



# ALLIANCE HOBBY

36 S ARCH AVE UNIT 2283

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## **Crosman Pumper Valve Removal/Install For 1322 1377 P1322 P1377 2289**

1. Remove breech and barrel via rear sight screw and front breech screw (underneath bolt).
  - a. Front breech screw is .050" hex.
2. Remove grip frame via two screws, one underneath hammer cover (far rear of gun) and the other in front of the trigger.
  - a. Screws are #2 Square Bit (or, less preferably, use a slotted screwdriver).
  - b. Caution! The hammer cover will fly off due to pressure from hammer spring. Hold cover with your finger. It will fly across the room!
3. Refer to the roll pin removal guide on [www.alliancehobby.com/directions](http://www.alliancehobby.com/directions) to remove the roll pin.
4. After pin removal, front sight/barrel band will slide out. Forearm, pump arm and pump cup will also slide out.
5. Remove transfer port bushing and sleeve from main tube (the aluminum bushing and "squared o-ring" rubber grommet underneath the breech). Sleeve can easily be removed with a razor blade, but don't cut into the sleeve itself. It's just rubber.
  - a. You must remove the sleeve or you'll destroy it when you drive the valve out.
6. Remove hammer spring and hammer. Remove hammer pin (protrudes top-center of main tube) to remove hammer itself.
7. The valve is held tightly in place in the main tube via friction only.
8. Take a tube or pipe slightly smaller than the gun's main tube (your barrel will actually work quite well) and drive the valve out from rear to front. The main tube is notched behind the valve and you cannot drive it out front to rear.
  - a. You must drive it out rear-to-front.
9. Reinstallation is simply a matter of driving it back into the tube. You must pay attention to the orientation of the valve exhaust hole so that it lines up with the hole in the top-center of the main tube.
  - a. The valve is a two-piece aluminum affair. When tightened from the factory, the threads at the front will often be off-center from the exhaust hole in the rear. Slightly loosen the valve maybe 1/16<sup>th</sup> of a turn to align the threads with the exhaust hole on the opposite end.
  - b. There is an inner o-ring in the valve ensuring the valve remains sealed.
  - c. Yes, this really is the way they were designed.
  - d. For Flat Top purchases, extra o-rings are included in case you chew them up during install.