

Diag. Code 12 Short in Squib Circuit or Front Airbag Sensor Circuit (to +B)

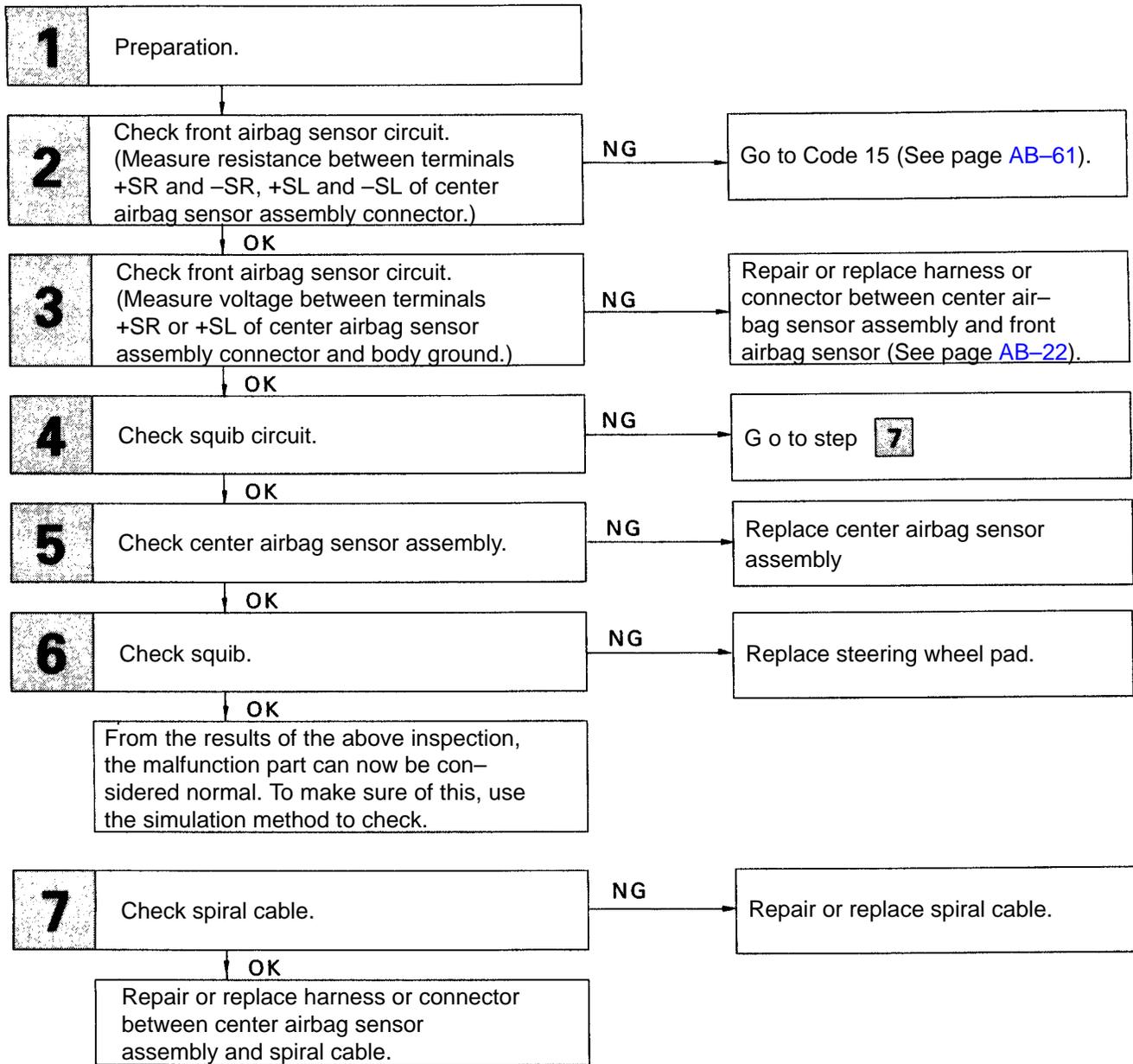
CIRCUIT DESCRIPTION

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.

