Eden Perfection, LLC Five-seveN Flat Trigger & Firing Pin Safety Installation instructions

Warning! Installation should be performed by a competent gunsmith!

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Flat Trigger Installation

- 1. Remove rear slide guide / fire control assembly. Set aside
- 2. Remove the Safety and safety catch plunger / spring. Set aside.
- 3. Remove trigger / trigger bar assembly.
- 4. Disassemble trigger pin, trigger spring, and trigger bar from factory trigger. Set factory trigger aside.

Important! All Eden Perfection, LLC Flat Triggers are inspected for dimensional accuracy prior to shipment. However, due to tolerances of the original factory parts it is recommended that the trigger pin and trigger retaining pin be test fit into the Flat Trigger before proceeding with installation. The trigger retaining pin should slide easily into the Flat Trigger, and allow it to rotate freely about the pin. The upper trigger pin may have a snug fit and require slight force to insert, which is okay. It should not require the use of any tools to install. Once test fit is confirmed, move forward with installation.

5. Assemble factory trigger bar, trigger spring, and trigger pin onto the Eden Perfection Flat Trigger. Once assembled, ensure free range of motion of the trigger bar.



- 6. Install the new Flat Trigger assembly into the frame.
- 7. Install the slide guide / fire control assembly into the frame.

Important! At this point the firearm should be checked for proper function.



- 8. Insert safety into frame. It is not necessary to install the safety catch plunger and spring at this point, as the safety may need to be removed and reinstalled several times in the coming steps.
- 9. At this point you must check the function of the fire control system. Due to manufacturing tolerances of the OEM parts, the trigger may contact the safety before the sear is able to release the hammer. With the safety "off" and the hammer cocked, pull the trigger to the rear to see if the hammer is able to fall. Note that the hammer should not be allowed to strike the ejector. Use a block or hold the hammer to prevent it from falling completely. Ensure that the safety

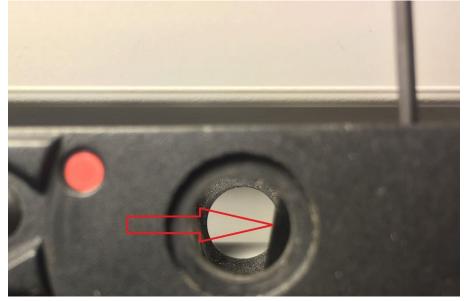
remains in the correct "off" position during this test. If the hammer falls easily and consistently with every pull of the trigger, skip to step 15. If the hammer does not fall, proceed to the next step.



10. If your hammer will not fall when the trigger is pressed completely to the rear, it will be necessary to remove a small amount of material from the area circled in red in the image below. You are essentially mimicking the area circled in green, but to a much lesser extent. A round file or rotary tool (such as a Dremel) may be used. It is extremely important to work slowly and perform regular checks. Removing too much material will result in an excessive amount of over travel in the trigger. This process can be done with the trigger installed, see next steps for details.



11. Install the set screw without thread locker into the threaded hole in the trigger. Remove the safety and adjust the set screw so that the trigger is just visible through the safety hole in the left side of the frame, as shown below.



12. Adjusting the trigger in this way allows access to the trigger for fitment through the hole in the left side of the frame. In the image below a rotary tool (such as a Dremel) is being used with a simple diamond tip. A round file may also be used. It is important to avoid contact with the frame and to only remove material from the portion of the trigger previously noted.

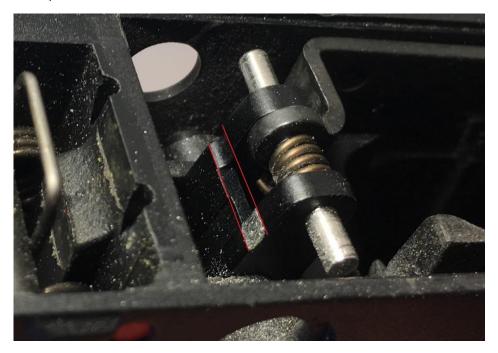


13. Remove a small amount of material (start with just the anodized layer), back the trigger adjustment set screw out, insert the safety, and perform the function check as noted in step 9. Repeat as necessary until the hammer is released easily and consistently with every trigger pull.

