

# AK TRIGGER

ENHANCED / ULTIMATE WITH LIGHTNING BOW®

## INSTALLATION INSTRUCTIONS

### READ THIS FIRST

Firearm safety is **YOUR** responsibility. You must memorize and put into practice the 4 Rules of Firearm Safety:

1. **ASSUME EVERY WEAPON IS LOADED.**
2. **KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOU ARE READY TO SHOOT.**
3. **DO NOT LET THE MUZZLE POINT AT ANYTHING YOU ARE NOT WILLING TO DESTROY.**
4. **KNOW YOUR TARGET AND WHAT IS BEYOND.**

All ALG AKT variants are a single stage trigger designed for the AK47 and AK74 variant platforms. The AKT-EL features a smoother and shorter trigger pull than the stock trigger and is ideal for combat and home defense use. It is machined from gun quality alloy steel and has a corrosion resistant Manganese Phosphate finish. The ultimate model (AKT-UL) has a shorter pull and a crisper reset than the enhanced model.

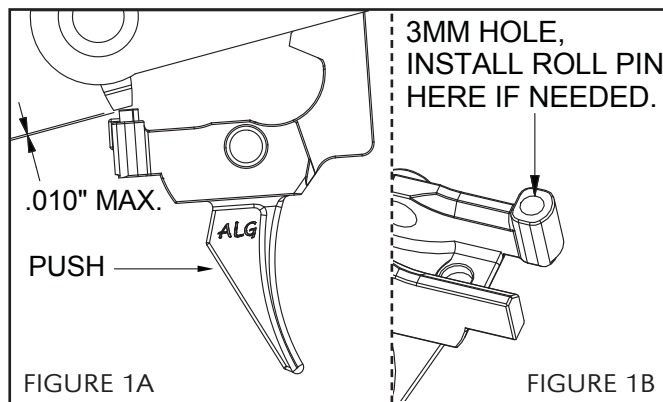
The AKT-EL and AKT-UL feature the Lightning Bow®, which produces a very comfortable feel to the user over the stock trigger, while enhancing trigger control. For OEMs and builders, the ALG AK triggers lend three parts towards 922(r) Compliance.

The AKT-EL and AKT-UL will lighten the trigger pull relative to a stock trigger, which will make the firearm easier to discharge. You must recognize and accept this fact before installing this trigger. If you do not want a lighter than stock trigger pull or are not willing to accept responsibility for the safety of your firearm, yourself, and those around you, do not install this trigger.

ALG Defense recommends installation by a certified gunsmith only.

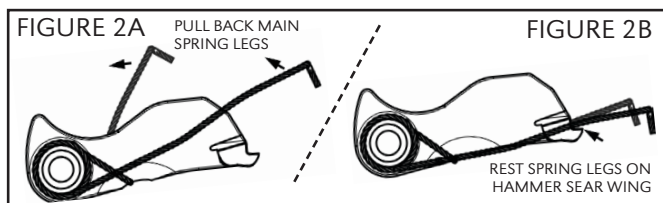
## INSTALLATION INSTRUCTIONS

1. Unload rifle and make safe.
2. Remove the safety selector.
3. Remove existing trigger group and clean receiver.
4. **SAFETY FITTING:** Pre-install the trigger without the disconnecter into rifle. Align trigger pin hole with receiver pin hole. Insert trigger pin into the receiver through the trigger and continue to push out through the other side of the receiver. Check that the trigger rotates freely on the trigger pin and does not interfere with the disconnecter stop rivet or the cut out on the bottom of receiver.
5. Due to the different models and platforms of AKs, the travel of the trigger to the safety stop varies greatly. No more than .010" clearance should be measured between the trigger and safety with the safety selector in the safe position (*See FIGURE 1A*).

