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Edited by

Lee Emerson

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### Preface

Thank you to Nolan and other members of www.m14forum.com, www.ar15.com, and www.makereadyforum.com for their contributions to this Identification Guide. This a subject still under research.

**Disclaimer** – Comply with all local, state and federal laws and regulations regarding possession, use, transfer and sale of M14 magazines. This information has been assembled in good faith for educational purposes. However, accuracy of the information provided herein cannot be guaranteed. Some errors may have been made in gathering the information and assembling this Identification Guide. As a result, the authors and editor take NO responsibility for any errors, incorrect data or omitted data contained within or missing from the Pictorial M14 Magazine Identification Guide. Use this information at your own risk.

**Printing** - If this is an electronic copy, DO NOT blindly attempt to print this document without printing a test page or two and setting the parameters for YOUR printer.

**Vocabulary** - In this Guide, floor plate is synonymous with base and magazine body is the same thing as magazine tube.

Lee Emerson aka Different January 2012 Las Vegas, NV

Chapter 1 - Background Information

#### Summary of the Commercial M14 Magazine Market

I've attempted to summarize what twenty round M14 magazines are available in the commercial market. Treat each of these individual categories unto itself as a separate issue to keep things straight in your mind. When it comes to the M14 rifle, the U. S. military has only contracted for twenty round magazines with the exception of ten round magazines made by Check-Mate Industries in the early 1990s.

**A) Magazine wrapping** that has been doctored or altered to look like it is 1960s or 1970s USGI contract production. The fake wrapping can still be identified but it's improving. IMO, stay on top of this issue because it's going to increase. Much work has been done in gathering the contract numbers for M14 magazines. This adds to our ability to detect counterfeit wrapping.

#### B) Commercial aftermarket phosphate coated magazines with fake markings

(Atwood, OM, BRW S-I and W) rarely work and often will not hold twenty rounds. These are sold on the Internet and at gun shows and gun shops. Sometimes these are sold in fake "GI" wrapping and sometimes not. These magazines with the fake markings will have three dimples around the magazine catch slot. They have a high malfunction rate. The follower will nose dive in the magazine body as the rifle cycles causing failure to feed.

**C)** Check-Mate Industries magazines with added "GI" markings are an obvious attempt to make the buyer think they are 1960s USGI contract magazines. Check-Mate Industries manufactured M14 magazines from 1985 onward. The markings have been added by unknown persons. There are differences between CMI and older genuine USGI contract magazines. Look for the horizontal line on the latch plate. If it's there, it's CMI regardless of any markings. There are some other differences as well but the horizontal line on the latch plate is the acid test.

**D)** Blued / matte finish magazines with unusual symbols or alphanumeric characters such as a 1/16 " diameter circle, H, A, a number inside a 3/16 " diameter circle, or an incomplete or backwards C. These have been available since September 2004. Range reports are mixed. These blued magazines sometimes work fine, sometimes not. They are often marketed as Taiwanese T57 magazines. Based on comparisons with known Taiwanese T57 magazines, these post-'04 "Taiwanese" magazines were not made for the Government of Taiwan.

**E) Pre-'94 ban mainland Chinese** magazines work very well. They have three dimples around the magazine catch slot and are gray (not charcoal) in color. They were packed in cosmoline from China. They have not been imported since 1994 into the United States.

**F) Genuine Taiwanese T57** magazines work great. These were imported into the United States in the early 1990s. Features are consistent so don't get fooled by the mysterious origin blued magazines.

**G)** Check-Mate Industries (CMI) has been consistent since 1985 in its manufacturing of M14 magazines. CMI magazines have some features which make them easy to differentiate from the 1960s and 1970s production USGI magazines. There are other clues but one that is usually easy to recognize is the horizontal line on the latch plate. Look for that if you want to know if it is was made by Check-Mate Industries. These have been sold, unmarked, through Springfield Armory, Inc. from the early 1990s onward. Because of the M9 magazines, some folks don't trust the CMI M14 magazines. In my opinion, CMI magazines are the best deal going for M14 magazines.

**H) ProMag Industries** magazines are made in the United States. A May 2005 review by Spartacus2002 reported malfunctions and a blued finish that quickly wears off. The ProMag unit is difficult to insert into the rifle with twenty rounds while the bolt is closed. As of December 2007, ProMag Industries M14 magazines are available with a phosphate coating.

**I) Genuine 1960s USGI contract** magazines were readily available until 2009 from several suppliers. In 2009 and beyond, Cole Distributing and Fulton Armory had limited quantities of used 1960s production M14 magazines for sale.

Guard your wallet.

Different

Excerpt from *M14 Rifle History and Development* Fifth Edition by Lee Emerson copyright 2011:

### **USGI Magazines**

The M14 magazine design was finalized by John C. Garand in the first five months of 1954 while he was a consultant to Mathewson Tool Company on the T44E4 rifle contract. The M14 magazine design was borrowed from Garand's T31 rifle project. The T31 (and M14) magazine design requires very low cartridge stripping forces. Rochester Manufacturing Company (Rochester, NY) developed the welding procedure for the M14 magazine parts.

Springfield Armory, government contractors and commercial magazine manufacturers have at one time or another produced five, ten, fifteen, twenty, twenty-five and thirty round magazines for the M14 type rifle. The five, fifteen, twenty-five and thirty round

magazines are commercially manufactured but not marked with any manufacturer's initials. The Springfield Armory, Inc. M1A description in the 1987 *Shooter's Bible* lists magazine capacity as five, ten, twenty, and twenty-five rounds.

A seven round magazine was produced by the U. S. Army MTU for use with the XM21 in Viet Nam. The XM21 seven round magazine was small enough to allow the sniper to assume a lower position with the rifle yet long enough to allow the magazine to be removed quickly. The U.S. Department of Defense contracted with several companies to supply five, ten and twenty round M14 magazines. For example, Check-Mate Industries, Inc. made ten round magazines about 1990 for the U. S. Army Marksmanship Unit. The five round M14 magazines were made by Check-Mate Industries but supplied by Springfield Armory, Inc. to the U. S. Department of Defense. The U. S. Marine Corps used both ten and twenty round magazines in the M14 DMR. For comparison purposes, the approximate length of the magazine tube (body) rear side for the various sizes are: five round - 2.25 ", seven round - 2.58 ", ten round - 3.44 " and twenty round - 5.75 ".

Usually, the U. S. government contractor manufacturer initials were marked on the rear side of USGI M14 magazines. Quantico Arms & Tactical Supply, Inc. purchased a batch of 12,000 New-In-Wrap USGI twenty round M14 magazines in 2004. Quantico Arms found that about 20 % of these magazines either had no manufacturer marking or the initials were very faint. At least at some point, the manufacturer's marking on the magazine body became required per USGI drawing F7790181. USGI Borg-Warner magazines have been unmarked straight from packaging dated as early as January 1963.

The following manufacturer initials have been observed on magazine follower stops: BW and B-W (Borg-Warner), CTX (unknown) and OM (Winchester). The manufacturer's marking on the magazine follower is optional per USGI drawing B7267085. If a USGI magazine follower has spot welds on the flat portion of the stop, there will be three evenly spaced weld "dimples" or "buttons." BRW S-I and OM magazines were assembled with BW and OM marked followers, respectively, in 1962.

Be aware that some commercial reproduction M14 magazines have USGI contractor style markings on the rear side and the packaging has been expertly copied. Such "GI" style reproduction magazines may not charge and reliably feed twenty cartridges. The magazine body thickness of these magazines may be thinner than genuine USGI units. A genuine USGI M14 magazine will hold and reliably feed twenty cartridges then activate the bolt lock. This function requirement for the M14 magazine is stated on USGI drawing D7790183.

The savvy collector can identify genuine USGI and Taiwanese government manufacture M14 magazine bodies. Examine the spot welds on the front side of a known USGI or Taiwanese twenty round magazine. Make notes on the size, number, alignment and location of the spot welds. Note that some KMT marked magazines differ from the typical

pattern of USGI magazine body spot welds. The USGI drawing F7790181 requires twelve evenly spaced spot welds up the center of the front side and one spot weld just to the right of the operating rod spring guide hole as the magazine stands up. Use this information when examining M14 magazines for sale.

Drawing D7790197 allows for the latch plate to be attached to the magazine body by two, four, five or six welds. USGI M14 magazine latch plate weld dimple patterns were consistently the same pattern according to manufacturer. The following latch plate dimple patterns have been consistent for genuine USGI magazines:

two dimples with a horizontal line immediately above the bottom pair - CMI four dimples - W, bar W, HR-R, bar R five dimples with the fifth centered - Atwood Vacuum Machine, UHC five dimples with the fifth placed towards the top pair - BRW S-I, BRW B2 five dimples with the fifth placed towards the bottom pair - BRW B2, OM, OM over a dot six dimples - A, KMT six dimples with a horizontal line immediately above the bottom pair - CMI

The USGI drawing D7790197 (magazine body assembly) does not specify a manufacturer's marking but drawing F7790181 (magazine tube) does. USGI magazine springs were coated with lubricating oil before packaging. Beginning in January 2007, Check-Mate Industries ten and twenty round magazines made for commercial sales are marked C.M.I. on the rear side of the magazine tube with no other markings. The Check-Mate Industries five round magazines remained unmarked.

USGI magazine contractors included Apex Metal Stamping Co., Atwood Vacuum Machine Co., Borg-Warner, Brunswick Sports Products, Check-Mate Industries, Killeen Machine & Tool, Olin-Mathieson Chemical (Winchester), Rochester Manufacturing, Springfield Armory, TRW, Union Hardware & Metal Company and Westinghouse Electric. Check-Mate Industries made twenty round M14 magazines for 1989, 1996, 2004, 2005 and 2009 U. S. Army contracts. The 2005 contract was for a guaranteed minimum of 25,000 and up to a possible maximum of 360,000 twenty round magazines. Check-Mate Industries marked some of its ten round magazines C.M.I. on the rear side of the body (tube). The USGI magazines are generally regarded as the best made.

Magazine body (tube) wall thickness can vary from 0.028 " to 0.041 " as observed among USGI, Chinese, Taiwanese and U. S. commercial manufacture M14 magazines. The specification per USGI drawing F7790181 for the body (tube) thickness is 0.0310 " + or - 0.0015 ". If a magazine body is too thick, e.g., 0.041 ", it may fail to lock the bolt open after the last round is fired.

Note that assembly of a complete twenty round M14 magazine from spare parts may be a violation of applicable local or state law in the United States, or may violate Canadian law. Possession, manufacturing, importation, sales or transfer of centerfire rifle ammunition

magazines capable of holding more than five rounds may be prohibited or restricted in U. S. cities and states. Under present Canadian law, magazines for the M14 type rifle and other centerfire long guns are pinned to limit the capacity to five cartridges. Consult state and local laws before purchasing or accepting any firearm magazine.



**USGI M14 Magazine Manufacturer Markings** – From left to right: Union Hardware & Metal Company, Atwood Vacuum Machine Company, Rochester Manufacturing Company, Olin-Mathieson Chemical Corporation and Killeen Machine & Tool Co. Photo courtesy of 30wolverine.



**USGI M14 Magazine Manufacturer markings** – Left to right: Olin-Mathieson Chemical Corporation and Apex Metal Stamping Co.

M14 magazine replacement parts have been available in the civilian market since about 1989 from Sarco, Inc. Replacement M14 magazine springs should be inspected for signs of any defects and for proper dimensions. Genuine T44E4 and twenty round M14 magazine springs have eight coils. The replacement magazine followers should have

three neat and evenly spaced spot welds attaching the stop to the follower. USGI M14 magazine followers are heat treated to file hard. Consequently, do not bend the rear tab on USGI M14 magazine followers any appreciable distance as they will snap off. If the rear tab is bent significantly and it does not snap off, it is likely a commercial reproduction part.

USGI M14 magazines have been modified to fit other rifles such as the Armalite, Inc. AR10, IMI Galil .308 caliber AR, ARM and SAR models and modified M1 Garand rifles. During the ten years of the Assault Weapons Ban, M14 magazines modified for use in the AR10 were required to still function in the M14 type rifle to remain compliant with the law. Since the sunset of the ban, new manufacture AR10 magazines are being made by Check-Mate Industries for Armalite. After 2004, a modified M14 magazine is known as a Generation I AR10 magazine and the post-'04 manufacture units are referred to as Generation II magazines. A Generation II AR10 magazine will not function in a M14 type rifle. For a time, Marc Krebs of Krebs Custom, Inc. (Wauconda, IL) modified Russian made Molot brand .308 caliber RPK style rifles to accept unmodified USGI M14 magazines.

The Australian International Arms 7.62 x 51 mm caliber bolt action M10 series rifles use a magazine identical to the ten round M14 magazine but for three differences. The follower is chromium plated, the latch plate has an angled bottom edge, and it lacks the front side magazine catch slot. The latch plate angled bottom edge is detailed as an alternative design on USGI drawing D7790197. These rifles were briefly imported in 2003 and 2004 into the United States by Tristar Sporting Arms, Ltd. (North Kansas City, MO). Tristar Sporting Arms specializes in shotguns for women shooters. It was established in 1994 by Marty Fajen, former Vice President at Reinhart Fajen, Inc. and daughter-in-law of the esteemed stockmaker. Marstar Canada imported the M10 rifles into Canada from 2005 onward.

#### M14 Magazine Tube Thickness Readings

From Noah Zark at www.m14forum.com (with editing by Different),

Here's what I have on rear wall thickness by manufacturer:

OM (12 + 1 welds) is 0.0345 " to 0.0350 " HR (12 + 1 welds) is 0.0345 " BRW S-1 (12 + 1 welds with manufacturer's marking right side up) is 0.0315 " to 0.032 " BRW B2 (12 + 1 welds with manufacturer marking in a circular pattern) is 0.0325 " to 0.033 " W (12 + 1 welds) is 0.0345 "

Recently Purchased Magazines

OM (12 + 1 welds, bought one with a group and looks recoated) is 0.035 " Taiwanese (13 big welds) is 0.035 " BRW S-1 (12 + 1 welds, manufacturer's marking is right side up) is 0.0315 " to 0.032 " BRW S-1 (12 + 1 welds, upside down manufacturer's marking more than 1 " up from the bottom) is 0.0315 "

Fake "GI" Magazines

BRW S-1 (small welds with two beside the magazine catch slot, manufacturer's marking is upside down and within 1 " of the bottom edge of the magazine) is 0.028 "

#### Latch Plate Dimple Patterns

From Nolan,

Do you see a pattern between the contract/contractor information and the following?:

The basic 4 dimple pattern of one toward each corner was used on W, Bar W, and HR-R marked magazines.

Five dimples where the 5th is in the middle was used on the Atwood (slash M) and UHC marked magazines.

Five dimples where the 5th is toward the top was used on BRW marked magazines.

Five dimples where the 5th is toward the bottom was used on the OM and OM over a dot marked magazines.

Six dimples were used on the KMT marked magazines.

Six dimples with a line was used on the CMI marked magazines.

### Chapter 2: USGI Magazines – A

#### Apex Metal Stamping Co., Inc. A Magazine

Apex Metal Stamping Co., Inc. (Brooklyn, NY) was awarded a U. S. Army contract in Fiscal Year 1969 to manufacture M14 magazines. Some magazines for that contract were manufactured by Killeen Machine & Tool Co. and so marked KMT. Apex Metal Stamping Co. also made other M14 parts such as the gas piston and the cartridge clip.



