Replace - 5 HP Vacuum Pump

Issue Date: 05/09/2024
Document ID/Revision: SG00266/A

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.

Contact our Customer Care team to learn more: 800.785.3391 // parkindustries.com

Description:

A step by step guide on how to replace the 5 hp vacuum pump on a Titan 4000 series machine.

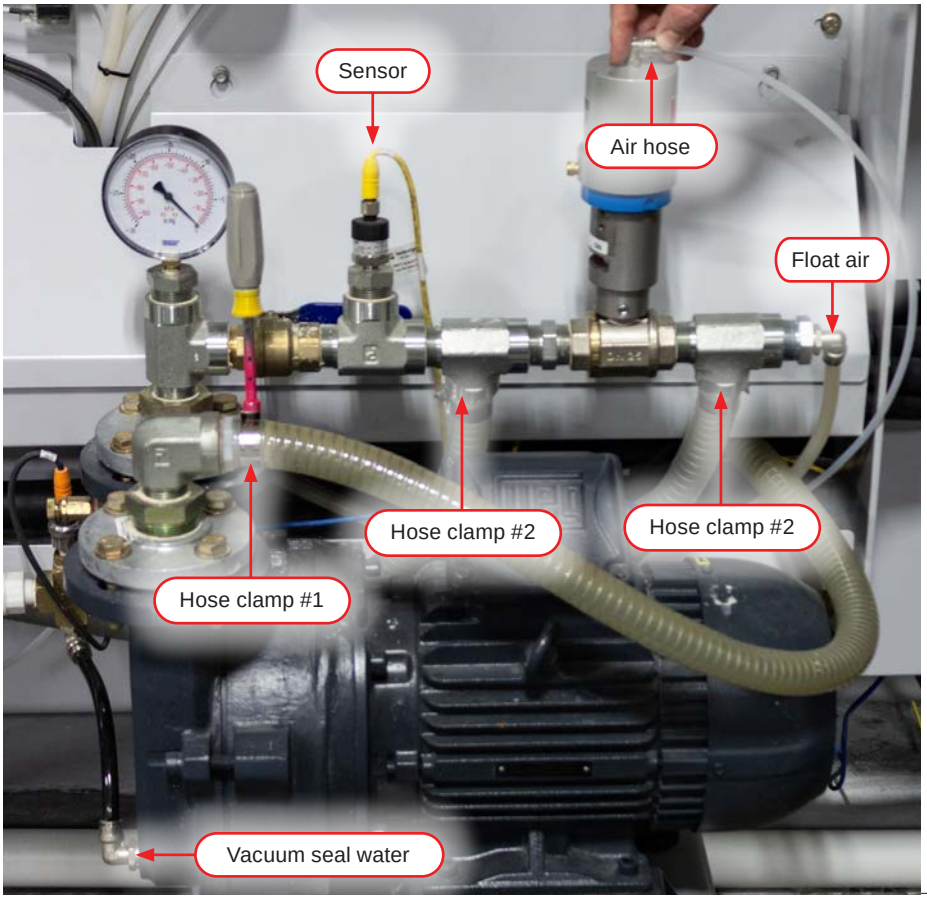


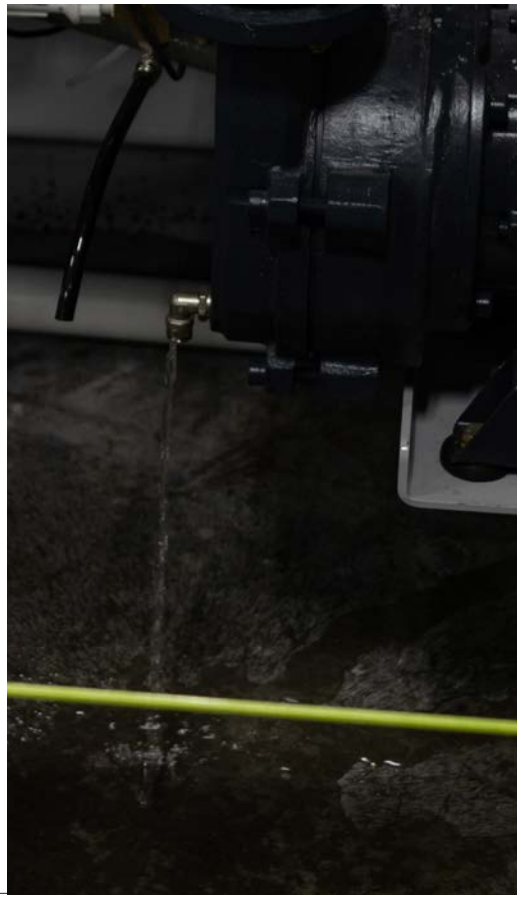
Tools and supplies:

