

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

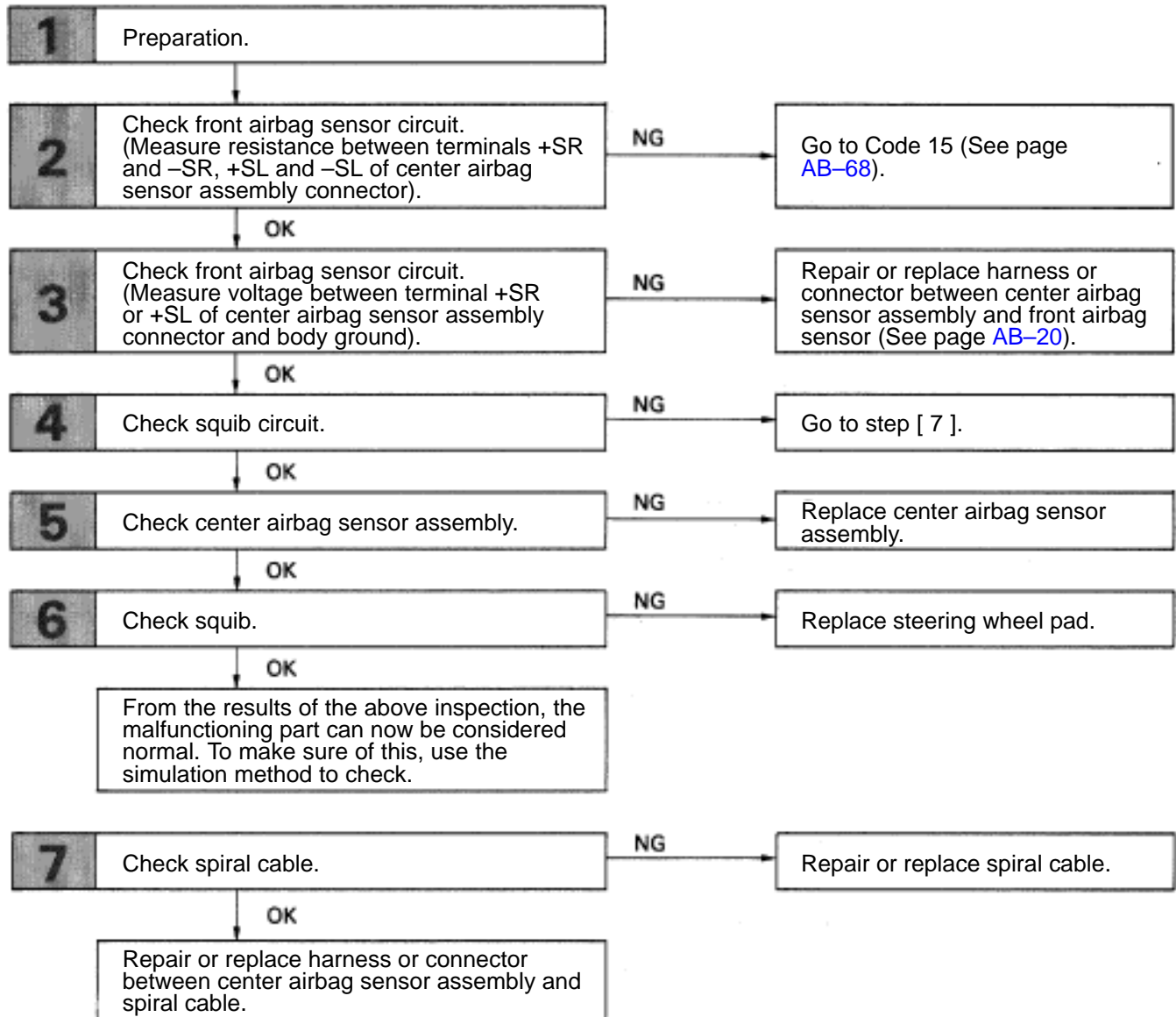
The squib circuit consists of the center airbag sensor assembly, spiral cable and the steering wheel pad (squib). It causes the airbag to deploy when the airbag deployment conditions are satisfied.

The front airbag sensor detects the deceleration force in a frontal collision and is located in the front fender on the left and right sides.

