13, located in the fuse block (J/B)] and turn ignition switch ON.

Does the fuse blow again?

Yes >> Repair harness. No >> Inspection End.

## 4. CHECK AIR BAG DIAGNOSIS SENSOR UNIT

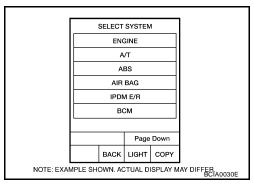
Connect CONSULT-II and touch "START".

Is "AIR BAG" displayed on CONSULT-II?

Yes >> GO TO 5.

No

>> Visually inspect the air bag diagnosis sensor unit harness connections. If the connections are OK, replace the air bag diagnosis sensor unit. Refer to <a href="SRS-57">SRS-57</a>, "Removal and Installation".



## 5. CHECK HARNESS CONNECTION

Check for loose connections between the combination meter and the air bag diagnosis sensor unit.

OK or NG

OK

>> Replace air bag diagnosis sensor unit. Refer to SRS-57, "Removal and Installation".

NG >> Properly connect the combination meter and air bag diagnosis sensor unit harness connectors. If "AIR BAG" warning lamp still does not turn off, replace the wiring harness.

**SRS-43** 

SRS

Е

2006 Armada

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

EHS0015N

## 1. CHECK METER FUSE

Check the 10A fuse [No. 14, located in the fuse block (J/B)]. Refer to PG-4, "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 the fuse block (J/B)] and turn ignition switch ON.

#### Does the fuse blow again?

Yes >> Repair harness. No >> Inspection End.

## 3. CHECK HARNESS CONNECTION BETWEEN AIR BAG DIAGNOSIS SENSOR UNIT AND COMBINA-TION METER

Disconnect the air bag diagnosis sensor unit harness connectors and turn ignition switch ON. Does "AIR BAG" warning lamp turn on?

Yes >> Replace the air bag diagnosis sensor unit. Refer to <u>SRS-57</u>, "Removal and Installation".

No >> Check the combination meter ground circuits.

#### DRIVER AIR BAG MODULE

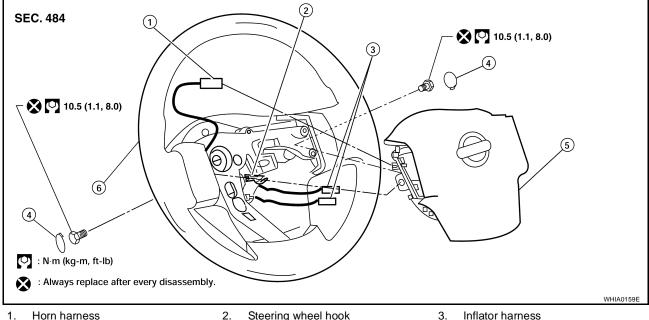
#### **DRIVER AIR BAG MODULE**

#### PFP:K8510

#### Removal and Installation

FHS00150

Α



Steering wheel hook 3 Inflator harness

> 6. Steering wheel

## Side lids RH/LH

#### **REMOVAL CAUTION:**

Do not attempt to repair or replace damaged direct-connect SRS component connectors. If a driver air bag direct-connect harness connector is damaged, the spiral cable must be replaced.

Driver air bag module

- Before servicing the SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- When servicing the SRS, do not work from directly in front of air bag module.

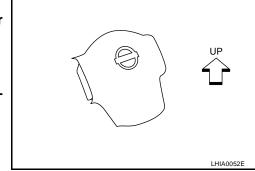
5.

- 1. Remove the left and right side bolts.
- 2. Lift the driver air bag module from the steering wheel.
- 3. Disconnect the air bag harness and horn connectors, then remove the driver air bag module.
  - For removal/installation of the direct-connect SRS connectors, refer to SRS-7, "Direct-connect SRS Component Connectors".

#### **CAUTION:**

Revision: July 2007

- When servicing the SRS, do not work from directly in front of air bag module.
- Always place air bag module with pad side facing upward.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module or harness connectors.
- Do not disassemble air bag module.
- Do not use old bolts after removal; replace with new bolts.
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).