- Lifting straps
- Crane/forklift
- 10 mm
- 7 mm
- Monkey wrench
- Adjustable wrench
- ½ wrench
- 5⁄16 nut driver
- ¾ wrench
- ⅝ wrench
- 9⁄16 wrench
- Loctite 567

1. Turn off the air, water, and power at the source and machine.
2. Disconnect the air and water lines from the pump. Unplug the sensor.

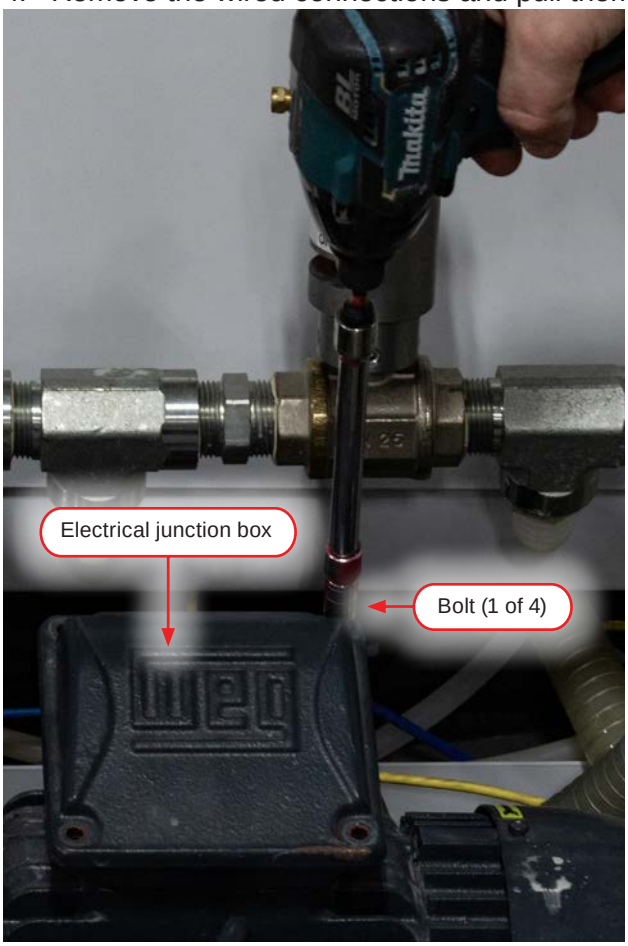
Note: *allow the water to drain after disconnecting the water hookup.*

