

# IMPORTANT!

Please read this before performing any maintenance or service work to this equipment!

## WARNING

**If you have not read the Operation and Maintenance Manual and feel you were not properly trained DO NOT ATTEMPT TO OPERATE THIS MACHINE. Serious injury or death may result!**

In order to ensure the safety of your employees, contract maintenance personnel, and yourself it is very important to “Lock Out & Tag Out” this equipment before performing any maintenance or service work on it. Depending on the equipment there will be areas that need to be addressed with Lock Out / Tag Out procedures

- Electric
- Water
- Pneumatic

In each of the above areas it is necessary to ensure that it is impossible activate any input to the equipment while it is being worked on. There are a number of ways to accomplish this in each area. Due to this, each individual company should determine what system will work best for them and ensure that each employee strictly adheres to it. If you have any questions on how to start a Lock Out / Tag Out program, you can contact your State Department of Labor office and they would be happy to provide you with information and sources for materials.

## WARNING

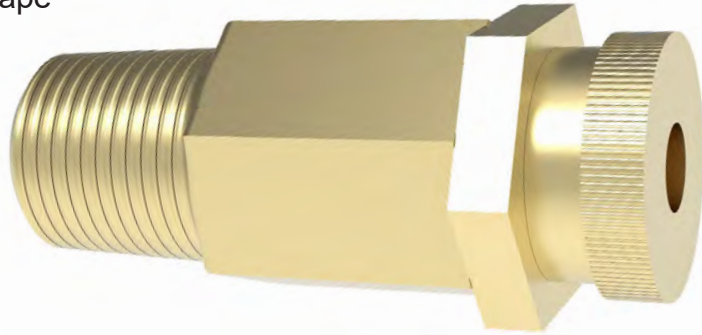
**Maintenance is to be performed by trained personnel and while the machine is in a safe state to perform any maintenance. Machine must be in a safe state prior to any maintenance.**

## Description:

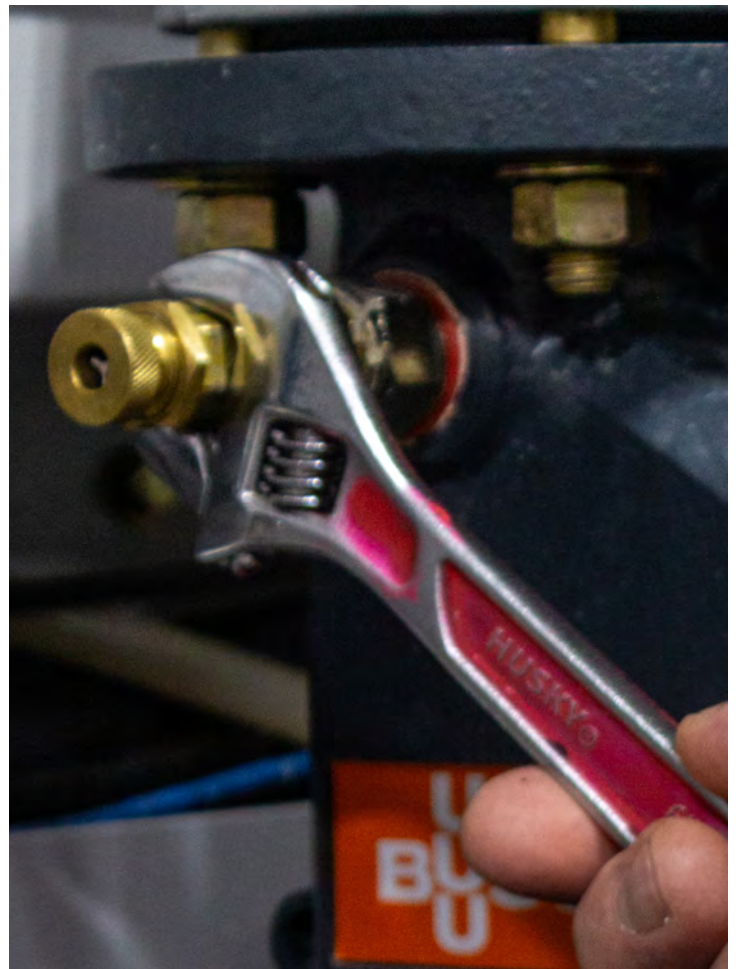
A step by step guide on how to replace the 5 hp vacuum pump relief valve.

## Tools and supplies:

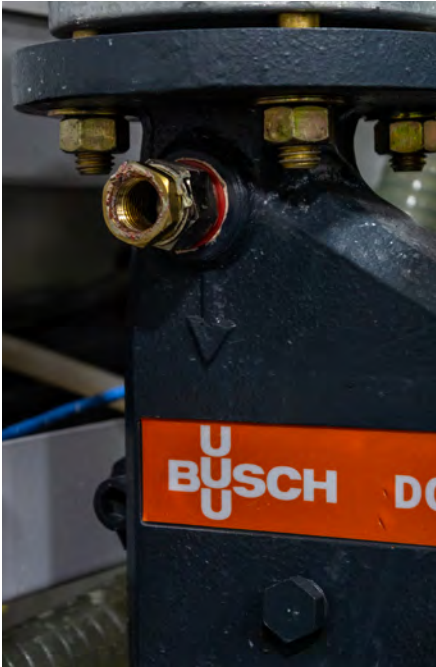
- Adjustable wrench
- Loctite 567 pipe sealant or Teflon tape
- $\frac{5}{8}$  wrench
- Shop towels



1. Turn off the air, water, and power at the source and machine.
2. Unscrew the relief from the pump.



3. Apply Pipe sealant or Teflon tape to seal the new relief valve.
4. Screw in the new relief.
5. Loosen the jam nut.
6. Turn the cap counterclockwise until 6 threads are visible beyond the jam nut.
7. Turn on the air, water, and power at the source and machine.
8. Turn the vacuum pump on and confirm a vacuum seal: the regulator should read 10 psi or 3 gallons per minute from vacuum pump discharge.



9. If a “hissing” noise is audible, continue to step 10. If a hissing noise is inaudible, turn the cap of the relief counterclockwise until it is.
  10. Close the ball valve at the vacuum inlet leading to the pump (located above the relief valve).
  11. Turn clockwise until you hear a crackling or grinding noise. Turn counterclockwise until the noise is gone, then complete another half turn.
- Note:** *When the relief valve is set correctly, you may hear a rattling noise from the valve.*
12. Once set, tighten the jam nut.
  13. Open the ball valve at the vacuum inlet. Confirm the Vacuum is within normal operating range.

