

RESTRAINTS

08
SECTION

ON-BOARD DIAGNOSTIC	08-02	AIR BAG SYSTEM	08-10
SYMPTOM		SEAT BELT	08-11
TROUBLESHOOTING	08-03	SERVICE TOOLS	08-60

08-02 ON-BOARD DIAGNOSTIC

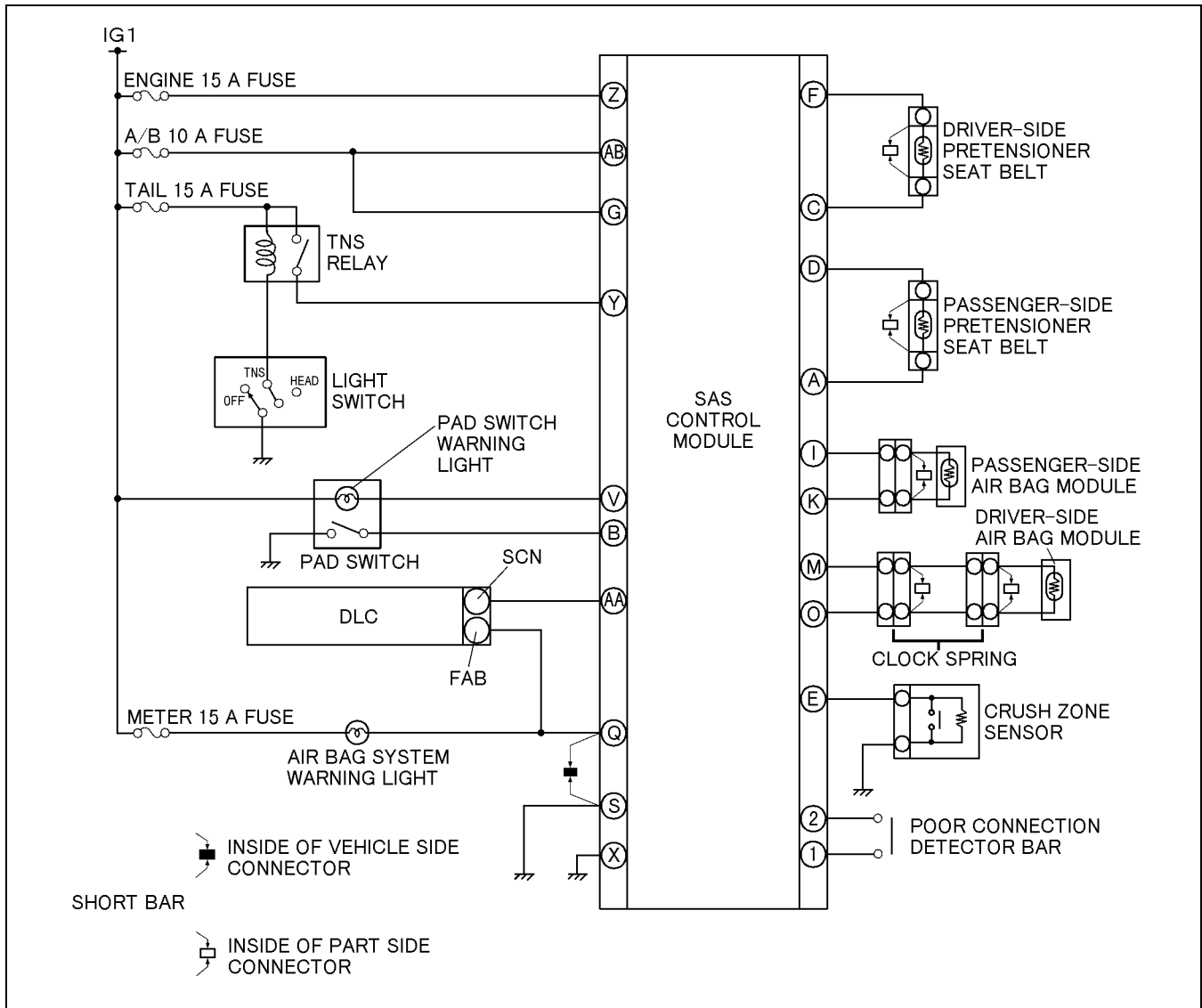
AIR BAG SYSTEM WIRING DIAGRAM. .	08-02-2	DTC 06	08-02-8
FOREWORD	08-02-2	DTC 07	08-02-11
Flowchart	08-02-2	DTC 11	08-02-12
Post-repair Operation	08-02-4	DTC 12	08-02-14
DTC TABLE	08-02-5	DTC 49	08-02-15
DTC 01	08-02-6	DTC 61	08-02-16
DTC 02	08-02-6	DTC 91	08-02-18
DTC 03	08-02-7		