**SRS** 

Е

M

K

**SRS-45** 2006 Armada

#### **DRIVER AIR BAG MODULE**

- Replace the 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 air bag module.



#### **INSTALLATION**

Installation is in the reverse order of removal.

- If driver air bag module is being replaced due to deployment, spiral cable must also be replaced. Refer to SRS-47, "SPIRAL CABLE".
- For removal/installation of the direct-connect SRS connectors, refer to <u>SRS-7</u>, "<u>Direct-connect SRS Component Connectors</u>".
- After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to SRS-20, "SRS Operation Check".

SPIRAL CABLE PFP:25554

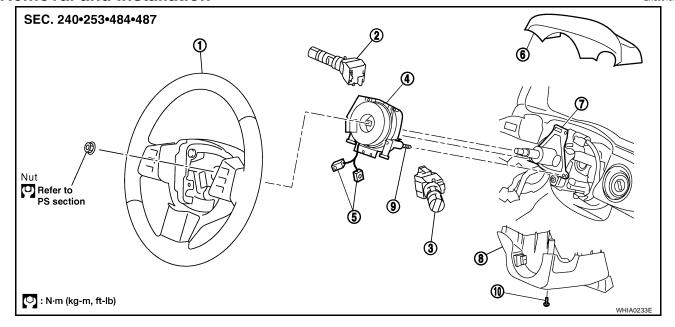
### **Removal and Installation**

FHS0015P

Α

D

Е



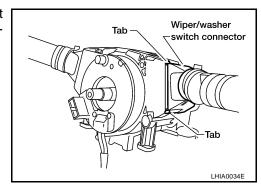
- 1. Steering wheel
- 4. Spiral cable
- 7. Column assembly
- 10. Screw

- 2. Lighting and turn signal switch
- 5. Driver air bag module connector
- 8. Column cover lower
- 3. Wiper and washer switch
- 6. Column cover upper
- 9. Screw (Do not remove)

#### **REMOVAL**

#### **CAUTION:**

- Before servicing the SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- When servicing the SRS, do not work from directly in front of air bag module.
- 1. Remove the steering wheel. Refer to PS-8, "STEERING WHEEL".
- 2. Remove the column cover upper and lower.
- Remove wiper washer switch connector, then pinch the tabs at wiper and washer switch base and slide switch away from steering column to remove.



SRS

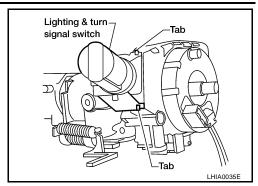
J

K

L

M

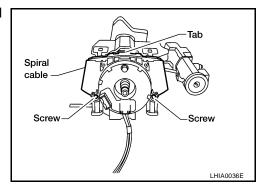
4. While pressing tabs, pull lighting and turn signal switch toward driver door and disconnect from base.



Remove the screws, release the clip, and remove the spiral cable.

#### **CAUTION:**

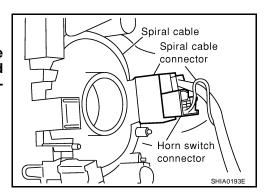
- Do not disassemble spiral cable.
- Do not apply lubricant to the spiral cable.



6. Remove the spiral cable connectors.

#### **CAUTION:**

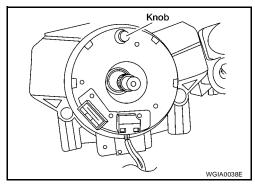
With the steering linkage disconnected, the spiral cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned counterclockwise about 2.5 turns from the neutral position.



#### **INSTALLATION**

Installation is in the reverse order of removal.

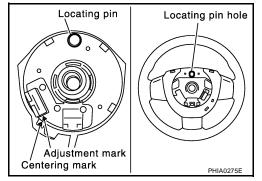
- Align spiral cable correctly when installing steering wheel. Make sure that the spiral cable is in the neutral position. The neutral position is detected by turning left 2.6 revolutions from the right end position and ending with the knob at the top.
- If equipped with VDC, refer to <u>BRC-62</u>, "<u>Adjustment of Steering Angle Sensor Neutral Position</u>" for steering angle sensor adjustment.
- After the work is completed, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-20</u>, "<u>SRS Operation</u> <u>Check"</u>.



