

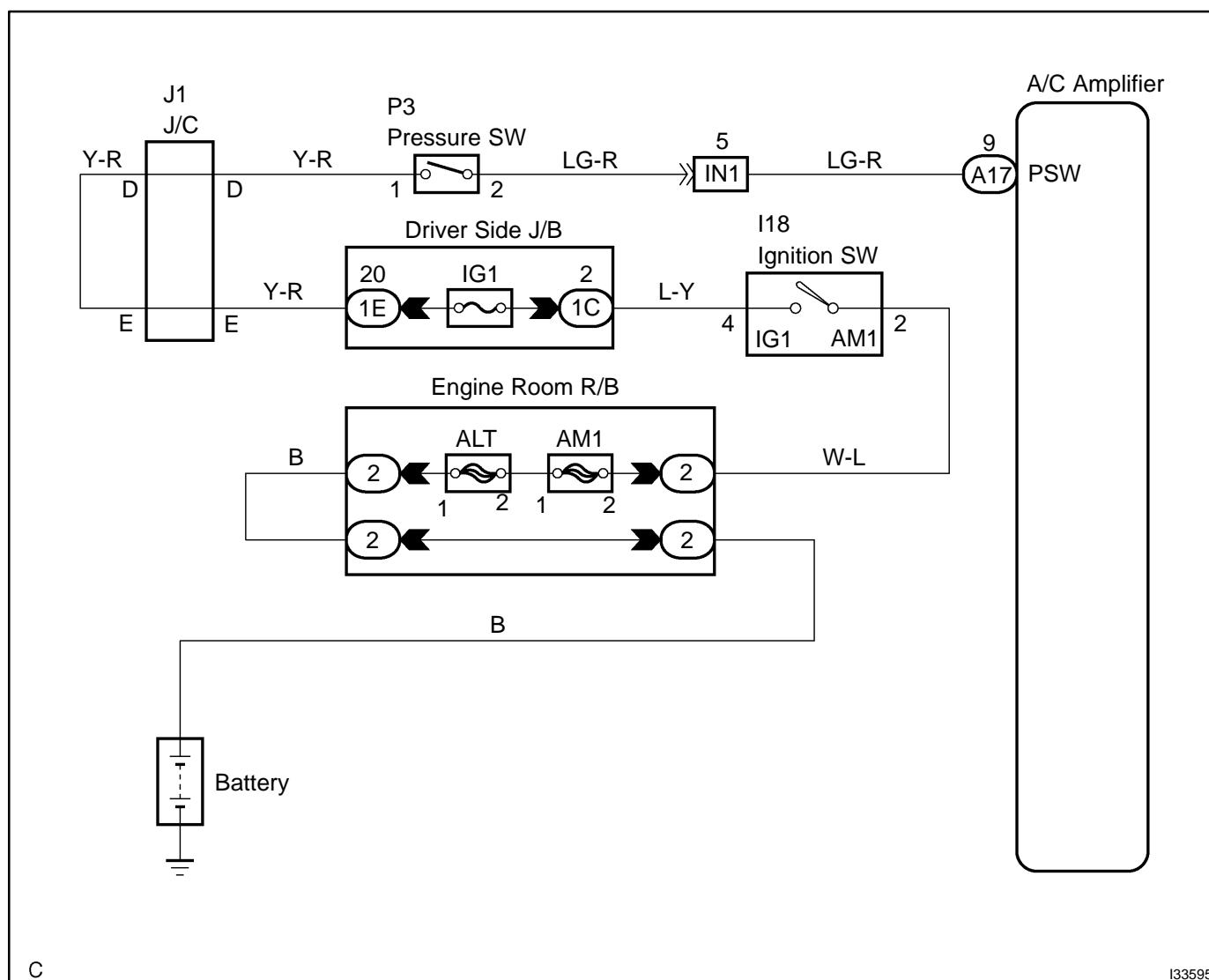
DTC	23	PRESSURE SWITCH CIRCUIT
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## CIRCUIT DESCRIPTION

The pressure switch sends 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 turn OFF the magnetic clutch.

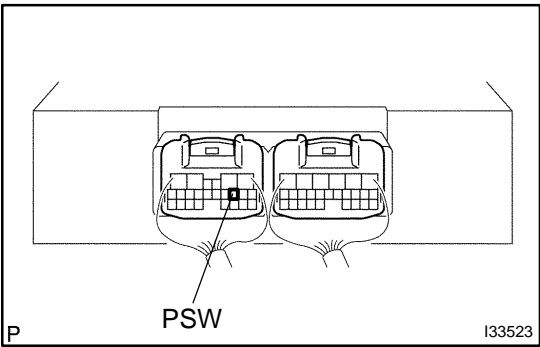
DTC No.	Detection Item	Trouble Area
23	<ul style="list-style-type: none"> <li>Open in pressure sensor circuit.</li> <li>Abnormal refrigerant pressure. below 196 kPa (2.0 kgf/cm<sup>2</sup>, 28 psi) over 3,140 kPa (32.0 kgf/cm<sup>2</sup>, 455 psi)</li> </ul>	<ul style="list-style-type: none"> <li>Pressure switch</li> <li>Harness or connector between pressure switch and A/C amplifier</li> <li>Air conditioning tube assy</li> <li>A/C amplifier</li> </ul>

## WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT AIR CONDITIONING AMPLIFIER(PSW)



- (a) Install the manifold gauge set.
- (b) Remove the A/C amplifier with the connectors being connected.
- (c) Turn the ignition switch to ON.
- (d) Check voltage between terminal PSW of the A/C amplifier assy connector and body ground when refrigerant pressure is changed.
- (e) The voltage changes with refrigerant pressure as shown in the diagram below.

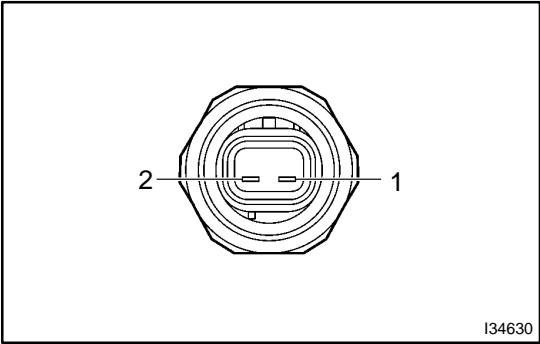
Voltage:

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

OK PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE

NG

2 INSPECT AIR CONDITIONING TUBE ASSY(PRESSURE SW)



- (a) Turn the ignition switch to ON.
- (b) Check continuity between terminal 1 and terminal 2 of the pressure switch when refrigerant pressure is changed.
- (c) Check that continuity changes with refrigerant pressure as shown in the diagram below.

Continuity:

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

NG REPLACE AIR CONDITIONING TUBE ASSY

OK

**3 CHECK HARNESS AND CONNECTOR(BETWEEN PRESSURE SWITCH AND AIR CONDITIONING AMPLIFIER)**

- (a) Check for open and short circuit in the harness and the connector between the pressure switch and the A/C amplifier (See page [01-35](#) ).

**NG****REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****4 CHECK DIAGNOSTIC TROUBLE CODE**

- (a) Start up the DTC check mode.  
(b) Check that DTC 23 is not output again.

**Standard: DTC 23 is not output.****OK****SYSTEM OK****NG****CHECK AND REPLACE AIR CONDITIONING AMPLIFIER**