

## **M1 CARBINE 30 ROUND MAGAZINES**

Identifying The USGI From The Others  
September Update 2007

(This September 2007 update adds information about the (K)ay, "KY", Jay Scott, and "Church" split back magazines.)

With renewed interest in the USGI Caliber 30 M1 Carbine taking place in 2007, an ancillary interest in magazines for those Carbines is being noted. Part of this interest is fueled by the release of a number of Carbines recently made available to the Civilian Marksmanship Program via Italy. Some information might be usefully provided that helps the prospective purchaser of magazines identify at least some of the most desirable magazines extant, the USGI 30 round variety. The pros and cons of various other types of 30 round magazines might also be considered at the same time.

At recent shows in 2006-2007, this interested observer has found very few USGI 30 round M1 Carbine magazine to buy in any sort of good shooting condition and even fewer collectable ones. What sits at shows now are simply commercial products so marked, commercial products unidentified, and outright fakes. The fakes are now being marked SEY and AYP. They are really bad fakes except for the nice deep clear markings which are almost a giveaway by themselves. If you find USGI "marked" 30 rounders, be wary.

The most recent oddity observed relates to the unmarked magazines discussed below in detail. There used to be only low quality unmarked commercial magazines with commercial features and high quality military style unmarked magazines with military features. There is now appearing for the first time low quality unmarked commercial magazines with poorly copied military features done perhaps in an effort to mimic the high quality unmarked military magazines.

This September 2007 update further consolidates a concise summary of 30 round M1 Carbine magazines to help non-experts identify what they have or intend to purchase with some certainty. After reviewing the available sources concerning 30 round M1 Carbine magazines, looking at photos, looking at books, looking at 30 round magazines, buying several samples, and looking at even more in stores and shows, the observer would offer the following.

### **Overview of Magazines:**

The entire topic is a bit cluttered. During WW2, Korea, and Vietnam, the US Government had a number of M1 Carbine 30 round magazines manufactured. Some were marked and some were unmarked. There were so many of them sold surplus that they used to be cut off to make 5 round hunting magazines, third locking bump and hold open follower included. The US Government gave away approximately 5 million of the 6 million total Carbines manufactured to other countries. The militaries and police agencies of those countries had more 30 rounders manufactured for their own needs, marked and unmarked. The actual military manufactured magazines tend to be of a fairly high quality. In the US, commercial entities manufactured more "commercial" magazines for sale in ordinary commerce marking them or not as they saw fit. Other individuals intentionally manufactured magazines, "reproductions", to mimic the USGI originals including fake marks or misleading marks, M2 being the most famous of the junky reproductions.

There are USGI, foreign military, commercial, and faked reproductions to sift through for the good ones. The 1994 Assault Weapons Ban (AWB) prohibited manufacture of magazines holding more than 10 rounds except for domestic law enforcement use or for export. Manufacturers could not make quality new ones in the past 10 years and sell them to individuals in the United States. The AWB did not restrict the continued sale of previously manufactured magazines such as M1 Carbine 15 and 30 rounders. The supply of existing 30 rounders was drying up over that space of 10 years. The oldest and most desirable USGI magazines are also the most used and abused as a group with the deadest springs. Even a large percentage of the reproductions are 30 or more years old and look old, because, well, they are. Factor in refinishing, Parkerizing, Black Oxide, rebluing, and so on, all of which complicate the equation. Now that the AWB limitations have expired, the magazines are being made again, but not necessarily with any quality.

All USGI magazines were originally blued. All of the AYP magazines, manufactured by FN for Belgium and Holland, were also originally blued. These are the most common high quality magazines available. Any other finish is to cover damage from rust and wear.

GI is not USGI. Where magazines are advertised as GI, the first question to ask is whose military and with what proof of what country on what continent? If they are USGI supposedly, there are fewer variations. Whatever isn't USGI, is something else. If the purchaser wants USGI, the else doesn't matter except to exclude it. With few exceptions, the something else is not as desirable due to poor quality and construction unless the purchaser can see and handle a foreign military magazine for its feel, appearance, or otherwise identify it. Pictures and descriptions are not a substitute for actually handling the magazine in person.

