The Winchester Model 71 & The 348 Winchester Cartridge in 2024

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Background & History

Winchester Model 71 Deluxe Carbine - 20" Barrel

One rifle in one unique caliber describes the Winchester Model 71 lever action rifle in 348 Winchester. Based on the massive Winchester Model 1886 lever-action frame, the Model 71 debuted in 1935 as the last Winchester lever action design. It walked into American Sportsman folklore at the height of the Great Depression and lasted until 1957 before being dropped from the Winchester catalog and into history with nearly 50,000 produced in both carbine and rifle versions. After Winchesters' bankruptcy in the 1980's, Browning Arms of Utah reignited interest in the Winchester Model 71 by producing a near copy as the Browning Model 71 in 348 Winchester, in both 20" carbine and 24" rifle barreled versions, with plain and fancy "deluxe" walnut stocked models. The Browning run of Model 71's was short lived and roughly 13,000 were produced before production ceased. The later Browning's differed in several aspects to the earlier Winchester Model 71's and many parts do not interchange between the two manufacturers except for the identical calibers. Both rifles shoot the unique .348 Winchester round. There are other firearms chambered for .348 Winchester but this article is specific to the Winchester and Browning lever action models. I've seen references online to late teens (2013 to 2019) run of Winchester Model 71's (Miroku Japan manufactured) but I've never seen one, in person, or online. And I once saw an article online that mentioned Uberti or one of the other foreign replica gun OEM's making a copy of the Winchester Model 71, but I've only seen it in caliber 45-70, none in 348 Winchester.

Uberti Model 71 in 45-70 Caliber

Type	Rifle Cartridge	Case length	2.255 in (57.3 mm)
Place of origin	United States	Overall length	2.795 in (71.0 mm)
Production history		Rifling twist	1 in 12
Designer	Winchester	Primer type	Large rifle
Produced	1936–present	Maximum pressure (CIP)	46,000 psi (320 MPa)
Specifications		Maximum CUP	40,000 CUP
Parent case: .50-110 WCF		Case Trim to Length	2.245 inches
Case type: Rimmed, bottleneck		Maximum Case Length	2.255 inches
Bullet diameter	.348”	**Browning Model 71 Rifle**	
Land diameter	.340”	Overall Length	42.5"
Neck diameter	.3755” inches	Barrel Length Rifle	24"
Shoulder diameter	.485” inches	Barrel Length Carbine	20”
Base diameter	.3785 inches	Rear Sight	Open Buckhorn
Rim diameter	.610” inches	Buttplate:	Shotgun Style, Metal
Rim thickness	.070” inches	Rifle Weight as Shipped w/ sling	8.81lbs/141oz.
Average Case Weight with LR Primer	255 grains	Rifle Weight loaded with 5 rounds of 250 grain ammunition	9.33lbs/150 oz.

.348 Winchester Firearm & Cartridge General Specifications

Both Model 71’s were marketed and used for big game hunting. Alaskan Brown Bears, Elk, and other large dangerous game was where the Model 71 found its hunting niche. Previous articles on both rifles point to their popular and continued use in Alaska and other areas of North America/Canada while a few articles hint at their use in Africa. But they are also popular on smaller game animals such as white tail deer and feral hogs/boars, the lighter 150 grain loads giving good service on these hunts.

A long out of production lever action rifle in a unique caliber does not make any Model 71 an easy choice for modern day shooters and hunters. Which is precisely why I wanted one. I do admit that seeing one in the hands of an experienced Alaska hunting guide (Mike Horstman, of the television show “Mountain Men” fame) who specializes in Alaskan Brown Bear hunts caught my eye one rainy weekend when I was bingeing on Alaskan TV fare. The well-worn Winchester Model 71 he carried looked to my eye like a well-loved and handy tool for traipsing around dangerous game country. Or in my case, an interesting project on a rifle and caliber I had little experience with.

Mike Horstman of "Mountain Men" fame shown with his Winchester Model 71 – Alaska, USA

I owned no Winchester 348 caliber firearms, ammunition, reloading dies, bullets, or cases. Fortunately, my powder locker held several suitable powders from my habit over long years of buying gunpowder if it was cheap, or a known use, or both. I looked in the locker and saw 3031, 4064, 4350, 4831 and 4895. All I needed to go down this rabbit hole was a rifle, reloading dies, brass, primers, powder, and bullets. I am fortunate to be stocked with two lifetimes of primers in all sizes, so powder and primers are in abundant and in near supply.

My Browning Model 71

And so, the journey began. As I often do, I started my search online, reading all the articles I could find on Winchester Model 71's, Browning Model 71's, in both new and used condition. There isn't a shortage of articles on the rifle and the unique round of ammunition. As many fans of Winchester Model 71's can attest, I soon discovered that a good Winchester Model 71, in 90% or better condition is a $2000 to $4000 dollar or more investment. My interest shifted to the Browning Model 71, largely based on two articles similar to this one where the authors expressed fondness for the classic Winchester Model 71's, but were often disappointed by their poor inherent accuracy. Winchester 71's appeared to be hit and miss accuracy wise. And cast bullet performance appeared to be as inconsistent. But the Browning Model 71's, especially those in

the 24" rifle model, appeared to be accurate shooters with both jacketed and cast projectiles. So, I soon settled on finding a new, or nearly new Browning Model 71 with a 24" barrel.

Gunbroker.com was my first website to peruse. For several weeks I monitored both Winchester and the rare Browning Model 71 auctions, watching those rifles sell for market, or above market prices, depending on condition and other factors. I saved an automated search query and set it to email me daily a summary of specific auctions involving "Browning Model 71".

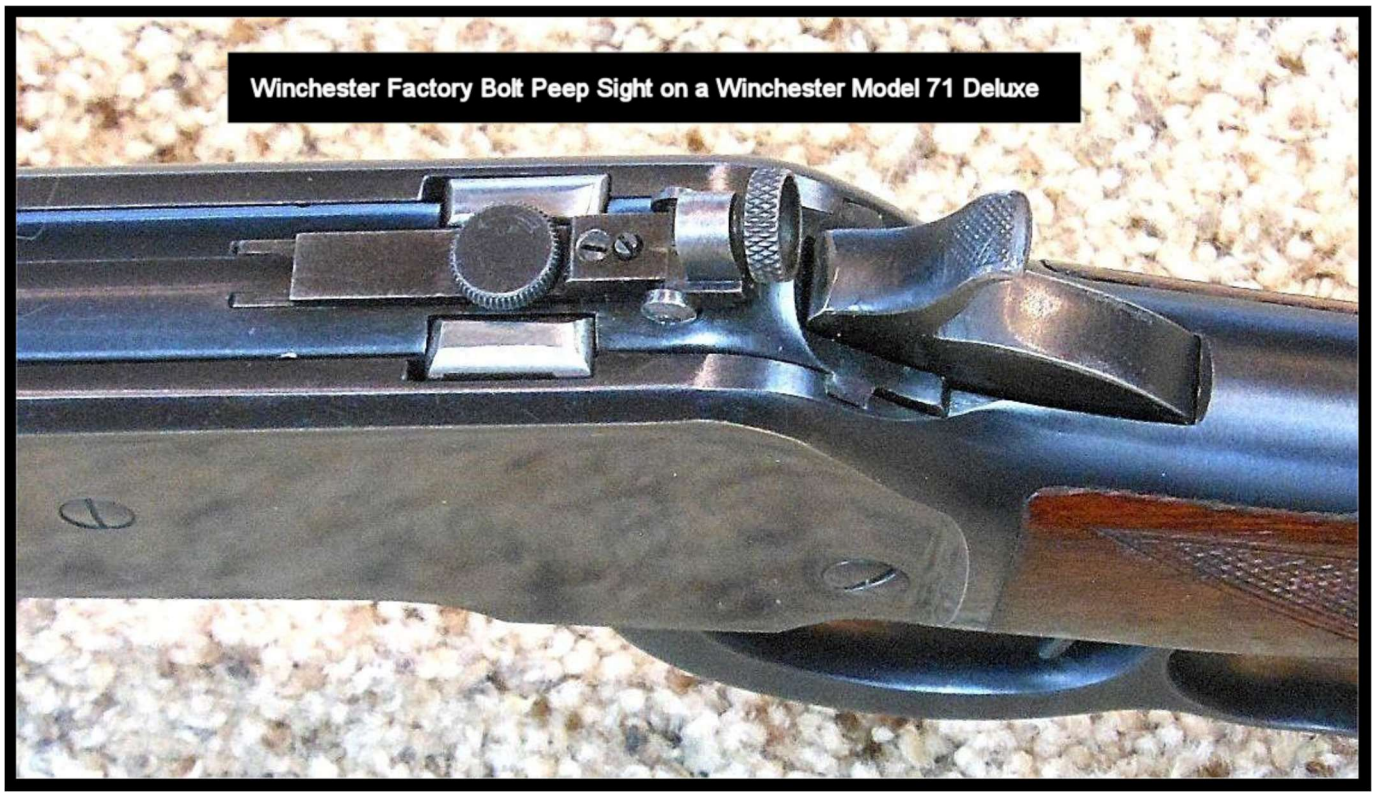
A few months later I awakened early one Saturday morning and as I often do, I reached for my smartphone and checked my email and saw that Gunbroker had sent me an email notice of a new Browning Model 71 auction that had started just hours earlier. It was a new in box Browning Model 71 (non-deluxe model) with a 24" barrel from the late 80's and the Buy it Now price was $1,799.00, which I knew to be on the mid to lower end of the current market price. I carefully reviewed the description and ticked off all the matching attributes I was looking for.