#### **SPIRAL CABLE**

#### **CAUTION:**

- The spiral cable may snap due to steering operation if the cable is not installed in the correct position.
- 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 neutral position.



Α

В

С

D

Е

F

G

#### SRS

J

K

M

#### FRONT PASSENGER AIR BAG MODULE

#### FRONT PASSENGER AIR BAG MODULE

PFP:K8515

#### Removal and Installation

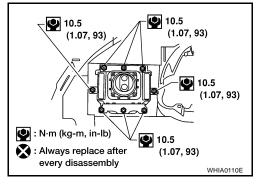
FHS0015Q

The passenger air bag module originally installed in the vehicle uses direct-connect style harness connectors. Service replacement passenger air bag modules use tab-locking style harness connectors. If the passenger air bag module is replaced or if the direct-connect harness connectors are damaged, the vehicle wiring harness must be modified to allow connection of the service replacement passenger air bag module. Refer to <a href="mailto:srs-51">SRS-51</a>, "WIRING HARNESS MODIFICATION" for wiring harness modification procedure.

#### REMOVAL

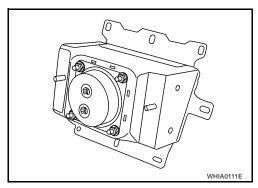
#### **CAUTION:**

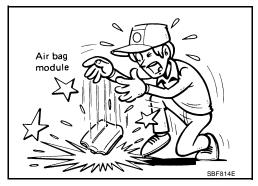
- Do not attempt to repair or replace damaged direct-connect front passenger air bag module connectors. If a direct-connect harness connector is damaged, the front passenger air bag must be replaced and the wiring harness modified.
- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of or under front passenger air bag module.
- 1. Remove the glove box. Refer to IP-14, "LOWER INSTRUMENT PANEL RH AND GLOVE BOX" .
- 2. Remove 2 nuts (through glove box opening) retaining front passenger air bag module to instrument panel crossmember.
- 3. Disconnect the air bag module electrical connectors.
  - For removal/installation of the direct-connect SRS connectors, refer to SRS-7, "Direct-connect SRS Component Connectors".
- 4. Remove the instrument panel assembly from the vehicle. Refer to <a href="#IP-10">IP-10</a>, "INSTRUMENT PANEL ASSEMBLY"</a>.
- Remove front passenger air bag module nuts and remove air bag module from the instrument panel assembly.



#### **CAUTION:**

- When servicing the SRS, do not work from directly in front of air bag module.
- Always place front passenger air bag module with caution label side facing upward.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module or harness connectors.
- Do not disassemble air bag module.
- Do not use old nuts after removal; replace with new nuts.
- Do not expose the front passenger air bag module to temperatures exceeding 90°C (194°F).
- Replace the 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 air bag module.
- For removal/installation of the direct-connect SRS connectors, refer to SRS-7, "Direct-connect SRS Component Connectors".





#### **INSTALLATION**

#### **Original Passenger Air Bag Module**

Installation is in the reverse order of removal.

#### FRONT PASSENGER AIR BAG MODULE

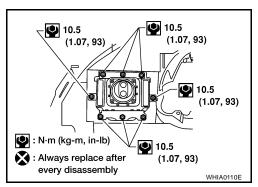
For removal/installation of the direct-connect SRS connectors, refer to <u>SRS-7</u>, "<u>Direct-connect SRS Component Connectors</u>".

#### **CAUTION:**

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

#### Service Replacement Passenger Air Bag Module

1. Install the front passenger air bag module to the instrument panel pad assembly.



- 2. Install the instrument panel assembly. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY".
- 3. Connect the front passenger air bag module harness connector to yellow 4-pin service replacement air bag connector and fasten connector to mounting bracket.

