



Newsletter from the Office of the Chief Electrical Inspector

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Question of the Month

An electrician installs an emergency disconnect on the outside of a single family home. There is no grounding electrode conductor connected to the emergency disconnect. What signage is required?

See correct answer on Page 2

Last Year in Review

In the year ending on June 30, 2021, the electrical program accomplished:

- 272,731 inspections
- 78% of inspections completed within 24 hours of request
- 90% of inspections completed within 48 hours of request
- 1.9 million miles driven
- 11,462 virtual inspections
- 74,293 corrections written 56% are serious corrections
- 83% of inspection requests made online
- 179,710 permits sold 90% are contractor permits
- 87% of permit fees were collected online
- 10,266 total citations and warnings written
- 6,101 of the citations written targeted the underground economy.
- 2,342 hours of training and outreach done by ECORE
- 5,073 pages reviewed by plans examiners 80% submitted online
- 19,019 licensees and certificates processed 94% on line
- 6,612 new trainee certificates issued 98% on line
- 445 01 general journey level reciprocal certificates issued to Oregon license holders.
- 6.9 million hours of experience reviewed by the audit team 2.4 million hours denied Some of the reasons are due to lack of verification, lapse certification or untimely affidavits
- 1540 hours of training delivered to new inspectors

This is just a snap shot of all the hard work that the Electrical program staff did last year.

The Top Five Corrections Written Last Year

- 1. 4,146 No access for inspection (RCW 19.28.101)
- 2. 3,499 Notifying the department work was ready for inspection with it was not ready (WAC 296-46B-906(7)(B))
- 3. 3,205 GFCI protections in dwellings (NEC 210.8(A))
- 4. 2,000 Not following the manufactures instructions (NEC 110.3(B))
- 5. 1,611 Failing to properly fill out the panel schedule (NEC 408.4 (A))

Safety Tip of the Month

The work of an electrician is challenging and rewarding. Knowledge of safe work practices and electrical laws, codes, and rules are essential to maintaining worker safety and ensuring installations meet the minimum requirements for safety to life and property.

Those learning the trade do not have the experience and knowledge required to make safe installation choices and require supervision throughout their training period.

RCW 19.28.161(3) and WAC 296-46B-100 describes proper supervision. Proper supervision consists of the trainee being on

the same job site and under the control of an appropriately certified supervising electrician.

Lack of proper supervision not only creates potentially hazardous conditions, it is illegal and could result in civil penalties being assessed to the contractor, administrator, and trainee.

Keep Your RCW/WAC up to date

Laws and rules that govern the electrical trade in Washington change often. We make it easy to keep track of the changes by providing insert and replacement pages on our website in the <u>Electrical Laws and Rules</u> section. Download the new page, print it and add it to your copy.

Get Your Inspection Faster With Good Work Descriptions and Driving Directions

Trying to find a jobsite and find what you need to inspect with little or no information to go on can make for slow going. Inspectors rely on driving directions and permit and inspection descriptions to get the job done. It slows everything down when they do not have good information.

Job descriptions – A few details are all it takes. The following are actual job descriptions from permits:

| Good | Bad |
|---|-------------------|
| Circuit to new heat pump in back yard | Extend circuit |
| Add an outlet at vanity in master bathroom | • Lights |
| 100 amp underground feeder from panel in garage | Run a circuit |
| to wiring in new barn | Homeowner request |

Can you tell the difference? The first three are clear and make it easier for the inspector to find the work you need inspected. The last four are virtually useless. Do not be shy! Permit job description fields take up to 255 characters.

Driving directions – It is equally important to provide good directions to your jobsite. Inspectors bounce all over, sometimes from the other side of the state. Please do not cut and paste directions from mapping websites. Always provide directions from the nearest main street, highway, or intersection. Better directions means inspectors can get more inspections done.

Here are examples of bad and good directions:

| Good | Bad |
|---|--|
| North on Hwy 821 from Selah, 1.2 miles past Pomona, right on Selah Creek Dr. I-82 East to Exit 75, right on McCreadie, right on Wine Country Rd. | Just past the green shop on Brown Rd. Hwy 20 Use Google Maps |

We have all struggled to find our way at one time or another. It is easy to tell the difference between good and bad driving directions. Together we can improve and everyone will benefit.

Ugly Picture of the Month: *If viewing this document online, click on the picture to open a larger image.* An electrical contractor installed this disconnect for a future heat pump. How many code violations do you see? Is the equipment connected to the Equipment Grounding Conductor? If we closed the breaker in the panel, what could happen?

Answer to Question of the Month: According to NEC 230.85 "... other disconnect switches or circuit breakers on the supply side of each service disconnect that are suitable for use as service equipment..." shall "...be marked as follows: EMERGENCY DISCONNECT, NOT SERVICE EQUIPMENT." This label will still need to follow the rules of markings found in NEC 110.21(B) and identification plates in WAC 296-46B-100.