I lasted about 4 minutes of indecision before I hit the "Buy it Now" button and committed to the purchase. Days later it arrived at my FFL dealer still in its original late 1980's Browning shipping box. After the paperwork, I held the nearly 40-year-old new rifle in my hands. Except for some light freckling on the metal butt plate and barrel, the rifle was new in nearly all aspects, with a deep blue finish on the metalwork paired with rich walnut wood. Thank you, Matt, for selling it to me. I took it home and after a little work with a good gun oil and a cotton rag, all the freckling disappeared and the metal glowed. The rifle was the only object I held in .348 Winchester at that moment; I had no ammunition for it. Impossible to shoot it to determine if I had a keeper or an expensive safe queen.

The 24" Barreled Browning Model 71 rifle I purchased

My Rifle Modifications

I rarely alter firearms to suit my personal tastes, but I do have certain non-negotiable requirements as exceptions to the "no alterations" rule. Sights top the list of exceptions. The factory buckhorn rear sight, while handy and useful for brush hunting in rugged Alaska, is a bear to use at my age with its short sight radius. The internet provided ample reading as to Winchester factory bolt peep sight options (available on eBay, but atmospheric in price as they are rarer than 24K gold Hen's teeth). And I have little doubt that drilling the mounting hole and tapping it in the bolt is an expert level gunsmith task. As one of my friends once said regarding Winchester bolts "They are harder than a Woodpeckers lips!" I was also aware of the repeated warnings as to subtle differences between original factory Winchester Model 71's and the later Browning Model 71's. Vintage Lyman or other period sights are rare and expensive and almost unobtanium. I decided that a modern receiver sight was the best option as the Browning Model 71.



A Factory Winchester Bolt Mounted Peep Sight - Rare & Expensive

The Modern Williams FP-71 Flat Receiver Target Sight (Browning 71 or Winchester 71)

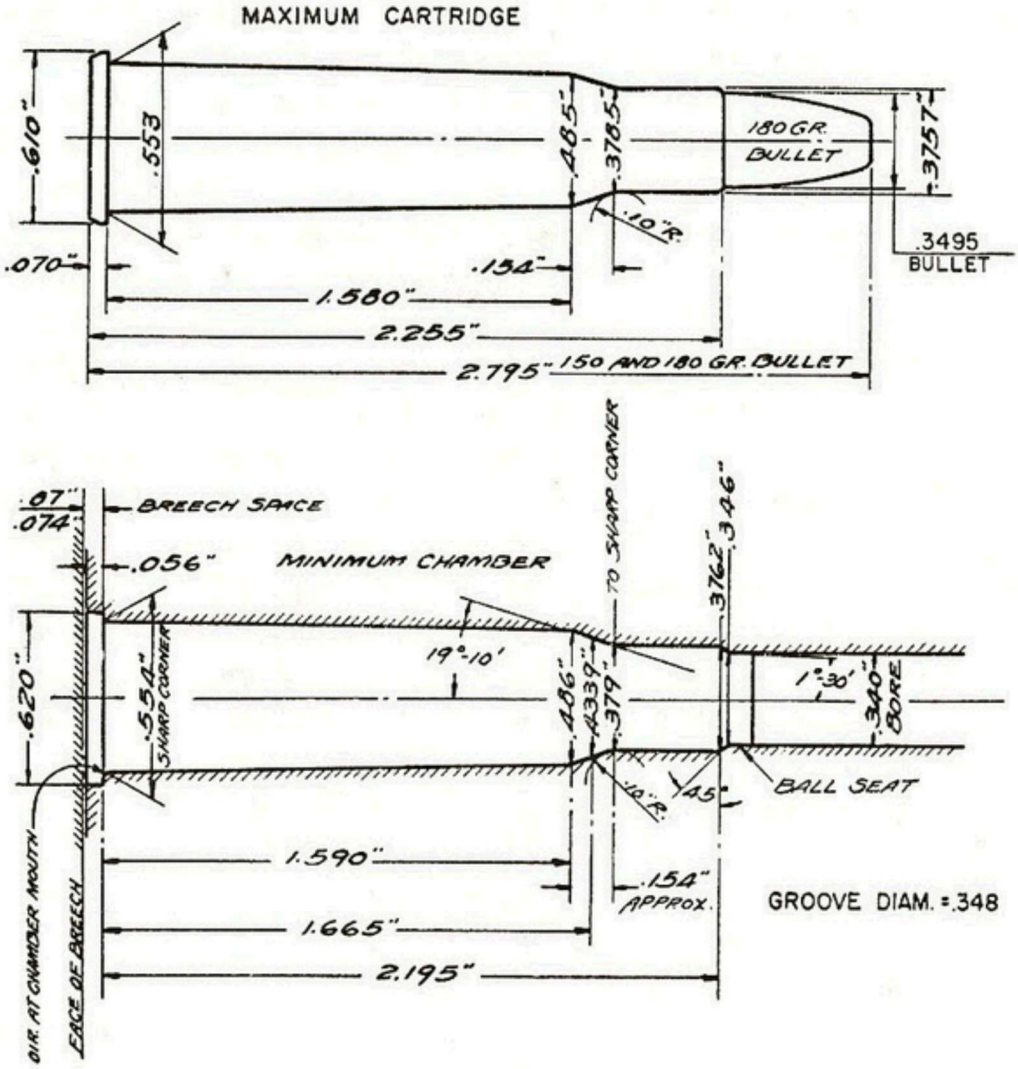
Many sight options exist for the Model 71, even a modern base for a red dot optic (Turnbull Restorations)

Fortunately, the modern Browning Model 71 is drilled and tapped for a receiver sight. Which is where I went in my search for a replacement rear sight. “Two is one, and one is none” is a rule I have long lived by, so I procured two current production Williams Target rear peep sights (Model FP-71) for flat sided receivers. And I discovered a Marbles tang mounted peep sight that requires the drilling and tapping of a 4-48 screw in the short tang of the Browning 71 in order to mount the sight. The Browning Model 71 has the short receiver tang with a single stock screw on the tang. The Marbles Peep sight requires two mounting bolts in order to secure the sight to the short tang to prevent movement. Marbles conveniently sells a companion replacement (slightly longer than OEM) tang screw along with a second screw (threaded 4-48) to hold the peep sight in place. The photo below depicts both the Marbles Short Tang peep sight and the replacement screw set. I hesitated for a few weeks over drilling a hole in a 40-year-old new rifle, but at the end of the day I ordered a 4-48 drill and tap set and a few additional small drill wire size drill bits under the 4-48 tap size to help drill the hole in the tang. But before mounting the Marbles peep sight I did a mock install and discovered that even at its lowest setting, the peep would hit the top of the comb on the rear stock making storing the sight flat against the stock impossible. The stock would have to be altered to create the proper amount of clearance. And since I would have to dismount the rear stock, and I had a basic uncheckered model, I decided I would get the stock and forearm checkered in the style of a Winchester deluxe model, and at the same time, remove the wood required at the top of the comb to let the rear peep clear the comb. So, the install of the rear peep and the drilling and tapping of the rear receiver tang will have to wait until I receive the stock and forearm back from the nice gentleman in Mississippi who will perform the checkering task.

