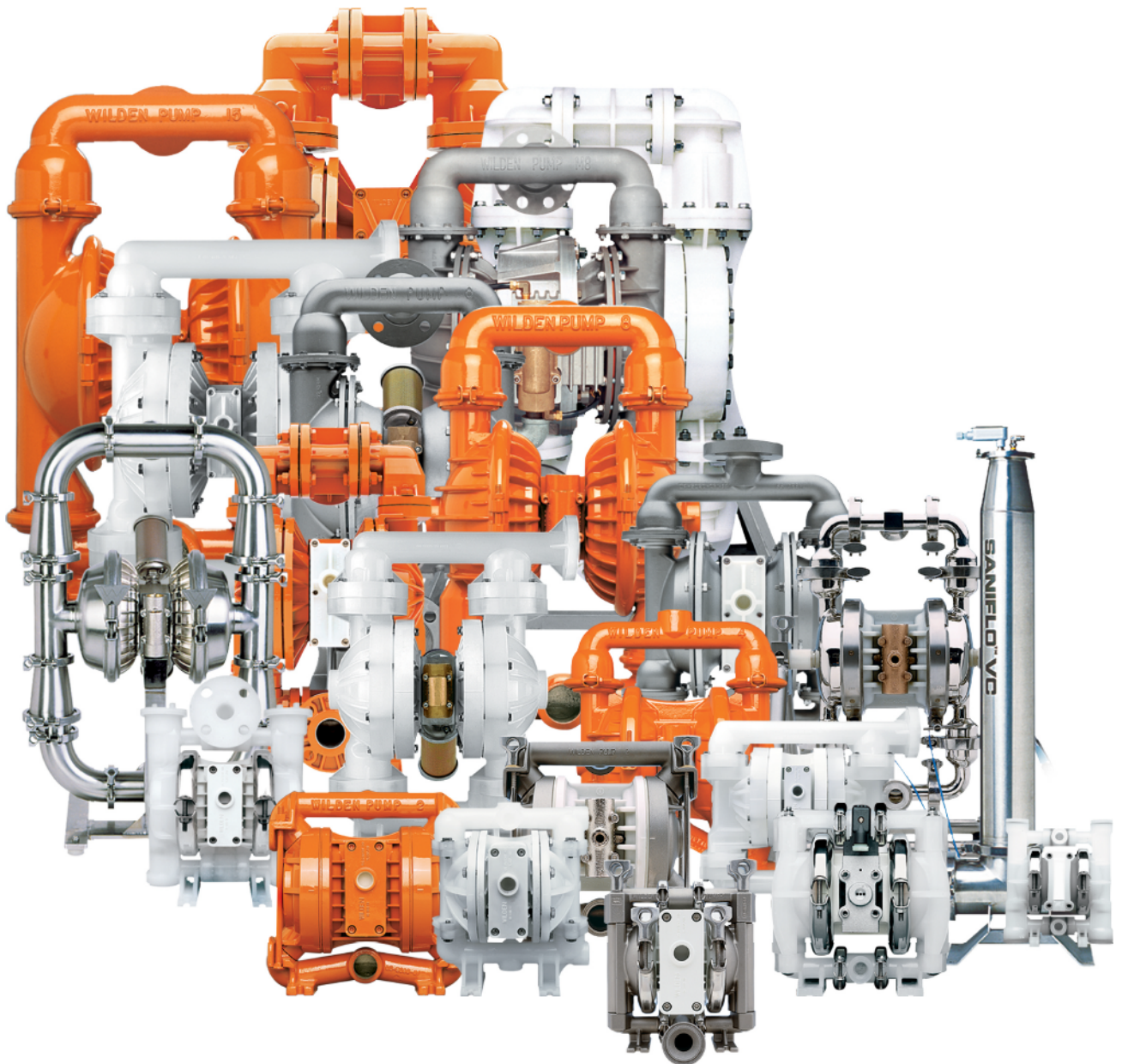


# HelioPower®

## MAINTENANCE GUIDE

**WILDEN®**  
Part of Pump Solutions Group  
A DOVER™ COMPANY



# Wilden® Pump Maintenance Guide

You've chosen to invest in one of the best industrial diaphragm pumps out there. But getting the best performance and longest operating life out of your investment requires having good pump maintenance practices. Maintaining your industrial AODD pump involves more than just inspecting and replacing worn parts. Everything from the air you use to understanding pressure and output limits will affect performance and longevity.

