

# Thames Valley Guns

## Savage 340 -.22 Hornet

### Introduction

For twenty years I managed a successful shooting club in the UK, together with a part time gun business, a full time job and looking after my family and looking back I'm not sure how I kept it all together but I was unknowingly paying a price. I spent so much time looking after everybody else that the time I actually spent shooting was almost reduced to zero and as a result I started to sell of some of my favourite rifles. One of those rifles was a BSA Hunter in .22 Hornet. Not only did I like the rifle but I loved the little .22 Hornet cartridge and as a result the Hornet/Hunter made an excellent and accurate combination that I was very sad to lose. That was a few years ago and as I continued to sell bits and pieces from my rifle collection, I didn't realise that working fourteen hours a day, seven days a week was starting to effect my well being.

Realising the slippery slope I was on, in 2013 decided I retired from the shooting club, reduce my working hours, spend more time with my family and more time enjoying the remaining rifles in my collection. Before my retirement from the club I was lucky if I shot 20 rounds a month, now I was shooting 200 rounds a month through five or six different rifles - utopia and it improved my well-being no end. I was also starting to think that it was time to recover some of those lost rifles and started to search for suitable replacements. No1 on my shopping list was a suitable .22 Hornet. I looked for a BSA Hunter to start with but there was nothing available, I found a couple of Martini's in .22 Hornet but the sellers wanted silly money and therefore my search was proving



rather fruitless. The previous rifle I had restored and wrote about in my Armourer's notes had been a Stevens Buckhorn and whilst a mass market rifle it had left a lasting impression and therefore out of casual curiosity I was keeping an eye out for another Stevens. Low and behold, what should pop up but a Stevens/Savage depicted above at a fraction of the price that the Martini's were going for. This rifle was ringing all the bells, It was a classic rifle, had a side mounted scope, the scope was a Kollmorgan and after I rang the seller and confirmed its condition, all lights were green.

### Savage 340C

Upon collection the rifle was actually a Savage 340C as the rifles nomenclature was hidden behind the Weaver side mount and therefore the seller had mistakenly advertised it as a Stevens. However the seller was not too far of the mark as the Savage 340 had been developed from the Stevens 330 and was introduced in 1950 and remained in production till 1983/85. The 340 was a rather inexpensive and is described in various publications as a "Plains Rifle" which in my mind equates to a "working rifle" and utilises a single locking lug, which in turn limits the rifle to low to medium pressure cartridges. Initial offerings was in .22 Hornet, 30-30 Winchester and .222 Remington, however as the other cartridge designs become available the rifle was also chambered in .223 Remington & .225 Winchester.



As this was a rather inexpensive rifle most stocks are off a plain type and lack any checkering, however Savage did offer the 340S as a deluxe version, which leads me to the subject of identifying the rifles various models. This rifles receiver is stamped 340C but this varies, depending on what publication you read and therefore is all gets quite confusing. In John Walter's, Rifles of the World, 3<sup>rd</sup> Edition, it states the 340C is a carbine with an 18" barrel, In Numrich Gun parts exploded drawings, they depict the .22 Hornet action as a 340E. On the website [www.leeroysrambling.com](http://www.leeroysrambling.com) the 340C is the deluxe version. Therefore my assumption is to assume that throughout the rifles 30 year production run and as the various improvements were added so were the various prefix's to reflect those improvements and regardless of prefix the rifles were manufactured in all the above calibres.

