

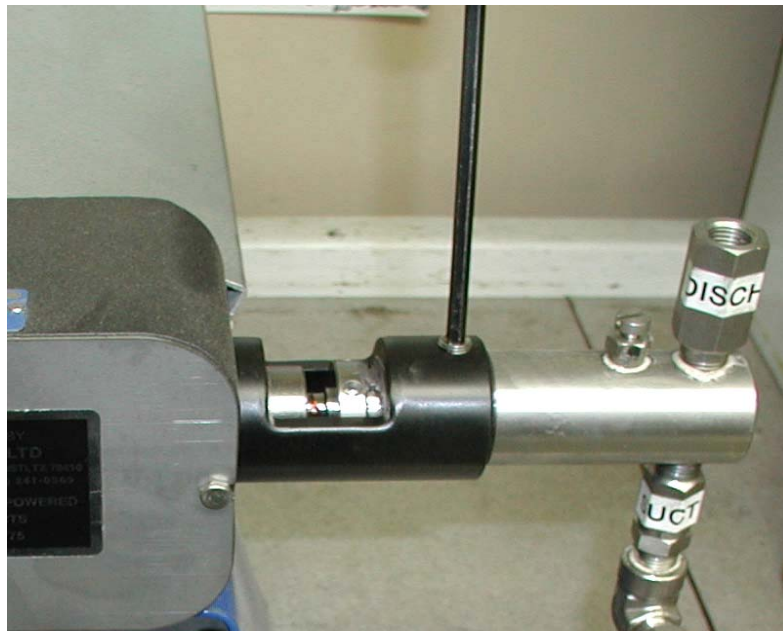


TXAM HBT Solar Pump Repair Manual

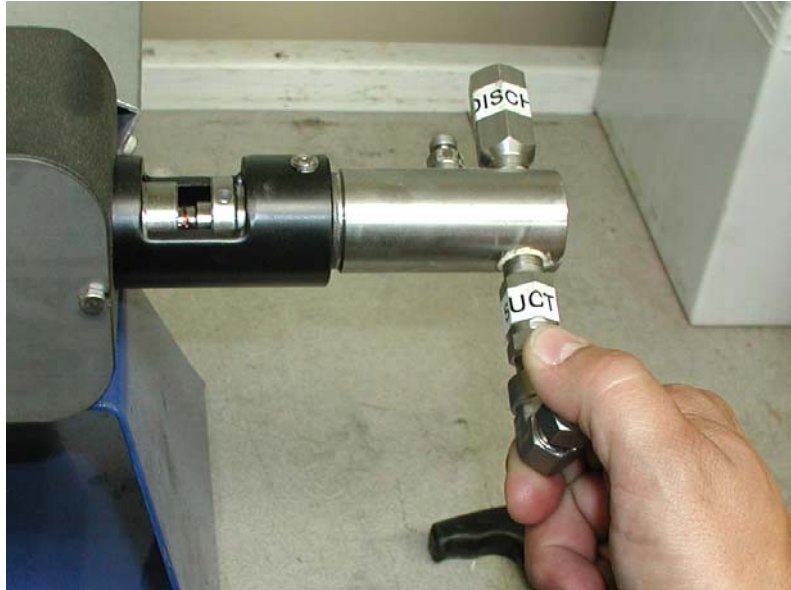
- Always add anti-seize compound to all parts that thread together including:
 - Where the head and yoke meet
 - Where the yoke and hex bushing meet
 - Set screws in eccentric wheel
- Any stainless to stainless connections should have stainless steel thread sealant such as Loctite 567 used instead of Teflon tape which will not seal as well on the bleeder and check valves in the head.

Replacing the Packing

1. Remove the chemical supply line from the suction check valve and the tubing from the discharge check valve on the head that needs to have the packing replaced.
2. Loosen the set screw on top of the yoke. You don't have to remove it completely.