Three rear sights on a lever action rifle are a bit much, so the buckhorn sight was gently removed using a small ball peen hammer with a polished face, thank you Mark Novak/Anvil Gunsmithing. I found a rear sight dovetail blank filler on the internet and gently persuaded it into place, leaving the Williams Receiver Peep sight as the sole rear sight on the rifle…for the moment. Test mounting the rear peep revealed that it may be possible to run the gun with both rear sights in place (the tang peep and the Williams) but that is a "to be confirmed" at a later date issue.

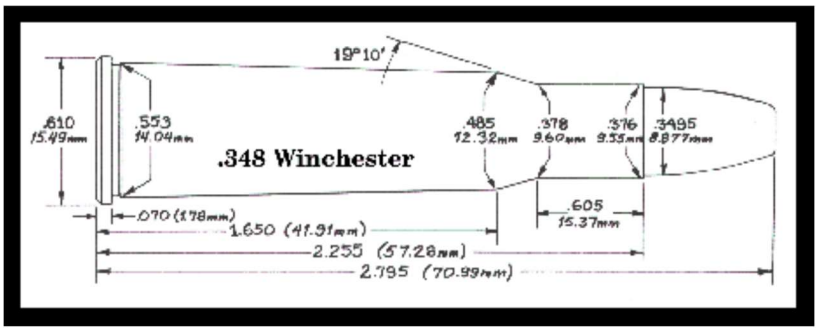
The Browning 71 came from the factory with a fore end sling mount and a rear stock sling mount. So, mounting a sling would not require altering of the forearm or the stock. A quick trip to my favorite Amish leather shop (Nohma leather on Amazon) and I had a very nice leather padded sling to join the Model 71 when it comes back together. And with those additions, my alterations to the Browning Model 71 were complete.

Ammunition, Bullets, Moulds, and Reloading

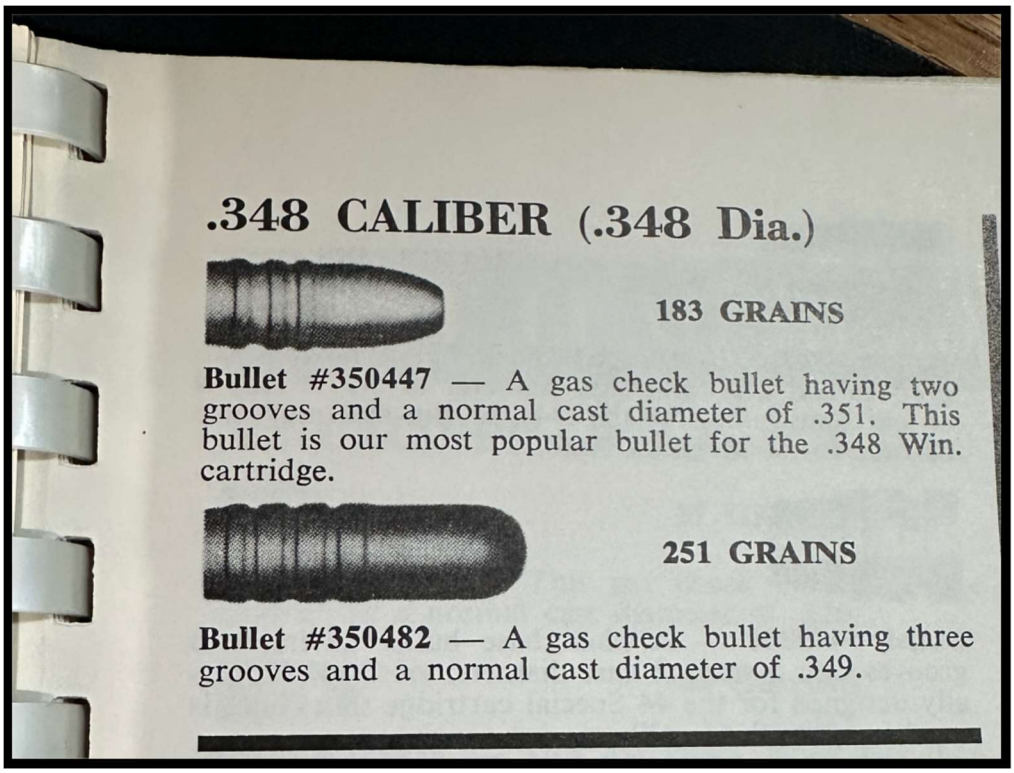


.348 WINCHESTER

The most powerful lever action rifle cartridge now made with a rifle to match it, the .348 is capable of stopping almost any soft skinned game animal on earth. Winchester's Model 71 rifle in this caliber is a modernization of the old 1886 action and is fast, reliable and strong.



With the advent of the Winchester Model 71, Winchester offered three basic loads with the rifle: 150, 200, and 250 grain flat points. Midway through the Winchester Model 71 production run, the 150 and 250 grain loads silently disappeared from most commercial ammunition catalogs, leaving the bulk of ammunition in the 200-grain jacketed flat point category. Cast bullet loads were often the only option for standard and non-standard bullet weights and designs, yesterday and today. Several Lyman/Ideal mould designs gave good service in cast .348 Winchester loads, Ideal# 350477 being one of the iconic cast bullet designs along with #350482. Today there are several mould makers that offer .348 Winchester designs, one of my favorites being Accurate Bullet Moulds.



.348 CALIBER (.348 Dia.)

183 GRAINS

Bullet #350447 — A gas check bullet having two grooves and a normal cast diameter of .351. This bullet is our most popular bullet for the .348 Win. cartridge.

251 GRAINS

Bullet #350482 — A gas check bullet having three grooves and a normal cast diameter of .349.