Apex Metal Magazine Follower Bottom View



Apex Metal Magazine Follower Left Side View



Apex Metal Magazine Follower Right Side View



Apex Metal Magazine Follower Rear View



Apex Metal Magazine and Follower Top View



Apex Metal Magazine Bottom View



Apex Metal Magazine Front Side - Note the twelve weld dimples in the center and one to the right of the catch slot.



Apex Metal Magazine Catch Slot - Note well worn condition of the catch slot.



Apex Metal Magazine Latch Plate – Genuine Apex Metal latch plates have six dimples.



Apex Metal Magazine Tube – Note the two alignment holes in this Apex Metal magazine tube.



Apex Metal Magazine Manufacturer Marking



Apex Metal Magazine Rear Side



Apex Metal Magazine Right Side



Apex Metal Magazine Left Side



Apex Metal Follower and Spring



Apex Metal Spring Top End



Apex Metal Spring Bottom End

### Chapter 3: USGI Magazines – Atwood Vacuum Machine

#### Atwood Vacuum Machine Magazine

Atwood Vacuum Machine Company (Rockford, IL) produced M14 magazines in 1961 for Springfield Armory.



USGI Atwood Vacuum Machine Company Magazine Follower Bottom View



USGI Atwood Vacuum Machine Company Magazine Follower Left Side View



USGI Atwood Vacuum Machine Company Magazine Follower Right Side View



USGI Atwood Vacuum Machine Company Magazine Front Side Spot Welds



USGI Atwood Vacuum Machine Company Magazine Latch Plate



**USGI Atwood Vacuum Machine Company Magazine Manufacturer Marking** – In 2006, Frank Iannamico identified this marking in his book *The Last Steel Warrior U. S. M14 Rifle.* 

### Chapter 4: USGI Magazines – BRW S-I

#### Borg-Warner BRW S-I Magazine

Borg-Warner (Rockford, IL) manufactured M14 magazines in 1962 and from 1966 to 1969. Some of the Borg-Warner marked magazines were made as a subcontractor to Olin-Mathieson Chemical Company and to Springfield Armory.

**Note:** In this Guide, BRW S-I denotes a genuine Borg-Warner manufacturer's marking. BRW S-1 with the serif font numeral one means the marking is not a factory original marking.

From Nolan,

I went through twenty or so of these and pulled examples for the photos.

I've had all of these since before the Assault Weapons Ban of 1994. Several of them are Government rebuilds that I used only for the examples of the makers stamp variants. I think that all but one of them has BW marked followers.

Blind people could have done a better job of stamping the makers stamp on these magazines. I've included five examples of the major orientations I've seen. Sometimes a round ring is visible around the stamp.

The followers are easy to identify, since they are stamped in two places with the makers ID. On the left side of the follower stop, there is a BW stamped. On the inside surface of the rear of the follower, a B-W is stamped. Another thing they share with the OM followers, in addition to having the makers ID stamped into them, is the two pinched "bend and break" stamping areas on the left hand side of the follower. These are visible in the bottom shot of the follower and the shot of the follower stop.

All of the BRW S-I marked magazines I have the USGI specified thirteen large spot welds on the front spine of the magazine. Twelve of them are below the front catch slot and one is along side it.

There are a lot of fake BRW S-I marked magazines out there. So far, every fake I've seen pictures of did NOT have the spot weld pattern on the front spine that I've pictured for this magazine. As far as I know, ALL USGI M14 magazines except for some KMT built ones use this pattern. It's in the Government's Technical Data Package for the M14 magazines. If yours has more than one spot weld along the sides of the front catch slot, it IS a fake, period.

At least in this part of the country, BRW magazines (real ones) have been the most common as far back as I can remember. I don't know how many they built, but it was a bunch.

If you have a BRW S-I magazine that differs from these pictures, speak up. I'm especially interested in seeing photos of ones that have a different dot pattern in the magazine latch plate.



**BRW S-I Magazine Follower Bottom View** – DO NOT attempt to bend the follower stop. It will likely break.



BRW S-I Magazine Follower Left Side View



BRW S-I Magazine Follower Right Side View



BRW S-I Magazine Follower Manufacturer Marking



**BRW S-I Magazine Follower Stop Manufacturer Marking** – Note markings on the follower and the follower stop.



**BRW S-I Magazine Follower Rear View** 



**BRW S-I Magazine Follower Top View** 



BRW S-I Magazine Top View



**BRW S-I Front Side View** 



BRW S-I Front Side Spot Welds - Note the twelve weld dimples in the center and one to the right of the catch slot.



**BRW S-I Magazine Catch Slot** 



BRW S-I Magazine Latch Plate – Genuine BRW S-I latch plates have five dimples.



**BRW S-I Magazine Tube** – Looking inside the magazine tube behind a five dimple latch plate. Note the lack of alignment holes in this genuine BRW S-I magazine tube.



**BRW S-I Magazine Manufacturer Marking** - Note that one marking is upside down relative to the bottom edge of the magazine tube. This is not unusual for genuine BRW S-1 magazines.



BRW S-I Magazine Manufacturer Marking - Note that the marking may not be right side up.

### Chapter 5: USGI Magazines – BRW B2

#### Borg-Warner BRW B2 Magazine

BRW B2 magazines were made by Borg-Warner in the 1960s. The B2 *may* signify the Brake Division of Borg Warner.



**BRW B2 Magazine Follower Bottom View** - The follower welds are round like the UHC, unlike the KMT magazines, which are square. Genuine USGI magazine followers have three weld dimples on the bottom side. Photo courtesy of sailor45 at www.m14forum.com.



**BRW B2 Magazine Follower Left Side** – Note the manufacturer's marking. Photo courtesy of sailor45 at www.m14forum.com.



BRW B2 Magazine Follower Left Side – Close up view of follower stop with manufacturer's marking "BW." Photo courtesy of sailor45 at www.m14forum.com.



BRW B2 Magazine Follower Right Side View - Photo courtesy of sailor45 at www.m14forum.com.



**BRW B2 Magazine Follower Rear End** – Close up view of the same follower stop (immediately above) with the manufacturer's marking on the rear plate.



BRW B2 Magazine Follower Top View - Photo courtesy of sailor45 at www.m14forum.com.



**BRW B2 Magazine Front Side View** – Twelve spot welds up the center plus one spot weld to the right of the catch slot. Photo courtesy of sailor45 at www.m14forum.com.



**BRW B2 Magazine Catch Slot** - Close up view of the top portion of the front side. Photo courtesy of sailor45 at www.m14forum.com.



**BRW B2 Magazine Catch Slot** - Measurement from top to bottom. Photo courtesy of sailor45 at www.m14forum.com.



BRW B2 Magazine Latch Plate - Photo courtesy of sailor45 at www.m14forum.com.



**BRW B2 Magazine Tube** – Looking at the tube interior surface behind the latch plate. Photo courtesy of sailor45 at www.m14forum.com.



**BRW B2 Magazine Manufacturer Marking** – Note the marking is upside down in relation to the bottom edge of the magazine tube. Photo courtesy of sailor45 at www.m14forum.com.



BRW B2 Magazine Spring and Follower - Photo courtesy of sailor45 at www.m14forum.com.



**BRW B2 Magazine Spring** – View of the bottom end of the spring. Photo courtesy of sailor45 at www.m14forum.com.


**BRW B2 Magazine Spring** – View of the top end of the spring. Photo courtesy of sailor45 at www.m14forum.com.

#### Chapter 6: USGI Magazines – HR-R

#### Rochester Manufacturing Company HR-R Magazine

HR-R marked magazines were made by Rochester Manufacturing Co. as a subcontractor to Harrington & Richardson Arms Co. in 1961.

From Nolan,

The three HR-R marked magazines that I used for these pictures I've had since the mid 1980's and were NEW when I obtained them.

These were some of my match magazines. I mark match and range magazines with the white paint you'll see in the dimples of the magazine latch plate and the makers stamp, sorry.

About the only odd thing I've noticed with the HR-R magazines is that it looks like there were two locations on the rear spine for the makers stamp.

Their followers are slightly different from other makers.

They have a total of thirteen spot welds on the front spine of the magazine. Twelve in a line up the spine below the front side catch slot and one to the side of the front side catch slot as per USGI design specifications.

HR-R magazines were made by Rochester Manufacturing Company as a subcontractor to Harrington & Richardson Arms Co. according to Frank Iannamico.



**HR-R Follower Bottom View** 



HR-R Follower Left Side View



HR-R Follower Right Side View



HR-R Follower Top View



**HR-R Front Side View** 



HR-R Magazine Catch Slot



HR-R Magazine Latch Plate



**HR-R Magazine Tube** – Looking inside the magazine tube behind the latch plate. There are no alignment holes in the magazine tube.



HR-R Magazine Manufacturer Marking

#### Chapter 7: USGI Magazines - KMT

#### Killeen Machine & Tool Co. KMT Magazine – Thirteen Weld Version

Killeen Machine & Tool Co. (Worcester, MA) made magazines and other M14 parts in the 1960s. KMT magazines were supplied to Springfield Armory in 1963 and 1965 and to Apex Metal Stamping Co., Inc. (Brooklyn, NY) in 1970.



**KMT Magazine Follower Bottom View** – Note the square-like spot welds attaching the follower stop to the follower. This is typical of KMT magazines. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Follower Left Side View** – No manufacturer markings on the follower. Photo courtesy of Cass at www.m14forum.com.



KMT Magazine Follower Right Side View - Photo courtesy of sailor45 at www.m14forum.com.



KMT Magazine Front Side View – Note the KMT magazine with two spot welds, one to either side of the magazine catch slot. This is the only known bona fide USGI magazine manufacturer that did not have just one spot weld adjacent to the magazine catch slot and only in some instances. Photo courtesy of Smoky at www.m14forum.com.



**KMT Magazine Front Side View -** Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Catch Slot** – Close up of the top portion of the front side. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Catch Slot** – Measurement number one of catch slot from top to bottom for one sample magazine. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Catch Slot** – Measurement number two of catch slot from top to bottom for one magazine. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Catch Slot** – Measurement number one of catch slot from top to bottom for a second magazine. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Rear View** - Photo courtesy of Smoky at www.m14forum.com.



**KMT Magazine Latch Plate** - Note the characteristic six dimples on the latch plate. The latch plate has two alignment dimples on the back side of it that fit into two matching holes in the tube of the magazine. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Interior View** – Looking at the tube interior surface behind the latch plate. Note the two alignment holes in the magazine tube. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Manufacturer Marking** – A KMT magazine where the tube marking is oriented parallel to the bottom edge. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Spring** – Top end of the magazine spring. Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Spring and Follower -** Photo courtesy of sailor45 at www.m14forum.com.



**KMT Magazine Spring** – Bottom end of the magazine spring. Photo courtesy of sailor45 at www.m14forum.com.

#### Killeen Machine & Tool Co. KMT Magazine – Nine Weld Version

From Nolan,

"I've had this thing probably close to twenty years but do not believe that the follower is the original so I didn't originally post any photos of this magazine. When in doubt ....

I'm now posting some pictures of this nine spot weld version to supplement a previous post of a thirteen spot weld version. As far as I know, the nine spot weld version of the KMT magazine is the ONLY legitimate USGI magazine to deviate from the specified thirteen spot weld requirement.

The latch plate is the standard 6 dimple one typical of KMT marked magazines. The latch plate is the standard KMT pattern one with the two alignment dimples on the back side of it that fit into two matching holes in the tube of the magazine. I've included a picture of this. The only other magazines I've seen that had a latch plate attached like this were by CMI and six dimple latch plate BRW magazines."



KMT Magazine Front Side View



KMT Magazine Catch Slot



**KMT Magazine Interior View** – Looking at the interior of the magazine tube behind the latch plate.



**KMT Magazine Manufacturer Marking** – The "KMT Co." marking is not always stamped right side up to the bottom edge of the magazine tube although it is in this photograph.

#### Killeen Machine & Tool Co. KMT Magazine – Seven Weld Version

Yet another version of the KMT Co. marked M14 magazine has surfaced amongst collectors. There is a KMT magazine with seven weld dimples on the front side including one adjacent to the magazine catch slot. One very credible source has owned three such magazines since the mid-1980s. Three samples were provided to Different in May 2007 for examination. Based on measurements taken with a dial caliper and visual examination in a comparision with a 2007 production CMI magazine, a mainland Chinese magazine and a known 1960s production thirteen weld KMT magazine, the seven weld KMT magazines appear to be legitimate.



KMT Seven Weld Magazine Top View - Magazine courtesy of Charlie Xray at m14forum.com.



KMT Seven Weld Magazine Right Side View - Magazine courtesy of Charlie Xray at m14forum.com.



**KMT Seven Weld Magazine Front Side View** - Magazine courtesy of Charlie Xray at m14forum.com.



**KMT Seven Weld Magazine Latch Plate** - The KMT seven weld magazines have the two alignment holes in the tube behind the latch plate. This is allowed per the alternate design of USGI drawing F7790197. The number of weld dimples is consistent for KMT Co. marked magazines. Magazine courtesy of Charlie Xray at m14forum.com.



**KMT Seven Weld Magazine Rear View** - Note the KMT Co. marking. Magazine courtesy of Charlie Xray at m14forum.com.

#### Killeen Machine & Tool Co. KMT Magazine – KMT plus A and X Version

An unusual Killeen Machine & Tool magazine version is marked with the letter A above the standard KMT marking plus the letter X is indicated on the latch plate. A few KMT magazines have been observed with a letter A above the KMT Co. marking.



**Magazine Follower in Killeen Machine & Tool Co. Magazine** - It is not known if this follower was originally assembled into the KMT magazine without the letter A marking. Photo courtesy of David Kray.



**Killeen Machine & Tool Co. Magazines** - Front side view shows a difference in the shape of the weld dimples. The magazine with the KMT Co. marking but no letter A is on top. The magazine with the KMT Co plus A and X markings is on the bottom. Photo courtesy of David Kray.



**Killeen Machine & Tool Co. Magazine** - This magazine has the KMT Co. and letter A markings on the bottom rear side of the tube plus an X on the latch plate. Photo courtesy of David Kray.



**Killeen Machine & Tool Co. Magazine** - This magazine has the KMT Co. on the rear side of the tube but no letter A. This latch plate may have a letter X. Photo courtesy of David Kray.



**Killeen Machine & Tool Co. Magazines** - Standard markings (left) and KMT Co. plus A and X marked magazine (right). Photo courtesy of David Kray.

Unknown Manufacture Magazine Follower Assembly



Unknown Manufacture Magazine Follower Assembly Left Side View – Possibly KMT manufacture, note the horizontal lines on the follower stop.



Unknown Manufacture Magazine Follower Assembly Right Side View – Possibly KMT manufacture, note the horizontal lines on the follower stop.

#### Chapter 8: USGI Magazines - OM

#### Olin-Mathieson Chemical Corporation OM Magazine

Olin-Mathieson Chemical Corporation made OM marked M14 magazines in 1962.

From Nolan,

The two OM marked magazines that I used for these pictures I've had since the mid to late 1980s. They were around long before the current batch of fake OM marked magazines.

There appears to be a number of different font lettering that was used on the OM marked magazines. These are the only two examples I have. In addition to the different fonts, the magazine on the left has the "O" placed above a dot.

The followers are easy to spot, since they have an OM or O.M. stamped onto the left side of the follower stop.

They both have a total of thirteen spot welds on the front spine of the magazine. Twelve in a line up the spine below the front catch slot and one to the side of the front side catch slot as per USGI design specifications.