3. Unscrew the head from the yoke. The plunger will remain in the yoke.



4. Remove the Packing Nut and Packing Gland from the head.

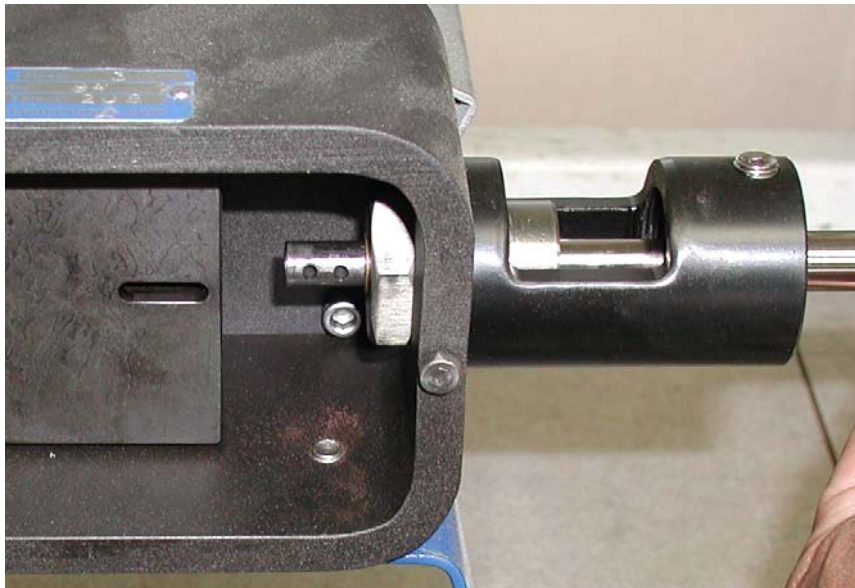
DO NOT DISCARD THE PACKING GLAND!



5. Change the packing and replace the head by reversing the order above.

Replacing the Plunger

1. Follow steps 1-3 for replacing the packing.
2. Open the front cover from the pump by remove one bolt and loosening the other.
3. Next remove the spring pin (two spring pins for plungers that are not adjustable) from the reciprocating block with a pair of Vise Grips or other pliers. Be careful to pull straight out and twist slightly back and forth. Bending the pin too far will break it off in the block. If this happens the pin will need to be drilled out.



4. Insert the new plunger. When replacing the plunger always replace the packing.
5. Replace the spring pin(s). Never reuse a spring pin after it has been removed. Spring pins should always be replaced with new ones. The size is 1/8" thick and between 3/4"-1" in length.
6. Screw the head back into the yoke and tighten the set screw



Replacing the Hex Bushing

1. Follow steps 1-3 for replacing the plunger.
2. Unscrew the yoke from the hex bushing.



3. Replace the hex bushing and reassemble.

Replacing the Reciprocating Block (Slide Block)

1. Follow steps 1-3 for replacing the plunger.
2. Remove the spring pins from the plunger or blind plunger from the opposite side and pull the plunger out of the block.
3. The slide block will then pull out of the housing.
4. Replace it and reverse the order of removal to reassemble the pump.

Replacing the Eccentric Wheel

1. Follow steps 1-3 for replacing the Reciprocating Block.
2. The following steps are easiest to perform if you separate the pump base from the housing by removing the two 3/16" hex bolts from the bottom of the pump housing.

3. Remove one or both of the two black plastic plugs from the bottom side of the pump housing.
4. There are **two** holes bored into the side of the wheel. Each hole has **two** stainless steel set screws used to secure the wheel to the drive shaft of the motor. Use a 3/16" Allen wrench to remove the set screws by inserting the wrench through the hole in the bottom of the pump housing.



- a. If the holes for the set screws do not line up with the holes in the pump housing, touch the motor wires to the battery power terminals to "bump" the wheel into position.
5. Remove the first set screw from the first hole and loosen the second one a few turns.
6. Do the same for the second hole.
7. The wheel should pull up and off of the drive shaft of the motor. If it sticks, use a screwdriver, punch, or other metal rod to lift the wheel and remove it. Stick the rod through the bottom hole in the housing box and under the wheel to lift it.
8. When installing the new wheel, make sure that the wheel sits flush on the drive shaft. The wheel should not be below or above the shaft or the bearing on the wheel will rub and fail.
9. Tighten the first set screw and don't forget to add the second one in each hole.
10. Continue to reassemble the pump by reversing the order of disassembly.