



## KILLER INNOVATIONS

### VELOCITY PRO TUCKED COMP

#### INSTALLATION, USE AND CARE INSTRUCTIONS

#### **BEFORE YOU START THE INSTALLATION, PLEASE READ THE FOLLOWING!**

1. This compensator is designed to be used with Sig P320 pistols. Please verify you are installing the correct compensator for your pistol. These comps are for 9mm ONLY! **Do not attempt to use this brake on or with any other pistol or caliber than it is marked for! Any attempt to do so could result in serious injury or death!**
2. Verify your barrel is 1/2-28 thread pitch. It cannot be installed on any other thread pitch.
3. Your compensator package should include the following items:

#### Package Contents



- A. Qty 1: Velocity Pro Tucked Comp body with button installed



- B. Qty 1: Comp Blast Baffle (preinstalled)



- C. Qty 1: Comp Wrench



- D. Qty 2: Locking Rings  
(**large ring = reduced compensation power**)  
(**small ring = full compensation power**)



- E. Blue Thread Locker

- F. .05 Allen Wrench



- G. Qty 2: 6/32 Half Dog Set Screws  
(brand: brighton best bb#141 016 only)  
(for use with ki slotted barrels)



- H. Qty 2: 6/32 Cone Point Set Screws  
(for use with dimpled barrels)



- I. Qty 2: 6/32 Cup Point Set Screws  
(for use with standard barrels)



- J. Qty 2: 4-40 x 3/16" Knurled Set Screw (one will be preinstalled)

- K. Qty 2: 4-40 x 1/8" Knurled Set Screw

#### Tools Needed:

- 5/64 Allen Wrench

#### Installation:

##### Pre-installation Safety Check

1. Installation and test firing should always be performed by a competent gunsmith.
2. Always clear your firearm of any ammunition and make safe before installing or uninstalling this compensator! Always follow proper firearm safety when using or working on your pistol!
3. Killer Innovations barrels for the Sig P320's come pre-cut with indexing slots where the comp will seat against the shoulder and time the compensator. If you are installing this compensator on another brand of threaded barrel there are a couple of additional steps and checks that need to be followed to ensure safe operation.
4. Be sure to **remove** the rubber o-ring before installing the compensator!

## Installation Steps for Killer Innovations Barrels

5. **This section applies if you are installing on a Killer Innovations barrel, or if your gunsmith has machined the 3 & 9 o'clock slots according to the appropriate "notch and dimple" print located at [www.killer-innovations.com/instructions](http://www.killer-innovations.com/instructions)**
  - A. Please install **Item G - Qty 2 half dog set screws** with a 5/64 hex wrench and a drop of blue thread locker. Run them in until the top of the screw is flush with the outside of the compensator for now.
  - B. With the barrel removed from the slide, install the compensator over the threaded end of the barrel until it stops at the thread shoulder.
  - C. Level the compensator with the top of the slide. Tighten both set screws until they stop in the slots located at 3 and 9 o'clock on the barrel. Then back off both set screws 1/4 turn.
  - D. Make sure the compensator is not able to rotate on the barrel and that the top of the compensator is still level with the top of the slide.
  - E. You should be able to remove the compensator off the barrel without loosening the 2 dog point set screws on the sides of the comp. The comp should travel freely over the threads and reinstall with no hang-ups.
  - F. Reinstall the barrel into the slide and install the complete upper to the lower.
  - G. Reinstall the comp on the barrel and pull the compensator forward about halfway off the threads. (note: it can be kind of tight sliding forward when new) Place the desired reduction force locking ring in the open slot in the top of the compensator. Push down on the locking button located on the side of the comp body and thread the locking ring onto the barrel. As you thread the locking ring onto the barrel pull the compensator all the way back to the shoulder until it stops. Finish tightening the locking ring until it stops finger tight, then let off the locking button. The locking button will prevent the ring from coming loose when firing.
  - H. Proceed to section 9.

## Installation Steps for Other Brand Barrels

6. **This section applies if you had your gunsmith dimple the barrel at 3 & 9 o'clock according to the appropriate "notch and dimple" print located at [www.killer-innovations.com/instructions](http://www.killer-innovations.com/instructions)**
  - a. Please install **Item H - Qty 2 pointed setscrews** with a 5/64 hex wrench and a drop of blue thread locker. Run them in until the top of the screw is flush with the outside of the compensator for now.
  - b. Put the compensator onto the threaded barrel about halfway. Place the locking ring in the open slot in the top of the compensator. Thread the locking ring onto the barrel while pushing the locking button located on the right side of the compensator all the way in. As you thread the locking ring onto the barrel pull the compensator all the way back to the shoulder until it stops. Finish tightening the locking ring until it stops finger tight, then let off the locking button. The locking button will prevent the ring from coming loose when firing.
  - c. Rotate the compensator until the top is level with the top of the slide. Then tighten the pointed setscrews to 13in lbs against the dimples in the barrel.
  - d. Proceed to section 9.
7. **This section applies if you are installing the compensator on another brand barrel that has not been dimpled or notched**
  - a. Killer Innovations recommends the barrel be dimpled or notched by a competent gun smith if possible. However, the brake can be used with an unmodified or OEM threaded barrel if needed. **Warning: this method will leave set screw marks on the sides of your barrel.**
  - b. Please install the **item I - Qty 2 cup point set screws** with a 5/64 hex wrench and a drop of blue thread locker. Run them in until the top of the screw is flush with the outside of the compensator for now.
  - c. Put the compensator onto the threaded barrel about halfway. Place the locking ring in the open slot in the top of the compensator. Thread the locking ring onto the barrel while pushing the locking button located on the right side of the compensator all the way in. As you thread the locking ring onto the barrel pull the compensator all the way back to the shoulder

until it stops. Finish tightening the locking ring until it stops finger tight, then let off the locking button. The locking button will prevent the ring from coming loose when firing.

