Teaching Drills, Impact Wrenches and Percussion Tools

This subset of tools includes the most widely used power tools in the world drills — along with powered wrenches, hammers, rotary hammers and hammer drills. Bracing, maintaining a firm grip on these powerful handheld tools is critical, so is protective eyewear - and ear plugs in the case of extended use.

Refer To ...

- Safety is Specific, Section on Drill Presses.
- Safety is Specific, Section on Drills, Hammer Drills, Rotary Hammers and Hammers.
- Safety is Specific, Section on Impact Wrenches.

...for references to the safe use of drills, impact wrenches and percussion tools.

Lesson Suggestion ... Create an Expert

Objective: To have students become thoroughly acquainted with at least one hand-held power tool owner's manual, to note the issues that are typically covered and the information that is provided, to recognize the manual's value as a reference tool and resource, to recognize when to refer back to it.

Materials/Requirements: Several handheld power tools and their owner's manuals. What To Do: Discuss the importance of owner's manuals as a starting point for becoming acquainted with any power tool. Point out the kind of information that is typically provided in an owner's manual and how that information might be useful.

Assign each student or team of students to read and digest one instruction manual that accompanies one of the hand-held power tools in your shop. Ask each student to create a written outline on the manual's highlights and prepare a presentation for his classmates.

Distribute copies of the outline to the other students and ask the student who created it to instruct his peers on the proper use of the tool based on what he has read and learned. Have him or her also relate dangerous situations that could develop if the proper procedures are not followed.

Encourage the other students to question their "instructor," and to evaluate how thorough the instruction session was. Ask them to suggest instances when it would be appropriate to re-read certain sections of the manual.

Finally, photocopy the guidelines for each tool as presented in **Safety Is Specific** and provide each student with a copy. Have your students compare each presentation to the rules outlined in **Safety Is Specific**. Have all the vital points been covered? Has any important information been overlooked? If so, what might the consequences be of overlooking that information?