



Kidd Innovative Design

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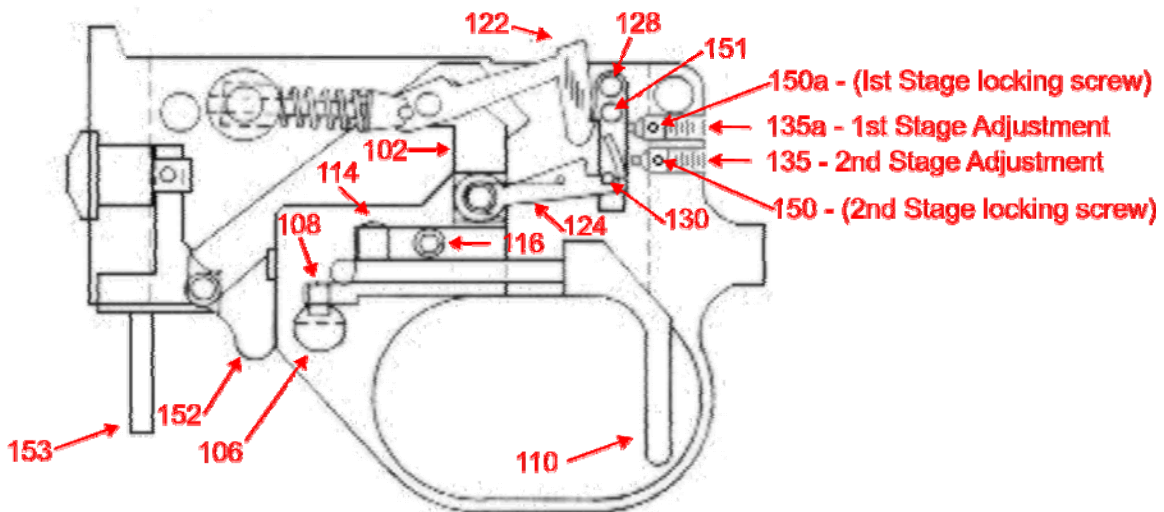
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Instruction Manual for the

KID MATCH TRIGGER for a 10/22 Rifle

Serial # _____ U.S. Patent # 5,924,231

Distributed by:



RFD is indebted to Nigel Graham for re-writing these instructions in a more 'user friendly' format.

INSTALLATION

The KID Match Trigger assembly is tuned and adjusted at the factory for optimum performance.

The proper length of a 10/22 barrel extension is .750" in length. When using an after market barrel, care should be taken to assure that the barrel extension is of this .750" length. This dimension is critical to the safe operation of the KID Match Trigger and should be inspected and adjusted if necessary by a qualified gunsmith.

It is recommended that only standard and high velocity ammunition be used with the KID Match Trigger assembly.

To install the KID Match Trigger assembly:

1. First make sure your rifle is **unloaded and pointed in a safe direction**.
2. Cock the action and allow bolt to slide forward
3. Loosen retaining screw under front of stock and place safety catch mid travel.
4. Remove the barreled action from the stock.
5. With the bolt forward, extract the two retaining pins and remove the existing trigger assembly.
6. Place the cocked KID trigger assembly into position in the action and insert the retaining pins.
7. Install the barreled action into the stock.

The KID Match Trigger assembly is now ready for service.

SAFETY

The safety button (**106**) is located at the front of the trigger guard. Depression of the safety button on the left side of the trigger guard locks the trigger and sear rendering the trigger assembly safe for carry or transport. Depressing the safety button on the right side will expose a red ring. This signifies that the safety has been released and the trigger assembly is ready to fire.

Please note: the safety catch blocks the trigger movement, not the sear. Always observe all usual safety precautions.

CAUTION! It is advised that you never transport a loaded weapon. See the included **RULES FOR SAFE FIREARM HANDLING**. If you have questions regarding the safe handling or operation of the KID Match Trigger, contact

Kidd Innovative Design, 8 Conisburgh Ct., Columbus, GA 31907 (706)568-1022.