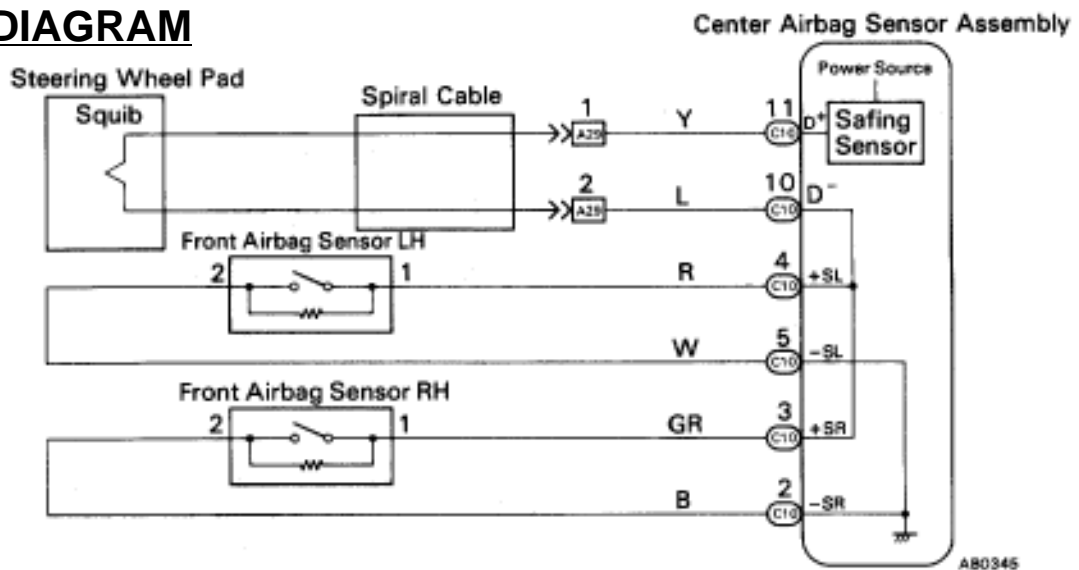
For details of the function of each component, see FUNCTION OF COMPONENTS on page [AB-5](#). Diagnostic code 12 is recorded when a +B short is detected in the squib circuit or the front airbag sensor circuit.

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



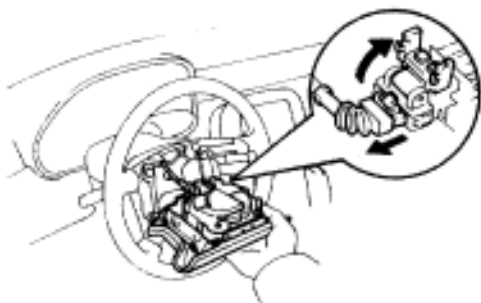
INSPECTION PROCEDURE

1

Preparation.



LOCK

AB0117
AB0340

P

- (1) Disconnect battery negative (–) terminal cable, and wait at least 20 seconds.
- (2) Remove steering wheel pad (See page AB-14).

Caution

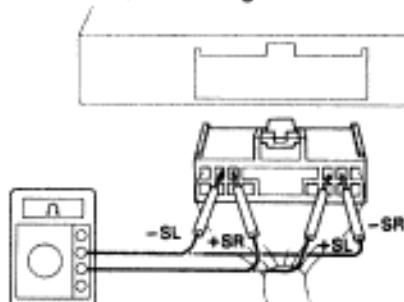
When storing steering wheel pad, keep upper surface of the pad facing upward.



2

Check front airbag sensor circuit. (Measure resistance between terminals +SR and –SR, +SL and –SL of center airbag sensor assembly connector.)

Center Airbag Sensor Assembly



AB0032

P

Disconnect center airbag sensor assembly connector.

C

Measure resistance between terminals +SR and –SR, +SL and –SL of harness side connector of center airbag sensor assembly.

OK

Resistance: 755 Ω – 855 Ω

OK

NG

Go to Code 15 (See page AB-68).