They are starting to fake these. I haven't had a chance to examine the faked OM marked magazines but have been told that they do NOT have the USGI spot weld pattern on the front spine and at the front side catch slot.



#### OM Magazine Follower Bottom View



OM Magazine Follower Left Side View



OM Magazine Follower Right Side View



**OM Magazine Follower Stop** – Note the marking, OM.



OM Magazine Follower Top View



OM Magazine Front Side View



**OM Magazine Catch Slot** – Photo courtesy of PapaFoxtrot at www.m14forum.com.



**OM Magazine Latch Plate** 



**OM Magazine Tube Interior View** – Looking at the inside of the magazine tube. If an "OM" marked magazine tube has two alignment holes behind the latch plate, it is not USGI contract manufacture.



**OM Magazine Manufacturer Marking** – Note that the "O" in the marking on the left hand magazine is located over a stamped dot. The significance of this is unknown. Photo courtesy of PapaFoxtrot at www.makereadyforum.com.

# Chapter 9: USGI Magazines – Bar R

#### Rochester Manufacturing Co. Bar R Magazine

Rochester Manufacturing Co., Inc. (Rochester, NY) supplied Springfield Armory with M14 magazines during its rifle projection.



Bar R Magazine Follower Bottom View



Bar R Magazine Follower Left Side View



Bar R Magazine Follower Right Side View



Bar R Magazine Follower Rear View



Bar R Magazine and Follower Top View



Bar R Magazine Front Side - Note the twelve weld dimples in the center and one to the right of the catch slot.



Bar R Magazine Catch Slot - Note well worn condition of the catch slot.



Bar R Magazine Latch Plate – Note the four dimples on the latch plate.



Bar R Magazine Tube – Note the lack of alignment holes behind the latch plate.



Bar R Magazine Manufacturer Marking



Bar R Magazine Rear Side


Bar R Magazine Right Side



Bar R Magazine Left Side



Bar R Follower and Spring



Bar R Spring Top End



Bar R Spring Bottom End

Chapter 10: USGI Magazines - UHC

#### Union Hardware & Metal Company UHC Magazine

Union Hardware & Metal Company (Los Angeles, CA) made M14 magazines for Springfield Armory in 1959 and Olin-Mathieson (Winchester) in 1961 and 1962.



UHC Magazine Follower Bottom View



UHC Magazine Follower Left Side View



UHC Magazine Follower Right Side View



UHC Magazine Follower Top View



UHC Magazine Front Side View – There are twelve spot welds up the center of the front side plus one spot weld adjacent to the catch slot.



UHC Magazine Catch Slot - Close up view of the top portion of the front side



UHC Magazine Catch Slot – Measurement of catch slot from top to bottom



UHC Magazine Latch Plate



UHC Magazine tube - Looking at the tube interior surface behind the latch plate



UHC Magazine Manufacturer Marking - Photo courtesy of sailor45 at www.m14forum.com,



UHC Magazine Spring and Follower



UHC Magazine Spring – Bottom end of the magazine spring



UHC Magazine Spring – Top end of the magazine spring

#### Chapter 11: USGI Magazines – W and Bar W

#### Westinghouse Electric W Magazine

Westinghouse Electric (East Springfield, MA) was a subonctractor to Harrington & Richardson Arms Co. in 1961 and to Olin-Mathieson Chemical Corporation in 1962 for M14 magazines.

From Nolan,

The W marked magazines are a commonly counterfeited variant. If you know what to look for, you can greatly decrease the odds of someone taking you for a ride and sticking you with fake USGI magazines that may or may not work even for a premium price.

I've had this particular magazine at least twenty years. I did not include any pictures of the follower because I do not believe it is original since it is an OM marked one. If the W magazines did indeed contain that specific type of follower, let me know. If not, and someone can supply some good clear close ups of an original follower from five directions, it would be appreciated. And NO, the W doesn't stand for Winchester, it stands for Westinghouse... The makers stamp is faint on this magazine. I've included an extra picture of it after filling it in with a paint stick.

This magazine, like all legitimate USGI magazines except for one specific variation of the KMT marked ones, has the "classic" twelve plus one Government design specified spot weld pattern on the front spine. There are twelve large spot welds below the front side catch slot and one medium to large spot weld on the right side of it as viewed when facing the front spine. There are NO spot welds on the left side or above the front side catch slot. Also notice that there are NO alignment holes in the magazine tube behind the latch plate.



Westinghouse Electric Magazine Front Side View



Westinghouse Electric Magazine Catch Slot



Westinghouse Electric Magazine Latch Plate - Note the characteristic four weld dimples.



Westinghouse Electric Magazine Tube – Looking inside the magazine tube behind the latch plate. There are no alignment holes for the latch plate.



Westinghouse Electric Magazine Manufacturer Marking



Westinghouse Electric Magazine Manufacturer Marking – The marking has been colored white with a paint stick for illustration purposes.

#### Bar W Magazine

Bar W magazines are not often found but they appear to be USGI contract manufacture. The manufacturer identity has not been confirmed. The weld dimples are formed differently than other 1960s production USGI magazines but close examination shows this to be a high quality mass produced item. A function test, performed by leid at www.m14forum.com, was good with no issues.



Bar W Magazine Follower Bottom View - Photo courtesy of leid at www.m14forum.com



Bar W Magazine Follower Left Side View - Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Follower Right Side View - Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Follower Rear View - Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Follower Top View - Photo courtesy of leid at www.m14forum.com



Bar W Magazine Assembly Right Side View - Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Front Side View - Twelve plus one dimples on the front side. Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Latch Plate - Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Tube Interior View - View looking behind the latch plate inside the magazine tube. Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Manufacturer Marking - Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Base - Photo courtesy of leid at www.m14forum.com.



**Bar W Magazine Follower and Spring -** Note the non-USGI spring with nine coils. This magazine was rebuilt by the supplier. Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Spring Bottom End - Detail view. Photo courtesy of leid at www.m14forum.com.



Bar W Magazine Spring Top End - Detail view. Photo courtesy of leid at www.m14forum.com.

#### Chapter 12: Check-Mate Industries

#### **Check-Mate Industries Magazines**

Check-Mate Industries (Wyandanch, NY) has been the sole supplier of USGI contract M14 magazines since 1985. Check-Mate Industries (CMI) M14 magazines became available to the commercial retail market in the spring of 2006 aside from supplying Springfield Armory, Inc. with M1A magazines since the early 1990s. Excerpt from *M14 Rifle History and Development* Fifth Edition by Lee Emerson copyright 2011:

Check-Mate Industries has manufactured ten, fifteen, and twenty round magazines for Springfield Armory, Inc. Until mid-2006, twenty round magazines produced for the commercial market had no manufacturer markings. Beginning that summer, the company logo was often stamped on the twenty round magazine floor plate exterior. The Armalite, Inc. company logo was stamped on a run of twenty round magazines in the summer of 2006. Starting in January 2007, Check-Mate Industries stamped its retail sale twenty round magazines C.M.I. on the rear side. As of February 2008, the crossed cannons logo of Springfield Armory, Inc. apears on the rear side of twenty round magazines manufactured for Springfield Armory, Inc. The same logo appears on fifteen round magazines as of March 2009. Until 2009, Springfield Armory, Inc. M1A fifteen round magazines used a twenty round body with a wood block under the follower to prevent loading more than fifteen rounds. Three months later, Check-Mate Industries introduced polished stainless steel twenty round M14 magazines to the commercial market. The stainless steel magazines were assembled with PTFE coated steel followers and marked C.M.I. on the rear side and the floor plate was stamped with the company logo.

#### 1990-1991 Check-Mate Industries Twenty Round Magazine

From Nolan,

This particular magazine is a CMI of Desert Storm vintage and I obtained it new and unmolested so I know for a fact that no components have been swapped from magazines by other makers.

There are a few things about the CMI magazines that are different from a number of other magazines. First, the alignment dimples on the back side of the magazine latch plate and the two holes in the magazine tube for them. The only other magazines I've noticed this on are the KMT ones and the six dimple latch plate BRW magazines.

Also, the follower in the CMI is different than the others I've compared it to. Subtle, but it is different. If you compare various followers, you'll also find that the shape of the two legs on the follower stop varies from maker to maker, especially the Chinese units.

The front spine spot welds on this particular magazine wouldn't photograph worth a flip. I tried oil, water, bore cleaner, etc. and every lighting angle possible. I even tried from the inside of the magazine. Nada. But, it has the standard twelve large spot welds below the front side catch slot and the one spot weld next to the front catch slot. The one next to the front side catch slot was a nice and deep one and photographed OK.

The magazine catch plate, in addition to the alignment dimples, also has a horizontal line stamped in it just above the bottom two dimples. I noticed that the previously posted picture of the 2004 vintage CMI magazine catch plate also has this line.



1990 – 1991 CMI Twenty Round Magazine Follower Bottom View



1990 – 1991 CMI Twenty Round Magazine Follower Left Side View



1990 – 1991 CMI Twenty Round Magazine Follower Right Side View



1990 – 1991 CMI Twenty Round Magazine Follower Top View



1990 – 1991 Twenty Round CMI Magazine Catch Slot



**1990 – 1991 CMI Twenty Round Magazine Latch Plate** - Alignment dimples as viewed from inside the magazine tube.



1990 – 1991 CMI Twenty Round Magazine Latch Plate



1990 - 1991 CMI Twenty Round Magazine Manufacturer Marking

2004 Check-Mate Industries Twenty Round Magazine



2004 CMI Twenty Round Magazine Top View - Photo courtesy of Lex\_Ordo at www.m14forum.com.



2004 CMI Twenty Round Magazine Front Spine Spot Welds - Photo courtesy of Lex\_Ordo at www.m14forum.com.



2004 CMI Twenty Round Magazine Latch Plate - Photo courtesy of Lex\_Ordo at www.m14forum.com.



2004 CMI Twenty Round Magazine Marking for Law Enforcement and Government Use – This prohibition was repealed under federal law with the sunset of the 1994 Assault Weapons Ban. State laws still apply. Check-Mate Industries is the only known USGI contractor for M14 magazines while the Assault Weapons Ban was in effect from 1994 to 2004. Photo courtesy of Lex\_Ordo at www.m14forum.com.



2004 CMI Twenty Round Magazine Floor Plate - Photo courtesy of Lex\_Ordo at www.m14forum.com.

#### 2001 Check-Mate Industries Ten Round Magazine

Check-Mate Industries has produced ten round M14/M1A magazines since at least 1991 when it delivered an order for the U. S. Army Marksmanship Unit. Some CMI ten round magazines are marked C.M.I. on the rear side and some are not. Check-Mate Industries has supplied Springfield Armory, Inc. with M1A ten round magazines since 1994, if not before then. The Springfield Armory, Inc. stock number for the M1A ten round magazine is MA5006.



2001 CMI Ten Round Magazine Follower Bottom View



2001 CMI Ten Round Magazine Follower Left Side View



2001 CMI Ten Round Magazine Follower Right Side View



2001 CMI Ten Round Magazine Follower Rear View



2001 CMI Ten Round Magazine Follower Top View



2001 CMI Ten Round Magazine Top View



2001 CMI Ten Round Magazine Right Side View



2001 CMI Ten Round Magazine Front Side View - Note the six plus one dimples.



2001 CMI Ten and Five Round Magazines Front Side View - Photo courtesy of Vic Borkenstein.



**2001 CMI Ten Round Magazine Rear View -** Note the manufacturer marking. Some CMI ten round magazines do not have a manufacturer marking.



2001 CMI Ten Round Magazine Latch Plate - Note the six dimples and the horizontal line.



2001 CMI Ten and Five Round Magazines Rear Side View - Photo courtesy of Vic Borkenstein.



2001 CMI Ten Round Magazine Spring - Note five coils.

#### 2007 Check-Mate Industries Twenty-five Round Magazine

In October 2007, CMI introduced its twenty-five round M14 magazine to the retail market. The CMI twenty-five round magazine used the same spring found in its twenty round magazine. It was 1.25 " longer than a twenty round magazine. Different has tested four CMI twenty-five round magazines in semi-automatic and automatic fire with flawless results. The company logo was stamped on the twenty-five round magazine floor plates.



2007 CMI Twenty-five Round Magazine Follower Bottom View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Follower Left Side View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Follower Right Side View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Follower Front View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Follower Rear View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Follower Top View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Tube Top View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Tube Left Side View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Tube Right Side View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Front Side View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Catch Slot - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Rear View - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Latch Plate - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Manufacturer Marking - Photo courtesy of Stan Willis.


2007 CMI Twenty-five Round Magazine Floor Plate - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Spring - Note eight coils. Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Spring Top End - Photo courtesy of Stan Willis.



2007 CMI Twenty-five Round Magazine Spring Top End - Photo courtesy of Stan Willis.

#### 2009 Check-Mate Industries Stainless Steel Twenty Round Magazine

In June 2009, CMI brought a unique M14 magazine to the commercial market, its highly polished stainless steel twenty round magazine. The CMI stainless steel twenty round magazine follower utilized a black color PTFE coated carbon steel follower. The spring in this magazine was the same as those used in other CMI twenty round magazines. The company logo was stamped on the stainless steel twenty round magazine floor plates.



2009 CMI Stainless Steel Twenty Round Magazine Follower Bottom View



2009 CMI Stainless Steel Twenty Round Magazine Follower Left Side View



2009 CMI Stainless Steel Twenty Round Magazine Follower Right Side View



2009 CMI Stainless Steel Twenty Round Magazine Follower Rear View



2009 CMI Stainless Steel Twenty Round Magazine Follower Top View



2009 CMI Stainless Steel Twenty Round Magazine Top View



2009 CMI Stainless Steel Twenty Round Magazine Left Side View



2009 CMI Stainless Steel Twenty Round Magazine Right Side View



2009 CMI Stainless Steel Twenty Round Magazine Front Side View



2009 CMI Stainless Steel Twenty Round Magazine Catch Slot



2009 CMI Stainless Steel Twenty Round Magazine Latch Plate



2009 CMI Stainless Steel Twenty Round Magazine Manufacturer Marking



2009 CMI Stainless Steel Twenty Round Magazine Tube Interior View



2009 CMI Stainless Steel Twenty Round Magazine Bottom View



2011 CMI Stainless Steel Twenty Round Magazine - Disassembly of parts. Photo courtesy of Mark Lehman.

### Chapter 13: US Commercial Magazines

#### Excerpt from *M14 Rifle History and Development* Fifth Edition:

#### U. S. Commercial Magazines

Aftermarket magazines often fail to function reliably because of their thinner body sheet metal, weak springs and flashing on their plastic followers. U. S. aftermarket brand twenty and thirty round magazines were produced before September 13, 1994 by companies such as Triple K Manufacturing Company (San Diego, CA) and U.S.A. Magazines, Inc. (1992 mailing address in Downey, CA). U.S.A. Magazines, Inc. made blued twenty and thirty round magazines. As of October 1994, U.S.A. Magazines, Inc. was located at 13050 Florence Avenue Santa Fe Springs, CA but appears to have gone out of business by August 2001.

Herman and Leo Krasne established the San Diego department store, Krasne's Incorporated, in 1946. Triple K Manufacturing Company was founded in 1963 by Jerry Krasne, son of Leo Krasne and grandson of Herman Krasne. Triple K is a division of Krasne, Inc. and remains a family owned business. Triple K stands for Kim, Kurt, and Karen, the three children of Jerry Krasne. Triple K manufactures leather goods for firearms carry and rifle and pistol magazines. In 2007, the Triple K company produced blued finish five, ten, twenty and thirty round magazines for the M14. The catalog numbers were 572M, 567M, 1018M and 1995M, respectively.

