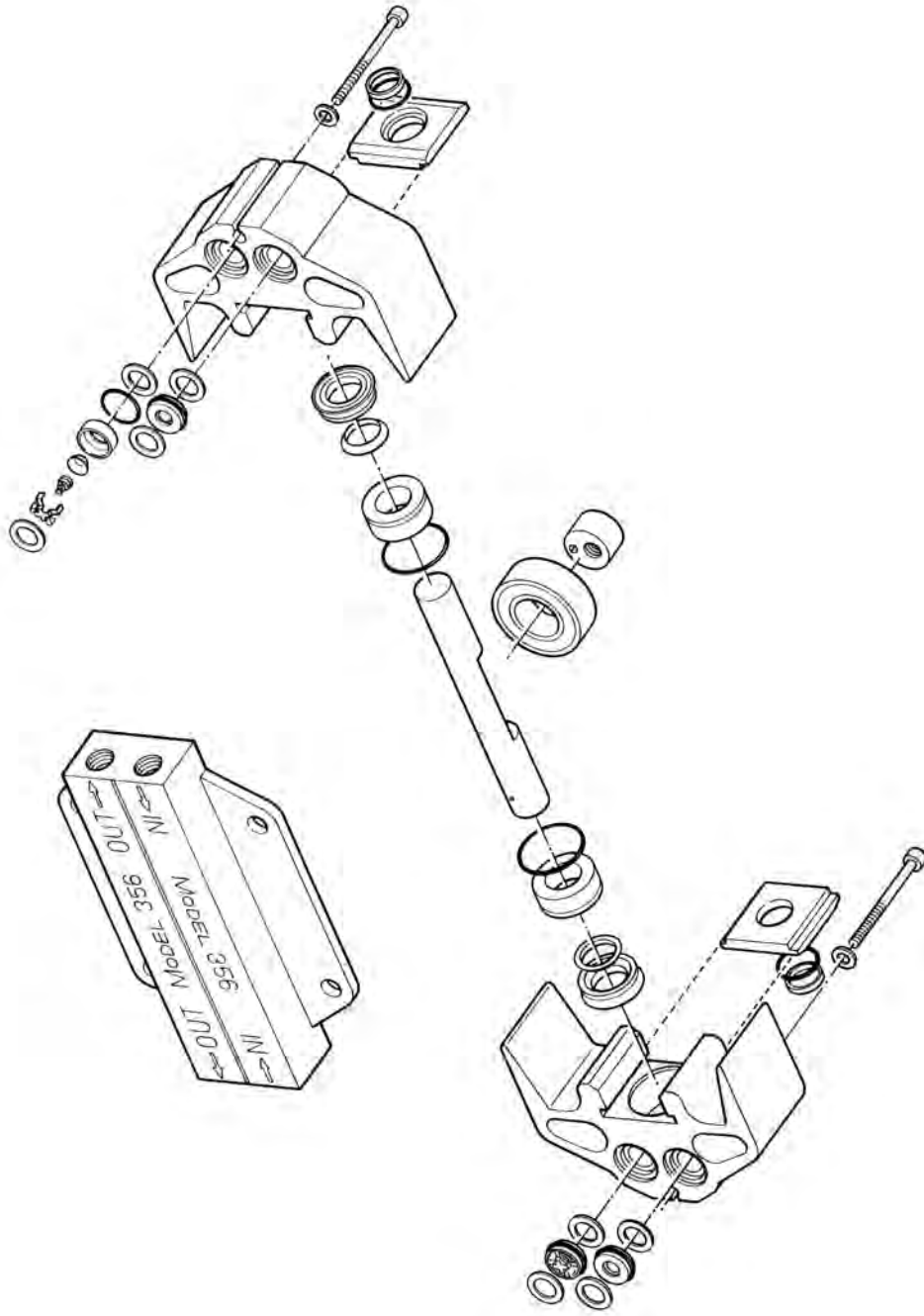




Manufacturer of High efficiency pumps & Systems

Repair Instructions Series 356



Before Disassembly:

- Make sure motor is disconnected from power source.
- Disconnect all plumbing.
- If the chemical pumped requires bodily protection, this should be worn during repair as a residual amount of chemical will be present in pump and on parts.



**Pumptec's
Complete
Tool
Kit**
(3/16 Hex Wrench)



1) Place pump on work surface. Pump label will indicate **IN** and **OUT**.



2) Turn over pump. Loosen bolts with 3/16" hex wrench. Remove bolts.



3) Turn over pump. Remove manifold. Note the position of valves in relation to label.



4) Pull pump heads apart. Place 1/2 of pump with plunger on work surface.



5) Pick-up pump head without plunger. Slide retaining plate out of slot in pump head.

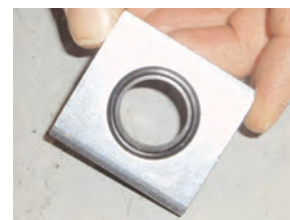


6) Pull plunger guide and do-ring out with fingers. It may be necessary to rock the part side-to-side to loosen. If unable to remove with fingers, a reverse pliers can be used, but will ruin part.



Wash parts with a mild cleaner or degreaser prior to installing new parts. Wipe dry with a clean towel.

Install KIT A.



7) Pull u-cup and backing ring out with fingers. A non-scratching tool can be used to pry parts out. Be careful not to scratch bore inside pump head.

8) Remove valves, o-rings and gaskets.

15) Install the vacuum seal/o-ring assembly into retaining ring. Constant, even downward pressure on parts will allow proper installation.

16) Lightly grease edge of retaining plate and slide into slot. Make sure o-ring around guide does not slide out of position. If o-ring slides out during sliding of plate, the o-ring may be damaged and unusable.

17) Lightly grease plunger and insert into pump head.

Repeat steps 4-16 with other pump head.

Slide pump heads together.

Install KIT B.



9) Lightly grease bore in pump head. Install u-cup with "U" facing downward. It is necessary to avoid damaging u-cup, so angle u-cup downward slightly until seal reaches bottom of seal bore. Gently slide remaining portion of u-cup into place.

10) Place backing ring into groove on back side of u-cup. The backing ring should install flush with back of u-cup.

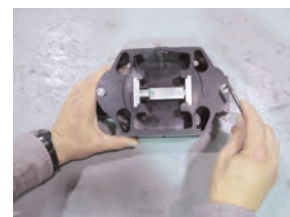
11) Place o-ring groove. DO NOT lubricate o-ring prior to installing into o-ring groove.



19) Install valves in each head. The "X" should be above the "O" on each head. Refer to picture and manifold label for guidance.

20) Place manifold over pump head/plunger assembly. The OUT on the manifold should be placed over the "X" position valve in each head. It may be necessary to slide assembly in and out permit the parts to line up.

18) Place valve gaskets into valve pockets in head and manifold. It is helpful to put a dab of grease in valve pockets to prevent gaskets from falling out.



12) Place guide into bore with bevel side down. DO NOT lubricate outside of guide. The guide will cause the o-ring to roll inward slightly during insertion.

13) It is important that o-ring does not slide or bulge out of o-ring groove.

14) Place vacuum seal inside of o-ring.

21) Turn over pump and install bolts. Tighten bolts until bolt head contacts pump head. DO NOT tighten fully.

Mount on pump back onto motor. Once pump had been tightened on to motor then tighten the bolts on back of pump fully. The design of the pump requires that pump must be fully tightened to motor BEFORE tightening back bolts on pump.