BLACKMER PUMP MAINTENANCE AND REBUILD KITS

A kit may be used in multiple pump models. Always refer to the proper pump's Parts List and Installation, Operation and Maintenance Instructions BEFORE attempting any maintenance.

MAINTENANCE

Maintenance and troubleshooting must be done by an individual experienced with pump maintenance and the type of system involved.

Visit our website www.blackmer.com or contact the factory for a current Parts List and Installation, Operation and Maintenance Instructions

SUGGESTIONS FOR REPAIR OF YOUR BLACKMER PUMP

*Maintenance Kits* include all the parts normally needed to repair your Blackmer pump.

*Rebuild Kits* include all Maintenance Kit items plus major components such as a rotor & shaft and a liner.

Parts Lists and Installation Operation & Maintenance Instructions are available at www.blackmer.com. The pump Parts List page will identify the parts included in each kit.

It is suggested that you replace all the parts in the kit. If you choose to selectively replace parts, carefully review the back side of this form.

If in doubt, replace the part.

Always refer to the proper pump's Parts List and Installation, Operation and Maintenance Instructions BEFORE attempting any maintenance.
MECHANICAL SEALS (if equipped)
If a seal has been leaking, the entire seal should be replaced. Should a seal that has not been leaking be replaced? It depends on the condition of the parts. The seal may have been damaged during pump disassembly, or it may have been in service long enough to have used up most of its wear life. If the lip of the rotating seal face is worn within .010” (.25 mm) of the shoulder, it should be replaced. If either seal face is grooved, scratched, or marred, replace both faces. Examine the O-rings and replace any that are cut, swollen, hardened or flattened.
If in doubt, replace the entire seal.

LIP SEALS (if equipped)
If a seal has been leaking, the entire seal should be replaced. Should a seal that has not been leaking be replaced? It depends on the condition of the parts. The seal may have been damaged during pump disassembly, or it may have been in service long enough to have used up most of its wear life.
If in doubt, replace the entire seal.
Also inspect the shaft in the seal area for excessive wear or “grooving”.

PACKING (if equipped)
When replacing the packing, always use a full set of packing rings. Never add new rings to an old set of packing.

VANES
After a period of time, the vanes will wear. Change the vanes if they are worn unevenly or have raised projections on the wearing edge. Push rod penetration of the vanes is usually an indication of excessive speeds, or excessive re-circulation of liquid through the built-in internal relief valve. Check the separate bypass valve set-pressure to make sure that when the discharge line is closed, the liquid bypasses back to the tank and does not re-circulate in the pump. See the “Operation” section in the pump Instruction sheet. Grooved Vanes should always be installed with the groove in the direction of rotation. (Fig. C)

DISCS (or HEADS) and ROTOR
Examine the discs (or heads) and rotor for wear. A few scratches or a lightly abraded area should not affect pump performance. Remove any burrs from the edges of the vane slots in the rotor, which could cause the vanes to hang up. If the rotor has worn into the disc (or head) .006” (.15mm) or more, the discs (heads) should be replaced. If the rotor is narrower than the liner by .015” (.38 mm) or more, replace it.
Excessive wear on the rotor ends, discs (or heads) after a short period of service is usually caused by end thrust on the shaft from the driver, or improper locknut adjustment. Refer to the individual pump instruction sheets for proper assembly and adjustment of the locknuts.

BALL BEARINGS (if equipped)
Ordinarily, there will be very little wear or deterioration of the ball bearings unless a seal has been leaking extensively. Leakage from the seal will wash the lubricant out of the bearings and cause rapid wear. Thoroughly clean the bearings in solvent and examine them for extra play or clearance, which indicates wear. Spin the outer race and check for roughness of turning. Replace bearings if wear is evident.

SLEEVE BEARINGS (if equipped)
Inspect for cracks, chips, or out of round appearance. Replace the Sleeve Bearings if any wear or damage is evident.

LINER (if equipped)
Small scratches in the liner seldom affect pump efficiency. If the liner is worn in a “washboard” manner, the vanes will bounce; the liner should be replaced. Liners are only included in the rebuild kits.

MISCELLANEOUS PARTS
Gaskets, O-rings and bearing lockwashers are inexpensive and it is usually a good idea to replace them.
Take care in rebuilding your pump. When assembled, make sure you can rotate the shaft by hand. Grease the bearings immediately. Do not over-grease.

CHECK THE SYSTEM
After repair, the entire system (pump, piping, valves, meter, etc.) must be checked for leaks. DO NOT operate system if leaks are present.