NOTE: Never dry fire the KID Match Trigger when it is not installed in a 10/22 rifle. Dry firing without proper support for the hammer can cause damage to the assembly.

BOLT HOLD OPEN

The bolt hold open (**152**) is located in the forward section of the trigger guard. The bolt hold open manually retains the bolt in the rearward position.

To hold the bolt open, pull the bolt handle to the rear most point while depressing the lower portion of the bolt hold open. Slowly release the bolt handle until the bolt catches on the bolt hold open. To release the bolt hold open, pull the bolt handle to its rear most position and release. The bolt will move forward into battery.

CAUTION! The bolt hold open does *not* lock the bolt on the KID trigger assemblies. Retracting the bolt will release the bolt hold open and allow the bolt to move forward into battery. This is to facilitate loading in match situations and is not recommended for field use. *It is recommended that the safety be in the 'ON' position at all times when the bolt is held open.*

MAGAZINE LATCH

The magazine latch (**153**) is located at the foremost area of the trigger guard. When the lever is pressed forwards (towards the barrel) the magazine latch releases the magazine for removal. *When loading or unloading the magazine in the rifle, the bolt should always be locked open and the safety should be in the 'ON' position.*

OPERATION and ADJUSTMENT

The KID trigger is a 2 stage match trigger which is factory set with a 7oz 1st stage spring plunger and 7oz 2nd stage spring plunger so when the 2nd stage comes into affect, this gives a total of a 14oz trigger pull weight which can be increased up to 2.5lbs. Any adjustments should only be carried out by KID or a qualified gunsmith.

As the trigger is pulled, it travels in a smooth rearward arc. Two spring assisted plungers (**135a** & **135**) at the rear of the trigger assembly provide the 1st and 2nd stage trigger pull weights to the sear (**128**). Sear/hammer engagement is set by the weight of the 1st stage plunger (upper one).

As the 10/22 fires, the bolt moves in a rearward direction pushing the hammer (122) in a rearward then downward direction. The rear of the hammer pushes down on the trigger bar (124) which disconnects the sear connecting pin (130) from the trigger bar, allowing the sear to move forward. As the rifle's slide move forward, this allows the hammer to rise and is caught by the sear. This is now in the "cocked" position as shown in the diagram. As the trigger is released, the trigger bar (124) moves forward allowing the sear connecting pin (130) to drop into the lower slot on the trigger bar as the trigger bar rises under spring pressure.

When the trigger is pulled (1st stage) the trigger bar pushes on the sear connecting pin (130) moving the sear in a rearward direction thus reducing the sear/hammer engagement. The 2nd stage plunger (lower one) now comes into affect and any further rearward movement of the trigger will disengage the sear and the hammer is released.

When you are trying the trigger out of the rifle, you will note the hammer may jam on the sear and the trigger has to be pulled to release it. This is normal. Under 'live' conditions the hammer is not pushed down as far as you had pushed it and the trigger will be in a rearward position. To simulate 'live' conditions, once the hammer has been released keep pressure on the trigger, push down on the hammer and release. The hammer will rise and be caught by the sear. You may now release the trigger.

The upper plunger (135a) adjusts 1st stage and the lower plunger (135) adjusts 2nd stage for both the following sections:

There are two means of adjusting both 1st and 2nd stage pull weights. The physical positioning of the plunger assemblies in the rear of the trigger assembly can be altered by first loosening the respective locking screw (150 or 150a) then using a flat blade screwdriver to turn the entire plunger assembly. Turn clockwise to move forward to increase weight and counter clockwise to move back to decrease weight. Note.... Only turn by 1/8 of a turn at a time and re-check settings. Re-tighten the locking screw once set. You may need to move the plungers forward if you wish to increase the weight towards the maximum of 2.5lbs. The locking screws (150 or 150a) only need to be loosened for this adjustment, not for the grub screw adjustment that follows.