Important! With care it is possible to fit the Flat Trigger so there is practically zero over travel once the hammer falls. However, doing so increases the chances of malfunction in harsh conditions, because something as small as a grain of sand or carbon deposit getting stuck between the trigger and safety could prevent the trigger form being pulled all the way, rendering the firearm useless. It is up to you, the user, to determine proper and safe function of your firearm.

14. Once the Flat Trigger is fit to your firearm it is recommended to thoroughly clean the leftover debris from the frame. This can be done with complete disassembly or with a firearm solvent and compressed air.

The image below shows a trigger that has been fitted for zero over travel. As you can see, the material removed covers the same height as the groove on the right side of the trigger, but the depth is minimal, about .015." There is no need to be concerned with the bare aluminum. It immediately develops a protective oxide layer.



- 15. Finally, install the safety and safety catch plunger / plunger spring.
- 16. You have now completed assembly and over travel fitment of your Flat Trigger. At this point all functions of the firearm should be checked, including operation of the firing pin safety. Checking firing pin safety function should be done even if you are not using the Eden Perfection Firing Pin Safety (see firing pin safety installation instructions later in this document for more details.)

Note: At this point the trigger is fully functional, but will still have take-up before the hammer falls. If you wish, you may leave the trigger as-is to mimic the stock trigger pull with the benefits of the flat face geometry. Or, you can use the set-screw to adjust the take-up to your liking. If you want to try

different adjustment levels, it is recommended to use the set-screw without thread locker for experimentation. Once you have a feel for the level of adjustment you like, remove the set-screw without thread locker and install the set-screw with thread locker. Then make your final adjustments. Adjusting the trigger is explained in the following steps.

Adjusting the take-up on your Flat Trigger

Warning! Adjusting the trigger to full potential (i.e. minimum allowable take-up) will likely require modification of the Firing Pin Safety for the safety to function properly. It is the user's responsibility to ensure proper function of his or her firearm.

The instructions below explain how to adjust your trigger for minimum allowable take-up.

- 1. Setting the trigger for minimum allowable take-up is very simple. With the safety in the "ON" position, tighten the adjustment set-screw until the trigger makes slight contact with the safety, then back the set-screw out about ¼ turn. Check the function of the safety. It should transition from "OFF" to "ON" effortlessly with zero interference with the trigger. If you experience any interference you should back the set-screw out until the safety moves freely.
- 2. Check to ensure proper "re-set" of the trigger. With the trigger pulled, push the trigger bar down so it disconnects from the sear, cock the hammer, then let the trigger return to the forward position. The trigger bar should return to its high re-set position, making contact with the sear. If the trigger bar does not re-set, you will need to back the adjustment set-screw out until proper re-set occurs easily and consistently.



3. If you used the set-screw with thread locker, you are finished with the trigger installation! If you experimented using the set-screw without thread locker, and you are happy with the results,

replace the set-screw as previously noted, making final adjustments with the set-screw with thread locker.

Important! At this point you must check the function of your firing pin safety as described below. This must be done whether you're using the Eden Perfection stainless steel firing pin safety or the factory part.

<u>Instructions when installing the Eden Perfection Firing Pin Safety</u>

If using the OEM firing pin safety, skip to the next section.

Note: It is helpful to have the firearm clamped in a vice or otherwise constrained during these steps.

- 1. Remove the barrel from the slide.
- 2. Remove the slide cover, cartridge indicator, and cartridge indicator spring. Set aside.
- 3. Remove the rear sight, factory firing pin safety and firing pin safety spring. Set aside
- 4. Reinstall the barrel into the slide and then assemble the slide onto the frame. The hammer should be cocked.
- 5. Install the stainless firing pin safety and firing pin safety spring.
- 6. Slide the plastic installation aid in place to mimic the rear sight and retain the firing pin safety spring. Ensure that the firing pin safety spring seats properly without bending to one side.



7. With the trigger in its forward position, insert a pick, punch, or other slender tool into the back of the slide and apply pressure to the firing pin, as shown in the image below. The hex key included with your Flat Trigger works well for this (installation aide and firing pin safety spring removed for clarity).



The firing pin should be blocked by the firing pin safety, although it will have some forward movement before making contact. With pressure still applied to the firing pin, pull the trigger to the rear, taking up all the pre-travel. DO NOT PULL THE TRIGGER FAR ENOUGH TO RELEASE THE HAMMER! The firing pin safety should move up and allow the firing pin to travel forward when the trigger is pulled.

