




**GREY
BIRCH**
RIFLE GUIDE



Congratulations on the purchase of your Grey Birch Rifle.

You have just invested in an heirloom product that will last for generations if properly maintained.

The purpose of this guide is to provide instructions to assemble & disassemble your rifle so you can self maintain it.

Please read these instructions prior to the use of your rifle.



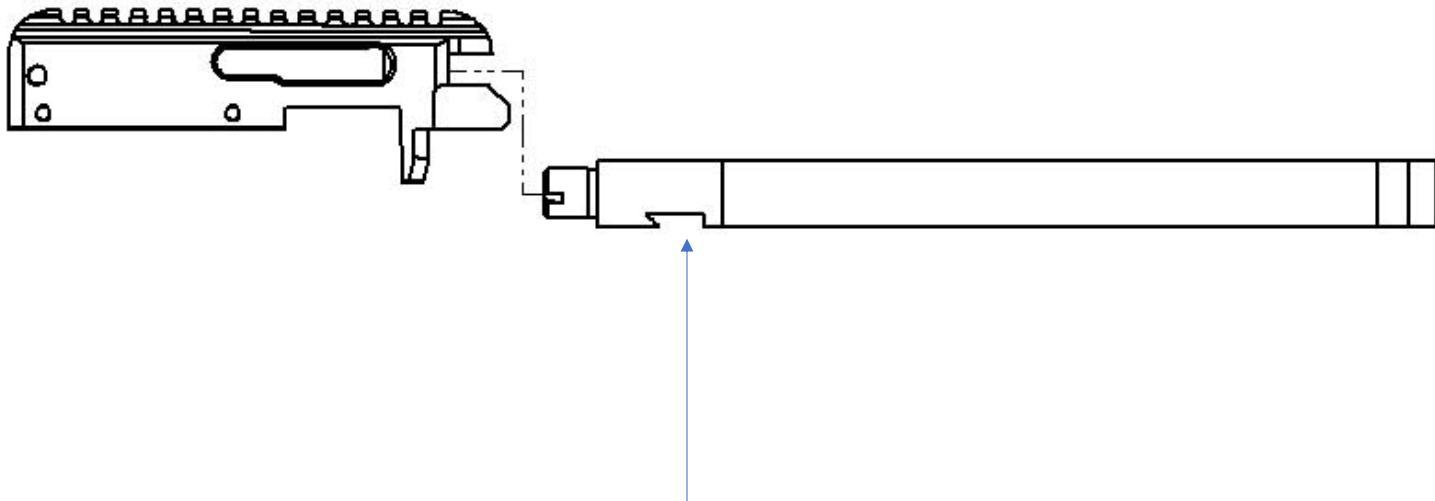
FIREARMS SAFETY IS IMPORTANT:

Please follow these guidelines when using your Grey Birch Rifle:

- Assume every firearm is loaded.
- Control the muzzle direction at all times. Do not point it at anything you do not intend to shoot.
- Remove the magazine from the firearm.
- Observe the chamber to ensure it is empty and lock back the bolt if possible.
- Now that your firearm has been proved safe, you can begin the disassembly of your rifle.



