DI9GX–01

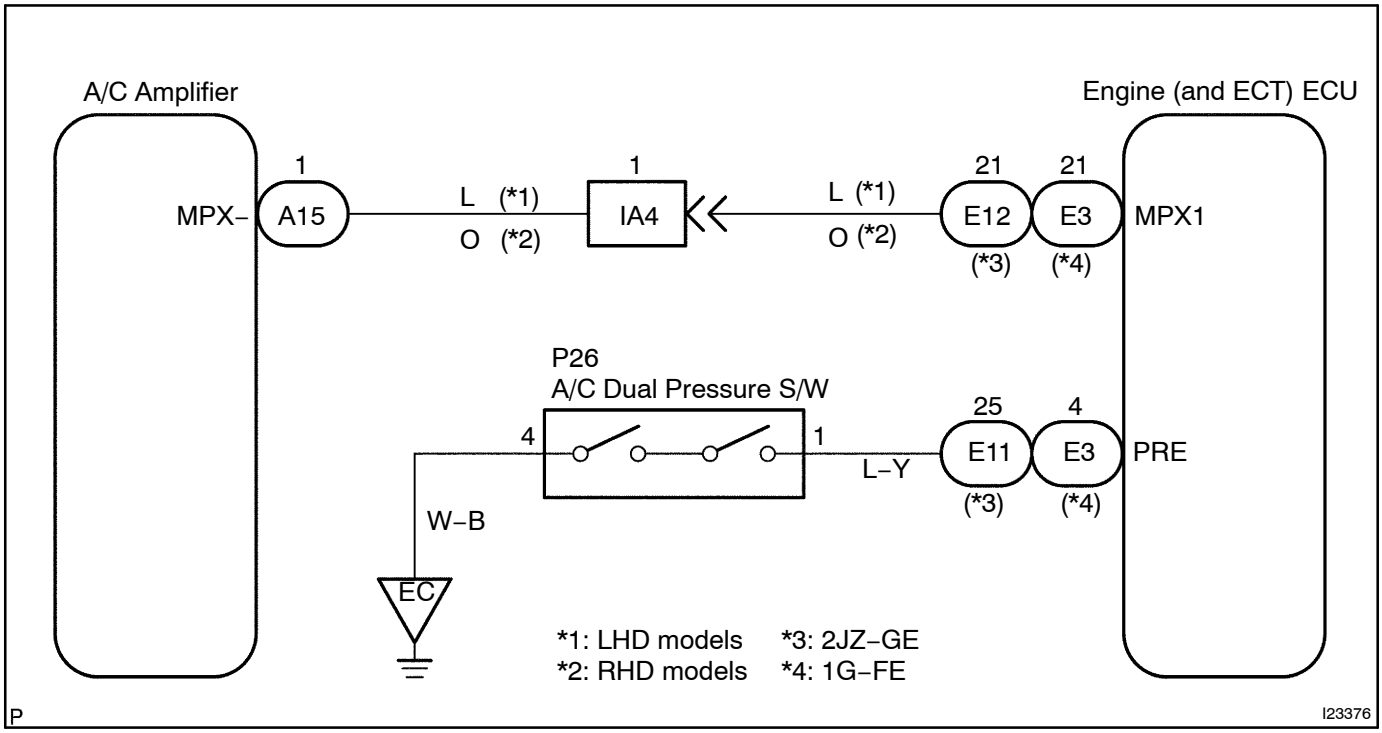
DTC	B1423	Pressure Switch Circuit

CIRCUIT DESCRIPTION

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

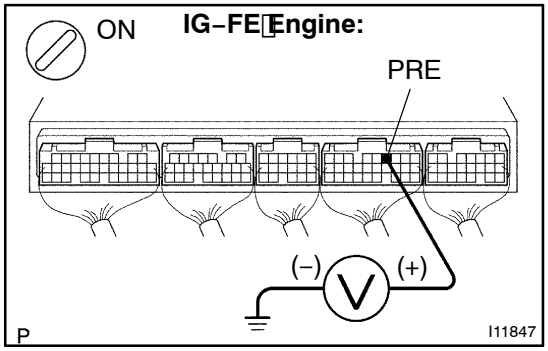
DTC No.	Detection Item	Trouble Area
B1423	• Open in pressure sensor circuit. • Abnormal refrigerant pressure. below 181 kPa (2.0 kg/cm^2, 28 psi) over 3,140 kPa (32.0 kgf/cm^2, 455 psi)	• Pressure switch. • Harness or connector between pressure switch and engine (and ECT) ECU • Harness or connector engine (and ECT) ECU and A/C amplifier • Refrigerant pipe line. • Engine (and ECT) ECU

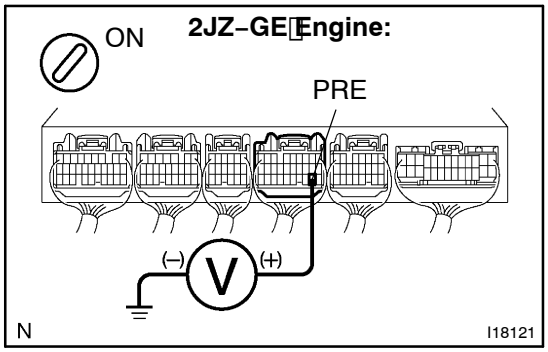
WIRING DIAGRAM



INSPECTION PROCEDURE

1	Check voltage between terminal PRE of engine (and ECT) ECU and body ground.





PREPARATION:

Install the manifold gauge set.

CHECK:

(a) Turn ignition switch to ON.

(b) Check voltage between terminal PRE of engine (and ECT) ECU connector and body ground when refrigerant pressure is changed.

OK:

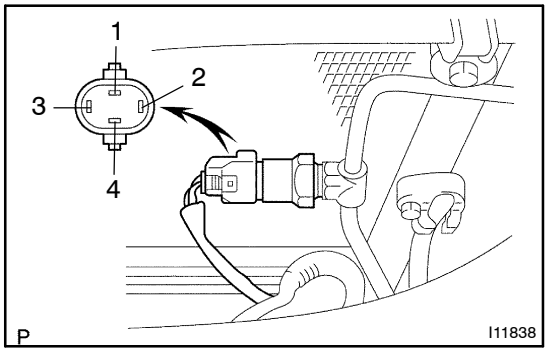
The voltage changes with refrigerant pressure, as shown in the diagram below.

Low Pressure Cut Side	Reference: High Pressure Cut Side
ON (0V) 225 kPa 196 kPa OFF (12V)	ON (0V) 2,550 kPa 3,140 kPa OFF (12V)

OK → **Proceed to next circuit inspection shown on problem symptoms table (See page DI–612).**

NG

2	Check pressure switch.



PREPARATION:

Disconnect pressure switch connector.

CHECK:

(a) Turn ignition switch to ON.

(b) 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) 211 kPa 181 kPa OFF (continuity)	ON (continuity) 2,550 kPa 3,140 kPa OFF (continuity)

NG → **Repair or replace harness or connector.**

OK

3	Check harness and connector between engine (and ECT) ECU and pressure switch, pressure switch and body ground (See page IN–34).

NG → Repair or replace harness or connector.

OK ↓

4	Check harness and connector between engine (and ECT) ECU and A/C amplifier. (See page IN–34)

NG → Repair or replace harness or connector.

OK ↓

Check and replace engine (and ECT) ECU.