#### **CAUTION:**

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

#### WIRING HARNESS MODIFICATION

The passenger air bag module originally installed in the vehicle uses direct-connect style harness connectors. Service replacement passenger air bag modules use tab-locking style harness connectors. If the passenger air bag module is replaced or if the direct-connect harness connectors are damaged, the vehicle wiring harness must be modified to allow connection of the service replacement passenger air bag module.

#### NOTE:

The wiring harness modification is to be performed only if the vehicle is equipped with the original passenger air bag which uses direct-connect harness connectors. If the passenger air bag is to be replaced in a vehicle that has already had the service replacement passenger air bag installed, the wiring harness modification is not required.

#### **CAUTION:**

- Do not attempt to repair or replace damaged direct-connect front passenger air bag module connectors. If a direct-connect harness connector is damaged, the front passenger air bag must be replaced and the wiring harness modified.
- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of or under front passenger air bag module.
- After the work is completed, perform self-diagnosis to check that no malfunction is detected.
   Refer to <u>SRS-20</u>, "<u>SRS Operation Check</u>".
- Locate the yellow and orange direct-connect passenger air bag module harness connectors.
- 2. Use wire cutters to cut back both previously used direct-connect passenger air bag module harness connectors from the vehicle wiring harness approximately 50 mm (1.9 in) from the connectors.
- 3. Remove approximately 150 mm (5.9 in) of the vehicle harness covering from the cut end.

SRS

Е

F

Α

K

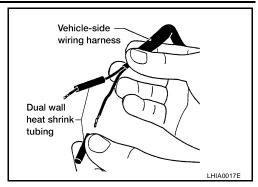
L

M

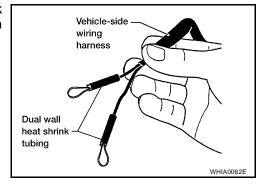
Revision: July 2007 SRS-51 2006 Armada

#### FRONT PASSENGER AIR BAG MODULE

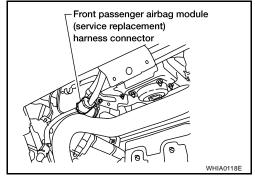
4. Slide a piece of dual-wall heat shrink tubing (provided in the passenger air bag service kit) onto each wire of the previously used vehicle wiring harness.



Fold each wire back and insert into the end of the heat shrink tubing so that the end of the wire is approximately centered in the heat shrink tubing.



- 6. Use a heat gun to shrink the heat shrink tubing and seal the wire.
- 7. Use electrical tape to secure the modified circuits to the outside of the wiring harness.
- 8. Locate the front passenger air bag service replacement connector that is taped back to the main harness. Unwrap the tape to access the yellow service replacement connector and remove the dust cover from the connector.



#### SIDE CURTAIN AIR BAG MODULE

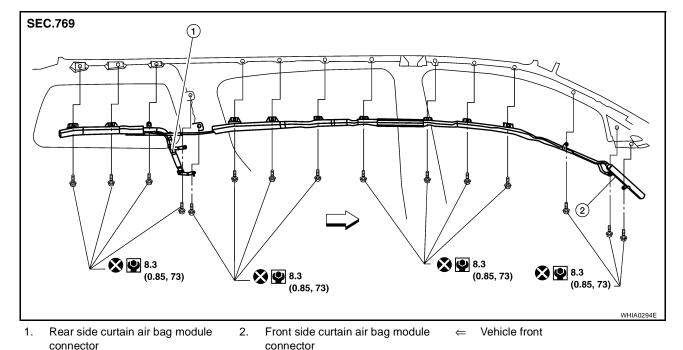
## SIDE CURTAIN AIR BAG MODULE

#### PFP:985P0

#### Removal and Installation

EHS0015S

Α



**REMOVAL** 

#### **CAUTION:**

- Do not attempt to repair or replace damaged direct-connect SRS component connectors. If a direct-connect harness connector is damaged, the harness must be replaced.
- Before servicing the SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- When servicing the SRS, do not work from directly in front of air bag module.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module or harness connectors.
- Do not disassemble air bag module.
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- Replace side curtain 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 air bag module.
- 1. Remove headlining. Refer to EI-35, "HEADLINING".
- 2. Disconnect front and rear side curtain air bag module connectors.
  - For removal/installation of the direct-connect SRS connectors, refer to SRS-7, "Direct-connect SRS Component Connectors".
- 3. Remove the bolts in order starting at the front or rear, and remove the side curtain air bag module.