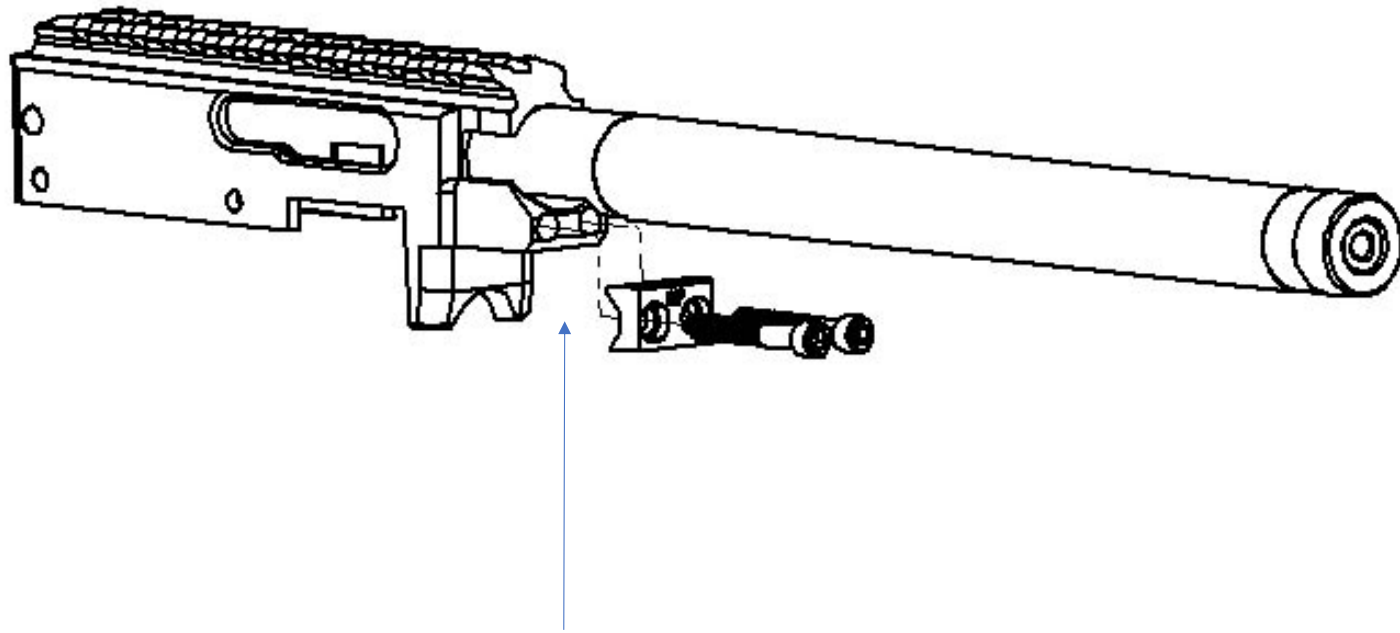
INSTALLING THE BARREL



Put the barrel into the receiver with the dove tail cut facing down. This is the interface for the V Block to hold the barrel into the receiver.



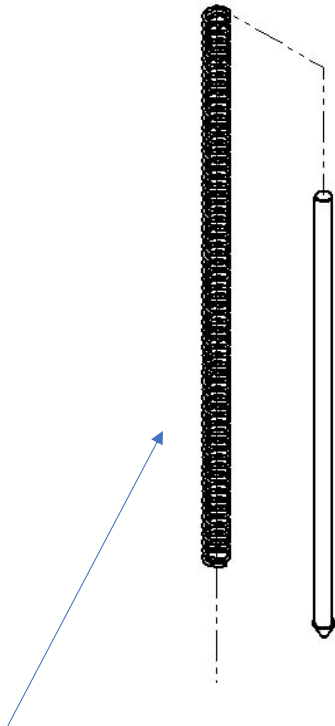
INSTALLING THE V BLOCK



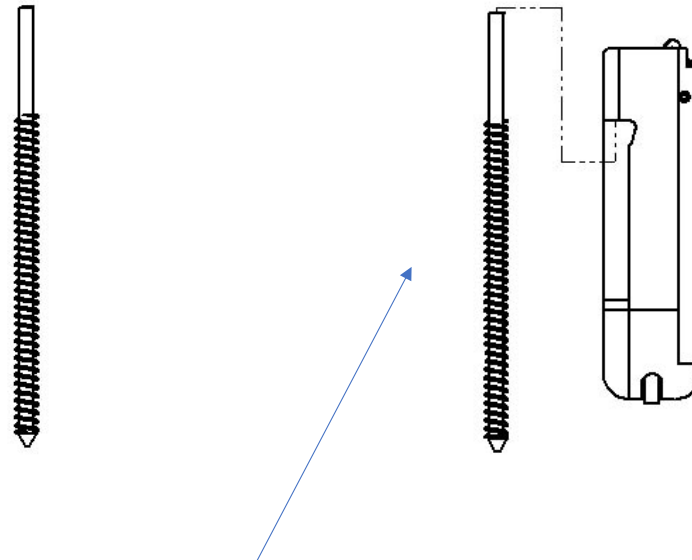
The v block is fastened to the receiver using two bolts. Place the v block onto the receiver over the barrel dove tail. The v block should sit labelled “this side up” at the top. Start to screw the bolts in with your fingers until they are hand tight. To finish the install, use a 5/32” hex bit to torque the bolts to approx. 15 in/lb.