A plastic twenty round M14 magazine was developed in 1977, patented in 1979 and manufactured by D. & D. Inc. (Wilson, NC). The magazine body is marked as follows on the right hand side adjacent to the floor plate: top line - THERMOLD second line - D.& D. INC. third line - WILSON, N.C. bottom line - U.S.A. The magazine floor plate is marked on the bottom as follows: PAT NO 4139959. A thirty round model was distributed by Toblas Guns (Albemarle, NC) in 1989. A plastic five round magazine charger was also manufactured. The plastic charger is identified is marked as follows: left hand side - PAT. NO. 4,538,371 right hand side - THERMOLD D. & D. INC. WILSON N.C. U.S.A.

Springfield Armory, Inc. sold twenty round M14 magazines blocked to five or ten rounds at least during the period 1976 to 1980. The sporterized five round magazine which sits flush with the stock was first offered in 1980.

After the Assault Weapon Ban sunset in 2004, ProMag Industries (South Gate, CA) manufactured twenty round magazines (product number M1A-A1). The ProMag Industries magazines had blued finish carbon steel bodies, chromium silicon alloy steel springs and polymer floor plates and followers. Likewise, 9.14 Magazine and National Magazines also made M14 magazines after 2004. 9.14 Magazine made phosphate coated five, ten and twenty round models. National made five, ten, twenty, twenty-five and thirty round units in either blued or phosphate finish.

Viking Tool and Machine made a small batch (less than ninety) of seventy-two round Beta C style M14 magazines before the 1994 Assault Weapons ban on new "large capacity" magazines. This conversion consists of cutting then screwing an MG-15 saddle drum to a Viking magazine tower. These M14 type drum magazines have been used at the legendary Knob Creek Machine Gun Shoot held every April and October in West Point, KY. These magazines commanded a premium price during the ten years the 1994 Assault Weapons ban was in effect.

Allied Armament, Inc. (Scappoose, OR) was incorporated on January 26, 2005. Its owner was James A. Malarkey. The firm developed and successfully tested a prototype single stack fifty round M14 drum magazine between the fall of 2010 and the spring of 2011. The magazine body was made from aluminum and given a ceramic coating which eliminated the need for lubrication. The internal operating components were made from steel and aluminum. No plastics were used in its construction. Fully loaded, the X-14 drum magazine weighed 4.9 pounds. It could operate in semi-automatic and automatic fire up to 850 rounds per minute with full metal jacket cartridges. A lifetime warranty and an instruction manual were to be included with each unit sold. Although the company was dissolved on March 25, 2011, Mr. Malarkey took the X-14 magazine to market in August of the same year under the XS Products brand.

The Beta Company (Tucker, GA) began shipping its 100 round twin drum M14 magazine in September 2011 to distributors. The M14 C-MAG <sup>(R)</sup> was made from polymer components. It had transparent drum covers on the rear side. Each unit was sold with a black nylon carry bag, user manual, magazine loader, and tube of graphite lubricant.

From 2007 to 2011, 44Mag Distributing and John Masen Company marketed replacement parts such as followers, floor plates and twenty round springs. The replacement parts sold by 44Mag Distributing were supplied by Check-Mate Industries.

#### **Thermold Twenty Round Magazine**

From Nolan,

This particular magazine is a Thermold magazine from a batch that I obtained new prior to the 1994 AWB.

Hell, what can I say? It's plastic. One interesting thing about them is that they are marked with the month and year that they were made. I would imagine that could come in handy of you lived in some repressive areas of the country where you had to prove the magazine existed prior to a certain date.

Also, they need zero lubricant. I keep a barest trace of an oil film on the springs to keep them from rusting.

I've had good luck with Thermold M14 magazines as have a couple of friends of mine. I have read several posts online from people who had problems, so you are on your own bubba. If you pick one up and it doesn't work out or you put an eye out or something, don't blame me.



**Thermold Magazine Follower Bottom View** 



Thermold Magazine Follower Left Side View



Thermold Magazine Follower Right Side View



Thermold Magazine Follower Top View



Thermold Magazine Front Side View



#### Thermold Magazine Assembly Right Side View



Thermold Magazine Catch Slot



Thermold Magazine Latch Plate



Thermold Magazine Manufacturer Marking



**Thermold Magazine Date Code** – This magazine was produced in May, 1990. The month of manufacture is indicated by the number of raised dots surrounding the two digit year code. The Canadian Thermold M16 magazines have a maple leaf molded into the side and the manufacturer's marking differs from the M14 magazine. The date stamp format is the same on the M14 magazine as the Canadian M16 magazine.



Thermold Magazine Mold Information



**Thermold Magazine Floor Plate Interior View** 



Thermold Magazine Base Exterior View

#### Thermold Thirty Round Magazine

The thirty round Thermold M14/M1A magazine was distributed in 1989 by Tolbas Gun's (Albemarle, NC).



Thermold Thirty Round Magazine New-In-Wrap - Photo courtesy of Bugs Bunny at www.makereadyforum.com.



Thermold Thirty Round Magazine New-In-Wrap - Photo courtesy of Bugs Bunny at www.makereadyforum.com.

#### **USA Thirty Round Magazine**

USA brand commercial twenty and thirty round M14 magazines were manufactured in the United States before September 13, 1994. These magazines had a blued finish and a unique latch plate. Western and Triple K brand M14 magazines were also made and sold before the federal Assault Weapon Ban took effect.



USA Thirty Round Magazine Front Side View - Photo courtesy of Mark LaFramboise.



**USA Thirty Round Magazine Rear View** - Note the unique latch plate design and front side drain hole. Photo courtesy of Mark LaFramboise.

#### Western Twenty Round Magazine

From Nolan,

This magazine was advertised as "New production made in US by Western". It was packaged in an unmarked zip closure plastic bag. I purchased it for \$12.99 plus shipping. As is my typical luck, I just checked the website I ordered it from and the price has dropped to \$9.99. <grin>

There are a total of nine spot welds on the front spine. Seven of them are below the front catch slot and two are above it. The size of the spot welds and the pattern around the front catch slot look very familiar. Come to think of it, they look exactly like the ones on a fake BRW S-1 magazine posted here yesterday

Texas Patriot brought my attention to something he noticed about the Western 20rd magazines. The semi-circular notch at the top of the front spine is shallower than a USGI magazine. I checked the Govt TDP [Technical Data Package] and it calls for a .460 inch radius with an allowable variation of a maximum of minus .005 of an inch. The new Western 20rd magazine I have in my collection measures out as having a radius of .375 inch. This alters the distance from the bottom of the notch to the front catch slot. It looks to be about .015 inch.

There is no makers stamp on this magazine. The rear latch plate is interesting on this magazine. It uses two alignment dimples like the USGI KMT and CMI branded magazines with two matching holes in the rear spine of the magazine tube. It appears to be secured to the magazine tube with a distinctive single spot weld pretty much centered on the latch plate rather than the four or more spot welds of a USGI magazine.

The drain hole measured about .182 inches after I flattened out the base plate. It was bent when it was originally assembled. A little quality time on one of the anvils and now it looks normal. The base seems a little on the soft side though.

The follower is also different than other makes. Most noticeable is that the follower stop is spot welded to the follower with only two spot welds rather than the typical three spot welds used by USGI, ChiCom, "Norinco", and Taiwan T57 magazines. Hmmm, only two spot welds....Where have we heard of that before? Hmmmmm.

The magazine spring was installed upside down and backwards. Now where have we heard of that before? Oh, that's right! In a number of the faked USGI magazines, it was not attached to the follower. This spring is unlike any I've ever seen in an M14 magazine. Both ends of this magazine spring match those from a German G3 magazine of 1990 vintage that I compared it to after noticing the shape of the end that normally attaches to the follower. The spring ends are very distinctive. Oh, and it's also wound in the opposite direction.

There are a number of very distinctive things about this magazine. The front spine spot welds, the latch plate, the spring, and the spot welds on the follower.



Western Twenty Round Magazine Follower Bottom View



Western Twenty Round Magazine Follower Left Side View



Western Twenty Round Magazine Follower Rear View



Western Twenty Round Magazine Assembly Right Side View



Western Twenty Round Magazine Front Side Spot Welds



Western Twenty Round Magazine Catch Slot



Western Twenty Round Magazine Latch Plate



**Western Twenty Round Magazine** – Looking inside the magazine tube at the rear side of the latch plate. Note the two alignment holes in the magazine tube for mating up with the latch plate.



Western Twenty Round Magazine Manufacturer Marking - None



Western Twenty Round Magazine Assembly Bottom View



Western Twenty Round Magazine Floor Plate - Drain hole is approximately 0.182 " after flattening the floor plate.



Comparison of Springs - Western Twenty Round Magazine Spring (left) versus USGI Magazine Spring (right)

#### Western Thirty Round Magazine

From Nolan,

I received this magazine today. I was told it was a Western brand magazine when I purchased it. I purchased it for \$13.99 plus shipping. It was packaged in a zip closure plastic bag labeled with:

National Magazines SKU R30-0036-P

M-14 .308 30 Rounds Parkerized

/////UPC Bar Code//////

#### 11/23/05

The grainy black phosphate coating made it impossible to even count the spot welds on the front spine, much less attempting to photograph them. I buffed the front spine down with a black rubber pad. You can count them now. There are a total of ten spot welds visible. Eight of them are below the front side catch slot and two of them are above it. The three spot welds surrounding the front side catch slot itself are similar to the pattern and size of the ones on the twenty round Western magazine. The same goes for the two spot welds near the bottom edge of the front spine.

There is no makers stamp on this magazine. The rear latch plate is interesting on this magazine. It uses two alignment dimples like the USGI KMT and CMI branded magazines with two matching holes in the rear spine of the magazine tube. It appears to be secured to the magazine tube with a distinctive single spot weld pretty much centered

on the latch plate rather than the four or more spot welds of a USGI magazine. I buffed the latch plate down a bit to verify what appears to be a single spot weld similar to the Western twenty round magazine.

The drain hole measured about .186 inches after I flattened out the base plate. It was bent when it was originally assembled. A little quality time on one of the anvils and now it looks normal. The base doesn't seem as soft as the one of the Western 20 round magazine. It's springy.

The follower is different than other makes and from the Western 20 round magazine follower. Noticeable is that the follower stop is spot welded to the follower with only two spot welds rather than the typical three spot welds used by USGI, ChiCom "Norinco", and Taiwan T57 magazines. But, even more noticeable is the two missing detents on the underside of the follower used to secure the magazine spring to the follower. This is the first M14 magazine follower I've ever seen that didn't have the two detents.

The magazine spring was installed upside down and backwards. It was not attached to the follower. The spring looks very similar to the standard USGI magazine spring except that it's has about eight extra coils. The radius of the curve of the end that attaches to the follower is a little smaller than the standard USGI M14 magazine spring. It is wound in the same direction as the USGI M14 spring I compared it to.



Western Thirty Round Magazine Follower Bottom View



Western Thirty Round Magazine Follower Left Side View



Western Thirty Round Magazine Follower Right Side View



Western Thirty Round Magazine Follower Rear View



Western Thirty Round Magazine Follower Top View



Comparison of Magazines - Twenty Round Magazine (left) versus the Western Thirty Round Magazine (right)



Western Thirty Round Magazine Front Side View



Western Thirty Round Magazine Catch Slot - Note the three dimples next to the catch slot.



Western Thirty Round Magazine Latch Plate



Western Thirty Round Magazine tube – Looking inside the magazine tube at the rear side of the latch plate.



#### Western Thirty Round Magazine Manufacturer Marking - None



Western Thirty Round Magazine Floor Plate - Drain hole is approximately 0.186 " after flattening the base.



**Comparison of Springs** - USGI twenty round spring (left) versus Western thirty round spring (right).

#### 2007 Unknown Commercial Manufacture Twenty-five Round Magazine

Twenty-five round magazines have been sold in the civilian market in the United States from 2005 to 2011.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Follower Bottom View - Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Follower Left Side View - Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Follower Right Side View - Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Follower Rear View -Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Follower Top View -The follower has two weld dimples visible from the bottom side. Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Assembly Right Side View - Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Front Side View -This magazine has eight dimples up the center of the front side and three adjacent to the catch slot. Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Catch Slot - Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Latch Plate - Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Tube Interior View -Parts courtesy of Kevin Schmadeka.



**Comparison of Twenty-five Round Magazines** - The 2007 Check-Mate Industries twenty-five round magazine tube (top) is 0.125 " shorter than the 2007 unknown commercial manufacture twenty-five round magazine tube (bottom). There are no manufacturer markings on the commercial manufacture twenty-five round magazine that measures 0.125 " longer than the CMI magazine. Parts courtesy of Kevin Schmadeka.



**Comparison of Twenty-five Round Magazines** - 2007 unknown commercial manufacture twenty-five round magazine (left) and 2007 Check-Mate Industries twenty-five round magazine (right). Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Floor Plate - Parts courtesy of Kevin Schmadeka.



2007 Unknown Commercial Manufacture Twenty-five Round Magazine Floor Plate - Parts courtesy of Kevin Schmadeka.


**2007 Unknown Commercial Manufacture Twenty-five Round Magazine Spring** - Magazine spring wire is 0.055 " diameter. Parts courtesy of Kevin Schmadeka.

#### Stamped Latch Plate Magazine

The manufacturer for this magazine is unknown to the editor. The follower is made of plastic. The sheet metal around the magazine tube catch slot can be easily deformed by inserting and removing the magazine from a rifle. The stamped latch plate magazine has four plus one front side dimples. The rear side has two holes drilled in it below the stamped latch plate. Presumably, the two holes were used to secure a capacity limiter inside the tube. All parts but the spring have a blued finish. The magazine spring coils are oval shaped. This magazine was sold in the commercial market in 2005.

#### Star Magazine

This magazine is easily identified as a commercial manufacture item. A five pointed star marking can be found on the rear side at the bottom. The spring has nine coils. The magazine follower has oval shaped dimples. The latch plate has six weld dimples. This twenty round magazine was sold in the commercial market in 2006. A twenty-five round version with the same five pointed star on the rear side was sold in the retail market in 2009.

#### 2004 - 2006 Commercial Magazines with Front Side Markings

Blued finish twenty round magazines with front side markings became available for sale in September 2004 at the close of the federal Assault Weapons Ban. The markings observed so far include A, H, 8 inside a circle, 5 inside a circle, a five pointed star, a 1/16 " diameter circle, a backwards C, and a sideways 7. The marking is stamped close to the bottom dimple. Some of the magazines are unmarked though when bought in a lot. These magazines have been sold by several firearms accesssories dealers in the United States.



Commercial Magazine with Front Side Marking - Follower bottom side view. Photo by Ethan.



Commercial Magazine with Front Side Marking - Follower left side view. Photo by Ethan.



Commercial Magazine with Front Side Markings - Follower right side view. Photo by Ethan.



Commercial Magazine with Front Side Marking - Follower top view. Photo by Ethan.



Commercial Magazines with Front Side Markings - Left side view. Photo courtesy of Dale Wooden.



**Commercial Magazines with Front Side Markings** - Front side view showing various markings. Some are unmarked though (far right). Photo courtesy of Dale Wooden.



**Commercial Magazine with Front Side Marking** - Note the three dimples on the latch plate. Photo courtesy of Ethan.



**Commercial Magazines with Front Side Markings** - Note the two, three and four dimple latch plates. Photo courtesy of Dale Wooden.



Commercial Magazine with Front Side Marking - Follower and spring. Photo by Ethan.



