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# Basic Safety Guidelines

**A**lways observe good, customary safety practices and precautions when handling or using electrical or electronic equipment. These practices include but are not limited to the items described in this document. In addition, review good safety practices recommended by your organization.

## A.1 Safety Practices

Observe the following safety practices when installing the equipment:

- Allow only qualified service personnel to install and maintain this equipment.
- To avoid electrical shock when removing a device or other electrical equipment, disconnect the power first, before any other steps.
- When you are replacing a card or other equipment in a chassis, disconnect the power cable.
- To avoid electrical shock when installing a device or other electrical equipment, apply power as the last step, after all other cables have been connected.

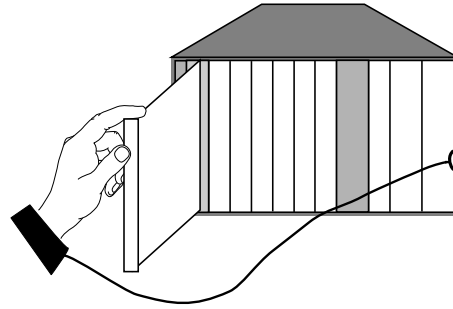
## A.2 Electrostatic Discharge

Electrostatic discharge (ESD) can occur when electronic components are handled improperly. ESD damage to semi-conductor components can result in the complete malfunction of a unit.

Follow all precautions against electrostatic discharge when removing or installing modules in an EN-2000. These precautions include but are not limited to the following:

- When handling any electronic equipment, always use an antistatic wrist strap that is connected to a grounded chassis or earth ground. [Figure A-1](#) illustrates how to connect the wrist strap to a chassis during maintenance operations.

Figure A-1. Wrist Strap Grounding



- Handle modules (sometimes called cards or boards) only by the edges.
- Avoid touching circuit boards or connector pins.
- Do not allow personal items, including jewelry, to touch ESD-sensitive equipment.
- After removing a component or module from the chassis, place it onto a non-conductive, antistatic surface or into an electrically shielded bag. (If a module will not be used for awhile, it is preferable to put it into an electrically shielded bag for storage.)
- If you store or ship a component or module instead of installing it in the chassis, make sure it is stored or shipped in packaging resistant to ESD.
- Use the correct screws or clips to fasten modules securely into place and to prevent accidental dislodging of a module.