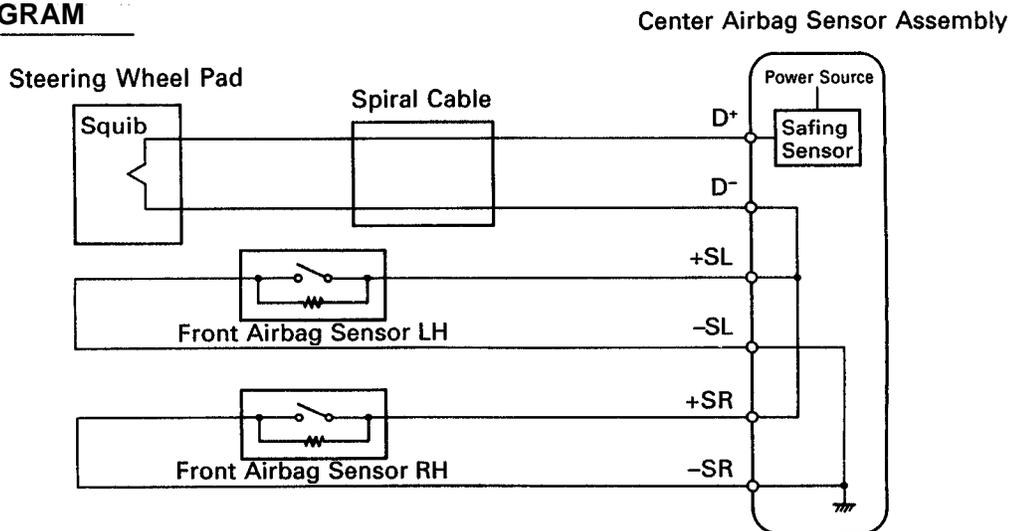
For details of the function of each component, see FUNCTION OF COMPONENTS on page [AB-7](#). Diagnostic code 12 is recorded when a +B short is detected in the squib circuit or front airbag sensor circuit.

Code No.	Diagnosis
12	<ul style="list-style-type: none">• Short circuit in squib wire harness (to +B).• Squib malfunction.• Short circuit in front airbag sensor +S wire harness (to +B).• open circuit in RH and LH front airbag sensor harness.• Spiral cable malfunction.• Center airbag sensor assembly malfunction.

DIAGNOSTIC CHART

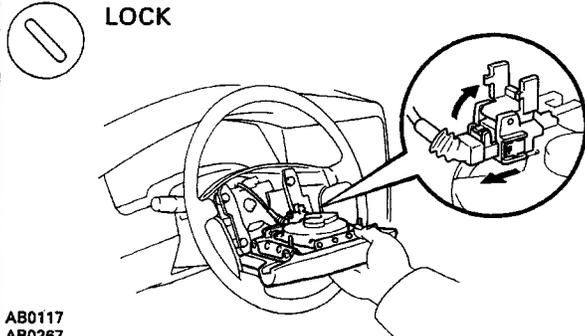


WIRING DIAGRAM

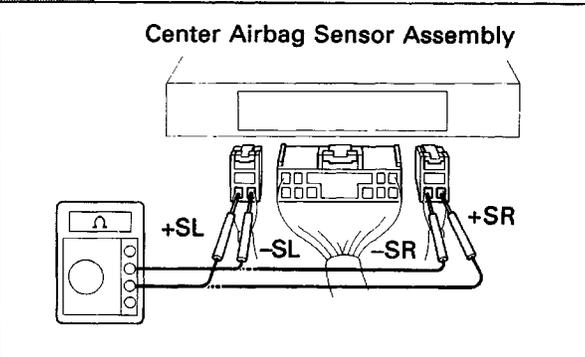


INSPECTION PROCEDURES

P Preparation **C** Check

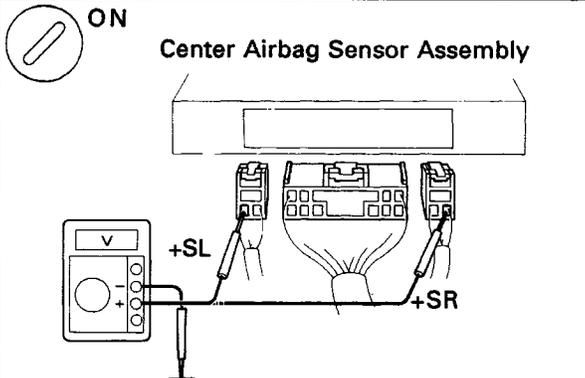
1	Preparation.
 <p>LOCK</p> <p>AB0117 AB0267</p>	<p>P (1) Disconnect battery negative (-) terminal cable, and wait at least 20 seconds. (2) Remove steering wheel pad (See page AB-15).</p> <p>Caution When storing steering wheel pad, keep upper surface of other pad facing upward.</p>



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: 755 Ω - 885 Ω</p>



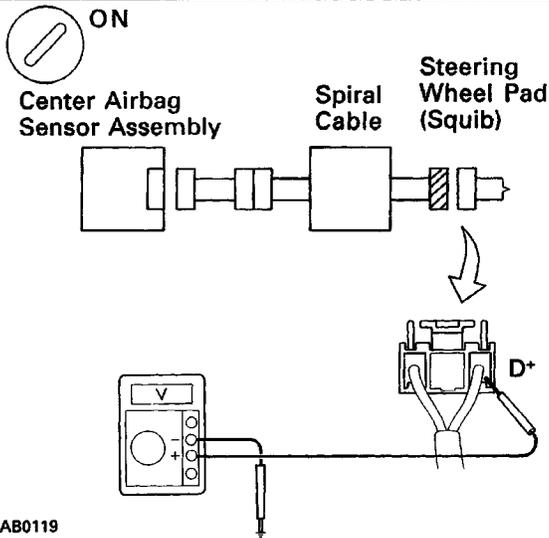
NG Go to Code 15 (See page AB-61).

