

Diag. Code 11 Short in Squib Circuit or Front Airbag sensor Circuit (to Ground)

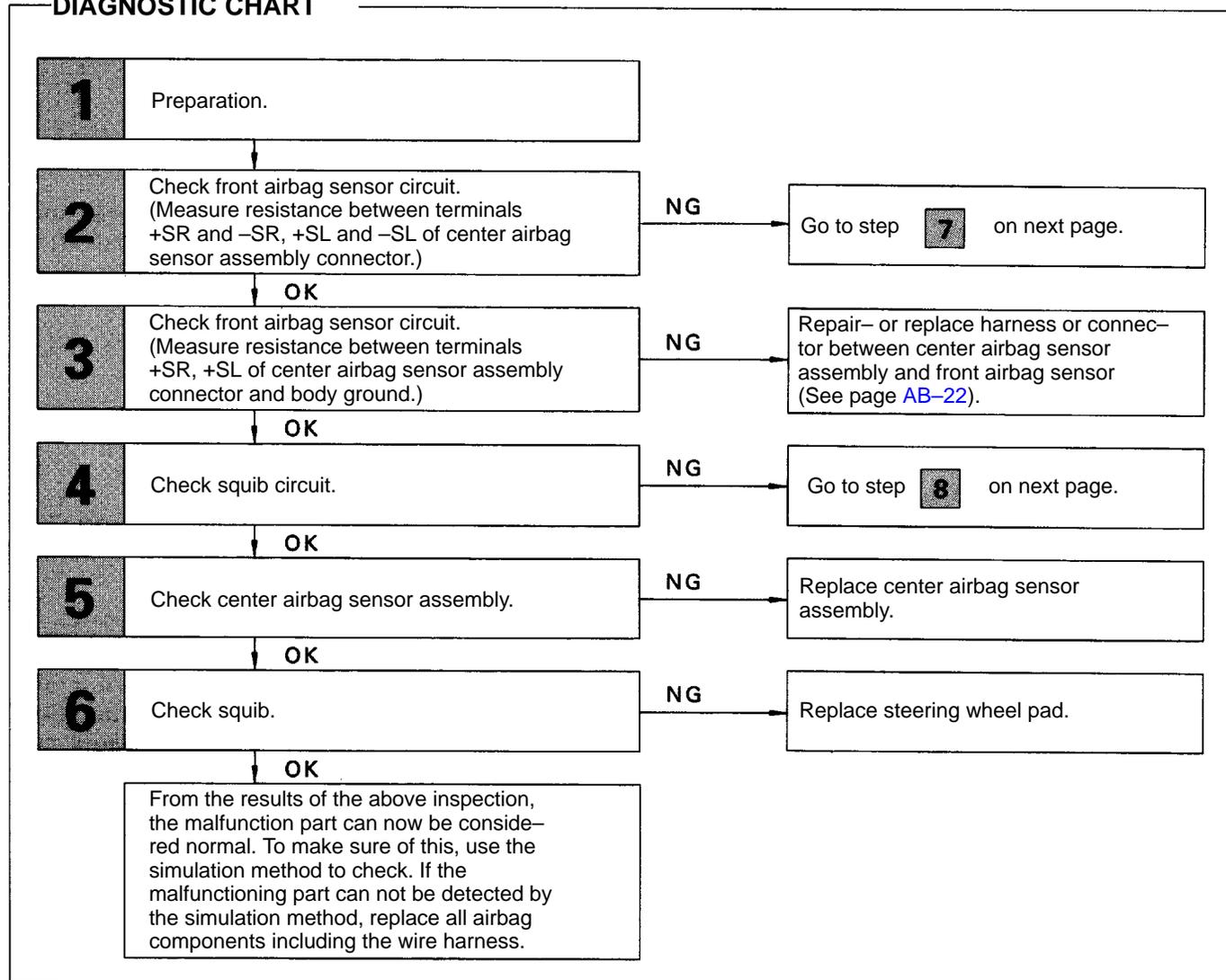
CIRCUIT DESCRIPTION

The squib circuit consists of the center airbag sensor assembly, spiral cable and the steering wheel pad (squib). It causes the airbag to deploy when the airbag deployment conditions are satisfied. The front airbag sensor detects the deceleration force in a frontal collision and is located in the radiator upper support.