The USGI and military magazines feel solid, heavy, and look well made. The commercial and reproduction magazines vary in quality, but usually seem tinny, light, and look poorly made. Poor welds, poor folds, poor fit-together, poor finish, and torn corners where the metal is folded are common.

USGI magazines have the metal edges de-burred. The drainage holes are de-burred. This metal finishing is a contract requirement. Commercial magazines and fakes usually are not de-burred and the drainage holes are simply a sharp feathered edge inside and out from the stamping process.

All USGI 30 round magazines have a follower that holds the bolt open when the cartridges are exhausted. One quick tip off is that many of the US made commercial and fake reproduction magazines have surplus 15 round followers installed without any hold open feature. There are variations of the hold open 30 round followers seen and reported. Each has a flat cut bolt hold open feature on the rear face. One type has a distinct step down on the ridge about 1/4 to an 1/8 inch from the rear face. Another has a very small step down on the right side of the ridge about 1/16th inch from the rear face. Others carry the round profile full length to the rear face and are de-burred nicely if USGI.

One major source of unmarked, but high quality, magazines that are identical to USGI magazines are those made for South American countries during the 1970's and 1980's. The US government financed and arranged for the sale of magazines to these countries which were commercially purchased as "foreign military sales" in the DOD system of "giving" to foreign countries. Some of these magazines were presumably from USGI manufacturers who had just ceased USGI Vietnam era production of marked magazines. These are believed to be the source of the USGI design and high quality, but unmarked, magazines that were re-imported years ago and sold. This entire subclass of magazine generates some skepticism as no one is actually sure of their origin. What is clear, however, is their duplication of distinctive USGI features and high quality.

In sorting unmarked magazines, there are now three classes of 30 rounders.

One unmarked magazine type is the "commercial" poor quality ones which are tinny, not formed well or evenly, leave gaps and odd angles in the folds, and the flaps, while welded, just don't look quite like they fit. They have no roll crimp, have the straight cut back, and a rectangular bolster. In fairness, some of these magazines work well and most can be adjusted to function properly. These often have the stamping feathers and burrs still on them and feel sharp and "cutty" at the metal edges. These unmarked magazines are similar to the USA and M2 marked magazines in appearance.

The second type of unmarked magazine, is a side by side perfect copy of the USGI magazines, especially the J and J marked ones. They will have a roll crimp, tapered back, and an angled bolster. Side by side, they are perfectly matched to the 1960's and 1970's magazines that the US was supplying to Vietnam and other countries to whom the USA had given Carbines. There was a USGI contractor at this time making USGI magazines. The same contractor was, logically, manufacturing unmarked magazines with the same machinery to facilitate foreign military sales contracts paid for by US DOD money. The result is USGI quality without a clear provenance. A well known manufacturer of magazines, Okay, says they never made any unmarked magazines and always used the circled oval "Okay" logo on their products. This type of

magazine has nicely finished metal edges that have been de-burred and de-feathered and do not feel as though they would cut you.

The third type observed in February 2007 for the first time, amounts to a poorly executed copy or fake of this second type of unmarked magazine. These copy cat magazines are made of a heavy stamping and feel like USGI ones. The back has an angled bolster, but poorly executed and only hour glass indented about half the way. There is a crimp in the front roll. The drain holes are not de-burred at all and quite sharp inside and outside the stamped holes. They have an angled bolster. The square edge of the hold open follower is not rolled or finished at all. These newly observed magazines feel good by weight on first impression, but when looked at closely, are poorly executed like the first type of unmarked magazines described just above. The largest problem with use will be that the locking bumps are placed too high which means the magazine will be held in the magazine well too low to properly position the top round in front of the bolt. The bumps are sufficiently misplaced that the difference is visible in a side by side comparison with a properly made USGI magazine. The finish is neither a clean bluing nor a Parkerizing, but some other finish that is matte or dull looking when just unwrapped out of large squares of brown waxed type paper packing. It would seem as though some of the features of genuine USGI magazines are being incorporated into this rendition, however poorly executed.