08-02

ON-BOARD DIAGNOSTIC

AIR BAG SYSTEM WIRING DIAGRAM

A5U080201046W01



Z5U0802W010

FOREWORD

A5U080201046W02

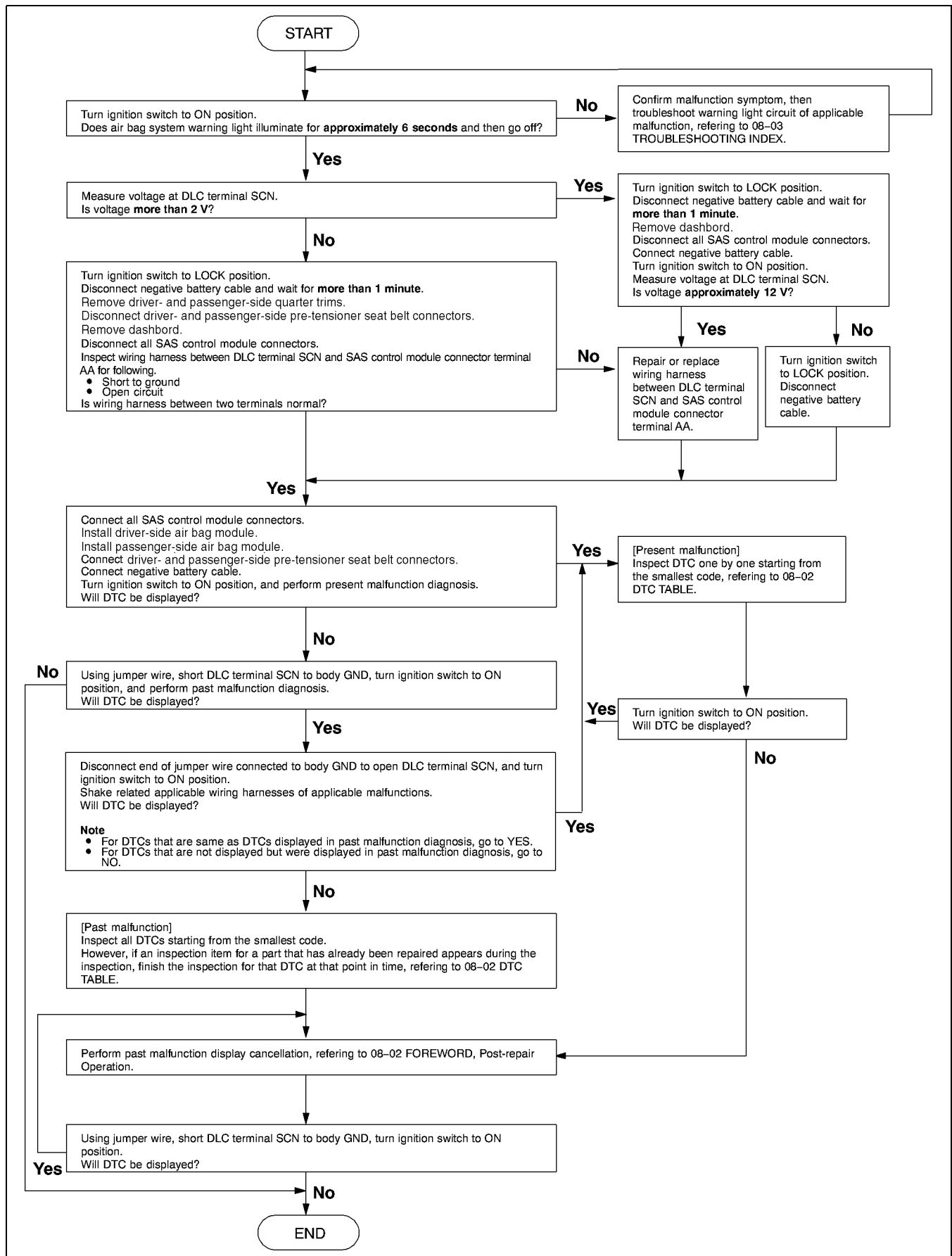
- Use the following flowchart to verify the cause of the trouble.

Flowchart

Note

- While performing the inspection of the past malfunction code, the applicable DTCs may be added to memory by removing or disconnecting the related parts. Inspect only the DTCs that were indicated before inspecting.
- When DTCs of present malfunction are no longer output after present and/or past malfunctions have been repaired, be sure to perform past malfunction display cancellation to prevent repair of malfunctions that have already been repaired.

ON-BOARD DIAGNOSTIC



08-02

Z5U0802W011

ON-BOARD DIAGNOSTIC

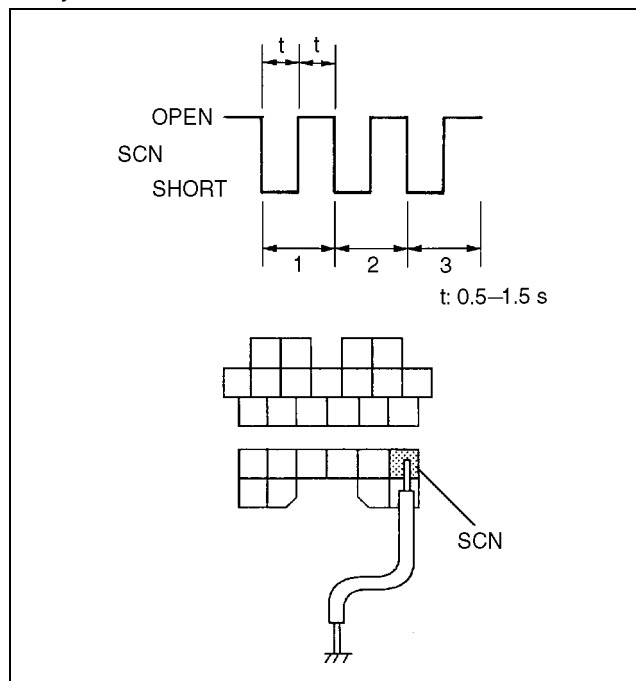
Post-repair Operation

Past malfunction code display cancellation

Caution

- Connecting the wrong DLC terminal may possibly cause a malfunction. Carefully connect the specified terminal only.

1. Turn the ignition switch to the ON position.
2. Wait until the air bag system warning light illuminates **approximately 6 seconds** and goes off.
3. Perform both the following steps alternately **three times** each at **0.5—1.5 seconds** intervals.
 - (1) Use a jumper wire to short the DLC terminal SCN to body GND.
 - (2) Disconnect the jumper wire from body GND.
4. If the DTCs are displayed, wait until they disappear.
5. Using a jumper wire, short the DLC terminal SCN to body GND to verify that the DTCs of the past malfunction are not displayed.
 - If the DTCs are still displayed, perform the past malfunction display cancellation again.
6. Turn the ignition switch to the LOCK position.
7. Disconnect the jumper wire from the DLC.



ZLU0802W001






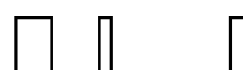




DTC TABLE

A5U080201046W03

- DTCs are common for present and past malfunction diagnosis.