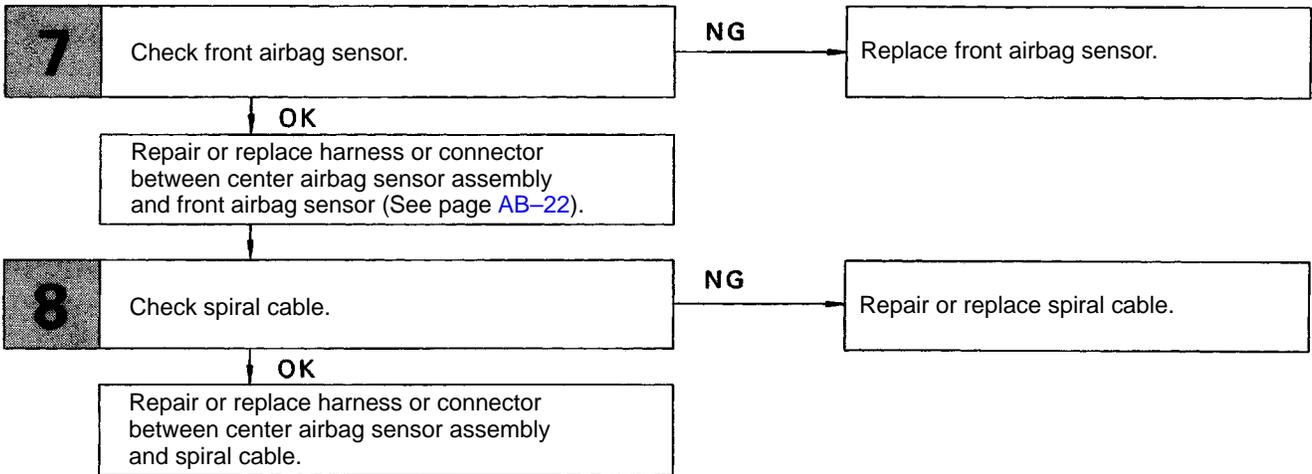
For details of the function of each component, see FUNCTION OF COMPONENTS on page AB-7. Diagnostic code 11 is recorded when occurrence of ground short is detected in the squib circuit or front airbag sensor circuit. If the malfunctioning part can not be detected by following the diagnostic chart, replace all airbag components including the wire harness.

Code No.	Diagnosis
11	<ul style="list-style-type: none"> • Short circuit in squib wire harness (to ground). • Squib malfunction. • Short circuit in front airbag sensor +S wire harness (to ground). • Front airbag sensor malfunction. • Short circuit between +S wire harness and -S wire harness of front airbag sensor. • Spiral cable malfunction. • Center airbag sensor assembly malfunction.

