



Washington State Patrol

Office of the State Fire Marshal

Serving Washington Since 1901

ELECTRICAL WIRING AND EQUIPMENT



PROPER USE OF



- ✓ Extension Cords
- ✓ Power Taps
- ✓ Line Voltage Wiring
- ✓ Low Voltage Wiring

Proper Extension Cord Uses

- May be used for some temporary power needs.
- May be used on portable appliances.
 - E.g. Vacuum cleaners, floor buffers, trouble lights, etc.
- Shall have a Underwriter's Listing
- Shall be properly sized for the amperage and electrical demands placed upon it.





Portable Appliances and Extension Cords

Examples of some portable appliances that may be operated temporarily with a proper extension cord.



Appliances that Should NOT Use Extension Cords.

Samples of common appliances needing permanent power that should NOT be served by an extension cord.



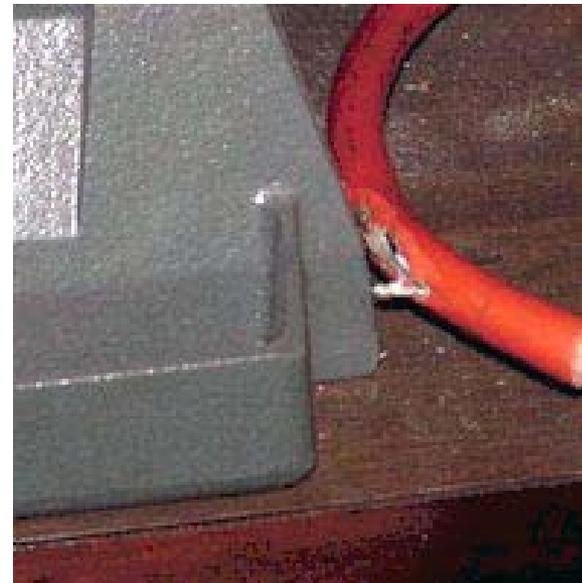
Do NOT Misuse Extension Cords

- Do not use damaged cords.
- Do not use jerry rigged cords.
- Do not run cords under carpets or rugs.
- Do not run cords through doors or windows.
- Do not use undersized cords.



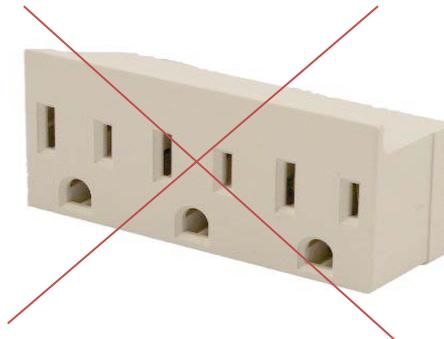
Samples of Improper Use...

Cords with damaged or frayed insulator sheathing



Multi-Plug Devices

Multi-plug devices must have over-current protection and may not be 'daisy-chained'.



Samples of Improper Use...

Overloaded
electrical
circuits.



Samples of Improper Use...

Overheated/damaged electrical circuits.



Safe Practices

Make Safe Facilities...

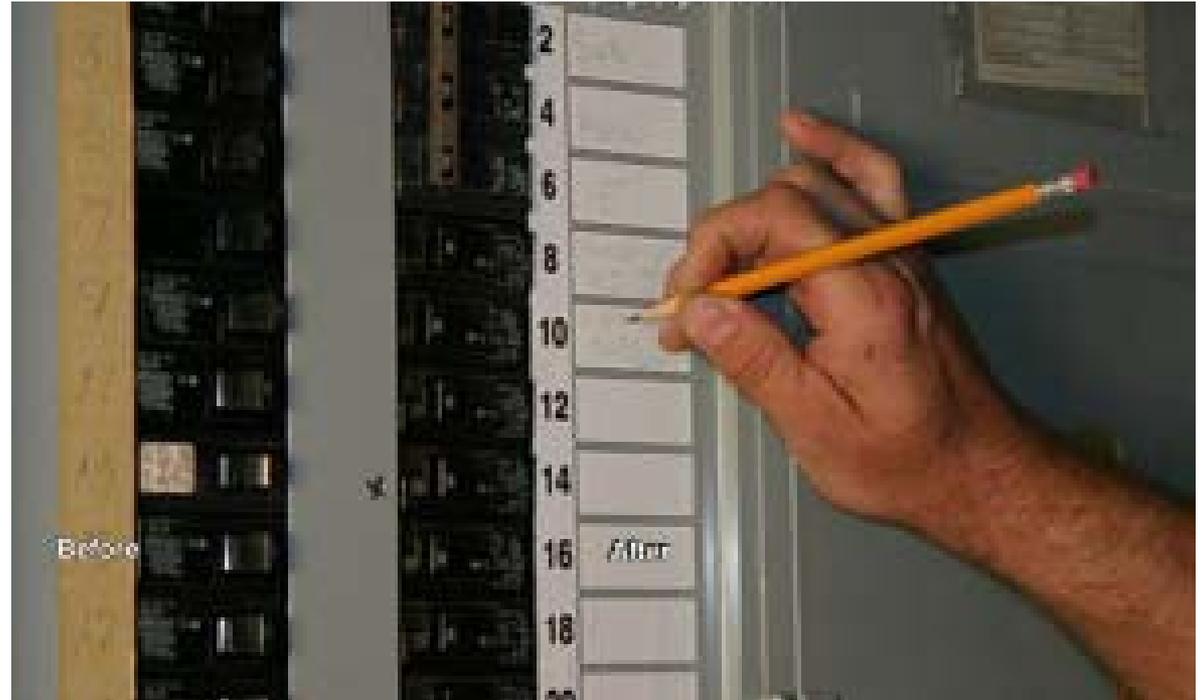
- Keep areas around electrical panels clear.
- Only allow qualified licensed technicians to service the electrical system.



