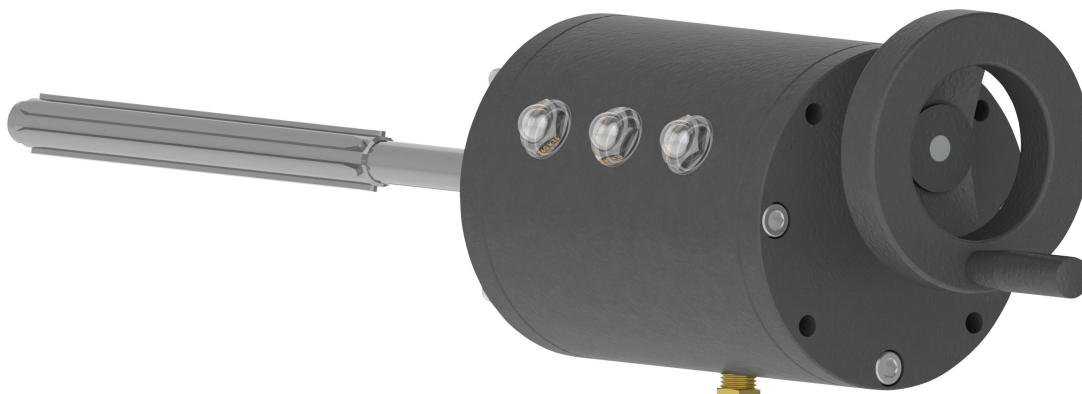


Series FXA Primary / Backup Transfer Shaft Operating Manual



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Congratulations! You have chosen the simplest and most reliable pump selection mechanism for primary / backup pump operations.

