DTC	B1476	A/C INVERTER LOAD SYSTEM MALFUNCTION

CIRCUIT DESCRIPTION

The A/C inverter assy stops compressor control and outputs the DTC if the rotation load is too great or too small while controlling motor rotation in the A/C inverter assy.
HINT:
Possible reasons could be as follows: Load is low when the refrigerant gas leaks, or load is too great when refrigerant gas is excessively charged, insufficient cooling performance due to condenser fan circuit trouble, or the compressor locked up.

DTC No.	Detection item	Trouble Area
B1476	Motor's rotation load while the compressor is operating is too great or too small.	• Volume of refrigerant • Electric inverter compressor (w/motor compressor assy) • Cooling fan circuit

INSPECTION PROCEDURE

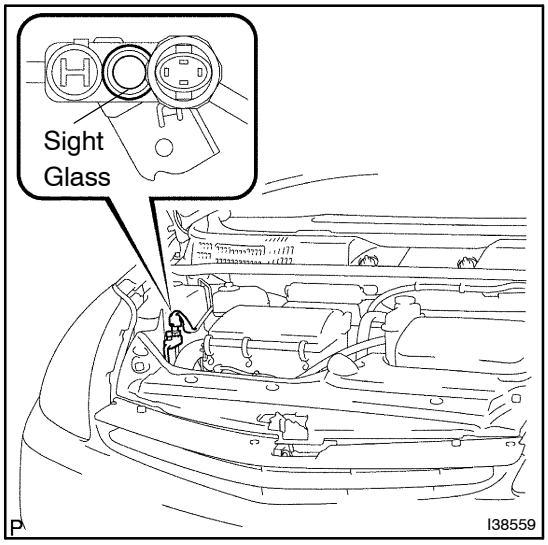
1	CHECK COOLER CONDENSOR ASSY

(a) Turn the power switch off and on (READY).
(b) Set the A/C temperature setting to "MAX. COOL" and the blower to " LO", and turn the A/C switch on.
(c) Check operation of the condenser fan.
Standard: The condenser fan rotates.

NG → **INSPECT COOLING FAN SYSTEM (SEE PAGE 16–9)**

OK

2 CHECK HFC–134A (R134A)



(a) Inspect refrigerant volume.

(1) Check the sight glass of the cooler unit refrigerant liquid pipe E.

(2) Set the vehicle according to the conditions below.

Item	Condition
All Doors	Fully open
Temperature setting	Max. Cool
Blower Speed	HI
A/C	ON

(3) Check the sight glass.

Item	Symptom	Amount of Refrigerant	Corrective Actions
1	Bubbles exist	Insufficient*	(1) Check for gas leakage and repair if necessary (2) Add refrigerant until bubbles disappear
2	No bubbles exist (DTC 76 is output)	Empty, insufficient or excessive	Refer to 3 and 4
3	No temperature difference between compressor inlet and outlet	Empty or nearly empty	(1) Check for gas leakage with gas leak detector and repair if necessary (2) Add refrigerant until bubbles disappear
4	Considerable temperature difference between compressor inlet and outlet.	Proper or excessive	Refer to 5 and 6
5	Immediately after air conditioning is turned off, refrigerant remains clear	Excessive	(1) Discharge refrigerant (2) Remove air and supply proper amount of purified refrigerant
6	Immediately after air conditioning is turned off, refrigerant foams and then becomes clear	Proper	–

*: Bubbles in the sight glass with room temperature higher than usual can be considered normal if cooling is sufficient.

NG → CHARGE REFRIGERANT (SEE PAGE 55–12)

OK

REPLACE ELECTRIC INVERTER COMPRESSOR

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.