



**SERVICE INSTRUCTIONS FOR BU0953B AND BU0953C
HAND HYDRAULIC PUMPS.
USE REPAIR KIT PART NO. RBU0953B**

Disassembly:

1. Remove handle fulcrum pins and handle with socket.
2. Remove tank filler hole screw 330174 and drain oil.
3. **Pump Piston:**
Pull out piston 330584 and remove clip 209910 by spreading it slightly. Unscrew gland nut 330641 using and adjustable spanner and remove V-packing support 330613, leather packings 330580, rubber packing and brass spreader 330614.
4. **Suction and Discharge Valves:**
Pry out and discard filter screen 210271 from hose hole. Remove spring retainer 330615, spring 330638, 5/16" ball 203201, spring 209914 and 3/16" ball 203197.
5. **Release Valve:**
Remove screw 330457. Grasp knob 330453 firmly and disassemble from valve stem 330449. Unhook loop of spring 330364 from pin 2766S on pump body. Slip Knob 330453 onto valve stem and use this knob to remove valve stem. Remove spring 330333, steel washer 330402, packing 213143 and 5/16" ball 203201.
6. **Tank Disassembly:**
To disassemble the tank, remove hex nut 330385 and "O" ring 330389. The reservoir tank 330579 can then be twisted off the pump body 330622. Remove tank rubber seal 330390.
7. **Magnet Assembly:**
Magnet assembly 330351 is pressed into oil return hole with the end of the aluminum tube holding the magnet facing out. The magnet assembly should be cleaned of chips.
8. **Intake Screen:**
Remove holding screw 330635 and discard screen 330616. Clean recessed hole into which screen sets. Replace new screen 330616 being sure that the screen is seated on bottom of hole. Insert screw 330635 and tighten securely.
9. **Overload Relief Valve:**
If the overload release valve has been disassembled – check the inside of overload body 330498 and remove any foreign particles by a thorough cleaning. Clean cone 330379, spring 330072 and rod 330573. Inspect hole in end of rod 330573 for clear passage.

Assemble Cone 330379 into body 330498 followed by spring 330072. Screw adjusting rod 330573 into body 330622 and turn the rod in until there is a resistance from the spring on the rod. Back off on the rod one (1) turn. This will seat spring firmly into counterbore on end of rod. Then continue to turn adjusting rod in until it just bottoms on solid spring. Back off 2-1/2 turns and leave at this point until a later test for final pressure relief setting. Follow instructions under tank assembly.

Assembly:

1. Clean and inspect all parts. Replace all packings and gaskets.
2. **Pump Piston:**
Insert brass spreader 330614 in base, flat side down. Slide V-packing support 330613 onto piston 330584, with the V away from groove in piston. Dip in Hydrol and assemble over bottom end of piston two (2) leather packings, one (1) rubber packing 330581 and one leather packing 330580. V on packing must nest on brass spreader. Place S22 assembly bushing into top of hole in pump body. Insert piston with packings on it into bell mouth of S22 assembly bushing. Slip packing seating tool S135 over piston. Using a medium weight hammer on seating tool, drive piston and packings down solid. Remove packing guide. Install and tighten gland nut 330641 using an adjustable spanner wrench. Replace clip 209910.
3. **Suction and Discharge valves:**
Insert 3/16" ball 203197, suction valve spring 209914, 5/16" ball 203201, discharge valve spring 330638, spring retaining screw 330615 and filter screen 210271.
4. **Release Valve Assembly:**
Insert 5/16" ball 203201, (coin lightly if necessary), rubber packing 213143, steel washer 330402 and spring 330333 in base. Assemble release lever 330449 in base and turn down against ball by slipping release valve handle 330453 onto hex of release lever. Do no force down tight. Remove release knob. Slip spring 330364 over release knob and hook one eye of spring onto pin 2766S. Place knob and spring over release valve stem and hook other loop of spring onto pin 2766S in pump body. Do not place knob onto hex of valve stem. Hold pump and release lever firmly and twist knob to the left two (2) faces of the hex. Push the knob onto the hex at this position. Insert flat head socket screw 330457 and tighten. Try release knob action to see if closing is positive. If action is not positive move knob to the left another face on hex. Knob and valve should work free and valve should close firmly when open and released. An improperly operating valve means improper assembly and an inoperative pump.
5. **Tank Assembly:**
Replace filter screen 330616 and magnet assembly 330351 if these parts were disassembled. Assemble rubber seal 330390 and tank assembly. Install new "O" ring 330389, assemble hex nut 330385 with countersunk end against "O" ring and tighten lightly. Rotate tank so that filler hole is on top and in line with pump handle. Tighten hex nut 330385.
6. **Overload Valve Pressure Test:**
Fill oil tank to proper level with correct hydraulic oil. Connect a 10,000 P.S.I. pressure gauge to the outlet hole. Operate the pump until pressure builds and overload valve unloads. Proper setting for BU0953B an BU0953C is 8300-8800 P.S.I. If pressure goes to high, turn the tie rod 330579 counterclockwise by screwdriver slot in the end. Restart and readjust if necessary until proper setting is obtained. If pressure is too low, turn tie rod clockwise and repeat as above. When proper pressure is obtained, tighten hex nut 330385 keeping screwdriver in end of the tie rod to make sure the tie rod does not turn with the nut.