**Commercial Magazine with Front Side Marking** - Magazine has been disassembled. Photo courtesy of Dale Wooden.

#### 2005 Commercial Magazine without a Catch Slot

This magazine was sold in 2005 through an ammunition supplier on the Internet.



Commercial Magazine without a Catch Slot Follower Bottrom View - Note the uneven spacing of the follower stop weld dimples.



Commercial Magazine without a Catch Slot Follower Left Side View



Commercial Magazine without a Catch Slot Follower Right Side View



Commercial Magazine without a Catch Slot Follower Rear View



Commercial Magazine without a Catch Slot Follower Rear View



Commercial Magazine without a Catch Slot Follower Top View



Commercial Magazine without a Catch Slot Top View



Commercial Magazine without a Catch Slot Right Side View



**Commercial Magazine without a Catch Slot Front Side View** - Note the lack of a catch slot. Metal finish is worn from inserting the magazine into a rifle.



Commercial Magazine without a Catch Slot Rear View



Commercial Magazine without a Catch Slot Latch Plate - Note three faint dimples.



Commercial Magazine without a Catch Slot Manufacturer Marking - None



**Commercial Magazine without a Catch Spring** 

#### 2007 ProMag Industries Twenty Round Magazine

This magazine has a metal follower without a stop. The front side dimples are difficult to see. The latch plate has two dimples.



2007 ProMag Industries Twenty Round Magazine Follower Bottom View



2007 ProMag Industries Twenty Round Magazine Follower Left Side View



2007 ProMag Industries Twenty Round Magazine Follower Right Side View



2007 ProMag Industries Twenty Round Magazine Follower Top View



2007 ProMag Industries Twenty Round Magazine Top View



2007 ProMag Industries Twenty Round Magazine Right Side View



2007 ProMag Industries Twenty Round Magazine Front Side View



2007 ProMag Industries Twenty Round Magazine Rear View



2007 ProMag Industries Twenty Round Magazine Tube Interior



2007 ProMag Industries Twenty Round Magazine Spring



2007 ProMag Industries Twenty Round Magazine Spring

### XS Products X-14 Fifty Round Drum Magazine



2011 XS Products X-14 Fifty Round Drum Magazine

### Chapter 14: Taiwan T57 Magazines

#### Excerpt from *M14 Rifle History and Development* Fifth Edition:

#### Foreign Manufacture Magazines

Taiwan and People's Republic of China also produced twenty round magazines that were imported from the late 1980s until 1994. Some Chinese twenty round magazines were blocked to five rounds capacity by welding a metal block under the follower following the 1989 import ban. Such magazines were included in the shipping boxes for Chinese M14 rifles imported by Century Arms International and IDE USA. While Chinese magazines are narrower than the USGI magazines, they have an excellent reputation for reliability. Chinese magazines imported into the United States in the 1980s and 1990s were coated with grease. Chinese magazines imported into Canada after 2000 were preserved with oil and packed in heat-sealed transparent plastic bags. Canadian plastic twenty round magazines have also been imported into the United States. These magazines have a good reputation but may require a small amount of plastic to be removed from the locking tab to feed reliably. Korean M14 twenty round magazines hit the U. S. market in May 2009. These are identified by the marking HNR on the floor plate.

#### Taiwanese T57 Blued Finish Magazines

From Nolan,

The pair of T57 blue finish magazines that I used for these pictures was purchased new in the early 1990's in faked USGI packaging from a large dealer on the West Coast.

Like the matte finish ones, there are a total of either twelve or thirteen spot welds on the front spine of the magazine. I have examples of both. Eleven or twelve are below the front side catch slot and one is to the side of it. It is very similar to the USGI method of construction except that it looks like Ray Charles did the spot welding and the welds are typically smaller in diameter with burn pits that you don't see on USGI magazines.

The T57 magazines also have drain holes that measure smaller than any of the other brand magazines I've measured. They only measure .170 to .172 or an inch or so in diameter. They're ten to fifteen thousandths smaller than the mainland Chinese "Norinco" magazines. Another thing I've noticed about the blued version is that there's often copper colored discoloration around the drain hole.

The followers are also stamped differently than the "Norinco" magazines. I feel confident that they were not made on the same tooling. Most noticeable is the top rear "corner" of the follower where it contacts the bolt stop. All of the T57 magazines I've looked at have a rounded corner here rather than a squared off one. This can keep some rifles from

locking open on the last shot.



T57 Blued Finish Magazine Follower Bottom View



T57 Blued Finish Magazine Follower Left Side View



T57 Blued Finish Magazine Follower Right Side View



T57 Blued Finish Magazine Follower Rear View



T57 Blued Finish Magazine Follower Top View



T57 Blued Magazine Assembly Right Side View



**T57 Blued Finish Magazine Catch Slot** 



**T57 Blued Magazine Front Side Spot Welds** – The number of spot welds on the front side is either twelve or thirteen total.



T57 Blued Finish Magazine Latch Plate



**T57 Blued Finish Magazine Floor Plate** 

#### Taiwanese T57 Matte Finish Magazines

From Nolan,

The pair of T57 matte finish magazines that I used for these pictures was purchased new in the early 1990's in faked USGI packaging from a large dealer on the West Coast.

There are a total of either twelve or thirteen spot welds on the front spine of the magazine. I have examples of both. Eleven or twelve are below the front side catch slot

and one is to the side of it. It is very similar to the USGI method of construction except that it looks like Ray Charles did the spot welding and the welds are typically smaller in diameter with burn pits that you don't see on USGI magazines.

With the dull matte finish, and the spot weld pattern on the front spine, and around the front catch slot, I suspect that a lot of these are in the hands of people that think that they are unmarked USGI.

The T57 magazines also have drain holes that measure smaller than any of the other brand magazines I've measured. They only measure .170 to .172 of an inch or so in diameter. They're ten to fifteen thousandths smaller than the mainland Chinese "Norinco" magazines.

The followers are also stamped differently than the "Norinco" magazines. I feel confident that they were not made on the same tooling. Most noticeable is the top rear "corner" of the follower where it contacts the bolt stop. All of the T57 magazines I've looked at have a rounded corner here rather than a squared off one. This can keep some rifles from locking open on the last shot.



T57 Matte Finish Magazine Follower Bottom View



T57 Matte Finish Magazine Follower Left Side View



T57 Matte Finish Magazine Follower Right Side View



T57 Matte Finish Magazine Follower Rear View



T57 Matte Finish Magazine Follower Top View



T57 Matte Finish Magazine Assembly Right Side View



**T57 Matte Finish Magazine Front Side Spot Welds** – The number of front side spot welds will be twelve or thirteen total.



T57 Matte Finish Magazine Catch Slot



T57 Matte Finish Magazine Latch Plate



T57 Matte Finish Magazine Manufacturer Marking - None



T57 Matte Finish Magazine Floor Plate

Chapter 15: Chinese Magazines

#### Norinco Five Round Magazine

From Nolan,

I don't remember where I got these from originally. I think that these might have been "leftovers" from the Norinco/Polytech M14S rifles we were selling in the early 1990's. At any rate, I disassembled and inspected four of them and they are all alike.

There is no makers stamp on any of these magazines that I've examined.

The followers started out as regular twenty round "Norinco" magazine followers. A sheet metal extension was spot welded onto the right side of the follower stop to slightly "adjust" the original length to tweak the cartridge capacity.

Another version of the five round Chicom "Norinco" magazine was also used. The other version used a standard twenty round magazine tube. The way they limited the cartridge capacity was to spot weld a much longer extension to the follower stop. From the outside, it looked identical to a standard twenty round magazine. I don't think I have any of those anymore, sorry.

There are a total of seven spot welds on the front spine of the magazine. When facing the front spine, four are below the front side catch slot, one is to the left of the front side catch slot and two are to the right of the front side catch slot.

The drain holes in the bases I measured are larger than the ones in the Taiwan Type 57 magazines and measure anywhere from .180 to .185 inches in diameter.

The magazine springs appear to be cut down standard springs from twenty round magazines. Note the nice sharp edges!



Norinco Five Round Magazine Follower Bottom View



Norinco Five Round Magazine Follower Left Side View



Norinco Five Round Magazine Follower Right Side View - Note the dimples on the follower stop.



Norinco Five Round Magazine Follower Top View



Norinco Five Round Magazine Front Side Spot Welds



Norinco Five Round Magazine Catch Slot



Norinco Five Round Magazine Latch Plate



Norinco Five Round Magazine Manufacturer Marking - None



Norinco Five Round Magazine Floor Plate



Norinco Five Round Magazine Springs



Norinco Five Round Magazine Springs – Note the angle variance of the last bend.

#### Norinco Twenty Round Magazine

From Nolan,

The magazines that I used for these pictures I bought new before the 1994 ban. These were all originally wrapped in waxed paper and the magazines were pretty much filled with brown grease.

There is no makers stamp on any of these magazines that I've examined. Their followers are formed differently from other makers.

There are usually a total of fifteen spot welds on the front spine of the magazine. When facing the front spine, twelve are below the front side catch slot, one is to the left of the front side catch slot and two are to the right of the front side catch slot. I have seen

magazines with a couple of extra spot welds but I don't think I've ever seen one with any missing.

The drain holes in the bases I measured are larger than the ones in the Taiwan Type 57 magazines and measure anywhere from .180 to .185 inches in diameter.

Norinco Twenty Round Magazines in Original Factory Packaging – Twenty round magazines imported into the United States before 1994 were packed in cosmoline grease. The inside and outside of the magazine assembly was covered in grease.



Norinco Twenty Round Magazine Follower Bottom View



Norinco Twenty Round Magazine Follower - Detail view



Norinco Twenty Round Magazine Follower Left Side View



Norinco Twenty Round Magazine Follower Right Side View



Norinco Twenty Round Magazine Follower Rear View



Norinco Twenty Round Magazine Follower Top View



Norinco Twenty Round Magazine Front Side View



Norinco Twenty Round Magazine Catch Slot – Note the three spot welds adjacent to the magazine catch slot.



Norinco Twenty Round Magazine Latch Plate



Norinco Twenty Round Magazine Manufacturer Marking - None



Norinco Twenty Round Magazine Floor Plate - Measurement of drain hole diameter

The Unwrapping of a Chinese Twenty Round Magazine



Chinese Twenty Round Magazine New In Wrap – Note the factory paper wrapping.



Chinese Twenty Round Magazine Unwrapped Right Side View – Note the generous coating of cosmoline. Photo courtesy of Mark LaFramboise.



**Chinese Twenty Round Magazine Unwrapped Rear View** – The inside of the magazine tube is also coated with cosmoline. Photo courtesy of Mark LaFramboise.



Chinese Twenty Round Magazine Unwrapped Front Side View – Note the cosmoline in the magazine catch slot and the twelve plus three spot weld pattern. Photo courtesy of Mark LaFramboise.


Poly Technologies Magazine Components – This magazine was sold with an IDE USA imported Poly Technologies M14 rifle in 1993. This modified Chinese twenty round magazine had a metal block attached to the bottom of the follower to limit its capacity to five rounds. Presumably, the magazine modification was performed to comply with the July 1992 passage of the Canadian magazine capacity ban. Photo courtesy of KJones at www.makereadyforum.com. Chapter 16: Korean Magazines

### Korean HNR Magazines

In May 2009, Korean made M14 magazines were introduced to the U. S. commercial market. They were easily identified by the marking HNR on the floor plate exterior. The springs were coated and had eight coils. The other parts of the magazine were phosphate coated. The front side of the magazine tube had nine dimples up the center and one adjacent to the catch slot. A light film of grease was applied to the interior of the front and rear sides of the magazine tube. They were packaged in kraft paper wrapping.



Korean Magazine Follower Bottom View - Note the three small diameter dimples.



Korean Magazine Follower Left Side View



Korean Magazine Follower Rear View



Korean Magazine Follower Right Side View



Korean Magazine Left Side View



Korean Magazine Tube Interior View - Note the two alignment holes behind the latch plate.



Korean Magazine Latch Plate - Note the six dimples.



Korean Magazine Rear View



Korean Magazine Top View



Korean Magazine Spring - Note the eight coils.



Korean Magazine Manufacturer Marking - HNR is stamped on the floor plate.



Korean Magazine New-In-Wrapper

Chapter 17: Magazine Packaging

### **USGI Magazine Packaging**

Excerpt from M14 Rifle History and Development Fifth Edition:

USGI M14 Magazine Packaging - In the 1960s, USGI M14 magazines were wrapped in one of three ways: 1) cheese cloth on the outside and chemical vapor barrier wrapper surrounding the magazine on the inside 2) oil preservative wrapper or 3) chemically treated cardboard sleeve inside a sealed transparent plastic wrap. Either method protected the magazine from moisture inside the package while it remained sealed. Chemically treated sealable wrapping paper was not available until about 1985. Packaging of USGI M14 parts was inspected by government employees as part of the production contract.

As with other USGI parts, the USGI M14 magazine packages were printed with specific information to identify the contents. Markings from a package from 1968 serves to illustrate what information was indicated (from top to bottom): first line – 1005-628-9048 is the Federal Stock Number second line – MAGAZINE ASSY is the nomenclature third line – 2-EA is the quantity fourth line – DAAG-25-68-C-0402 is the contract number fifth line – A-MAR-1968 is the year and date the magazines were packaged. From at least 2004 onward, Check-Mate Industries packaged its USGI contract M14 magazines in blue color plastic bags for the U. S. military. Check-Mate Industries magazines produced in 2005 and 2006 for the U. S. government contract kept the RESTRICTED USE - LAW ENFORCEMENT / GOVERNMENT USE ONLY marking on the magazine body rear side.



**1960 USGI Magazine Packaging** - Unopened Harrington & Richardson M14 contract magazines packed in November 1960. Photo courtesy of Christopher Cleary.



**1962 USGI Magazine Packaging** - This 1962 dated wrapper was opened in 2005 and a BRW S-I marked magazine was revealed. Note the inner foil wrapper. Photo courtesy of Harley Rider at www.m14forum.com.



**1962 USGI Magazine Packaging** - This 1962 dated wrapper was opened in 2005 and a HR-R marked magazine was found inside. Note the inner foil wrapper. Photo courtesy of Harley Rider at www.m14forum.com.



**1968 USGI Magazine Packaging** - This packaging is genuine. In 2007 and 2008, there was fake "GI" packaging in the commercial market that looked very similar to this. Caveat emptor! Photo by of Harley Rider at www.m14forum.com.



2004 USGI Magazine Packaging - Photo courtesy of Lex\_Ordo at www.m14forum.com.



2004 USGI Magazine Packaging



**2005 USGI Magazine Packaging** - The CAGE Code, 1M291, identifies the contractor as Check-Mate Industries. This magazine was packaged in July 2005.



**2006 Check-Mate Industries Magazine Packaging** - This magazine has no USGI contract label because it is packaged for commercial sales. Photo courtesy of sailor45 at www.m14forum.com.

### **Commercial Manufacture Magazine Packaging**



USA Thirty Round Magazines New In Wrap - Photo courtesy of Mark LaFramboise.



2005 National Thirty Round Magazine Packaging Label

### 1990 Fake "GI" Magazine Packaging

From Nolan,

This package does NOT contain a USGI M14 magazine as you would think it would after reading the nomenclature.

It does contain an oiled Taiwan Type 57 M14 magazine in a clear plastic bag. It could be a blued one or the darker matte finish, but I can promise you it will NOT contain a real USGI M14 magazine.

There are a number of variations in the labeling of this style package with different dates, etc. A number of the fakes use the same RAP 1970 labeled packaging material but not all.

