

DTC	RrDEF, FRS	Pressure Switch Circuit
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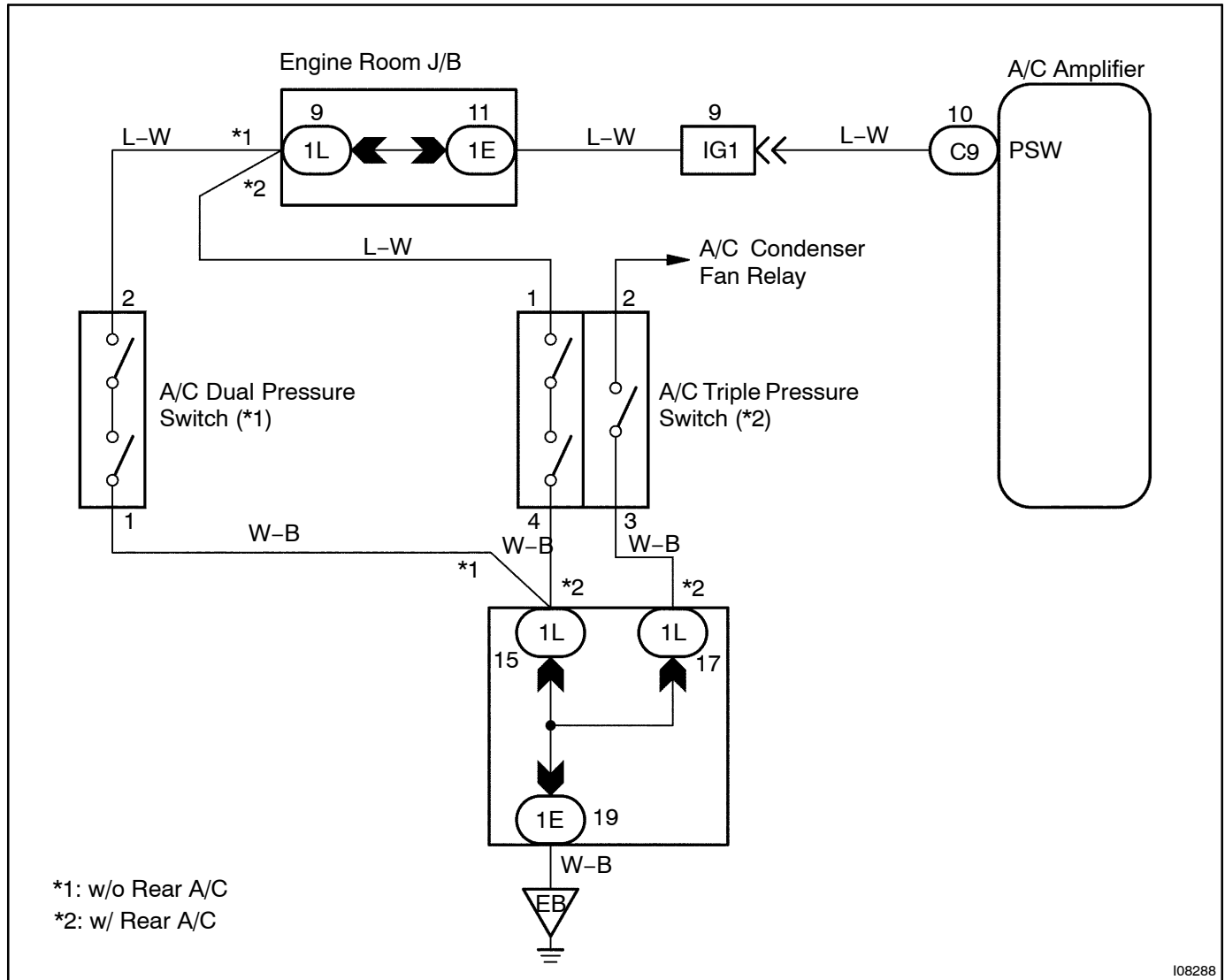
DTC	23	Pressure Switch Circuit
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CIRCUIT DESCRIPTION

The pressure switch sends the appropriate signals to the A/C amplifier when the A/C refrigerant pressure drops too low or rises too high. When the A/C amplifier receives these signals, it outputs signals via the A/C amplifier to switch OFF the compressor relay and turns the magnetic clutch OFF.