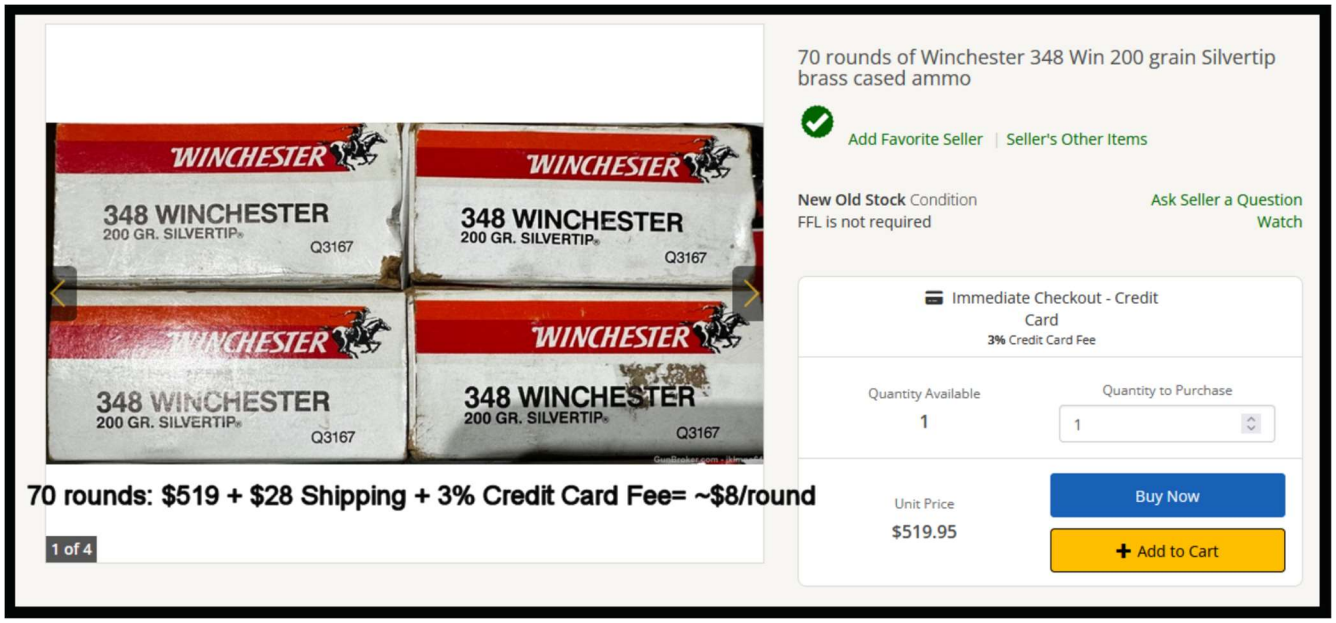
Ideal .348 Winchester Cast Designs

In 2024, both commercial jacketed ammunition in any grain weight is difficult to find at a reasonable cost. Commercial 348 Winchester loads, brass, and projectiles are regulated to

seasonal runs, and post Covid epidemic ammo shortages combined with a unique, near obsolete cartridge regulated to only a few firearm models has made the goal of procuring .348 Winchester ammunition nearly impossible, or very expensive when found. Current prices on Firearm websites show commercial loaded ammunition from new manufactured to new old stock (NOS) range from $2 to $5 a round or more. Factory 250 grain loads are the hardest to find, often exceeding $7 per round when found. New Old Stock boxes make up the bulk of current ammunition offerings (some boxes well over 50 years of age), with a few specialized boutique ammunition makers offering new manufacture loads in the 150, 200, and 250 grain range in both cast and jacketed flat points, or using the new polymer spitzer style projectiles safe for use in tube fed lever action magazines like the Model 71's.

As of 2024, there are commercial bullet makers that are sporadically offering 150, 180, 200, and 250 jacketed projectiles, prices average $1 to $2 per bullet. I recently found a Barnes 250 grain jacketed flat point soft nose on Gunbroker and obtained a few boxes for testing.

Brass, new or used, to develop your own ammunition is equally hard to come by, and as expensive. I contacted Starline Brass and inquired in March of 2024 as to when the next run of .348 Winchester brass might occur. The kind lady on the telephone advised me that Starline Brass had been running "flat out" for nearly 5 years, and if they did do another .348 Winchester brass run it was so far off into the future, she couldn't see it if she stood on the roof of the tallest building they had. Point well taken. So, in 2024 the options for .348 Winchester brass are the existing supply online.



The Highest Priced Auction for .348 Winchester I've seen in 2024

So, understanding my options, I returned to Gunbroker and began searching for reloading components, starting with new and used brass. After a few weeks I had 200 rounds of new

Winchester factory brass and 150 rounds of “once fired” brass. The once fired brass I intend to use for load development and discard after one use. Concurrent with my brass search I reached out to a favorite online resource: Cast Boolits a website I’ve been a member of since its inception over 20 years ago. Using one of the forums, I asked for help in finding a suitable bullet mould for .348 Winchester, an Accurate Bullet mould being my target manufacturer.

My original post at the Cast Boolits Forum:

Requesting help & input on selection of a 348 Winchester Gas Check Bullet Mould Design

I am requesting forum help & input on selection of a 348 Winchester Gas Check Bullet Mould Design from Accurate molds. I am interested in having a two-cavity iron mould made for a Browning Model 71 in 348 Winchester. I would like a 200-grain design, flat nose, solid point, gas check base that can be later modified into a two-cavity hollow point mould by Eric Ohlen at hollowpoint bullet moulds.

I am new to 348 Winchesters; this is the first firearm I own in this caliber. No other mfg. has mould designs in production other than Tom at Accurate moulds. I did an internet search last week and could not find any Ideal, Lyman, Ohaus, Hensley & Gibbs, RCBS bullet moulds in the 200-grain range available for purchase, except for Accurate Bullet Moulds.

I would like to order from Tom an iron mould, but do not know what to order or how to order. I've been on his website and gone through the selection and order process, but I wanted to solicit input from the forum for selection of the mould attributes I want. My assumption is I need a mould that has a flat point (lever action design) that casts at .349", at a minimum.

The follow moulds from Tom's catalog appear to fit my criteria:

Design #34-200A & Design #34-200B

So, I am asking what design at Accurate moulds, what as cast size to order, which options to choose for size (plus or minus tolerances, etc.) and any special notes I need to give Tom in order to indicate I want enough material left in the mould in order to have it converted to hollow point by Eric Ohlen. Thanks in advance.

A few days after I posted a plea for help in finding a suitable bullet design, I had helpful suggestions.

One of the answers is below:

I don't like either of those designs. We can do better.

SAAMI chamber shows 1 degree 30 minutes, Basic from forcing cone entrance.

Rather than trying to match two cast cylindrical diameters taper the fore part to match the throat angle. I would start with 34-200LG and have Tom make the following mods:

(Note: 348 Winchester designs at Accurate Bullet Molds actually start with 35-xxx vs. 34-xxx an error I corrected with my order.)

- *Truncate nose shortening crimp to meplat length to .50" and increase meplat diameter accordingly. Better for Erik's HP conversion.*
- *Adjust width of lube groove and driving bands to make base to crimp length 0.50". Slight increase in bullet OAL will aid maintaining weight close to 200 grains after HP conversion. Seating depth should put GC at neck-shoulder junction.*
- *North of crimp groove taper nose 1 deg, 30 minutes Basic (3 degrees total included angle) blending from .350 major diameter to .34 diameter parallel nose section.*
- *Make nose tolerance negative. Tolerance should be centered on driving bands and GC heel.*
- *You want driving bands .351+*

I took that information with me to the Accurate Bullet mould website and purchased two moulds after emailing Tom at Accurate Bullet Molds with a summary of the conversation at Cast Boolits. Tom returned my email advising he agreed with the suggested design, and to place an order with him via his website and to include the notes above with my order. Which I did.

Since Tom had a .348 Winchester design already in his catalog, I went ahead and ordered an iron two cavity mould in this design, the Accurate 35-250B. I wanted to have a 250-grain mold in addition to the 200-grain custom design.

Accurate 35-250B Bullet Mould and bullets cast from Lead

The Accurate 35-250B Mould after Hollow Point Conversion - Weights are ~235grains w/ Gas Check & Lube

The second mould would be the custom design based on the recommendations from my post on Cast Boolits as detailed previously. I had also indicated to Tom that both moulds would eventually be sent to Erik Ohlen for hollow-pointing. And not soon after I wrote the preceding words, I received the Accurate 35-250B two cavity mould back from Erik Ohlen after hollow-pointing. Photo above. The work Erik did was amazing and the mould casts perfectly and bullets drop from the pins easily.

