

SHOTGUN GRENADES

We recommend that you use Bullseye powder for the explosive and in the time delay mode you need the slowest burning powder possible for the timer. Hodgdon H870 is a good example.

So you will know what you have in each one, you will need to color code each style. A black ring around the mini's should be sufficient. Use these as an example: HE-Red, Incendiary-Yellow, Time Delay-Green and High Shrapnel-Violet.

Naturally, you can carry the mini's in your magazine tube, but any and all others should be carried in some sort of impact resistant case. In other words, don't take any chances that they will be dropped or deformed for they could be detonated prematurely, thus causing serious injury to you or others.

You will need the following tools to make these: a small vise, a hack saw, a riveter, parafin wax, a shotshell loader, a metallic cartridge loader, a hammer and a rough file.

Finally, we must stress that these are extremely **dangerous** and should be treated as any other device of this nature "with great care and respect".

Regardless of the length of these grenades, you must not make the outside diameter of the rounds any larger than the inside diameter of the muzzle of the weapon to be used. Either make them small enough to fit any choke in the bore size desired or make them to fit your weapon and never fire them in another.

Diagram #1: Get some of the thinnest tubing you can find (preferably steel or aluminum) that is near or the exact inside bore diameter of your weapon.

Diagram #2: After loading your shotshell to the desired load or after cutting off the end of a commercial load and draining the shot, you need to measure how deep it is from the end of the shell (with no end crimp) to the inside bottom of the cup of the wad.

Diagram #3: Now cut a piece of your tubing to this length plus one half ($\frac{1}{2}$) inch longer.

Diagram #4: In the end of this tubing, make cuts as shown in diagram approximately one half ($\frac{1}{2}$) inch inward.

Diagram #5: Then bend all of these fins inward and make them overlap.

Diagram #6: Then drill a hole of your size preference and insert a rivet of your size preference and set it in place.

Now melt a small amount of wax and let it solidify around the inside bottom of the base to seal. No diagram.

Diagram #7: You must now select a pistol cartridge case loaded with a primer only that will fit inside the tube casing (if there is a large gap, it doesn't matter but a close fit is best - example: .38 used in a 12 bore is not wise, but a .44 - or even a cut off .410 shotshell - in a 12 bore is good). This case cannot be any closer than 3/8 inch of the end of the tube casing. It must be recessed as shown. You may need to shorten the pistol case some minor amount.

Diagram #8: Fill this pistol cartridge case full of the fastest burning smokeless powder you can find and if possible use the hottest magnum primer available in the pistol case.

Diagram #9: Then insert the pistol case into the explosive case as shown and press it into the wax at the base to keep the powder from leaking out.

Diagram #10: Melt more wax on top of the pistol case and seal it into the explosive casing. Make this a very light coating.

Diagram #11: While the wax is hot, place a washer that is near the same inside diameter of the explosive casing on top of the pistol case as shown.

Diagram #12: Melt more wax all over the outside of the explosive case and insert it into the shotshell case. Make sure it is a snug fit and that the casing will not fall out. (WARNING: If this explosive casing extends past the end of the shotshell do not proceed further but melt the wax, disassemble everything and shorten everything).

Diagram #13: Fill the end with more wax and insert a similar washer as in Step #11 in the end of the shotshell while the wax is still hot.

The mini's are now ready for use, but there are helpful hints about assured detonation and serrations at the end of the text. It would be wise to read all of the contents, as you may find ways to combine some of the aspects of the others in the mini's.

SIX (6) INCH HIGH EXPLOSIVE: This one is made exactly like the mini's except that the tubing is 6" long or longer and naturally they are not tube loadable. They usually cannot be over 6" long to be inserted into an auto or pump, however, we have made some that have been 10-14" long and fired them in single shot and double guns. These require that the pistol case be filled (as shown) to the end with fast burning powder. In other words, about 4½" of powder. Diagram #14.

SIX (6) INCH INCINDIARY: These are made like the 6" HE

but only the pistol case is filled with powder. After filling it, drip a small amount of wax on the end of it to seal it in and keep it dry. Then fill the steel casing with granulated magnesium. Then insert the pistol case and seal like the mini's. Diagram #15.

SIX (6) INCH HIGH SHRAPNEL: This is loaded similar to the 6" HE but you need to mix in small amounts of metal chips, buckshot, birdshot, or even staggered washers with the powder. Diagram #16.

SIX (6) INCH TIME DELAY: In this one, you must put in $3\frac{1}{2}$ " of fast burning powder and then put in very thin washers up to the 4" mark and then inside the washers hole put in very slow burning powder and then also slow burning powder in the pistol case as well but with a magnum primer. Then seal like the mini's. Time delay varies with powders but is usually $\frac{1}{2}$ to 2 seconds.

ASSURED DETONATION: You can normally rely on impact and deformity of the casings to detonate the explosives or mainly the primer. If you are experiencing difficulty, you can place a B*B on top of the primer in Step #11. You have to be **extremely** careful with these as you could just drop these wrong and they could go off. Please do this with caution and preferably only with the single shot 6" models.

SERRATIONS: On all of these, before putting any powder in them, take the tubing and cut lengthwise grooves on the outside of them. This increases accuracy and they now have weak stress points and when detonated have a greater shrapnel effect.

BARREL PROTECTION: We have never had any of these scratch a barrel but we do not rule out the possibility. On all 6" models, we recommend coating the entire length of the explosive casing in wax, and after use, an immediate cleaning.

ACCURACY: Burst Radius: Effective Shrapnel Radius:
(all approximates)

MINI'S: 100 yds. 6" drop: 2" Burst: 5"-10" Shrapnel.

HIGH EXPLOSIVE: 100 yds. 15" drop: 12" Burst: 30" Shrapnel.

INCINDIARY: 100 yds. 17" drop: 4"-5" Burst: 12" flame.

HIGH SHRAPNEL: 100 yds. 11" drop: 8" Burst: 22" Shrapnel.

TIME DELAY: 100 yds. 26" drop: 8" Burst: 15" Shrapnel.