Safe Practices

Make Safe Facilities...

- Circuits in electrical panels shall be clearly identified.



Safe Practices

Make Safe Facilities...

- Space heaters with elements that heat above 212° are prohibited.
- Qualifying space heaters may be used in non-patient areas in healthcare occupancies.



Samples of Improper Use...

Improper wiring
that lacks a proper
junction box.



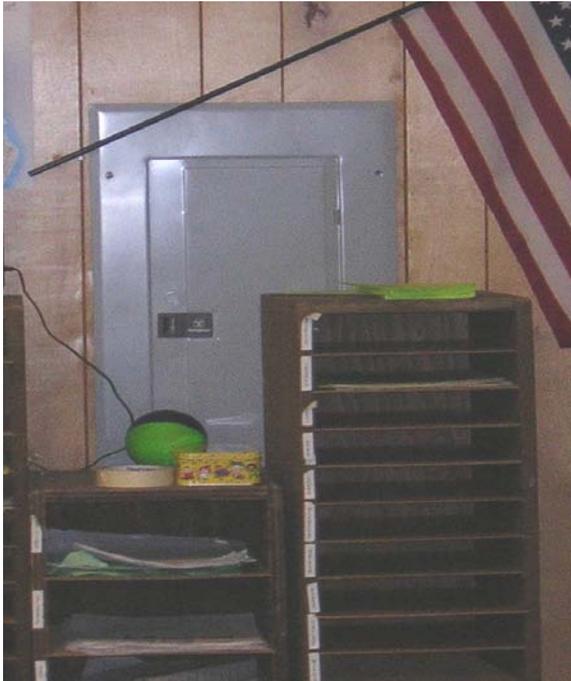
Samples of Improper Use...

Undersized junction box that can not safely accommodate the number of circuits.



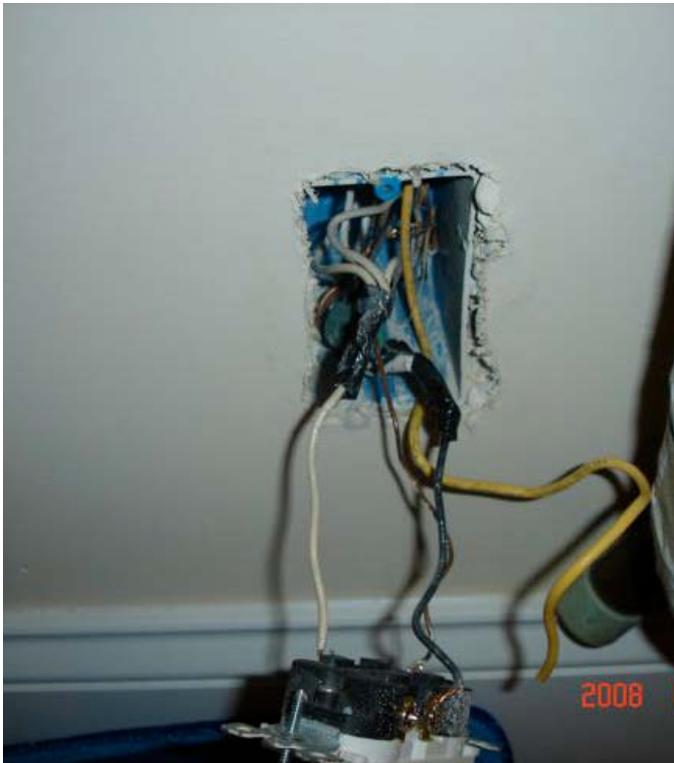
Samples of Improper Use...

Obstructed
electrical panel.



Samples of improper use...

A receptacle improperly wired with electrical tape rather than proper wire nuts.



Samples of Improper Use...

A can of chewing tobacco substituted for a proper junction box.



Safe Practices

Make Safe Facilities...

- Electrical receptacles in wet locations should be equipped with a Ground Fault Circuit Interrupter (GFCI)



Junction Boxes and Receptacles

Ensure that junction boxes are sealed and damaged receptacles are promptly repaired.





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Contact your area
Deputy State Fire
Marshal when questions
arise or for additional
information.