INSTALLING BOLT ASSEMBLY (PART 1)



Slide the return spring over the return rod.

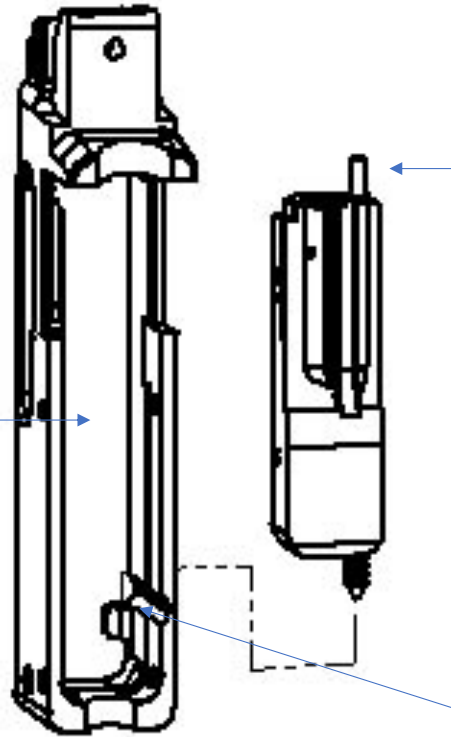


Push the rod into the bolt. This will compress the return spring. Pinch the top of the return rod protruding from the top of the bolt. This will keep the assembly together while installing the bolt into the receiver.



INSTALLING THE BOLT ASSEMBLY (PART 2)

Prior to installing the bolt, lightly lubricate the roof of the receiver.

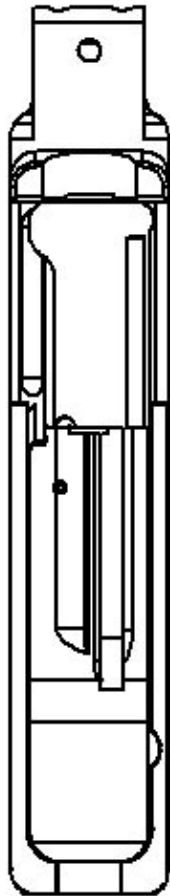


It is helpful during the installation of the bolt to hold the rod here with one hand. This will give you control of the bolt, while keeping the rod and spring assembly attached to the bolt assembly.

Place the rear of the bolt assembly into the receiver. The tip of the return rod rests in the pocket inside the rear of the receiver. Once the tip of the rod is set in the pocket, lay the bolt down flat into the receiver.



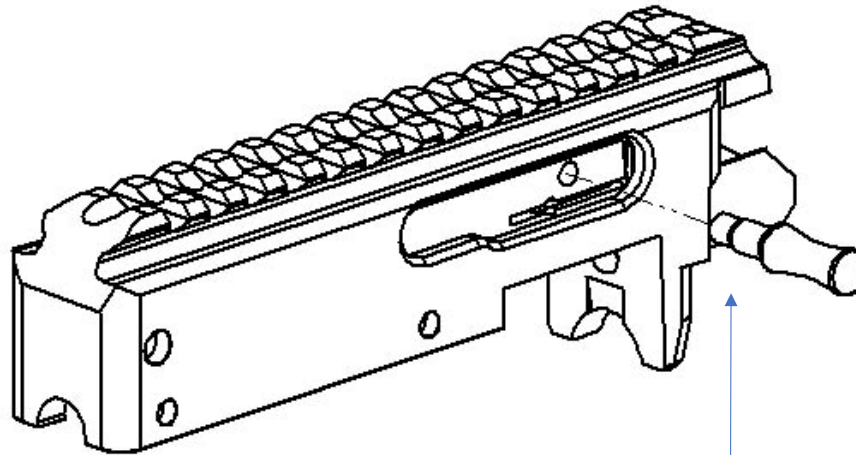
INSTALLING THE BOLT ASSEMBLY (PART 3)



With the bolt assembly laying flat in the receiver, gently allow the bolt assembly to slide forward into place. Ensure the Bolt extractor is centered in the extractor slot on the barrel.



