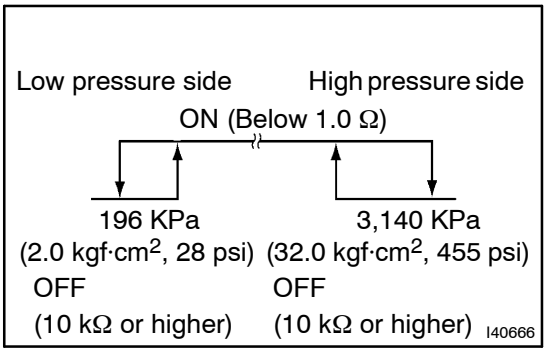
DTC B1423/23 PRESSURE SWITCH CIRCUIT

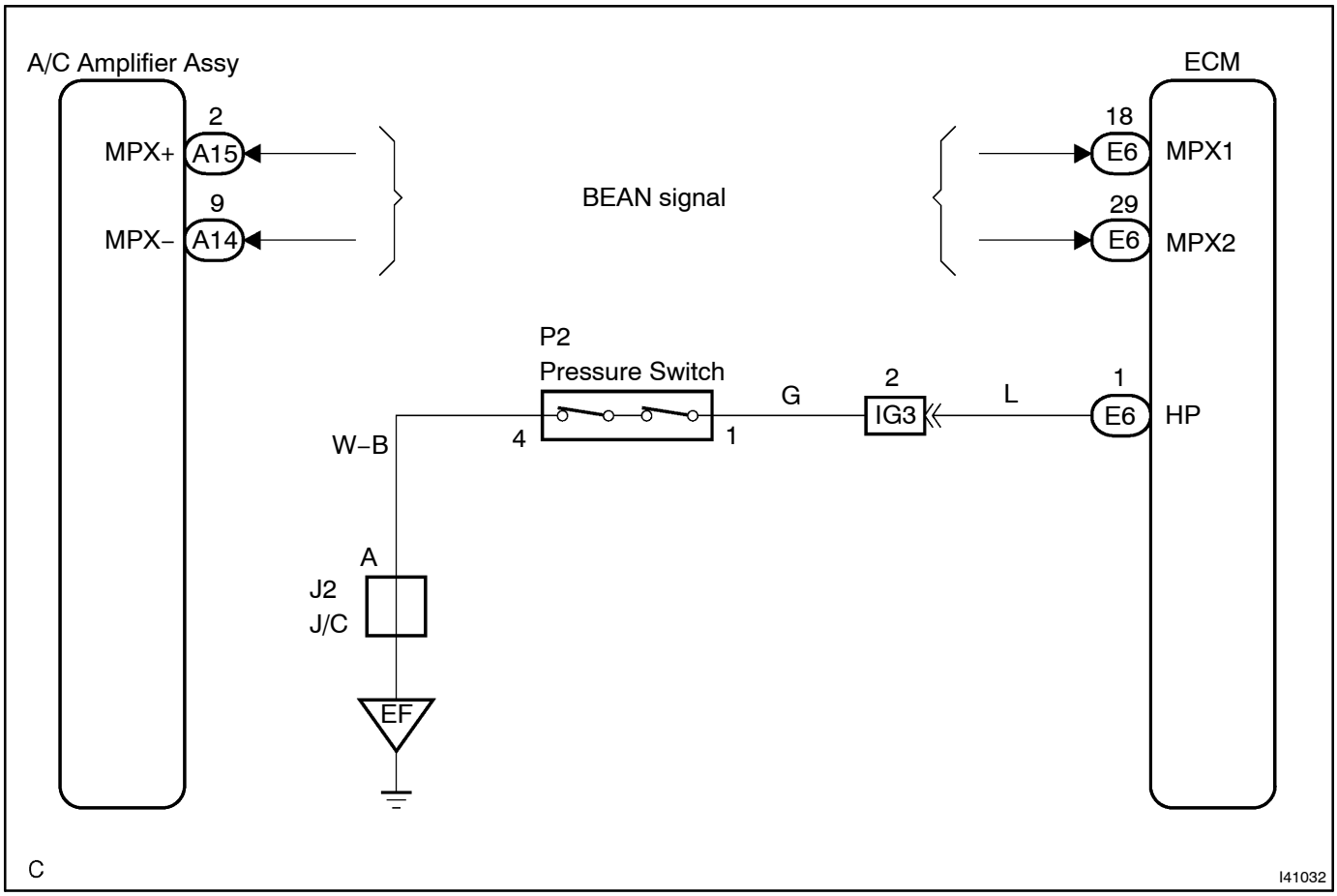
CIRCUIT DESCRIPTION



The ECM and A/C amplifier communicate via BEAN.
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 through the A/C amplifier to turn the magnet clutch relay off and turns the magnetic clutch off.

DTC No.	Detection Item	Trouble Area
B1423/23	• 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 ECM • Multiplex communication circuit • Refrigerant pipe line • ECM • A/C amplifier assy

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT REFRIGERANT PRESSURE

(a) Set the manifold gauge.
(b) Read the manifold gauge pressure when these conditions are established.
Test conditions:
- Temperature at the air inlet with the switch set at RECIRC is 30 to 35˚C (86 to 95˚F)
- Engine running at 1,500 rpm
- Blower speed control switch at ”HI” position
- Temperature control dial at ”COOL” position
- Air conditioning switch ON
- Fully open doors

Standard:
Pressure on high pressure side:
1.37 to 1.57 MPa (13.9 to 16.0 kgf·cm^2, 198 to 228 psi)

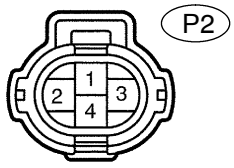
HINT:
If the refrigerant pressure is below 196 KPa (2.0 kgf·cm^2, 28 psi), the refrigerant amount in the air conditioning cycle may have decreased significantly for reasons such as a gas leakage.

NG → **INSPECT AND REPAIR AIR CONDITIONING CYCLE**

OK