Note

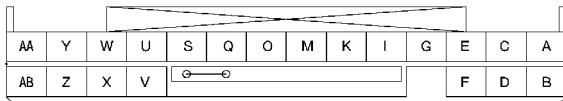
- When DTCs not shown in the DTC table are displayed, replace the SAS control module.
- After a new SAS control module is installed, the air bag system warning light continuously flashes when the ignition switch is turned to the ON position. This is the deployment authorization standby code output by the SAS control module. Perform the deployment authorization and restore the system to an operational state.
- If the air bag system warning light does not illuminate or remains illuminated when the ignition switch is turned to the ON position, inspect and repair the air bag system warning light circuitry and then confirm that the air bag system warning light is operational.

DTC	Output signal	Malfunction location	Page
01		SAS control module connector poor connection	(See 08-02-6 DTC 01)
02		SAS control module	(See 08-02-6 DTC 02)
03		Power supply of SAS control module	(See 08-02-7 DTC 03)
06		Driver-side air bag module system	(See 08-02-8 DTC 06)
07		Passenger-side air bag module system	(See 08-02-11 DTC 07)
11		Driver-side pre-tensioner seat belt system	(See 08-02-12 DTC 11)
12		Passenger-side pre-tensioner seat belt system	(See 08-02-14 DTC 12)
49		Passenger air bag deactivation system	(See 08-02-15 DTC 49)
61		Crush zone sensor system	(See 08-02-16 DTC 61)
91		Air bag system warning light circuit	(See 08-02-18 DTC 91)
—	Continuously flashes	Deployment authorization standby code	—

ON-BOARD DIAGNOSTIC

DTC 01

A5U080201046W04

DTC 01	SAS control module connector poor connection
DETECTION CONDITION	Warning <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure. There is no continuity between poor connection detector bar terminals of SAS CM.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Poor connection of any SAS CM connector Malfunction of SAS CM connector
<p>SAS CONTROL MODULE CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p>	

Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY SAS CM CONNECTOR IS CONNECTED WITH SAS CM <p>Warning</p> <ul style="list-style-type: none"> Handling air bag system components improperly can accidentally deploy air bag modules and pre-tensioner seat belt, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08–10–3 AIR BAG SYSTEM SERVICE WARNINGS) Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove dashboard. (See 09–17–2 DASHBOARD REMOVAL/ INSTALLATION.) Is SAS CM connector securely connected? 	Yes Go to next step.
		No Reconnect connector properly.
2	INSPECT SAS CM CONNECTOR <ul style="list-style-type: none"> Remove driver- and passenger-side quarter trims. Disconnect driver- and passenger-side pre-tensioner seat belt connectors. Disconnect SAS CM connector. Inspect poor connection detector bar. Is SAS CM connector okay? 	Yes Present malfunction diagnosis: <ul style="list-style-type: none"> Replace SAS CM. (See 08–10–10 SAS CONTROL MODULE REMOVAL/ INSTALLATION) Past malfunction diagnosis: <ul style="list-style-type: none"> Troubleshooting completed.
		No Replace wiring harnesses.

DTC 02

A5U080201046W05

DTC 02	SAS control module
DETECTION CONDITION	Warning <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure. Malfunction in SAS CM inner circuit.
POSSIBLE CAUSE	<ul style="list-style-type: none"> SAS CM malfunction

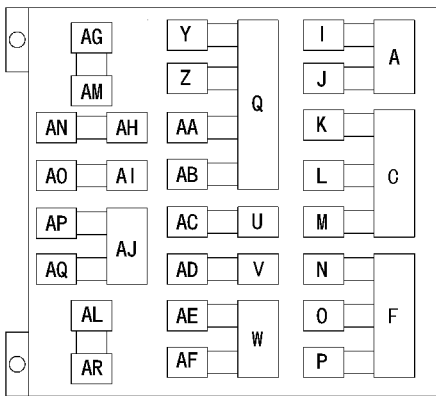
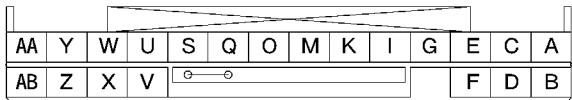
ON-BOARD DIAGNOSTIC

Diagnostic procedure

ACTION	
• Replace SAS CM. (See 08–10–10 SAS CONTROL MODULE REMOVAL/INSTALLATION)	

DTC 03

A5U080201046W06

DTC 03	Power supply of SAS control module
DETECTION CONDITION	Warning <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure. Voltage detected at SAS CM terminals Z and AB is 9 V or less.
POSSIBLE CAUSE	Note <ul style="list-style-type: none"> DTC 3 is indicated when voltages in both of following wiring harnesses drop simultaneously. <ul style="list-style-type: none"> Wiring harness between A/B 10 A fuse and SAS CM connector terminal AB Wiring harness between ENG 15 A fuse and SAS CM connector terminal Z Weak battery Malfunction in wiring harness between battery and SAS CM
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>FUSE BLOCK</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p> </div> <div style="text-align: center;"> <p>SAS CONTROL MODULE CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p> </div> </div>	

08–02

Diagnostic procedure

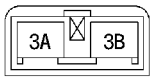
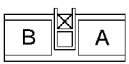
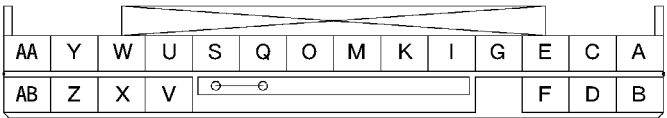
STEP	INSPECTION	ACTION	
1	INSPECT BATTERY <ul style="list-style-type: none"> Measure voltage of battery. Is voltage more than 9 V? 	Yes	Go to next step.
		No	Battery is weak. Inspect charge/discharge system. (See 01–17–2 BATTERY INSPECTION)
2	INSPECT WIRING HARNESS BETWEEN BATTERY AND FUSE BLOCK <ul style="list-style-type: none"> Remove fuse block without disconnecting connectors. Turn ignition switch to ON position. Measure voltage at terminals Y and AB of fuse block. Is voltage of at least either terminal more than 9 V? 	Yes	Go to next step.
		No	Repair wiring harnesses.

