

## Model 7815130 1 <sup>1</sup>/<sub>2</sub>" Pump & Cart Manual





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#### Thank you for purchasing a US-FIP product!

This manual contains installation, operation, cleaning and repair instructions, with parts lists, for your US-FIP Pump.

**READ THIS MANUAL** carefully to learn how to service the US-FIP Pump & Cart system. Failure to do so could result in personal injury or equipment damage.

### SAFETY:

Safety is very important!

**DO NOT attempt to modify any US-FIP product.** To do so could create unsafe conditions and void all warranties.

# DO NOT place any US-FIP product in an application where general product service ratings are exceeded.

The following DANGER, WARNING, AND CAUTION signs and their meanings are used within these instructions.



Safety labels are placed on every US-FIP product. Do not remove any labeling on any US-FIP product. Immediately replace any label that is missing.

#### **RECEIVING EQUIPMENT**

When unpacking your equipment, inspect all of the contents for damage that may have occurred during shipping. Report any damage to us immediately.

#### FLUID CONTACT MATERIALS

304 Stainless Steel, Neoprene, Nitrile, Carbon Graphite

**Installation** – Your US-FIP Pump head may be rotated to any position. The rotation of your US-FIP Pump shaft determines the inlet and outlet ports (refer to the dimensional drawing). Furthermore, your US-FIP pump has reverse capability on the variable frequency drive that is facilitated by use of your remote transmitter.

#### **OPERATING INSTRUCTIONS**



- \* Do not run dry
- \* Use 10' suction hose of the same diameter as the pump connection or larger.
- \* If the pump makes a "ticking" noise,
- **SLOW DOWN!** Your impeller is suffering
- \* Rinse your pump thoroughly with water
- \* Never leave anything in the pump besides water
  - \* Use only Food Grade Silicone Lubricant \*

Any questions please call (262)-909-0013

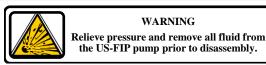
**Drive** – Your US-FIP Pump is suitable for direct drive. All components fit easily onto a C-Face motor and should not be forced.

**Speeds** – Your US-FIP Pump is operable from 175-1750 RPM. For longer pump life, operate at the lowest possible speed. Low speeds are also required for viscous fluids.

**Self-Priming** – Your US-FIP Pump is capable of priming at low or high speed. For vertical dry lifts of 10 feet, a minimum of 30 HZ is required. The pump will lift up to 22 feet when wet. The suction lines must be air tight for selfpriming operations and must be greater than or equal to the pump port size and less than 10ft long.

**Running Dry** – This pump relies on the pumped fluid for impeller and seal lubrication. Do not run dry for more than 30 seconds. Running the pump without liquid will damage the impeller.

Use ONLY food grade silicone lubricants





**Compatibility** – Neutralize all corrosive cleaning solutions after each use or at the end of each day to prolong pump life. Leave nothing in the pump other than water.

**Temperatures** – The operating temperature range of this pump is  $45^{\circ}$  to  $180^{\circ}$  F (7° to 76° C). Temperatures up to  $210^{\circ}$  F are achievable with a hi-temp impeller.

**Cleaning** – All parts have been expertly manufactured and polished—handle all parts with care.

The model 15030 pump is designed for clean-in-place operation—there is no need to disassemble the pump for cleaning.

If acidic cleaners are used, be sure to rinse the pump thoroughly after each application.

**Impeller Torque** – The torque required to initiate rotation of a new impeller in a dry pump body is:

Forward: 7.9 pounds force - feet

Reverse: 12.1 pounds force - feet

These values may vary slightly due to manufacturing tolerances.

**Spare Parts** – To avoid costly downtime, keep a spare US-FIP impeller, seal kit and o-rings on hand.

## SERVICE INSTRUCTIONS

## GENERAL

The US-FIP Pump & cart is relatively maintenance free, requiring normal cleaning and inspection to ensure optimum performance. Inspect the impeller and all o-rings for cuts or abrasions and inspect seal faces for nicks and cracks. Replace worn or damaged parts as necessary.

## **REPAIR INFORMATION**

Repair of the US-FIP Pump & cart system is normally accomplished by replacing defective parts. The only moving parts are the impeller, the pump and motor shafts, and the seal. For repair or replacement of the drive motor, refer to the motor manufacturer. Refer to the Parts List for replacement data for the US-FIP Pump & cart parts. See the US-FIP Pump & cart Disassembly section below for replacement instructions.

## Inspection

Remove only the front housing clamp and front cover to expose the impeller within the body.

Remove only the rear housing clamp and body with the impeller contained therein for inspection/ replacement of the seal.