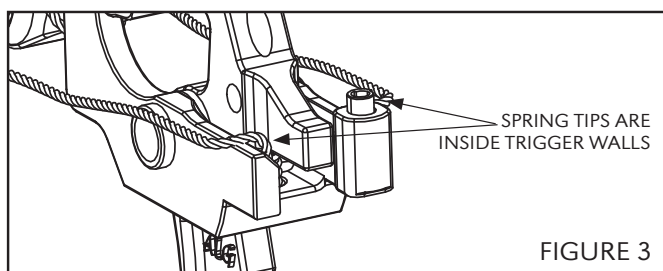


- a. Your new trigger might require the installation of a roll pin, which is included along with a spare pin, to be used as the safety stop. The purpose of this installed pin is to minimize any excessive space between the trigger and safety, which could result in the gun firing in the SAFE position. This pin can be shortened to adjust the stop for trigger rotation.
  - b. After your trigger is pre-installed, you **MUST** check the function of the safety. In order to do this, you will have to push the back of the trigger forward, towards the muzzle end, until it stops against the floor of the receiver. While pushing the trigger forward, put the safety selector into the SAFE position and check the clearance (*See FIGURE 1A*).
  - c. If there is greater than .010" clearance, the trigger should be removed and a roll pin installed. The pin is installed into the 3mm hole located on top of the leg. The pin can be tapped with a hammer or pressed in until it stops. The pin can then be filed or sanded down to obtain the proper clearance height needed for the safety to function properly (*See FIGURE 1B*). ALG Defense recommends the McMaster-Carr file (PN: 4225A32 or equivalent).
  - d. After proper clearance is obtained, remove the safety selector and trigger from the rifle.
6. **TRIGGER INSTALLATION:** Place a drop of lubricant in the trigger bores. Install disconnecter spring into disconnecter. Then install disconnecter into trigger, aligning spring with the recessed pocket. Reinstall trigger and disconnecter into the rifle. Align trigger pin hole with receiver pin hole. Insert trigger pin into the receiver, through the trigger and disconnecter and continue to push out through the other side of the receiver.

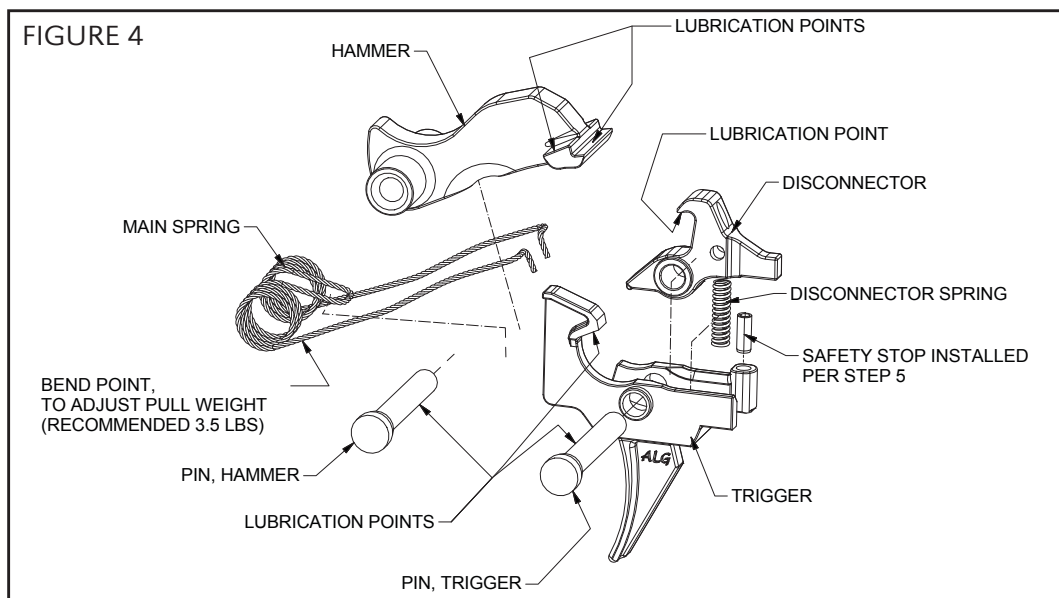
7. **INSTALLING MAIN SPRING ONTO THE HAMMER:** Attach spring loops to hammer trunnion. Then pull spring legs back a full counter-clockwise rotation, temporarily resting them on the hammer sear wings (See **FIGURE 2**).



