Hammers and other striking tools are perhaps the most widely used, and probably the most often abused of all hand tools. They are made in various types, sizes and configurations for specific purposes. They should be selected for their intended use and used only for those purposes for which they are designed. Misuse can cause the striking face to chip, possibly resulting in eye or other serious injury.

**Basic Safety Rules that Apply to the use of Hammers**

A hammer blow should always be struck squarely with the hammer striking face parallel with the surface being struck. Always avoid glancing blows and over and under strikes.

When striking another tool (chisel, punch, wedge, etc.), the striking face of the proper hammer should have a diameter at least 3/8" larger than the face of the struck tool.

Always use a hammer of suitable size and weight for the job. Don't use a tack hammer to drive a spike, nor a sledge to drive a tack.

Never use one hammer to strike another hammer, a hatchet, or other hardened objects.
Never use a striking tool with a loose or damaged handle.

Discard any striking tool if it shows dents, cracks, chips, mushrooming, or excessive wear.
Never regrind, weld or reheat-treat a hammer.
Always follow safety precautions shown on striking tools.
Users and bystanders always wear safety goggles.
NAIL HAMMERS
Nail hammers are made in two designs; curved claw and straight or ripping claw. The face is slightly crowned with the edges beveled, although certain heavy-duty designs may have checkered faces designed to reduce glancing blows and flying nails. Handles may be wood, steel, or fiberglass. Steel and fiberglass handles are generally furnished with rubber-type grips that are occasionally used on wood handles.

Proper Uses
Nail hammers are designed for driving unhardened nails only, using the center of the hammer face. The claws are for pulling unhardened nails and ripping woodwork and should not be struck against metal.

WARNING: Hardened steel-cut, pole barn, and masonry nails should never be driven with a nail hammer. These nails may shatter or may cause a hammer face to chip with an indirect or glancing blow, and should never be driven, even when using the proper tool, unless safety goggles are worn. When not driven through a piece of wood, a hole should be started with a small star drill or masonry bit. A hand drilling hammer or sledge is the proper tool to use.

BALL PEEN HAMMERS
Ball peen (or ball pein) hammers have a rounded, slightly crowned striking face with beveled edges and a round, ball shaped peen. Handles may be wood, steel, or fiberglass. The steel and fiberglass handles are commonly furnished with rubber-type grips, which are occasionally used on wood handles.
Proper Uses
Ball peen hammers of the proper size are designed for striking chisels and punches, and for riveting, shaping, and straightening unhardened metal. When striking a struck tool (chisel or punch), the striking face of the hammer should have a diameter at least 3/8" larger than the face of the struck tool.

SOFT FACE AND NON FERROUS HAMMERS AND MALLETS

The faces of soft face hammers and mallets are made of various non-ferrous materials (wood, rawhide, rubber, plastic, copper, brass, lead, etc.). Heads are typically cylindrically shaped with two flat striking faces. Handles are usually wood or fiberglass. Rubber and plastic hammers are used for setting stone and alignment applications. Plastic hammers may have replaceable tips available in varying degrees of hardness.

Proper Uses
Soft face hammers are intended for striking blows where steel hammers would mar or damage the surface of the work. Wooden mallets are properly used for striking wood and plastic handled chisels, gouges, wood pins and small stakes, and to form or shape sheet metal. They should never be used to drive nails or screws, or to strike sharp metal objects.

TACK HAMMERS
Tack hammers are usually made in the designs illustrated. One end of the head is magnetized to hold tacks. Handles are usually wood. The tack hammer has a long thin claw for pulling tacks in corners and along walls; also used for removing light moldings. The heads of the other two designs are designed for starting and driving tacks only.
Proper Uses
Primary use of these light-duty hammers is holding and driving tacks and upholstery nails. The magnetic end is used for starting the tack; the opposite end, for driving.

AXES AND HATCHETS

Axe and hatchet are made in various designs and head configurations. The more widely used types are illustrated. An axe is generally used with both hands while a hatchet is generally used with one hand. Handles may be wood, steel, or fiberglass. Steel and fiberglass handles are generally furnished with rubber-type grips that are occasionally used on wood handles.

Proper Uses
The double bit axe is usually used to fell, trim, or prune trees and to split and cut wood. It is also used for notching and shaping logs and timbers. The single bit axe, in addition to the above uses, is used to drive wood stakes with the face. Hatchets are used for cutting, splitting, trimming and hewing, and driving unhardened nails and stakes with the striking face. The cutting edges of axes and hatchets are designed for cutting wood and equally soft materials. The striking faces of hatchets are properly hardened for driving common nails but should never be used to strike chisels, punches, star drills or other hardened metal tools, or for striking stone or concrete.

Always wear safety goggles to protect your eyes.

Wrong
Avoiding Abuse/Misuse.

Never use a striking tool for anything other than the uses described above.
Never strike one hammer with or against another hammer or a hatchet.
Never strike concrete, steel chisels or similarly hard objects with a nail hammer as the hammer face or object being struck may chip, possibly resulting in eye or other serious bodily injury.
Never use a striking tool with a loose or damaged handle.
Never strike with the side or cheek of a hammer.
Never use a sledge to strike a hammer, another sledge, hatchet, axe, or maul.
Avoid glancing blows against other hardened surfaces.
Avoid glancing blows to minimize chipping of the hammer.
Never use an axe or a hatchet as a wedge or a maul.

When to Repair or Replace
Do not use any hammer if the striking face or its bevel show dents, chips, mushrooming or is excessively worn, or if the claws show indentations or nicks inside the nail slot, or if the claw is broken.
If only the handle is damaged, replace it with an equivalent new handle.
Cutting edges on mauls, hatchets, and axes may be redressed.
Tips on certain designs of soft faced and nonferrous hammers and mallets can be replaced should they become damaged.