# Air bag module

#### **INSTALLATION**

Installation is in the reverse order of removal.

- For removal/installation of the direct-connect SRS connectors, refer to <u>SRS-7</u>, "<u>Direct-connect SRS Component Connectors</u>".
- After replacement of side curtain air bag module, perform self-diagnosis to check that no malfunction is detected. Refer to <u>SRS-20</u>, "<u>SRS Operation Check</u>".

SRS

M

Е

Revision: July 2007 SRS-53 2006 Armada

#### **CRASH ZONE SENSOR**

#### **CRASH ZONE SENSOR**

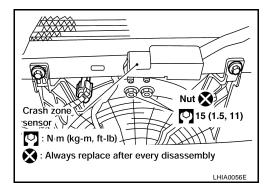
PFP:98531

# Removal and Installation REMOVAL

EHS0015T

#### **CAUTION:**

- Before servicing the SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Replace crash zone sensor if it has been dropped or sustained an impact.
- Do not disassemble crash zone sensor.
- 1. Disconnect the negative and positive battery cables, then wait at least 3 minutes.
- 2. Remove front grille. Refer to EI-17, "FRONT GRILLE".
- 3. Disconnect the crash zone sensor harness connector.
- 4. Remove crash zone sensor nuts.



#### **INSTALLATION**

Installation is in the reverse order of removal.

• After the work is complete, perform self-diagnosis to check that no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

## SIDE AIR BAG (SATELLITE) SENSOR

## SIDE AIR BAG (SATELLITE) SENSOR

PFP:98830

# Removal and Installation REMOVAL

EHS0015U

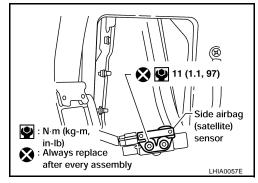
Α

D

Е

#### **CAUTION:**

- Before servicing the SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Do not use old nuts after removal; replace with new nuts.
- Check side air bag (satellite) sensor to make sure 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.
- 1. Disconnect the negative and positive battery cable, then wait at least 3 minutes.
- 2. Remove seat belt pre-tensioner. Refer to SB-3, "Removal and Installation of Front Seat Belt" .
- 3. Remove side air bag (satellite) sensor nuts.
- 4. Disconnect the side air bag (satellite) sensor harness connector.



#### SRS

#### **INSTALLATION**

Installation is in the reverse order of removal.

 After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

K

L

M

## FRONT SEAT BELT PRE-TENSIONER

## FRONT SEAT BELT PRE-TENSIONER

PFP:86884

## **Removal and Installation**

EHS0015V

For removal and installation procedures for seat belt and seat belt buckle pre-tensioners, refer to SB-3, "Removal and Installation of Front Seat Belt".

#### **DIAGNOSIS SENSOR UNIT**

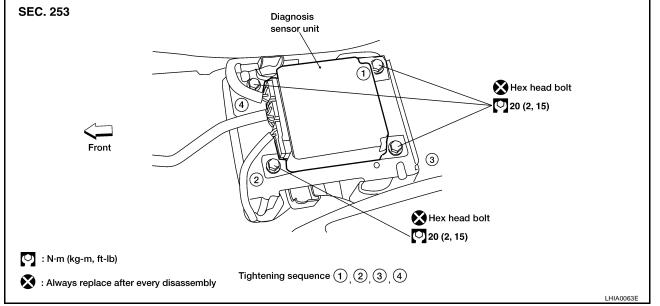
#### **DIAGNOSIS SENSOR UNIT**

#### PFP:28556

## Removal and Installation REMOVAL

EHS0015W

Α



#### **CAUTION:**

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

- Do not use old bolts; replace with new bolts.
- Check diagnosis sensor unit bracket to make sure 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.
- 1. Disconnect the harness connectors for each air bag module and seat belt pre-tensioner.
- 2. Remove center console. Refer to <a href="IP-15">IP-15</a>, "CENTER CONSOLE"</a>.
- 3. Disconnect diagnosis sensor unit harness connectors.
- 4. Remove bolts from the diagnosis sensor unit.