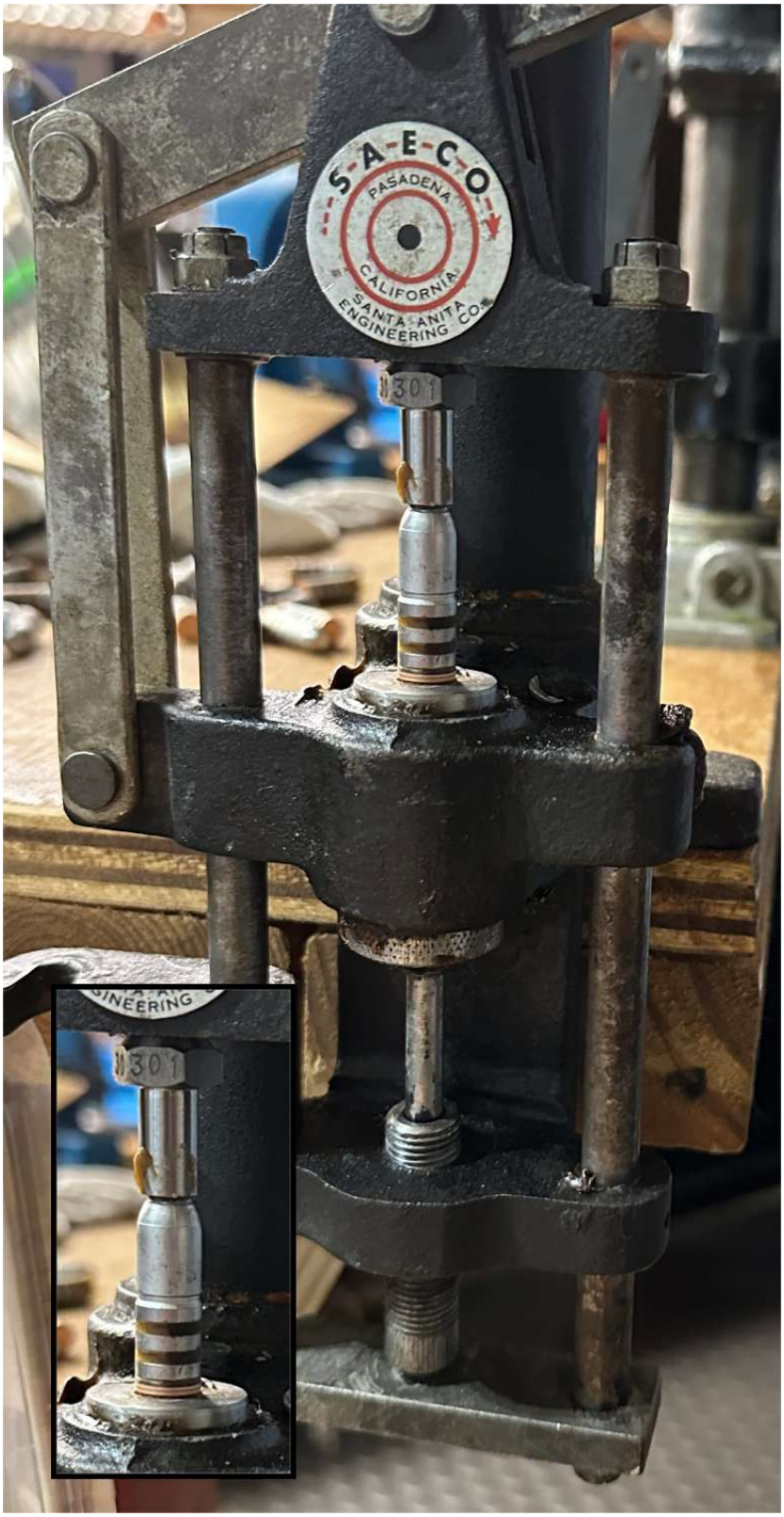
A Short Sidebar Regarding Hollow-Point Bullet Moulds

Erik Ohlen in Corvallis, Oregon is the proprietor of the website "Hollow Point Bullet Moulds" and is a well-known machinist who converts conventional bullet moulds to efficient and effective hollow-point moulds. Erik can convert just about any modern or vintage bullet mould to hollowpoint configuration. The limiting factor for conversion is enough space on the mould blocks

to accept the hollowpoint conversion and the block configuration does not interfere with the install of the hollowpoint pins and supporting mechanism.

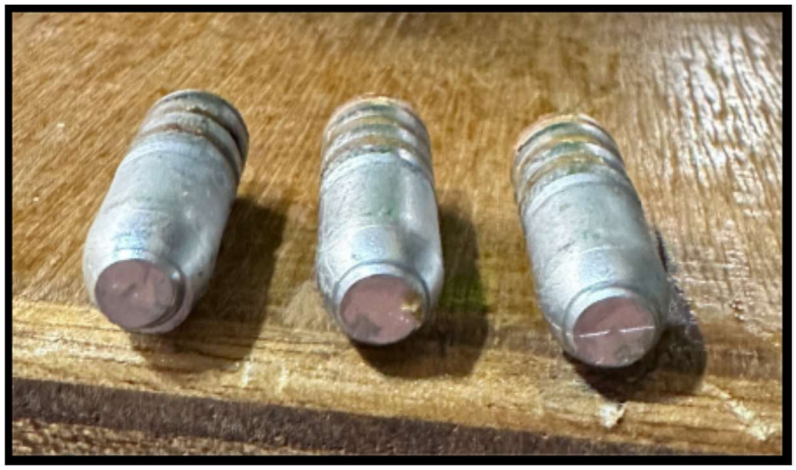
I soon received the first mould, the iron Accurate #35-250B in two cavities. Before sending it to Erik for the hollow point conversion, I immediately cast approximately 100 bullets and culled the keepers ending up with roughly 75 usable bullets in the 238-grain range. The Accurate 35-250B is a flat point, rounded nose, crimp groove, dual lube groove gas-check design. When I ordered both moulds, I knew they were gas check models and found gas checks from Sage's Outdoors, a specialty supplier. I ordered 2,000 .348 Winchester copper gas checks for around $80 delivered.

I knew I would also need a sizing die for .348 Winchester. For rifle bullets I have a 1960's era SAECO Luber/Sizer (now owned by Redding). Since I didn't know which size cast bullet would work best in the rifle, I ordered sizer dies in .349", 350", and 351" from Buffalo Arms Company in Ponderay Idado.



The SAECO Sizer/Luber with the Accurate 35-250B cast bullet and the .308" Top Punch

Top punches for the SAECO sizer were the last frustrating puzzle to solve. Redding/SAECO does not currently offer a .348 Winchester top punch that matches the profile of the Accurate 35-250B bullet. I ended up using a .308" caliber spitzer style top punch from my reloading stash that "mostly" fit the top of the Accurate design, but in sizing the first batch at .350", I did damage a few of the noses (see below) with the poorly fitting .308" top punch. I pressed on regardless.



Nose Damage on Accurate 35-250B projectiles using .308" Top Punch

I soon had around 60 sized and lubed gas checked bullets that weighed in at 248-249 grains. "Right on the money" as they say weight wise. Tom at Accurate moulds makes spectacular performing moulds.

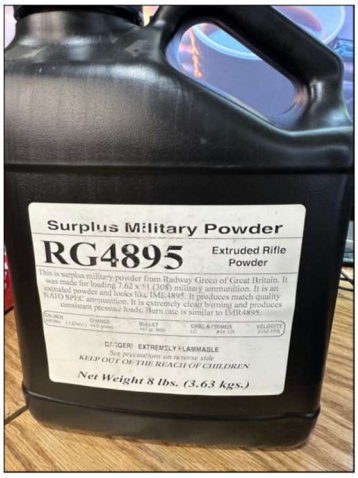
Later, I discovered that Erik Ohlen at Hollowpoint Bullet Moulds makes a SAECO top punch conversion device that adapts the SAECO top punch to accept a RCBS Top punch. After calling Erik and speaking to him about my problem, Erik provided the solution with his SAECO/RCBS top punch adapter and two custom made RCBS top punches that fit the two Accurate Bullet mould designs. The following two photos depict the Ohlen SAECO/RCBS conversion adapter and my custom RCBS style top punch adapted for the Accurate 35-250B bullets that have been cast as hollow-points.