8. If the firing pin safety is not blocking the firing pin properly, material must be removed from the angled surface as shown below. The red line indicates where material should be removed. DO NOT REMOVE MATERIAL FROM THE PEAK OF THE FIRING PIN SAFETY (YELLOW LINE) AS THIS COULD RENDER THE FIRING PIN SAFETY INOPERABLE. Remove the firing pin safety and sand / file a small amount of material as described.



- 9. Repeat steps 5 8 until proper function of the firing pin safety is achieved. WORK SLOWLY AND CHECK OFTEN! Typically, only a very small amount of material needs to be removed. A DREMEL or other rotary tool is useful and makes quick work of this process, but can also make quick work of less-than-satisfactory results if you're not careful. Once proper function is achieved, a final polish of the surface may be done to enhance performance.
- 10. Reassemble the slide, and then the firearm. Ensure all systems work properly.

Instructions when using the OEM firing pin safety

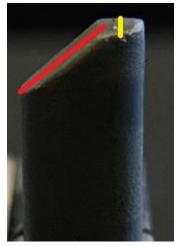
Note: It is helpful to have the firearm clamped in a vice or otherwise constrained during these steps.

- 1. Remove the barrel from the slide.
- 2. Remove the slide cover, cartridge indicator, and cartridge indicator spring. Set aside.
- 3. Reinstall the barrel into the slide and then assemble the slide onto the frame. The hammer should be cocked.
- 4. With the trigger in its forward position, insert a pick, punch, or other slender tool into the back of the slide and apply pressure on the firing pin, as shown in the image below. The hex key included with your Flat Trigger works well for this. (Note, the image shows the Eden Perfection Stainless Firing Pin Safety with the rear sight removed. The process will be the same for the factory part and at this point you will still have the rear sight installed.)



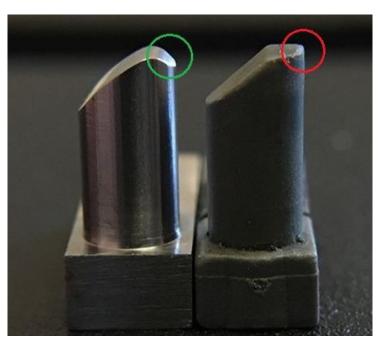
The firing pin should be blocked by the firing pin safety, although it will have some forward movement before making contact. With pressure still applied to the firing pin, pull the trigger to the rear. DO NOT PULL THE TRIGGER FAR ENOUGH TO RELEASE THE HAMMER! The firing pin safety should move up and allow the firing pin to travel forward when the trigger is pulled.

5. If the firing pin safety is not blocking the firing pin properly, you have two options. You must either back the trigger adjustment screw out until the firing pin safety works properly, or you must remove material from the angled surface of the firing pin safety as shown below. The red line indicates where material should be removed. You are essentially reducing the size of the flat spot on the peak of the firing pin safety and/or changing the angle described by the red line. DO NOT REMOVE SO MUCH MATERIAL THAT THE FLAT IS COMPLETELY REMOVED.



It is recommended that you remove the firing pin safety from the slide in order to perform any modification. To do this you will need to remove the rear sight and firing pin safety spring and set them aside.

- 6. Repeat steps 4 5 until proper function of the firing pin safety is achieved. If you opt to remove material from the firing pin safety, WORK SLOWLY AND CHECK OFTEN! Typically, only a very small amount of material needs to be removed. A DREMEL or other rotary tool is useful and makes quick work of this process, but can also make quick work of less-than-satisfactory results if you're not careful. The plastic installation aid can be used to simplify the process. Install the firing pin safety and firing pin safety spring, then install the installation aid, which mimics the rear sight. Ensure the firing pin safety spring seats properly without bending to one side.
- 7. Once fitted and correct operation is achieved, reassemble the slide, and then the firearm. Ensure all systems work properly. When using the factory firing pin safety, you need to ensure that reassembly after field stripping functions properly. The sharp corner on the back of the factory firing pin safety may catch on the firing pin safety lever when attempting to reinstall the slide onto the frame. If this occurs lightly round-off the back side of the factory firing pin safety, circled in red, to mimic the design of the Eden Perfection Stainless Firing Pin Safety, circled in green.



IT IS YOUR RESPONSIBILITY TO ENSURE SAFE AND PROPER FUNCTION OF YOUR FIREARM!

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