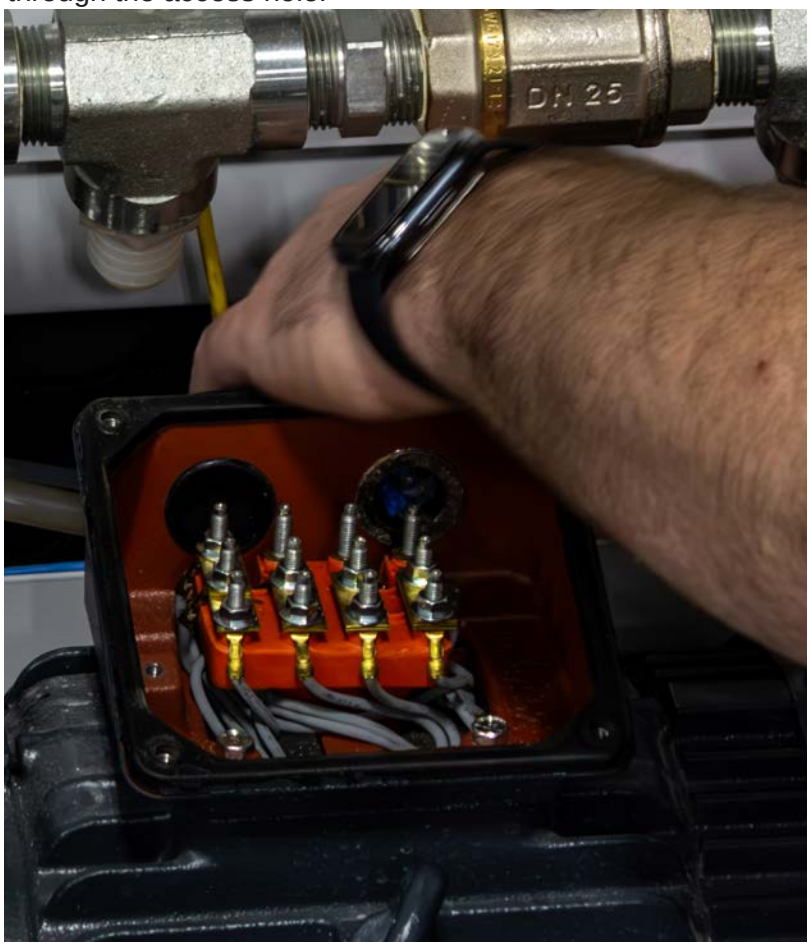




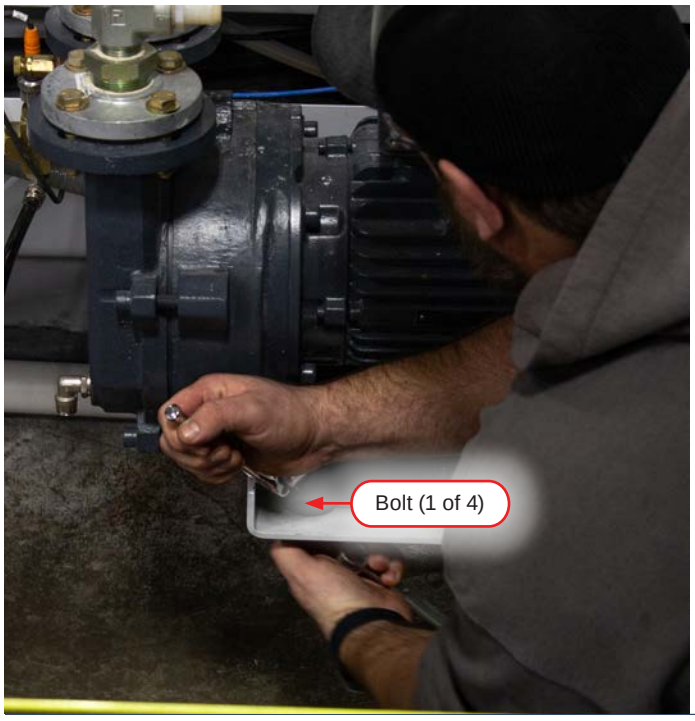
Contact our Customer Care team to learn more: 800.785.3391 // parkindustries.com

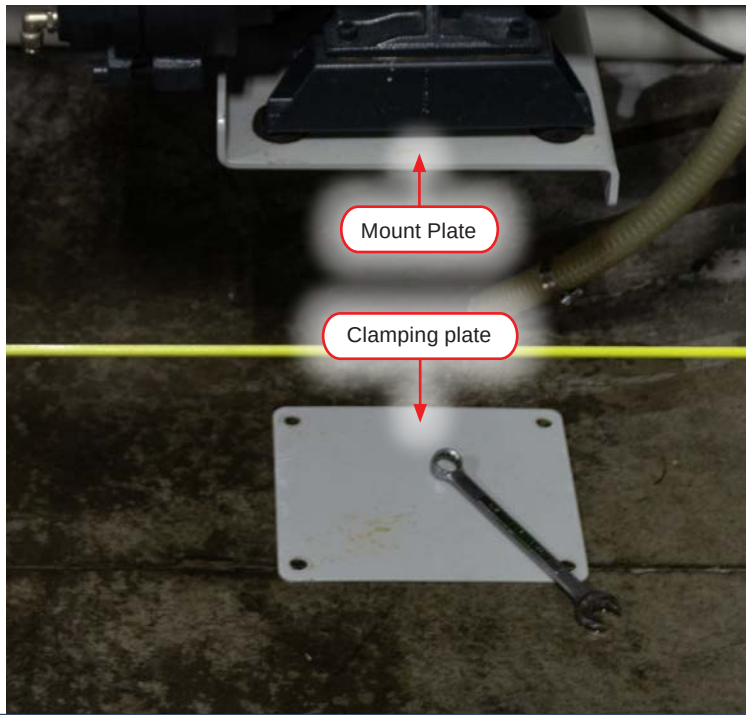
3. Unscrew the 4 bolts for the electrical junction box cover.
4. Remove the wired connections and pull them through the access hole.