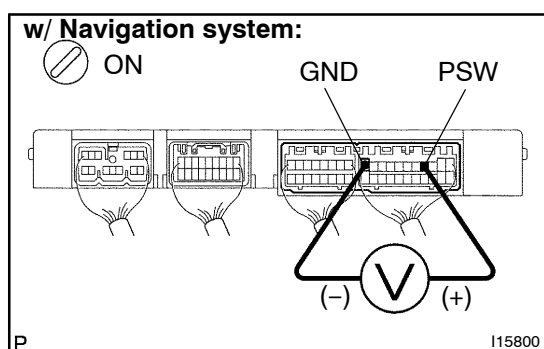
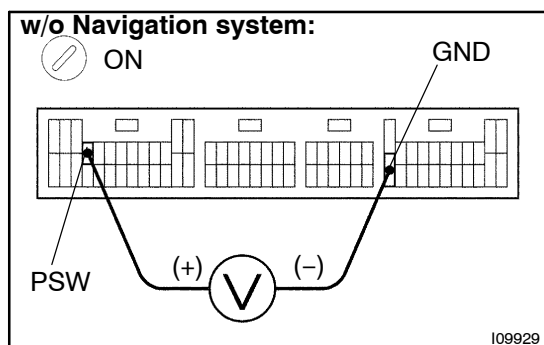
Blinking light	Detection Item	Trouble Area
RrDEF FRS	• Open in pressure sensor circuit. • Abnormal refrigerant pressure. below 196 kPa (2.0 kg/cm², 28 psi) over 3,140 kPa (32.0 kgf/cm², 455 psi)	• Pressure switch • Harness or connector between pressure switch and A/C amplifier • Refrigerant pipe line • A/C amplifier
DTC No.	Detection Item	Trouble Area
23	• Open in pressure sensor circuit. • Abnormal refrigerant pressure. below 196 kPa (2.0 kg/cm², 28 psi) over 3,140 kPa (32.0 kgf/cm², 455 psi)	• Pressure switch • Harness or connector between pressure switch and A/C amplifier • Refrigerant pipe line • A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check voltage between terminals PSW and GND of A/C amplifier.

**PREPARATION:**

Install the manifold gauge set.

CHECK:

- Turn ignition switch to ON.
- Check voltage between terminal PSW of A/C amplifier connector and body ground when refrigerant pressure is changed.

OK:

The voltage changes with refrigerant pressure, as shown in the diagram below.

Low Pressure Cut Side	Reference: High Pressure Cut Side
ON (0V) 196 kPa OFF (12V)	ON (0V) 2,550 kPa OFF (12V)

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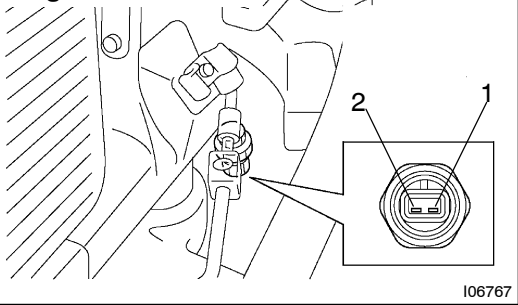
Go to step 2.

OK

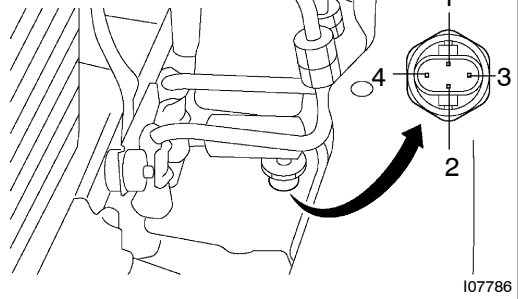
Proceed to next circuit inspection shown on problem symptoms table ([See page DI-130](#)). However, if RrDEF and FRS indicator light is light up (or DTC 23 is displayed), check and replace amplifier.

2 Check pressure switch.

Single A/C models:



Dual A/C models:



PREPARATION:

Disconnect pressure switch connector.

CHECK:

- (a) Turn ignition switch to ON.
- (b) Single A/C models:
Check continuity between terminals 1 and 2 of pressure switch when refrigerant pressure is changed.
- (c) Dual A/C models:
Check continuity between terminals 1 and 4 of pressure switch when refrigerant pressure is changed.

OK:

The continuity changes with refrigerant pressure as shown below.

Low Pressure Cut Side	Reference : High Pressure Cut Side
ON (continuity) 196 kPa → 211 kPa	ON (continuity) 2,550 kPa → 3,140 kPa
OFF (continuity)	OFF (continuity)

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Replace pressure switch.

OK

3 Check harness and connector between A/C amplifier and pressure switch
(See page IN-34).

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Repair or replace harness or connector.

OK

Check and replace A/C amplifier.