

HEAT GUNS

Power tools require operator respect in specific ways. They must be used carefully and kept in safe operating condition, whether they are in the hands of a professional tradesman, an amateur do-it-yourselfer, or a vocational student. *The demands of safety apply to all.* The material presented here is a compilation of carefully selected safe use precautions as they relate to specific electric power tool CAUTIONS, WARNINGS and DANGERS. The purpose is to highlight the safe use of specific tools that have a potential of causing injury if ignored. The warnings and instructions on the power tool and in its operator's manual provide the best source of safety information for the tool. Read and understand the contents and follow the advisements of operator's manuals on each specific power tool and all related accessories. This is considered essential to the safe operation of any power tool. Review PTI's *Safety is Specific* publication for general power tool safety.



Heat guns have a variety of uses, such as removing paint, creating bends and welding plastics, cutting Styrofoam, soldering, heat shrinking, and thawing water pipes. The extreme temperatures that make heat guns so useful also make them very dangerous.

Good Personal Safety is a Must

Following good safety practices when using a heat gun is a must. Make a habit of including safety in all your activities.

- As appropriate, wear breathing protection, such as a dust mask or respirator, hearing protection, gloves and workshop apron.
- Do not point the heat gun at clothing, hair or other body parts. Do not use as a hair dryer. Heat guns can produce 1000°F (540°C) or more of flameless heat at the nozzle. Contact with the air stream will result in serious burns and personal injury.
- Do not touch the tip of the heat gun after use.
- Hot surfaces – burns to fingers or hands.

Choose the Right Tool and Accessory

There are hundreds of nozzles and accessories for heat guns. Use only those specifically recommended by the heat gun manufacturer. Others may not fit right or be able to handle the heat generated by the heat gun.

Know your Work Environment

- Do not use near flammable liquids or in explosive atmospheres, such as near fumes, gases or dust. The flameless heat from the heat gun may ignite the dust or fumes. Remove materials or debris that may become ignited from work area.
- Hidden areas such as behind walls, ceilings, floors, soffit boards and other panels may contain flammable materials that may ignite when using the heat gun in these locations. Ignition of these materials may not be readily apparent and could result in property damage and personal injury. Check these areas before applying heat. If in doubt, use a different method.

Before Using the Heat Gun...

Shield materials around the heated area to prevent property damage or fire. Keep a fire extinguisher nearby.

When Using the Heat Gun...

- Always hold the heat gun by the designated grasping surfaces.
- Do not touch nozzle or accessory tips, or store heat gun until the nozzle has cooled to room temperature. The metal nozzle requires approximately 20 minutes to cool before it can be touched. Contact with the nozzle or accessory tip could result in personal injury.
- Keep heat gun moving to avoid excessive temperatures. Pausing or lingering in one spot may ignite or melt the workpiece or the material behind it.
- Do not cut off air flow by placing nozzle too close to workpiece. Keep intake vents clean and clear of obstructions. Restricting air flow may cause the heat gun to overheat.
- Place the heat gun on a stable, level surface when not handheld. Use the support pads or support stand. Place cord in a position that won't cause the heat gun to tip over.

- Do not leave the heat gun unattended while running or cooling down. It could tip, causing fire or burns.
- Do not apply airflow directly on glass. The glass may crack or shatter, resulting in property damage or personal injury.
- The proper amount of heat for each job depends on the temperature range selected, distance between the nozzle and workpiece, and the length of time heat is applied. Experiment with scrap materials and start with lowest temperature range. Be careful when working until the proper combination of heat, distance and time of application has been obtained. Use a back-and-forth motion when applying heat unless concentrated heat is desirable.

When Done...

Unplug tool or remove battery from the gun immediately after use, before removing or changing the nozzle and before performing any service or maintenance on the tool. Place the heat gun in a clear area away from combustible materials while cooling to prevent materials from igniting. Store the tool in a dry place.

Special Considerations for Removing Paint

Use extreme care when stripping paint. Peelings, residue and vapors of paint may contain lead, which is POISONOUS. Pre-1977 paint may contain lead and paint made before 1950 is likely to contain lead. Hand to mouth contact with paint peelings or residue from pre-1977 paint may result in lead ingestion. Exposure to even low levels of lead can cause irreversible brain and nervous system damage. Young and unborn children are especially vulnerable to lead poisoning. **DO NOT REMOVE LEAD-BASED PAINT WITH A HEAT GUN.** Before beginning your work, determine whether the paint you are removing contains lead. A local health department or a professional who uses a paint analyzer can check the paint for lead content. **LEAD-BASED PAINT SHOULD BE REMOVED ONLY BY A PROFESSIONAL.**

- Work in a well-ventilated area. If possible, move the workpiece outside. If working indoors, open windows and put an exhaust fan in a window. Be sure the fan is moving air from inside to outside. Proper ventilation will reduce the risk of inhaling chemicals found in the fumes or dust created by using a heat gun.
- Remove or protect any carpets, rugs, furniture, clothing, cooking utensils and air ducts to prevent contamination and property damage from the paint peelings. Paint scrapings may ignite if too close to the heat gun nozzle.
- Keep food and drink away from work area. Wash hands, arms and face and rinse mouth after leaving the work area and before eating and drinking. Do not smoke, or chew gum or tobacco in the work area.
- Place drop cloths in the work area to catch paint scrapings. Wear protective clothing such as hats, extra work shirts and overalls. Paint scrapings may contain chemicals that are hazardous.
- Work in one room at a time. Remove furnishings or cover them and place in the center of the room. Seal doorways with drop cloths to seal work area from the rest of the building.
- Children, pregnant women, and nursing mothers should not be near work area until all work is completed and work area is cleaned thoroughly.
- Wear a dust respirator mask or a dual filter (dust and fume) respirator mask which has been approved by the Occupational Safety and Health Administration (OSHA), the National Institute of Safety and Health (NIOSH), or the United States Bureau of Mines. These masks and replaceable filters are readily available at major hardware stores or industrial distributors. Be sure the mask fits. Beards and facial hair may keep masks from sealing properly. Change filters of- ten. Disposable paper masks are not adequate.
- Clean up all paint scrapings and dust. Do not sweep, dry dust or vacuum; the paint dust will be thrown up into the air where it can be inhaled or contaminate other areas. Wet mop floors. Use a wet cloth to clean all walls, sills and other surfaces where paint and dust have accumulated. Use a high phosphate detergent, trisodium phosphate (TSP), or a trisodium phosphate substitute to clean and mop the work area.
- Dispose of paint scrapings properly. Following each work session, place paint scrapings in a double plastic bag, close it with tape or twist ties and dispose.
- Remove protective clothing and work shoes in the work area to avoid transferring dust to other parts of the building. Wash work clothes separately. Wipe shoes off with a wet rag that is then washed with the work clothes. Wash hair and body thoroughly with soap and water.
- Crowded, cluttered work areas can cause tripping or loss of balance and are particularly dangerous.
- Never alter a guard or use the tool with a guard missing. Be sure all guards are in place and working properly before each use. Do not defeat guards.

NOTICE

The contents are not meant to be, nor should they be considered, an absolute or complete presentation of the safety measures and procedures that relate to using the power tools covered. Obviously every possible application cannot be foreseen. This brochure's purpose is to highlight only some important safety and safety related information compiled from the experience of Institute members and other reliable safety oriented sources. Individual manufacturers' tool operator's manuals, shipped with tools and accessories, are recommended as a final source for proper procedures for specific tool usage.