A friend of mine and I bought a rather large number of these back in 1989 or 1990. Who would have even dreamed that they were faking stuff like this back then? Magazines were a fraction of the cost that they are today. If it was profitable to do it back then.....



1990 Fake "GI" Magazine Packaging



1990 Fake "GI" Magazine Packaging



**1990 Fake "GI" Magazine Packaging Contents** – A blued Taiwanese Type 57 magazine was found when the package was opened.

2003 - 2004 Fake "GI" Magazine Packaging



**2003 Fake "GI" Magazine Packaging** - Close up view of fake contract information. Photo courtesy of Christopher Cleary.



**2003 Fake "GI" Magazine Packaging** – A fake "GI" magazine was found inside this wrapper. There was no inner wrapper. The magazine had a non-USGI spring of nine coils. The magazine tube had the appearance of a CMI unit but was unmarked. Photo by Christopher Cleary.



**2004 Fake "GI" Magazine Packaging** - This fake "GI" magazine was purchased by Different at a 2004 gun show. It contained a mystery origin magazine with three dimples adjacent to the catch slot and a W marking on the rear side.



2004 Fake "GI" Magazine Packaging with Fake "W" Magazine

2006 Fake "GI" Magazine Packaging



2006 Fake "GI" Magazine Packaging with Fake "W" Magazine



**2006 Fake "GI" Magazine Packaging** – A fake "W" marked magazine was found inside when opened. The magazine had three dimples adjacent to the catch slot.



**2006 Fake "GI" Magazine Packaging** – A fake BRW S-1 magazine was found inside when opened. The magazine had three dimples adjacent to the catch slot.



**2006 Fake "GI" Magazine and Packaging** - This February 1963 dated wrapper contained a Check-Mate Industries magazine with a serif font BRW S-1 marking. Magazine and wrapper courtesy of jack at www.m14forum.com.

### 2006 Fake "GI" Magazine Cardboard Packaging

In 2006, a collector opened a package of two magazines he had bought several years ago. Inside were two "W" marked magazines. Each magazine had three dimples adjacent to the catch slot, clearly non-USGI contract manufacture. The springs inside the magazines had nine coils, again non-USGI contract manufacture. The packaging led the buyer to believe he was buying two USGI contract magazines. The packaging was genuine, it indicated a valid 1970 Army contract, but the contents were not.

### 2007 Fake "GI" Magazine Cardboard Packaging

The fake "GI" magazines in this packaging have these features: nine coil springs, two weld dimples on the followers, incorrect latch plate dimple patterns, alignment holes behind the latch plate, and fourteen weld dimples on the front side. They are marked "OM" and "BRW S-1."



**2007 Fake "GI" Magazine Packaging** - The contract number on this package ends in 0402. Photo courtesy of Drew Dover.

Chapter 18: Mysterious Origin Magazines

Where do these magazines come from?

### 2003 Fake "GI" Magazine



**2003 Fake "GI" Magazine** - This magazine was packaged in a fake September 1970 wrapper. However, the latch plate identifies it as a CMI unit. Photo courtesy of Christopher Cleary.



**2003 Fake "GI" Magazine** – The magazine tube has twelve plus one weld dimples on the front side. The follower has three spot welds. However, this CMI magazine was assembled with a non-USGI magazine spring. Photo courtesy of Christopher Cleary.



**2003 Fake "GI" Magazine Spring** – Top to bottom, USGI spring and 2003 fake "GI" magazine spring. Note the nine coils of the fake "GI" spring. USGI drawing 7267078 for the M14 magazine spring requires eight left-hand coils. Also, USGI M14 magazine springs will hang perpendicular to the follower instead of at an angle. Photo courtesy of Christopher Cleary.

### 2004-2005 Fake "GI" Magazine with BRW S-I, OM or W Marking

This particular variant of fake "GI" magazine has been sold at gun shows and through Internet auction boards and magazine dealers. They can have no manufacturer markings or be falsely stamped with BRW S-I, OM or W markings. If you see such a magazine and it has three dimples adjacent to the catch slot, it is not USGI contract manufacture.



2004-2005 Fake "BRW S-I" Magazine Follower Bottom View



2004-2005 Fake "BRW S-I" Magazine Follower Left Side View - This fake "BRW S-I" follower is unmarked and softer than the USGI magazine follower.



2004-2005 Fake "BRW S-I" Magazine Follower Right Side View



2004-2005 Fake "BRW S-I" Magazine Follower Top View - Note the two dimples.



2004-2005 Fake "BRW S-I" Magazine Right Side View



2004-2005 Fake "BRW S-I" Magazine Front Side Spot Welds – Photograph taken with no camera flash. These fake "GI" magazines have six dimples on the latch plate. Of four magazines with the same packaging, two had eight down the center of the front side. The welds on one of the two were noticeably deeper and sharper than the other. The other two magazines had seven shallow small diameter weld dimples down the center of the front side. Note the spot weld dimple diameter is smaller than USGI magazine spot weld dimples. There are eight small welds along the front, with 2 more above the latch hole. On this magazine the welds are fairly well aligned but on others the alignment wanders a bit.



2004-2005 Fake "BRW S-I" Magazine Front Side Spot Welds – The top end around the magazine catch slot has two weld dimples.



2004-2005 Fake "BRW S-I" Magazine Latch Plate



**2004-2005 Fake "BRW S-I" Magazine tube Interior View** – Looking inside the magazine tube behind the latch plate. Note the two alignment holes not found on genuine USGI Borg-Warner magazines.



**2004-2005 Fake "BRW S-I" Magazine Marking** – This magazine is marked with a "BRW S-I" marking. Borg-Warner has not made M14 magazines since 1969.



2004-2005 Fake "BRW S-I"Magazine Spring Bottom End - The bottom of the "mystery" spring is shaped differently from the USGI magazine spring.



2004-2005 Fake "BRW S-I"Magazine Spring Top End - Form of the bends is obviously different than USGI magazine springs. The top end of this fake "GI" spring is more open with a shorter last leg and harder to install onto the follower as compared to the USGI magazine spring.



2004-2005 - Fake "W" spring and follower (left) and USGI spring and follower (right). Photo courtesy of Quagmire at www.m14forum.com.



**2004-2005 Fake "GI" Magazine Tube** – Thickness measurement of 0.0315 " meets the USGI drawing F7790181 requirement.



2004-2005 Fake "GI" Magazine Floor Plate – Thickness measurement of 0.0325 " meets the USGI drawing 7790182 requirement of 0.032 " + or – 0.003 ".



**2004-2005 Fake "GI" Magazine Floor Plate** – The floor plate is soft enough to be bent by hand. USGI drawing 7790182 requires the floor plate to be heat treated to "file hard."

### 2006 Fake "GI" Magazine with W Marking

This magazine tube was clearly not made to the USGI drawings. Note the three weld dimples adjacent to the magazine catch slot.



2006 Fake "GI" Magazine with W Marking - Photo courtesy of CRASH-CAF at www.m14forum.com.



**2006 Fake "GI" Magazine with W Marking** - Photo courtesy of CRASH-CAF at www.m14forum.com.

### 2006 Fake "GI" Magazine with Atwood Vacuum Machine Marking

Beginning in January 2006, fake Atwood Vacuum Machine Company marked twenty round magazines began appearing in gun shows. These magazines had tube wall thicknesses of 0.032 " with soft followers and floor plates. The fake "GI" magazines continue to have springs angled off to one side under the follower and crudely formed corners. These magazines, like some of the 2004 and 2005 fake "GI" magazines, will hold twenty rounds.



2006 Fake "GI" Magazine Front Side View – This fake Atwood Vacuum Machine marked magazine has seven small spot welds up the front side centerline plus three small spot welds around the catch slot. Photo by PapaFoxtrot at www.m14forum.com.

Between January and March 2006, an improved fake "GI" magazine appeared in the commercial market. The difference between this improved fake unit and previous counterfeits was the presence of thirteen spot welds on the front side, twelve up the centerline and one to the right of the magazine catch slot and a "W" marking on the rear side at 2 3/8 " from the bottom edge. These magazines were wrapped in USGI wrapping paper marked (top to bottom): first line – 1005-628-9048-B053 second line – Magazine Assy For Rifle third line – 7.62 MM M14 9/70 fourth line DAAG-111-42- OMINC-A7. These magazines could be identified as fake by the same crudely formed magazine

springs and follower assemblies with two welds. They were not covered with an inner wrapper like previous fake "GI" magazines.

In 2006, fake "GI" magazines were being sold on Internet auction web sites and at gun shows. These fake "GI" magazines had the following falsified markings: the "slash M" aka Atwood Vacuum Machine (see below), BRW S-1, OM and W.



**2006 Fake "GI" Magazine Front Catch Slot** – This is a fake Atwood Vacuum Machine marked magazine. Photo by PapaFoxtrot at www.m14forum.com.



2006 Fake "GI" Magazine Follower Bottom – This fake Atwood Vacuum Machine marked magazine has two elliptical spot welds on the follower assembly. Note the difference in the spring corner bend shape as compared to USGI spring corner bends. Photo by PapaFoxtrot at www.m14forum.com.



**2006 Fake "GI" Magazine Latch Plate** – This is a fake Atwood Vacuum Machine marked magazine. Photo courtesy of PapaFoxtrot at www.m14forum.com.



**2006 Fake "GI" Magazine Manufacturer Marking** – This is a fake Atwood Vacuum Machine Company stamping. Photo by PapaFoxtrot at www.m14forum.com.

### Late 2006 Fake "GI" Magazine without Markings

This magazine was sold in October 2006 at the Knob Creek Machine Gun Shoot. It loads twenty cartridges and functions reliably. It is a higher quality fake "GI" magazine.



Late 2006 Fake "GI" Magazine Without Markings - Note the large diameter weld dimples on the front side. Photo courtesy of Gunruner at m14forum.com.

Nolan has commented on this magazine, "The front welds are interesting looking. The spotwelds on the latch plate though are different from any that I've seen and almost look like a variant of the National/Western mags."



Late 2006 Fake "GI" Magazine Without Markings - Note the large diameter weld dimples on the front side. Photo courtesy of Gunruner at m14forum.com.



Late 2006 Fake "GI" Magazine Without Markings - Note the overlapping dimples on the latch plate. Photo courtesy of Gunruner at m14forum.com.

#### 2007 Fake "GI" Magazine with BRW S-I Marking

Kudos to BlueOval8950 for spotting this fake "GI" magazine at the Big Reno Gun Show in August 2007. This is one of the easier fake "GI" magazines to spot. They were sold with a BRW S-I, OM or W marking on the rear side. They have a gray phosphate coating on the body, floor plate and follower assembly. These are easy to spot as they have fourteen weld dimples on the front side, eleven up the center and three adjacent to the catch slot. The weld dimples in the center of the front side are wider than other mystery origin magazines but the number of them identifies the product as a counterfeit. The magazine latch plate is almost identical to the 2004-2005 fake "GI" BRW S-I marked type. The magazine spring has nine coils and is angled away from the follower assembly instead of hanging straight down. Consequently, this fake "GI" magazine may be difficult to load on the twentieth round or it may be difficult to insert into the rifle with the bolt closed. The follower assembly and floor plate appear to have been heat treated as they are not easy to bend unlike other counterfeits. This fake "GI" magazine has two alignment holes behind the latch plate.



2007 Fake "GI" Magazine Follower Bottom Side - Note two dimples instead of three on the follower stop. Photo by BlueOval8950 at www.m14forum.com.



2007 Fake "GI" Magazine Follower Left Side - Photo by BlueOval8950 at www.m14forum.com.


2007 Fake "GI" Magazine Follower Right Side - Photo by BlueOval8950 at www.m14forum.com.



2007 Fake "GI" Magazine Follower Top View - Note two dimples instead of three on the follower. Photo by BlueOval8950 at www.m14forum.com.



2007 Fake "GI" Magazine Side View - Photo by BlueOval8950 at www.m14forum.com.



**2007 Fake "GI" Magazine Front Side** - The front side has eleven weld dimples up the center plus three weld dimples adjacent to the catch slot. Photo by BlueOval8950 at www.m14forum.com.



2007 Fake "GI" Magazine Catch Slot - Note the three dimples adjacent to the catch slot. Photo by BlueOval8950 at www.m14forum.com.



**2007 Fake "GI" Magazine Side View** - Comparison shows a genuine Check-Mate Industries magazine latch plate (left) and the 2007 fake "GI" magazine latch plate (right). Note the difference in size between the dimples on each latch plate. Photo by BlueOval8950 at www.m14forum.com.



**2007 Fake "GI" Magazine** - Note the alignment holes behind the latch plate. Genuine BRW S-I, OM and W magazines do not have alignment holes. Photo by BlueOval8950 at www.m14forum.com.



**2007 Fake "GI" Magazine Marking** - The 2007 fake "GI" magazines are marked BRW S-I, OM or W. Photo by BlueOval8950 at www.m-14forum.com.



**2007 Fake "GI" Magazine** - Magazine tube (body) thickness reading is comparable to Check-Mate Industries magazines. Photo by BlueOval8950 at www.m14forum.com.



**2007 Fake "GI" Magazine Floor Plate** - Magazine floor plate thickness reading meets the USGI drawing thickness requirement. Photo by BlueOval8950 at www.m14forum.com.



2007 Fake "GI" Magazine - Disassembly reveals nine spring coils instead of eight. Photo by BlueOval8950 at www.m14forum.com.

#### CMI Magazine with Fake "GI" Markings

Check-Mate Industries magazines have been stamped with BRW S-1 and W markings. Sometimes they are wrapped in fake "GI" paper but often are sold out of the wrapper.



**CMI Magazine with fake "BRW S-1" Marking** – This is a photograph of the latch plate on a CMI magazine with a serif font BRW S-1 marking on the tube. Genuine BRW S-I magazine latch plates only had five weld dimples. Only CMI magazines have the characteristic horizontal line directly above the two bottom dimples on the latch plate. This is a common counterfeiting technique.



**CMI Magazine with fake "BRW S-1" Marking** - This is a photograph of the tube interior behind the latch plate. Genuine BRW S-I magazine tubes do not have the alignment holes behind the latch plate. The two alignment holes were only punched in genuine A, CMI, and KMT magazine tubes as far as USGI magazines are concerned.



2005 Check-Mate Industries Magazines with Fake "W" Marking - Note tell tale CMI line on the latch plate. Photo by Chief Engineer at www.m14forum.com.



2005 Check-Mate Industries Magazines with Fake "W" Marking Front Side View - Photo by Chief Engineer at www.m14forum.com.



**2005 Check-Mate Industries Magazines with Fake "W" Marking Top View** - These magazines had non-USGI followers and springs as sold. Photo by Chief Engineer at www.m14forum.com.



**Non-USGI Follower Bottom View** - This non-USGI, non-CMI follower was part of the Check-Mate Industries magazine with the fake "W" marking evaluated on July 15, 2006.



**Non-USGI Follower Left Side View** - This non-USGI, non-CMI follower was part of the Check-Mate Industries magazine with the fake "W" marking evaluated on July 15, 2006.



**Non-USGI Follower Right Side View** - This non-USGI, non-CMI follower was part of the Check-Mate Industries magazine with the fake "W" marking evaluated on July 15, 2006.



**Non-USGI Follower Rear View** - This non-USGI, non-CMI follower was part of the Check-Mate Industries magazine with the fake "W" marking evaluated on July 15, 2006.

