



BROWNELLS[®]

FRONT SIGHT INSERT KIT

Stock #081-000-370

BROWNELLS[®]
SELECTION. SERVICE. SATISFACTION.
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www.brownells.com



CONTAINS:

- 5 DYES
- LIQUID ACRYLIC
- POWDERED ACTIVATOR
- MIXING CUPS

Sight inserts benefit the target shooter and hunter, especially in situations requiring fast, accurate front sight acquisition, and in low light conditions when game is more likely to be active.

Brownells Front Sight Insert Kit makes it possible to add or replace these inserts on a host of Smith & Wesson® and Ruger® revolvers, plus change the insert color and make custom sights for a wide variety of rifles, shotguns, and pistols. Never again will it be necessary to replace a perfectly good front sight, because it's too difficult to acquire at dawn or dusk, your eyes aren't as good as they used to be, or because the insert has faded, become damaged, or completely fallen out and been lost.

This kit comes complete with everything you need to make tough, acrylic inserts properly formed to the specific contours of your guns' front sights. With the included liquid acrylic, powdered activator, and your choice of five concentrated dyes, you will create bright, high contrast inserts that are far stronger and longer-lasting than those used on today's factory sights.



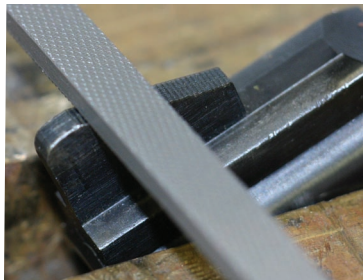
WARNING



Never attempt to disassemble or reassemble a firearm unless you are absolutely certain that it is empty and unloaded. Visually inspect the chamber, the magazine and firing mechanism to be absolutely certain that no ammunition remains in the firearm. Disassembly and reassembly should follow the manufacturer's instructions. If such instructions are not immediately available, contact the manufacturer to see if they are available. If they are not available at all, then you should consult other reference sources such as reference books or persons with sufficient knowledge. If such alternative sources are not available and you have a need to disassemble or reassemble the firearm, you should proceed basing your procedures on common sense and experience with similarly constructed firearms.

With regard to the use of these tools, the advice of Brownells Incorporated is general. If there is any question as to a specific application it would be best to seek out specific advice from other sources and not solely rely on the general advice and warnings given.

Clamp the firearm in a vise so the barrel is angled, and the sight blade face is parallel with the floor. There are two reasons for this, the first; it is easier to cut the dovetail, and second, when you apply the liquid into the sight cut, it will level itself out. If your gun already has a dovetail, skip to the mixing instructions. Use a pillar file, such as #360-312-121, and file a cut, the width of the file, approximately 1/8" deep (equal to the thickness of the file). Most front sights are serrated, so start your cut just below the top serration. This will place the insert properly for your rear sight. If the cut is not long enough, you can turn the file on its side and extend the cut farther down the ramp. The dovetail "corners" extend farther than the cut, so leave plenty of room

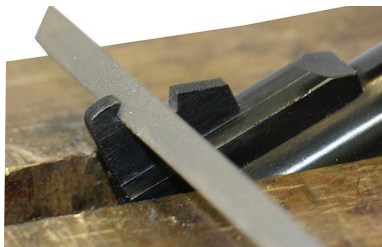


Filing the basic slot

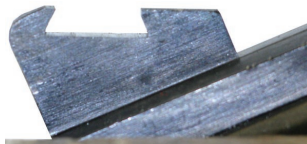


Lengthening the slot

Cut the under part of the dovetail with the sight base file so the points come out nice and even. Always check to see that your file cuts are square on each side. If you cut deeper to one side, it will show! Clean up all your cuts so everything looks good.



Turning the slot into a dovetail

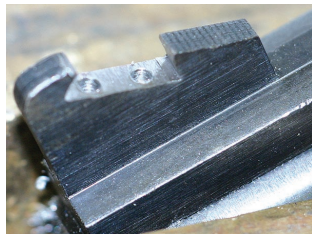


Finished dovetail

Center punch two punch marks, centered in the bottom of your dovetail cut. Use a hand drill, with a #51 or smaller drill bit and drill, two holes approximately 1/8" deep. Do not go too deep or you will drill through into the sight base.



Center punching the holes

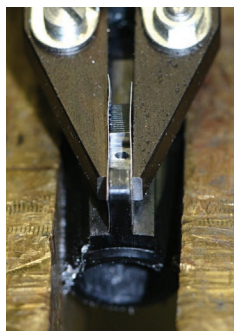


Insert lock holes drilled

Use a brush to remove any metal chips or filings and de-grease the sight and dovetail using TCE. To hold the sight insert liquid in place while it sets up, you must form a dam on both sides of the sight. We like to cut two pieces from an aluminum can, roughly 3/8" x 3/4", one piece for each side of the sight insert. Size varies, it should be slightly taller than the sight, and longer than the dovetail. Lay the pieces along side the sight and use a pair of parallel jaw pliers to hold the pieces in place. Use a rubber band on the plier handles to hold them together if the joint is loose.