2	CHECK AIR CONDITIONING OPERATION

Pressure Switch Connector Wire Harness View:



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(a) Disconnect the pressure switch connector.
(b) Connect terminals 1 and 4 of the connector of the pressure switch on the vehicle wire harness side using a service wire.
(c) Start the engine.
(d) Turn the air conditioning switch on and check that the magnet clutch is turned on.
(e) Check that the magnet clutch is turned off when disconnecting terminals 1 and 4 (that are connected in the prior step).
OK:
Terminals 1 and 4 connected: magnet clutch is on
Terminals 1 and 4 disconnected: magnet clutch is off

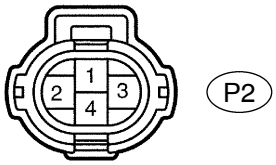
NG → **Go to step 3**

OK

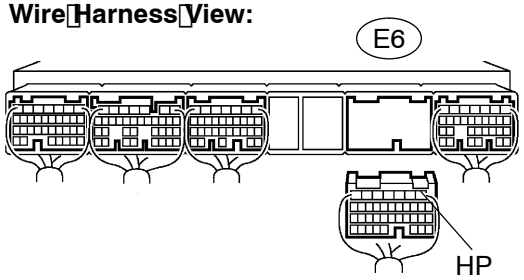
REPLACE PRESSURE SWITCH

3 CHECK HARNESS AND CONNECTOR(PRESSURE SWITCH – ECM)

Pressure Switch Connector Front View:



ECM Connector Wire Harness View:



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(a) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
E6–1 (HP) – P2–1	Always	Below 1 Ω
P2–4 – Body ground	Always	Below 1 Ω
E6–1 (HP) – Body ground	Always	10 kΩ or higher

Result:

NG	A
OK (Checking from the PROBLEM SYMPTOMS TABLE)	B
OK (Checking from the DTC)	C

B → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–435)**

C → **REPLACE AIRCONDITIONER AMPLIFIER ASSY**

A

REPAIR OR REPLACE HARNESS OR CONNECTOR