

Question of the Month – You are installing a 1 horsepower, single-phase, 230-volt irrigation pump using 150 feet of #12 copper branch circuit conductors from the 230-volt service panel to the pump. What is the voltage drop at the pump?
See correct answer on Page 2

Thank You Tracy Prezeau for your Service to the Electrical Board

After many years of excellent service to the [electrical board](#), Tracy Prezeau's term on the board is ending. Governor Gregoire appointed Tracy to the board in 2005. In 2011, her fellow board members elected her to serve as chairperson. Electrical board members serve on a volunteer basis and we greatly appreciate Tracy's valuable contribution to the electrical industry of Washington. We thank her for her years of excellent service and wish her well. We know she will remain active in her support of Washington's electrical program through her position as an international representative of the IBEW Education Department. Congratulations to board member Jason Jenkins, who was elected to serve as the new chairperson at the July meeting.

Safety Tip of the Month

Make sure your temporary power installations are safe. Temporary power installations on construction sites, if not installed properly, can be a source of extreme hazard. Make sure your work is not the cause of a tragedy. Ensure all temporary wiring meets NEC requirements. Make sure service conductors at temporary power poles are not exposed.

Reciprocity Agreement Signed with Oregon for Journey-Level Electrician Certification

The Oregon Building Codes Division and the Washington State Department of Labor & Industries (L&I) have signed a reciprocal agreement allowing general journey level electricians certified in one state to apply for a certificate in the other state without having to take an examination under certain conditions.

Oregon reciprocal licenses are generally available to those who obtained Washington (01) general journey level electrician certificates after completing an 8000-hour apprenticeship and making a passing score on their Washington exams. Anyone having a Washington master (01) general journey level electrician certificate is also eligible. [Get more information about reciprocity and apply.](#)

If you need licensing verification from the state of Washington for an Oregon application, mail (do not email) your Oregon verification document along with a completed [Request for a Letter of Good Standing](#) and fee of \$26.40 to us at the address shown in the top left corner of the good standing form. We will fill out the verification form and mail it back to you along with your letter of good standing.

Washington reciprocal certificates are generally available to those electricians who obtained their Oregon general journeyman electrician (J) licenses after completing an 8000-hour apprenticeship and passing their Oregon exams. Anyone having an Oregon General Supervising Electrician (S) license obtained by Oregon examination is also eligible. Oregon license holders can apply anytime after they receive their Oregon license. To apply, submit an [Application for a Reciprocal 01 General Journey Level Electrician Certificate](#).

You can get details about the agreement and the application process by visiting the [Journey Level Electrician](#) tab of our Electrical Licensing website.

2020 NEC 230.71 Maximum Number of Disconnects – Exemption for Listed Power Outlets

Power outlets such as temporary construction services, recreational vehicle and mobile home services and pedestals, and marina power outlets are certified under UL 231 Standard for Power Outlets. Many electrical contractors have significant numbers of temporary services that will remain serviceable for many years that otherwise would have to be disposed of

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due new requirements in 2020 NEC 230.71 for maximum number of disconnects. The department is hereby issuing a policy that will exempt power outlets listed under UL 231, where used as service equipment, from the requirements of 2020 NEC 230.71. This policy will be in place until further notice and give time for requirements in UL 231 to be updated and will give manufacturers time to revise their design and begin production and supply of the revised equipment.

Temporary Allowance Extended for Trainees to Work While Completing Classroom Training

The COVID-19 pandemic has reduced availability of required classroom education for electrical trainees. Temporary measures are in place to increase availability of education during recovery. Trainees having certificates that expired on or after March 13, 2020, who have paid a renewal fee to renew them into inactive (“T”) status, may continue working in the trade while completing their classroom education until January 26, 2021.

On October 29, 2020 the new 2020 WAC 296-46B takes effect, and with it, trainees cannot renew their certificates if they have not completed their required classroom education. Beginning October 29, if not renewed by the expiration date, a late renewal fee is required. Trainees expiring on or after October 29, 2020 may continue to work for 90 days after their expiration date while completing their required classroom training. If required training is not completed within the additional time allowed, trainees cannot lawfully work in the electrical trade without a properly renewed (active) training certificate. This policy will remain until a date to be determined after the Governor declares the state is moving into Phase 4 of the recovery.

If you have a training certificate, now is the time to schedule your classroom education. Trainees should not wait until the last minute to complete educational requirements! You can download a list of [approved basic trainee classes](#) at the [Basic Classroom Instruction & Continuing Education](#) page of our website.

What Questions Are Allowed To Be Answered By Electrical Inspectors

Electrical inspectors often face many different types of electrical installation questions from consumers, contractors, and electricians. [WAC 296-46B-010](#)(2) states: *Electrical inspectors will give information as to the interpretation or application of the standards in this chapter, but will not lay out work or act as consultants for contractors, owners, or users.* There are a couple of reasons for this rule. L&I cannot take on the responsibility of an incorrect installation because an installer misunderstood the information that was provided. In addition, this ensures a level playing field for all competing in the electrical industry by placing limits on the types of questions an inspector may answer. It would not be ethical for one contractor to win a bid over another because of consultation given by a L&I inspector.

Many people call to ask if they “can just run something by” the inspector. Inspectors are not allowed to enter into discussions about project bidding or design or other “what if” scenarios. It is not the inspector’s role to make recommendations between design or installation options for the installer. The installer is responsible for the entire decision making process from bidding, to permit fees, to installation.

An inspector or supervisor can answer a specific question about a code interpretation or corrections you have been issued.

Ugly Picture of the Month: *If viewing this document online, click on the picture to open a larger image.* Notice a problem with this installation? Someone put the stickers on upside down... or did they?

Answer to Question of the Month: 4.7 volts or 2 percent. Voltage Drop = $(2 \times 12.9 \times 8 \times 150) \div 6530$. The formula: **VD = $(2 \times K \times I \times L) \div$ wire circular mils**, where K is the conductor resistivity constant of 12.9 for copper and 21.2 for aluminum; I is load amperes (per Table 430.248); and L is one-way circuit length in feet. You can find wire circular mils in NEC Chapter 9, Table 8.



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