As a reference point, a properly made USGI magazine will measure on a micrometer from the bottom of the locking bumps to the top of the feed lips at the rear of the magazine a minimum of 1.50" or slightly more. If less than 1.50", feed problems become prevalent.

### **Terminology:**

**Hardback-** Original USGI one piece formed steel without cuts and welds on the back corners with reinforcing grooves running the length of the sides of the magazines. Distinctively heavy and solid feeling.

**Split back-** Original USGI one piece flat steel punched out and then formed so that the back makes a wing onto each side where the metal is welded together. The process forms a gap at the center sides of the banana back. They are not two pieces welded together, but all in one piece stamped, cut, and welded.

**Bolster-** At the bottom of each side of the magazine is a stamped projection that holds the floor plate so it does not get pushed out by the spring. Some are stamped so there is an angle [\_\_\_\_\_] at the rear end of the bolster which forces the floor plate to the correct location flush with the bottom of the tube. Others are stamped so there is a rectangle [\_\_\_\_\_] formed. They are clearly different when looked at from the side. Various magazines from the four potential sources used an angle bolster or a rectangle bolster as they saw fit.

**Front top roll crimp-** Under where the cartridges exit the magazine on the way to the feed ramp is a (\_\_\_) shaped cutout. Under the cutout is a folded roll of sheet metal that joins the left and right sides of the magazine vertically. On USGI magazines, half way down that folded roll, there is a one-fourth inch crimp that holds the roll together. Most non-USGI magazines lack this front top roll crimp. It is easy to start sorting with this feature. All USGI split backs have a crimp on the front top roll as an additional feature to hold the roll together.

**Center banana back shape-** With the split back magazines, the stamping, bending, and welding leaves an opening half way down the back of the magazine on each side. Depending on the shape of the metal left below the solid uncut upper portion, two shapes of the back are observed. The USGI shape leaves metal that is narrow at the top and widens as it goes to roll around the sides. It looks like half of an hourglass. The USGI shape leaves a slot between the back and the sides. The slot is wide at the top and closes where the metal rolls to the sides. The commercial and reproductions use a square cut that is even, up and down. The commercial and reproduction shape leaves a slot between the back and the sides that is uniform and more open. If the two are compared side by side, the differences are apparent. The caveat is the recent observation of unmarked magazines copying this feature, but only partially hour glassed. They are not straight sided and are not fully indented, but hour glass in about half way. The difference is obvious if compared to a genuine USGI magazine.

### **Split Back Descriptions:**

**“Markings”** (type) (manufacturer) (bolster) (front top roll crimp) (split back shape)(other comments)

**“SEY”** USGI split back, Seymour Products, rectangle bolster [\_\_\_\_], has crimp, tapered back

**“SEY”** Fake split back- tinny look and feel, no crimp, straight back, so light feeling the lack of metal mass is apparent. Recently made versions of this magazine have the SEY heavily stamped.

**“A.I. underlined”** USGI split back, Autotyre, rectangle bolster [\_\_\_\_], has crimp, tapered back (stepped T18 hold open follower smaller at rear than main portion)

**“A.I. underlined”** Fake split back having no front roll crimp, a straight back, and no stepped down hold open follower.

**“A1/M2”** The first 8,000 trial 30 round magazines for testing were made by Autotyre. The follower was stamped flat, then folded and assembled in a wedge cut. The follower was also stepped. That magazine is quite scarce. Genuine A1/M2 magazines have a front roll crimp in the normal USGI location.

**“A1/M2”** Fakes- A number of similarly marked magazines but without a front roll crimp, with a follower having no hold open feature, and appearing to be of lesser quality exist. These are some of the confusing reproductions because the lack of a front roll crimp and lack of a hold open follower makes them non-USGI.

