



Instructions for Repair and Disassembly of Hand Pump

Please note: part identifiers are referenced by the number in the accompanying illustrations.

Example: p-10 fig.2 refers to part 10 in figure 2.

These are linked to the enlarged version of the appropriate image.

All images open in a new tab/window. Click any of the images on this page for an enlarged view.

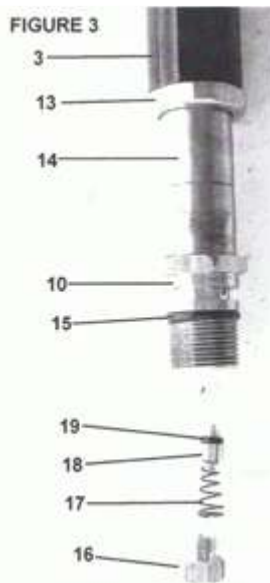
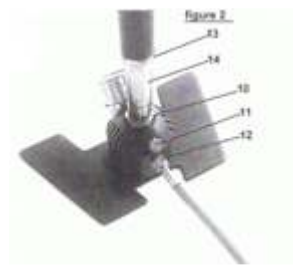


With pump fully assembled as in figure 1, loosen the base adapter nut ([p-10 fig.2](#)) from the base assembly and remove the base adapter. Clean and inspect the base adapter O ring ([p-15](#)) replace is necessary.

Clean the base assembly where the base adapter was.

Remove the retaining nut ([p-16 fig3](#)) and the check valve spring ([p-17](#)) and the check valve ([p-18](#))

Clean the check valve. The check valve O ring ([p-19](#)) should be free of nicks scraps or abrasions or replaced. USE Motor oil on this O ring.



Un-screw the handle assembly ([p-1, p-2 fig 1](#)) from the outer cyl. Tube ([p-3](#)) Easily done by laying pump flat on bench and turning black tube by hand.

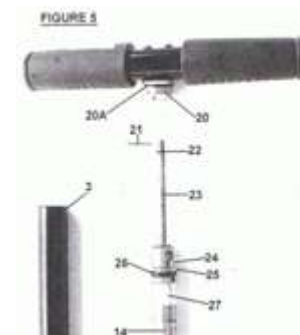
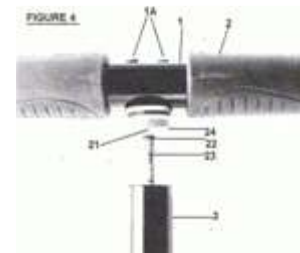
Remove the rod pin ([p21 fig 4](#)) from the main piston rod ([p-23](#))

Clean and replace if needed the O rings ([p-20A and P-22 fig 5](#))

Unscrew the outer cylinder retaining nut ([p-13 fig 3](#)) from the outer cylinder tube ([p-3](#))

Unscrew and remove the base adapter ([p-10](#)) while holding the upper valve retainer ([p-24 & p-25](#))

Replace the outer O ring on the base adapter ([p15 fig 6](#))





adapter
([p32 fig 6](#)) MAKE SURE THIS O RING IS FULLY SEATED AND LUBED. Also be very careful when assembling not to damage this O ring.

Remove, Clean and replace the outer O ring ([p-33 fig 6](#)) on the cylinder retaining nut and the inner O ring ([p-34](#)) Lube these O rings with O ring lube.

Remove the middle cyl. Tube ([p14](#)) and clean and lube the outer cylinder wall.

Remove the upper valve retainer ([p24 fig 5](#)) from the upper cylinder valve ([p-25](#))

Remove the snap ring ([p-38 fig 8](#)) and remove and clean the check ball ([p-37](#))

Push the main piston rod ([p23 fig 7](#)) out the bottom of the inner cylinder ([p-29](#))



Clean, replace and lube the O rings on the upper cyl. valve ([p-28](#), [p-26](#), [p-36](#), & [p-39 fig 7](#)) Be sure to keep track of the clear plastic washers ([p-35](#))

Remove the split nylon washer ([p-31 fig 8](#)) and replace / clean lube the main piston rod O ring ([p-30](#))

Re-assemble in reverse order. DO NOT OVER TIGHTEN ANY PART. Each part is sealed with an O ring and over tightening could cause the O ring to be damaged. Motor oil should be used as a lube.

The pump is now ready to use.

Sun Optics USA is the authorized repair facility for the Benjamin Sheridan and Air Force Airgun high pressure hand pump.

To contact the repair facility please email info@sunopticsusa.com or you may call direct at (817) 783-6433 or fax your inquiry to (817) 783-6553. Hours: M-F 8:30AM to 4:30PM Central Time