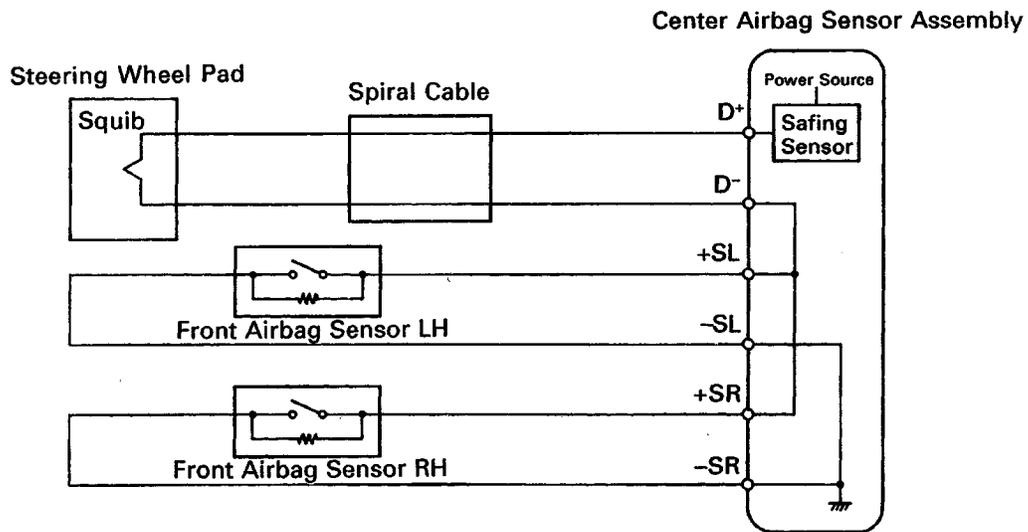
DIAGNOSTIC CHART



DIAGNOSTIC CHART (Cont'd)



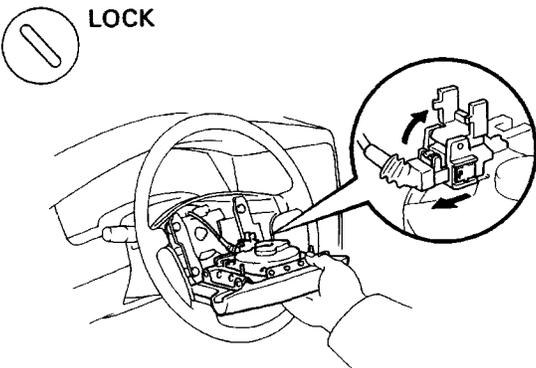
WIRING DIAGRAM



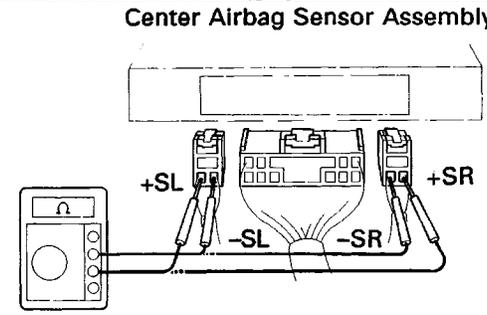
AB0190

INSPECTION PROCEDURES

P Preparation **C** Check

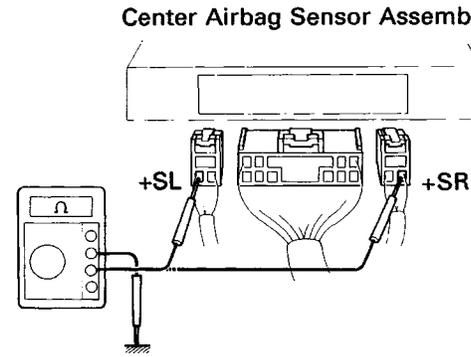
1	Preparation.
 <p>LOCK</p> <p>AB0117 AB0267</p>	<p>P (1) Disconnect battery negative (-) terminal cable, and wait at least 20 seconds. (2) Remove steering wheel pad (See page AB-15).</p> <p>Caution When storing steering wheel pad, keep upper surface of other pad facing upward.</p>



2	Check front airbag sensor circuit. (Measure resistance between terminals +SR and -SR, +SL and -SL of center airbag sensor assembly connector.)
<p style="text-align: center;">Center Airbag Sensor Assembly</p>  <p>AB0097</p>	<p>P Disconnect center airbag sensor assembly connectors.</p> <p>C Measure resistance between terminals +SR and -SR, +SL and -SL of harness side connector of center airbag sensor assembly.</p> <p>OK Resistance: 755Ω - 885Ω</p>



NG Go to Step **7**.

