Think Safety!

1. Use the Right Tools
2. Use Only High-Quality Tools
3. Use Your Tools Properly

Always wear safety goggles to protect your eyes.

1. Never use cheater bars or hammers.
2. Inspect and discard bent, worn, or cracked tools.
3. Use the correct drive size; choose the largest possible drive size. It is stronger and safer.
4. Use the correct size socket; do not use metric sockets on inch fasteners or vise versa, because the fit is not good enough.
5. Place the socket all the way on the fastener.
6. Always be prepared and braced for something coming loose. If possible, PULL on a wrench handle and adjust your stance to prevent a fall if sudden release occurs.
7. If it appears that there is no safe way to do a job, find another way! Don’t risk an accident.
8. Use only impact sockets on impact guns. Never use chrome sockets on impact guns.
9. Take special care in selecting and using wrenches on high strength fasteners—grade 5 and 8, 12 pt. nuts and bolts, and many other aerospace fasteners; they require unusually high torques for their size.
10. The safest wrench is a box or socket type because they are stronger and less likely to slip off the fastener. Open end, flare nut and adjustable wrenches are not as strong as the corresponding sizes of box and socket wrenches. Open end, flare nut, and adjustable wrenches are not intended for heavy loads such as breaking loose frozen fasteners, or final tightening.
11. Always be sure to fully seat an open end wrench on the nut or bolt.
12. Tightly adjust to the nut the adjustable wrenches and pull so force is on the fixed jaw side.

13. Avoid overtorquing. A torque wrench will permit tightening to the exact torque required for best performance and safety.
14. Wrenches should not be ground to change their shape.
15. Ordinary plastic dipped and cushioned handles are designed for comfort NOT electrical insulation.
16. Never expose any wrench to excessive heat, which may change the hardness and metal structure, and ruin the tool.
17. Reversible ratchets are among the strongest hand tools in their respective drive sizes. They are designed to interchange with a full range of sockets and accessories in their drive size. It is possible for a lower torque rated socket, or accessory, to be used. Exercise care so as not to overload the weakest component.
18. Use the right type and size screwdriver blade for the screw. Too loose, or too tight a blade may slip, causing serious injury. Screwdriver blades should never be used as punches, chisels, scrapers, or pry bars. Worn blades may cause serious bodily injury.
19. “Mushroomed” heads of punches and chisels may chip and cause injury.
20. Always keep hammer heads tightened on the handle. Do not strike one hammer with another hammer.

Eight Safety Tips for Impact Sockets

1. Wear safety goggles.
2. Never use a nail or homemade pin for holding a socket in place.
3. Never exceed a manufacturer's recommended gun pressure rating.
4. Don’t dwell longer than necessary to get torque.
5. Put the socket on the fastener before starting the impact gun.
6. Do not hold impact sockets, universal joints, or extensions while impact tool is running. Serious hand and wrist injury can occur.
7. Use adapters only for special applications—not for general use.

Safety depends on the purchase of quality tools, proper care and use of the tools, and replacement of worn out tools. Wright tools are designed and forged to be as strong as their size permits and to outwear other brands.

Always use the right size and type of tool for the job being done. Wright Tool Company cannot be responsible for injury or damage caused by tools improperly used, or from tools which have been abused or badly worn.

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8. Minimize the joints between the gun and fasteners for less loss of torque and less wear.

**Safety Rules, Requirements and Limitations of Chisels and Punches**

1. Safety goggles or equivalent eye protection conforming to ANSI requirements must be worn by the user and all persons in the immediate area where any chisel or punch is being used to avoid possible eye injury from flying objects. It is suggested that a safety screen also be used to prevent injury to other workmen from flying particles.

2. Metal cutting chisels are special purpose tools designed and intended only for the cutting, shaping and removing of metal softer than the cutting edge of the chisel itself. Such soft materials may include cast iron, wrought iron, steel, bronze, copper, etc. An initial light cautious blow may be used to ascertain the relative hardness of the struck object with subsequent examination of the cutting edge. To avoid possible bodily injury, chisels must not be used to cut objects as hard or harder than the chisel cutting edge.

3. Chisels, prick, pin, center and starter punches must not be used for prying or wedging, and no surface of the chisel or punch must be struck other than the struck face.

4. A hammer blow should always be struck squarely with the hammer face parallel with the struck face of the chisel or punch. Always avoid glancing blows and over and under strikes.

5. The striking face of the appropriate type and size hammer should have a diameter approximately 3/8 inch (9.5 mm) larger than the struck face of the chisel or punch.