OHLEN Custom SAECO top punch conversion for RCBS Top Punches with custom profile for hollow-point bullet (35-250B)

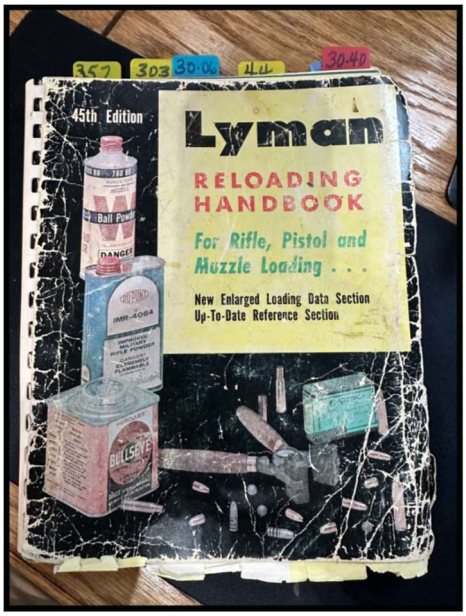
Over the intervening weeks I managed to find a few boxes of Hornady #3410 200 grain flat point jacketed bullets along with the Barnes 250 grain flat points for the .348 Winchester. Once those arrived, I began making a few loads for testing in both jacketed and cast bullet designs.


Hornady
348 CAL .348
200 GR FP
INTERLOCK
Qty: 100 #3410

Gunpowder

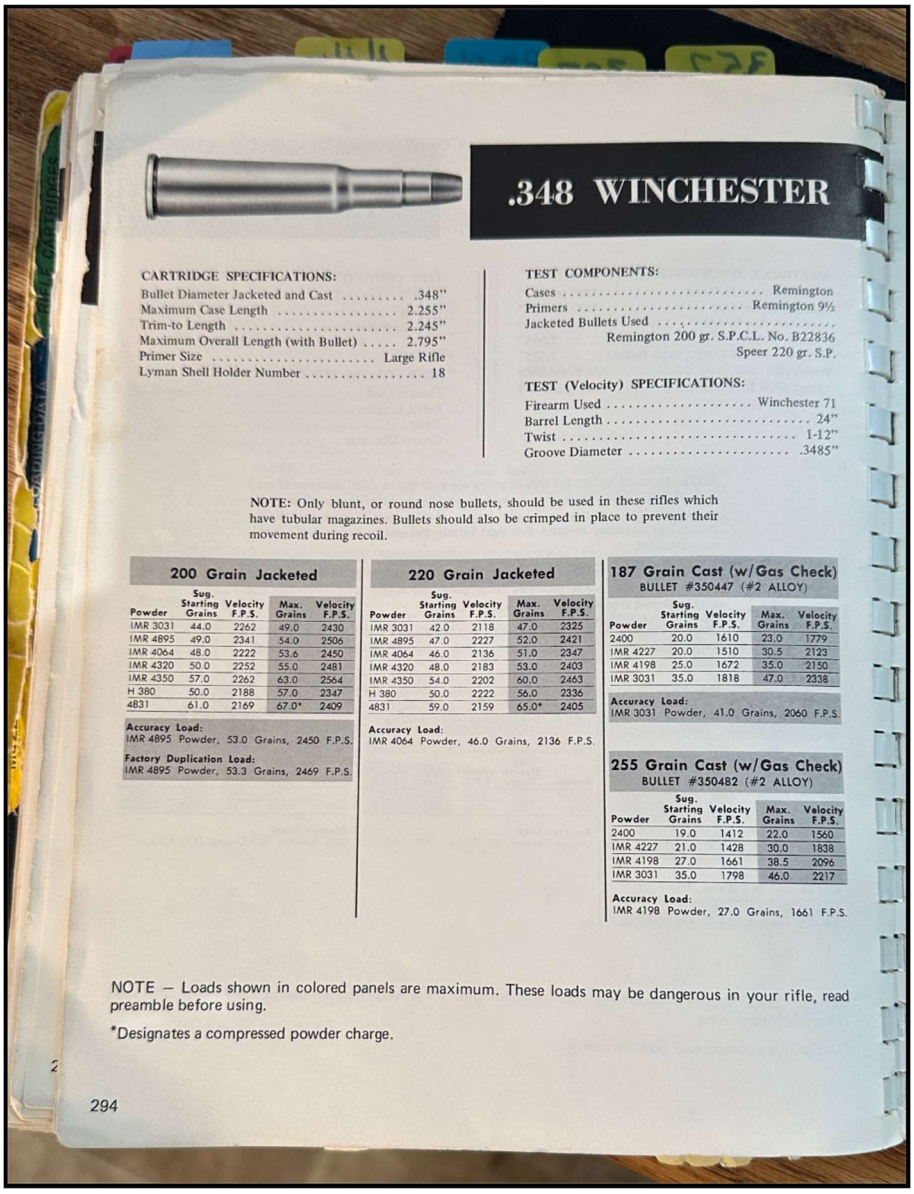


Years ago, I purchased several 8lb. jugs of surplus Radway Green (RG) 4895 pull-down powder from Wideners at a very good price. This 4895 powder clone has worked well for me in a number of rifle calibers. The RG4895 popped into my mind when I began searching my old Lyman Reloading manuals for information on 348 Winchester loads and discovered that 4895 was a useful powder for .348 Winchester. I have extensively tested my RG4895 stash and know it performs close to traditional 4895. One of my goals at this stage of my life is to use what I have on hand and avoid purchasing additional powder, or primers. As always, check your load data and use reduced loads when beginning to load with new components.



My go-to loading reference books are the earlier editions of the Lyman manuals from the World War 2 period (1940's) to the early 1970's. Specifically, I have on hand Lyman Reloading manuals

#5, 39, 40, 42, 43, and 45. Above is my well-worn 45th edition, heavily annotated. Below is the reference page for .348 Winchester in the 45th edition.



.348 WINCHESTER

CARTRIDGE SPECIFICATIONS:

Bullet Diameter Jacketed and Cast	.348"
Maximum Case Length	2.255"
Trim-to Length	2.245"
Maximum Overall Length (with Bullet)	2.795"
Primer Size	Large Rifle
Lyman Shell Holder Number	18

TEST COMPONENTS:

Cases	Remington
Primers	Remington 9½
Jacketed Bullets Used	Remington 200 gr. S.P.C.L. No. B22836 Speer 220 gr. S.P.

TEST (Velocity) SPECIFICATIONS:

Firearm Used	Winchester 71
Barrel Length	24"
Twist	1-12"
Groove Diameter	.3485"

NOTE: Only blunt, or round nose bullets, should be used in these rifles which have tubular magazines. Bullets should also be crimped in place to prevent their movement during recoil.

200 Grain Jacketed

Powder	Sug. Starting Grains	Velocity F.P.S.	Max. Grains	Velocity F.P.S.
IMR 3031	44.0	2262	49.0	2430
IMR 4895	49.0	2341	54.0	2506
IMR 4064	48.0	2222	53.6	2450
IMR 4320	50.0	2252	55.0	2481
IMR 4350	57.0	2262	63.0	2564
H 380	50.0	2188	57.0	2347
4831	61.0	2169	67.0*	2409

Accuracy Load:
IMR 4895 Powder, 53.0 Grains, 2450 F.P.S.

Factory Duplication Load:
IMR 4895 Powder, 53.3 Grains, 2469 F.P.S.

220 Grain Jacketed

Powder	Sug. Starting Grains	Velocity F.P.S.	Max. Grains	Velocity F.P.S.
IMR 3031	42.0	2118	47.0	2325
IMR 4895	47.0	2227	52.0	2421
IMR 4064	46.0	2136	51.0	2347
IMR 4320	48.0	2183	53.0	2403
IMR 4350	54.0	2202	60.0	2463
H 380	50.0	2222	56.0	2336
4831	59.0	2159	65.0*	2405

Accuracy Load:
IMR 4064 Powder, 46.0 Grains, 2136 F.P.S.