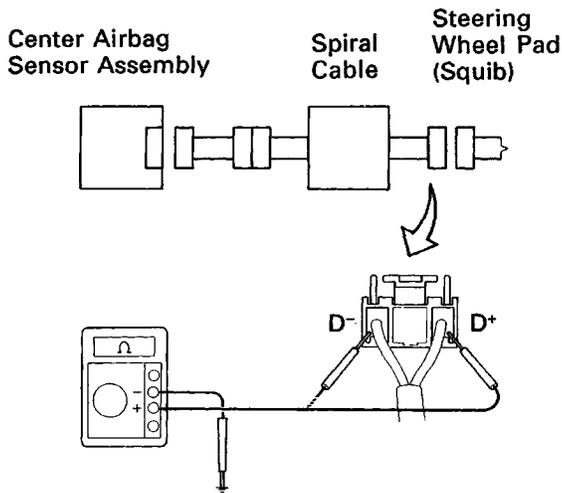
3	Check front airbag sensor circuit (Measure -resistance between terminals +SR, +SL of center airbag sensor assembly connector and body ground.)
<p style="text-align: center;">Center Airbag Sensor Assembly</p>  <p>AB0096</p>	<p>C Measure resistance between terminals +SR, +SL of harness side connector of center airbag sensor assembly.</p> <p>OK Resistance: ∞ Ω</p>



NG Repair or replace harness or connector between center airbag sensor assembly and front airbag sensor (See page AB-22).

4

Check squib circuit.



AB0072
AB0070

P Measure resistance between D+, D- on spiral cable side of connector between spiral cable and steering wheel pad and body ground.

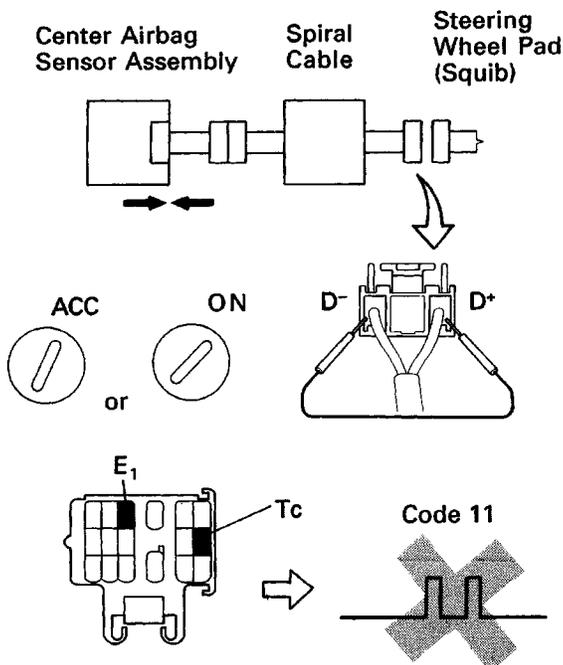
OK Resistance: $\infty \Omega$

OK

NG Go to Step **8**.

3

Check center airbag sensor assembly.



AB0074
AB0069
AB0118 AB0119
SH-18-1 AB0057

P (1) Connect connectors to center airbag sensor assembly.
(2) Using a service wire, connect D+ and D- on spiral cable side of connector between spiral cable and steering wheel pad.
(3) Connect negative H terminal cable to battery, and wait at least 2 seconds.

C (1) Turn ignition switch ACC or ON and wait at least 20 seconds.
(2) Using SST, connect terminals Tc and E1 of check connector.
SST 09843-18020
(3) Check diagnostic code.

OK Diagnostic code 11 is not output.

