

# Troubleshooting electric circuits

Technology, Information Technology



## TROUBLESHOOTING ELECTRIC CIRCUITS 1

In troubleshooting, it is imperative for the technician to take into consideration several important aspects of the troubleshooting processes. However, knowledge of troubleshooting process alone would not suffice; hence, it requires keen analysis of the entire system being dealt with. Further, there is also a relative importance on paying attention to small details by making sure that the materials or components involved are secured and functional which are excellent cues in resolving more complex problems.

In this study, I have discovered manifold troubleshooting techniques which are very helpful in meeting ends meet. As part of the pre-qualifying parameters, it is significant to identify the defected system, whether it is electrical or mechanical. This should be followed by a thorough analysis of the fault found in the identified system. Carrying out the troubleshooting steps would then follow for repairs. These techniques would make the troubleshooting a lot faster. In the scope of troubleshooting an electrical circuit, it is likewise of utmost importance to identify the controls and loads, clearly understand the sequence of the operation in a system, and the mastery of the basic circuit theory which will help in the analysis of the individual components at hand. To make the troubleshooting more systematic, I should look at the problem from a smaller view to a larger view which will project the picture as a whole. To carry the troubleshooting process effectively, I would extensively utilize the three important measuring devices: ohmmeter, voltmeter and ammeter. Nevertheless, these would not be enough without having a view of the backbone of the system. This can be

addressed by using schematic diagrams, electrical wiring diagram (EWD) and test lights. What should I do if the problem remains undetected after exhausting all the troubleshooting process? The answer depends on you alone.

## TROUBLESHOOTING ELECTRIC CIRCUITS 2

### References:

Brown, M., Rawtani, J., & Patil, D. (2004). Practical troubleshooting of electrical equipment and control circuits. Houston: Newnes.

Electrical Circuit Theory. (n. d.). Retrieved January 13, 2012, from [http://www. autoshop101. com/forms/elec11. pdf](http://www.autoshop101.com/forms/elec11.pdf)

Khandpur, R. S. (2006). Troubleshooting Electronic Equipment. New York: McGraw-Hill Professional.