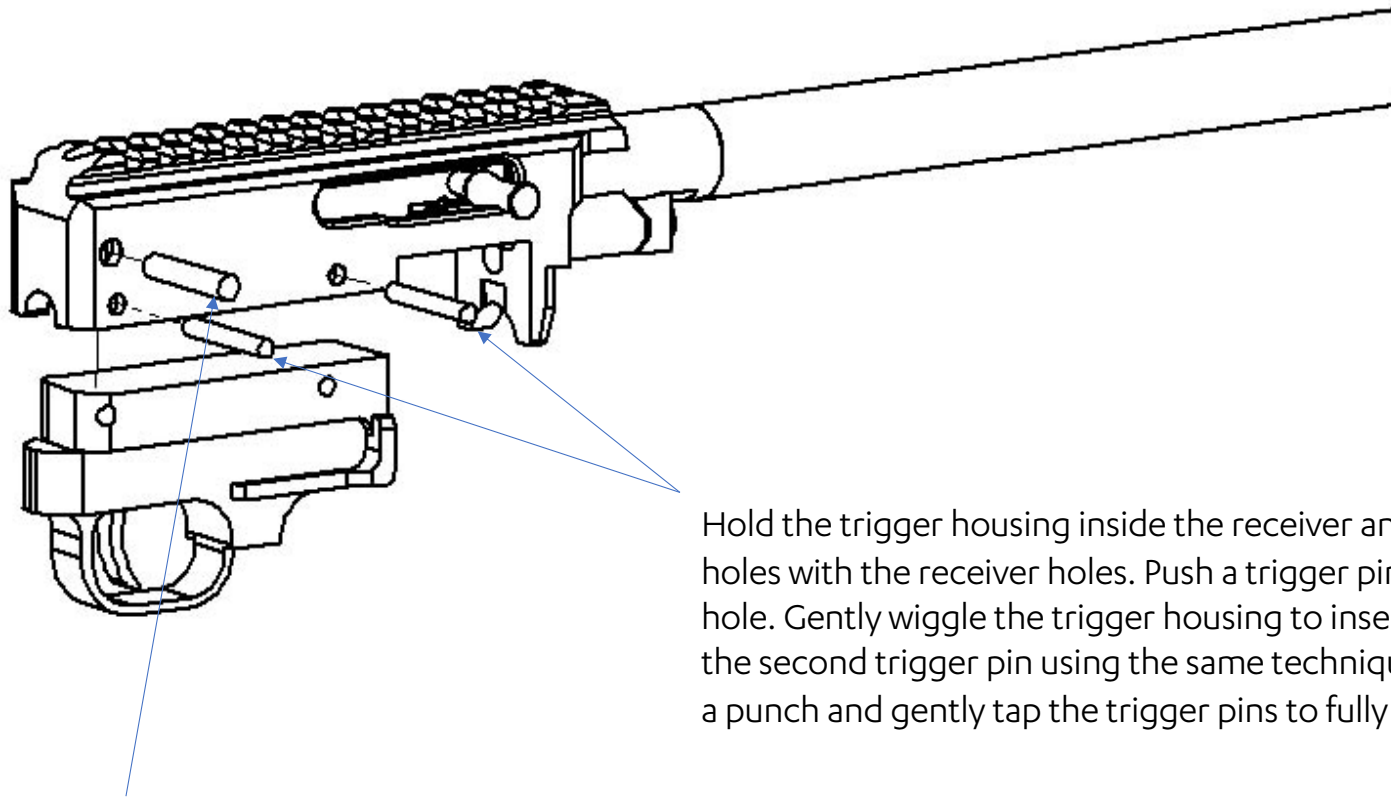
INSTALLING THE BOLT ASSEMBLY (PART 4)



Once the bolt assembly is installed, flip the receiver right side up. The charging handle will have loctite from the factory. When reinstalling the charging handle, ensure that some loctite still remains on the charging handle. If no loctite remains, place a small amount on the threads prior to threading the charging handle into the bolt assembly. Failure to do so could result in the charging handle to become loose during shooting. Thread the charging handle into the bolt hand tight.



