

STAR ONLINE PUBLICATION

Case Number: S2008000151

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Symptom/Vehicle Issue: Outside Air Temperature Displayed On Cluster Or Radio Are Inaccurate

Customer complaint/ technician observation: Owner complains that the AAT (ambient air temperature) reads incorrectly. Technician observed that the air temperature reading is inaccurate or does not function. DTC's may be present, P0071, P0072, P0073, P0070-15, P0070-11, P0073-00 for ambient air sensor performance, high, low, or shorted conditions.

Discussion: The left side driver mirror does contain the ambient are temperature sensor, the ambient air Temperature sensor can be replaced seperately. If the vehicle is not equipped with a DDM (driver Control Module) the sensor is directly wired to the BCM Fig 1, 2, 3.

NOTE: The AAT Sensor operates between 345,260 Ohms (low temperature) and 181 Ohms (high temperature). Example at 20°C (68°F) values are between 11,370 Ohms and 13,610 Ohms see chart below for values, test at sensor and modules as needed.

The only role that the DDM (if equipped) has with the ambient temperature sensor is that the module takes the input from the sensor and then directs it back out to the CBC through a hard wire trace (pass-through)on the DDM PC board.

1. Removable Panel
2. Ambient Air Temperature Sensor



Fig 1

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

Contact STAR Center, or your Technical Assistance Center Via TechCONNECT or eCONTACT ticket if no solution is found

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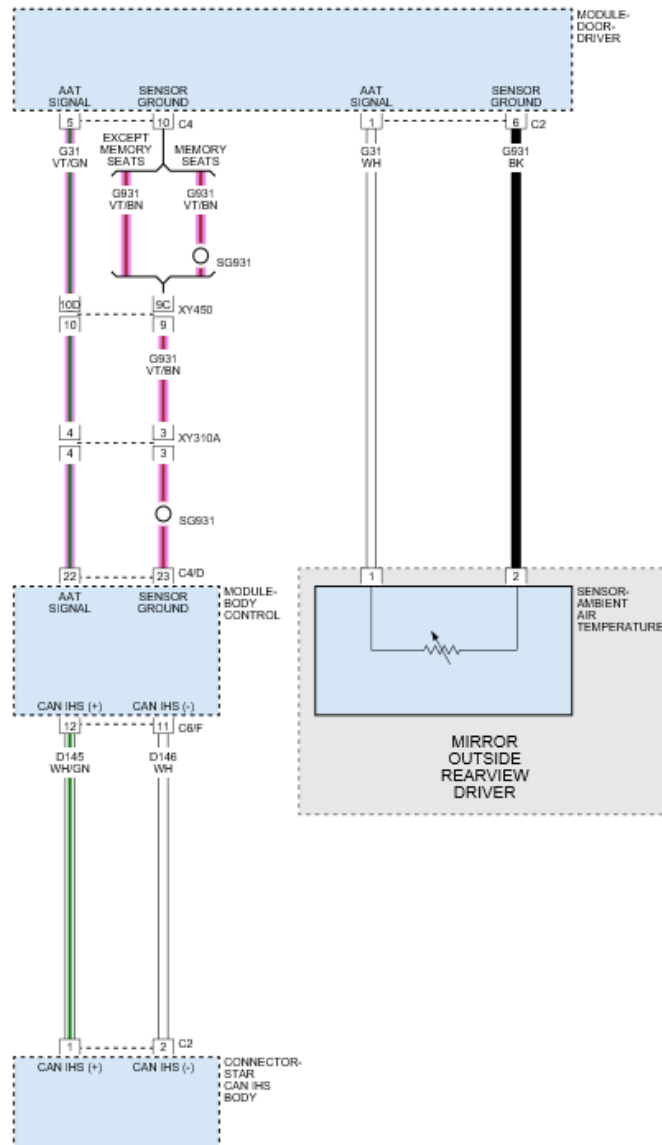


Fig 2 – DT truck example.

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TABLE 1: SENSOR OUTPUT CHARACTERISTICS			
TEMPERATURE		RESISTANCE (K-OHMS) X 1000	
DEGREES C	DEGREES F	MINIMUM	MAXIMUM
10	50	17.99	21.81
20	68	11.37	13.61
25	77	9.12	10.88
30	86	7.37	8.75
40	104	4.90	5.75

Fig 3

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