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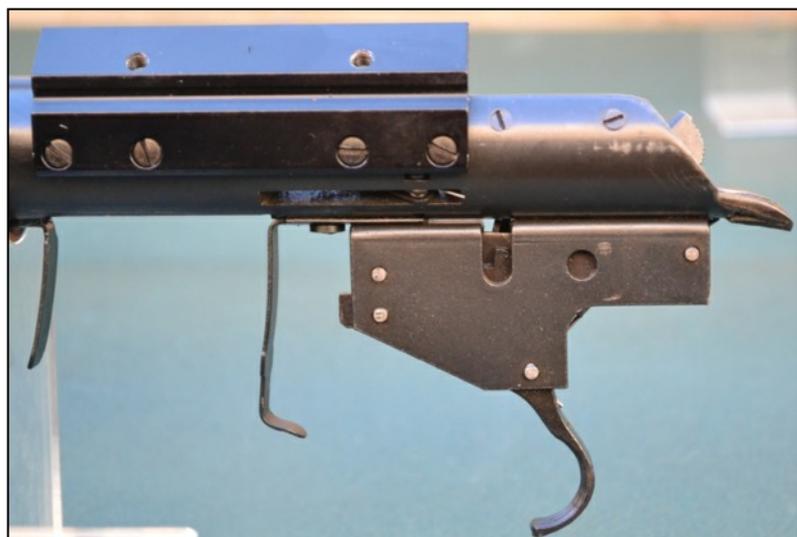
### Receiver

The receiver is a tubular design, 7" in length and 1.24"(31.8mm) in diameter. It is split receiver meaning there is no bridge at the rear. The bolt has a single locking lug and this engages in the corresponding recess at the front of the receiver. Unusually this rifle



has a two gas escape ports, parallel to one another on either side of the receiver. Above the right gas port is the rifles serial number (152309) and behind this the rifles ejection port. The receiver walls at this point are fairly substantial at 0.28"(7.2mm) and generally remain so throughout the receivers length. Moving rearward is the bolt handle recess, which is the second/safety locking lug and the safety catch.

Underneath the receiver and working from the front to the rear is the rifles recoil block, secured between the barrel nut and the receiver. In the base of the recoil block is the thread for the king screw. On original rifles the action is secured utilised the king screw and the barrel band, however this rifle has been modified with a tang, which is welded onto the rear of the receiver and a new trigger guard screw passes through the trigger guard, the stock and into the tang. Behind the recoil block is the front magazine guide, which also supports the spring loaded feed ramp. Moving rearwards is the magazine well and the rear magazine support/catch.



To the rear of the magazine support/catch is the trigger assembly, which is an all metal design with the trigger, sear and associated parts contained in what is essentially a folded plate, which in turn is secured by three screws. To remove the trigger assembly you must strip all the trigger parts to access two of the three screws and therefore from this aspect it is probably not the best design. The safety catch is functional and well

positioned at the rear of the receiver. The safety can be engaged with the firing pin cocked or in the fired position but in both cases it locks the trigger and locks the bolt in the closed position. Trigger is a single pull only and releases 4.10lbs.

On the earlier factory rifles the left side of the receiver is fairly plain as the rifle was not fitted for a scope, midway is the Savage nomenclature, model number etc and below this the recess for the ejector and its spring. Ejectors on the 340 vary in length and shape depending on the rifles calibre and the Hornets is very long and slim, therefore the user should be careful with scrubbing the bore as the cleaning rod could easily damage the ejector. To the rear of the nomenclature is two blanking screws which allow the user to fit a peep/aperture sight.

As the early guns had no facility for fitting a scope, plus it was a split receiver design, gunsmiths would be required to drill, tap and fit a side rail as depicted with this weaver base above. The fitting of the side rail also required the stock to be modified to permit the action to seat correctly.



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### The Barrel

Although the barrel is fairly unremarkable as barrels go, there is a few of points that I would like to bring to your attention. The



barrel nut which has become one of Savage's trademarks was first incorporate in the Savage 340. The barrel band is in my opinion a poor design and I am unsure why savage incorporated it. However in the UK, the rifle was modified with the rear tang and as a result this should have made the barrel band redundant but for reasons unbeknown, it has been retained and therefore the action now has three points of contact with the stock. Another peculiarity is the the foresight block as it is not the original, the factory foresight was secured with two screws and had a rearsight been fitted, this foresight would have sat too high to be of any use. The rearsight has been removed and was lost prior to my purchase, although I am aware that the original rearsight was the simple spring loaded plate barleycorn type with a ramp located along its length. The last note worthy of mention is the barrels condition, to use an English expression it is in "mint" condition, unusual for a rifle that is fifty years old. Markings refer to the rifles proof, "proof tested .22 Hornet" patent number and a mixture of Savage and UK proof marks.