INSTALLING THE TRIGGER HOUSING

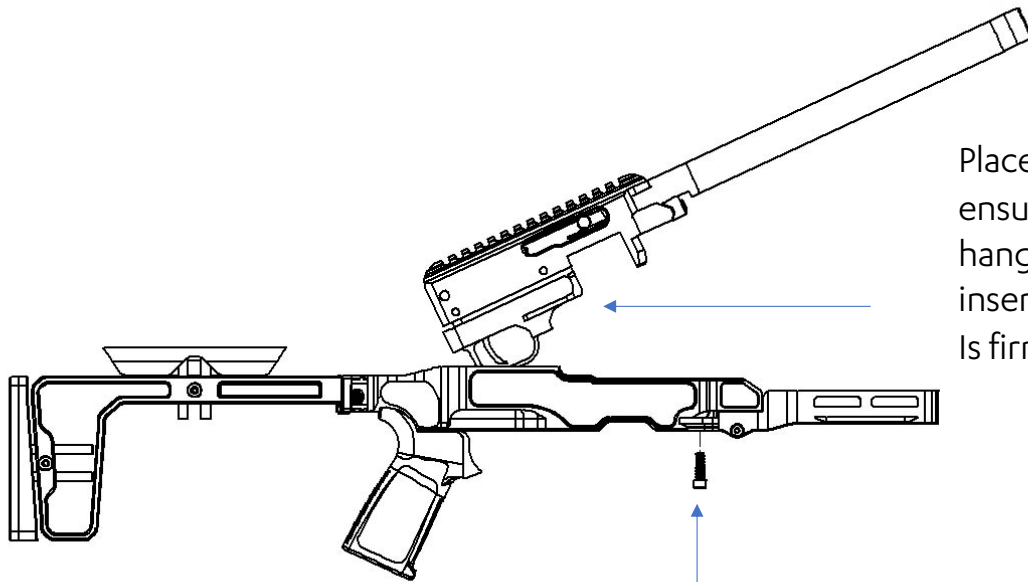


Hold the trigger housing inside the receiver and line up the trigger pin holes with the receiver holes. Push a trigger pin through the trigger pin hole. Gently wiggle the trigger housing to insert the pin fully. Insert the second trigger pin using the same technique. You may need to use a punch and gently tap the trigger pins to fully insert them.

Once the bolt is installed, slide the buffer in the buffer hole. You may need a punch to tap it in place.



INSTALLING THE BARRELED ACTION INTO YOUR STOCK



Place the rear of the receiver into the stock, sliding the trigger in first. ensure the safety button is centered in the trigger housing as it may hang up the trigger group seating in the stock. Once the trigger is inserted, gently drop the barrel down into the stock. Once the action is firmly seated, tighten the action screw.

Using a T25 key, tighten the action screw to approx. 20-25 in/lb.



For a full disassembly, complete the assembly steps in reverse.



BARREL INFORMATION

Rimfire barrels do not typically require a break in. They also require a lot less cleaning compared to centerfire barrels. Some like to leave a wax buildup in the barrel from use with higher quality ammunition. Everyone has a personal preference and the below are recommendations only for best results.

We recommend the following to get the most out of your Grey Birch Carbon Fiber Barrel:

- Accumulated powder fouling buildup that forms on the breech end of the barrel, over time may cause extraction problems. It is recommended to use barrel solvent when needed to clean this type of fouling.
- Every 300-400 rounds, use a 22 LR bronze brush, wet with solvent and work the brush back and forth with short strokes and withdraw from the breech end. If there is any evidence of lead in the barrel, it is recommended brushing the full length of the barrel with solvent to clean the fouling.
- Do not allow cleaning solvents to remain in contact with the carbon fiber exterior of your barrel. To clean the exterior, wipe it down with water or automotive wax as soon as possible. Leaving cleaning solvents on your barrel could damage the carbon fiber.
- Do not allow your carbon fiber barrel to come into contact with acetones, excessive heat, fire or jealous friends.



Additional Resources:

Ballistics by the Inch - <http://ballisticsbytheinch.com/22.html>

The Ultimate Optics Guide to Rifle Shooting by our friend Reg Wales -
<https://vortexoptics.com/the-ultimate-optics-guide-to-rifle-shooting.html>

We have achieved our best accuracy results using the following ammunition:

- RWS R50
- Eley Tenex Biathlon
- RWS Club Sport
- CCI Subsonic

For additional support please visit www.greybirchsolutions.com/support