**Universal Troubleshooting Process Completion Form**

Copyright © 2006 by Steve Litt, all rights reserved. You may make unlimited paper copies of this document, as long as you do not change it in any way, and keep all copyrights, license, and attributions intact.

Version 20060423-1800


A Troubleshooters.Com ® Publication

RESOURCES:
- www.troubleshooters.com/bookstore/28tales.htm: “28 Tales of Troubleshooting” is the easiest way to learn troubleshooting.
- www.troubleshooters.com/bookstore/ttech.htm: “Troubleshooting Techniques of the Successful Technologist” is the most complete treatment of troubleshooting.
- www.troubleshooters.com/utp/tcourses.htm: Our troubleshooting courseware – the best way to teach troubleshooting to your team.

Step 1: Prepare: Have you prepared your work area? Made arrangements with customers and co-workers? Gotten your tools arranged? Most importantly, have you prepared your attitude to troubleshoot?

Step 2: Have you made a damage control plan? Under what circumstances will you stop work and protect against damage. Consider things like data loss, mechanical breakage, rework, injury to yourself or others, work stoppage, potential legal problems, and any other damage that could occur during troubleshooting.

Step 3: Have you gotten a complete and accurate symptom description: Collect info on the user/customer, the system and its accessories and environment. Obtain and write down the answer to this question: "What indicates to you that there is a malfunction?" Find out if there's a known procedure to reproduce the problem, and if so, record it. If not, record what seems to make it occur more and less often. When was the symptom first noticed, and what else happened around the same time? Were there any configuration changes or repair around that time? Any other symptoms that might play a part? Record this information here.
Step 4: Reproduce the symptom: Were you able to reproduce the symptom using the customer/user's reproduction procedure? Did the symptom or its reproduction procedure vary from the customer/user's description? List all the techniques you used in attempting to reproduce the symptom. List the exact reproduction sequence you found.

Step 5: Perform corrective maintenance: Have you performed all factory mods or other documented procedures that might cause this symptom? List them. Have you performed appropriate cleaning and appropriate maintenance replacements? List them.

Step 6: Narrow it down: List the diagnostic tests performed, their results, and what they ruled out. Did you consider the quadruple tradeoff? Did you narrow it down to a root cause? Record your experiments and conclusions here.

Step 7: Repair or replace defective component: Did you repair or replace it? In a workmanship like manner? Did it seem to fix the symptom?

Step 8: Test: Did the symptom go away? Did you create any other problems? Did you strongarm the symptom rather than fixing the root cause? If the symptom is intermittent, did you test it long enough and stress the system enough?

Step 9: Take Pride: Did you celebrate your victory over this problem? In what ways did you show genius in this solution? How can you do even better next time?

Step 10: Prevent future occurrence: Did you give the customer/user care instructions? Have you documented any unusual aspects?