

## Schematics, Parts Diagrams, and Exploded-View Drawings.

The intent of this article is to increase understanding of the various diagrams and their usefulness, also, to explain their limitations. We hope it improves your understanding of these and assists in your understanding of the construction and makeup of the Schematics, Diagrams, Drawings, and Airguns. Parts Diagrams in the early 1900s were nothing more than a representation of the parts making up an assembly, in no particular order. It was common that these were not complete and did not include common parts like pins, rivets, or screws.

Schematics are a simple representation of the elements of a system using abstract or graphic symbols rather than realistic pictures. Components are usually depicted as circles, squares, triangles, polygons, etc. Schematics usually do not include irrelevant details. The purpose is to help users understand the interconnections of parts and provide graphical instruction assistance for understanding mechanical assemblies. Generally, these are not to scale.

Exploded-View Drawings are a picture, schematic, or technical drawing of an object showing the relationship of the parts to each other. Exploded-View Drawings are much older than Schematics and date back to the fifteenth century. These were usually two-dimensional drawings.

The use of 3-dimensional drawings, known as Isometric drawings, became associated with Exploded-View Drawings during World War II to satisfy the military's need for as easy to understand instructional aid. These are the most realistic type drawing or diagram. General use increased during the late 1940s and 1950s. By the mid-1960s, they were in common use and depicted component parts realistically. Therefore, very few exist for airguns prior to 1950 and few exist for those made prior to 1960. One important feature of these is that they are almost always drawn to scale. The term Schematic became common use in recent years to represent Exploded-View Drawings. Almost like slang.

Airgun Schematics, Parts Diagrams, and Exploded-View Drawings are valuable tools in understanding the relationship of parts, unfortunately, they do not explain the way the parts fit together. In the beginning, Airgun manufactures didn't place an importance on these drawings being accurate or updated, because they were making toys that usually were discarded when they failed.

Airgun "Schematics" as Exploded-View Drawings are now referred to, were often not kept current or updated. Often when part numbers changed due to improvements in design, material, or method of construction, etc. the "Schematics" were not always updated. Over time, improvements in manufacturing processes, simplified manufacturing process, resulted in a new part with a new number, but because it filled the same or original need, the manufacturers occasionally kept the old number, even though the parts appeared different or were made out of different material. An Airgun model or part may have undergone a change in design and the gun discontinued before the manufacturer could update the "Schematic". A company reorganization or change of ownership resulted in many part

number changes at several different companies.

When considering all these changes, “the schematics” we provide on our website are what we consider the best for each model at the time. We have made these available to our customers to be used as a reference only. We have not changed the Manufacturers drawings or information.