WAC 296-24-985 Use of equipment. (1) Portable electric equipment. This section applies to the use of cord- and plug-connected equipment, including flexible cord sets (extension cords).

(a) **Handling.** You must handle portable equipment in a manner which will not cause damage. You must not use flexible electric cords connected to equipment for raising or lowering the equipment. You must not fasten flexible cords with staples or otherwise hung in such a fashion as could damage the outer jacket or insulation.

(b) Visual inspection.

(i) You must visually inspect portable cord- and plug-connected equipment and flexible cord sets (extension cords) before use on any shift for external defects (such as loose parts, deformed and missing pins, or damage to outer jacket or insulation) and for evidence of possible internal damage (such as pinched or crushed outer jacket). Cord- and plug-connected equipment and flexible cord sets (extension cords) which remain connected once they are put in place and are not exposed to damage need not be visually inspected until they are relocated.

(ii) If there is a defect or evidence of damage that might expose an employee to injury, you must remove the defective or damaged item from service, and employees must not use it until repairs and tests necessary to render the equipment safe have been made.

(iii) When an attachment plug is to be connected to a receptacle (including any on a cord set), you must first check the relationship of the plug and receptacle contacts to ensure they are of proper mating configurations.

(c) Grounding-type equipment.

(i) A flexible cord used with grounding-type equipment must contain an equipment grounding conductor.

(ii) You must not connect or alter attachment plugs and receptacles in a manner which would prevent proper continuity of the equipment grounding conductor at the point where plugs are attached to receptacles. Additionally, you must not alter these devices to allow the grounding pole of a plug to be inserted into slots intended for connection to the current-carrying conductors.

(iii) You must not use adapters which interrupt the continuity of the equipment grounding connection.

(d) **Conductive work locations.** Portable electric equipment and flexible cords used in highly conductive work locations (such as those inundated with water or other conductive liquids), or in job locations where employees are likely to contact water or conductive liquids, must be approved for those locations.

(e) Connecting attachment plugs.

(i) Employees' hands must not be wet when plugging and unplugging flexible cords and cord- and plug-connected equipment, if energized equipment is involved.

(ii) You must only handle energized plug and receptacle connections with insulating protective equipment if the condition of the connection could provide a conducting path to the employee's hand (if, for example, a cord connector is wet from being immersed in water).

(iii) You must properly secure locking-type connectors after connection.

(2) Electric power and lighting circuits.

(a) Routine opening and closing of circuits. You must use load rated switches, circuit breakers, or other devices specifically designed as disconnecting means for the opening, reversing, or closing of circuits under load conditions. You must not use cable connectors not of the load-break type, fuses, terminal lugs, and cable splice connections for such purposes, except in an emergency.

(b) **Reclosing circuits after protective device operation.** After a circuit is deenergized by a circuit protective device, you must not manually reenergize the circuit until it has been determined that the equipment and circuit can be safely energized. The repetitive manual reclosing of circuit breakers or reenergizing circuits through replaced fuses is prohibited.

Note: When it can be determined from the design of the circuit and the overcurrent devices involved that the automatic operation of a device was caused by an overload rather than a fault condition, no examination of the circuit or connected equipment is needed before the circuit is reenergized.

(c) **Overcurrent protection modification**. You must not modify overcurrent protection of circuits and conductors, even on a temporary basis, beyond that allowed by chapter 296-24 WAC Part L the installation safety requirements for overcurrent protection.

(3) Test instruments and equipment.

(a) **Use.** Only qualified persons must perform testing work on electric circuits or equipment.

(b) **Visual inspection.** You must visually inspect test instruments and equipment and all associated test leads, cables, power cords, probes, and connectors for external defects and damage before the equipment is used. If there is a defect or evidence of damage that might expose an employee to injury, you must remove the defective or damaged item from service, and no employee must use it until necessary repairs and tests to render the equipment safe have been made.

(c) **Rating of equipment.** Test instruments and equipment and their accessories must be rated for the circuits and equipment to which they will be connected and must be designed for the environment in which they will be used.

(4) Occasional use of flammable or ignitible materials. Where flammable materials are present only occasionally, you must not use electric equipment capable of igniting them, unless measures are taken to prevent hazardous conditions from developing. Such materials include, but are not limited to: Flammable gases, vapors, or liquids; combustible dust; and ignitible fibers or flyings.

Note: Electrical installation requirements for locations where flammable materials are present on a regular basis are contained in WAC 296-24-95613.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 15-24-100, § 296-24-985, filed 12/1/15, effective 1/5/16. Statutory Authority: Chapter 49.17 RCW. WSR 91-24-017 (Order 91-07), § 296-24-985, filed 11/22/91, effective 12/24/91.]