- d. Rotate the compensator until the top is level with the top of the slide. Then tighten the cup point setscrews to 13 in lbs into sides of the barrel. The cup point needs to cut into the barrel to properly secure the compensator from rotating.

### Final Installation Checks

8. Make sure the brake is all the way back to the shoulder of the barrel. Ensure the compensator is not able to slide back and forth on the barrel and that it is not able to rotate. It should be securely fastened to the end of the barrel. Pull the slide of the pistol back and make sure the frame completely clears the compensator. Make sure that the front of the slide is not contacting the back of the brake at any point. Test with a feeler gauge or strip of thin paper.
9. You are now ready to test fire and begin tuning. Proper personal protection equipment should always be worn while operating a firearm. Fire one round. Unload the firearm and make safe. Recheck the compensator to make sure everything is still tight. The compensator is now ready to use.

### Tuning:

1. After proper installation you should be ready to tune. This must be done in a controlled and safe environment. When making any adjustments to the Blast Baffle make sure you remove your magazine and clear the chamber. An additional press check to verify before continuing is advised.
2. The compensator packaging includes a small bag with 2x 4-40 1/8" knurled set screws and a spare 4-40 3/16 set screw. The 4-40 1/8 screw acts as a locking screw for the 4-40 3/16" set screw that is already installed in your compensator body.
3. Begin tuning your comp with the blast baffle in the position it comes in from our factory with the Full Compensation Ring (the thin one). Verify the 3/16" length screw is tight against the baffle and torque to min 10 in lbs if possible. Then install the 1/8" length screw behind it to act as a jam nut. Torque this to 10 in lbs if possible.
4. Proceed shooting. The number of rounds used here is dependent on the user's ammo, build, and desired feel. You know what you are looking for and should feel comfortable with the recoil you are feeling. **\*If you experience the desired recoil reduction and muzzle rise reduction skip to step #12\***
5. If you need to make a baffle adjustment to change the port size remove your mag and clear the chamber before starting.
6. Start by swapping locking rings for the reduced port locking ring (the thick one). This will keep you from needing to adjust the baffle.
7. Once you have swapped to the RPLR, shoot again. **\*If you experience the desired recoil reduction and muzzle rise reduction skip to step #12\***
8. Before you begin tuning, remove the mag and clear the chamber.
9. Remove the RPLR and install the FCLR (the thin one). Now you can start playing with the port size by adjusting the baffle. Remove the 1/8" length knurled set screw and back off the 3/16" length knurled set screw. With your 4 pin comp wrench spin the baffle clockwise to the desired port size. Once set, tighten the 3/16" length screw against the baffle and torque to min 10 in lbs if possible. Then install the 1/8" length screw behind it to act as a jam nut. Torque this to 10 in lbs if possible.
10. Once you have made your adjustment, shoot again. **\*If you experience the desired recoil reduction and muzzle rise reduction skip to step #12\***
11. If you feel the build still needs more tuning repeat steps 8,9,10.
12. Once your Locking Ring and Baffle distance has been figured out you can lock everything in place. Remove your mag and clear the chamber before continuing.
13. Carefully remove BOTH 4-40 knurled set screws without moving the baffle. Apply a small dab of the included blue Loctite to each screw, Install the 3/16" length until it hits the baffle and tighten securely or torque to 10 in lbs if possible. Repeat this step with the 1/8" screw to act as a jam nut.
14. Allow the Loctite to cure for 24 hrs.
15. Once everything is cured recheck the compensator to make sure everything is still tight. You are now ready to use the compensator!

## Use:

1. **!!!Caution - the compensator gets extremely hot. After use, let it cool before touching!!!** As you shoot the pistol, you should be periodically checking to ensure the compensator has not come loose. Check the set screws to make sure they have not backed out. It is good practice to mark all screws with a paint pen for a quick visual reference if they have backed out. Always make sure the compensator is level with top of the slide. **If anything looks or feels wrong, stop shooting, investigate and fix any issues before proceeding.**

## Care:

1. You should disassemble and clean your compensator about every 1000 rounds if possible. Start by removing the comp from the pistol and removing the button screw located on the bottom of the compensator. **Don't lose the small spring! DO NOT REMOVE THE BLAST BAFFLE OR 4-40 Knurled Set Screws!**
2. Make sure you completely remove the carbon and debris from button and button area.
3. Make sure the serrations/knurled on the outside of the locking ring are clean and all carbon and debris have been removed from the grooves. This is critical to ensure the locking ring does not come loose during use.
4. Inspect the compensator for any damage before assembly and reinstallation.
5. To re-assemble: place the small spring in the cup at the end of the button and slide it into place ensuring the spring stays in the correct position. Use a small amount of blue thread locker when re-installing the locking button screw located on the bottom of the compensator. If you use too much thread locker, it will glue the button in place when it dries, preventing it from moving. Don't over tighten the button screw! Medium finger tight should do it. The threaded end of the screw should be flush or sub surface with the top of the button bar when assembled. If it is protruding, you have gone too far.

## Notes:

- If you need to remove the blast baffle for any reason and are unable to do so please visit our web site – the required armorer's tool is available for purchase to help remove the blast baffle.
- KEEP all extra parts that come with the compensator for future repairs
- Killer Innovations has compensator rebuild kits available on our web site, as well as replacement locking rings, comp screws, and other parts to maintain the function of your comp. Please see the "Spare Parts" section on our web site.

*Visit [Killer-innovations.com](http://Killer-innovations.com) for more*