#### 2007 Fake "T57" Magazine

This magazine was sold by firearms accessories dealers from 2005 to 2011. Many buyers report reliable service with these magazines. They were marketed as unissued 1970s vintage units made in Taiwan. The claim is also made by more than one purveyor that these magazines were made in Taiwan with former Harrington & Richardson M14 project equipment. The truth is that the machinery necessary to produce genuine T57 magazines and flash suppressors was not supplied to the Taiwan government. Therefore, the State Arsenal had to find machinery in Taiwan to produce these parts.

Per the 1967 Memorandum of Understanding with the U. S. government, T57 rifles, accessories and parts had to be interchangeable with their USGI counterparts. The government of Taiwan was provided with a complete set of U. S. government drawings and inspection gauges for its T57 project. Examination of the fake "T57" magazines shows that they do not meet a number of M14 magazine component drawing and quality assurance requirements. For example, the latch plate pattern of three dimples does not match any of the specified weld patterns of USGI drawing D7790197. The fake "T57" magazines are coated in oil and wrapped in brown wax paper secured by a rubber band. That doesn't look like modern military parts packaging.



2007 Fake "T57" Magazine New-in-Wrap



2007 Fake "T57" Magazine New-in-Wrap Opened - Note the grease coating the magazine.



**2007 Fake "T57" Magazine Rear View -** The magazine tube is 0.022 " thck. The USGI drawing requires a wall thickness of 0.0310 " + or - 0.0015 ".



**2007 Fake "T57" Magazine Manufacturer Marking** - Manufacturer markings appear in various places, above the latch plate and at the bottom of the rear side. This example is a six-pointed star at the bottom of the rear side of the tube.



2007 Fake "T57" Magazine Assembly Top View



**2007 Fake "T57" Magazine Front Side View** - The front side has eleven weld dimples up the center and one to the right of the catch slot. The USGI drawing F7790181 requires twelve weld dimples up the center of the front side of the tube.



2007 Fake "T57" Magazine Assembly Right Side View



2007 Fake "T57" Magazine Bottom Side View



**2007 Fake "T57" Magazine Floor Plate** - The fake "T57" floor plate thickness is 0.024 ". The USGI drawing 7790182 requires a thickness of 0.032 " + or - 0.003 ".



2007 Fake "T57" Magazine Bottom Side View - The follower has three weld dimples.



2007 Fake "T57" Magazine Follower Left Side View



2007 Fake "T57" Magazine Follower Right Side View



2007 Fake "T57" Magazine Follower Top View



2007 Fake "T57" Magazine Follower Rear View



2007 Fake "T57" Magazine Spring - The spring is made from 0.049 " diameter wire.



**2007 Fake "T57" Magazine** - This new condition fake "T57" magazine spring is 10.625 " long, just shy of the USGI drawing C7267078 free length requirement, 13.0 " - 2.0 ".

#### 2010 Mega Mag Twenty Round Magazine

Mega Mag twenty round M14 magazines were available from an online vendor in March 2010. Information about Mega Mag could not be found through online search engines at the time. The magazine held twenty-three cartridges. The finish was blued sheet metal. The molded plastic follower lacked a stop. The magazine tube was 5/8 " longer than a 1960s USGI Olin-Mathieson magazine. The rear side of the magazine tube had two 5/32 " holes. There were three dimples near the catch slot and six punch dimples along the seam on the front side. The latch plate was formed by stamping. The spring had nine oval coils. The magazine tube and floor plate were not heat treated and could be bent by hand.



2010 Mega Mag Magazine Follower Bottom View



2010 Mega Mag Magazine Follower Left Side View



2010 Mega Mag Magazine Follower Right Side View



2010 Mega Mag Magazine Follower Rear View



2010 Mega Mag Magazine Rear View



2010 Mega Mag Magazine Top View



2010 Mega Mag Magazine Left Side View



2010 Mega Mag Magazine Right Side View



2010 Mega Mag Magazine Front Side View



2010 Mega Mag Magazine Catch Slot



2010 Mega Mag Magazine Latch Plate



2010 Mega Mag Magazine Manufacturer Marking - None



2010 Mega Mag Magazine Tube Interior View



2010 Mega Mag Magazine Floor Plate



2010 Mega Mag Magazine Spring



2010 Mega Mag Magazine Spring



Magazine Comparison - The 2010 Mega Mag Magazine (top) is 5/8 " longer than a USGI magazine (bottom).

#### 2011 PTFE Magazine

In November 2011, a twenty round magazine with polytetrafluoroethylene (PTFE) coated parts was introduced to the commercial market. The sample tested had feed lips that were not bent downward sufficiently to keep twenty rounds loaded under slight jarring of the magazine. Also, the bolt would not remain locked open when it was removed in unloaded condition from the rifle. Otherwise, the sample magazine functioned as it should. plate wlate were not heat treated and could be bent by hand.



2011 PTFE Magazine New-In-Wrap



2011 PTFE Magazine New-Out-Of-Wrap



2011 PTFE Magazine Disassembled - The spring has eight coils with no visible defects.



2011 PTFE Magazine Rear Side View



2011 PTFE Magazine Catch Slot



**2011 PTFE Magazine Latch Plate -** The latch plate has five dimples. The PTFE coating wore off at the top of the latch plate when the magazine was inserted into the rifle.



2011 PTFE Magazine Manufacturer Marking - None



**2011 PTFE Magazine Tube Interior View -** There are no alignment holes behind the latch plate.



2011 PTFE Magazine Top View



**2011 PTFE Magazine Front Side View -** There are eleven dimples on the front side, ten along the center and one adjacent to the right hand side of the catch slot.



2011 PTFE Magazine Right Side View



2011 PTFE Magazine Bottom View



**2011 PTFE Magazine Follower Bottom View -** There are three dimples on the bottom of the follower stop.



2011 PTFE Magazine Follower Left Side View



2011 PTFE Magazine Follower Right Side View



2011 PTFE Magazine Follower Top View



2011 PTFE Magazine Follower Rear View



2011 PTFE Magazine Spring Top View



2011 PTFE Magazine Spring Bottom View

Comparison of USGI and Fake "GI" Magazine Parts



**Comparison of Magazine Front Sides** - From left to right, USGI Westinghouse Electric, fake "GI" bar W, and USGI Atwood Vacuum Machine Co. Photo courtesy of leid at www.m14forum.com.



**Comparison of Magazine Catch Slots** - From left to right, USGI Westinghouse Electric, fake "GI" bar W, and USGI Atwood Vacuum Machine Co. Photo courtesy of leid at www.m14forum.com.



**Comparison of Magazine Markings** - From left to right, USGI Westinghouse Electric, fake "GI" bar W, and USGI Atwood Vacuum Machine Co. Photo courtesy of leid at www.m14forum.com.



Fake "GI" bar W and USGI Magazines with non-USGI Springs - Top to bottom, fake "GI" bar W,
USGI BRW S-I, USGI OM, and USGI HR-R marked magazines. The three USGI magazines were sold in 2005 from a well know firearms accessories supplier with non-USGI magazine springs. Note nine coils for each of the four magazines in the photograph. Photo courtesy of leid at www.m14forum.com.



**2006 CMI Magazine Follower and Spring** - For comparison, note the eight coils in this spring per the USGI drawing 7267078.

#### Mysterious Origin Ten Round Magazine

The mysterious origin ten round magazine has been on the market since at least 2001. They were sold on Internet auction boards and at gun shows and gun shops as late as 2011. This magazine had a horizontal line on the lower half of the latch plate and two alignment holes behind the latch plate like Check-Mate Industries magazines. However, there were several noticable differences between the two magazines. The mysterious origin ten round magazines had two dimples on the latch plate and five plus one dimples on the front side. The front side dimples on the mysterious origin ten round magazine were lightly struck and smaller in diameter as compared to CMI magazines. The latch plate corners on the mysterious origin ten round magazine were more squared off than the latch plates on CMI magazines. The squared corners made for difficult insertion into a rifle magazine well. In contrast, CMI magazines snapped into a rifle without undue force. CMI ten round magazines were marked C.M.I. on the rear side. The mysterious origin ten round magazines lacked a manufacturer marking.



Mysterious Origin Ten Round Magazine Follower Bottom View



Mysterious Origin Ten Round Magazine Follower Left Side View


Mysterious Origin Ten Round Magazine Follower Right Side View



Mysterious Origin Ten Round Magazine Rear View



Mysterious Origin Ten Round Magazine Follower Rear View



Mysterious Origin Ten Round Magazine Follower Top View



Mysterious Origin Ten Round Magazine Top View



Mysterious Origin Ten Round Magazine Right Side View



Mysterious Origin Ten Round Magazine Front Side View



Mysterious Origin Ten Round Magazine Front Side View



Mysterious Origin Ten Round Magazine Catch Slot



Mysterious Origin Ten Round Magazine Rear View - Note lack of manufacturer marking.



Mysterious Origin Ten Round Magazine Latch Plate - Note two dimples and horizontal line.



Mysterious Origin Ten Round Magazine Tube Interior View - Note the two alignment holes.



Mysterious Origin Ten Round Magazine Spring

### Examination of fake "W" marked Magazines by Different

This is a comparison of my four fake "W" marked M14 magazines purchased at a gun show in Las Vegas, NV in October, 2004 versus the USGI M14 magazine requirements. Two of the four fake "W" marked magazines are shown unopened in the two photographs below. When opened, they were marked with "W" on the rear side. They are not USGI contract made because the spot weld patterns on the magazine tube and follower are incorrect. The followers have two spot welds instead of three as required by the USGI drawing 7267019. Also, the magazines would not hold twenty rounds because the spring is angled away from the follower in its free length state.

### References

USGI M14 drawings dated 21 January 1986: 1) 7790197 Tube Assembly, Magazine 2) 7790183 Magazine Assembly 3) 7267019 Follower Assembly, Magazine 4) 7267078 Spring, Magazine 5) 77790182 Base, Magazine 6) 7791081Tube, Magazine.

Federal Specification QQ-W-470 Wire, Steel, Carbon, Spring, Music (ASTM A228) Scope: This specification covers one type of round, cold drawn, high carbon, steel wire with a bright smooth finish.

Military Specification MIL-W-12332A Welding, Resistance, Spot, Seam, and Projection; For Fabricating Assemblies of Low-Carbon Steel dated 14 December 1964

Military Standard MIL-STD-171E Department of Defense Manufacturing Process Standard Finishing of Metal and Wood Surfaces dated 23 June 1989



**2004 Fake "GI" Magazine Packaging** – Wrapper is marked RAP Industries, a legitimate supplier of USGI wrapping paper in the 1960s.



**2004 Fake "GI" Magazine Packaging** – The wrapper is marked on Bell Fire Products Corp. on the reverse side.

### **USGI Magazine Parts Materials**

1) Magazine Tube Assembly - Material not specified but by MIL-W-12332A cannot exceed 0.20 % Carbon content, i.e., this is a low carbon steel. Required to be heat treated to 71 to 76 Rockwell "A".

2) Magazine Follower Assembly - Same as the magazine tube assembly but it must heat treated to "file hard."

3) Magazine Base (Floor Plate) - ASTM A109 heat treated to 71 to 76 HRA

4) Magazine Spring - ASTM A228 0.0630 " + or - 0.0005 " diameter music spring wire per Federal Specification QQ-W-470. Spring is required to have eight left hand coils with a free length of 13.0 - 2.0 ". The drawing 7267078 has several dimension and load requirements for the spring.

### **USGI Magazine Parts Finish**

1) All parts but the spring - Zinc or manganese phosphate coating per MIL-STD-171.

2) Magazine Spring - VV-L-800 specification lubricating oil.

### **USGI Magazine Parts Dimensions**

See drawings

### **USGI Magazine Function Test**

Per USGI drawing 7790183 Note 2: "Each magazine assembly shall be capable of withstanding a 20 round function firing test when fired in the M14A1 Rifle without malfunction attributable to the magazine after firing the 20th round from the magazine. The magazine follower shall actuate the weapons bolt catch to hold the bolt in the open position."

### **USGI Magazine Weld Requirements and Peel Test**

1) Magazine Follower Assembly - The USGI drawing requires three evenly placed welds to attach the stop to the follower. The welds shall be able to pass the MIL-W-12332 Peel Test but the weld dimple (button) diameter does not have to meet the minimum dimension required per that specification

2) Magazine Tube Assembly - The rear side lock tab may have two, four, five or six circular depressions. The lock tab welds shall be able to pass the Peel Test but the weld dimple (button) diameter does not have to meet the minimum dimension.

The USGI drawings do not specify the welding requirements for the front side of the magazine tube assembly where the two ends of the sheet metal are joined. However, because we know the magazine tube itself must be low carbon steel. This is because the lock tab must be attached according to the magazine tube per MIL-W-12332 which specifies steel with a carbon content not exceeding 0.20 %.

USGI drawing 7790197 does NOT specify an exemption for the front side weld dimple (button) diameter. Examination of more than two dozen known USGI twenty round M14 magazines shows that the magazine tube front side weld dimple (button) diameters are never less than 3/16 " (0.1875 inches) and no more than 1/4 " (0.250 inches) in diameter.

From another board member we know the measurements of several known USGI twenty round magazine tube thicknesses range from 0.028 " to 0.035 ". I checked several of my own USGI twenty round M14 magazines with a machinist's 1/64 " scale ruler. I get a reading of 1/32 " or 0.03125 ".

Now, per MIL-W-12332A Table II the minimum weld dimple (button) diameter for 0.028 " thick steel is 0.152 " by allowed interpolation. By the same document table, the minimum weld dimple (button) diameter for 0.035 " thick steel is 0.173 " by allowed interpolation. I examined several of my known USGI twenty round M14 magazines to see what the front side weld dimple (button) diameter was. The minimum front side weld dimple (button) diameter I found was 3/16 " (0.1875 inches) by 1/64 " scale machinist's ruler.

At this point, I take a small leap of faith in stating that the front side of USGI twenty round M14 magazines was welded in accordance with MIL-W-12332. If so, the front side welds are required to pass the Peel Test just as the follower and lock tabs are required to do so.

### USGI Magazine Markings

M14 magazine identification requirements were specified in USGI drawing F7790181. See the James Wesley Rawles FAQ on M14 Magazines and *M14 Rifle History and Development* Text Only Edition at www.lulu.com/m14rhad. The majority of USGI magazine bodies and some USGI magazine followers have manufacturer markings.

### Comparison of Fake "W" Marked Magazines to USGI Requirements

Material - The fake "W" magazine parts appear to be carbon steel. The magazine spring appears to be steel wire.

Parts Finish - The follower assembly, magazine tube assembly and floor plate appear to have a manganese phosphate finish as required by the USGI drawing. The spring in each of the four fake "W" marked magazines is coated with greasy grime and not any lubricating oil for sure. All four of these magazines were obtained NIW in October, 2004 at a gun show in Las Vegas, NV.

Magazine Part Dimensions - The suspect magazine spring has eight left hand wound coils but it measures 3/64 " (0.047 inches) diameter and not the minimum 0.058 " diameter required by the USGI drawing. Using the USGI drawings and several known USGI twenty round M14 magazines, I measured several physical dimensions of the fake "W" marked magazines against the USGI dimensions: square hole, floor plate round hole, tube height, tube width, tube depth, lock tab width, lock tab height, lock tab depth, distance from the top of the lock tab to the top of the magazine tube, length of the feed lip, position of the feed lip along the top edge and the height of the feed lip. There was no difference dimensionally between the fake "W" magazines and the USGI magazines except the spring wire diameter.

