

January 19, 2015

Danger! Danger!

I borrowed a friend's electrical tools to begin a New Year project; well okay, an old project that failed to get done in 2014. One look at the snips, shown below, that I was about to use started me thinking about electrical safety.



Working with electricity is a dangerous job and if you have had a good safety record you must be aware that sometimes you may become a little complacent. Keeping in mind the potential danger lurking in your circuits hopefully will keep you from doing something that could release that danger.

What danger lurks in your electrical system? An Electrical Arc-Flash which consists of the following harmful, and possibly fatal, components:

- Intense light capable of causing temporary to permanent loss of eyesight
- Sound waves up to at least 141.5 db @ 2 ft, damaging unprotected ear drums
- Molten metal and shrapnel propelled by the pressure wave created as copper vaporizes from a solid to a vapor and expanding by 67,000 times
- Intense heat well above the 205° F threshold for 3rd degree burns

This is far from a complete list and obviously the voltage and system protection devices have a significant effect on the severity of the event. However, this list alone keeps me in line and maybe it will help you too. By the way, my friend who loaned me the tool pictured above, he's okay if you were wondering, but a lot more cautious now.

You are invited to submit an Electric Motor Testing Tip of your own and receive a free PdMA[®] mug or hat if we publish it! Contact Lou at 813-621-6463 ext. 126 or lou@pdma.com.

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