

### *Pliers and Wrenches*

#### List tasks needing pliers and wrenches

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#### Explain dangers

Injuries with hand tools are not often serious, but they can be severe enough to send you to the hospital and make you lose time from work.

Common causes include using the wrong tool, using the right tool improperly, rushing, and lack of training or experience.

#### Identify controls

[Demonstrate these points as you talk.]

#### All tools

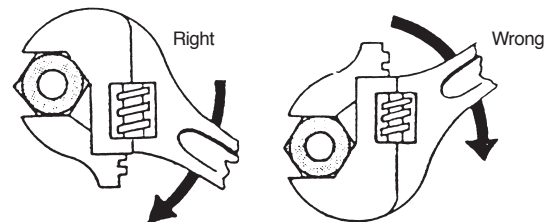
- Use tools for their intended purpose. Don't use pliers as wrenches. Don't use wrenches as hammers.
- Wherever possible, don't expose tools to extremes of heat and cold. Metal will lose its temper and get brittle.
- Don't extend the handles of tools with sleeves or cheater bars for more leverage and power.
- Don't confuse cushion grips with insulated handles. Cushion grips are for comfort only. Insulated handles are for electrical shock protection.
- Don't hammer on the handles of wrenches or pliers to gain more force. The tool could bend, break, or fly off and hit you or someone else.

#### Pliers

- Use pliers with enough space between the handles to keep palm and fingers from being pinched.
- Pull on pliers; don't push.
- Oil regularly. All it takes is a drop of oil on the hinge.
- Use pliers that are big enough to do the job with reasonable effort.
- Don't use pliers to turn nuts and bolts. The jaws can slip and damage corners and edges of nuts and bolt heads.

#### Wrenches

- Replace damaged wrenches. Straightening a bent wrench only weakens it.
- Pull on a wrench; don't push.
- Be prepared in case the wrench slips. Make sure your footing is solid, your stance balanced, and your hands clear.
- With adjustable wrenches, put pressure on the permanent jaw, not the movable jaw.



- Use the right wrench for the job. Don't use pipe wrenches on nuts or bolts. Don't use adjustable wrenches on pipe.
- On adjustable wrenches, inspect knurl, jaw, and pin for wear.

#### Demonstrate

Review types of pliers and wrenches used by your crew. Inspect a few for evidence of wear, damage, or misuse.