187 Grain Cast (w/Gas Check)
BULLET #350447 (#2 ALLOY)

Powder	Sug. Starting Grains	Velocity F.P.S.	Max. Grains	Velocity F.P.S.
2400	20.0	1610	23.0	1779
IMR 4227	20.0	1510	30.5	2123
IMR 4198	25.0	1672	35.0	2150
IMR 3031	35.0	1818	47.0	2338

Accuracy Load:
IMR 3031 Powder, 41.0 Grains, 2060 F.P.S.

255 Grain Cast (w/Gas Check)
BULLET #350482 (#2 ALLOY)

Powder	Sug. Starting Grains	Velocity F.P.S.	Max. Grains	Velocity F.P.S.
2400	19.0	1412	22.0	1560
IMR 4227	21.0	1428	30.0	1838
IMR 4198	27.0	1661	38.5	2096
IMR 3031	35.0	1798	46.0	2217

Accuracy Load:
IMR 4198 Powder, 27.0 Grains, 1661 F.P.S.

NOTE – Loads shown in colored panels are maximum. These loads may be dangerous in your rifle, read preamble before using.

*Designates a compressed powder charge.

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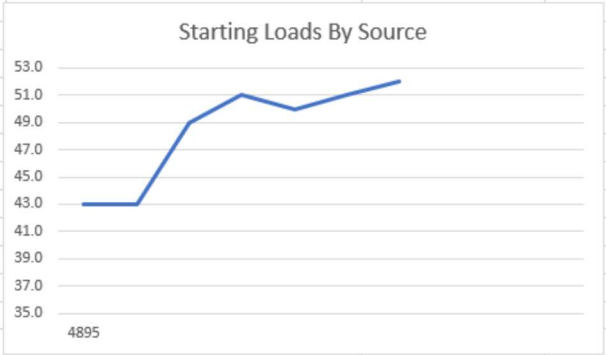
The earlier manuals did provide information on .348 Winchester loads in both cast and jacketed designs. Suggested powders, depending on bullet type (cast or jacketed, from 187 grains to 255 grains in weight) were: 4895, 4320, 4350, H380, 4831, 3031, 2400 and 4064. But cross checking all the manuals and their information in an Excel spreadsheet I noticed wide variations in starting loads for **4895** between the earlier manuals and the later ones. I also found modern references online at several websites whose suggested charges fell into the same ranges.

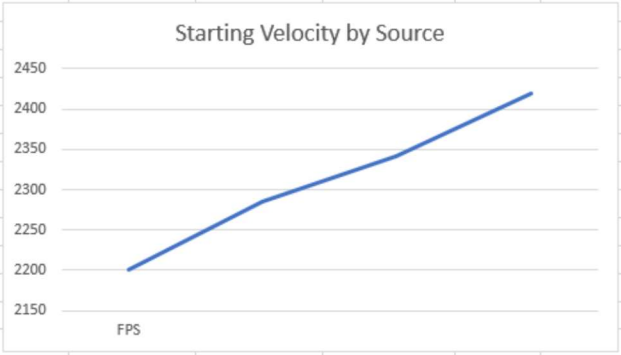
Charting out the suggested 4895 starting loads in a spreadsheet gave me the confidence to create a modern safe starting load with RG4895. So, I began loading five once fired cases at a time with

RG4895, and both cast and jacketed bullets. I also loaded a few with 4350 this opportunity being the first time I have used 4350. For this article, I plan to use the RG4895, 4350, and 4831, all which happen to be powders I have on hand currently.

Vintage powders I have on hand - Along with their vintage price tags

	Winchester .348 factory load uses a 200 grain Silvertip bullet (SD .236) at a muzzle velocity (MV) of 2520 fps from a 24" barrel.								
	Source	Projectile	Powder	Starting	Velocity	Max	Velocity		
1	IDEAL Book #39	200 Gr. Jacketed	4895	43.0	2200	48.0	2400		
2	LYMAN 42nd Edition	200 Gr. Jacketed	4895	43.0	2285	48.0	2535		
3	LYMAN 45th Edition	200 Gr. Jacketed	4895	49.0	2341	54.0	2506		
4	Shooters Reference	200 Gr. Jacketed	4895	51.0	2419	55.0	2591		
6	Handloader Ammunition Loading Journal	200 Gr. Jacketed	4895	50.0	2392				
7	Handloader Ammunition Loading Journal	200 Gr. Jacketed	4895	51.0	2439				
8	Handloader Ammunition Loading Journal	200 Gr. Jacketed	4895	52.0	2479				
9	Handloader Ammunition Loading Journal	200 Gr. Jacketed	4895						
10		200 Gr. Jacketed	4895						
11		200 Gr. Jacketed	4895						



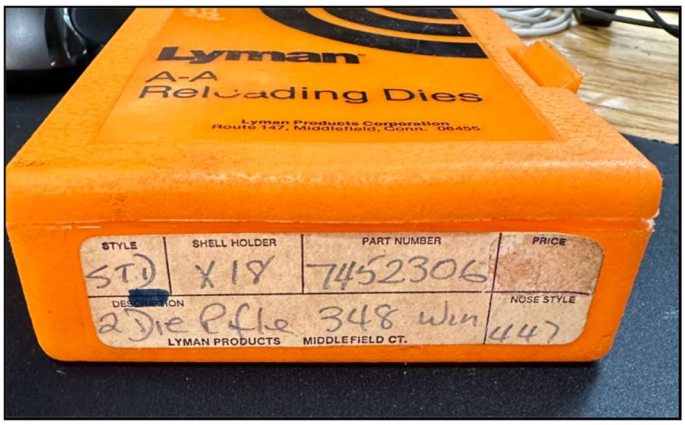


For example, it is easy to find load data for the popular 200-grain bullets showing a muzzle velocity in excess of 2,500 fps. Reducing this to 2,400 fps was all it took to minimize case stretching in the borrowed rifle. This backing off from maximum loads would hardly be noticed in the woods at peep sight ranges and frequently produced tighter extreme spreads and smaller groups. To be fair, some of these high-velocity loads shot very well, especially with Cutting Edge bullets, but the price was too high in case life, at least for me. The most pleasant to shoot and most generally useful were 200-grain bullets at 2,400 fps or so. The current Winchester .348 factory load uses a 200 grain Silvertip bullet (SD .236) at a muzzle velocity (MV) of 2520 fps from a 24" barrel.

A spreadsheet I created cross checking loads for .348 Winchester using 4895

Reloading Dies

Finding suitable reloading dies was probably the easiest challenge to overcome. I used eBay and started monitoring auctions for good deals on new or used dies for .348 Winchester. I soon found several good deals on vintage Lyman, RCBS, and other manufacturers. I ended up with ten dies. I'll explain why I have so many .348 Winchester dies.



Vintage Lyman Die box for .348 Winchester

Based on experience, I wanted to ensure I had multiple sizing dies, knowing that with big bottleneck cartridges like the .348 Winchester, dies can suffer stress resizing this brass. And I was correct because I split one of the vintage Lyman sizing dies almost as soon as I starting sizing the once fired brass. I ended up damaging and losing seven cases when I noticed deep scratches after sizing.

The cracked vintage Lyman Sizing Die

The badly scratched .348 Brass

Discovering what had scratched those cases led me to discover that the vintage Lyman die had split at the mouth. It was discarded. Fortunately, I had a spare sizing/de-capping die, and soon had another from eBay.

I also wanted several seating dies so that I could set each for a specific bullet. One was set for the Hornady #3410 200 grain Jacketed bullet, one for the Accurate 35-250B, and the last for the custom Accurate 200 grain mould I would soon receive. For jacketed bullets, all I really needed was a sizing die and a seat die.

But for cast bullets, I knew I would need a die similar to the Lyman “M” die to neck size the brass to prevent damage to the bullet as its being inserted and seated. The Lyman “M” die is a specialty die from Lyman for resizing the case neck when using cast bullets. I looked for a Lyman “M” die for 348 Winchester, but if Lyman ever made one, they aren’t making one now. None were to be found, so on to Plan B.

