

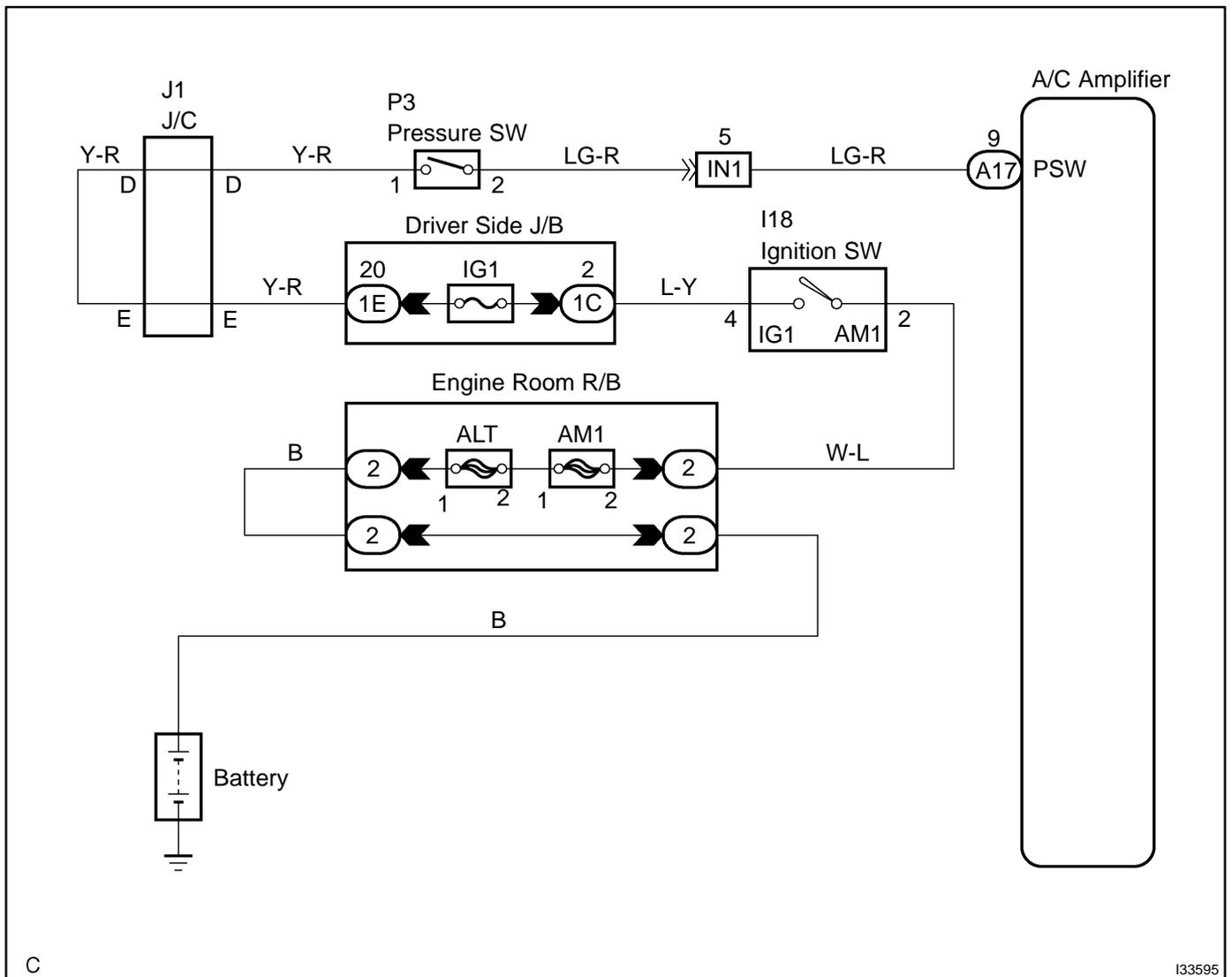
DTC	23	PRESSURE SWITCH CIRCUIT
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CIRCUIT DESCRIPTION

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.

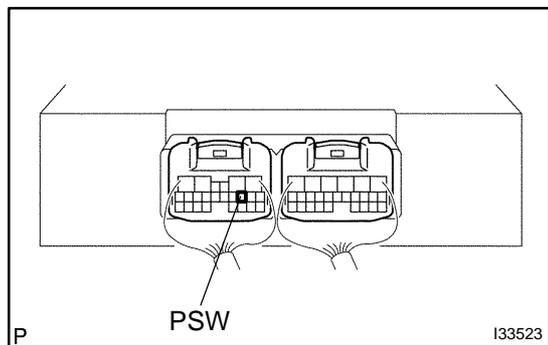
DTC No.	Detection Item	Trouble Area
23	<ul style="list-style-type: none"> • Open in pressure sensor circuit. • Abnormal refrigerant pressure. below 196 kPa (2.0 kgf/cm², 28 psi) over 3,140 kPa (32.0 kgf/cm², 455 psi) 	<ul style="list-style-type: none"> • Pressure switch • Harness or connector between pressure switch and A/C amplifier • Air conditioning tube assy • A/C amplifier

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.

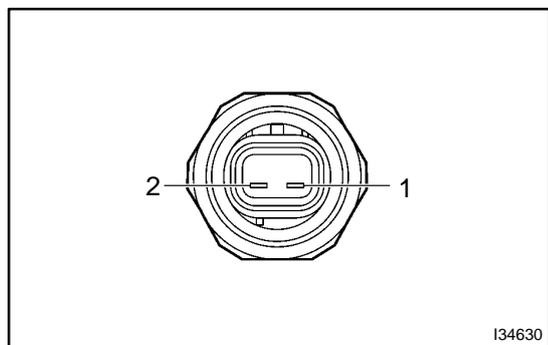
Voltage:

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

OK → PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE

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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 OFF (continuity)

NG → REPLACE AIR CONDITIONING TUBE ASSY

OK

3	CHECK HARNESS AND CONNECTOR(BETWEEN PRESSURE SWITCH AND AIR CONDITIONING AMPLIFIER)
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- (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](#)).

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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4	CHECK DIAGNOSTIC TROUBLE CODE
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- (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

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CHECK AND REPLACE AIR CONDITIONING AMPLIFIER