8. Place a drop of lubricant in the bore of the hammer trunnion.
9. Install hammer into receiver with hammer spring legs on top of the hammer sear wing. Insert hammer pin into receiver through the hammer and into receiver on the opposite side. Release spring legs from hammer sear wings. Be sure that the spring tips are inside the trigger walls (See **FIGURE 3**).



10. Apply a small amount of lubricant into the following locations (See **FIGURE 4**):
  - a. Hammer and trigger sears (grease recommended);
  - b. Face of the disconnecter;
  - c. Where hammer sear wings contact the disconnecter;
  - d. Trigger and hammer pins.
11. **CHECK SAFETY OPERATION:** Reinstall the shepherd's hook (or pin retainer) then, with the hammer cocked and the safety selector set to the SAFE position, pull the trigger hard. The hammer should not fall. Please refer to **Step 5** on reverse side.



12. **CHECK TRIGGER RESET:** Set safety selector to FIRE. Dry fire weapon and keep trigger held back. Pull charging handle and release, letting the bolt carrier snap forward. The hammer should not fall. Release trigger. Hammer should be caught by the trigger.

### CHECKING PULL WEIGHT OF THE TRIGGER

The pull weight of the AKT-EL and AKT-UL should be approximately 3.5 lbs. If it is less than 3.5 lbs. remove the main spring and bend each leg down in 5 - 10 degree increments, clockwise at the bend point, immediately after the coil, with a pair of pliers

See **BEND POINT** in **FIGURE 4** below.

### LUBRICATION

Maintenance of our triggers consists of occasionally placing a drop of lubricant on the locations shown below. The recommended lubricant is ALG Go-Juice or equivalent; a high quality grease is recommended on the trigger/hammer sears.

When the trigger and lower receiver well become dirty, it is not always necessary to remove the trigger group for cleaning. Spray down the trigger group with electrical contact cleaner to remove residual oil and dirt. Next, use compressed air to blow off the trigger group and then flush liberally with a light lubricant such as ALG Go-Juice. Blow off excess lubricant with compressed air and lubricate as noted in **Step 10**.

### AKT-EL & AKT-UL APPLICATION NOTES

Due to the different manufacturers of the AK platform and tolerances that vary among those manufacturers, ALG cannot guarantee that our AK Triggers will fit your specific make and model properly. All AKT models were designed to fit nominal AK47 style machined and stamped receivers. Some fitting may be required of the AKT-EL or AKT-UL to your weapon's safety and/or receiver. Please note, once the trigger has been installed into your weapon it is considered to be used and cannot be returned or have a refund issued. ALG recommends that our customers research the specifications of their weapon model prior to purchasing our products and like always the AKT-EL and AKT-UL should be installed by a certified gunsmith.

**Thank You For Your Purchase.**

**Contact ALG Defense with any questions.**

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ALG Defense AK Trigger Instructions, Version 1 - 6/12/17