**“Church”** An unusual military magazine from West Germany with unique features. Split back, no front roll crimp, tapered back, square hold open follower, all with an unusual bolster. The bolster is neither rectangular nor tapered. It is comprised of two rounded ends as if a rectangle were rounded off, but the folded under part under the floor plate is not as long as the rounded ends above it. Even more unusual is that the feed lips are not stamped as part of the rear of the magazine and are not welded and reshaped to form a one piece lip with the magazine back. The lips are simply a curve retaining the cartridges. The back is simply the back rising to the normal location. The lips and the back form an open seam curving inward on both sides. The magazines are originally Parkerized in a gray-black color similar to end of WW2-Post War German material. It is a fine thin finish, but dull. The “Church” is comprised of three rows of three squares topped by one square on one square rising from the left row of threes. There is a pointed steeple arising from the topmost single square. The windows in each square, from the bottom row, left to right, to the steeple are:  $\wedge \wedge \wedge \quad \wedge \text{O} \wedge \quad \text{“ “ “} \quad \wedge \text{O}$ . The Church has its steeple at the bottom of the magazine. A noted authority believes these to be West German manufactured in the late 1950's.

**“Jay Scott”** A clearly marked commercial magazine sold by a company known for its handgun grip sales. Split back, no front roll crimp, square hold open follower, rectangular bolster. Well known for having dead springs. Stretching them doesn't work as they collapse back rapidly when loaded. The followers are also poorly formed and folded and stick going up and down. They appear to be older commercial magazines simply stamped with the Jay Scott name. Definitely not a USGI magazine. Replacement of the follower and spring make them quite serviceable as the body is made well enough

**“J” and “J underlined”** USGI split back, angled bolster [\_\_\_\_/], has crimp, tapered back. These magazines are identified as Vietnam era USGI military magazines. The J and  $\underline{\text{J}}$  magazines were made by Jahn Manufacturing in the time frame of 1966-1967. OKAY Industries purchased Jahn in about 1970. All OKAY Industries magazines supposedly have the OKAY in an oval stamped on them.

**(K)ay** Until recently, this observer has read that OKAY Industries made some M1 Carbine magazines but had never seen one nor seen a complete description of one with the Circled K logo on it. (K) marked magazines have also been referred to in a formed but not finished state which were then finished in Parkerizing by another vendor. Likewise, the observer has no information on this.

As of September 2007, however, the observer has had a chance to examine an **(K)ay** 30 round Carbine magazine. The **K** is circled by an **O** followed by an **ay** with the entire **(K)ay** contained within yet a larger circle. It is a split back, angled bolster [\_\_\_\_\_/], has front roll crimp, and has a tapered back. It is made out of a solid feeling steel shell and is generally similar to the J and J magazines. Since OKAY Industries purchased Jahn Manufacturing in about 1970, the construction would logically be similar. The purchase date makes these late Vietnam war era magazines.

**“KY”** Similar to J and J underlined magazines with a rectangular bolster [\_\_\_\_\_] . One well known expert believes them to be West German military, but otherwise little is known.

**“unmarked”** USGI split back design and quality, believed to be from Vietnam era and just after, angled bolster [\_\_\_\_\_/], has crimp, tapered back. These magazines are made exactly like J and J underlined magazines “probably” accounting for the South American re-imports. The observer’s best guess is that they were made on the same machinery that made the J and J underlined magazines which didn’t necessarily happen in the same era or generation. The mechanical similarity is too close. The observer has compared them manufacturing characteristic for manufacturing characteristic and cannot identify any differences. They actually work well.

**“AYP”** Foreign military split back, FN manufactured for Belgium/Holland, angled bolster [\_\_\_\_\_/], no crimp, square cut. The AYP magazines match USGI quality and work perfectly when new. These magazines are heavy, solid feeling, and work like USGI. The “bluing” on perfect examples is a deep blackish blue very evenly and attractively done. A lot of AYP magazines suffered some storage corrosion and are sold as “new” after being reblued. If buying without seeing the product, the purchaser should establish if they are actually new or corroded and then reblued. The reblued ones are obvious because the coloration is slightly to mostly mottled and there are pits or light corrosion blemishes blued over. The insides are still perfect on every one looked at even with outside tube corrosion.

The followers are often plum colored on perfect magazines. As to finish, the AYP look and are far better finished than the actual USGI ones. They are not black oxide or Parkerizing. The ones that got rusty in storage have been dipped in some sort of bluing after the rust or stained bluing was cleaned off. Some of the bluing jobs just turned the rust pits or surface corrosion stain blue again. On other magazines or with other formulas, it made the whole magazine look like it was a mottled blue, black, and maroon like old German bluing jobs gone plumish.