5. Remove the 4 bolts securing the pump to the mount plate; after the final bolt, catch the clamping plate attached to the underside of the mount plate.





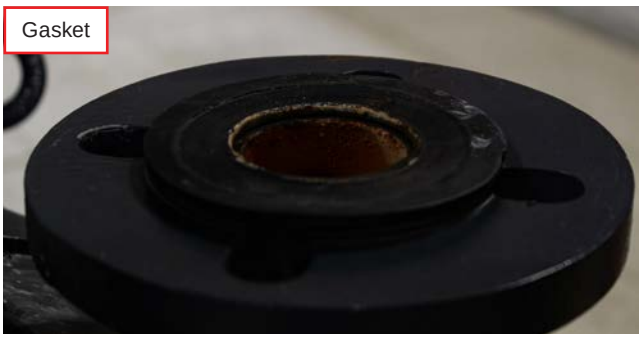
Contact our Customer Care team to learn more: 800.785.3391 // parkindustries.com

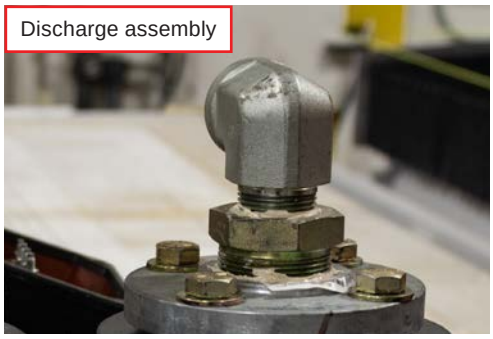
6. Remove the pump from its platform.



7. Strip the old pump: remove the manifold, discharge assembly, relief valve, vacuum seal water, and cord connector, and gaskets.