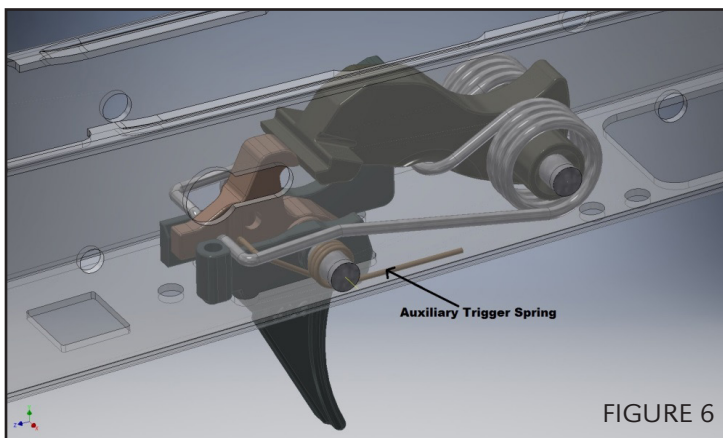
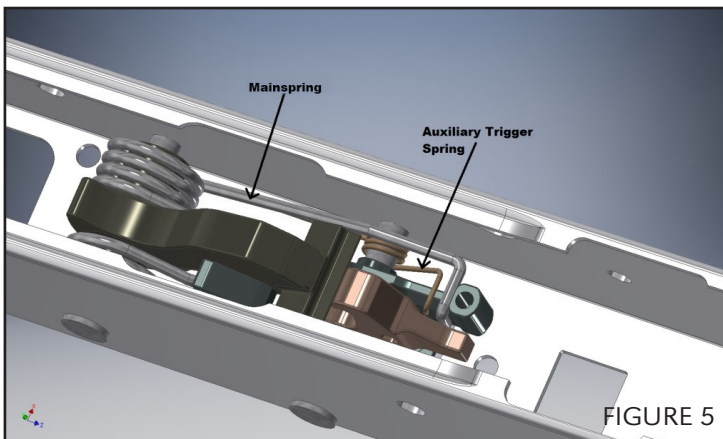


## INSTALLATION OF THE ALG AUXILIARY TRIGGER SPRING. (OPTIONAL)

The ALG Auxiliary Trigger Spring is an optional trigger spring designed to increase the pull weight without bending the mainspring. Follow the instructions for installing your ALG AKT trigger until **Step 6**, the point of installing the trigger.

1. Push the trigger pin through the receiver wall, align it with the trigger and disconnecter and push through until it is flush with the back trigger wall.
2. Lay the auxiliary trigger spring flat on the bottom of the receiver with the straight leg pointed towards the muzzle end and align the trigger pin with the inside diameter of the auxiliary trigger spring. Push the trigger pin through the spring and the receiver wall.
3. Next take a small flat screwdriver and carefully wedge it under the "hooked" leg of the auxiliary trigger spring and lift the leg up until it clips over the trigger wall. Your auxiliary trigger spring is now installed.

You can now continue to **Step 7** in the instructions. The completed installation should look like **FIGURE 5** and **FIGURE 6** below. This will add 10-14 oz. of pull weight. If you are looking for more (1 -1.2 lbs.) you can change the configuration by not hooking the auxiliary trigger spring leg on the trigger but rather over the mainspring leg after it is installed.



## A NOTE ABOUT THE RIVET HEIGHT

The ALG Defense AK series of triggers were designed to work with most AK variants without fitting. With AK variants that have a rivet for the rear of the trigger guard, commonly acting as an anti-slap feature, this rivet should be no greater than 0.062 inches tall (**FIGURE 7**). Our AK series of triggers are designed to work with rivets that are 0.062 inches in height or less. If this rivet is higher than 0.062 inches, the rivet will have to be shaved down to allow for more clearance. Having improper clearance can result in damage to the disconnecter itself.

Alternatively, if the user does not choose to modify the rivet, you can opt to modify the underside of the disconnecter to increase the clearance between the bottom of the disconnecter and the rivet in the receiver. It is not recommended to completely remove the tail of the disconnecter as adverse issues may arise, such as trigger slap. Most users prefer to bevel (angle) the disconnecter in the area that would contact the rivet. We recommend shaving down the rivet, not the disconnecter tail.

Please note, we do recommend having a qualified gunsmith install and perform all fitting of fire control groups. AK receivers and parts coming from a wide origin of manufacture vary, there is no agreed upon set specifications. As such, fitting may be required. Please note the rivet and/or disconnect will need the proper clearance as per the chart below, failure to have the correct clearance will cause damage."