#### **INSTALLATION**

Installation is in the reverse order of removal.

 After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to SRS-20, "SRS Operation Check".

#### **CAUTION:**

The diagnosis sensor unit must always be installed with the arrow mark "←" pointing toward the front of the vehicle for proper operation.

#### ECU DISCRIMINATED NO.

After replacing the diagnosis sensor unit, confirm that the diagnosis sensor unit identification is correct for the vehicle as equipped. Refer to <a href="SRS-18">SRS-18</a>, "CONSULT-II Function"</a>.

SRS

Е

|

K

M

101

#### OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

#### OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

PFP:98852

#### **Removal and Installation**

EHS0015X

The occupant classification control unit, occupant classification (pressure) sensor, and bladder are an integral part of the front passenger seat cushion and are replaced as an assembly. Refer to <u>SE-85, "FRONT SEAT"</u> to remove the seat, and <u>SE-90, "SEAT CUSHION TRIM AND PAD (DRIVER) OR SEAT CUSHION ASSEMBLY (PASSENGER)"</u> to replace the seat cushion.

## **COLLISION DIAGNOSIS**

#### PFP:00015

## **For Frontal Collision**

EHS001MQ

Α

Check the SRS components using the following table.

 After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

## SRS INSPECTION (FOR FRONTAL COLLISION)

Part	SRS is activated	SRS is NOT activated
Driver air bag module	If the driver air bag	If the driver air bag has NOT been activated:
has deployed: REPLACE Install with new fas- teners.	Remove driver air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.	
		Install driver air bag module into the steering wheel to check fit and alignment with the wheel.
	3. If no damage is found, reinstall with new fasteners.	
	4. If damaged—REPLACE. Install driver air bag modules with new fasteners.	
Front passenger air	If the front passenger air bag has NOT been activated:	
bag module	air bag has deployed: REPLACE	Remove front passenger air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.
	Install with new fas- teners.	Install front passenger air bag module into the instrument panel to check fit with the instrument panel.
		3. If no damage is found, reinstall with new fasteners.
		4. If damaged—REPLACE. Install front passenger air bag modules with new fasteners.
Crash zone sensor	If any of the front air	If the front air bags or seat belt pre-tensioners have NOT been activated:
	bags or seat belt pre- tensioners* have	Remove the crash zone sensor. Check harness connectors for damage, terminals for deformities, and harness for binding.
	been activated: REPLACE the crash zone sensor and bracket with new fas-	Check for visible signs of damage (dents, cracks, deformation) of the crash zone sensor and bracket.
		3. Install the crash zone sensor to check fit.
	teners.	4. If no damage is found, reinstall with new fasteners.
	*: Confirm seat belt	5. If damaged—REPLACE the crash zone sensor and bracket with new fasteners.
pre-tensioner activa- tion using CONSULT- II only.		
Seat belt pre-ten-	If either the driver or	If the pre-tensioners have NOT been activated:
sioner assemblies (All applicable loca-	passenger seat belt pre-tensioner* has	Remove seat belt pre-tensioners.     Check harness cover and connectors for damage, terminals for deformities, and
tions: buckle, reel, lap outer)	been activated: REPLACE all seat	harness for binding.
,	belt pre-tensioner assemblies with new fasteners.	2. Check belts for damage and anchors for loose mounting.
		3. Check retractor for smooth operation.
		<ul><li>4. Check seat belt adjuster for damage.</li><li>5. Check for deformities of the center pillar inner.</li></ul>
	*: Confirm seat belt pre-tensioner activa-	6. If the center pillar inner has no damage, REPLACE the seat belt pre-tensioner
		assembly.
tion using CONSUL II only.	-	7. If no damage is found, reinstall seat belt pre-tensioner assembly.
	•	8. If damaged—REPLACE. Install the seat belt pre-tensioners with new fasteners.
Diagnosis sensor unit  If any of the SRS	If any of the SRS	If none of the SRS components have been activated:
J	components have	Check case for dents, cracks or deformities.
	been activated:	2. Check connectors for damage, and terminals for deformities.
	REPLACE the diag- nosis sensor unit.	3. If no damage is found, reinstall with new fasteners.
	Install with new fas-	4. If damaged—REPLACE. Install diagnosis sensor unit with new fasteners.