ON-BOARD DIAGNOSTIC

STEP	INSPECTION	ACTION
3	INSPECT WIRING HARNESS BETWEEN FUSE BLOCK AND SAS CM <p>Warning</p> <ul style="list-style-type: none"> Handling air bag system components improperly can accidentally deploy air bag modules, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08–10–3 AIR BAG SYSTEM SERVICE WARNINGS) <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove driver- and passenger-side quarter trims. Disconnect driver- and passenger-side pre-tensioner seat belt connectors. Remove dashboard. (See 09–17–2 DASHBOARD REMOVAL/INSTALLATION.) Disconnect SAS CM connector. Connect negative battery cable. Turn ignition switch to ON position. Measure voltage at SAS CM connector terminals Z and AB. Is voltage of at least either terminal more than 9 V? 	<p>Yes</p> <p>Present malfunction diagnosis:</p> <ul style="list-style-type: none"> Replace SAS CM. (See 08–10–10 SAS CONTROL MODULE REMOVAL/INSTALLATION) <p>Past malfunction diagnosis:</p> <ul style="list-style-type: none"> Troubleshooting completed. <p>No</p> <p>Replace wiring harnesses.</p>

DTC 06

A5U080201046W07

DTC 06	Driver-side air bag module system
DETECTION CONDITION	<p>Warning</p> <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure. <ul style="list-style-type: none"> Abnormal resistance (other than 1.85—3.46 ohm) detected in driver-side air bag module circuit Short circuit in wiring harness related SAS CM terminal M or O
POSSIBLE CAUSE	<ul style="list-style-type: none"> Driver-side air bag module malfunction Clock spring malfunction Malfunction of connectors between clock spring and SAS CM Open or short circuit in wiring harness between clock spring and SAS CM
<p>CLOCK SPRING</p>  <p>COMPONENT SIDE CONNECTOR (VIEW FROM TERMINAL SIDE)</p>	<p>CLOCK SPRING CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM TERMINAL SIDE)</p>
	<p>SAS CONTROL MODULE CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p>

ON-BOARD DIAGNOSTIC

Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT SEPARATOR* OF CLOCK SPRING Warning <ul style="list-style-type: none"> Handling air bag system components improperly can accidentally deploy air bag modules and pre-tensioner seat belt, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08-10-3 AIR BAG SYSTEM SERVICE WARNINGS) <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove driver-side air bag module. (See 08-10-5 DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION) Is separator* of clock spring okay? <p>*: Consists of two parts of female connector that separate short bar from terminal when connected to male connector.</p>	Yes Present malfunction diagnosis: <ul style="list-style-type: none"> Go to next step. Past malfunction diagnosis: <ul style="list-style-type: none"> Go to Step 6.
		No Replace clock spring. (See 08-10-8 CLOCK SPRING REMOVAL/INSTALLATION)
2	VERIFY WHETHER MALFUNCTION IS IN DRIVER-SIDE AIR BAG MODULE OR OTHER PARTS <ul style="list-style-type: none"> Connect leads of SST (Fuel And Thermometer checker) or apply 2 ohms resistor to clock spring terminals 3A and 3B. Set resistance of SST (Fuel And Thermometer checker) to 2 ohms. Connect negative battery cable. Turn ignition switch to ON position. Is DTC 06 indicated? 	Yes Go to next step.
		No Replace driver-side air bag module. (See 08-10-5 DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION)
3	INSPECT SEPARATOR* OF CLOCK SPRING CONNECTOR <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove column cover. Disconnect clock spring connector. Is separator* of clock spring connector okay? <p>*: Consists of two parts of female connector that separate short bar from terminal when connected to male connector.</p>	Yes Go to next step.
		No Replace wiring harness.
4	VERIFY WHETHER MALFUNCTION IS IN CLOCK SPRING OR OTHER PARTS <ul style="list-style-type: none"> Connect leads of SST (Fuel And Thermometer checker) or apply 2 ohms resistor to clock spring connector terminals A and B. Set resistance of SST (Fuel And Thermometer checker) to 2 ohms. Connect negative battery cable. Turn ignition switch to ON position. Is DTC 06 indicated? 	Yes Go to next step.
		No Replace clock spring. (See 08-10-8 CLOCK SPRING REMOVAL/INSTALLATION)

08-02

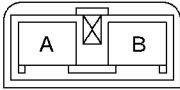
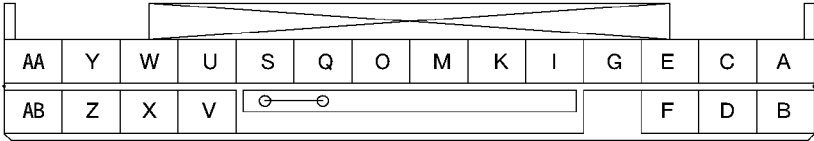
ON-BOARD DIAGNOSTIC