One odd observation which initially caused me concern is the chamber face has two steps which appear roughly machined, upon closer scrutiny this is to permit clearance for the extractor.

### Bolt Assembly

The bolt is in my opinion quiet sophisticated for what is intended as a budget rifle and as a result I find worthy of some study. With regards to my own studies, it is the first time that I have come across a rifle with a "bolt guide" or "gas shield" as I've seen it described of this design type. Other rifles with split bridges such as the Lee Enfield have a solid and integral bolt guide. The item referred too is the long plate which is located between the locking lug and the bolt handle and rotates about the axis of the bolts body.

The bolt guide sits in the receiver bridge at all times, regardless of the bolts position and with the exception locking phase retains the locking lug and the bolt handle in the upright position when cycling the action. When the bolt is fully forward a small lever which is located in the bolt guide is depressed which allows the bolt to rotate and the bolt to lock. Where the terminology "gas shield" originates from, I am unsure as I cannot see where the bolt guide fore fills this function. When the bolt is closed and the round discharged, the bolts gas escape port is facing the ejection port and away from the firer. Furthermore on later models the bolt guide was manufactured in plastic and therefore would be unable to support this role.

The single locking lug provides a smooth and fast cycling action, the twin extractor is a spring plate design and supports the cartridges rim on the bolt face. The small groove located at



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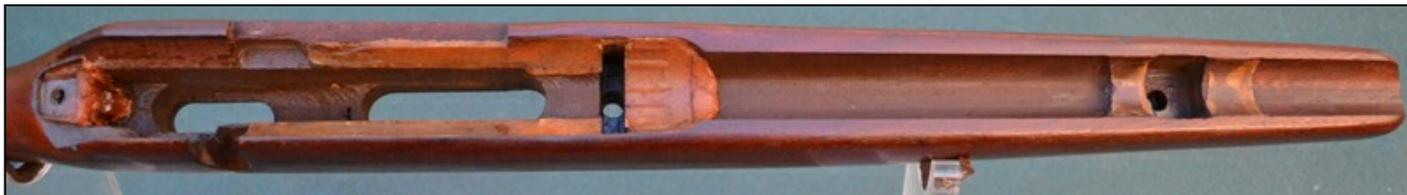
4 o'clock position on the bolt face is to allow the passage of the ejector. Whilst the locking lug provides the primary method of locking, the bolt handle clearly acts as a secondary point of locking and also as a safety lug should the main lug fail.

The firing pin is cocked on opening and primary extraction is achieved by a small cam on the locking lug, otherwise in all other respects the bolt, cocking piece, sear etc is fairly standard and unremarkable.

In summary the bolt functions well, however if I have any criticism, the bolt guide is overly complicated and if not fitted correctly can cause the bolt to bind. The use of roll-pins in the bolts assembly may be a cost saving exercise but when stripping and repairing they should be replaced which is a pain when servicing a fifty year old bolt. Being little more than a spring clip the extractor can be easily stretched and damaged when removed for cleaning, so caution should be exercised when removing it.

### Stock

The is plain walnut and unremarkable in terms of its design. It was designed to be functional and in that respect it fore fills its role



admirably. My particular stock had been well looked over the years and with the exception of the odd transit mark had weathered the years well. The stock had been modified to accept the screw for the rear tang and had been bedded with the old fibreglass bedding material utilised prior to the introduction of the more modern two pack epoxy resins we know today.

As the old bedding appeared to do the job well and referring to the old adage "that if it works leave it alone" I felt it prudent to do just that. Therefore the only restoration work I carried out on the stock was to remove the old finish, highlight the walnut grain and refinish.