Note: *check for wear and tear; replace if necessary.*







8. Attach the manifold, discharge assembly, relief valve, vacuum seal water, cord connector, and gasket to the new pump.

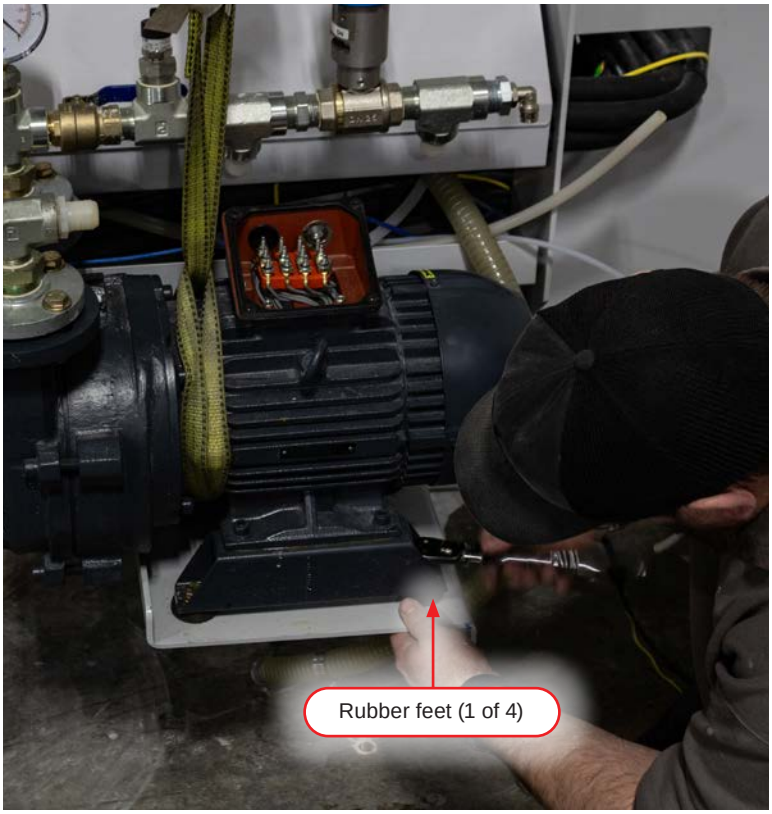






9. Pass the bolts through the pump, rubber feet, mount plate, and clamping plate; attach and tighten a nut onto the bolt's threaded end to secure the new pump to the machine.

Note: *avoid flattening the rubber feet as you tighten the bolts.*



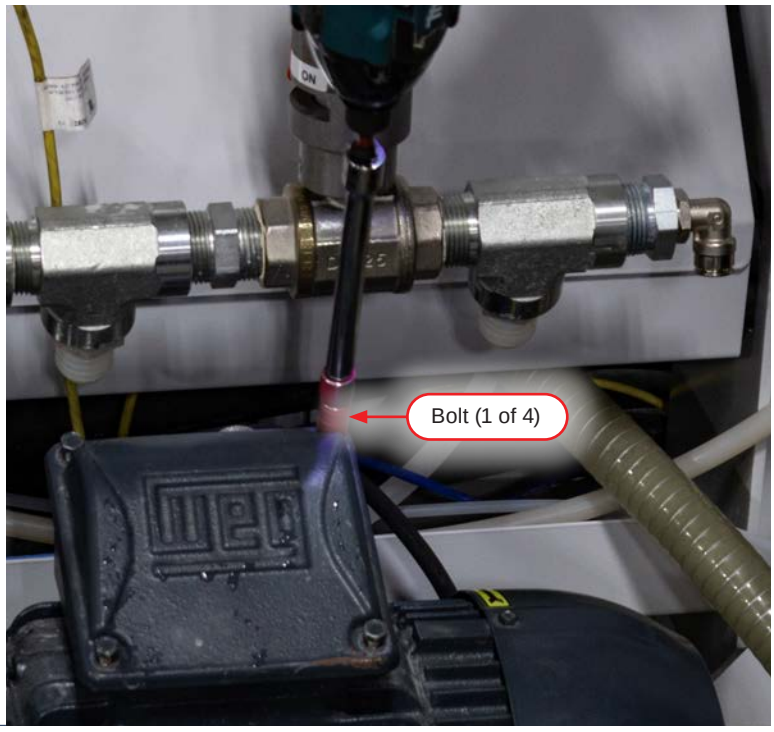


10. Insert the wires through the cord connector to the electrical junction box, connecting them to the pump.

Note: *refer to the wiring diagram on the motor nameplate when attaching the wires.*

11. Seal the electrical junction box.



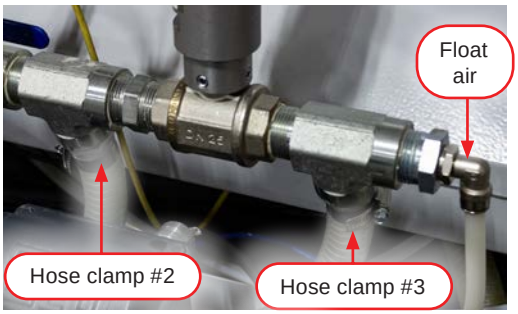


Contact our Customer Care team to learn more: 800.785.3391 // parkindustries.com

12. Attach the air and water lines to the pump.













13. Turn on the water, air, and power at the source and machine.
14. Check for leaks.
15. Quick cycle the pump on and off to confirm a clockwise rotation of the motor: Watch the fan on the end of the motor. The arrow sticker on the fan shows the proper motor rotation.
16. The regulator should read 10 psi or 3 gallons per minute from vacuum pump discharge.
17. Confirm the vacuum relief valve is set correctly. See Replace - 5 HP Vacuum Relief Valve Service Guide.
18. Confirm proper vacuum.

Contact our Customer Care team to learn more: 800.785.3391 // parkindustries.com