

# Safe Operating Procedure

## 12/03

### **ELECTRICAL SAFETY FOR SCIENCE SHOPS**

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This SOP refers to the general safe use of electrical equipment in shops. It does not apply to electrical repair work.

- Make sure all electrical equipment is properly grounded. Replace old equipment without proper grounding.
- Make sure electrical equipment is U.L. listed and or F.M. approved.
- Keep equipment, appliances, and extension cords in good condition.
- Ensure extension cords are properly rated for the tool or equipment being used. The cord should be equipped with a GFI if it is to be used in a wet area.
- Route the cord so that it does not become damaged and that it does not pose a tripping hazard.
- Do not suspend electrical cords or other lines unsupported across rooms or passage ways.
- Do not route cords over metal objects such as overhead pipes or frames, metal racks, nails, etc.
- Do not run cords through holes in walls or ceilings or through doorways or windows.
- Do not place cords under carpet, rugs, or heavy objects.
- Do not place cords on pathways or other areas where repeated abuse can cause deterioration of insulation.
- Do not use extension cords as a substitute for permanent wiring. Do not use multiple-outlet plugs unless they have a built in circuit breaker.
- Leave sufficient room for work in the area of breaker boxes. Label all the circuit breakers and the fuses to indicate whether they are in the “on” or “off” position, and to indicate the appliance or room area served by the breaker.
- Make sure fuses, when used, are properly rated.
- Make sure electrical repairs, splices, and wiring is done by a qualified electrician.