

DTC	54	Open in P Squib Circuit
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CIRCUIT DESCRIPTION

The P squib circuit consists of the airbag sensor assembly and front passenger airbag assembly. It causes the airbag to deploy when the airbag deployment conditions are satisfied.

For details of the function of each components, see FUNCTION OF COMPONENTS on page [DI-211](#)

DTC 54 is recorded when an open is detected in the P squib circuit.

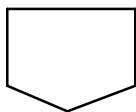
DTC No.	DTC Detecting Condition	Trouble Area
54	<ul style="list-style-type: none"> • Open circuit in P⁺ wire harness or P⁻ wire harness of squib • P squib malfunction • Airbag sensor assembly malfunction 	<ul style="list-style-type: none"> • Front passenger airbag assembly (P squib) • Airbag sensor assembly • Wire harness

WIRING DIAGRAM

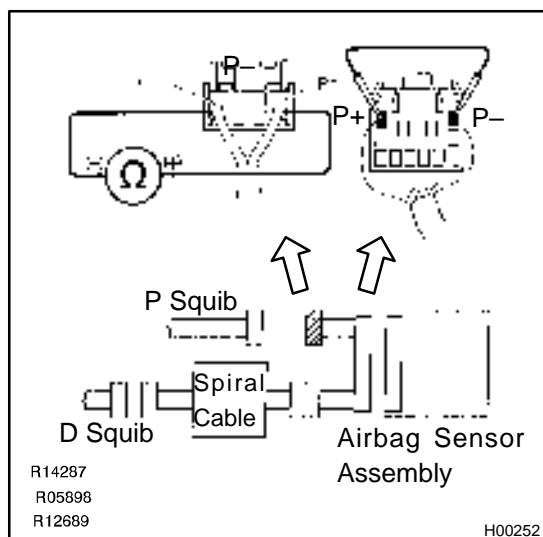
Refer to page [DI-245](#) for the WIRING DIAGRAM.

INSPECTION PROCEDURE

1	Preparation. (See step on page DI-252)
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2	Check P squib circuit.
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PREPARATION:

Using a service wire, connect P⁺ and P⁻ on airbag sensor assembly connector.

CHECK:

For the connector (on the airbag sensor assembly side) between the airbag sensor assembly and front passenger airbag assembly measure the resistance between P⁺ and P⁻.

OK:

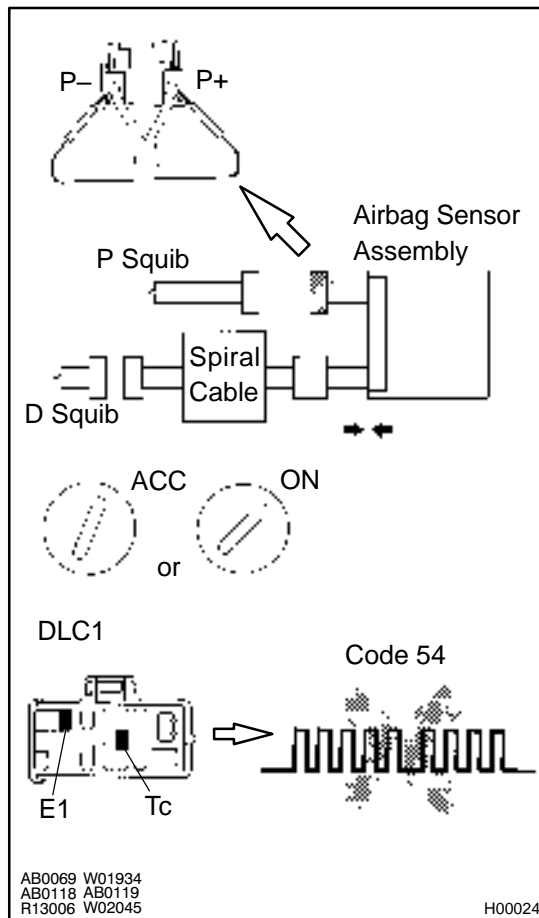
Resistance: Below 1 Ω

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Repair or replace harness or connector between airbag sensor assembly and front passenger airbag assembly.

OK

3 Check airbag sensor assembly.



PREPARATION:

- Connect connector to airbag sensor assembly.
- Using a service wire, connect P+ and P- on airbag sensor assembly side of connector between airbag sensor assembly and front passenger airbag assembly.
- Connect negative (-) terminal cable to battery, and wait at least 2 seconds.

CHECK:

- Turn ignition switch to ACC or ON and wait at least 20 seconds.
- Clear malfunction code stored in memory.
(See page [DI-252](#))
- Turn ignition switch to LOCK, and wait at least 20 seconds.
- Turn ignition switch to ACC or ON, and wait at least 20 seconds.
- Using SST, connect terminal Tc and E1 of DLC1.
SST 09843-18020
- Check DTC.

OK:

DTC 54 is not output.

HINT:

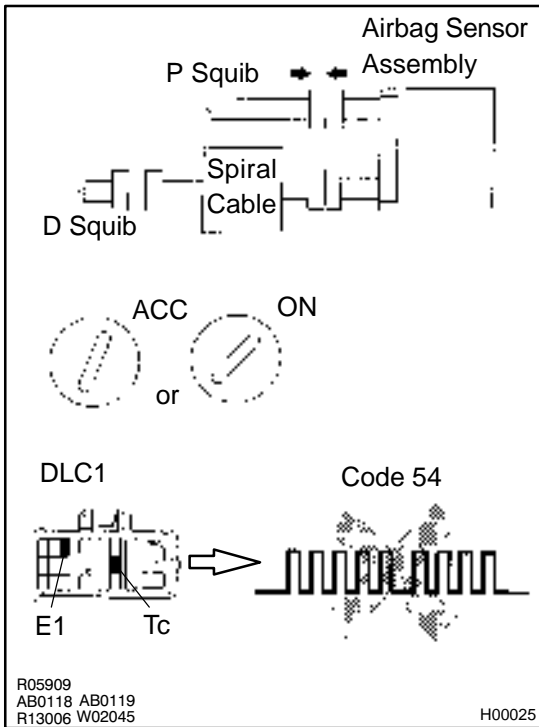
Codes other than code 54 may be output at this time, but they are not relevant to this check.

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Replace airbag sensor assembly.

OK

4 Check P squib.



PREPARATION:

- Turn ignition switch to LOCK.
- Disconnect negative (–) terminal cable from the battery, and wait at least 90 seconds.
- Connect front passenger airbag assembly connector.
- Connect negative (–) terminal cable to battery, and wait at least 2 seconds.

CHECK:

- Turn ignition switch to ACC or ON and wait at least 20 seconds.
- Clear malfunction code stored in memory.
(See page [DI-252](#))
- Turn ignition switch to LOCK, and wait at least 20 seconds.
- Turn ignition switch to ACC or ON, and wait at least 20 seconds.
- Using SST, connect terminals Tc and E1 of DLC1.
SST 09843–18020
- Check DTC.

OK:

DTC 54 is not output.

HINT:

Codes other than code 54 may be output at this time, but they are not relevant to this check.

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Replace front passenger airbag assembly.

OK

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.