

## **ELECTRICAL DANGERS**

Employees using electric tools must be aware of several dangers. Among the most serious hazards are electrical burns and shocks. Electrical shocks, which can lead to injuries such as heart failure and burns, are among the major hazards associated with electric powered tools. Under certain conditions, even a small amount of electric current can result in fibrillation of the heart and death. An electric shock also can cause the user to fall off a ladder or other elevated work surface and be injured due to the fall.

## **SAFE WORK PRACTICES TO FOLLOW**

- Operate tools following the manufacturer's instructions.
  - Use the personal protective equipment appropriate for the tool being used.
  - Inspect tools, power cords, and electrical fittings for damage prior to each use. Repair or replace damaged equipment.
  - Switch tools off before connecting to a power supply.
  - Disconnect the power supply before making adjustments.
  - Make sure tools are either properly grounded or double-insulated.
    - Grounded tools must have a three-wire cord with a three-prong plug.
    - This plug must be plugged into a properly grounded three-pole outlet.
  - Do not break off the third (ground) prong on a plug.
  - Test electrical tools and cords for effective grounding with a continuity tester before use.
  - Do not bypass the tool's ON/OFF switch by connecting and disconnecting the power cord.
  - Suspend power cords over walkways or working areas wherever possible to eliminate tripping hazards.
- Do not use extension cords as permanent wiring. They must only be used to temporarily supply power to an area that does not have a power outlet.
  - Do not allow vehicles or equipment to pass over unprotected power cords. Cords should be put into electrical conduits or protected by placing them between two pieces of lumber of suitable strength.
  - Keep power cords away from heat, water, and oil.
  - Do not use light-duty power cords for heavy load applications.
  - Do not carry electrical tools by the power cord.
  - Do not disconnect the power supply by pulling or jerking the cord from the outlet. Pulling the cord rather than the plug may result in electric shock.
  - Do not tie knots in power cords. Knots can cause short circuits and electric shocks. Loop the cords or use a twist lock plug.
  - Do not clean tools with flammable solvents.
  - Do not operate electrical tools in an area containing high levels of explosive vapors or gases.
  - Do not overload the circuit by plugging several power cords into one outlet.

Let's be safe out there!