3	Check front airbag sensor circuit. (Measure resistance between terminal +SR or +SL of center airbag sensor assembly connector and body ground.)
<p style="text-align: center;">Center Airbag Sensor Assembly</p>  <p>AB0119 AB0095</p>	<p>P (1) Connect negative H terminal cable to battery. (2) Turn ignition switch ON.</p> <p>C Measure voltage between terminals +SR or +SL of harness side connector of center airbag sensor assembly and body ground.</p> <p>OK Voltage: 0 V</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.



AB0119
AB0072
AB0067

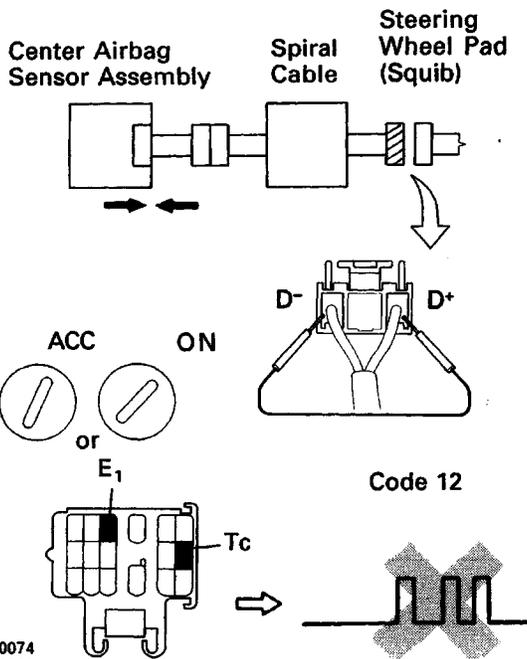
C Measure voltage at D+ on spiral cable side of connector between spiral cable and steering wheel pad.

OK Voltage: 0 V

OK

NG Go to Step **7**.

3 Check center airbag sensor assembly.



AB0074
AB0069
AB0118 AB0119
SH-18-1 F1389

- P**
- (1) Turn ignition switch LOCK.
 - (2) Disconnect negative (-) terminal cable from battery.
 - (3) Connect connectors to center airbag sensor assembly.
 - (4) Using a service wire, connect D+ and D- on spiral cable side of connector between spiral cable and steering wheel pad.
 - (5) Connect negative (-) 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 E_i of check connector.
SST 09843-18020
 - (3) Check diagnostic code.

OK Diagnostic code 12 is not output.

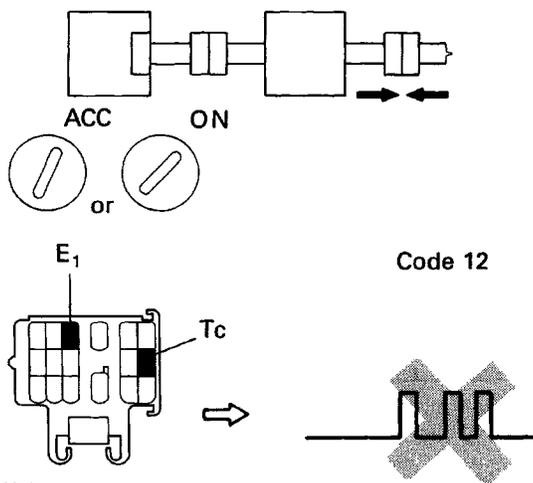
Hint Codes other than code 12 may be output at this time, but this is not relevant to this check.

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 FI1389

- P** (1) Turn ignition switch LOCK.
- (2) Disconnect battery negative (-) terminal cable, and wait at least 20 seconds.
- (3) Connect steering wheel pad (squib) connector.
- (4) Connect negative (-) 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 12 is not output.

Hint Codes other than code 12 may be output at this time, but this is not relevant to this check.

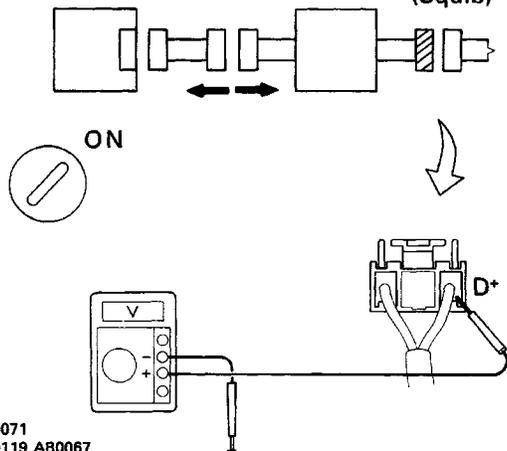
OK

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.

8 Check spiral cable.

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



AB0071
AB0119 AB0067

- P** (1) Turn ignition switch LOCK.
- (2) Disconnect connector between center airbag sensor assembly and spiral cable.
- (3) Turn ignition switch ON.

- C** Measure voltage at D+ on spiral cable side of connector between spiral cable and steering wheel pad.

OK Voltage: 0 V

OK

NG Repair or replace spiral cable.

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