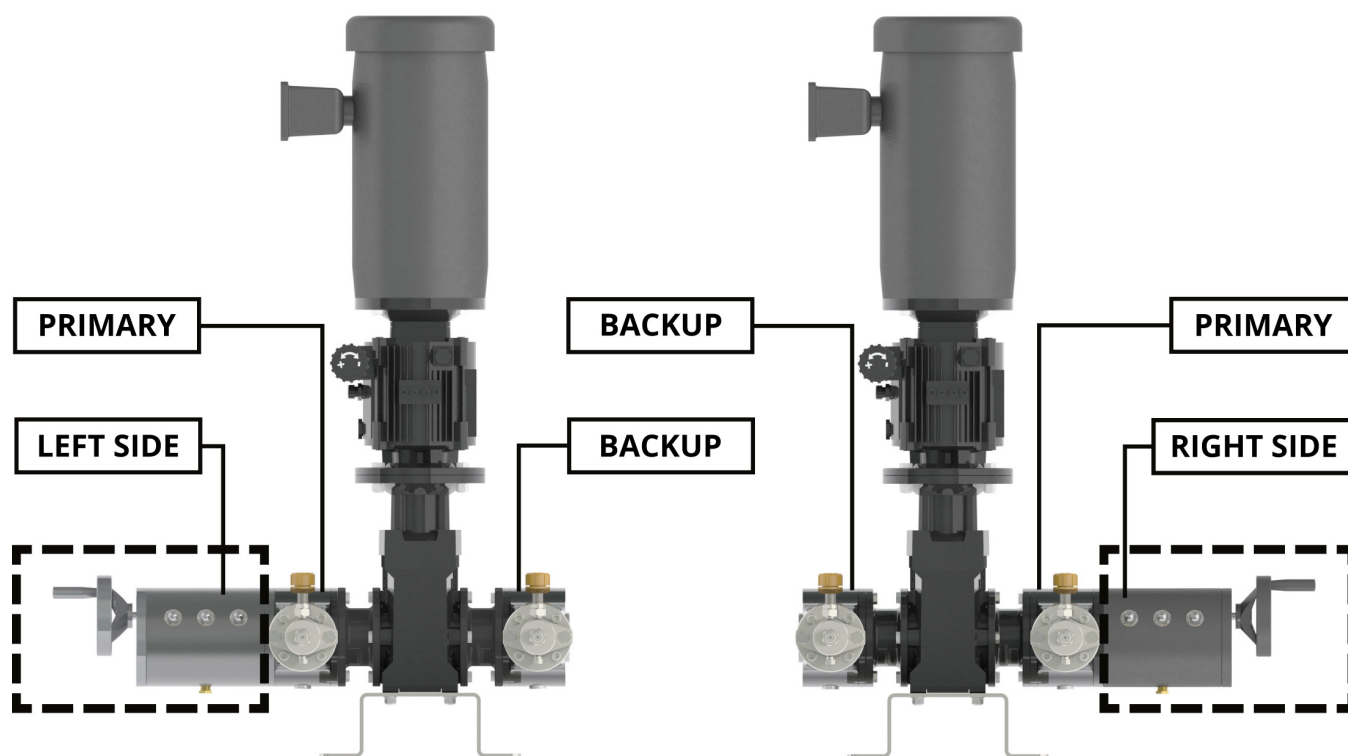
1. INTRODUCTION

1.1 Scope

This IOM applies to the CheckPoint Series FXA Primary / Backup Transfer Shaft Option, part number FXA0050-1.

1.2 Description

A primary / backup configuration contains two pumps, where at any one time only one of the pumps is physically engaged to the drive unit. A transfer mechanism positions the splined drive shaft in one of three positions; Primary, Backup or Neutral. Turning the crank moves the shaft through the unit connecting the gearbox output to one of two FXA drives. Three visual ports on the housing indicate the shaft position. The Transfer Mechanism can be installed on the left or right side. The pump closest to the mechanism is always considered the Primary pump.



1.3 Specifications / Benefits

- API 674 and 675 compliant
- Intrinsically safe
- Simple operation
- Allows servicing of one pump while other is in operation
- Allows secondary pump to be pre-set to desired flow rate
- Backup pump is not in motion (no seal wear while not pumping)

2. INSTALLATION

- The transfer shaft mechanism is a factory installed option for the CheckPoint FXA line. Field Installation depends on specific factors of the installation and will be addressed on a case by case basis.

3. OPERATION

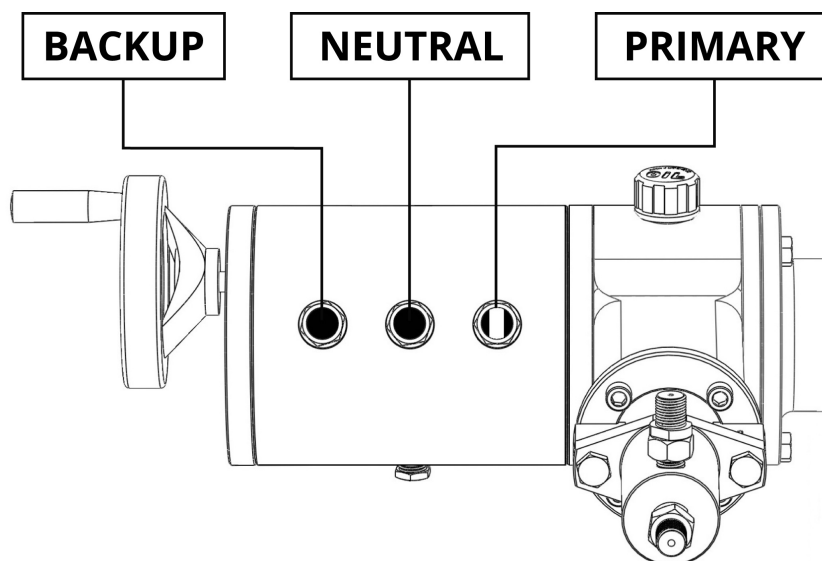
3.1 *Primary / Backup Pump Selection*

- Reduce the speed of the drive to its minimum speed of 6 strokes per minute
 - Lower the set point on the VFD, or
 - Adjust the variator to its minimum by rotating the control knob clockwise. A minimum speed has been preset on the variator.
- Crank the hand wheel until the shaft is in the proper position for the backup pump.
 - Crank the hand wheel in the clockwise direction to disengage the primary pump. The shaft is in the neutral position and neither pump is being driven, although the drive shaft is still turning.
 - Continue turning the hand wheel until the spline shaft engages the backup pump. Turn the hand wheel until it is fully engaged, as indicated in the right sight window of the transfer shaft housing.

