

Overhaul Procedure

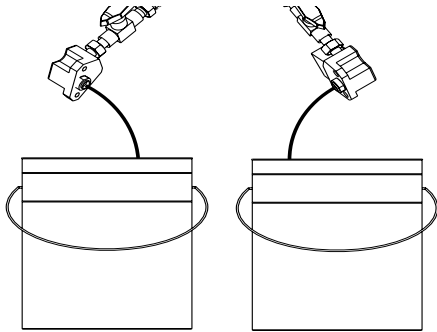
19875-00 (-01) Pumps 21835-00 Pumps

1. Dump pressure off system

WARNING

Be sure air and power are off to system.

This is achieved by removing side blocks from the gun, opening ball valves and purging materials into clean containers.

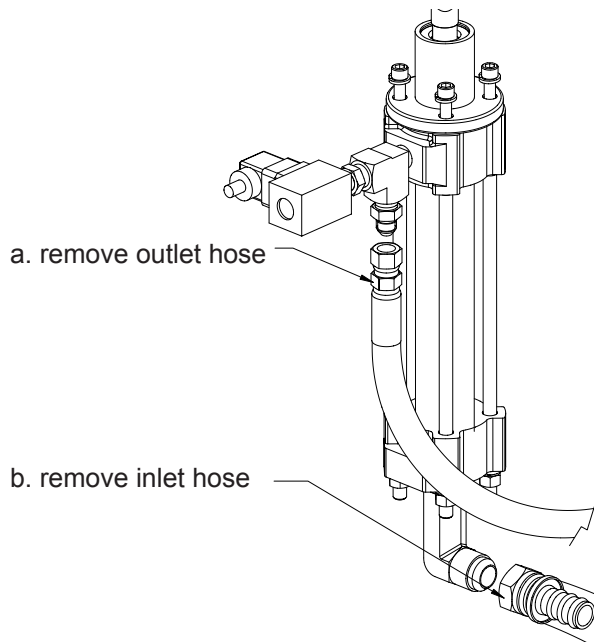


2. Flush system side to be rebuilt with suitable solvent.

NOTE

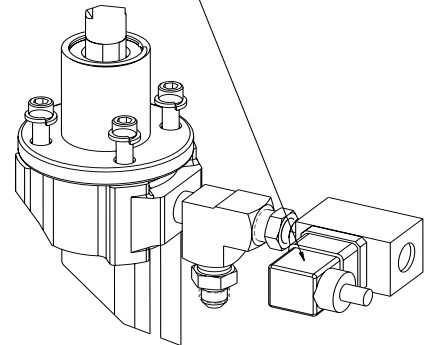
Step three is optional, but it makes the process easier.

3. Disconnect inlet and outlet fittings from the pump.

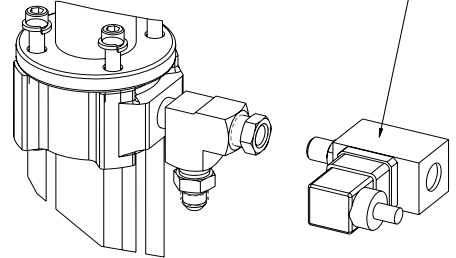


4. Disconnect the din connector from over pressure switch.

- a. remove plug



- b. Remove Switch from fitting.



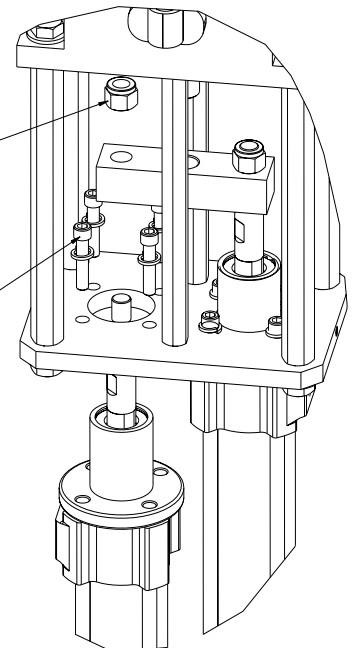
CAUTION

Do not immerse Over Pressure Valve in solvents externally. (Flushing will not affect).

5. Remove pump from base.

- a. remove nylon Lock nut from yoke.