6. Chisels and punches must be inspected at regular intervals and their use discontinued at the first sign of excessive wear, chipping or cracking of the point end, cutting edge, or the struck face, or from bending.

7. Never use a chisel or punch with a dull, chipped or deformed cutting edge or point, or one with a mushroomed struck face.

8. Dulling of the cutting edge or point end may occur from tool usage, and it should be resharpened or redressed to the original contour by the use of a whetstone or file. It is understood that industrial users with adequate facilities and properly trained personnel may choose to redress or resharpen these tools by other means without altering the metallurgical characteristics of the tool.

9. At the first indication of mushrooming of the chisel or punch struck face, it must be redressed to original contour by the use of a hand file. It is understood that industrial users with adequate facilities and properly trained personnel may choose to redress or resharpen these tools by other means without altering the metallurgical characteristics of the tool.

10. Except as noted in item 8 or 9, no area, section or portion of the chisel or punch must be ground, welded, re-heat treated, or otherwise altered from the original condition as furnished by the manufacturer.

11. The point end diameter of the starter punch or pin punch must approximate the size of the work piece.

12. Pin punches must not be used as a starting (solid) punch.

13. Drift or lining punches are special purpose tools intended for aligning and sizing holes and must not be used for driving metal or other hard objects.

**Vise Safety Information**

1. Misuse of vises can cause serious injury to eyes, hands and other body parts.

2. To ensure safety, vise must be set up and used properly.

3. Before set up and use, read, understand and follow all instructions as outlined below.

**Clamping Systems Safety Information**

1. Misuse of C-Clamps or L-Clamps can cause serious injury to eyes, hands and other body parts.

2. To ensure safety, C-Clamps and/or L-Clamps must be selected, inspected and used properly.

3. Read, understand and follow all instructions as outlined below.

**Before Using Workholding Clamps**

1. Select enough clamps of proper size and capacity to handle job being done.

2. ALWAYS inspect clamps before using. NEVER use a clamp with:
3. Bent, twisted or cracked frame
4. Badly worn threads on spindle
5. Bent or cracked spindle
6. Swivel pads badly worn or missing from spindle.

When Using Workholding Clamps

1. NEVER use hammer or pipe extension to tighten a clamp; only tighten to prevent slippage. If a wrench is used on a clamp, do not exceed the recommended “nominal clamping pressure/lbs.”
2. NEVER use a clamp as a permanent holding device; always use clamp only as a temporary holding tool.
3. NEVER use a clamp to secure loads on moving vehicles; vibrations can cause them to loosen.
4. NEVER use a clamp with chain, strap, cable or hook to lift or move a load or work object.
5. NEVER use a clamp to support any scaffolding.
6. NEVER weld any parts of a clamp to other metal objects before consulting Wright Tool Company.
7. NEVER strike or use power tools on objects that are clamped using workholding clamps without wearing eye and face protection.
Use this table to select the correct size wrench for any size fastener-inch or metric.

1. Measure the fastener head or nut with metric calipers.
2. Look down the MINIMUM OPENING column and find the first number larger than your reading.
3. Look to the left of that number to find the wrench size. (The vertical line between two sizes indicates that the range of an inch wrench overlaps that of a metric wrench. Either size can often be used.)

This table is to help you select the correct size wrench for any fastener, even if you do not know whether it is an inch or a metric fastener. The closer a wrench fits a fastener, the more torque can be transmitted without rounding the fastener corners or causing excessive wear to the wrench.

First, measure the fastener head or nut with calipers in millimeters. Then, look down the MINIMUM OPENING column to find the first number larger than your reading. For example, if you read 15.1, look down the table until you come to the value 15.9; then look across the table to 5/8". The vertical line between two sizes indicates that the range of an inch wrench overlaps that of a metric wrench. Either size can often be used.

Another way to use the table without measuring is to simply choose a wrench without referring to the table. Sometimes, a fastener is damaged or worn, so you might need to use a slightly different size wrench. You can always use the table to come as close as possible to the best fit. Always feel how much play there is to see that you have made the correct choice. If it doesn’t feel right, it isn’t right.

Remember that all wrenches wear when they are used, even when they are used carefully. Once a wrench is worn oversize, it should be discarded because its use would be the same as putting the wrong size wrench on a fastener.

The best drive size is indicated in the column headed BEST DRIVE. The drive indicated here provides an appropriately high level of strength in the handle. If you use a smaller drive than what is recommended here, you are using soft fasteners, a smaller drive will work satisfactorily. If no drive is listed, use your judgement for the job. Extremely high torque may require an even larger drive size than indicated.

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