Wilfley SolidLock™ Seal - AF Retrofit Kit
Installation Guide

This guide provides instructions for the installation of the SolidLock™ seal into an AF process pump. This guide must be read and understood before installation and start-up.

The design, materials and workmanship incorporated in the construction of Wilfley pumps makes them capable of giving trouble-free service if properly applied and maintained. The life and satisfactory service of any mechanical unit is enhanced and extended by correct application, proper installation, periodic inspection, condition monitoring and careful maintenance. This installation guide was prepared to assist operators in understanding the construction and the correct methods of installing this seal.

A.R. Wilfley and Sons, Inc. shall not be liable for damage or delays caused by a failure to observe the instructions that are contained in this guide.

Warranty is valid only when genuine Wilfley parts are used. Contact your local Wilfley representative for basic warranty information and before making any changes.

Use of the equipment on a service other than stated in the order could nullify the warranty, unless written approval is obtained in advance from A.R. Wilfley and Sons, Inc.

To assure proper installation, supervision from an authorized manufacturer's representative is recommended.

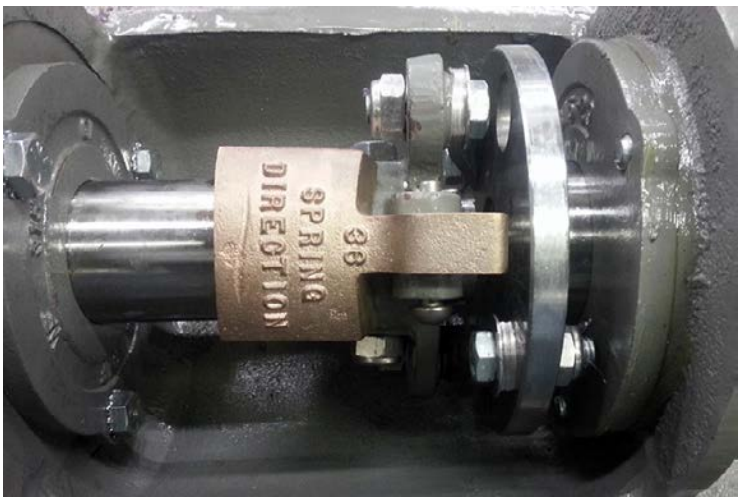
The Wilfley SolidLock™ seal requires a locked out shaft. If you have the Wilfley Hydrovoir® seal installed your pump shaft will already be locked.

The Wilfley SolidLock™ retrofit kit provides you with a new lab ring, shaft sleeve and SolidLock™ assembly. All other pre-existing seal parts must first be removed.

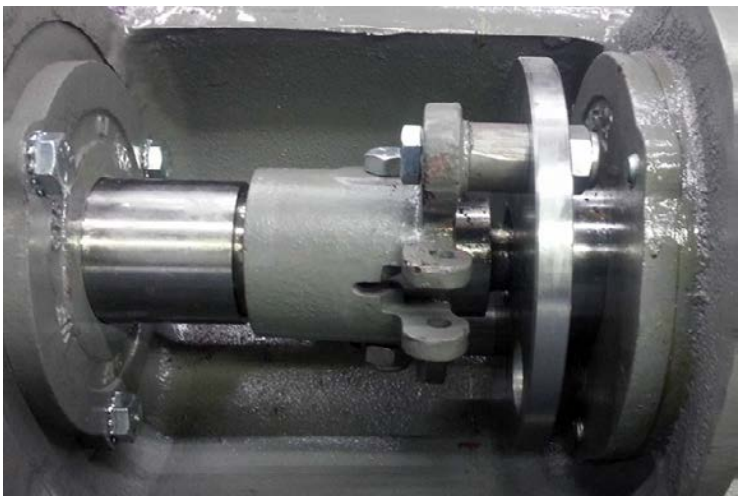
Please refer to the AF operating handbook as required.

1. Remove case (3) and impeller (8).

2. Remove bearing frame cover (20) and then remove springs (25) and governor weights (28).



3. Lock the shaft using bushings (98M) and bolts (98L).

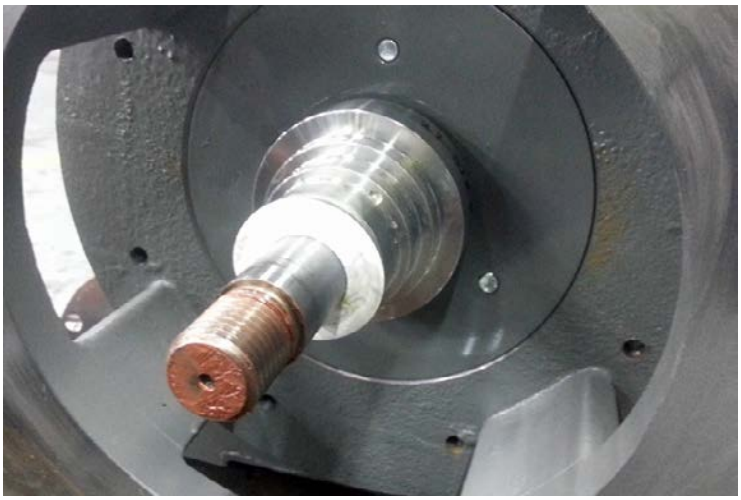


4. Remove the rotary seal (9) and gasket (10A) from the impeller (8).

5. Remove the stationary seal housing (12), stationary seal (11), gasket (12A), and lab ring (67). Ensure that the remaining gasket (67A) is in good reusable condition, replace if necessary.

6. Remove the 3 studs (12B) from the case plate (5) and use the provided bolts (S1B) to bolt the new lab ring (S1A) in place. The new lab ring (S1A) houses the stationary seal (S1D) for the SolidLock™.

7. Remove shaft sleeve (14) and gasket (14A).



8. Slide smallest loose o-ring (14A) onto pump shaft (13) followed by the seal loose on the shaft sleeve (14) – do NOT tighten the four set screws (S2P) on the seal at this time.

9. Add the final loose o-ring (8A) to the end of the shaft sleeve (14) or onto impeller (8) hub (pump size dependent).

10. Replace impeller (8) and tighten. Replace case gasket (5A) if necessary.

11. Replace case (3) and tighten case bolts (3A).

12. To set the SolidLock™ seal simply move forward until it contacts the stationary seal (S1D), tighten the 4 set screws (S2P), then pull out the two pull pins (S2H). This releases the springs (S2G) and the rotary seal (S2A) makes contact with the stationary seal (S1D). If the pins (S2H) are hard to pull manipulate a weight by hand whilst pulling.