Troubleshooting Basics Outline

- 1. Initial Verbal Assessment
 - a. Review Service Response Procedure
 - b. Gather information with blank template
 - c. Your goal is to identify the type of problem and verify it is an item we can resolve
 - d. It is unrealistic to resolve most problems remotely, make certain the customer is aware of this
- 2. Identifying the Needs of the Customer
 - a. Determine the motivation of the customer
 - b. What resolution would they prefer?
 - c. Is their request in conflict with the AHJ?
 - d. What level of involvement do they desire?
 - e. What items do they need to provide to you?
- 3. Communicating Findings
 - a. Always communicate with the customer before leaving the site
 - b. Keep explanation relevant and concise
 - c. Review with AHJ if necessary
 - d. Take time to produce documentation before leaving the site
 - e. Produce information for return trip assuming it will not be you that returns
- 4. Completion and Solution Follow Through
 - a. Where you a resource for addressing the problem?
 - b. Check back with the customer to verify resolution
 - c. Realize there can be more than one problem
 - d. How can we improve our response in the future?
- 5. System Troubleshooting Approach
 - a. Advance preparation and accumulation of documents/resources can help greatly
 - b. Do not loose sight of timelines
 - c. Documentation can start at any time
 - d. Systematic approach, outline if necessary
 - e. Narrow down general to specific
- 6. Multi-meter Use
 - a. What do the symbols represent?
 - b. What range do the readings fall into?
 - c. Digital versus analog
 - d. Tips for getting the most from your meter
- 7. Electronic Circuit Troubleshooting
 - a. What are factors that can affect a circuit?
 - 1. Ground faults, inductance, resistance, capacitance, voltage drop
 - b. Isolating the problem big steps first
 - 1. Eliminating items from the system
 - 2. Halving the circuit
 - c. Equipment versus circuit