

## Manual for Bix'n Andy TacSport/Pro Trigger.

*Warning :* we advise that this trigger be installed by a *qualified gunsmith*. When operating any firearm always practice safe shooting and only discharge the firearm when it is pointed in a safe direction with a known backstop. Never install or un-install this trigger with ammunition in the receiver. Bix'n Andy take no responsibility for any damages to or loss of property, injury or death arising out of the use and/or misuse of this trigger.

## **Installing TacSport Pro:**

- 1. Remove the bolt from the action, remove old trigger and replace it with the TacSport. If using a trigger hanger, the are to make sure it is correctly orientated.
- 2. The dowel pin holes are meant to be a tight fit. You will likely require a small hammer and parallel punch to insert the pins. Make sure they are flush.

#### Tuning your TacSport and TacSport Pro Trigger

Single Stage TacSport/Pro: you can adjust the force required to pull the trigger and the sear engagement.



- 1. The trigger force can be adjusted from under around 80 grams (3 ounces) to 1,000 grams (2 pounds) (TacSport:- 280 grams (10 ounces) to 2,000 grams (4.4 pounds)) without changing springs. You will need the 1.5mm hexagonal wrench provided. \*Pro Only\* To achieve pull weights under 10 ounces, screw **E** must be lowered to zero tension and screw **H** can be adjusted between 3 10 ounces.
- 2. As we use the same shoe for the single and two-stage trigger, some of the holes will not be used on the single-stage. Please pay careful attention to which holes are indicated. Insert the wrench into the screw marked as "E" in diagram 1. To increase trigger force, turn the wrench clockwise and to reduce the force, turn counter-clockwise. Do not worry, the screw cannot come out. When the desired force is set, you will need to set the sear engagement.
- 3. The sear engagement is set at the factory and will be good for the default force setting. It is important to know that the lower the trigger force the more sear engagement will be required to have a safe operating trigger. To adjust the sear you will need the 1.5mm hexagonal wrench provided. The adjustment screw is labeled as "F" in diagram 1. G & H are not for adjustment.
- 4. To increase sear engagement you will turn the screw counter-clockwise and vice-versa to reduce engagement. To start it is a good idea to reduce the engagement (clockwise) until the firing pin travels forward to the fired position when closing the bolt. Slowly, a sixteenth of a turn (22.5 degrees) at a time, increase the sear engagement (counter-clockwise) until the sear starts to catch. At this point the sear will likely not hold the cocking piece reliably. Now turn the sear screw counter-clockwise another 22.5 degrees.
- 5. Test the rifle by vigorously cocking the bolt and making sure that the cocking piece is holding every time.

**Two-Stage TacSport/Pro :** you can adjust the force required for the first stage of pull, the force for the second stage of pull, the length of travel for the first stage of pull and the sear engagement.

1. The trigger force has the following adjustment range:

TacSport: 280 - 2,000 grams (10 oz - 4.4 lbs) / TSPro: 160 - 1350 grams (5.7 oz - 3 lbs).

The trigger force is split between the first stage and the second stage. The total force will be the sum of the two stages. The settings are independent of each other. The stages minimum and maximum force are as follows:

- TacSport:
  - First stage: 200 1,500 grams (7 oz 3.4 lbs)
  - Second stage: 80 450 grams (3 oz 1 lbs)

- TacSport Pro:
  - First stage: 90 900 grams (3.2 oz 2 lbs)
  - Second stage: 70 450 grams (2.5 oz 1 lbs)
- 2. To adjust the first stage use the 1.5mm wrench in the screw E in diagram 2. To increase pull force, turn the screw clockwise and counterclockwise to reduce the force. Do not worry, this screw can not come out.
- 3. To adjust the second stage of pull, insert the wrench into the set screw **H** in diagram 2 in the trigger shoe. Clockwise will increase the force and counter-clockwise will reduce the force.
- 4. To adjust the length of the pull on the first stage use the wrench in set screw **F** in diagram 2. To shorten the pull, one can turn the screw clockwise and to increase the pull turn the screw counter-clockwise. When you shorten the length of pull to "zero" then you need to be aware that you will affect the sear engagement. It is a good idea to leave some first-stage pull even if it is a very small amount.
- 5. The sear engagement can be adjusted with the 1.5mm wrench in hole **G** in diagram 2. The sear is factory set for the force of the second stage of pull that the trigger is shipped at. If you wish to reduce this force, you will need to increase the sear engagement and if you increase the force you will likely need to reduce the sear engagement. It is critical that once the sear engagement is set that you test the cocking and release of the firing pin multiple times to ensure that the top sear is reliably holding the cocking piece in place without dropping when the bolt is closed aggressively. A good way to set the sear engagements, once the trigger force is set, is to screw the sear engagement screw **G** in diagram 2 in until the rifle will not cock. Then turn the sear engagement screw counter-clockwise a sixteenth of a turn until the cocking piece starts to catch. From that point, turn the sear engagement screw counter-clockwise another 22.5 degrees or sixteenth turn.

# Safety and Bolt Stop Release Lever



The TacSport Pro is shipped with a safety lever and a bolt stop release lever. The bolt stop and safety can be removed. They are kept in place by a small e-clip which can be removed by spreading the legs of the clip with a screwdriver **I** and **J** in diagrams 3 and 4. Please keep the spring washer and a ball-bearing that come with the safety lever and bolt stop.

The safety lever has a feature that locks it in the safe position until it is moved slightly out to the side and then forward. This is an additional safety to prevent the safety from being knocked into the fire position if the lever gets snagged. Although this lock pin can be removed if you want your safety to work in the traditional manner (straight forward and back), we strongly recommend you leave it like it is. The motion is fluid and easy to use and we feel you will prefer it after very little use. The pin can be removed by opening the trigger and using a punch to drive it out from the right hand side to the left (**K** in diagram 5). If the pin is too tightly seated it can also be ground flat with the side of the trigger.

## Maintenance

We suggest that you practice good cleaning which will, from time to time, include opening the trigger and cleaning it. Please look at our videos on our website for guidance. **Do not pour lighter fluid into the trigger in an attempt to clean out debris.** This can only worsen the problem and should not be done to any trigger for that matter. A full cleaning with a solvent and drying it out is necessary. The trigger is designed to run dry so never lubricate it in any way.