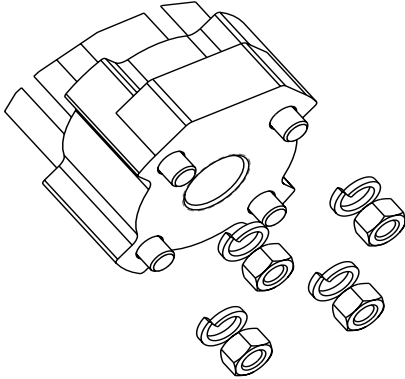
- b. remove four bolts



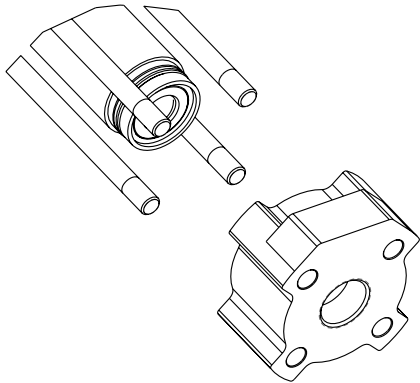
Overhaul Procedure

Breaking Down Pump

1. Remove four nuts at the base of pump break loose, in a criss-cross pattern.



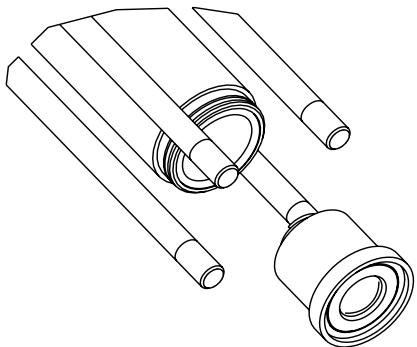
2. Remove Base from Tie Rods.



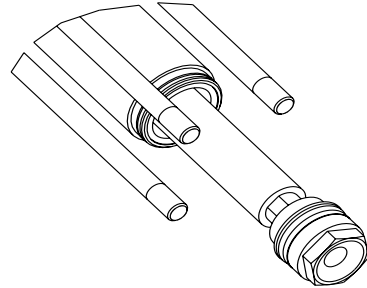
NOTE

On P/N 21835-00 pumps, watch out for APS-119, APS-128, & 19633-00. The spring will push these parts out. Observe which side of the APS-119 comes out, Keep right side up for diagnostics.

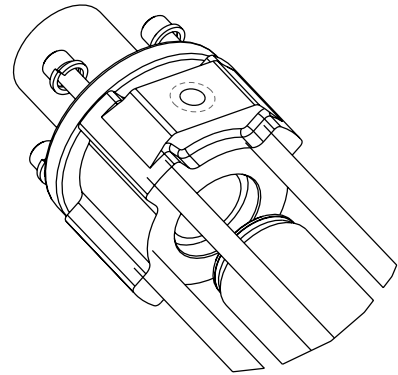
3. Remove Valve Housing from the cylinder.
P/N UF-118 on 19875-00 pump.
P/N, 19634-00 on 21835-00 pump.



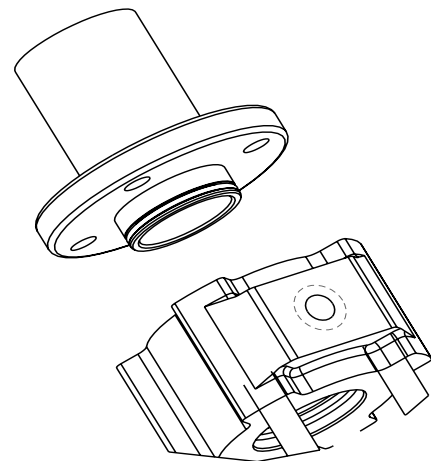
4. Using a rubber mallet, tap shaft out through the bottom of the cylinder, P/N 18219-00.



