## RIDGID

## Proper Use of Pipe Wrenches

AWARNING Failure to properly use wrenches can result in serious injury.
Always use the correct pipe wrench. Pipe wrenches are available in a number of different styles and sizes particular to the job they are designed for:


- Straight and RAPIDGRIP Pipe Wrench - suitable for all forms of pipe work
- End Pipe Wrench - fast easy grip for close to wall and parallel work
- Offset Wrench - provides easy entry to tight spots and awkward angles
- Compound Leverage Wrench - multiplies leverage: used for seized joints
- Chain Pipe Wrench - ideal for extremely tight work
- Strap Wrench - suitable for polished, plastic or plated pipe


## Mount The Pipe Wrench Correctly On The Work Piece

When using a pipe wrench of any size, a gap must be maintained between the shank of the hook jaw and the pipe itself. This permits the pressure of the two gripping points (the heel jaw and the teeth of the hook jaw) to produce the gripping action of the wrench. Allowing the back of the hook jaw to contact the pipe greatly reduces the gripping action of the wrench and can cause the wrench to slip. It may also result in the failure of the hook jaw. Maximum grip and turning force is developed by maintaining a gap of approximately $1 / 2^{\prime \prime}(12 \mathrm{~mm})$ between the back of the hook jaw and the work piece.


When using a RapidGrip wrench, be sure to center the work piece in the " v " of the hook. If the work piece is not in contact with both sides of the " v ", it can reduce wrench gripping action and may result in failure of the hook.


## Improper Uses of Pipe Wrenches

AWARNING Misuse or abuse of a pipe wrench may result in serious injury. The following is a list of practices that may result in damage or failure of the wrench.

- Do not use cheaters - A "cheater" is usually a piece of pipe slipped over the handle of a pipe wrench to increase the leverage of the pipe wrench. This may result in the bending and/or breaking of the wrench handle. A "Cheater" can also slip off the wrench during use, causing injury. If greater leverage is needed use a larger wrench.

- Do not use the wrench as a hammer - A pipe wrench is designed to turn pipe. Using the wrench as a hammer could damage the wrench.
- Do not use a wrench with a bent or twisted handle - A bent handle indicates the wrench has been overloaded and could be damaged. A bent handle should never be straightened. A wrench with a bent or twisted handle should be taken out of service.
- Do not use an incorrect size wrench - Always insure the correct size of wrench is being used for the job. Wrench nut should not be located at the very end of the hook jaw. Using a wrench beyond its capacity may result in wrench failure. Using a wrench that is larger than required may result in damage to the work piece.


| Suggested Pipe Wrench Size Reference |  |
| :---: | :---: |
| Wrench | Pipe Dia. |
| $6{ }^{\prime \prime}$ | $1 / 8^{\prime \prime}-1 / 2^{\prime \prime}$ |
| $8{ }^{\prime \prime}$ | $1 / 44^{\prime \prime}-3 / 4{ }^{\prime \prime}$ |
| 10" | $1 / 4^{\prime \prime}-1{ }^{\prime \prime}$ |
| $12^{\prime \prime}$ | $1 / 2^{\prime \prime}-1 / 1^{\prime \prime}$ |
| $14^{\prime \prime}$ | $1 / 2^{\prime \prime}-11^{\prime \prime} 2^{\prime \prime}$ |
| $18^{\prime \prime}$ | $1^{\prime \prime}-2^{\prime \prime}$ |
| $24^{\prime \prime}$ | $1^{1} / 2^{\prime \prime}-2^{1 / 2} 2^{\prime \prime}$ |
| $36^{\prime \prime}$ | $2^{\prime \prime}-3^{1 / 2^{\prime \prime}}$ |
| $48^{\prime \prime}$ | $3^{\prime \prime}-5^{\prime \prime}$ |
| $60^{\prime \prime}$ | $3^{\prime \prime}-8^{\prime \prime}$ |

- Do not use on hard, square or hexagonal material - Wrench is designed to turn pipe or soft round stock. Wrench may slip on hardened material or the teeth may chip when used on hex or square stock.
- Do not hit a wrench with a hammer to break loose a fitting - High impact loading may damage a wrench and result in unexpected handle failure.
- Do not apply a side load to the handle - Putting a strain on the wrench that it was not designed for can result in a broken housing or twisted handle.
- Do not use as a lever, lifting device or to bend tubing - Wrench is designed to turn pipe. Improper use may result in damage to the handle.
- Do not use near a flame - Teeth on the hook or heel jaw could become soft. This may result in chipping or flattening of the teeth. Chain on a chain wrench could also become soft. This reduces its strength which may result in its failure.
- Do not use in conjunction with a power drive, threading machine or any mechanical/hydraulic device to make or break fittings - Use of a power drive, threading machine/hydraulic devices to apply force to the handle of a pipe wrench can result in wrench failure and/or serious personal injury.
- Do not modify or alter a pipe wrench - Modifying a pipe wrench may result in wrench failure and serious injury.


## Proper Maintenance of Pipe Wrenches

IWWARNING Do not use a pipe wrench that is not properly maintained. Inspect your wrench frequently for damaged or worn parts.

## Straight/RapidGrip/End/Offset and Compound Wrenches

- Clean teeth with a wire brush. Dirt in hook or heel jaw may result in the wrench slipping.
- Replace jaws with worn teeth or any other damage. This may result in the wrench slipping or possible failure of the jaw.
- If the wrench fails to operate with its normal ratchet action, examine the spring assembly and replace if necessary.
- To prevent rusting, keep non painted parts well lubricated with oil and store in a dry place.


## Chain Wrenches

- Clean heel jaw teeth with a wire brush. Dirt in hook or heel jaw may result in the wrench slipping.
- Replace heel jaw if teeth are worn or damaged. This may result in the wrench slipping or possible failure of the jaw.
- Inspect chain for separation of the links or any other damage. This indicates the chain has been overstressed and should be replaced.
- To prevent rusting, keep chain and jaw well lubricated with oil and store in a dry place.


## Strap Wrenches

- Inspect the strap and replace if frayed or cut. This reduces the strength of the strap.
- Replace the strap if the wrench slips due to grease, oil or other dirt that may have impregnated the strap.

If you have any questions regarding the care and use of pipe wrenches, call or email Ridge Tool's Technical Service Department at (800) 519-3456 or techservices@ridgid.com