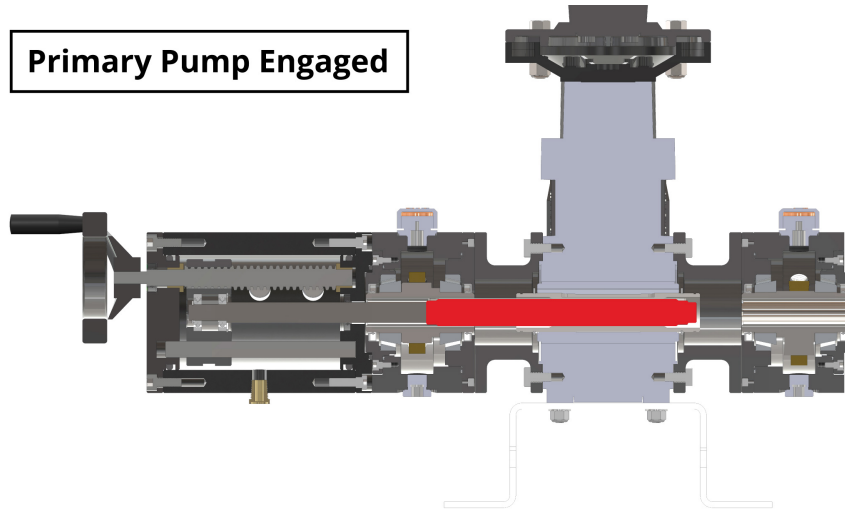
NOTE: The hand wheel should turn freely without much effort. During the active pumping stroke, this force may increase. Try to actuate the hand wheel during the scavenging stroke when the pressure is low. When the shaft is first engaging the backup pump, it may be necessary to vary the amount of torque to ensure proper engagement.

- Repeat this process when changing back to the primary pump by turning the hand wheel in the opposite direction.