5. Remove cylinder, P/N 18219-00 from Pump Head, P/N 18227-00.



6. Remove Cup Adapter, P/N 21440-00 from Pump Head, P/N 18227-00.

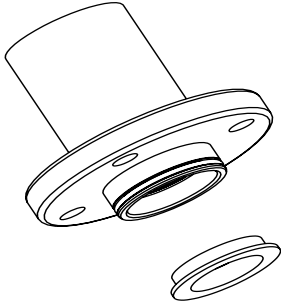


Overhaul Procedure

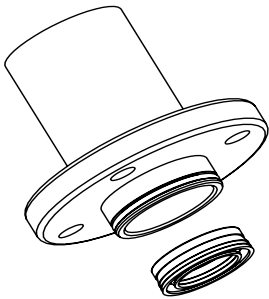
Disassemble Sub-Assemblies

1. Cup Adapter, P/N 21440-00.

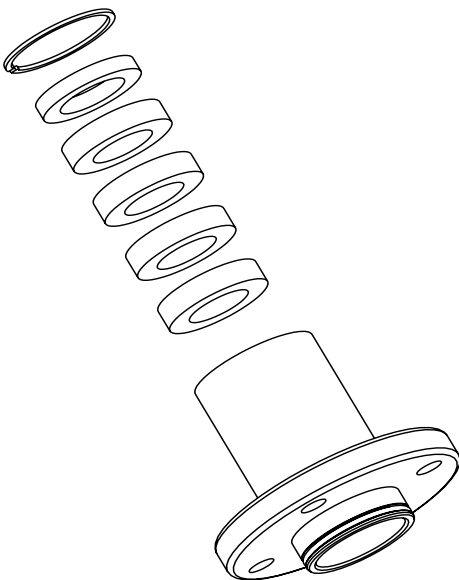
- a. Remove Support Washer, P/N 18295-01.



- b. Remove Seal, P/N 21595-00.

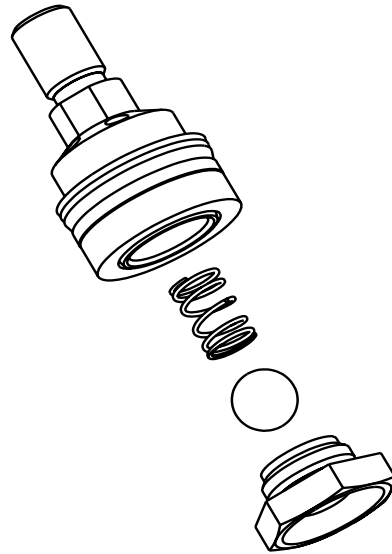


- c. Remove Snap Ring, P/N 1005-02, Nylon Washer, P/N 21896-01, & Felt Wipers, P/N 21897-01.

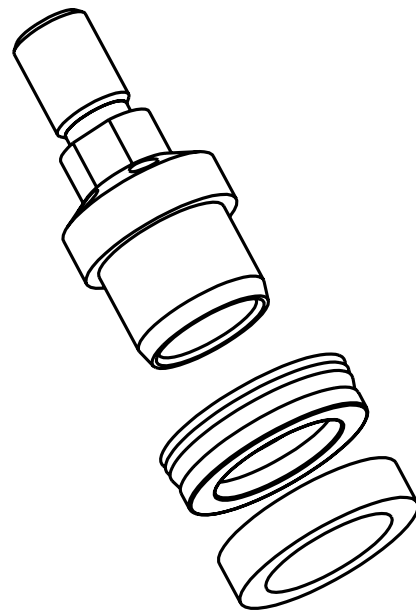


2. Shaft Assembly:

- a. Remove P/N 21598-00, Transfer Seat from P/N 21597-00, Transfer Housing. Watch for P/N APS-133, Ball and P/N 21803-00, Spring. The Ball is loaded with spring tension.



- b. Remove FS-110, Piston Guide and P/N 21595-00 Pump Seal.



Overhaul Procedure

Cleaning

1. Thoroughly wash all parts in suitable solvent.
2. If parts have any build-up of hardened material, it is acceptable to polish parts with fine sand paper, (1200 grit) or steel wool(000).
3. It is recommended that the cylinder be honed with a fine grit bead honer,(P/N RK5-2).

Inspection

1. The Pump Cylinder, P/N 18219-00 inner wall should be smooth. No pitting or scarring should be seen. If slight scars show in the wall, they must not be able to be felt with a finger nail.
2. The Pump Shaft, P/N 21599-00 must not have any scoring, pitting, or build up of any debris on the shaft.
3. Set the Ball, P/N APS-133 in the Seat, P/N 21598-00 and hold up to a light. Observe for light between seat surface and the ball.

NOTE

If a large sliver of light shows, check for debris or scarring on Seat or Ball.

4. P/N APS-128 & P/N APS-119 repeat the above step.

NOTE

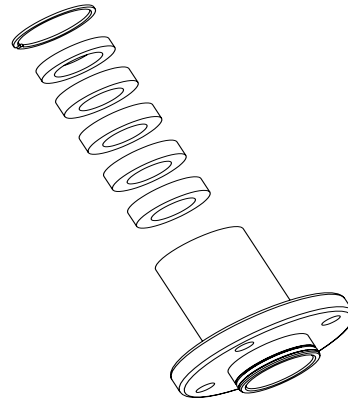
The APS-119 is reversible, you can use either side.

