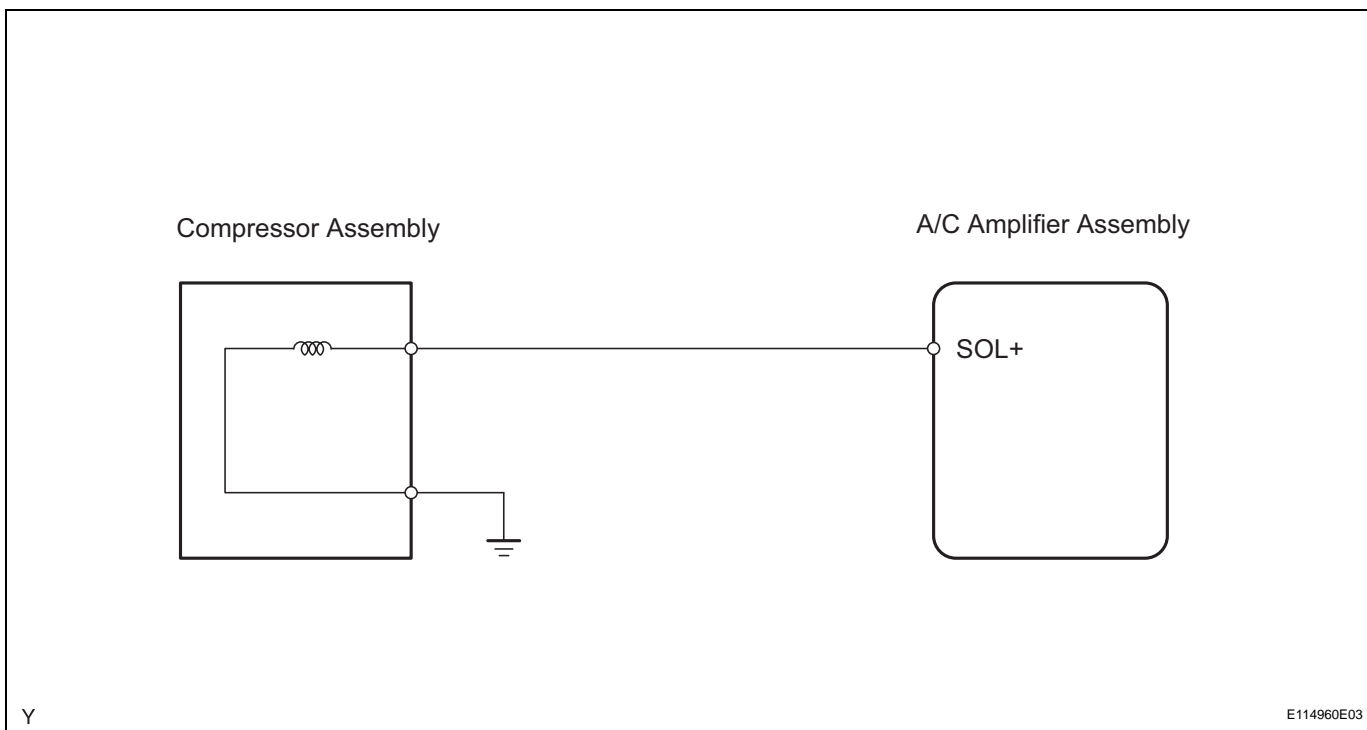


DTC**B1451****Compressor Solenoid Circuit****DESCRIPTION**

The compressor assembly regulates the amount of refrigerant to discharge according to signals from the A/C amplifier assembly. The A/C amplifier assembly controls the compressor by using heat load variance and engine rpm variance data to determine the amount of refrigerant to discharge, and then converts the data to a signal.