### Disassembly

- 1. Remove the front housing clamp (8) and front cover.
- 2. Remove the rear housing clamp (8) and slide the pump housing (5) with o-rings (6) and impeller (9), off of the shaft (2). Remove the impeller from the body and inspect for wear/damage.
- 3. Remove back plate (4) by rotating counter-clockwise to disengage the retaining pins.



CAUTION The seal spring will push the back plate forward when free of the retaining pins.

- 4. Remove the seal components (3), being careful not to mar or damage the shaft (2) finish, and inspect for damage/wear.
- Loosen the four mounting bolts and remove the motor adapter (1) and inspect the internal lip seal (10) for damage/wear. Please note the orientation of the lip seal prior to replacement.
- 6. Remove the stub shaft (2) and key by loosening two set screws and lifting it off of the motor and inspect for damage/wear.

#### Assembly

- 1. Bottom out the stub (2) shaft and key onto the motor shaft and tighten two set screws.
- 2. Press a new lip seal (10) into the back (motor side) of the motor adapter (1) and place the motor adaptor on top of the motor. Tighten the four motor bolts.
- 3. Place the new seal components (3) onto the stub shaft. The seal collar will align with the step on the stub shaft (2), near the lip seal (10) and the shaft pins will be within the clearance slots of the seal collar.



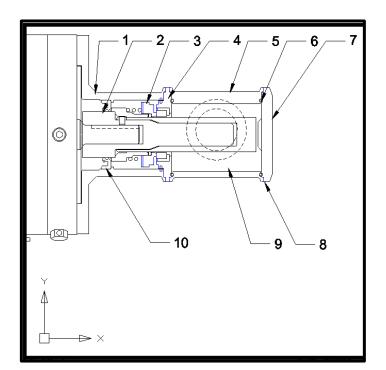


- 4. Install a new seal seat (3) into the back plate (4). Attach the back plate (4) to the motor adapter (1) with the seal seat facing the motor. Align the pins on the back plate (4) with the slots on the motor adapter (1), press down against the seal spring and turn the back plate (4) clockwise until it stops, and release. The back plate (4) will remain in place while the remainder of the pump components are assembled.
- Lubricate a new impeller (9) and rotate into the pump body (5) until the impeller is centered within the body. The front cover (7) may be attached first if desired (see step 4 ahead). This may be preferred if a clean surface is not available for impeller insertion.

Clockwise Rotation –. Rotate the impeller into the pump housing with blades bending counterclockwise.

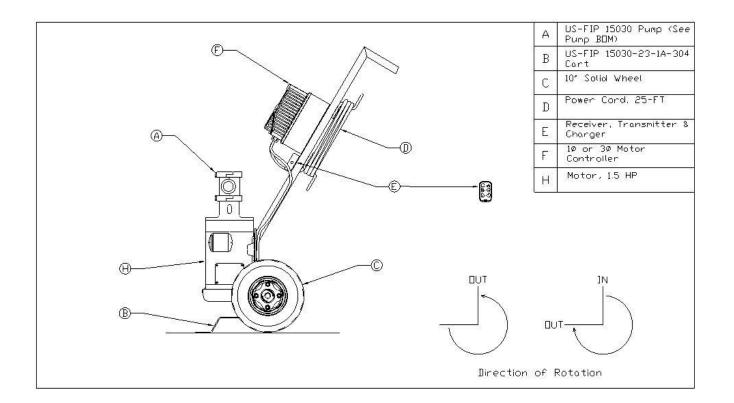
Counterclockwise Rotation - Rotate the impeller into the pump housing with blades bending clockwise.

- 6. Place a new o-ring (6) into the groove on the side of the pump body (5) where the impeller extension sleeve is protruding.
- Slide the impeller sleeve, impeller, and body onto the stub shaft, making sure to align the two slots at the end of the impeller sleeve with the two pins located at the bottom of the shaft (under the seal collar). Align the machined groove of the pump housing (5) with that of the back plate (4) and secure with a clamp (8).
- Place a new o-ring (3) into the groove on the front (top) of the pump body (5). Place the front cover onto the pump housing and secure with a housing clamp (1).



Use ONLY food grade silicone lubricants

Parts List (See Diagram)		
2	015-006-BNZ-140	7/8'' Stub Shaft
3	015-080-SIK	Seal Assembly
4	015-011-304	Back Plate
5	015-001-304-Т	Sanitary Body, TC
6	015-090-EPM	Body O-ring (2)
7	015-234-304	Front Cover
8	FTG 2.5" Clamp	Clamp (2)
9	015-002-EPDM	1.5" EPDM Impeller
10	015-081-BUN	Motor Protection Seal
	015-023-304-ASY	Drive Collar, Spring, & Seal Cup





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