	SRS is activated	SRS is NOT activated	
Steering wheel	1. Visually check steeri	ng wheel for deformities.	
	2. Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.		
	3. Install driver air bag module into the steering wheel to check fit and alignment with the wheel.		
	4. Check steering whee	el for excessive free play.	
	5. If no damage is foun	d, reinstall.	
	6. If damaged—REPLACE.		
Spiral cable	If the driver front air	If the driver front air bag has not deployed:	
	bag has deployed:	1. Visually check spiral cable and combination switch for damage.	
	REPLACE the spiral cable.	2. Check connectors and protective tape for damage.	
	odbio.	3. Check steering wheel for noise, binding or heavy operation.	
		4. If no damage is found, reinstall.	
		5. If damaged—REPLACE.	
Occupant classifica-	1. Remove passenger	seat.	
tion system (Passen-	2. Check control unit case for dents, cracks of deformities.		
ger seat)	3. Check connectors and pressure sensor tube for damage, and terminals for deformities.		
	4. Check seat frame and cushion pan for dents or deformities.		
	5. If no damage is found, reinstall seat with new fasteners.		
	6. If damaged — REPLACE seat cushion assembly with new fasteners.		
Harness and connec-	Check connectors for poor connection, damage, and terminals for deformities.		
tors	2. Check harness for binding, chafing, cuts, or deformities.		
	3. If no damage is found, reinstall the harness and connectors.		
	4. If damaged—REPLACE the damaged harness. Do not attempt to repair, splice or modify any SRS harness		
Instrument panel	If the passenger front	If the passenger front air bag has NOT deployed:	
	air bag has deployed: REPLACE the instru-	Visually check instrument panel for damage.	
		2. If no damage is found, reinstall the instrument panel.	
	ment panel assembly.	3. If damaged—REPLACE the instrument panel.	

#### For Side and Rollover Collision

EHS001MR

Check the SRS components using the following table.

 After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

#### WHEN SRS IS ACTIVATED IN THE SIDE OR ROLLOVER COLLISION

- 1. Replace the following components:
- Front seat back assembly (on the side on which side air bag is activated)
- Diagnosis sensor unit
- (LH or RH) side air bag (satellite) sensor (on the side on which side 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 and "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 THE SIDE OR ROLLOVER COLLISION

- 1. Check the SRS components and the related parts using the following table.
- If the front seat back assembly is damaged, the front seat back assembly must be replaced.
- 2. Conduct self-diagnosis using CONSULT-II and "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation Check"</u> for details. Ensure entire SRS operates properly.

