# Kinetic Research Group, LLC www.KRG-OPS.com Bolt Lift for Remington™ 700 rifles

US Patent # 642652

Thank you for purchasing this exciting product from KRG. We trust that it will provide years of trouble free performance and enhance your shooting experience. Careful consideration was given to design and material/finish selection. We are confident that the Bolt Lift will be a valuable addition to your rifle.

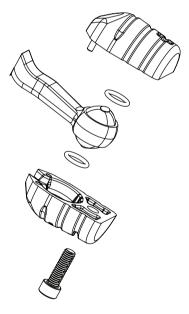
#### **Contents of Kit:**

- Bolt Lift half, top and bottom (very high strength reinforced polymer with stainless steel threaded insert)
- 2 ea. Reinforcing Pins (hardened stainless steel)
- 2 or 3 sets of two circular spacers (weather and solvent resistant)
- 10-32 x 5/8" socket head cap screw (blackened stainless steel)
- Epoxy is no longer included with the kit because few used it.

**Safety Warning:** Before you attempt any installation, make sure your rifle is unloaded. Before starting, remove the bolt from the rifle.

### **Installation Instructions:**

(Note: A more fully illustrated version of these instructions, along with a video, will eventually be posted on the website) **Installation of Bolt Lift using spacers. Refer to Diagram 1 below for all steps:** 



- **Step 1:** Place one spacer onto the top checkered part of the factory bolt handle. The handle is not circular, but the spacer will conform to it. Place the top half of the Bolt Lift onto the factory bolt handle, over the spacer. The top half is the half with the threaded insert, and the small rectangular window for the insert.
- **Step 2:** While holding the top half of the Bolt Lift on, flip the bolt handle over and place the second spacer onto the bottom checkered part of the factory bolt handle.
- **Step 3:** Place the bottom half of the Bolt Lift onto the bolt handle, over the spacer, taking care to line up the reinforcing pins with their corresponding holes.
- **Step 4:** Squeeze the two halves of the Bolt Lift together, then insert the screw through the bottom half and tighten to draw the two halves together. This does not require large amounts of torque, so be careful not to strip the threaded insert out of the top half.

#### Notes:

- There have been large variations in the size of the factory bolt handles over the years. To deal with this, we have included several sizes of spacers to take up more or less room around the bolt handle. Even with the tightest fit, you may notice a small amount of play in the Bolt Lift. We recommend epoxy bedding the Bolt Lift onto the factory bolt handle for those that are allowed to do so (those instructions below).
- If you find that the size of your factory bolt handle does not work with the provided spacers, you can either epoxy bed the Bolt Lift or try some various sized o-rings found at your local hardware store. While these o-rings may not be as weather or solvent resistant as the ones provided, they will likely work for quite some time. Please let us know if you have found a size that suits your needs and we may add it to later Bolt Lift kits.
- If you find that your factory bolt handle is too big for the Bolt Lift, you can remove some material with a file or Dremel from the cavities of the Bolt Lift. Usually the interference occurs around the perimeter of the factory bolt handle (not the checkered part).

# Installation of Bolt Lift using epoxy bedding method:

**Note:** There are two ways to do the installation, permanent and removable. The step-by-step instructions will cover the removable method. To permanently install the knob, simply slather your favorite epoxy all over the CLEANED factory bolt handle and the insides of the Bolt Lift halves, then clamp the halves together, and insert the screw to keep the halves clamped until the epoxy cures.

- **Step 1:** Clean the factory bolt handle and then apply a layer of shoe polish to the bolt handle, this is used as a release agent to ensure that no epoxy sticks to your metal knob (other release agents may work as well). Make sure the factory bolt handle is completely covered. This is similar to epoxy bedding a rifle; you want the epoxy to stick to the halves of the Bolt Lift but not the metal factory bolt handle. It helps to lay out some cotton swabs and acetone to clean up any errant epoxy.
- **Step 2:** Mix epoxy and put a small amount in the large oval cavity in the top half of the Bolt Lift. We recommend only mixing a small amount of epoxy at a time, so that later you can add more if you don't have a secure fit. The goal here is to take up the remaining space in the cavity around the factory bolt handle without the epoxy contacting the bottom half of the Bolt Lift. Do not put any epoxy in the other cavities if you want to remove your Bolt Lift at a later time.
- **Step 3:** Place the top half of the Bolt lift onto the top of the factory bolt handle. If any epoxy squeezes out, clean it up with the cotton swabs to ensure that it cannot bond with the bottom half of the Bolt Lift.
- **Step 4:** Repeat step 2 for the bottom half of the Bolt Lift.
- **Step 5:** Press the two halves of the Bolt Lift together and insert and tighten the screw to lock the two halves together. Let the epoxy cure, then you can pry the halves apart using pressure near the reinforcing pins.

## **Notes:**

- Alternatively, you can place epoxy in the top half of the Bolt Lift, clamp the two halves together over the factory bolt handle until the epoxy sets, then later repeat the process with epoxy in the bottom half. This may help ensure your Bolt Lift isn't permanently epoxied to the factory bolt handle. If you are not under a tight timeline, this is the approach that we recommend for best results. It is easier to ensure that the epoxy fills the gaps, without worrying about permanently locking the two halves together.
- -There is a slot in the bottom half of the Bolt Lift, through the screw counterbore. This slot is so that you can get a drilled head screw and run safety wire through the head of the screw and around the Bolt Lift, to prevent the screw from loosening, similar to how motorcycle racers safety wire their bolts and handgrips. Some shimming of the screw may be required to properly time the wire holes in the screw head with the slot. We will try to provide a peel washer for this purpose at some point in the future.