Please use the adjustments below before considering if you need to move the plungers from their factory settings within the trigger assembly.

Each plunger (135 & 135a) has a grub screw in its centre which is accessed from the rear of the trigger assembly and these apply pressure to the internal spring within the plungers. Turning clockwise will increase the weight, turning counter clockwise will reduce the weight. Please use extreme caution when adjusting the 1st stage to a low weight. KID state "do not reduce the 1st stage pull below 3 ounces; this will render the sear inoperable".

Always make small adjustments and recheck the operation of the trigger in an unloaded rifle, or with the trigger assembly removed.

DO NOT allow the hammer to operate as normal with the trigger assembly removed or damage may occur.

OVER-TRAVEL Over-travel is the rearward travel of the trigger (110) past the point of let off. This travel is determined by the over-travel screw (108).

To increase over-travel:

Turn the over-travel screw counter-clockwise. Adjustments should be made in '1/8' turn increments until the desired over-travel is achieved.

To decrease over-travel:

Turn the over-travel screw clockwise. Adjustments should be made in '1/8' turn increments until the desired over-travel is achieved.

The over-travel is preset at the factory for optimum performance and should only be adjusted by KID or a qualified gunsmith.

TRIGGER BODY POSITIONING SCREW

The trigger body positioning screw (116) determines the position of the trigger body and its relationship to the safety. Turning the trigger body positioning screw clockwise will move the trigger body rearward.

Turning the trigger body positioning screw counter-clockwise will move the trigger body forward.

CAUTION! If the trigger body is positioned too far rearward, it may interfere with the operation of the safety button, causing a dangerous situation. This screw is preset at the factory for optimum performance and ***NO ADJUSTMENTS OR MODIFICATIONS SHOULD BE ATTEMPTED.***

TAKE UP AND SEAR POSITION

Take up is the play between the trigger bar (124) and the sear connecting pin (130). The trigger bar must have a bit of take up in order to operate properly. The sear (128) position is determined by the sear positioning screw (151). This screw is used to position the sear in relation to the trigger bar.

Should the take up ever need adjustment, use the following instructions. With the trigger assembly out of the rifle, depress the hammer (122) until the trigger bar disconnects from the sear connecting pin. With the hammer still depressed, pull the trigger (110) to the rear. Release the hammer to the cocked position. Slowly release the trigger and note the action of the trigger bar. As the trigger reaches its foremost point, the trigger bar should rise and connect with the sear connecting pin. If the trigger bar fails to rise and connect with the sear connecting pin, the sear (128) is too far forward. Turn the sear positioning screw clockwise in '1/8' turn increments until the trigger bar rises to connect with the sear connecting pin. Should the trigger bar rise and connect before the trigger reaches its foremost point, the sear is positioned too far rearward. Turn the sear positioning screw counter-clockwise in '1/8' turn increments until the trigger returns to its foremost position.

If the trigger is not allowed to return to its foremost position the safety button may become inoperable causing a dangerous situation. The trigger bar and the sear relationship is preset at the factory for optimum performance and should only be adjusted by KID or a qualified gunsmith.

You may need to re-adjust 1st and 2nd stage trigger weights after making any sear position adjustments.

The information available in this instruction manual is intended for the use of responsible adults. Kidd Innovative Design urges all members of the public to become familiar with The Rules of Safe Firearm Handling.

RULES OF SAFE FIREARM HANDLING

1. Always keep the muzzle pointed in a safe direction
2. Firearms should be unloaded when not in use
3. Don't rely on your Gun's 'safety'
4. Be sure of your target and what is beyond it
5. If your gun fails to fire handle with care
6. Always wear ear and eye protection when shooting
7. Be sure the barrel is clear of obstructions
8. Learn your guns mechanical and handling characteristics
9. Never transport a loaded firearm
10. Avoid alcohol and drugs while handling firearms

No liability is expressed or implied for damage or injury, which may result from the improper installation or use of this product. The installation process of this product may affect manufacturer's warranty.