Part	SRS is activated	SRS is NOT activated
LH side curtain air bag module  If the LH side curtain air bag has deployed: REPLACE the LH side curtain air bag module. (Repair the center pillar inner, etc. before installing new one if damaged.)	If the LH side curtain air bag has NOT deployed:	
	Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side.	
		2. If damaged—Remove the LH side curtain air bag module.
	3. Check for visible signs of damaged (tears etc.) of the LH 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 side curtain air bag module with new fasteners.	
		6. If damaged—REPLACE the LH side curtain air bag module with new fasteners.
RH side curtain air	If the RH side curtain	If the RH side curtain air bag has NOT deployed:
bag module	air bag has deployed: REPLACE the RH side curtain air bag	Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side.
	module. (Repair the	2. If damaged—Remove the RH side curtain air bag module.
	center pillar inner, etc. before installing new	3. Check for visible signs of damaged (tears etc.) of the RH side curtain air bag module.
	one if damaged.)	4. Check harness and connectors for damage, and terminals for deformities.
		5. If no damage is found, reinstall the RH side curtain air bag module with new fasteners.
	6. If damaged—REPLACE the RH side curtain air bag module with new fasteners.	
Front LH side air bag	If the front LH side air	If the front LH side air bag has NOT deployed:
module bag has deployed:  REPLACE front LH		Check for visible signs of damage (dents, tears, deformation) of the seat back on the collision side.
	Coalback accombly.	2. Check harness and connectors for damage, and terminals for deformities.
		3. If damaged—REPLACE the front LH seatback assembly.
Front RH side air bag	If the front RH side air	If the front RH side air bag has NOT deployed:
module	bag has deployed: REPLACE front RH seatback assembly.	Check for visible signs of damage (dents, tears, deformation) of the seat back on the collision side.
	Coalback accombly.	2. Check harness and connectors for damage, and terminals for deformities.
		3. If damaged—REPLACE the front RH seatback assembly.
(LH or RH) side air	If any of the SRS	If none of the SRS components have been activated:
bag (satellite) sensor components have deployed: REPLACE the side air bag (satellite) sensor on the collision side with new fasteners. (Repair the center pillar inner, etc. before installing new one if damaged.)	Remove the side air bag (satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding.	
	air bag (satellite) sen-	Check for visible signs of damage (dents, cracks, deformation) of the side air bag (satellite) sensor.
		3. Install the side air bag (satellite) sensor to check fit.
		4. If no damage is found, reinstall the side sir bag (satellite) sensor with new fasten-
	ers.  5. If damaged—REPLACE the side air bag (satellite) sensor with new fasteners.	
Diagnosis sensor unit	If any of the SRS	If none of the SRS components have been activated:
	components have	Check case and bracket for dents, cracks or deformities.
	deployed: REPLACE the diag-	2. Check connectors for damage, and terminals for deformities.
	nosis sensor unit with	3. If no damage is found, reinstall the diagnosis sensor unit with new fasteners.
new fasteners.	new fasteners.	4. If damaged—REPLACE the diagnosis sensor unit with new fasteners.

Revision: July 2007 SRS-61 2006 Armada

Part	SRS is activated	SRS is NOT activated
Seat belt pre-ten-	If either the driver or	If the pre-tensioners have NOT been activated:
sioner assemblies passenger seat belt pre-tensioner* has been activated:	<ol> <li>Remove seat belt pre-tensioners.</li> <li>Check harness cover and connectors for damage, terminals for deformities, and harness for binding.</li> </ol>	
outer)	REPLACE all seat belt pre-tensioner	2. Check belts for damage and anchors for loose mounting.
	assemblies with new	3. Check retractor for smooth operation.
	fasteners.	4. Check seat belt adjuster for damage.
	*: Confirm seat belt	5. Check for deformities of the center pillar inner.
	pre-tensioner activa- tion using CONSULT-	<ol><li>If the center pillar inner has no damage, REPLACE the seat belt pre-tensioner assembly.</li></ol>
	II only.	7. If no damage is found, reinstall seat belt pre-tensioner assembly.
		8. If damaged—REPLACE. Install the seat belt pre-tensioners with new fasteners.
	If either the front LH	If the front LH or front RH side air bag modules have NOT deployed:
air bag)	or front RH side air bag modules has been deployed: REPLACE front seat-	1. Visually check the seat on the collision side.
		<ol><li>Remove the seat on the collision side and check the following for damage and deformities.</li></ol>
	back assembly on the	<ul> <li>Harness, connectors and terminals</li> </ul>
de	deployed side.	<ul> <li>Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat)</li> </ul>
		3. If no damage is found, reinstall the seat.
		4. If damaged—REPLACE the damaged seat parts using new fasteners. If the front seat back is damaged, the front seat back assembly must be replaced.
Center inner pillar	1. Check the center inner pillar on the collision side for damage (dents, cracks, deformation).	
	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—REPLA	ACE the damaged trim parts.