### Magazine

The magazines vary depending on calibre and as depicted below this magazine is marked .22 Hornet to avoid any confusion with other calibres.

They are simple yet well made and functional magazines which if looked after and serviced from time to time will provide a sterling service throughout the life of the rifle. Capacity for the .22 Hornet is four rounds and construction is four press steel plates which are pinned together. Removing the base plate allows you to remove the spring and the magazine platform and re-assembly is in the reverse order.

Besides a service I have not had to repair or alter the magazine in any way, which I think is quiet an accolade to a fifty year old magazine.

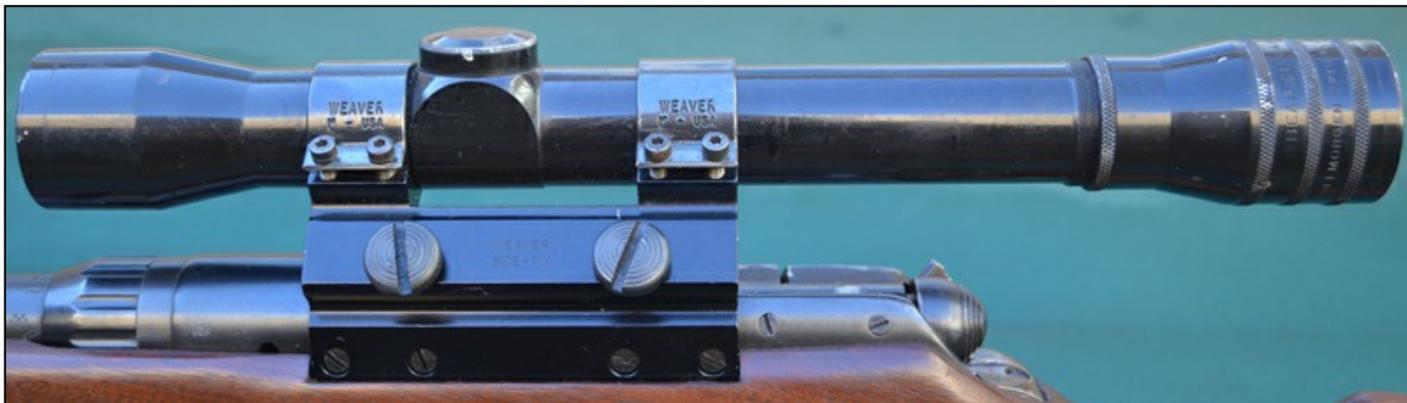


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### Mount & Scope

The mount and the scope are worthy of mention as they are from the same period as the rifle and therefore compliment it well.



The mount is a weaver side mount with 1" rings and are typical of the mount used for rifles with receivers of a split bridge design and in particular the Savage 340. The rings and scope can be removed for transit or storage, but I wouldn't like to guarantee any resemblance of zero once the scope has been removed and replaced. However I am sure it will be close and one must remember this is a working rifle not a precision target rifle and therefore "close" may be perfectly acceptable when engagement ranges are around 100 -150yds.

The scope was a Kollmorgan x4 Bear Cub and for me was the icing on the cake. I had wanted one of these scopes for a long time but on Ebay they go for more money than I paid for this whole setup, therefore I considered myself very fortunate. The Bear Cub was available between 1956 and 1959 and may be a good indicator of the rifles age if they were purchased together.

The scopes optics and fine wire reticule were in excellent shape but the scopes anodised finished had been painted and had seen better times, therefore my plan was to remove the paint and return the scope to its natural finish.

