Troubleshooting Process - Worksheet

Simutech's Systematic Troubleshooting Approach uses a flowchart to show the troubleshooting process. In this worksheet, document your observations, analysis, and test results as you troubleshoot electrical systems.

Preparation

Documentation describing the problem such as work orders, trouble/incident reports	Notes
Equipment documentation and manuals	
Equipment history files	
Do you have access to the person reporting the problem?	

Observations

Initial Observations – include all observations in the "as found" state					
System Operation/Features – try to operate the system and note any behaviors or features that are					
abnormal					
Additional Observations – note any new observations that occur while troubleshooting					

Define Problem Area

Initial Problem Area – based on Observations

Reduced Problem Area – after each test to sectionalize, you may need to make additional entries here

Identify Possible and Most Probable Causes

Stage	Possible Causes	Most Probable
Initial Observation	Corresponds to the initial Problem Area defined above	
Based on reduced Problem Areas	Add an entry for each reduced Problem Area entry above	

Tests Performed

Notes:

- A number of factors must be considered when determining the location to test. You may wish to test the most probable cause or you may need to sectionalize the circuit further before testing the most probable cause. You should also consider the physical location of the test as some locations are much easier to test than others.
- When testing you should always predict what your meter reading should be and then see if it matches your actual reading. If it matches continue on with your line of thinking. If it does not match then you must evaluate the reading to see where to go next.

Test #	Purpose and Result	Test location	Expected Reading	Actual Reading			
	Purpose						
	Result	L					
	Purpose						
	Result						
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