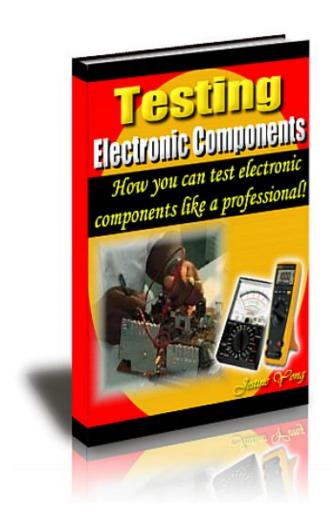
Preview of the book

Testing Electronic Components



Brought to you by Jestine Yong

http://www.TestingElectronicComponents.com

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This book is dedicated to my wonderful wife Michelle. Without her loving encouragement and support, this book would still have been possible-but not nearly worth the trouble.

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Safety First



Whenever you're working on any electronic equipment, your own safety has to come first. Every electronic technician must always take safety precautions before he or she starts work. Electricity must be handled properly, or else it can injure or cause fatalities. Here are some basic steps that show you how to avoid accidents from occurring.

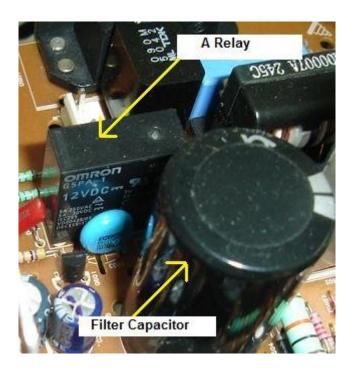
1. Electrical Shock

Once you open up a set cover, you're actually exposing yourself to the threat of electric shock. Always keep in mind that safety has to come first.

A serious shock may stop your heart and if large electric current flows through your body, you will receive serious burns. Here are some rules, which should help you to avoid electricity hazards.

- a) Always turn off the equipment and unplug it before you begin to work.
- b) If you have to run tests while the equipment is operating, turn the equipment on, make your test carefully, and then turn the equipment off again.
- c) Wear rubber bottom shoes or sneakers.
- d) Try to do the work with one hand, while keeping the other in your pocket. That keeps the possible current paths away from the heart.
- e) Don't attempt repair work when you are tired or rushed.
- f) Always assume that all the parts in the power supply are "HOT".
- g) Use only plastic screwdriver for shock protection during service operation.

2. Discharging Switch Mode Power Supply (SMPS) Capacitors



Most SMPS have a resistor to drain the charge in the main filter capacitor. But some resistors may fail and the capacitor can hold this charge even after you have turned off the equipment. This capacitor has a range of about 150uf to 330uf at 400 working voltage. Before you start to work on a power supply, always turn off the power and **discharge** the filter capacitor. You can do this by placing a

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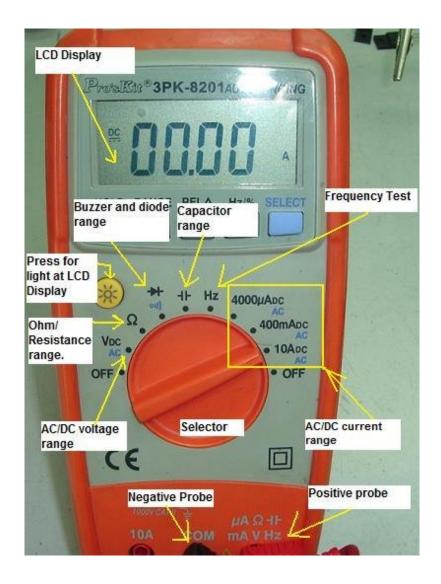
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To received my free special report "The Easy Way to Understand Switch Mode Power Supply" please go to

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This is just one of the sample quality photo found in my book for easy and simple understanding and removes all the guesswork!



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