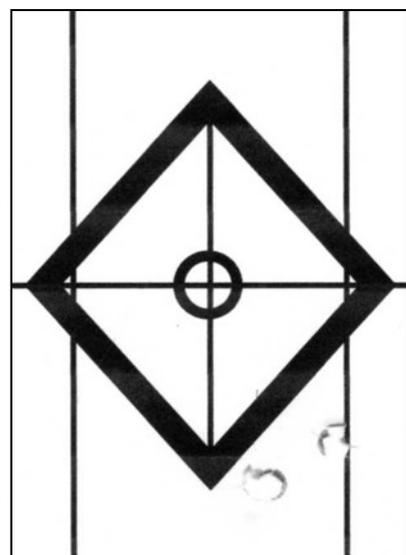
### Range Test

One of the principle reasons for purchasing this rifle was its calibre. I wanted a rifle in .22 Hornet as I find this cartridge just a pleasure to shoot and therefore it is one of my favourite all time cartridges. I do not rate the .22 Hornet as a nail tacker but it is accurate enough with the right gun and its zero recoil and modest report ticks all the right boxes in my opinion.

My original loading for this cartridge was a little to high and as this was a sixty year old rifle, I decided to reduced my load and reload with 9.8gr of Vihtavouri N110 utlising the Speer 45gr Soft point which in the past I had found to be an exceptionally accurate bullet.

As I was testing some .22 rifles at the same time and to avoid relocating the bench, I set the shooting bench up at 75yds on this occasion, rather than the 100yds that I typically zero centre fire rifles. My first few rounds were purely to zero the rifle in, but in doing so I realised that I had made a stupid error when assembling the scope, I had positioned the elevation drum in the windage position - bummer. I decided to press ahead and not waste my journey, after all this was a grouping exercise to test the rifles accuracy and therefore I could refit the scope and zero another time.

Once I had got the zero to within a 2" of the bull I settled in to see what the rifle could do. Utilising a front rest my first three round group measured 1" which was not to bad. My second and third group were very similar and I noticed at a very early stage that I was loosing the odd round due to the hefty trigger. By the fourth group I was getting the hang of the trigger and this group measured 1/2"(13mm) with two rounds breaching the same hole. This was what I wanted as an 1/2" group was in my opinion good going for both the rifle and the cartridge. My daughter was also with me at the time and I let her have a shoot, Although not a regular shot she managed a number



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of groups with an average of 2" but one group was a fraction under 1/2" at 12mm. I didn't include this group in these notes as I regarded this as a fluke, however it does make one think.

### Summary

The finished rifle restored very well as depicted below. I had replaced the missing sights, cleaned up the scope and the woodwork



produced a pleasing grain once all the many years of handling had been removed. They say "beauty is in the eye of the beholder" but like all things mechanical, some items are better looking than others but in my professional opinion, I think the Savage 340 is a good looking rifle with pleasing lines. The Monte Carlo stock has the right profile and gives a solid but balanced feel, the 22" barrel is the right length and as a result the rifle handles well. The magazine engaged and disengaged from its well with ease and the bolt cycled the rounds without fault and therefore in essence a reliable rifle, which is what a "working rifle" is all about.

If I had any criticism with the 340 it is fairly minor, the safety catch is in a good location but it is not always clear whether it has been applied or not, it has no positive detent and therefore can be moved inadvertently which is somewhat of a safety failing. Opening and cocking the bolt requires considerable effort and as a result can trap unwary fingers against the scope.

I like side-mounted scopes and this scope and mount combination reconfirmed that opinion but it is not to every one's taste. Although hard work, I managed to remove all the old damaged paint and as most of the original anodising still remained intact, I was able to restore the scope to a reasonably good condition.

In summary, this is a fairly unusual rifle in the UK and one that until recently, was off my radar. I have worked on Savage 110's in the past and quite frankly do not rate them, however I am really pleased to have had the opportunity to study this rifle and I'm really impressed with it, so much so I would like to buy another one in a different calibre- I just have to find one!!!!

First published: 02 March 2014

Updated:

Paul Green

Thames Valley Guns, England

[www.thamesvalleyguns.co.uk](http://www.thamesvalleyguns.co.uk)

Email: [paul.tvg@ntlworld.com](mailto:paul.tvg@ntlworld.com)