AYP magazines are marked so that the floor plate is up to read the letters. The letters are all the same total height neatly aligned making a visual rectangle about 3/4" from the base. The "A" is an odd font in that the cross bar is way low for an A as an A is usually seen written-printed in the USA. If the A looks like a normal A, an AYP magazine it isn't. The "Y" is an odd font in that the standing leg is long and the two arms are short compared to a normal Y as a Y is usually seen written-printed in the USA. If the Y looks like a normal Y, an AYP magazine it isn't. The "P" is a normal looking P.

AYP magazines have been fake reproduced according so some information and have the letter font wrong.

**“M2”** fake reproduction split back, (manufacturer unknown), rectangle bolster [\_\_\_\_\_] , no crimp, square cut back

**“unmarked”** fake reproduction split back, (manufacturer unknown), rectangle bolster [\_\_\_\_\_] , no crimp, square cut back, light and tinny feel, varying colors of blue but rarely bright.

**“unmarked”** fake reproduction split back, (manufacturer unknown), angled bolster [\_\_\_\_\_/], heavier steel than other commercial magazines, poorly stamped out, partially tapered back done incorrectly, crimp on front roll, drain holes not de-burred, follower hold open not de-burred at rear, an odd neither bright blued nor Parkerized finish.

**“unmarked”** USGI quality magazines identical to the J and J magazines noted at length above

“USA” magazines are a common commercial magazine usually marked **Made in USA** with no other marks.

“N.V.S.” marked magazines are Japanese of a fairly high quality. They are split back but with straight cut sides. These magazines are not often seen. “Japan” may be added on the floor plate. Some reference is made to these being German which is very doubtful since most of them have the “Japan” marked floor plates.

“Japan” may also be on the floor plate of other Japanese 30 round magazines that are of a fairly high quality but otherwise unmarked. These are distinctly different than the Japanese made 15 round magazines once shipped with Universal carbines which were markedly flimsy and poorly made.

“IU” **Circled**- believed to be a fake.

The split back magazines above are the ones most likely to be seen today for sale.

### **Hard Back Descriptions:**

“A.I. Underlined” USGI hard back, Autotyre, angled bolster [\_\_\_\_\_/

“KI over M2” USGI hard back, (manufacturer?), angled bolster [\_\_\_\_\_/ (Note: this is properly KI like Indian, not 1 like one.) In the past, some knowledgeable collectors have believed that if it says K1 (one) over M2 it is probably not genuine. Since this article was first posted, a number of other knowledgeable collectors have made public descriptions and pictures of hardback 30 round magazines appearing to be identical to the KI (Indian) over M2 magazines except that the I is different. Three such magazines have been observed with the upper right half of the top I bar missing making the I look like a 1. Another such seemingly identical magazine has been observed with the entire left and right halves of the top I bar missing making it look like a one with nothing at the top or a small “L” in New Times Roman font. This observer’s impression of photographs and the impression of one knowledgeable collector who has one of each of these variations is that the stamping die was damaged. The resulting I became a funny looking one. The funny looking one became a one with no top additions when the second piece of the die departed the stem. This might explain these variations combined with the belief that the hardback series of Carbine magazines have not been faked, even in the old days of the 1960’s.

The most common characteristic of the I(Indian) or the 1(one) is that the left bottom of the I bar is longer than the right bottom of the I bar. The top left of the I bar is the same as the bottom left of the I bar in that both are longer than the bottom right of the I bar. Photos of some of these magazines appear to have neither side of the top I bar actually present but what remains is not a 1(one) correctly either. At least one of the magazines has the top left of the I bar present, but it is the deepest clearest smoothest part of the entire stamping almost appearing as if it were added later.

Definitive conclusions are hard to make about these KI/M2 magazines. The best suggestion would be to evaluate these magazines on the basis of characteristics other than the stamped letters/numbers.