I did find a similar die for the Lyman “M” die from Lee; the Lee Universal Expanding die that comes with two universal expander inserts. I also found a specialized insert from Buffalo Arms that was specifically made for the .348 Winchester that fits the Lee Universal die. The Lee universal neck die with its custom insert from Buffalo Arms is reserved for use with jacketed bullets as its sizing stem is close to .348”/.349”.

And about the same time, I contacted Hornady Manufacturing after I noticed they offered custom dies while searching online for custom die makers. I called and spoke to a person in the customer service department who then referred me to “Bill”, the custom die guru.

I explained to Bill what I was looking for based on the Lyman “M” die and while we were chatting over the call, he looked up the design online and quickly advised me that Hornady could make a similar die for me in .348 Winchester. Bill was a joy to speak to and I instantly recognized I was dealing with a skilled subject matter expert (SME). I knew I was going to like what he would eventually ship to me.

A few weeks later I had the ~~custom Hornady die~~ Bill's clone in my hands and it worked perfectly.

I ordered the sizing stem in .350" with a base flare that will open the case mouth like the end of a trumpet if I am not careful to set the die correctly. Setting the die correctly in my RCBS single stage press gives me a neck sized case that easily accepts the Accurate 35-250B cast bullet and bells the case mouth very gently to allow the gas check base to start evenly into the case without damage. The custom neck sizing from Hornady is reserved for neck sizing brass for use with lead cast bullets. And it works very well for that purpose.

Last on my list of needed dies is the excellent Lee Factory Crimp die, and Lee still offers their die in .348 Winchester. I procured mine from Midway USA and soon had it in my hands.

As a side note, I discovered that none of my reloading trays would fit the big rimmed case head of the .348 Winchester, so I had to improvise and create one using a pine 2x4 and a 5/8" spade wood bit. I'm surprised at how handy my homemade shell holder works, so I made another to have as a spare.

I spent a few hours one rainy weekend carefully cleaning and polishing all of the vintage and new dies I had received. My die set now numbered ten dies. After cleaning all of them with solvent, a G.I. toothbrush and dawn detergent, I set each one by hand one at a time in my RCBS single stage press and verified performance of each die by testing cases in the rifle, measuring with my 6" Starrett dial calipers, and loading dummy rounds for cycling. After loading dummy rounds, I disassembled each of them and ran them again through the press and checked for consistency of loading, full length sizing, neck sizing (using once fired brass), depth of projectile, and crimp. After a few hours all the dies were ready for a production run and were marked and numbered for easy reference.

Brass Trimming

Many of the articles on the .348 Winchester cartridge that I've read in books, or online, indicate that the Model 71 in .348 Winchester is hard on brass. You should expect .348 brass to stretch when used as intended. Multiple articles confirmed that brass has a short life in this rifle, mainly due to aggressive full-length re-resizing after each use. Neck sizing only is the preferred method after initial sizing to extend case life.

There is a general consensus from hand loaders that brass must be trimmed in order to get best accuracy, a consistent crimp, and good overall performance. I have a RCBS manual case trimmer that I converted years ago to a power trimmer using an electric drill as the power source. Fortunately finding a Number 34 RCBS trimmer pilot was easy, Midway USA to the rescue.

I found the trim to length in several of the older Lyman manuals, 2.245" and began trimming all the once fired brass I had received from online sites. Working slowly and checking and re-checking trimmed cases I soon had around 150 trimmed cases ready for loading. My tolerances were -.002" and + .001" for trimmed cases. I would estimate that 75% of the cases were right on at 2.245" after trimming. As a general note, some of the once fired cases were at the extreme ends of overall length and would have performed poorly had I not trimmed them. This brass was purchased as "once fired" and I fully expect to get case head separations as I use them. My intent

is to use the purchased once fired brass in load development with lighter starting loads and discard them after one use.

It is always best to check the overall length of any brass to ensure you have a consistent case length before you begin loading.

After I completed the brass trimming, I cleaned the brass with warm soapy water and dawn detergent, rinsed them with clean water, and then laid them out one day in the sun for about 8 hours. After the brass was dry, I ran them one final time in a vibratory clean for a few hours. The final step was filling my two wood loading trays with clean and trimmed brass, ready for priming with Large Rifle primers.

Loads, Loading, & Reloading

Loading the .348 Winchester round with the once fired brass revealed some cautions. After I developed initial loads with the Hornaday 200gr. FMJ flat point and the Accurate 35-250B cast bullet loads I loaded 40 test cartridges with the once fired brass I obtained from Gunbroker. I full length sized each case but did not check the resized cases against a case gage, which I later discovered was a mistake. Fast forward a few weeks I was ready to go to the range and a random thought occurred to me. I needed to check the loaded rounds with a Wilson case gage, which I had purchased along with the loading dies. I checked every single loaded round I had and to my surprise, I discovered about 30% would not pass the GO/NO GO check on the loaded case gage. The failed rounds stood tall, proud of the max length step (the upper step) when dropped into the case checker gauge. When I tried to load the NO-GO rounds in the rifle, the bolt was able to close to about 95% but it was evident that the lever was not locking into place and the rounds would more than likely fail to fire.

Loaded Round Base is Proud of Max Length Step, will not chamber correctly and allow bolt to lock

I ended up disassembling every one of those failed rounds and running them again through the sizing die two or three times and checking each case after it came out of the die. Several required a few attempts before they would pass the Wilson case gage. After repeating the loads for each of the NO GO rounds, all passed the Wilson case gage. And randomly checking them in the Browning Model 71 revealed they passed a function check. The lesson I learned is that .348 Winchester cases are hard to resize and each case requires a mandatory size check in a Wilson Case gage or similar to ensure that the sized case has been reset to the proper dimensions.

Performance at the Range

A trip to the local Issac Walton League of America (IWLA) range gave me the location I needed to test fire the rifle and chronograph the rounds I had made with cast and jacketed bullets. Tagging along on this adventure was my green Shooting Chrony chronograph, noting that it took me two days to re-discover it from where it was hiding in my backyard man cave. The notebook inside the carry-all bag indicated that I last used it in 2011, nearly 13 years ago. Which meant a trip to the drugstore to fetch new 9V batteries. I wisely bought a four pack. I opened the bag and mounted the chronograph on a tripod in my backyard to test it due to the time that had passed since its last use. All appeared to be normal with the chronograph properly registering my suppressed .22LR pistol shots using CCI standard velocity ammunition. Sadly, it was while testing the Shooting Chrony chronograph that I discovered that “Shooting Chrony Inc.” closed its doors in 2021 after a hard year of Covid-19 restrictions. Internet chatter puts the company’s demise as

a result of the general slowdown of all businesses during the recent pandemic. I was sad to see another long-recognized name in the shooting sports pass into history. I said a silent prayer that my Shooting Chrony lasts another 13 years as spare parts, repairs, or replacements are rapidly disappearing in 2024, if they exist at all.

Vintage Shooting Chrony Model F-1

Bullets, Velocity, & Feet Per Second

Here are the results of several range sessions:

Case	Bullet	Bullet Weight	Powder	Charge	Primer	COAL	CRIMP	Notes:	FPS
Loaded: 04/24				Grains					Average
Win Super Speed	Hornady #3410 200Gr. FMJ-FP	200 Grains	RG4895	49.5	WIN LR	2.791"	LFC	*Note Adjusted COAL	2372
Win Super Speed	35-250B Lead Cast Hollow Point Gas Check	~246 Grains	RG4895	48.0	WIN LR	2.762"	LFC	*Note Adjusted COAL	2225
REM-UMC	Hornady #3410 200Gr. FMJ-FP	200 Grains	4831SC	65.0	WIN LR	2.791"	LFC	*Note Adjusted COAL	2379

Loaded Rounds:


Hornady #3410
200 grain Flat
Point Jacketed
Bullet