STEP	INSPECTION	ACTION	
5	INSPECT WIRING HARNESS BETWEEN CLOCK SPRING AND SAS CM <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove driver- and passenger-side quarter trims. Disconnect driver- and passenger-side pre-tensioner seat belt connectors. Remove dashboard. (See 09-17-2 DASHBOARD REMOVAL/ INSTALLATION.) Disconnect SAS CM connector. Inspect following wiring harness between SAS CM and clock spring terminals (harness side) for short to ground, short to power supply, and open circuit: <ul style="list-style-type: none"> — M and A — O and B Are wiring harnesses okay? 	Yes	Replace SAS CM. (See 08-10-10 SAS CONTROL MODULE REMOVAL/ INSTALLATION)
		No	Replace wiring harnesses.
6	INSPECT SEPARATOR* OF CLOCK SPRING CONNECTOR <ul style="list-style-type: none"> Remove column cover. Disconnect clock spring connector. Is separator* of clock spring connector okay? <p>*: Consists of two parts of female connector that separate short bar from terminal when connected to male connector.</p>	Yes	Go to next step.
		No	Replace wiring harness.
7	INSPECT CLOCK SPRING <ul style="list-style-type: none"> Remove clock spring. (See 08-10-8 CLOCK SPRING REMOVAL/ INSTALLATION) Inspect clock spring. (See 08-10-8 CLOCK SPRING INSPECTION) Is clock spring okay? 	Yes	Go to next step.
		No	Replace clock spring. (See 08-10-8 CLOCK SPRING REMOVAL/ INSTALLATION)
8	INSPECT WIRING HARNESS BETWEEN CLOCK SPRING AND SAS CM <ul style="list-style-type: none"> Remove driver- and passenger-side quarter trims. Disconnect driver- and passenger-side pre-tensioner seat belt connectors. Remove dashboard. (See 09-17-2 DASHBOARD REMOVAL/ INSTALLATION.) Disconnect SAS CM connector. Inspect following wiring harness between SAS CM and clock spring terminals (harness side) for short to ground, short to power supply, and open circuit: <ul style="list-style-type: none"> — M and A — O and B Are wiring harnesses okay? 	Yes	Replace driver-side air bag module. (See 08-10-5 DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION)
		No	Replace wiring harnesses.

ON-BOARD DIAGNOSTIC

DTC 07

A5U080201046W08

DTC 07	Passenger-side air bag module system
DETECTION CONDITION	Warning <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure. Abnormal resistance (other than 1.63—2.71 ohm) detected in passenger-side air bag module circuit. Short circuit in wiring harness related SAS CM terminal I or K.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Passenger-side air bag module malfunction Malfunction of connector between passenger-side air bag module and SAS CM Open or short circuit in wiring harness between passenger-side air bag module and SAS CM
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>PASSENGER-SIDE AIR BAG MODULE CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM TERMINAL SIDE)</p> </div> <div style="text-align: center;"> <p>SAS CONTROL MODULE CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p> </div> </div>	

Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT SEPARATOR* OF PASSENGER-SIDE AIR BAG MODULE CONNECTOR <p>Warning</p> <ul style="list-style-type: none"> Handling air bag system components improperly can accidentally deploy air bag modules and pre-tensioner seat belt, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08-10-3 AIR BAG SYSTEM SERVICE WARNINGS) <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove glove compartment. Disconnect passenger-side air bag module connector. Is separator* of passenger-side air bag module connector okay? <p>*: Consists of two parts of female connector that separate short bar from terminal when connected to male connector.</p>	Yes Present malfunction diagnosis: <ul style="list-style-type: none"> Go to next step. Past malfunction diagnosis: <ul style="list-style-type: none"> Go to Step 3.
		No Replace wiring harness.
2	VERIFY WHETHER MALFUNCTION IS IN PASSENGER-SIDE AIR BAG MODULE OR OTHER PARTS <ul style="list-style-type: none"> Connect leads of SST (Fuel And Thermometer checker) or apply 2 ohms resistor to passenger-side air bag module connector terminals A and B. Set resistance of SST (Fuel And Thermometer checker) to 2 ohms. Connect negative battery cable. Turn ignition switch to ON position. Is DTC 07 indicated? 	Yes Go to next step.
		No Replace passenger-side air bag module. (See 08-10-6 PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION)

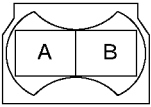
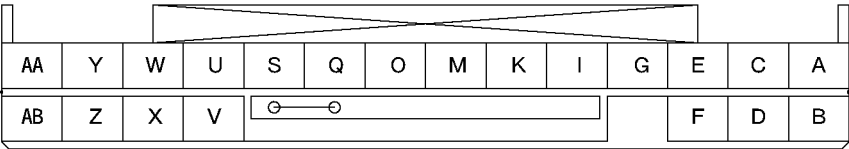
08-02

ON-BOARD DIAGNOSTIC

STEP	INSPECTION	ACTION
3	INSPECT WIRING HARNESS BETWEEN PASSENGER-SIDE AIR BAG MODULE AND SAS CM <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove driver- and passenger-side quarter trims. Disconnect driver- and passenger-side pre-tensioner seat belt connectors. Remove dashboard. (See 09-17-2 DASHBOARD REMOVAL/INSTALLATION.) Disconnect SAS CM connector. Inspect following wiring harness between SAS CM and passenger-side air bag module terminals (harness side) for short to ground, short to power supply, and open circuit: <ul style="list-style-type: none"> — I and A — K and B Are wiring harnesses okay? 	Yes Present malfunction diagnosis: <ul style="list-style-type: none"> Replace SAS CM. (See 08-10-10 SAS CONTROL MODULE REMOVAL/INSTALLATION) Past malfunction diagnosis: <ul style="list-style-type: none"> Replace passenger-side air bag module. (See 08-10-6 PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION)
		No Replace wiring harnesses.