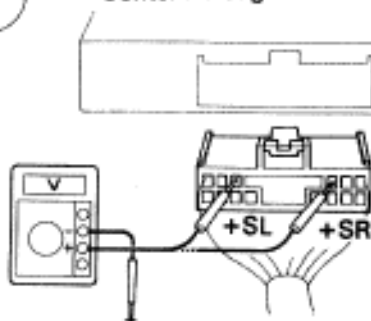
3

Check front airbag sensor circuit. (Measure voltage between terminal +SR or +SL of center airbag sensor assembly connector and body ground.)



ON

Center Airbag Sensor Assembly

AB0119
AB0036

P

- (1) Connect negative (–) terminal cable to battery.
- (2) Turn ignition switch ON.

C

Measure voltage between terminals +SR or +SL of harness side connector of center airbag sensor assembly and body ground.

OK

Resistance: 1 V

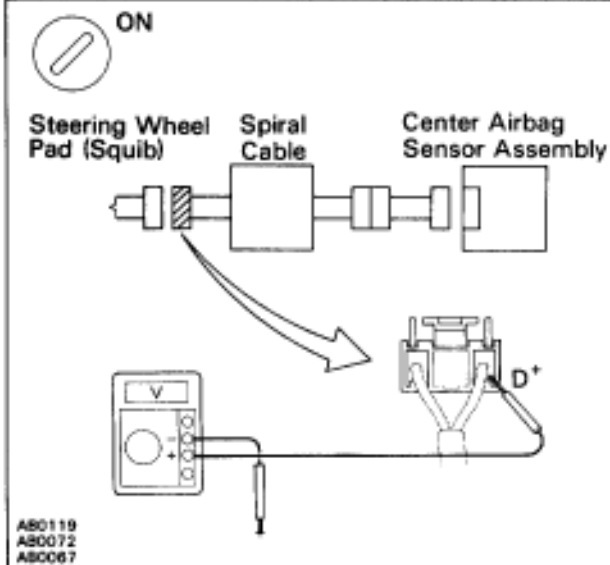
OK

NG

Repair or replace harness or connector between center airbag sensor assembly and front airbag sensor (See page AB-20).

4

Check squib circuit.



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

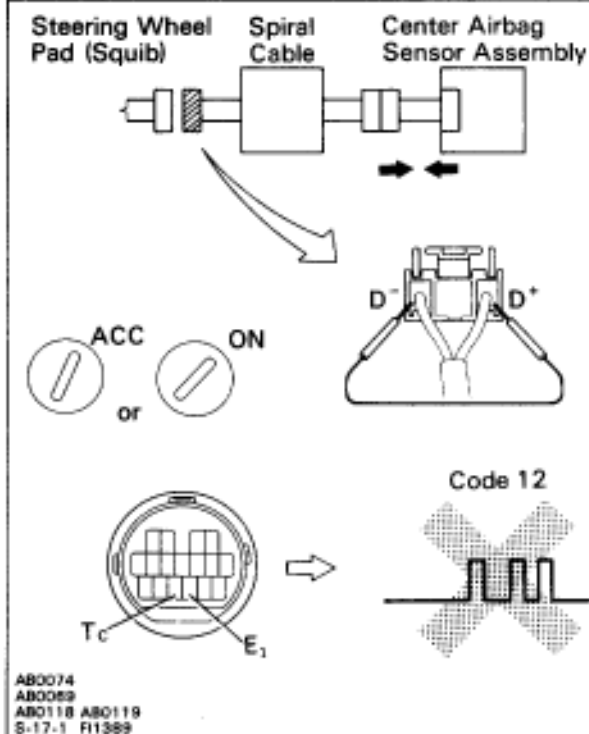
OK Resistance: 1 V

OK

NG Go to step [7].

5

Check center airbag sensor assembly.



- P**
- (1) Turn ignition switch LOCK.
 - (2) Disconnect negative (–) terminal cable from battery.
 - (3) Connect connector 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 E₁ of TDCL.
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.

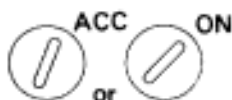
OK

NG Replace center airbag sensor assembly.

6

Check squib.

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



Code 12



AB0075
AB0118 AB0119
S-17-1 FI1389

OK

- 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 TDCL.
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.

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.

7

Check spiral cable.

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



AB0071
AB0118 AB0067

OK

- 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: Below 1 V

NG

Repair or replace spiral cable.

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

MEMO