

# *How to Keep Ceremonial M1 Garand Rifles Functioning Flawlessly*

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**Wisconsin American Legion Midwinter Conference**



**\*Contact info at end of powerpoint.**

**Note: I take no credit for the images on these slides. Most were taken from internet sites including the CMP site. I thank all those who posted these images on internet sites to help illustrate the workings of the M1 Garand.**

# Garand Collectors Association Video



## GARAND COLLECTORS ASSOCIATION

Membership

CCA Journal

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About the CCA

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Financial Aid

History of the M1 Garand Rifle

The GCA Store

CMP

Evolution of National March

Rifles - Springfield Army

Production

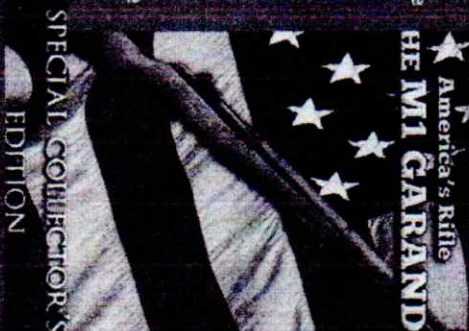
Glossary of Collector Terms

Ceremonial Rifle Maintenance

M1 Garand Data Sheet

Americas Rifle-M1 Garand

Video on DVD - \$9.95



<https://media.exed.wisc.edu/m1/m1garand-ceremonial-maintenance/m1garand-ceremonial-maintenance.html>

**At this point I assume you  
have disassembled the  
rifle. There are good on-  
line videos on  
Disassembly and  
Assembly**



**My video on the Garand Collectors Association  
website goes through disassembly & assembly  
[http://media.exed.wisc.edu/m1/m1garand-  
ceremonial-maintenance/m1garand-ceremonial-  
maintenance.html](http://media.exed.wisc.edu/m1/m1garand-ceremonial-maintenance/m1garand-ceremonial-maintenance.html)**

## **Top Eight Things That Cause Failure to Feed/Extract in Ceremonial M1's**

**Symptoms of all eight problems are:**

**Rifle fires the first shot but**

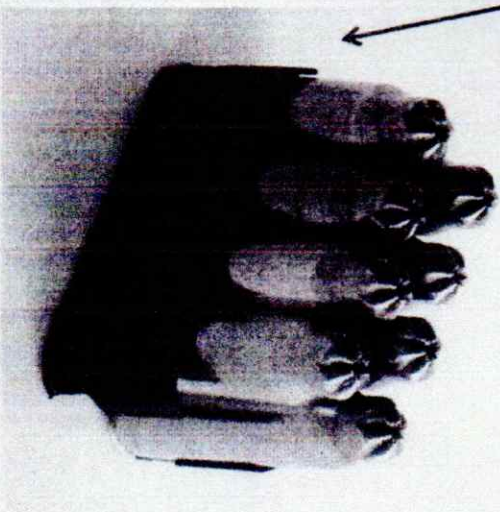
- **Does not properly eject the fired round**
- **Action closes on the fired round and does not feed the next loaded round**
- **Causes the next round to "stovepipe"**

**Some Failure to Feed Problems Are Simple to Fix - Always Check These Two First!**

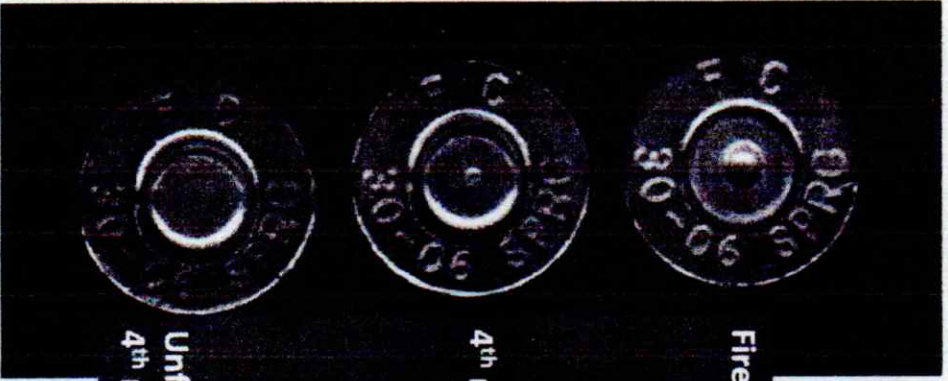
**Losing Powder!**



**Bad Clip! Bent, worn out**



**Only use unfired blanks!  
Reading the ammunition**



**Fired**  
**4th round**  
**Unfired not  
4th round**



**Crimp hardly opens**

## Six Other Common Problems That Cause Failure to Feed/Extract in Ceremonial M1's

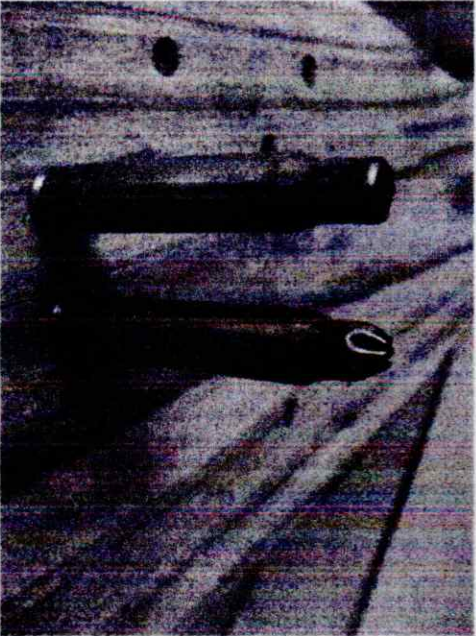
1. **Wrong Size Hole in the Blank Firing Adaptor (BFA)**
2. **A Bad Operating Rod (Op Rod) Spring**
3. **Improper Reassembly of the Gas System (Gas Cylinder, BFA and Gas Cylinder Screw)**
4. **Improper Lubrication**
5. **Out of Spec Op Rod Piston (Op Rod Tip)**
6. **Out of Spec Gas Cylinder**



**Problem #1: The Hole in the BFA**

**Check to see that you have the the correct Blank Firing Adaptor for the**

**Blanks you are using!**



**Old Blank**

**New Blank**





If You are using the new blanks, the hole in the BFA needs to be .172



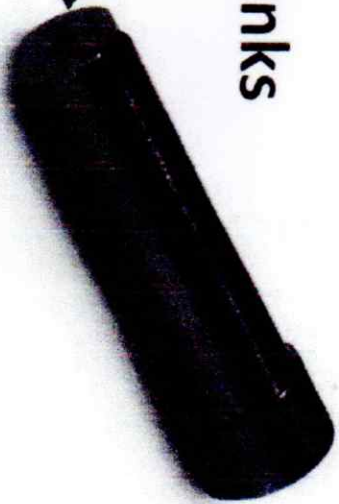
**.172 hole with the new blanks**

**I use 11/64 bit or a**

**#17 drill bit.**



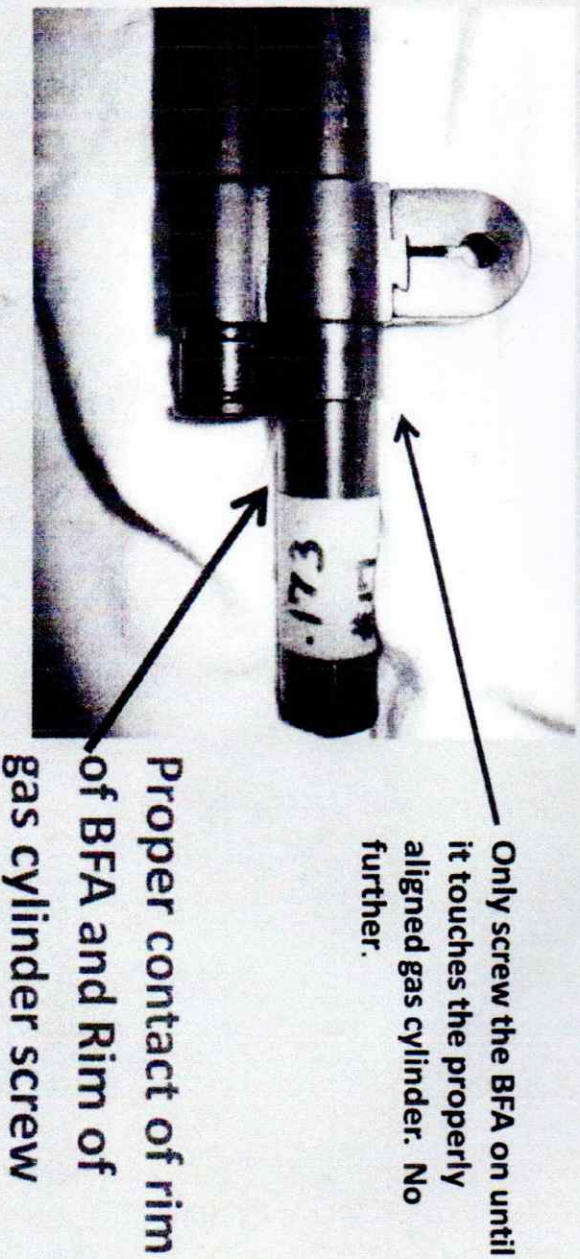
**Drill it out while it is on**



**the rifle or remove it and drill it out in vice.**



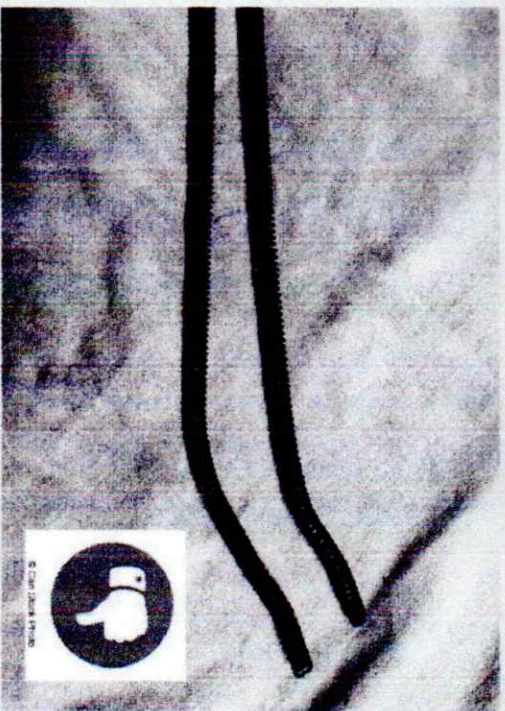
**When you replace the BFA, only screw it on until it touches the front of the (properly aligned) gas cylinder. Do not screw it on until it stops! If you do that, you will move the cylinder to the rear and the alignment will be off. Then, make sure the rim of the gas cylinder crews overlaps the rim on the BFA to help secure it in place**



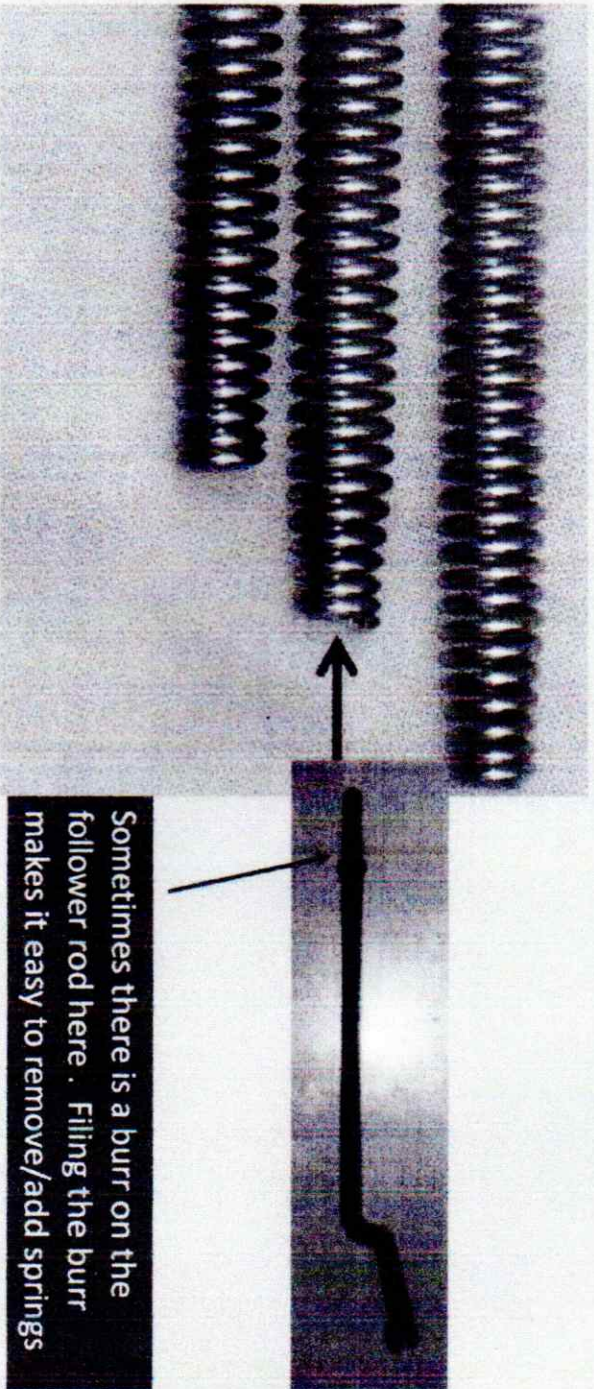
## Problem #2: The Op Rod Spring



The spring should be 19" – 20.25" long and not kinked nor heavily worn (indicated by a lot of "silver" areas on the spring)



The follower rod does into the narrower end of the op  
rod spring



You usually have to “twist” the spring on/off the follower  
rod.

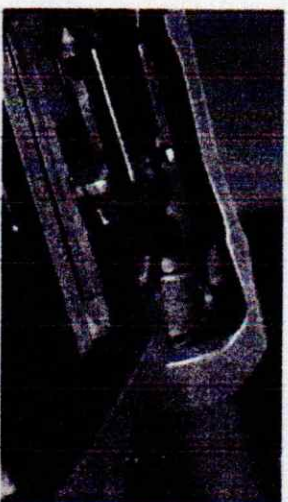
# Problem 3: Incorrect Reassembly

Before reassembly,

1. clean the barrel and chamber

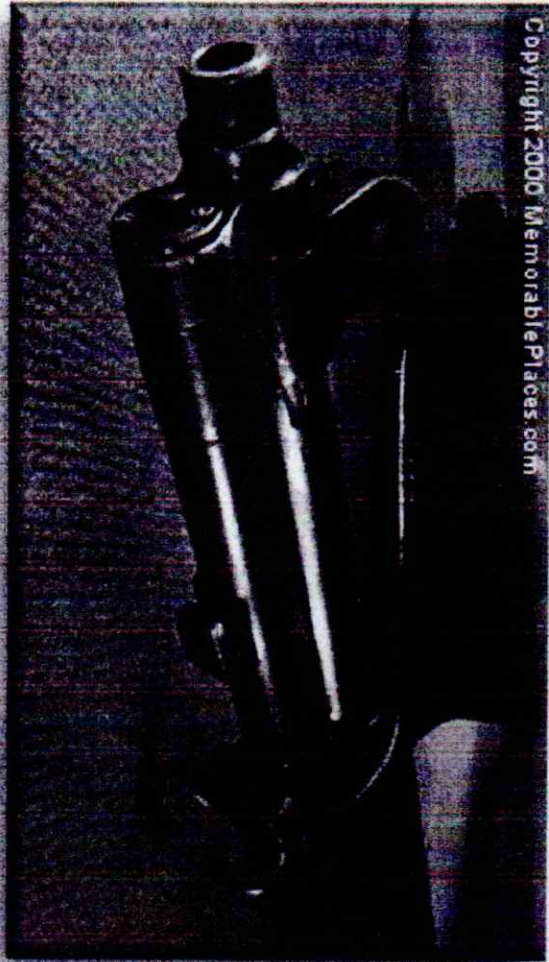


2. LUBRICATE THE RIFLE (more on this later).



GI brush  
cheap  
knock  
ebay

**Proper Gas Cylinder Alignment:**  
**VERY IMPORTANT!!!**



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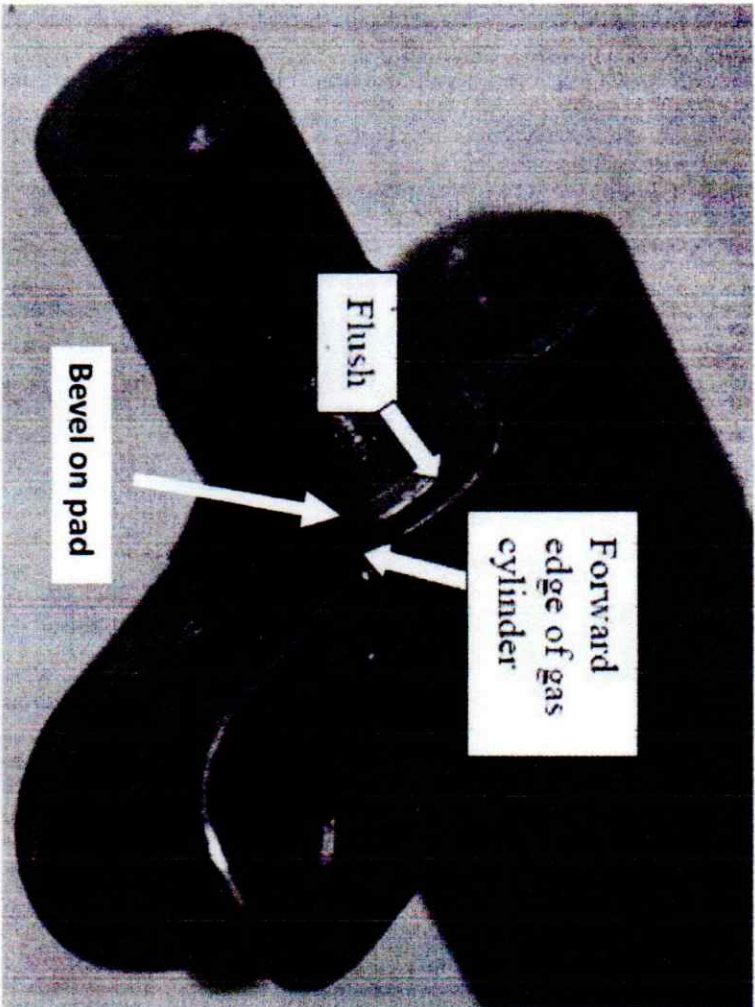
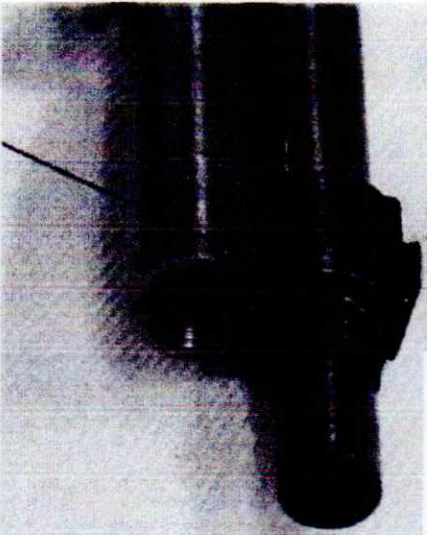
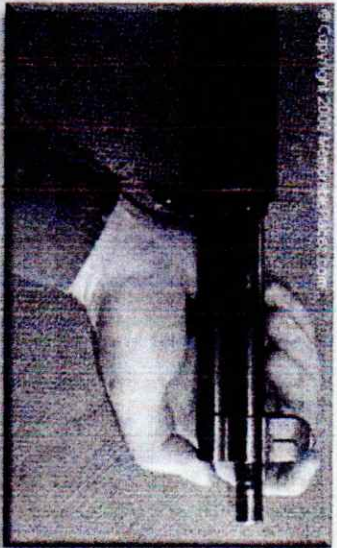


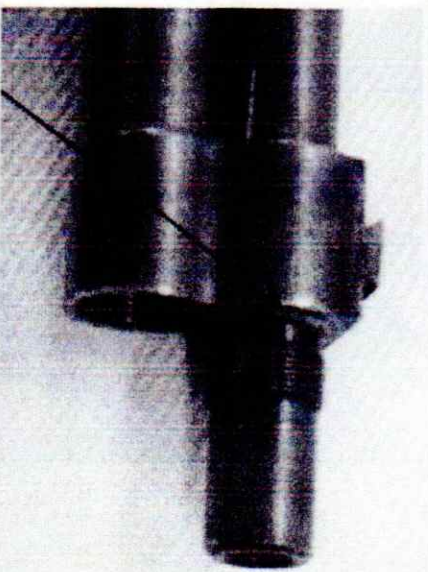
Figure 32. Gas cylinder positioned CORRECTLY

Pictures from  
MI Garand Operation and Maintenance Guide  
for Veteran and Civilian Service Organizations,  
Law Enforcement, and National Cemeteries  
1 June 2013-Change 1  
Prepared by Armament Research, Development, and Engineering Center  
(ARDEC) Picatinny Arsenal, NJ 07806

# Positioning the Gas Cylinder



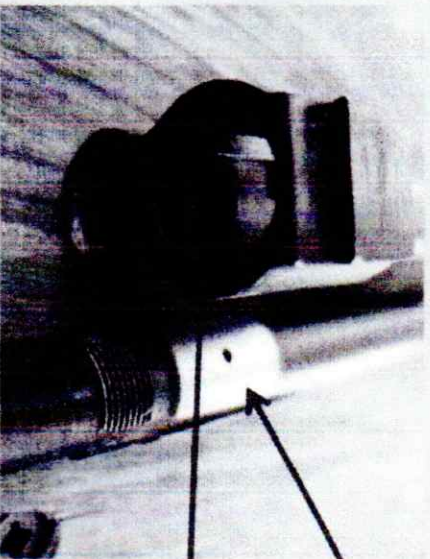
**Too far back!**



**This is correct.**



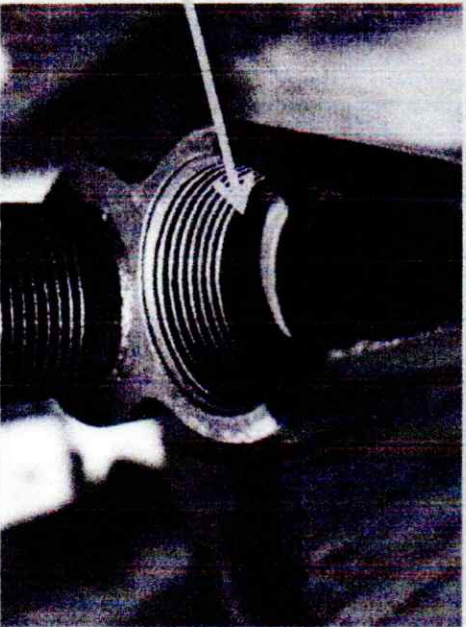
## Hole in Gas Cylinder and Hole in Barrel

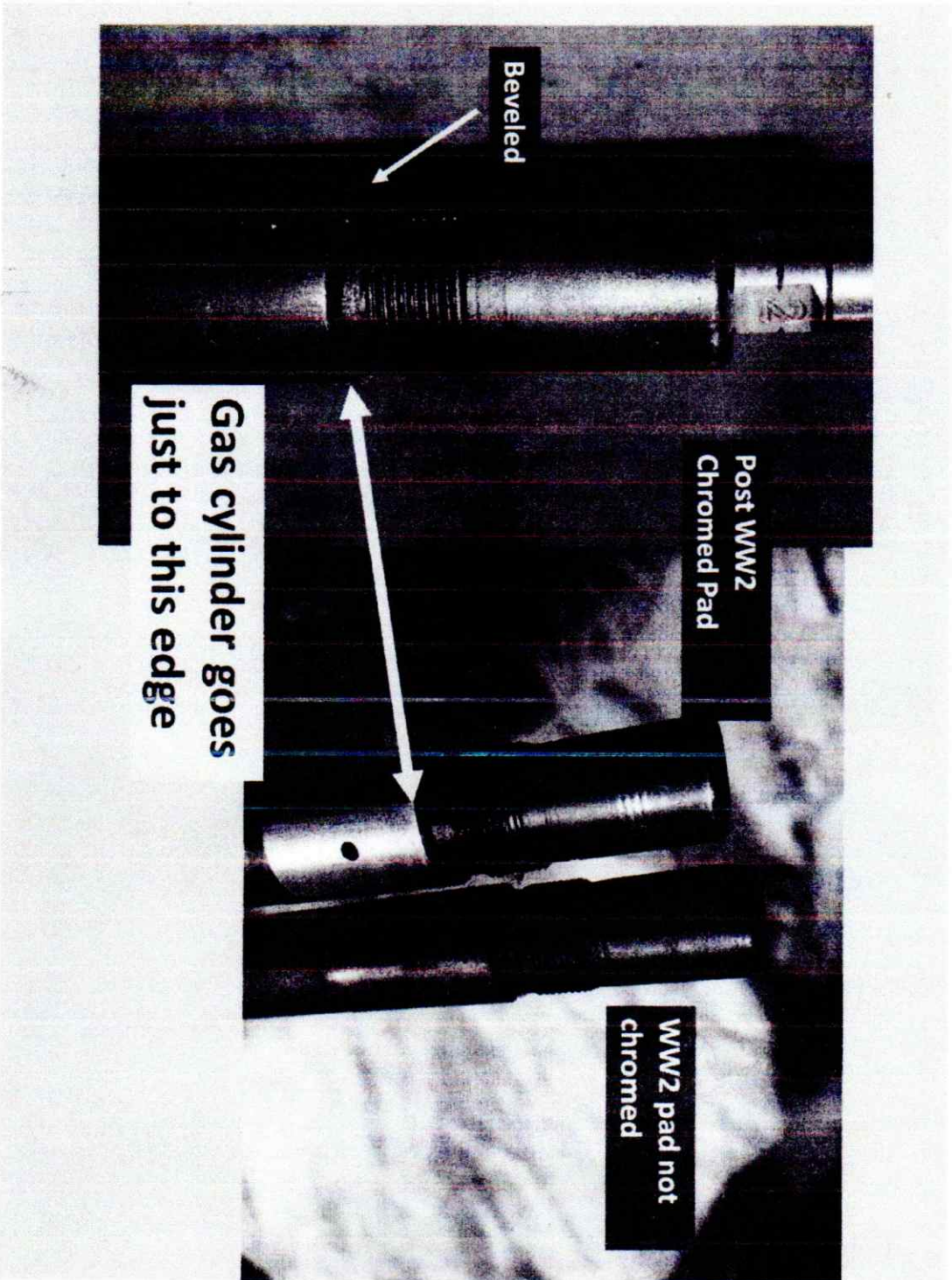


This round hole  
must be centered in

the rectangular  
gas port in cylinder

Proper  
alignment





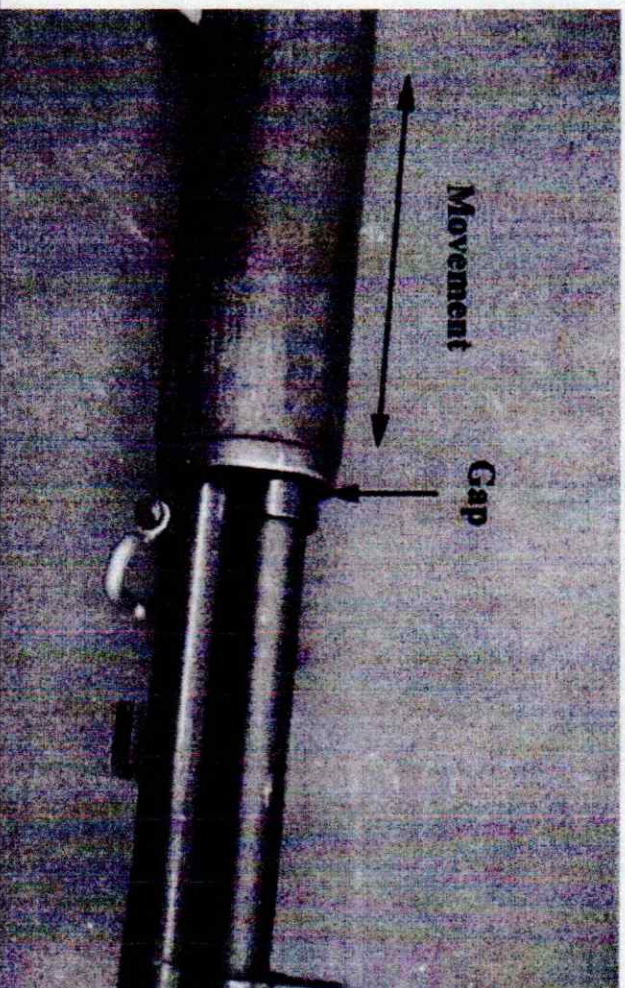
Beveled

Gas cylinder goes just to this edge

Post WW2 Chromed Pad

WW2 pad not chromed

If the gas cylinder and port in the barrel are properly aligned, the front hand guard will (in most cases) be "loose".



If the front handguard is tight, there is a good chance that the cylinder is on too tight and the alignment of the hole in the barrel and the gas port on the Cylinder is incorrect.

# Problem #4: Proper Lubrication and Cleaning

It's not a fancy computer! Any decent synthetic grease will work.



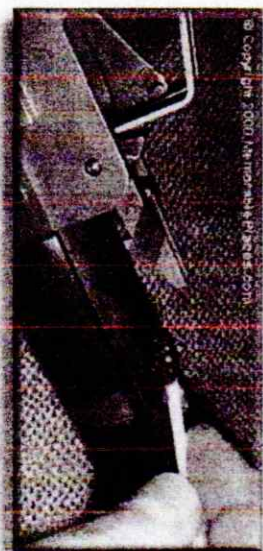
# Lubrication Points Using Plastilube or Other Rifle Grease



**Don't over  
do it!**

Also the channel in the receiver and lip  
of the receiver

# Lubrication Points Using Plastilube or Other Rifle Grease



**Don't over  
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