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**SAFETY IS AN INVESTMENT IN YOUR FUTURE.**

Everything starts with Safety at IEC

**Open Holes in Electrical Boxes & Panels**

Toolbox Talk # 5040

You may notice a broken, loose, or missing cover on an electrical receptacle or junction box. Perhaps it’s a missing “knockout” plug on the side of an electrical box. Or, you may occasionally come across an open hole in the face of an electrical breaker panel where one or more electrical breakers are missing. Sometimes it’s just too easy for us to dismiss these type conditions, writing them off as too minor to be considered a serious hazard. Nothing could be further from the truth!

First, the electrical current lurking behind the covers over electrical boxes and panels is enough to do serious damage if someone were to accidentally come in contact with a hot wire or component; in fact, that could even be deadly. While I am not suggesting a person would intentionally stick his or her finger in an opening into an electrical box or panel, there is a very remote possibility that some way, somehow, a conductive object that a person is holding or touching could accidentally enter the opening and make contact with an energized wire or other component inside the box, resulting in quite a shock! There are actually a few other valid reasons why we must keep all unused openings into electrical boxes and panels closed, including:

• Preventing moisture from entering into the electrical box or panel. Moisture can cause the wires and other metallic electrical components to corrode over time. And this condition could eventually lead to the wires or other electrical components to short out, or even heat up to the point that a fire could start.

• Preventing lint, sawdust, dried vegetation, and other unwanted debris from collecting inside the electrical box or panel. These combustible materials can present a fire hazard that can be ignited by a small spark should they build up inside an electrical box or panel over a long period of time.

• Preventing insects, small rodents, and even reptiles from entering electrical boxes and panels. Certain critters, like fire ants, enter electrical boxes and panels through openings while in search for food. And if one or more fire ant makes contact with the electrical current, they release a pheromone that attracts more fire ants . . . and the cycle repeats itself until the box is packed with these insects. This can cause havoc with electrical contacts and other devices. There are even documented cases where mice or rats caused an electrical short by gnawing on the insulation covering electrical wires. Even lizards and snakes have been found lurking inside of electrical boxes and panels; not something an electrician would hope to find inside there!

Any time you notice any sort of breach or opening into an electrical box or panel, please notify your supervisor, safety rep, or electrician right away so they can arrange for a qualified person to correct the hazard.

Please read and understand this important document and sign on the reverse side that you have done so.

YOUR SIGNATURE ON THE REVERSE SIDE INDICATES THAT YOU HAVE READ AND UNDERSTAND THE CONTENTS OF THIS DOCUMENT.

Phone 614-473-1050 email: JVan@IECCentralOH.org website: www.ieccentraloh.org

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Attendance – Toolbox Talk

Company / Employer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Topic: Open Holes in Electrical Boxes & Panels

# I have read and understand Toolbox Talks, topic as shown, on date indicated.

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