Function Test - Three of four the fake "W" marked magazines will not load twenty cartridges and it was a struggle for the fourth fake "W" magazine to accept the twentieth round. If the magazine cannot accept twenty rounds it cannot fire twenty rounds from a M14A1 as required per USGI drawing 7790183 Magazine Assembly. This is cause for rejection. IMHO, this is one but easy test to check the authenticity of a magazine with a manufacturer's marking on the rear side.

Weld Requirements and the Peel Test - All of the magazine follower assemblies in the fake "W" marked magazines have two welds attaching the follower to the stop. The USGI drawing 7267019 Follower Assembly, Magazine requires three evenly spaced welds to attach the follower to the stop. Examination of hundreds of known USGI magazine follower assemblies has not shown any exception to this USGI drawing requirement. The magazine followers in my fake "W" marked magazines are fake too.

Examination of hundreds of known USGI twenty round magazines has shown USGI magazines to have thirteen weld dimples on the front side including one to the right of the square hole when looking at it with the follower up and the floor plate down. The only known exception are SOME KMT marked twenty round magazines that have nine front side weld dimples of which one is to the left and the other to the right of the square hole. The four fake "W" marked magazines in my possession have nine front side weld dimples of which three surround the square hole, two on the left and one on the right as the follower is up and the floor plate is down.

MIL-W-12332A requires resistance spot welds to be able to pass the Peel Test. From section 7 Production Requirements paragraph 7.3.3.1, "The weldment or simulated specimen shall be separated by driving a chisel between the welded components in an unwelded area or by peeling one sheet back against the weld until failure occurs around the periphery of the weld or until the part fails. Failure of the base metal outside the weld area shall be considered evidence that the welds are satisfactory."

In other words, the sheet metal steel of the magazine tube has to break before the weld does. I did a Peel Test on one of the four fake "W" marked magazines. The fake "W" marked magazine failed the Peel Test because the welds broke and the sheet metal did

not. The diameter of the front side weld dimples on the four fake "W" marked magazines in my possession varies from 1/32 " (0.03125 inches) to 1/16 " (0.0625 inches). The thickness of the fake "W" marked magazine tube measures 1/32 " by 1/64 " scale machinist's ruler, the same as the known USGI twenty round magazines. The fake "W" marked magazine front side weld dimples do not meet the minimum dimple (button) diameter requirement.

Markings - The fake "W" marked magazines have a 3/32 " tall "W" that is centered 1 1/4 " above the bottom on the rear side of the magazine tube. There are no markings on the follower assemblies.

Here are photos of the Peel Test I performed on the fake "W" marked twenty round magazine:



Start of Peel Test on 2004 Fake "W" Magazine



Close up of 2004 Fake "W" Magazine after the Peel Test



2004 Fake "W" Magazine - Two twists of the sheet metal produced shear.



End of Peel Test on 2004 Fake "W" Magazine

## Chapter 19: Commercial Magazines Evaluation

### **Evaluation of Commercial Manufacture Magazines**



### **Test Samples**

The following magazines were evaluated on July 15, 2006 by Different (see photo above, top to bottom, left to right):

- 1) five pointed star marked twenty round
- 2) twenty-five round
- 3) magazine with stamped latch plate and plastic follower
- 4) CMI with "added W" marking and non-USGI spring and non-USGI follower

5) magazine without a magazine catch slot

6) thirty round

7) 2006 production CMI

#### Observations

Surface finish: manganese phosphate - 1, 2, 4, 6 and 7, blued - 3, 5

Any evidence of grease? None on all seven magazines.

Magazines holds full charge of ammunition? All seven magazines did.

Magazine easy to insert with a full charge of ammunition? No for 1, 2, 3, 5 and 6. Yes for 4 and 7.

Markings: 1 - five pointed star on rear side, 4 - W on rear side 2,3,5,6 and 7 - none

Front side weld dimples: 1 - seven + three, 2 - eight + three, 3 - four + one, 4 - twelve + one, 5 - twelve + one, 6 - eight + three, 7 - twelve + one.

Latch plate dimples: 1, 2, 4, 6 and 7 - six, 3 - none, 5 - three.

Follower dimples: 1, 2, 4, and 6 - two, 3 - none (plastic), 5 and 7 - three.

Horizontal line on the latch plate: 4 and 7 - yes, 1, 2, 3, 5 and 6 - no.

Spring diameter - 1/16 " for all seven springs

Spring coils - 1,2 3, and 4 - nine, 5 and 7 - eight, 6 - thirteen.

Spring free length (inches): 1 - 11.25, 2 - 11.5, 3 - 9, 4 - 12, 5 - 9.875, 6 - 15.5, and 7 - 11.125.

#### Conclusion

In my opinion, the following features *when used together* are reliable to identify many non-USGI magazine parts: a) number of weld dimples on the front side including the area adjacent to the magazine catch slot b) number of follower weld dimples c) ease of insertion into the rifle with a full ammunition charge and d) the number of spring coils.

Note that magazine **4**) with the CMI magazine and added "W" marking was assembled with a non-USGI follower and a non-USGI spring. Even if the magazine tube looks okay,

check the follower for three evenly spaced weld dimples. If possible, check the spring for eight coils. There are some other features that help identify the non-USGI parts.

### Chapter 20 - Magazine Springs

### Magazine Springs

From Nolan,

I found the USGI specs for the M14 magazine springs and attached it to this post in Adobe Acrobat format below. Read the comments about nicks, scratches, toolmarks, etc. on the spec sheet.

The reason that toolmarks are to be avoided on springs because they create localized stress when the spring flexes resulting in a much much shorter life. The same goes for rust pits. Read anything about spring making and you will find that this is true. Odds are, when the spring snaps, it will be at the pit, nick, scratch, die mark, etc.

Notice how smooth the surface of the wire is on the inside and outside of the bends are on the USGI HR-R, Preban (REAL) Taiwan Type 57, and USGI 1991 contact C.M.I. marked magazines. I can pull apart dozens and dozens of additional USGI and dozens and dozens of additional legit Type 57 magazines and their springs are all just as nice as the ones pictures above. The same goes for M1 Carbine magazines, 1911 magazines, M9 pistol magazines, etc. etc. Look at a G3 mag spring or even a the spring out of a three dollar Chinese military AK-47 magazine.

Now look at the surface of the wire on the inside and outside of the bends of the springs that I received from Elite last year...The bend geometry isn't right either

Who kept telling me that they are as good as, and meet USGI specs? Sorry, but the official US Govt spec sheet says you are wrong. There is a very good reason that the govt doesn't allow tool marks on springs. Research it and see why.

Here's an idea...maybe they are seconds that didn't meet USGI spec. Rather than just scrap them, sell them as aftermarket. Or, maybe I just got a bad batch, which in it's self would make me question overall quality control.



Magazine Spring sold by Elite Firearms in 2005 - Note the surface of the metal on the inside and outside of the bends.



Pre-'94 AW Ban Check-Mate Industries Magazine - Nolan has owned this pre-'94 ban CMI magazine since before September 1994.



Pre-'94 AW Ban Taiwan T57 Magazine - Nolan has owned this real deal Taiwan T57 magazine since before September 1994.



M14 Magazine Springs sold by Elite Firearms in 2005 - Nolan bought these springs from Elite Firearms in 2005.



**M14 Magazine Springs sold by Elite Firearms in 2005** - Nolan bought these springs from Elite Firearms in 2005. Note the surface of the metal on the inside and outside of the bends.



M14 Magazine Springs sold by Elite Firearms in 2005 - Nolan bought these springs from Elite Firearms in 2005. Note the surface of the metal on the inside of the bends.



**M14 Magazine Spring sold by Elite Firearms in 2005** - Nolan bought this spring from Elite Firearms in 2005. Note the surface of the metal on the inside and outside of the bends.



**M14 Magazine Springs sold by Elite Firearms in 2005** - Nolan bought these springs from Elite Firearms in 2005. Note the surface of the metal on the inside and outside of the bends.

### From Bill Ricca,

Another difference in GI springs versus commercial springs is GI springs come from "Certified" batches of wire. The certification states that the entire wire has been measured for uniformity and checked for content of percentages of raw material.

Certified wire will feed through the machines uniformly and keep the dimensions correct. If the wire is not certified, it is a hit or miss production, some will be at spec, some will be off spec. Certified wire is a lot more expensive due to the amount of wire that get rejected raises the costs. Certified wire also costs more to produce because the rolls may contain many partial lenghts, only those that measure up. The rest of the coil that does not measure up and been cut away and discarded. This causes many set ups and feeding, versus one that will result with non certified wire.

As stated in the past, there is a lot of meaning to the term "Mil Spec". Next time you see the term Mil Spec on one of these internet sites, have yourself a good laugh. Chances are they haven't a clue.

From Nolan,

Here's another comparison of a known legit USGI spring from an HR-R marked magazine that I've had since new and an Elite supplied spring.

The following two pictures show what I meant in the first post of this thread about the spring geometry being "off".

Notice the "dropped" corners. The entire dozen that I ordered are like this. Even ignoring the nicks and tool marks these springs do not compare to any of the legit USGI springs that I have as far as workmanship. The geometry of the bends don't look anything like the published USGI specs or any of the USGI magazine springs that I have.

Like I posted months ago, the springs were worth the two bucks each I paid for them but I find it impossible to believe that these are first run springs.

But, are they legit USGI and will they last anywhere near as long as a legit USGI spring? What do you think?

Do any of you guys have free access to or the ability to perform a metallurgical analysis? If so, it might prove interesting to take a peek at the replacement followers and floorplates in addition to the springs. A hardness test might prove interesting too.



**Comparison of M14 Magazine Springs** - Top end of USGI HR-R spring (left) and top end of M14 magazine spring from Elite Firearms (right).



**Comparison of M14 Magazine Springs** - Bottom end of USGI HR-R spring (left) and bottom end of M14 magazine spring from Elite Firearms (right).

Excerpt rom *M14 Rifle History and Development* Fifth Edition:

M14 magazine springs were tested and inspected to ensure they would not take a permanent set. Magazine springs selected for inspection were compressed to a height of 11/16 ", essentially compressed solid height, three times then examined for compliance with USGI drawing C7267078. This included meeting the free length requirement of 13 "

-2 ". A permanent set in a USGI M14 rifle compression spring is not formed when compressed to the minimum length and left indefinitely.

The majority of the compression coil springs in the M14 rifle are subjected to fatigue stress over a very large number of operating cycles. These springs were designed with this service requirement in mind. If a spring weakens enough the M14 rifle will malfunction in one manner or another. A weak magazine spring could cause cartridge feeding problems. If the extractor spring is weak the spent case may stick in the chamber after firing. A soft ejector spring could result in a spent case being caught between the bolt and receiver. In a combat situation, such malfunctions could prove fatal. Nonetheless, over the course of thousands and thousands of cycles, the free lengths of the operating rod spring and the hammer spring will gradually shorten so that they will warrant replacement.

Check-Mate Industries has been in business since 1972 as a tool and die metal stampings manufacturer. Check-Mate Industries has completed more than 400 government arms related contracts and produced more than 10,000,000 rifle and pistol magazines. For the M14 rifle, Check-Mate Industries manufactures the magazine follower assembly, floor plate and tube (body) using steel from American mills. The magazine springs are supplied supplied to Check-Mate Industries. The springs typically exhibit slight surface nicks on the outboard side of the angled segments of each coil. These surface irregularities appear to be made in the same manner and at the same location and appear identical in dimension and finish. Sample springs examined in post-1991 Check-Mate Industries magazines manufactured over a period of several years possess these surface nicks. The surface nicks were formed by CNC bending machines during manufacture. The same springs were used in both government contract and commercial sale M14 magazines. Even though the magazine springs passed government inspection every time, Check-Mate Industries performed extensive testing on the springs to alleviate consumer concern. Check-Mate Industries found no negative effect on spring integrity or performance due to the presence of these surface blemishes.

By comparison, springs from genuine 1960s production Borg-Warner magazines are smooth in appearance and possess identical dimensions but the free length is about 1/2 " shorter than the springs found in Check-Mate Industries magazines. Before 1992, USGI M14 magazines springs had smooth surfaces with no irregularities visible to the naked eye, regardless of the contractor. What is the requirement for the M14 magazine spring appearance? The USGI drawing C7267078 Note 2 specifies, "Springs shall be free from scratches, splits, laps, cracks, seams, nicks, die marks, and other injurious defects."

Jeff St Paul (Tygh Valley, OR) tested 2006 production Check-Mate Industries magazine springs in December 2006 to determine if they met the USGI drawing spring force requirements at each specified length under compression. The magazine springs met the requirements exactly on each one tested. The magazine springs are heat treated after forming which tends to minimize any effect from minor surface irregularities.

At the same time, Mr. St Paul also performed accelerated use testing to determine what effect the minor die marks would have on magazine spring cycle life. He tested 2006 production M14 magazine springs with minor surface nicks sold by Check-Mate Industries. Spring force measurements were taken after 500 and 1000 cycles (simulation of 10,000 and 20,000 rounds respectively). At both points in the testing, there was no reduction whatsoever in spring force measurements taken at various compressed lengths and no change in the free length. In other words, Check-Mate Industries magazine springs show no degradation after simulating 20,000 rounds of fire. The surface nicks do not appear to have any adverse affect on performance. Thus, they are not an injurious defect and the spring meets the USGI drawing requirement. This is borne out by the fact that every lot of Check-Mate Industries M14 magazines supplied to the U. S. government under contract has exceeded the government conducted firing and corrosion resistance tests and visual inspection. There has never been any rejection of Check-Mate Industries M14 magazines by the U. S. government.

Springfield Armory performed an evaluation of M14 magazine springs in the 1960s. The effects of long-term storage and repeated cycling of magazine spring were studied. The specified load (spring force) for the USGI M14 magazine spring is 5.5 pounds + 0.75 pounds at a compressed length of 5.5 " (unloaded magazine). However, the Springfield Armory tests found that the M14 magazine spring will perform satisfactorily at a load as low as 4.5 pounds force at 5.5 " length.

In the Springfield Armory study, three USGI M14 magazine springs were placed into a vertical shaper for a gymnastication test. Each spring was cycled at a rate of 116 strokes per minute. The spring force was measured after so many cycles, 5, 55, 655, 1,655, etc. After 6,655 cycles, the spring force at 5.5 " long were 6.1, 6.1 and 5.75 pounds each. The load, or force, of each spring was checked again after 10,000 cycles. The results were 5.1, 5.75 and 3.9 pounds at 5.5 " length. One spring measured 5.25 pounds at 5.5 " length even after 12,000 cycles. The springs were found badly distorted at 10,000, 12,000 and 14,751 cycles, respectively.

In another part of the spring evaluation, ten magazines were stored loaded for five years. After the first week in storage, the magazine spring force was found to range from 5.1 to 5.6 pounds at 5.5 " length. After five years of loaded storage, the same ten magazines were test fired with six loadings (120 rounds per magazine). The magazines were then disassembled and the spring force measured. The results were 4.6 to 4.75 pounds for length of 5.5 ". There was no malfunction of any magazine.

Unloaded magazines were tested as well for the effects of long-term storage. Ten magazines were stored unloaded for five years. After the first week in storage, the force for each spring ranged from 8.3 to 8.8 pounds at 5.5 ". After five years, the same ten magazines were loaded and fired six times each (120 rounds per magazine). The force for each spring was then measured. The results ranged from 5.0 to 5.25 pounds at 5.5 " length. There was no malfunction of any magazine.

# Chapter 21: M14 Magazine Identification Diagram



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