

Crosman Model 1923

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The Crosman Model 1923 is the most sought after Crosman air rifle. To date, very little has been written about this particular gun. It is also the most interesting Crosman Pneumatic rifle or pistol ever produced since it is the only one in which the pump rod pulled straight out the front end of the compression tube. All other Crosman pneumatic arms have the type pump which pivots from the muzzle end of the compression tube.



The Model 1923 was also the first Crosman gun ever produced. It was designed by William McLean, the Crosman family's chauffeur. The production of this gun lasted approximately one year and only a very small quantity was produced.

Several Crosman Model 1923 guns were recently examined by the authors. In general, there is an obvious similarity between the Model 1923 and the Crosman 100 and 101 which are familiar to most collectors. The operation of the bolt and loading are the same as is the cocking procedure. Many of the small parts are interchangeable.

The oldest Model 1923, which was repaired by the authors, was serial number 97. This gun had a walnut stock and a machined steel receiver. It also had an aperture rear sight, mounted in a dove-tail cut in the receiver above the barrel in front of the breech. The second and third guns restored by the authors were serial number 1227 and 1479. These were basically identical. Some common differences between these later guns and the serial number 97 were that the most recent guns had die cast receivers with a Crosman logo on the right side. Their stocks were not of walnut but of some other hard wood. Their rear sights were very similar to the early model 100 series guns in that the aperture was mounted over the bolt on a bridge which accepted the rear sight aperture. The receiver of the Model 1923 was so narrow that the recess could not be deep enough to accept the entire bridge; therefore, part of the bridge was inletted into the stock. The front sight on these later guns was also higher than on the serial number 97 gun. This was because the rear sight had to be higher to accommodate the locking pin of the bolt.

Since the Model 1923 guns described go Oakleaf (*The Airgun Journal*, Vol. 2, No.1 *Crosman's First Effort*) and Beeman (*The Airgun Journal*, Vol 2, No.1, *Editor's Note*) serial numbers 637 and 540 respectively, had steel receivers and walnut stocks as compared to the serial numbers 1227 and 1479 which had die cast receivers and hard wood stocks. These changes must have occurred about serial number 1000. The Model 1923 receivers were thinner than the model 100 series receivers. This was fine for the steel receivers; however, their die cast receivers were prone to splitting and cracking. The stock on the Model 1923 was one piece sans since the receiver was inletted into the stock; their wood was quite thin in the receiver area. Both hard wood stocked guns examined by the authors had cracks in the stock where the receiver was

inletted. These problems probably contributed to the design of the Model 100 series guns with their heavier receivers and two-piece stocks.

The Crosman Model 1923 described by Smith (*Smith's Standard Encyclopedia of Gas, Air, and Spring Guns of the World*) was identical to the ones described by Oakleaf and Beeman. All the Model 19232 guns mentioned here had the same shape stock with only minor differences in the shape of the Schnabel; barrel bands and front sights machined from steel; nickel plated brass compression tubes; blued steel barrels; and three screws for attaching the butt plate. All except the serial number 97 gun had the rear sight mounted on a bridge. All had the serial number stamped on the top of the receiver (to the right of the bolt) and the heel of the butt plate (the serial number 97 gun did not have the serial number stamped on the butt plate). It cannot yet be determined when the pump knob was first grooved, but the serial number 97 gun's pump knob lacked the concentric ring grooves present on the serial number 1227 and 14779. It appears that these rings were added to the guns after production had begun to minimize the chances of the pump knob sliding off the surface it was being pushed against. This probably was done for the convenience of the shooter or to reduce the possibility of bending the pump rod.



Mr. F. Kunzler (personal correspondence) brought a Crosman Model 1923 serial number 199, to the author's attention. It was basically identical to the serial number 97 gun, except for the receiver and rear sight. The serial number 199 receiver was machined for both, the dove-tail and bridge types of rear sights. The sight on the gun was the bridge type and the dove-tail was not used. It is therefore, apparent when this change was made since the serial number 97 gun was not machined to accept the bridge type sight and the serial number 540 gun did not have the dove-tail. This also narrows down the period in which other changes were made (i.e. addition of the serial number to the butt plate and rings on the pump knob). The serial number 199 gun had also been fitted with a sling and swivels.

The model 1923 as original produced must have been expensive to make, hence the change to die cast receivers and hard wood stocks. Other changes which occurred with the introduction of the Model 100 series guns include; the plating for the compression tube was changed to paint and the trigger was flared for comfort. The model 1923 had flat springs for the trigger while their Model 100 series guns had coil springs. The later Model 1923 guns had double flat springs for the

trigger spring - possibly an improvement to eliminate malfunctions on earlier guns (uncontrolled trigger release).

The valve on the Model 1923 operates on the same principle as on the Model 100 series guns. The mechanism was almost identical. Only small differences in the shape of the check valve and the exhaust valve body gasket exist. There were no machined seats at the bottom of the compression chamber, or in the exhaust valve body. Model 100 series parts can be used to repair the Model 1923. Best results were obtained when all the valve parts were replaced with Model 100 series parts. The only Model 1923 which had a complete set of original parts was the serial number 1227 gun.

The Model 1923 guns were very difficult to pump up compared to the forearm pivot type guns. There was no leverage advantage as in the forearm pivot type mechanism. This was a definite power limiting factor.



In the interest of having a usable and more powerful example of this style gun, the authors built a CO2 facsimile. It fills from a standard Crosman 10 ounce CO2 cylinder. The receiver was not reduced to the same width as the Model 1923 receiver for strength. It was salvaged from a broken Model 101. It was also left higher than the Model 1923 receiver. A compression tube was fabricated from scratch. Standard Crosman parts from Models 101 and 113 were used. The filling head plug screw was given the appearance of the Model 1923's pump knob. The stock was made from American Black Walnut. It was made thicker in the receiver area than the Model 1923's stock to accommodate the heavier receiver. All the external metal parts were chrome plated.



Since the serial number 97 and 1228 guns had different internal parts, the performance of each was evaluated using an electronic chronograph. The results were:

Velocity Comparison Chart

Serial number	97	1227	CO2
Trial 1	575	418	668
Trial 2	578	426	687
Trial 3	577	441	665
Trial 4	577	429	673

The CO2 version was included for comparison. The serial number 1227 gun was completely original or used duplicated original parts (seals). The serial number 97 gun had a model 100 series valve assembly.

The serial number 97 Model 1923 came in a cardboard sleeve which was said to be original. The box, however, pictured a Crosman rifle which was not the Model 1923 and was not mentioned in any available literature. It had a forearm pivot type pump, Model 1923 receiver with the bridge type rear sight. It also exhibited a one piece stock similar to the Model 1923 except the forearm had been cut through and the barrel band moved closer to the receiver to facilitate pumping.