Clean thoroughly with TCE



Aluminum can "dams" held in place with parallel jaw pliers

Lay out the powered activator, dye, liquid acrylic, cup and a toothpick for easy access. Set the mixing cup on a flat surface, and put 7 to 8 drops of liquid acrylic in the mixing cup. Scoop out a small amount of dye on the end of the toothpick and mix thoroughly with the liquid activator. It takes a very small amount of dye to make a brilliant color, so don't overdo it. Squeeze a small quantity of the acrylic powder into the mix. The ratio is not very critical, but if you have too much powder, the mix will be too thick, and won't flow into and properly fill the dovetail plus, it will set too quickly. Gradually add a small amount of powdered activator to the colored liquid (the amount should be equal to about 1/4 the volume of the liquid). Mix this thoroughly. Gradually add and mix, add and mix, until the consistency is equal to that of 10w-30 motor oil.



Put several drops of the liquid acrylic in the cap

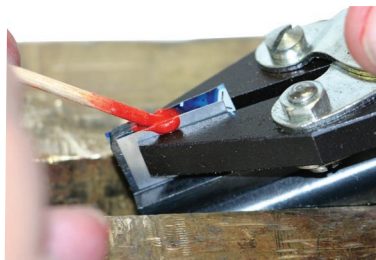


Add dye to the liquid

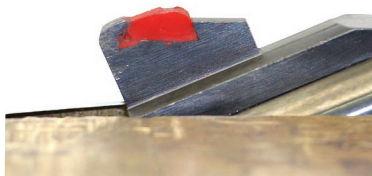


Add powdered activator to the liquid/dye mix

Pick up a drop with the toothpick and place it into the dovetail. Move the liquid with the toothpick around and push it into both the corners of the dovetail and the two holes you have drilled. Keep picking up drops and transferring them until you have the entire dovetail overfilled, because the mix will shrink slightly. Leave it to dry about 30 minutes.



Push sight insert mixture into dovetail

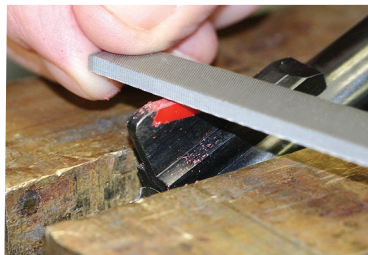


After 30 minutes, remove dams. Insert will be rough and oversize

After 30 minutes, remove the pliers and carefully peel the two pieces of aluminum off the sides. At this point you should have an insert that has completely filled the dovetail, and will be standing higher than the sight blade. File down the top of the insert with a smooth mill or pillar file until it is flush with top of the sight ramp. If you file carefully, this should be good enough, and not need any more finishing. If it's still a little rough, take some 400 grit wet or dry paper, and use a drop of oil on the insert, polish the top of the insert. You may also have to clean up some overflow on the sides of the ramp, but they can be easily be scraped off with a scraper of some type.

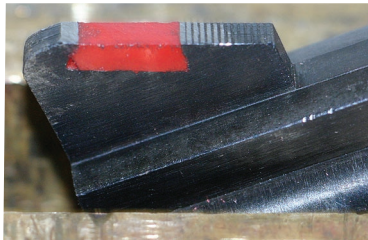


Gently scrape the edges clean with a pocket knife

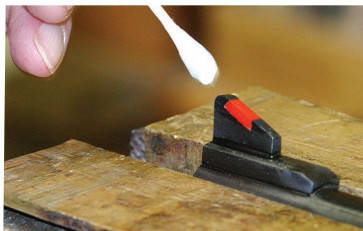


File the top of the insert

If you have scratched the sides, or hit the top of the sight ramp with your file, you can now de-grease the ramp with TCE, and touch up the bluing with your favorite cold blue.

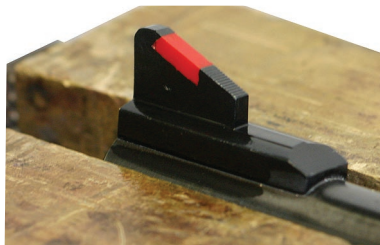


Smooth insert showing file marks on surrounding metal



Use cold blue to touch-up the file marks

Apply a drop of oil to the sight ramp, wipe it down, pick up your gun and admire your work!



The finished insert, ready to shoot