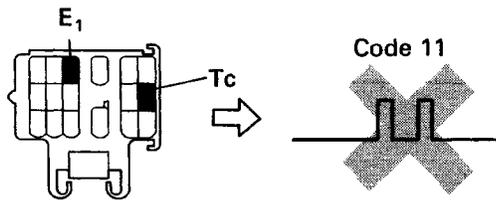
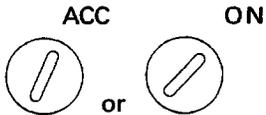
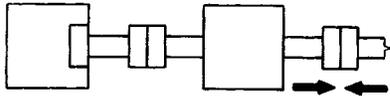
Hint Codes other than code 11 may be output at this time, but this is not relevant to this check.

OK

NG Replace center airbag sensor assembly.

6 Check Squib.

Center Airbag Sensor Assembly Spiral Cable Steering Wheel Pad (Squib)



AB0075
AB0118 AB0119
SH-18-1 AB0057

- P**
- Turn ignition switch LOCK.
 - Disconnect battery negative (-) terminal cable, and wait at least 20 seconds.
 - Connect steering wheel pad (squib) connector.
 - Connect negative H terminal cable to battery, and wait at least 2 seconds.

- C**
- Turn ignition switch ACC or ON, and wait at least 20 seconds.
 - Using SST, connect terminals Tc and E1 of check connector.
SST 09843-18020
 - Check diagnostic code.

OK Diagnostic code 11 is not output.

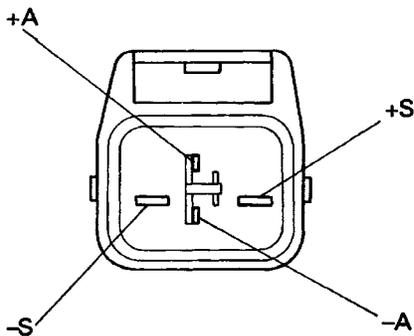
Hint Codes other than code 11 may be output at this time, but this is not relevant to this check.

OK

NG Replace steering wheel pad.

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check. If the malfunctioning part can not be detected by the simulation method, replace all airbag components including the wire harness.

7 Check front airbag sensor.



AB0034

- P** Disconnect front airbag sensor connector.
C Measure resistance between each terminal of front airbag sensor.

OK

Terminal	Resistance
(+) S- (+) A	755Ω - 885Ω
(+) S- (-) S	∞
(-) S- (-) A	Less than 1Ω

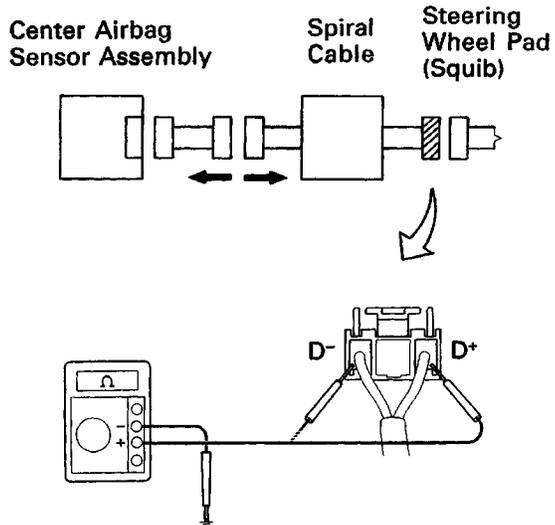
Notice

- Do not touch ohmmeter probes strongly against terminals of front airbag sensor.
- Make sure the front airbag sensor connector is properly connected.

OK

NG Replace front airbag sensor.

Repair or replace harness or connector between center airbag sensor assembly and front airbag sensor (See page AB-22).

8**Check spiral cable.**AB0071
AB0070

- P** Disconnect connector between center airbag sensor assembly and spiral cable.
- C** Measure resistance between D+, D- on spiral cable side of connector between spiral cable and steering wheel pad and body ground.
- OK** Resistance: $\infty \Omega$

OK**NG**

Repair or replace spiral cable.

Repair or replace harness or connector between center airbag sensor assembly and spiral cable.