DTC 11

A5U080201046W09

DTC 11	Driver-side pre-tensioner seat belt system
DETECTION CONDITION	Warning <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure.
	<ul style="list-style-type: none"> Abnormal resistance (other than 1.83—2.81 ohm) detected in terminals driver-side pre-tensioner seat belt circuit. Short circuit in wiring harness related SAS CM terminal C or F
POSSIBLE CAUSE	<ul style="list-style-type: none"> Drive-side pre-tensioner seat belt malfunction Malfunction of connectors between driver-side pre-tensioner seat belt and SAS CM Open or short circuit in wiring harness between driver-side pre-tensioner seat belt and SAS CM
<div> <div> DRIVER-SIDE PRE-TENSIONER SEAT BELT CONNECTOR  HARNESS SIDE CONNECTOR (VIEW FROM TERMINAL SIDE) </div> <div> SAS CONTROL MODULE CONNECTOR  HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE) </div> </div>	

ON-BOARD DIAGNOSTIC

Diagnostic procedure

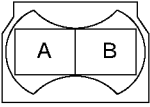
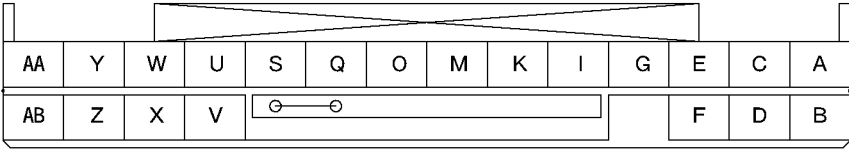
STEP	INSPECTION	ACTION
1	INSPECT OF DRIVER-SIDE PRE-TENSIONER SEAT BELT CONNECTOR Warning <ul style="list-style-type: none"> Handling air bag system components improperly can accidentally deploy air bag modules and pre-tensioner seat belts, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08-10-3 AIR BAG SYSTEM SERVICE WARNINGS) <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove driver-side quarter trim. Disconnect driver-side pre-tensioner seat belt connector. Is there cracking or chipping in driver-side pre-tensioner seat belt connector? 	Yes Replace wiring harness.
		No Present malfunction diagnosis: <ul style="list-style-type: none"> Go to next step. Past malfunction diagnosis: <ul style="list-style-type: none"> Go to Step 3.
2	VERIFY WHETHER MALFUNCTION IS IN DRIVER-SIDE PRE-TENSIONER SEAT BELT OR OTHER PARTS <ul style="list-style-type: none"> Connect leads of SST (Fuel And Thermometer checker) or apply 2 ohms resistor to terminals A and B of driver-side pre-tensioner seat belt connector. Set resistance of SST (Fuel And Thermometer checker) to 2 ohms. Connect negative battery cable. Turn ignition switch to ON position. Is DTC 11 indicated? 	Yes Go to next step.
		No Replace driver-side pre-tensioner seat belt. (See 08-11-1 SEAT BELT REMOVAL/INSTALLATION)
3	INSPECT WIRING HARNESS BETWEEN DRIVER-SIDE PRE-TENSIONER SEAT BELT AND SAS CM <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove passenger-side quarter trim. Disconnect passenger-side pre-tensioner seat belt connector. Remove dashboard. (See 09-17-2 DASHBOARD REMOVAL/INSTALLATION.) Disconnect SAS CM connector. Inspect wiring harness between terminal F of SAS CM connector and terminal A of driver-side pre-tensioner seat belt connector, and between terminal C of SAS CM connector and terminal B of driver-side pre-tensioner seat belt connector for following. <ul style="list-style-type: none"> Short to ground Short to power supply Open circuit Are wiring harnesses okay? 	Yes Present malfunction diagnosis: <ul style="list-style-type: none"> Replace SAS CM. (See 08-10-10 SAS CONTROL MODULE REMOVAL/INSTALLATION) Past malfunction diagnosis: <ul style="list-style-type: none"> Replace passenger-side pre-tensioner seat belt. (See 08-11-1 SEAT BELT REMOVAL/INSTALLATION)
		No Replace wiring harness.

08-02

ON-BOARD DIAGNOSTIC

DTC 12

A5U080201046W10

DTC 12	Passenger-side pre-tensioner seat belt system
DETECTION CONDITION	<p>Warning</p> <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure. Abnormal resistance (other than 1.83—2.81 ohm) detected in terminals passenger-side pre-tensioner seat belt circuit. Short circuit in wiring harness related SAS CM terminal D or A
POSSIBLE CAUSE	<ul style="list-style-type: none"> Drive-side pre-tensioner seat belt malfunction Malfunction of connectors between passenger-side pre-tensioner seat belt and SAS CM Open or short circuit in wiring harness between passenger-side pre-tensioner seat belt and SAS CM
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>PASSENGER-SIDE AIR BAG PRE-TENSIONER SEAT BELT CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM TERMINAL SIDE)</p> </div> <div style="text-align: center;"> <p>SAS CONTROL MODULE CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p> </div> </div>	

Diagnostic procedure

STEP	INSPECTION	ACTION	
1	INSPECT OF PASSENGER-SIDE PRE-TENSIONER SEAT BELT CONNECTOR <p>Warning</p> <ul style="list-style-type: none"> Handling air bag system components improperly can accidentally deploy air bag modules and pre-tensioner seat belts, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08-10-3 AIR BAG SYSTEM SERVICE WARNINGS) Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove passenger-side quarter trim. Disconnect passenger-side pre-tensioner seat belt connector. Is there cracking or chipping in passenger-side pre-tensioner seat belt connector? 	Yes	Replace wiring harness.
		No	<p>Present malfunction diagnosis:</p> <ul style="list-style-type: none"> Go to next step. <p>Past malfunction diagnosis:</p> <ul style="list-style-type: none"> Go to Step 3.
2	VERIFY WHETHER MALFUNCTION IS IN DRIVER-SIDE PRE-TENSIONER SEAT BELT OR OTHER PARTS <ul style="list-style-type: none"> Connect leads of SST (Fuel And Thermometer checker) or apply 2 ohms resistor to terminals A and B of driver-side pre-tensioner seat belt connector. Set resistance of SST (Fuel And Thermometer checker) to 2 ohms. Connect negative battery cable. Turn ignition switch to ON position. Is DTC 12 indicated? 	Yes	Go to next step.
		No	Replace driver-side pre-tensioner seat belt. (See 08-11-1 SEAT BELT REMOVAL/INSTALLATION)

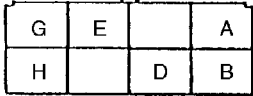
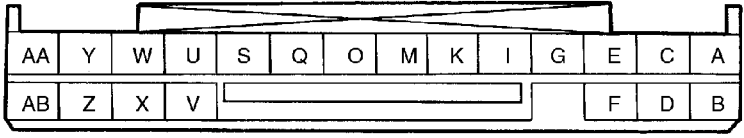
ON-BOARD DIAGNOSTIC

