DTC	B1472	A/C INVERTER HIGH VOLTAGE OUTPUT SYSTEM MALFUNCTION

CIRCUIT DESCRIPTION

The high voltage is output from the A/C inverter assy to the electric inverter compressor for driving the motor. Compressor control is stopped and the DTC is output if there is an open or short to ground in the output circuit.

The output DTC is memorized as previous trouble. Compressor control remains stopped unless the past and current DTCs are cleared by intelligent tester II.

CAUTION:

Wear insulated gloves and pull out the service plug grip before inspection as procedures may require disconnecting high–voltage connectors.

HINT:

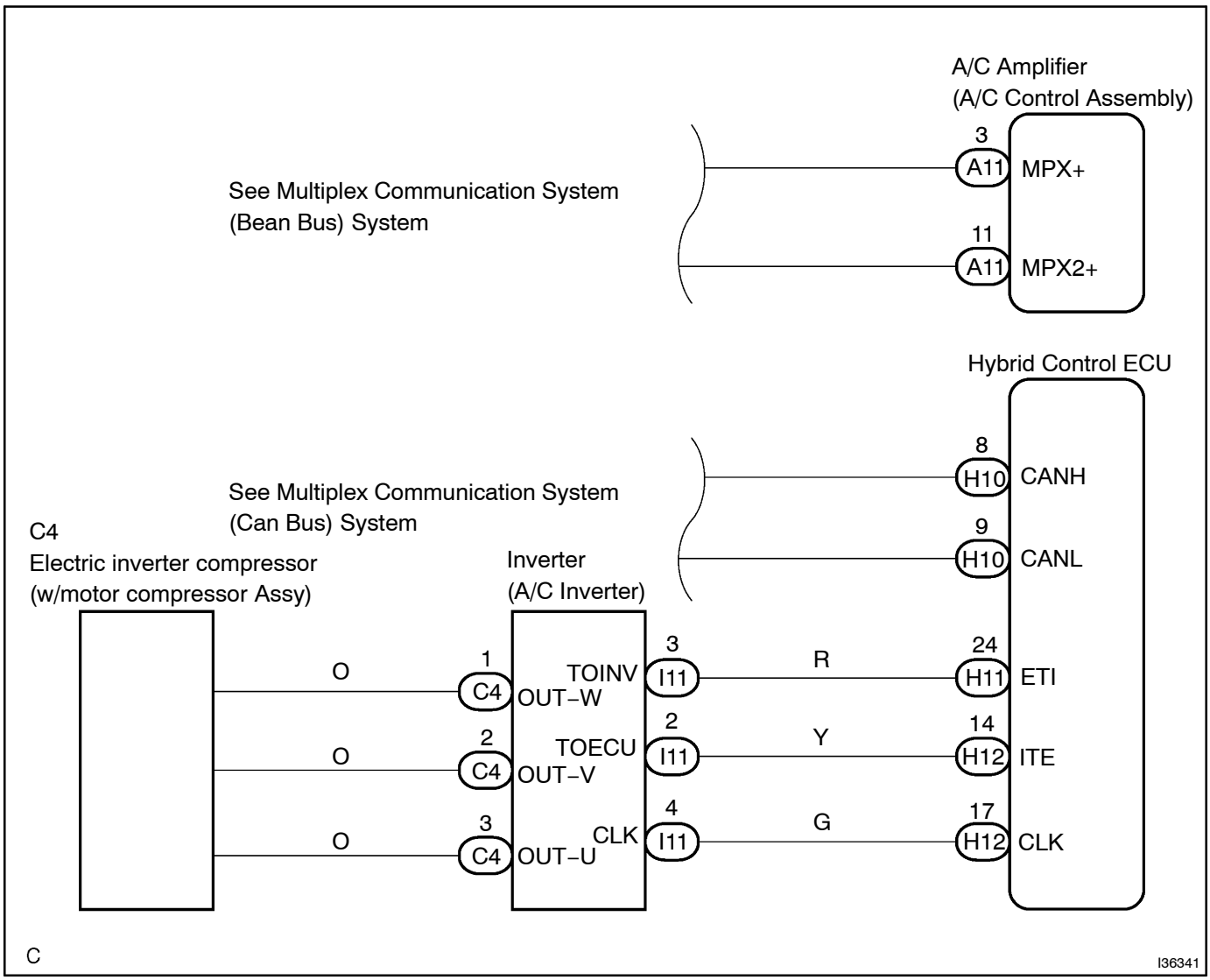
The hybrid vehicle system and air conditioning system output DTCs separately. Inspect DTCs following the flow chart for the hybrid system first if any DTCs from those systems are output simultaneously.

DTC No.	Detection item	Trouble Area
B1472	Open or short in A/C inverter high voltage output system	• Hybrid control ECU • Electric inverter compressor (w/motor compressor assy) • A/C inverter (w/converter inverter assy)

NOTICE:

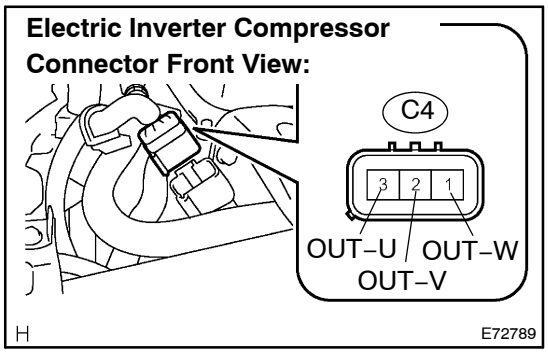
The A/C inverter is integrated with the inverter assy. It is necessary to replace the PCU box assy if the A/C inverter (inverter assy) needs to be replaced because the A/C inverter (inverter assy) cannot be replaced alone.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT ELECTRIC INVERTER COMPRESSOR



(a) Remove the service plug grip.

CAUTION:

Because the compressor has a high–voltage circuit, wear insulated gloves and pull out the service plug to cut the high–voltage circuit before inspection.

(b) Disconnect the electric inverter compressor connector.

(c) Measure the resistance according to the value(s) in the table below immediately after the compressor is stopped.

Standard:

Tester connection	Condition	Specified condition
C4–1 (OUT–W) – C4–2 (OUT–V)	Always	0.5 to 0.8 Ω
C4–1 (OUT–W) – C4–3 (OUT–U)	Always	0.5 to 0.8 Ω
C4–2 (OUT–V) – C4–3 (OUT–U)	Always	0.5 to 0.8 Ω

NG → **REPLACE ELECTRIC INVERTER COMPRESSOR**

OK

REPLACE A/C INVERTER ASSY

NOTICE:

The A/C inverter is integrated with the inverter assy. It is necessary to replace the PCU box assy if the A/C inverter (inverter assy) needs to be replaced because the A/C inverter (inverter assy) cannot be replaced alone.