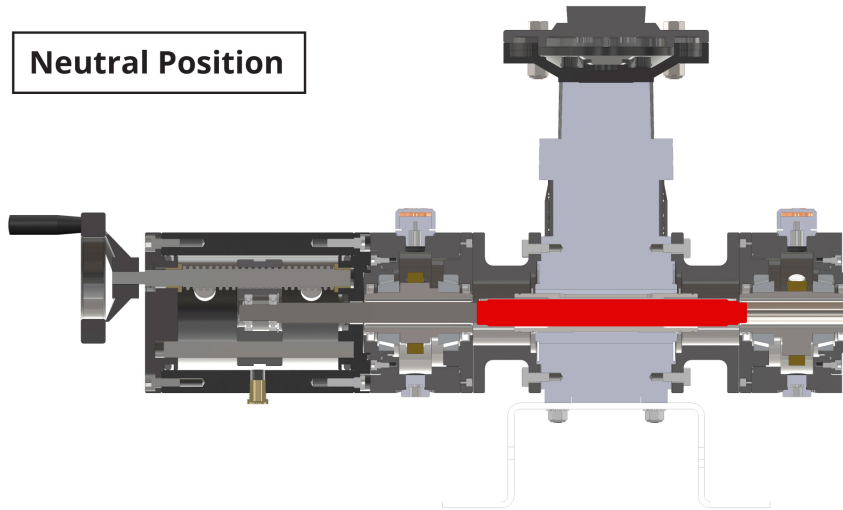
Position Indicator



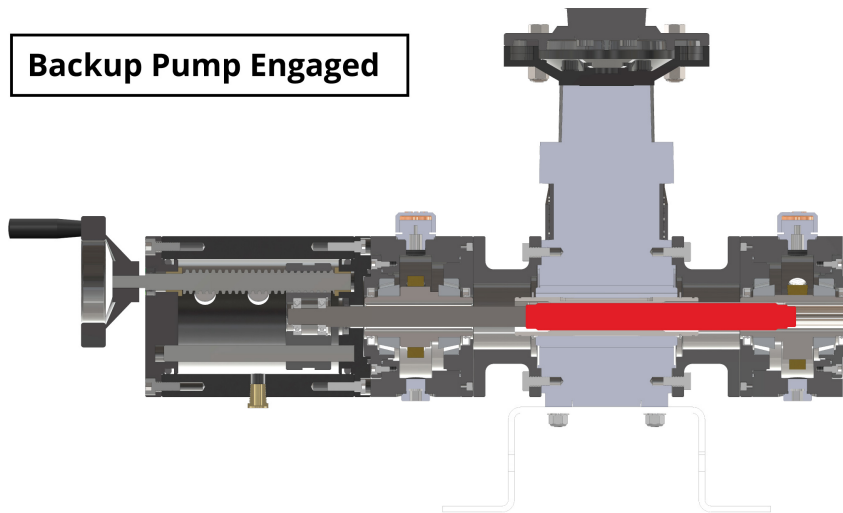
Primary Pump Engaged



Neutral Position



Backup Pump Engaged



4. MAINTENANCE

The transfer shaft mechanism is maintenance-free; no additional lubrication is required.

5. TROUBLESHOOTING

5.1 *Transfer shaft will not slide*

If the shaft will not slide smoothly between the pumps, there may be debris in its path.

- The unit may be removed by unscrewing the 4 captive fasteners securing the unit to the FXA.
- Inspect the shaft for burrs and debris. Lubricate the shaft heavily with never seize or equivalent shaft lubricant.
- Check operation to ensure that the lead screw smoothly actuates the shaft while removed from unit.
- Reinstall the shaft unit and secure the fasteners.

5.2 *Housing unit is making noise*

A shaft bearing may need replacing. Ensure that noise is still being generated in the Neutral position to eliminate the FXA as a source of the noise.

- The unit may be removed by unscrewing the 4 captive fasteners securing the unit to the FXA. Rotate the shaft by hand.
- The shaft should move freely as it spins in the bearings.
- The bearings are permanently lubricated. If the bearings need to be replaced, remove the hand wheel and outer flange cover.
- The lead screw and transfer bushing will now be removable.
- The bearings can be removed by removal of snap ring.
- Reinstall the shaft unit, and secure the fasteners.

5.3 *Miscellaneous*

If you are experiencing an operating problem not listed above, or if none of the above troubleshooting actions solve your operating problem, please contact your Authorized CheckPoint Distributor or contact CheckPoint directly +1 (504) 340-0770 or help@cppumps.com. We will work to assist you in determining appropriate next steps. Once CheckPoint has had the opportunity to help you troubleshoot your problem, please keep in mind the following regarding repairs:

- ***CheckPoint offers exchange programs to keep you in service*** We will ship you a rebuilt pump, which you will be able to install prior to sending us your existing pump. Upon receipt of your pump, we will tear it down, rebuild, and report to you our findings. We offer a fixed-price exchange plan, an actual-cost plan, and a consigned exchange. Please contact CheckPoint to learn more about our unique exchange services.

- ***Nothing beats factory-direct repairs*** Although the Series FXA pump has been designed to be easy to operate and repair, the best way to ensure continued reliable service is to have your pump repaired by the factory. OEM repair services ensure CheckPoint quality and reliability.
- ***Remember that after you repair your CheckPoint pump, it should perform like new*** If your pump is anything less than exceptional, call us to determine what can be done to restore the pump to “like-new” performance.
- ***Training sessions are available*** CheckPoint strives to maintain excellence in all that we do, and we are happy to share. If you would like to train your employees on CheckPoint Pumps & Systems, please contact us to discuss training options.