STEP	INSPECTION	ACTION
3	INSPECT WIRING HARNESS BETWEEN DRIVER-SIDE PRE-TENSIONER SEAT BELT ANS SAS CM <ul style="list-style-type: none"> • Turn ignition switch to LOCK position. • Disconnect negative battery cable and wait for more than 1 minute. • Remove passenger-side quarter trim. • Disconnect passenger-side pre-tensioner seat belt connector. • Remove dashboard. (See 09-17-2 DASHBOARD REMOVAL/ INSTALLATION.) • Disconnect SAS CM connector. • Inspect wiring harness between terminal D of SAS CM connector and terminal A of passenger-side pre-tensioner seat belt connector, and between terminal A of SAS CM connector and terminal B of passenger-side pre-tensioner seat belt connector for following. <ul style="list-style-type: none"> — Short to ground — Short to power supply — Open circuit • Are wiring harnesses okay? 	Yes Present malfunction diagnosis: <ul style="list-style-type: none"> • Replace SAS CM. (See 08-10-10 SAS CONTROL MODULE REMOVAL/ INSTALLATION) Past malfunction diagnosis: <ul style="list-style-type: none"> • Replace passenger-side pre-tensioner seat belt. (See 08-11-1 SEAT BELT REMOVAL/ INSTALLATION)
		No Replace wiring harness.

DTC 49

A5U080201046W11

08-02

DTC 49	Passenger air bag deactivation system
DETECTION CONDITION	<ul style="list-style-type: none"> • No voltage detected at terminal V of SAS CM • Terminal G of SAS CM is not connected to ground
POSSIBLE CAUSE	<ul style="list-style-type: none"> • Passenger air bag deactivation switch malfunction • SAS CM malfunction • Malfunction in wiring harness between METER 15 A fuse and passenger air bag deactivation switch • Malfunction in wiring harness between SAS CM and ground • Malfunction in wiring harness between SAS CM and passenger air bag deactivation switch
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>PASSENGER AIR BAG DEACTIVATION SWITCH CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM TERMINAL SIDE)</p> </div> <div style="text-align: center;"> <p>SAS CONTROL MODULE CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p> </div> </div>	

Diagnostic Procedure

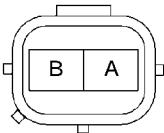
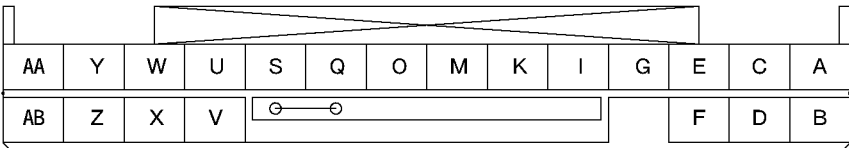
STEP	INSPECTION	ACTION
1	INSPECT WIRING HARNESS BETWEEN BATTERY AND PASSENGER AIR BAG DEACTIVATION SWITCH <ul style="list-style-type: none"> • Disconnect negative battery cable. • Remove center panel. • Connect negative battery cable. • Measure voltage at terminal A of passenger air bag deactivation switch connector. • Is voltage more than 9 V? 	Yes Go to next step.
		No Replace wiring harness.
2	INSPECT PASSENGER AIR BAG DEACTIVATION SWITCH <ul style="list-style-type: none"> • Inspect passenger air bag deactivation switch. (See 08-10-9 PASSENGER AIR BAG DEACTIVATION (PAD) SWITCH INSPECTION) • Is switch okay? 	Yes Go to next step.
		No Replace passenger-side air bag cut-off switch. (See 08-10-9 PASSENGER AIR BAG DEACTIVATION (PAD) SWITCH REMOVAL/INSTALLATION)

ON-BOARD DIAGNOSTIC

STEP	INSPECTION	ACTION	
3	INSPECT WIRING HARNESS BETWEEN PASSENGER AIR BAG DEACTIVATION SWITCH AND SAS CM Warning <ul style="list-style-type: none"> Handling air bag system components improperly can accidentally deploy air bag modules and pre-tensioner seat belt, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08–10–3 AIR BAG SYSTEM SERVICE WARNINGS) <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove driver- and passenger-side quarter trim. Disconnect driver- and passenger-side pre-tensioner seat belt connectors. Remove dashboard. (See 09–17–2 DASHBOARD REMOVAL/INSTALLATION) Disconnect SAS CM connector. Measure voltage at terminal V of SAS control module connector? Is voltage more than 9 V? 	Yes	Go to next step.
		No	Replace wiring harness.
4	<ul style="list-style-type: none"> Is there continuity between terminal G of SAS CM and ground? 	Yes	Replace SAS CM. (See 08–10–10 SAS CONTROL MODULE REMOVAL/INSTALLATION)
		No	Replace wiring harness.

DTC 61

A5U080201046W12

DTC 61	Crush zone sensor system
DETECTION CONDITION	Warning <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure. <ul style="list-style-type: none"> Short circuit in wiring harness related SAS CM terminal E. Malfunction in crush zone sensor inner circuit.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Crush zone sensor malfunction Malfunction of connectors between crush zone sensor and SAS CM Open or short circuit in wiring harness between crush zone sensor and SAS CM Open or short circuit in wiring harness between crush zone sensor and ground
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>CRUSH ZONE SENSOR CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM TERMINAL SIDE)</p> </div> <div style="text-align: center;"> <p>SAS CONTROL MODULE CONNECTOR</p>  <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p> </div> </div>	