Re-Assemble

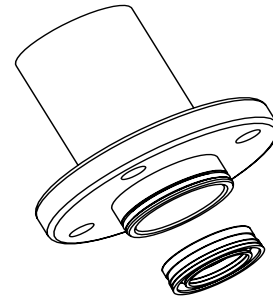
NOTE

All parts underlined are contained in Repair Kit.

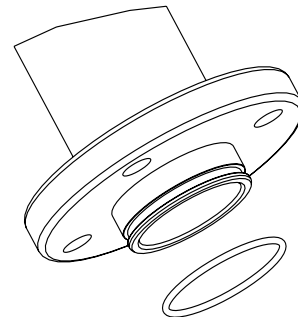
1. Soak P/N 21897-01 in a light weight, non detergent oil, then install in P/N 21440-00.
2. Install P/N 21896-01, push down and install Snap Ring P/N 1005-02 in groove.



3. On bottom side of P/N 21440-00 install P/N 21595-00 so that the lip faces out

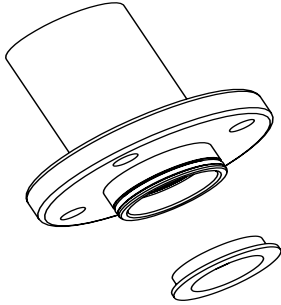


4. Lubricate and install O-Ring, P/N 13867-43 on bottom groove.

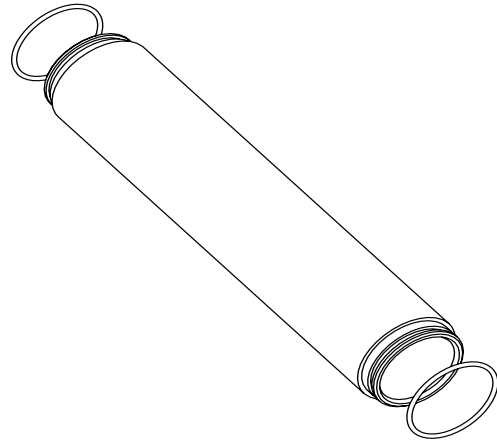


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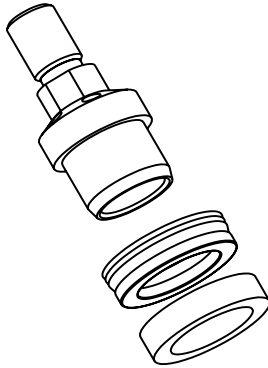
5. Install P/N 18295-01 with lip facing toward P/N 21595-00 seal.



9. Lubricate and install two P/N 13867-49 O-Rings on P/N 18219-00 cylinder.



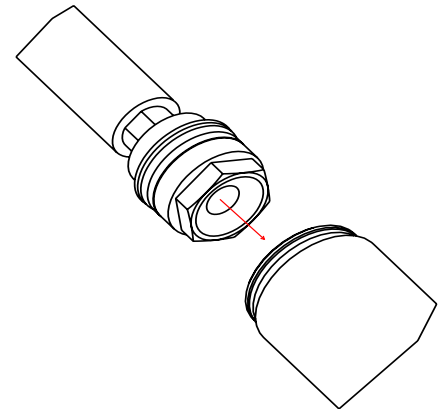
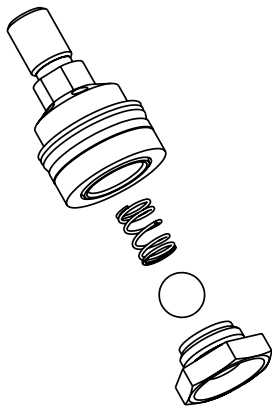
6. Place P/N 21595-00 Seal and P/N FS-110 guide on P/N 21597-00. The lips of the Seal will face away from P/N FS-110.



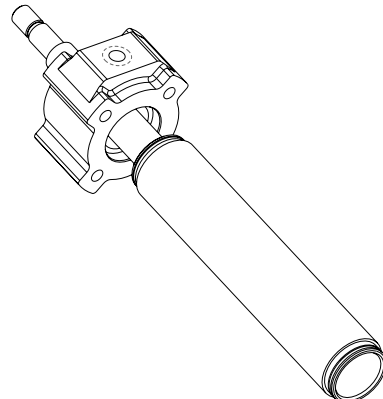
10. Using a light weight non-detergent oil, coat the seal on the shaft assembly and the walls of the cylinder, then install the shaft assembly into the cylinder, leave approximately 4" of the shaft exposed on the top side.