THE BETTER YOU TREAT YOUR PUMP, THE MORE LIFE YOU'LL GET OUT OF IT.

## **Prevent Problems Caused by Debris and Moisture**

Every operating environment has its fair share of contaminants present. You can't prevent them, especially in outdoor applications, but there are ways to protect your pump components from harmful debris.

- Debris from external sources can ruin your pump over time. A suction strainer keeps large debris out of your pump and helps prevent external failure.
- Always use good, clean, dry air to run your pump and keep hose fittings clear of dust, dirt, and grime.
- In humid operating environments, watch for moisture buildup in the lines. Filter regulators prevent moisture buildup and have the added benefit of allowing you to regulate pump air pressure.



## **Avoid Overworking Your Pump**

Everyone has a job that needs to get done quickly and efficiently. But pushing your pump beyond its mechanical limits will only result in more downtime.

- Running your pump at max volume occasionally is okay but doing this all the time will cause premature component wear and pump damage.
- Keep air pressure as low as possible to attain the output you need without overworking your pump. 90 psi is usually recommended for maximum efficiency.
- Wilden® pumps are designed for intermittent dry operation but overdoing it places additional stress on the pumping system.

## THINK ABOUT COMPATIBILITY

Wilden® pumps are built for versatility, but that does not mean a single pump works for all applications. Using a pump in an application that it isn't made for will only result in costly repairs and damage.

- Using a compatible material will make your pump last longer. Using chemically compatible elastomers is equally as important as selecting the right housing material.
- The larger the pump, the higher the output. Prevent burning out your pump prematurely by choosing a model sized appropriately for your application and output requirements.

## PREPARING TO PERFORM INDUSTRIAL PUMP MAINTENANCE

Your manual has model-specific details for industrial pump maintenance, but we will cover some of the basics below. Always take proper safety precautions to avoid injury during pump assembly and only use genuine Wilden® parts to protect your warranty.

## Step 1: Review Your Manual for Parts Information

Your Wilden Pump manual has all the essential information needed about Wilden® pump maintenance. Start by reviewing the Pump Designation System legend on the first page of your manual. This diagram explains how to identify the material codes and other information needed to order replacement parts and repair kits for your pump.

Parts that might need replacement during routine pump maintenance include:

- Diaphragms
- Valve Balls
- Valve Seats
- Valve Seat O-Rings
- Air System Gaskets & Seals
- Air Valve
- Wetted parts and outer pistons
- Air Chamber/Center Block

## Step 2: Determine Your Maintenance Frequency and Requirements

Wilden® makes industrial pump maintenance easy with its straightforward AODD pump design. The maintenance schedule you follow will vary depending on the pump type, frequency of use, and the viscosity and abrasiveness of the substances you pump. Most pumps, however, require the following for maintenance:

- **Inspecting Mechanical Parts:** Routine visual inspection of clamps, fittings, and other components helps you identify wear and damage before they become big problems.
- **Lubrication:** Not all Wilden® AODD pumps require regular lubrication but some series need a lubricator installed. Check your manual to see if this is required for your pump.
- **Inspecting the Air Valves and System:** Air valves are critical to diaphragm pump operation. Regular maintenance should include removing air valves to clean and inspect them. Check for signs of damage or wear and lubricate them as needed.
- **Check Hoses and Connections:** Worn seals and fatigued hoses can cause leaks that impact pump performance. Always replace worn parts and use lubricant as needed to ensure tight seals.

The moment you see air bubbles in your product, or product coming out of your exhaust, your pump may be experiencing a failure. The quicker you can remove the pump from operation, the less likely you are to create a larger problem. Remember to have a spare pump or spare parts kit on the shelf to minimize downtime!