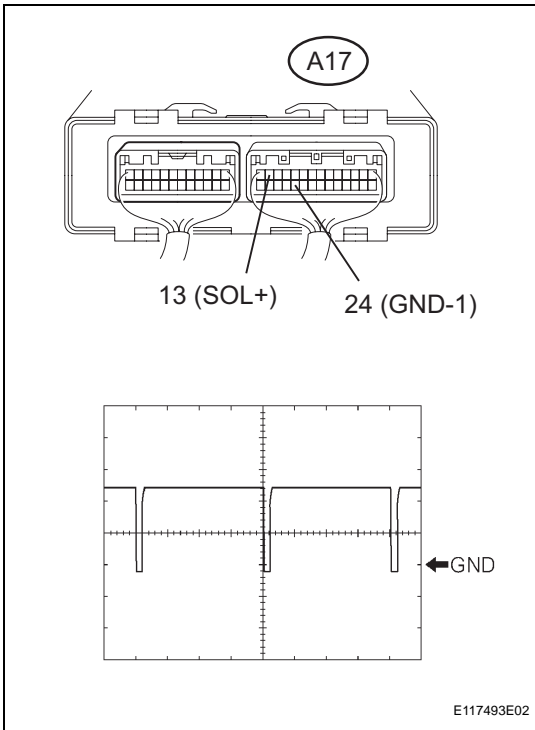
DTC No.	DTC Detection Condition	Trouble Area
B1451	Open or short in solenoid of the externally changeable compressor circuit	<ul style="list-style-type: none"> Compressor assembly Harness and connector between A/C amplifier and compressor A/C amplifier assembly

WIRING DIAGRAM

Y

E114960E03

1 CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY (SOL+ VOLTAGE)



- (a) Remove the A/C amplifier but do not disconnect the connectors.
- (b) Start the engine.
- (c) Turn the A/C switch ON and blower switch ON.
- (d) Using an oscilloscope, check the waveform of the amplifier.

Item	Content
Tester Connection	SOL+ (A17-13) - GND-1 (A17-24)
Tool Setting	5 V/DIV., 500μsec./DIV.
Conditions	Engine idling

OK:
Waveform is as shown in the illustration.

Result

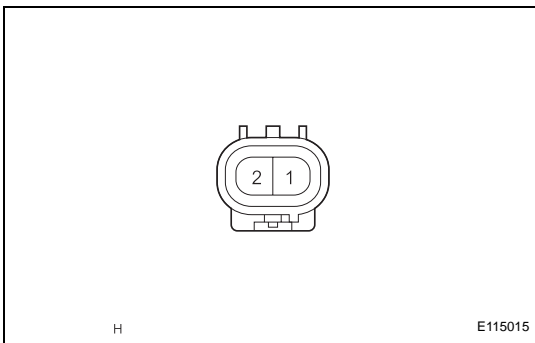
Result	Proceed to
NG	A
OK (when troubleshooting according to Problem Symptoms Table)	B
OK (when troubleshooting according to DTC Chart)	C

B → PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

C → CHECK INTERMITTENT PROBLEM

A

2 INSPECT COMPRESSOR ASSEMBLY



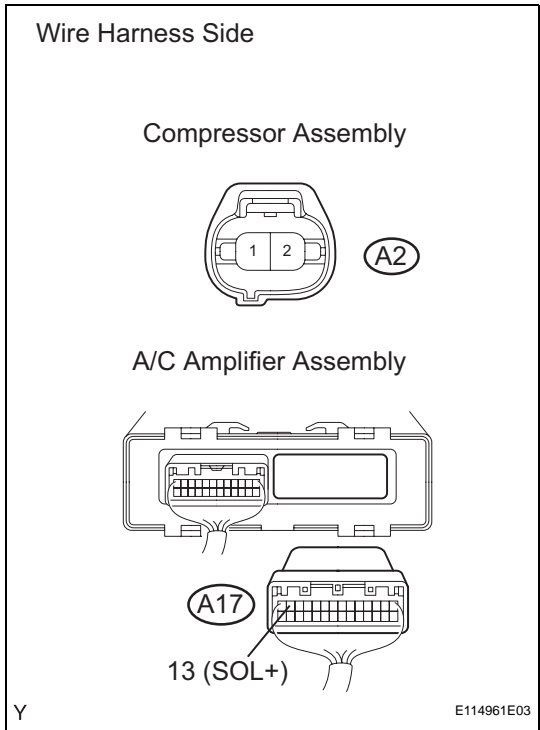
- (a) Remove the compressor.
 - (b) Measure the resistance of the compressor.
- Standard resistance**

Tester Connection	Specified Condition
1 - 2	10.1 to 11.1 Ω

NG → REPLACE COMPRESSOR ASSEMBLY

OK

3 CHECK WIRE HARNESS (COMPRESSOR - AIR CONDITIONING AMPLIFIER)



- (a) Disconnect the A2 compressor connector.
- (b) Disconnect the A17 amplifier connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
A2-2 - A17-13 (SOL+)	Below 1 Ω

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY