

HIGH TOWER ARMORY 90/22 TM

Bullpup Stock Kit for the Ruger® 10/22®



ASSEMBLY INSTRUCTIONS AND USER GUIDE

**READ AND UNDERSTAND ALL WARNINGS AND
INSTRUCTIONS BEFORE INSTALLING OR USING THIS
PRODUCT**

This manual should always accompany your HTA 90/22 stock or equipped rifle upon transfer of possession or ownership, or upon lending it to anyone.

If you do not understand anything in this manual, contact High Tower Armory at 763-428-4488 or info@HighTowerArmory.com for an explanation before installing or using this product.

Firearms Safety Rules



WARNING:

FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

1. Treat all guns as though they are loaded at all times.
2. Point the muzzle in a safe direction at all times. (A safe direction is one in which an accidental discharge would cause no human injury, and, at most, minimal property damage.)
3. Keep your finger off the trigger and outside the trigger guard until you are aimed at a safe target and intend to fire.
4. Be sure of your target and what's around and behind it.
5. Whenever you pick up a gun that, even for an instant, has been outside your direct control, begin by opening the gun's action to determine whether or not it is loaded.
6. Unattended guns should be made inaccessible to children and other unauthorized users. The best way to do this is to store the gun under lock and key, with ammunition locked up in a different location.
7. Know the mechanical and operating features and characteristics of any firearm before you load or use it. If in doubt, refer to the owner's manual, or contact the manufacturer or your retail gun dealer for knowledgeable assistance.
8. Never take anyone's word that a gun is unloaded. Check it yourself every time!
9. Always use your gun's safeties, but don't rely on the safeties as a substitute for safe gun handling practices. A gun's safeties, like any other mechanical devices, can fail, or you may be mistaken about the position they are in.
10. Keep your gun unloaded until you are ready to fire. Unload your gun as soon as you have stopped firing. On the range, carry your gun unloaded, with the action open, the safeties engaged, and the muzzle pointed in a safe direction at all times.
11. Never leave a loaded firearm unattended.
12. Always wear adequate hearing protection and eye protection while shooting or observing.
13. Never cross over or under a fence, jump across a stream or ditch, climb a tree, or cross any other obstacle or precarious terrain with a loaded gun. Unload it first!
14. Always be sure that the barrel and action are clear of obstructions before firing. Mud, snow, water, grease, excess oil, or any other obstruction could cause the barrel or cartridge to burst, resulting in damage to the firearm, serious injury or death.
15. Never use alcohol or drugs before or while handling a gun. Guns require your full, undivided, unimpaired attention at all times!
16. Remember: FIREARMS SAFETY DEPENDS ON YOU!



WARNING:

IN ADDITION TO THE ABOVE SAFETY RULES, ALWAYS FOLLOW THE FIREARMS SAFETY RULES IN THE OWNER'S MANUAL PROVIDED BY STURM, RUGER & CO. WITH YOUR RUGER 10/22 RIFLE. IF YOU DO NOT HAVE A COPY OF THE RUGER 10/22 MANUAL, YOU CAN DOWNLOAD A COPY FOR FREE AT WWW.RUGER.COM.



WARNING:

THE HTA™ 90/22™ STOCK MUST NOT BE USED BY LEFT HANDED SHOOTERS BECAUSE SPENT CASINGS AND HOT GASES WILL BE EJECTED INTO THE SHOOTER'S FACE, POSSIBLY CAUSING SERIOUS INJURY.

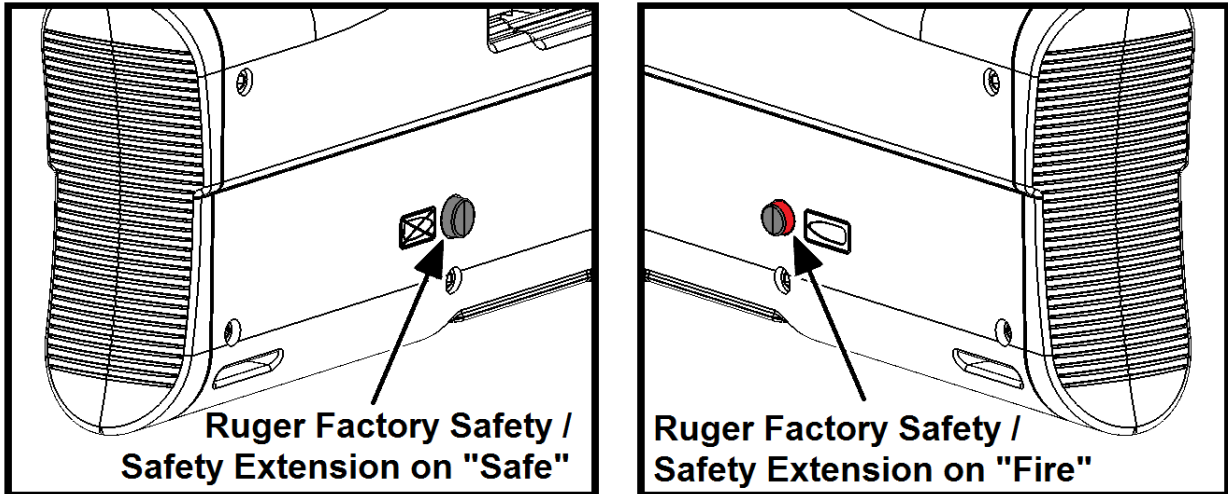


WARNING:

THE HTA 90/22 HAS TWO MANUAL SAFETIES, THE RUGER FACTORY SAFETY, NOW LOCATED IN THE 90/22 BUTTSTOCK AND FITTED WITH THE 90/22 SAFETY EXTENSION (PART D) AND THE 90/22 FRONT TRIGGER SAFETY (PART M). THE HTA 90/22 MAY FIRE IF DROPPED OR STRUCK WITH RUGER FACTORY SAFETY DISENGAGED (REAR SAFETY). KEEP CHAMBER EMPTY UNTIL READY TO FIRE AND UNLOAD CHAMBER AS SOON AS YOU STOP FIRING. KEEP BOTH SAFETIES ENGAGED UNTIL READY TO FIRE AND REENGAGE BOTH SAFETIES AS SOON AS YOU STOP FIRING. SEE FIGURES 1 AND 2 BELOW.

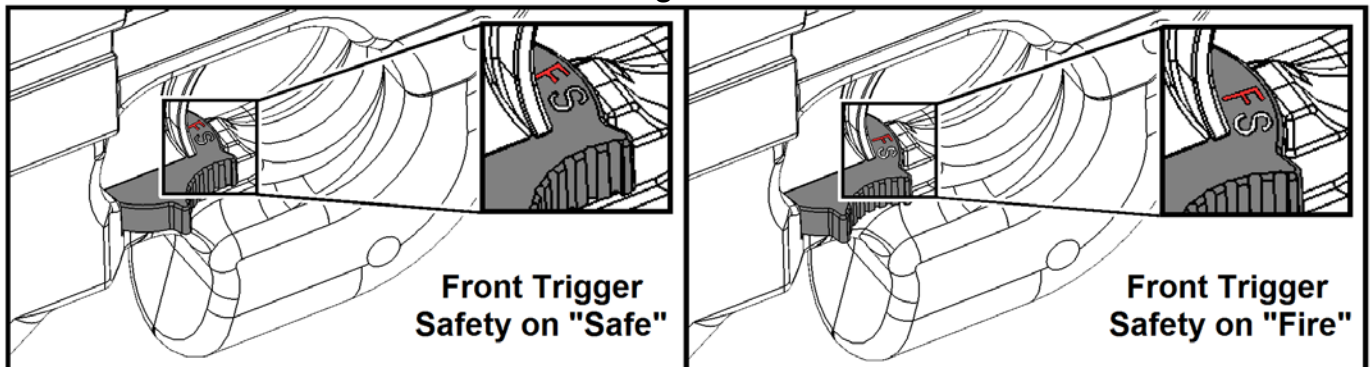
Ruger Factory Safety fitted with Safety Extension (Part D)

Figure 1



Front Trigger Safety (Part M)

Figure 2



WARNING:

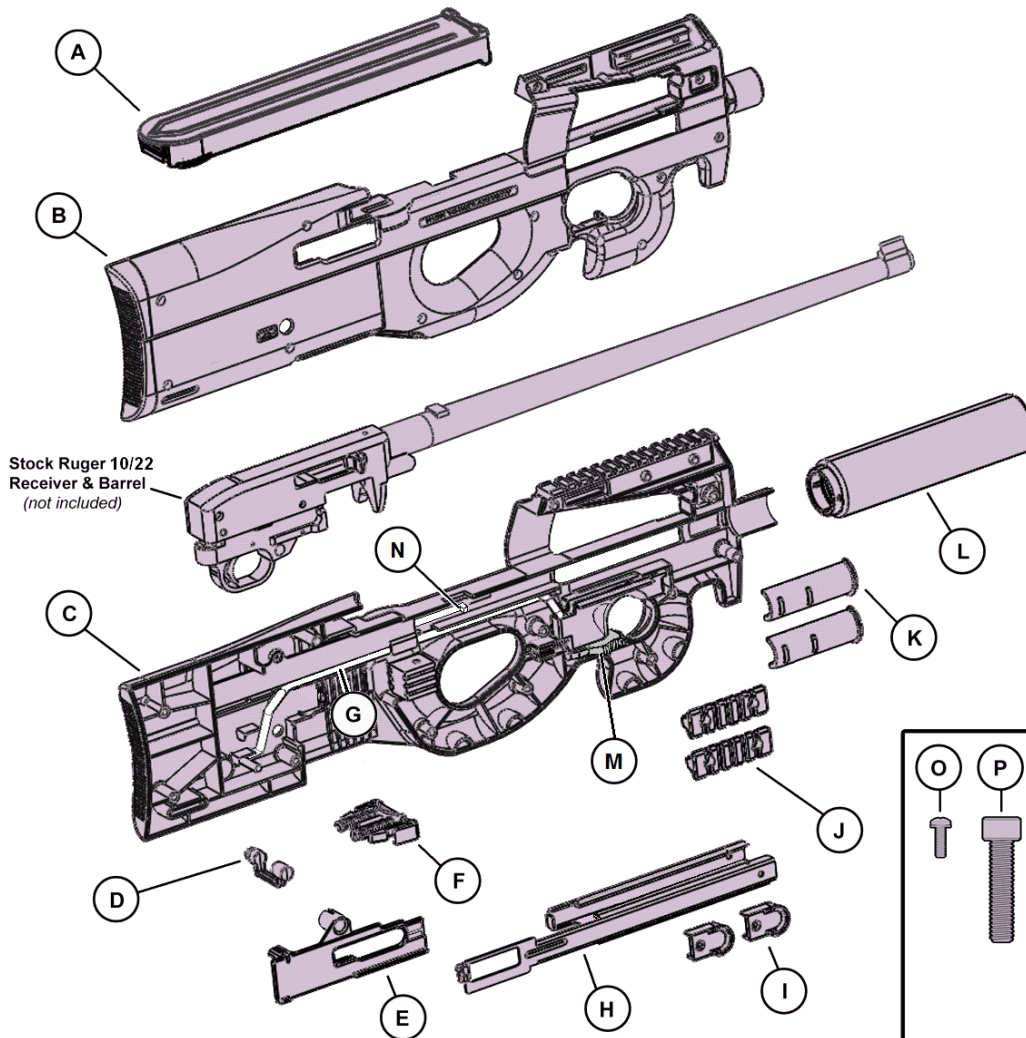
SERIOUS INJURY OR DEATH MAY RESULT FROM:

- USING THIS PRODUCT IN AN UNSAFE MANNER .
- ALTERING THIS PRODUCT IN ANY WAY.
- ATTEMPTING TO OPERATE THIS PRODUCT LEFT HANDED.
- FAILURE TO WEAR PROPER HEARING AND EYE PROTECTION WHILE USING THIS PRODUCT. EYE PROTECTION SHOULD MEET ANSI Z87.1 (1993 STANDARDS)
- FAILURE TO PROPERLY FOLLOW THESE INSTRUCTIONS AND WARNINGS.
- FAILURE TO USE BOTH INCLUDED SAFETIES.
- FAILURE TO FOLLOW THE SAFETY RULES OUTLINED ON THE PREVIOUS PAGE AND THE SAFETY RULES FOUND IN THE RUGER 10/22 MANUAL.

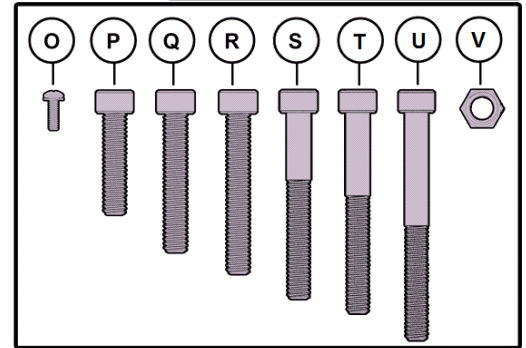
FIGURE 3

MODEL: HTA 90/22

INVENTORY OF PARTS



PRT	NAME	QTY
A	Storage Box	1
B	Right Stock	1
C	Left Stock	1
D	Safety Extension	1
E	Receiver Gaurd	1
F	Storage Box Release	1
G	Trigger Actuating Rod	1
H	Charging Handle	1
I	Charging Handle Grip	2
J	Side Picatinny Rails	2
K	Barrel Bushing	2
L	Dummy Suppressor	1
M	Front Trigger Safety	1
N	CH Operating Rod	1
O	CH Grip Bolt	2
P	3/4\" Bolt	2
Q	1\" Bolt	2
R	1 1/8\" Bolt	4
S	1 3/8\" Bolt	2
T	1 1/2\" Bolt	2
U	1 3/4\" Bolt	2
V	Hex-nut	14



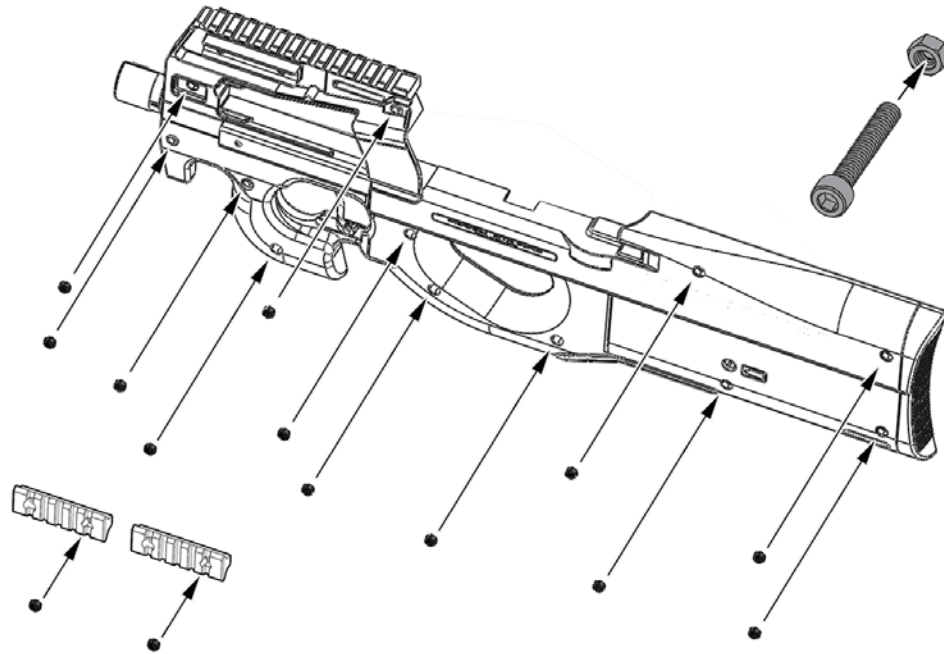
Assembly instructions for the High Tower Armory 90/22 stock

Things you will need for assembly:

- Small Philips screw driver
- Medium slotted screw driver
- Tape measure or measuring stick at least 26 inches in length.

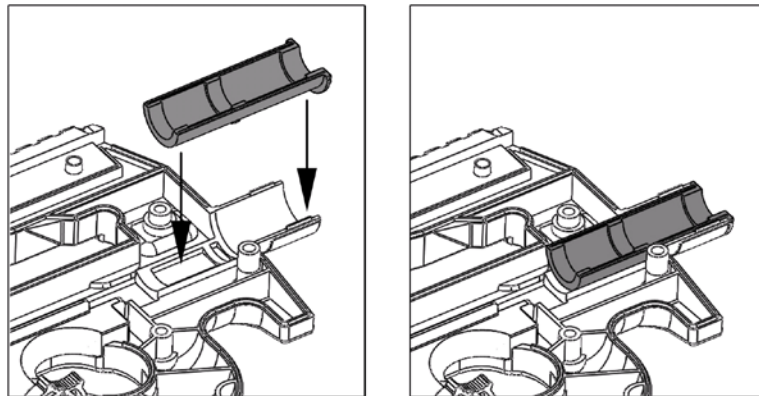
- 1) **IMPORTANT:** Before assembling the HTA 90/22, verify your rifle is unloaded by removing the Ruger 10/22's magazine, opening the bolt, and visually confirming that the chamber is empty. Always use safe firearm handling practices as explained in your Ruger 10/22 owners manual.
- 2) Remove the factory stock and sight rail from the Ruger 10/22® by following instructions found in the Ruger 10/22 manual.
- 3) Press 12 **Hex Nuts (V)** into the hexagonal pockets on the outside of **Left Stock Half (C)**. To press nuts into the pockets, first screw a nut onto the end of a bolt, use the bolt to fully and squarely seat the nut into the pocket, and then unscrew the bolt, leaving the nut captured in place. One nut will go into the hexagonal pocket in each of the **Side Picatinny Rails (J)** as well. See **Figure 4**.

Figure 4



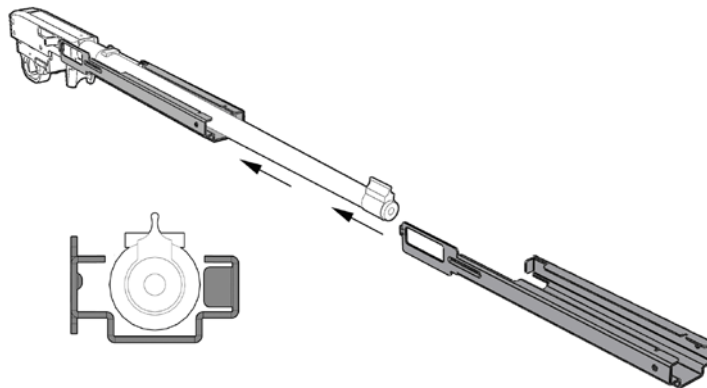
- 4) Once all nuts are installed, place the **Left Stock Half (C)** outside down on a flat surface.
- 5) If you are using a Ruger factory barrel, place one half of the **Barrel Bushing (K)** into the **Left Stock Half (C)**. This bushing is not necessary for .920" bull barrels.

Figure 5



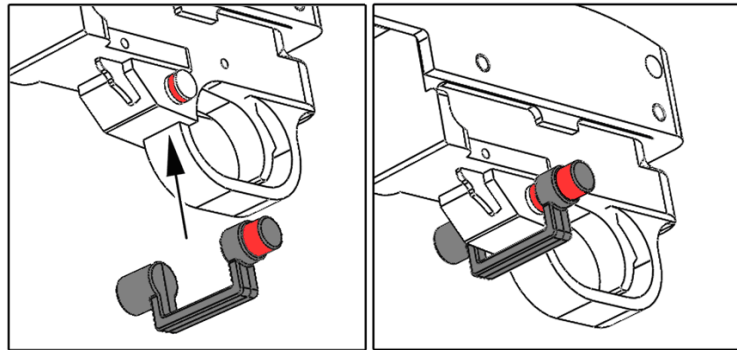
- 6) Carefully position **Charging Handle (H)** around the Ruger 10/22 barrel.

Figure 6



- 7) Slip the **Safety Extension (D)** into position over the factory safety button. The **RED INDICATOR SIDE OF SAFETY EXTENSION (D) MUST AND CAN ONLY BE INSTALLED ON THE SAME SIDE AS THE RUGER 10/22 RED INDICATOR.**

Figure 7



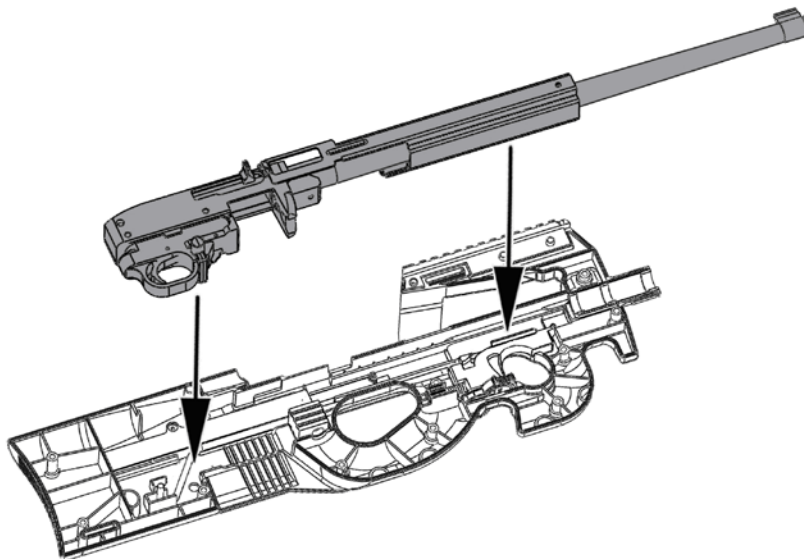
WARNING: The HTA 90/22 is equipped with both a Front Trigger Safety (M) and a Safety Extension (D) for engaging the Ruger factory (rear) safety. The Front Trigger Safety (M) is a necessary additional safety but is **NOT** intended as a substitute for the factory safety, because it does not lock the Ruger 10/22's action. Failure to install and use Safety Extension (D) / Ruger factory safety, **TOGETHER WITH** the Front Trigger Safety (M) may allow the rifle to discharge accidentally, resulting in serious injury or death.



WARNING: If dropped or struck with Safety Extension (D) / Ruger factory safety disengaged, the rifle may discharge, resulting in serious injury or death. Use of "match" triggers, other non-standard or non-factory triggers, or factory triggers which have been altered to lighten the weight of pull, will increase this risk. Keep chamber empty until actually firing and unload chamber as soon as you stop firing. Keep both safeties (Ruger factory safety and Front Trigger Safety) engaged until actually firing and reengage both safeties as soon as you stop firing.

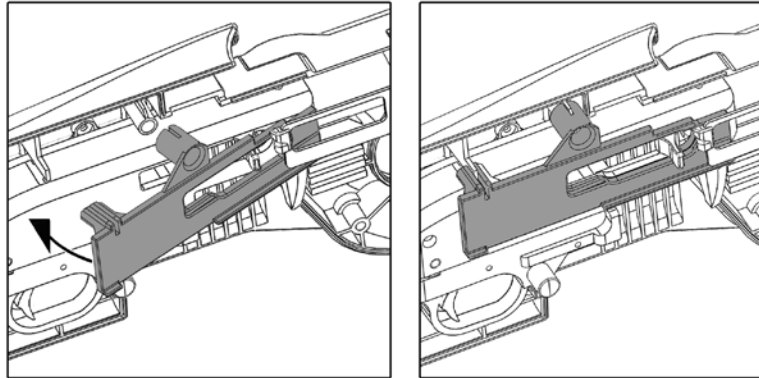
- 8) Lay the Ruger 10/22 and charging handle assembly in the **Left Stock Half (C)**, making sure that the end of the **Trigger Actuating Rod (G)** is inside the 10/22's trigger guard and the **Safety Extension (D)** has aligned with the hole in the **Left Stock Half (C)**.

Figure 8



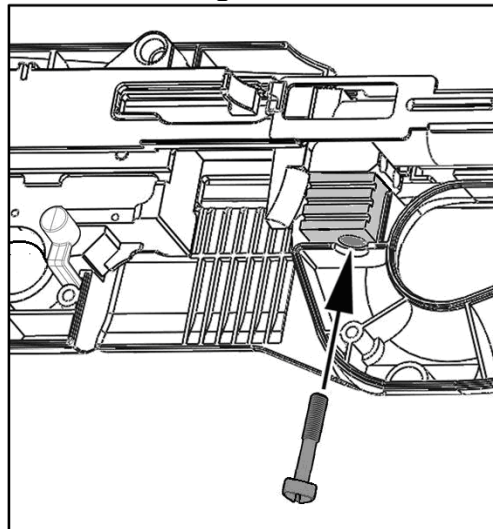
- 9) Slide the **Receiver Guard (E)** between the 10/22 receiver and the **Charging Handle (H)**. This part will key into the **Left Stock Half (C)**.

Figure 9



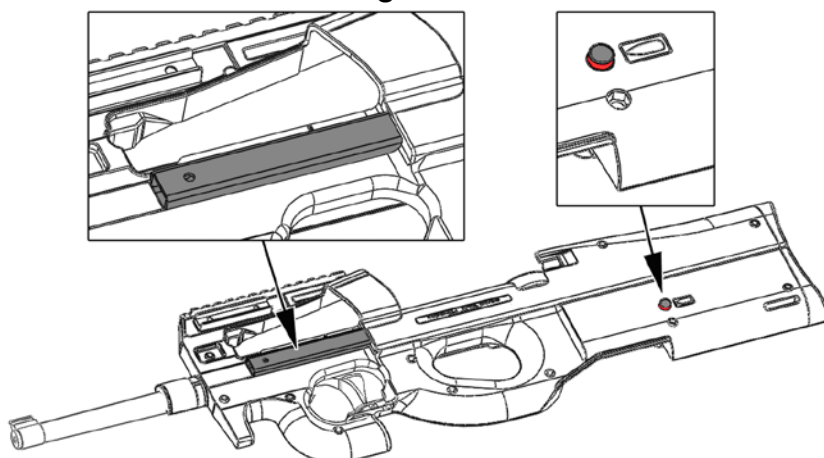
- 10) After sliding the 10/22 as far to the rear in the **Left Stock Half (C)** as possible, tighten the factory 10/22 take down screw through the aluminum bedding block, securing the 10/22 assembly to the **Left Stock Half (C)**.

Figure 10



- 11) Verify that the **Charging Handle (H)** and **Safety Extension (D)** have seated into their correct positions in **Left Stock Half (C)** as shown in **Figure 11**.

Figure 11

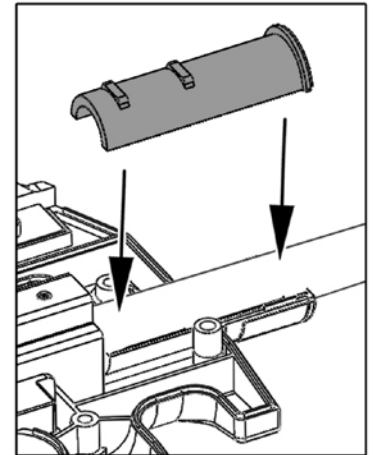




WARNING: It is imperative that the Safety Extension (D) is installed properly as this safety locks the Ruger 10/22 action. Failure to follow this step properly may result in serious injury or death.

- 12) If using a factory 18.5 inch tapered 10/22 barrel, press the second **Barrel Bushing (K)** half over the barrel and onto the first **Barrel Bushing (K)** half. If using a bull barrel, the bushings will not need to be installed. See **Figure 12**.
- 13) Place the **Right Stock Half (B)** over the **Left Stock Half (C)** assembly and tighten the bolts into their designated holes using the provided hex key wrench (see **Figure 13** for bolt placement). **Do not over-tighten bolts or the threading may strip or the nuts may strip out of their position in the Left Stock Half (C).**

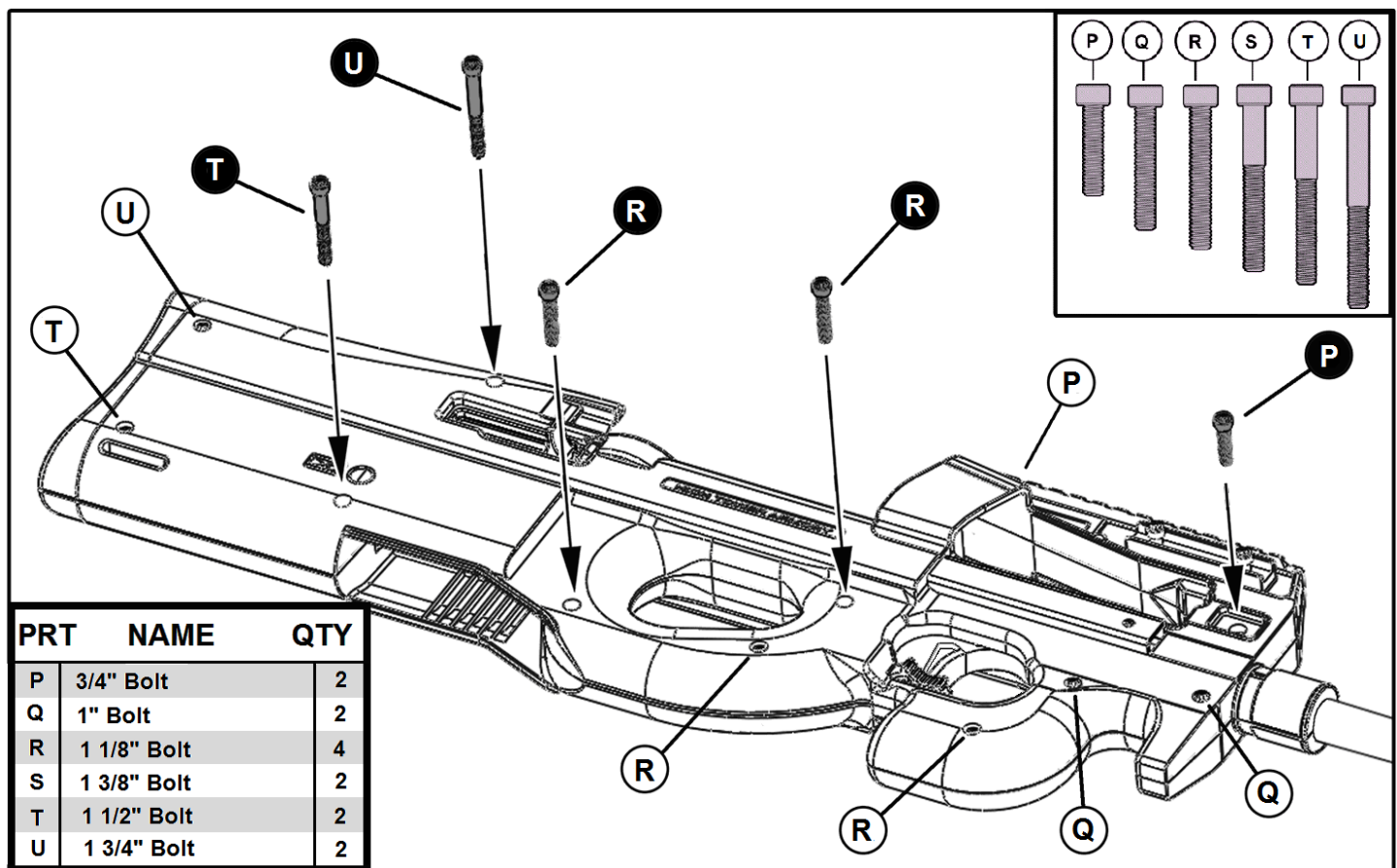
Figure 12



NOTE: The **Front Trigger Safety (M)** must be in the fire position for **Right Stock Half (B)** to install over the **Left Stock Half (C)**.

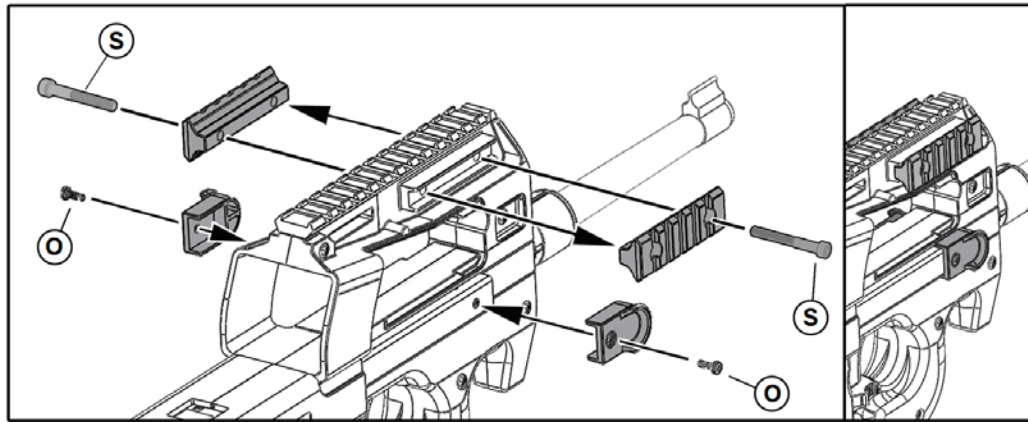
NOTE: Install the 5 bolts marked with a black bubble in **Figure 13** before installing the others. It is recommended a functions check be performed before the remaining bolts are installed. Check functionality of the **Charging Handle (H)** and **Safety Extension (D)**. **DO NOT** use live ammunition with this stock until all bolts have been properly installed and tightened.

Figure 13



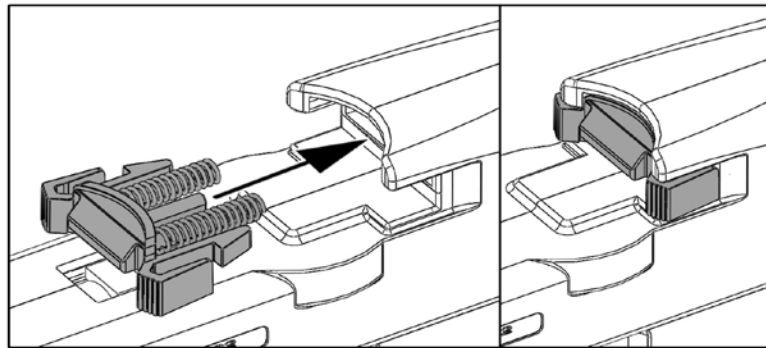
- 14) Install the **Side Sight Rails (J)** and **Charging Handle Grips (I)** and tighten with corresponding bolts as shown in **Figure 14**. **Do not over-tighten bolts.**

Figure 14



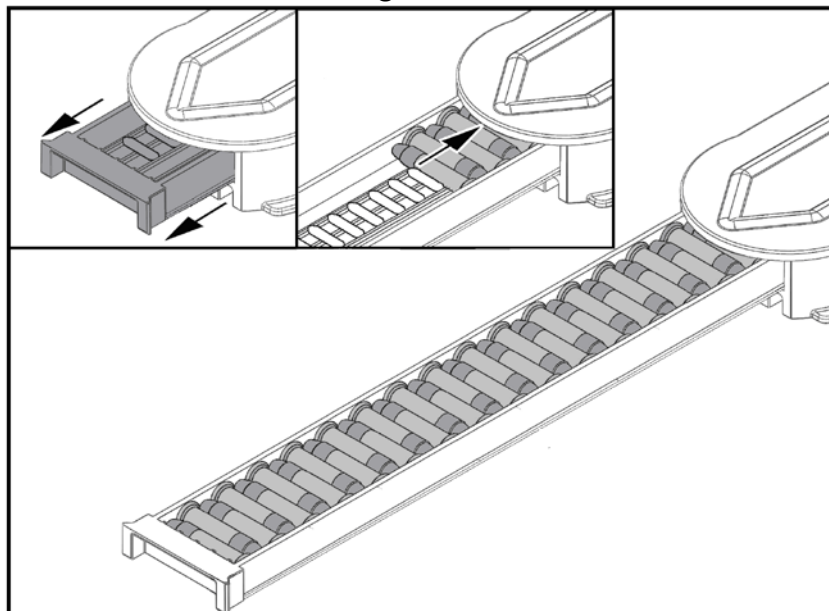
- 15) Insert the **Storage Box Release (F)** into the opening in the top of the stock with the angled surface facing up, as shown in **Figure 15**.

Figure 15



- 16) To load .22 LR rounds into the **Storage Box (A)**, pull outward on the tabs located at the mouth of the **Storage Box (A)**. With the internal tray fully extended, put several rounds in an alternating pattern at the front of the tray as shown in the second inset image in **Figure 16**. Push these rounds forward into the portion of the tray that remains inside the body of **Storage Box (A)**. Repeat until the enclosed portion of the tray is full. Once this front portion of the tray is full, the rest of the tray can be loaded front to back in the same alternating pattern.

Figure 16





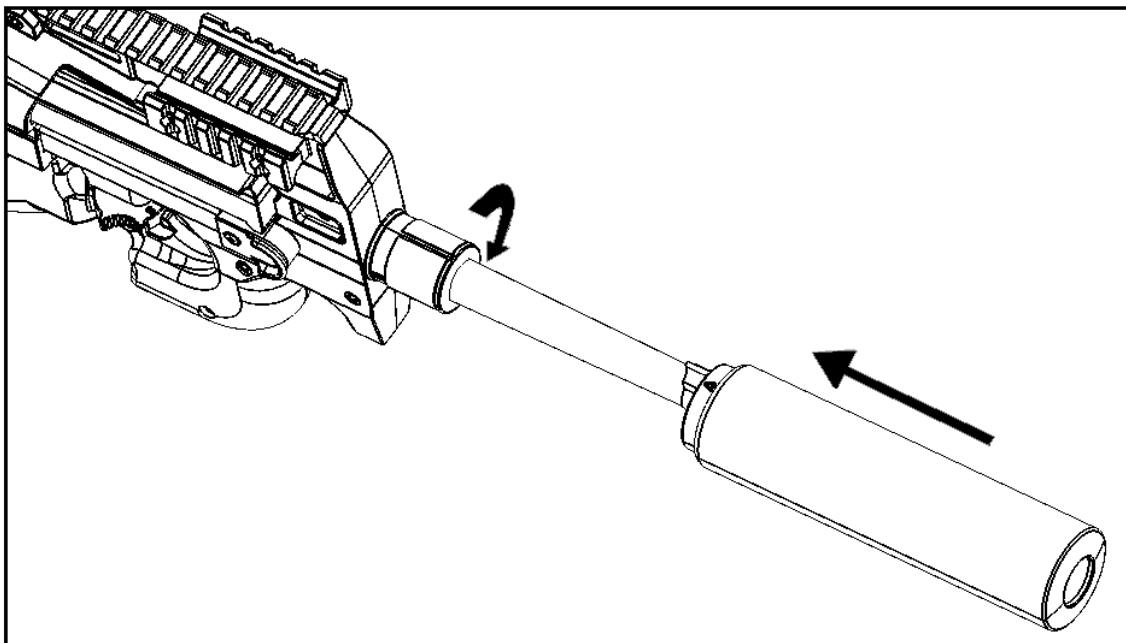
WARNING: Always store your HTA 90/22 unloaded and under lock and key. Store ammunition in a secure location that is remote from the firearm. In addition, it is unlawful in some areas to store and/or transport ammunition and firearms together. Never store or transport the HTA 90/22 with a loaded Storage Box (A) attached, as an unauthorized user who obtains the HTA 90/22 will also have ammunition for it, which could result in serious injury or death. Install a loaded Storage Box (A) only when using the HTA 90/22.

- 17) **IMPORTANT:** Immediately upon assembling your HTA 90/22, you must measure your rifle's overall length to verify that it meets the federally required minimum length of 26 inches. To do this, place the butt of the stock against a flat, hard surface and measure from this surface to the muzzle of the barrel. If your rifle does not reach the 26 inch legal minimum, IMMEDIATELY disassemble your rifle and reinstall it in the factory stock. Please visit our website, www.HighTowerArmory.com, for more information. Know your local laws. Some jurisdictions may require minimums longer than 26 inches. Any legal violations resulting from failure to check the overall length of your rifle are not the responsibility of High Tower Armory, LLC.

- 18) Install **Dummy Suppressor (L)** by aligning indicators on **Dummy Suppressor (L)** with the channels on the front of the HTA 90/22 and sliding the suppressor over the front of the stock. Once slid completely over the end of the stock, give the suppressor a quarter turn to lock.

NOTE: The dummy suppressor included in this kit does NOT count toward overall length because it is not permanently affixed. Similarly, removable muzzle devices like compensators and flash hidere do not count toward overall length unless they are permanently attached in a manner that satisfies federal law.

Figure 17



- 19) If you have any problems, questions, or issues while assembling your new HTA 90/22 please visit our website, www.HighTowerArmory.com to watch an instructional video, email your question to info@HighTowerArmory.com, call us at 763-428-4488 or consult a competent gunsmith for assistance before loading or using your HTA 90/22.

To disassemble the HTA 90/22:

- 1) **IMPORTANT: Before disassembling the HTA 90/22, verify your rifle is unloaded by removing the Ruger 10/22's magazine, opening the bolt, and visually confirming that the chamber is clear. Always use safe firearm handling practices as explained in your Ruger 10/22 owners manual.**
- 2) Remove the **Storage Box (A)** and **Dummy Suppressor (L)**.
- 3) Remove bolts with heads on the left side of stock first. This includes the bolts in the left **Side Picatinny Rail (J)** as well as the left **Charging Handle Grip Screw (O)**.

NOTE: Some **Hex Nuts (V)** can work themselves free from their pockets during disassembly. Disassemble the HTA 90/22 on a clean, flat surface to help avoid losing hardware.
- 4) Remove remaining bolts with heads in the **Right Stock Half (B)**.

NOTE: Most optics on the primary rail will not require being removed for disassembly of the stock. Accessories on the **Side Picatinny Rails (J)**, however, may need to be removed for disassembly.
- 5) You should now be able to remove the **Right Stock Half (B)**.

NOTE: It may be necessary to pull back slightly on the **Charging Handle (H)** to remove the **Right Stock Half (B)**.
- 6) Be sure to remove the takedown screw from the aluminum receiver bedding block before attempting to remove the Ruger 10/22 from **Left Stock Half (C)**.

Caring For Your HTA 90/22:

- 1) Keep the **Charging Handle (H)** and **Trigger Actuating Rod (G)** lightly oiled to improve function and protect against corrosion. If you experience excessive drag on the **Charging Handle (H)** or **Trigger Actuating Rod (G)**, apply a heavier lubricating grease or oil.
- 2) Periodically oil the **Charging Handle Operating Rod (N)** to ensure smooth, reliable function.
- 3) Do not over oil parts. A light film is sufficient and will help prevent dirt and residue build-up.

This product was made with pride in the USA!

Thank you for your purchase!

HTA Limited Lifetime Warranty:

High Tower Armory, LLC offers a limited lifetime warranty for this product against all material and workmanship defects. HTA will repair or replace this product for as long as you own it, provided:

- You are the original purchaser of this product with copy of invoice/receipt
- The issue was not caused by abuse or misuse
- The product has not been altered in any way

If you discover a defect, **IMMEDIATELY** unload and stop using your HTA 90/22. Then please visit our website, www.HighTowerArmory.com, for complete details regarding how to submit a warranty claim.

This unit was inspected by _____

High Tower Armory, LLC
P.O. Box 3 Rogers, MN 55374
www.HighTowerArmory.com
763-428-4488

Printed in the USA
Copyright 2013

"Ruger" and "10/22" are registered trademarks of Sturm, Ruger & Co.

