What is a bench vise?
A bench vise is like an extra hand and is a common tool found in any shop or garage. It is attached to a workbench and its purpose is to hold material steady, allowing you to use both hands to work on the material with other tools. They are ideal for sawing, sanding, planing, drilling, screwing, soldering and more.

A conventional bench vise is manually operated. The user has to crank down on a lever to operate it. This is a high risk for injury and/or strained muscles. It also cannot provide dependable power, control or stability. This is even more evident when additional help is necessary for set-up and operation.

A hydraulic bench vise provides power and performance with the efficiency of hydraulic power. The user operates the vise by use of a hydraulic foot pump. It is user and handicap friendly and eliminates physical limitations and risk factors.

Conventional vises (left) have a lever of some sort. The user has to manually crank down on it with one hand and support the object in the other while operating.

Hydraulic bench vises, such as Posi Lock Puller’s PHV859A (right) are powered by a hydraulic foot pump. This provides a hands-free operation.
How does the Posi Lock Hydraulic Bench Vise Work?

Hydraulic bench vises are durable, powerful and precise. They use a hydraulic source such as a hydraulic foot pump to power the unit, leaving the users hands-free to manage the workpiece. Below are guidelines for set-up and usage of Posi Lock's Hydraulic Bench Vise.

Inspect the hydraulic components
Examine the hydraulic components for any kinks in the hoses or other forms of damage before use. Clean and lubricate the vise.

Connect Air Supply
Connect air supply and hydraulic hose couplers as required.

Operate the pump
Use the foot pump 3-position foot turn-dle to advance and close the vise jaws. Hold, or retract to open the jaws.

Position the object
Hold the object in place between the jaws. Turn the air control valve to open up air flow. Step on the foot pump to close the jaws and to clamp firmly around the object.

Make sure the object is secure before performing maintenance.

Manage air flow
At the air inlet, turn the control valve CLOCKWISE to restrict air flow to pump. The Vise closes slowly. Turn the control valve COUNTER CLOCKWISE to allow more air flow to the pump. The Vise will close faster.
SAFETY PRECAUTIONS

Hydraulic power is one of the safest methods for applying force when used correctly. Below we have provided several precautions which pertain to hydraulic systems:

- DO NOT touch or handle hydraulic hoses or fittings with pressure in the system.
- DO NOT wear loose clothing while operating the system.
- DO NOT make or break any hydraulic connections with pressure in the system.
- DO NOT operate hose with sharp bends or kinks. (Discard hose that has been kinked or otherwise damaged).

SAFETY | OPERATOR SAFETY COMES FIRST!

1. Secure vise to table.
2. Small parts should be held with pliers (not your fingers) when clamping object in vise jaws. Keep all body parts out of vise jaw clamping area. Failure to do so can result in serious injury.
3. Make sure odd shaped objects are positioned securely.
4. Always wear safety glasses.
5. Use hydraulic gauge to track clamping force exerted. IE: 1000 PSI = 1000 LBS. of force.
6. Avoid damage to the hose by keeping hot material away.
7. Anticipate possible problems and take steps to avoid them.

The Posi Lock Hydraulic Bench Vise will have approximately 3 to 5 times the force of a manual vise. Respect these forces.
8. Disconnect power source when not in use.
**Target Markets**

Hydraulic bench vises help users do their jobs accurately and efficiently and are used throughout industries including:

- Manufacturing
- Oil fields
- Wind farms
- Paper mills
- Construction sites
- Logging
- Railroad
- City/County/State dept.
- Automotive shops
- Salvage yards
- Steel mills
- Motorcycle shops
- HVAC
- Home shops
- Maintenance shops
- Warehouses
- Recycling centers
- Processing plants
- Assembly lines
- Agriculture shops
- Warehouses
- Aviation
- Shipyards
- Power plants

**Applications**

Hydraulic bench vises are versatile tools and are found in any shop, garage or maintenance department. They provide hands-free operation in both horizontal and vertical positions to perform clamping, pressing or work-holding applications. For example:

- U-joint removal
- Form steel
- Woodworking
- Sawing
- Cutting steel/metal
- Drilling & boring
- Cutting conduit
- Fabrication
- Assembly
- Auto maintenance
- Regripping golf clubs
- Rebuilding regulators
- Home projects
- Planing
Posi Lock's PHV859A Hydraulic Bench Vise is the most advanced of its kind, proving itself over and over in shops across the globe. With 5-TONS of clamping force and an air control valve for speed and safety, the industrial strength vise is the perfect vise for any shop.

The PHV859A includes:
- 5-Ton hydraulic vise
- Air over hydraulic 10,000 PSI foot pump with air control valve
- 10,000 PSI gauge
- 10 foot hydraulic hose
- Set of Posi Lock Hold-Et’s (Magnetic Vise Clips)