“SEY” USGI hard back, Seymour Products, angled bolster [\_\_\_\_\_/

“AI over M2” probably fake reproductions if they exist at all. No one is known to have faked hardbacks yet.

A beginner is unlikely to run into a great selection of hard backs.

### **Side Note About USGI 15 Round Magazines:**

The emphasis of this article is USGI 30 round Carbine magazines and how to avoid the poor quality reproduction, commercial, or fake 30 round magazines plagued with un-reliability. Hopefully that purpose is served by the foregoing. There were other Carbine magazines before the 30 round ones were developed.

The standard issue World War II magazine was a USGI contractor made 15 round magazine with a short straight box. They were well made and very dependable. USGI 15 round magazines are not rare. All USGI 15 round magazines were blued when originally made. A Parkerized finish is a refinish either by the military or by others. Poor thick granular Parkerizing will impede function especially if used to conceal corrosion. Each contractor made magazine was marked on the lower rear with their unique production code. There are web sites devoted to the identification of these manufacturers with as many as perhaps 50 different codes possible.

During World War II, government contractors manufactured approximately 2 million Carbines beyond then current needs that were never issued during the war from a total production of about 6 million. This would include some of the 1944 production and virtually all of the 1945 production. The 1942, 1943, and part of 1944 production was adequate for the military's needs. Keep in mind that this is a gross generalization and vastly rounded numbers just for making a point. The un-issued Carbines were matched by a correspondingly enormous number of un-issued 15 round magazines. Sufficient 15 round magazines were made by war time contractors in the early 1940's that they are still found by the case full and sold at gun shows new in the wrappers in 2007. They are admittedly less common than they used to be.

After World War II, the issued Carbines were repaired, refinished, and reissued. 15 round magazines were Parkerized where salvageable. USGI 15 round magazine production during the war was sufficient to meet post war needs especially considering the emphasis later placed on the M2 fully automatic Carbine and its 30 round magazines. After World War II, 5 million of the 6 million Carbines made were given away to allies of the United States. About 700,000 had been lost due to combat operations during the war. About 200,000 were sold by the DCM in the early 1960's. Few remained in the service of the United States after the Vietnam era. During the Vietnam War era, new USGI 30 round J and J marked magazines were made as needed in the 1967 time frame. Manufacture of USGI contractor made 15 round magazines was not resumed.

Genuine World War II era 15 round USGI Carbine magazines are sufficiently common that they are not being outright faked at this time (to the observer's knowledge). These contractor marked originals should be considered highly desirable because they work so well. Because of that same quality, new in the wrap, new but unwrapped, and near new to excellent 15 round USGI magazines have increased in price two or three fold in the last several months.

There was a very limited amount of commercial production of 15 round magazines in the 1960's most commonly associated with the group of trade names including Universal and Iver Johnson. What 15 round magazines the company that held those trade names including Plainfield manufactured or imported was inconsequential compared to the remaining USGI World War II marked magazines existing at the time. The newly made 15 round magazines tended to be of a lower than military quality. This lower quality was similar to the lower quality 30 round magazines being made commercially at the time. It is not know if these 15 round magazines were commercially produced in the United States or imported from Japan or other Carbine using countries. Some were marked Japan.

There are currently several commercial producers of 10, 15, 20, and 30 round magazines. Purchasers would be well advised to read the online web site "feedback" comments listed by vendors of these magazines and make sure there is a satisfactory "fit and function" guarantee before selecting any of them for purchase. Very few purchasers of these commercial magazines seem happy.

### **Conclusion:**

As to both split backs and hard backs, real USGI 30 rounders have almost disappeared. Many that remain are being sold at collector prices rather than shooter prices. The purchaser should be careful in deciding what magazine is the most useful to them in getting a new Carbine up and running.

The observer has recently seen otherwise experienced shooters randomly buying very poor quality 30 round magazines expecting them to function in M1 Carbines. Many of these purchasers will be

disappointed with poor functioning not the fault of the Carbine. World War II era contractor marked USGI 15 round magazines are a more reliable investment, unless genuine USGI, AYP, or a select few foreign military 30 round magazines can be identified and obtained.

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