ON-BOARD DIAGNOSTIC

Diagnostic procedure

STEP	INSPECTION	ACTION	
1	INSPECT WIRING HARNESS BETWEEN CRUSH ZONE SENSOR AND SAS CM Warning <ul style="list-style-type: none"> Handling air bag system components improperly can accidentally deploy air bag modules and pre-tensioner seat belt, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08–10–3 AIR BAG SYSTEM SERVICE WARNINGS) <ul style="list-style-type: none"> Turn ignition switch to LOCK position. Disconnect negative battery cable and wait for more than 1 minute. Remove driver- and passenger-side quarter trims. Disconnect driver- and passenger-side pre-tensioner seat belt connectors. Remove dashboard. (See 09–17–2 DASHBOARD REMOVAL/ INSTALLATION.) Disconnect SAS CM connector. Inspect wiring harness between terminal E of SAS CM connector and terminal A of crush zone sensor connector, and between terminal B of crush zone sensor connector and ground for following. <ul style="list-style-type: none"> Short to ground Short to power supply Open circuit Are wiring harnesses okay? 	Yes	Go to next step.
		No	Replace wiring harness.
2	INSPECT CRUSH ZONE SENSOR <ul style="list-style-type: none"> Measure resistance between crush zone sensor terminals A and B. Is resistance approximately 820 Ω? 	Yes	Replace SAS CM. (See 08–10–10 SAS CONTROL MODULE REMOVAL/ INSTALLATION.)
		No	Replace crush zone sensor. (See 08–10–11 CRUSH ZONE SENSOR REMOVAL/ INSTALLATION.)

08–02

ON-BOARD DIAGNOSTIC

DTC 91

A5U080201046W13

DTC 91	Air bag system warning light circuit
DETECTION CONDITION	Warning <ul style="list-style-type: none"> Detection conditions are for understanding DTC outline before performing inspection. Performing inspection with only detection conditions may cause injury due to operating error or damage the system. When performing inspection, always follow inspection procedure. <ul style="list-style-type: none"> Malfunction in air bag system warning light circuit
POSSIBLE CAUSE	<ul style="list-style-type: none"> Air bag system warning light bulb malfunction METER 15 A fuse malfunction Instrument cluster malfunction Malfunction of connectors between instrument cluster and SAS CM Open or short circuit in wiring harness between METER 15 A fuse and instrument cluster Open or short circuit in wiring harness between instrument cluster and SAS CM
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>INSTRUMENT CLUSTER CONNECTOR</p> <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p> </div> <div style="text-align: center;"> <p>INSTRUMENT CLUSTER</p> <p>COMPONENT SIDE CONNECTOR (VIEW FROM TERMINAL SIDE)</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;"> <p>SAS CONTROL MODULE CONNECTOR</p> <p>HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)</p> </div> <div style="text-align: center;"> <p>DLC</p> </div> </div>	

Diagnostic procedure

STEP	INSPECTION		ACTION
1	<ul style="list-style-type: none">Is this present malfunction diagnosis?	Yes	Replace SAS CM. (See 08–10–10 SAS CONTROL MODULE REMOVAL/ INSTALLATION)
		No	Go to next step.
2	INSPECT METER 15 A FUSE <ul style="list-style-type: none">Turn ignition switch to LOCK position.Disconnect negative battery cable.Remove METER 15 A fuse.Is fuse okay?	Yes	Reinstall METER 15 A fuse, then go to next step.
		No	Replace METER 15 A fuse.
3	INSPECT AIR BAG SYSTEM WARNING LIGHT BULB <ul style="list-style-type: none">Remove instrument cluster. (See 09–22–3 INSTRUMENT CLUSTER REMOVAL/INSTALLATION)Remove air bag system warning light bulb.Is bulb okay?	Yes	Reinstall air bag system warning light bulb, then go to next step.
		No	Replace air bag system warning light bulb.
4	INSPECT INSTRUMENT CLUSTER <ul style="list-style-type: none">Is there continuity between instrument cluster terminals 1C and 3D?	Yes	Go to next step.
		No	Replace instrument cluster. (See 09–22–3 INSTRUMENT CLUSTER REMOVAL/ INSTALLATION)

ON-BOARD DIAGNOSTIC

STEP	INSPECTION	ACTION	
5	INSPECT FOR CONTINUITY BETWEEN METER 15 A FUSE AND INSTRUMENT CLUSTER <ul style="list-style-type: none"> • Connect negative battery cable. • Turn ignition switch to ON position. • Measure voltage at instrument cluster connector terminal 1C. • Is voltage more than 9 V? 	Yes	Go to next step.
		No	Repair wiring harness.
6	INSPECT WIRING HARNESS BETWEEN INSTRUMENT CLUSTER AND SAS CM <p>Warning</p> <ul style="list-style-type: none"> • Handling air bag system components improperly can accidentally deploy air bag modules and pre-tensioner seat belt, which may seriously injure you. Read AIR BAG SYSTEM SERVICE WARNINGS before handling air bag system components. (See 08-10-3 AIR BAG SYSTEM SERVICE WARNINGS) <ul style="list-style-type: none"> • Turn ignition switch to LOCK position. • Disconnect negative battery cable and wait for more than 1 minute. • Remove driver- and passenger-side quarter trims. • Disconnect driver- and passenger-side pre-tensioner seat belt connectors. • Remove dashboard. (See 09-17-2 DASHBOARD REMOVAL/ INSTALLATION.) • Disconnect SAS CM connector. • Inspect wiring harness between instrument cluster connector terminal 3D and SAS CM connector terminal Q for following. <ul style="list-style-type: none"> — Short to ground — Short to power supply — Open circuit • Is wiring harness okay? 	Yes	Go to next step.
		No	Replace wiring harness.
7	INSPECT WIRING HARNESS BETWEEN DLC AND SAS CM <ul style="list-style-type: none"> • Inspect wiring harness between DLC terminal FAB and SAS CM connector terminal Q for following. <ul style="list-style-type: none"> — Short to ground — Short to power supply • Is wiring harness okay? 	Yes	Troubleshooting completed.
		No	Replace wiring harness.

08-02