7. Set P/N 21803-00 spring in P/N 21597-00 housing and set APS-133 ball on Spring.

8. Apply blue lock-tite to the threads of P/N 21598-00 and install on P/N 21597-00. Tighten these two parts!

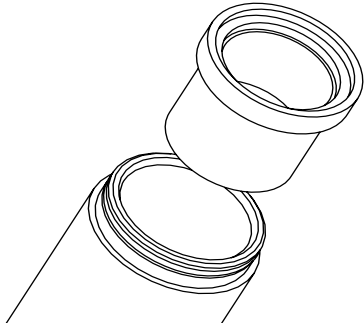


11. Install cylinder/shaft assembly into P/N 18227-00 pump Head, careful not to cut O-Ring for pump P/N 21835-00.

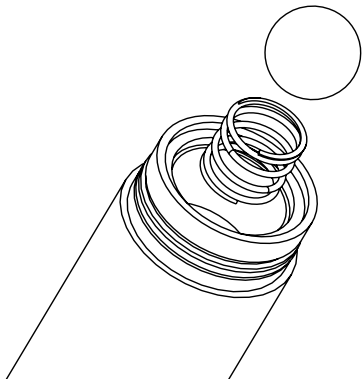


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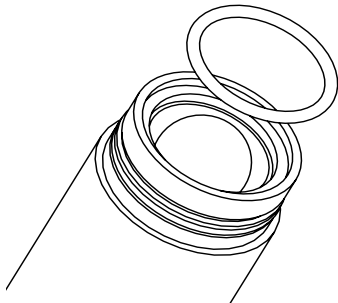
- 12.** With the Pump Assembly upside down, (easy if clamped in a vise) install Foot Valve Housing P/N 19634-00.



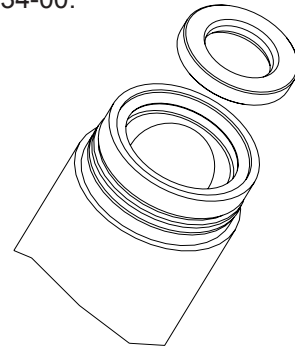
- 13.** Set P/N 19633-00 Spring in place and set P/N APS-128 Ball on Spring.



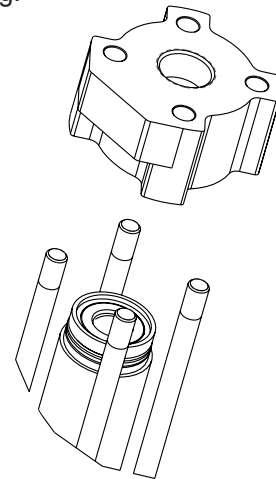
- 14.** Lubricate and install P/N 13867-44 O-Ring in groove of P/N 19634-00.



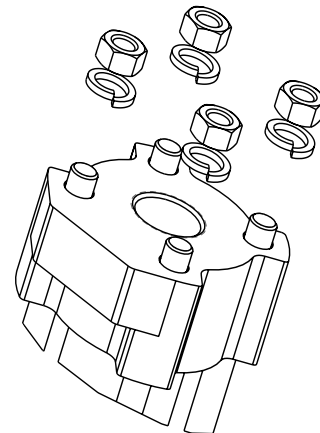
- 15.** Lubricate the outer edge of P/N APS-119 and set top of ball, square and center flats of P/N APS-119 and P/N 19634-00.



- 16.** Gently set P/N P33-11 through P/N 18289-00 Tie Rods and push down square and firm until it sets down over cylinder O-Ring.



- 17.** Continue holding P33-11 down, install (4) P/N 7734-12 Lock Washers and hand thread (4) P/N 7733-17 Nuts. Tighten P/N 7733-17 in a criss-cross pattern until tight.



Overhaul Procedure

For 19875-00 Pumps:

1. Set UF-118 in cylinder.
2. Set P/N APS-128 in body.
3. Lubricate P/N 13867-44 and install in groove of UF-118.
4. Install P/N APS-119.
5. Gently set P/N P33-11 through P/N 18289-00 Tie Rods and push down square and firm until it sets down over cylinder O-Ring.
6. Continue holding P33-11 down, install 4 P/N 7734-12 Lock Washers and hand thread 4 P/N 7733-17 Nuts.
7. Tighten P/N 7733-17 in a criss- cross pattern until tight.
8. Lubricate P/N 21595-00 Seal (inside of P/N 21440-00 housing).
9. Gently push down over Pump Shaft P/N 21599-00 and set flush to P/N 18227-00 Pump Head.
10. Re-install pump in reverse order of removal.