Air Conditioning Trouble Shooting Delta T

Checking to see if an AC unit is working properly is very easy with a temperature scan gun. All territory leads and maintenance team members have a temperature scan gun. All air conditioning technicians have a temperature scan gun. If you would like your own, you can find them at home improvement and hardware stores.

No air conditioning work should be considered completed if the Delta T is less than 16 Degrees.

Temperature Scan Gun



How To Measure the Effectiveness of an AC Unit

- 1. Using the temperature scan gun, measure the temperature of the air going into the AC unit. This is called the return. Sometimes the return has an air filter.
- 2. Measure the temperature coming out of the AC at the first duct after the air handler.
- 3. Calculate the difference in these two temperatures. This is called the Delta T.

(Temperature Going In) – (Temperature Coming Out) = Delta T

Delta T (Degrees Fahrenheit)	Condition	Action
17 or more	Good	No action necessary
15 - 16	Weak	The unit needs service
Less than 14	Bad	This unit is not functioning and needs immediate repair

Before Calling for Service

- ✓ Check the batteries in your thermostat
- ✓ Check the setting of the thermostat to make sure the AC is on
- ✓ Check to make sure the breakers are on for the AC system at the breaker panel. Sometimes an AC unit is powered off at the breaker panel in error from the closing the night before.
- ✓ Know the Delta T of each system in your location so that the service tech can be directed to work on the correct units.