

## 597's

597 was the first gun to come out of the Mayfield plant when it opened in '96. We shipped the first one out in '97.

The 597 was to be inexpensive, lightweight, very accurate, semi-auto.

Mayfield is all modern machinery. Computer was used extensively to design this gun (and the 710). This was made specifically for Mayfield. This was one of Elizabethtowns 1<sup>st</sup> projects. Mike McKinney was the designing engineer.

Rimfire guns in general have been made the same way for 100+ years.

The 597 is not hammer forged. It is button rifled (cut to dimension needed then inserted with a mandrel that cuts the rifling in when pushed in. Button rifling is less stressful to metal. This makes for better accuracy.

Barrel is screwed into the barrel extension. BBL ext. is hooked into receiver. (All 22 receivers now are made of air craft quality aluminum). The receiver is more or less just to hold the bolt. No pressure on a 22 is in the receiver so aluminum is fine. Both of the above parts are restricted.

BBL ext. is held onto receiver by clamp and screw.

The rear site is the same as model 700. Front site is held on by one screw. Rear site is several different parts:

Base

Base slide

Aperture (has V to be lined up)

Two base screws

Elevation Screw (on side)

Windage screw

\*\*\*\*\*Note there are two types of back sites.

Lock tight will hold screws tight but you can still get them off.

\*\*\*\*\*USE RED LOCK TIGHT ONLY ON FIREARMS

The receiver is restricted except to RARC's but a new gun is cheaper so we don't really sell to RARC's either. Cracked receivers need to come back to Ilion-(NOT MAYFIELD-NOT RARC).

NEVER SEND CANADIAN GUN TO FACTORY-ALWAYS FIND A REPAIR CENTER IN CANADA.

Trigger assembly is extremely simple. The only part that folks can get is the whole thing (trigger housing assembly).

The hold open only works w/empty magazine clip. It lets you know that the clip is empty and prevents dry fire.

597's will only go on safety if gun is cocked. This is how it is designed. Gun is fine.

597 is cycled by gas

The bolt assembly is made to specific weight. When the bolt comes back the 597 extracts the spent shell recocks the hammer.

\*\*\*The stock assembly on the 597 doesn't come with swivel studs. These can be added. Technically this voids the warranty on the stock but don't discourage it-do say that it voids the warranty though.

Drill your hole about 2 inches from the butt. Keep perpendicular with the stock.

The ridges on the inside of the stock make it stronger.

Barreled action is what you have left when you take the stock off. This consists of:

Barrel

Receiver

Trigger assembly

We don't sell the barreled action

Rear site assembly has:

Base

Slide

Elevation screw on side (used to be flat and 2 yrs ago went to allen)-The marks on the side are for reference only-they mean nothing

Aperture (top part)-this is held on by

Windage screw-holds aperture on

Base (is held on by 2 screws)

Trigger assembly (held on by a drift pin)

Take pin out pull down to get assembly out.

Parts are:

Hold open

Hold open spring

The hold open holds open just enough to stop the bolt from coming open.

Ejector & hold open assembly is all that people can purchase separately. (Can't have magazine latch alone either) must buy trigger housing assembly.

Clean with Rem Action Cleaner after trigger housing assembly comes out.

Consumers can buy the action springs and the bolt action.

Dual bolt guide rails are a major feature of this gun. All others on the market have only one bolt guide rail. By putting two the bolt comes back at the same consistency. Consistency leads to accuracy. That and the buttoned rifling are what makes this gun more accurate. That is why this firearm is as accurate as a bolt action.

If this gun is jamming it is usually the clip or ejector

Rubber between the bolt action screens is called bolt buffer-this is epoxied in-it stops the bolt from slamming into the back of the receiver

The operating handle(pulls right out) pulls bolt back. You have to take this out to disassemble the bolt. Take out the guide rail retaining screws (at back). These must be put in loose tighten until stops then back off  $\frac{1}{2}$  to  $\frac{3}{4}$  turn. When these are out take bolt guide rail and action springs out.

Parts included in the bolt assembly are:

Extractor (pulls spent round out of case)

Extractor spring(inside extractor)

Extractor pin (RARC Restricted because there are two different sizes of these and they must fit properly for head space)

Head space is lining up of bolt, ammo, and chamber. If head space is incorrect to a point gun will go boom.

Inside of the bolt is the firing pin. Inside of this is the firing pin return spring. Consumers can get the firing pin and firing pin return spring.

The receiver and the barrel make up the barrel assembly.

The 3 pins on top of the receiver are for a scope mount. The grooves are for 22 tip off rings for scope. These rings are made for small cheap 22 scopes that are  $\frac{3}{4}$  in in diameter. If you wanted to put a quality scope most are 1 inch in diameter. You would need Weaver style rings to make this fit. When you put the scope on