

GRENADES

Grenades, unlike a rifle, are area weapons that allow a single man to kill a mass of enemies who are behind cover, or who's position is not clearly known. It's pocket artillery.

A SWAT cop in full body armor is a difficult target to engage with a rifle, but grenades will effectively neutralize this threat because police body armor only protects the torso and head (helmet). Grenades fragments will penetrate any unarmored spot on a cops body, killing him, or disabling him and making him easy prey to finish off.

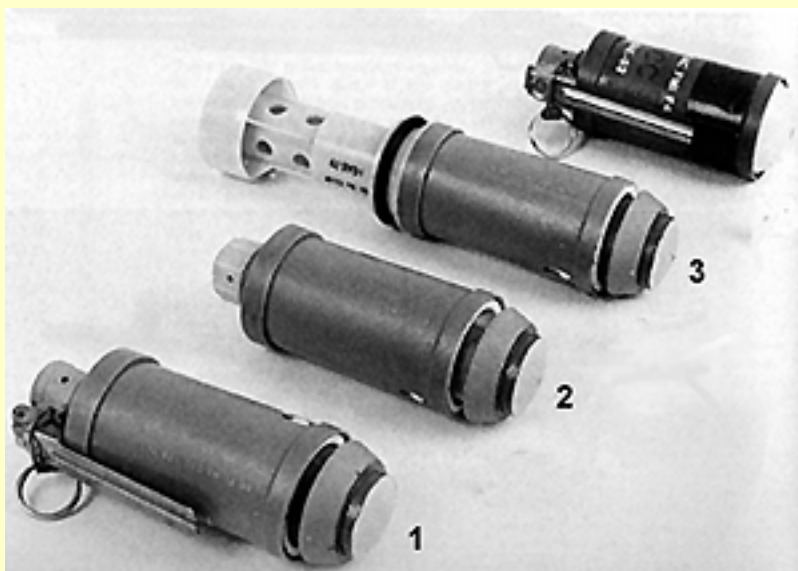
The LA bank robbers would have been better off if they had some grenades with them, especially the one who got shot while trying to get a new car (see video [here](#)). Rather than trying to shoot the police who are hiding behind the protection of a car, he could have tossed a grenade over his car to engage the cops en mass. Once the grenades exploded, killing or wounding the police, he rushes them while firing full auto.

This wouldn't have kept him from getting killed eventually (too many cops, too much time), but he would have taken some pigs with him. A more well prepared criminal wouldn't have taken so long to engage the police with his superior weaponry.

This is what they should have done (besides get caught); come out of the bank laying suppressive fire while driving at high speed towards the nearest exit, chucking grenades at cops hiding behind cars. As piggies run away or are killed, push through road block chucking smoke and tear gas behind you to cover your retreat and prevent pursuit.

Any piggies get in your way, full auto AP with frags, deploying smoke to cover your rear. Shit gets too thick, start chucking firebombs to light the neighborhood on fire so piggies have to divert effort to saving civilians.

Once free of immediate police contact, pull a ninja turtle under cover of smoke and leave behind a booby trap or two to prevent immediate pursuit.



This picture illustrates a commercially manufactured grenade that can be used as a conventional grenade (1), land mine (2), rifle grenade (3), and a bounding grenade (un-numbered).

The grenade is a basic explosive unit that is altered by addition of various sub-units to modify it to suit the mission. I'm adapting this principle for my version of grenades.

To make a grenade you'll need the following parts from the local hardware store:

One section of 1 1/4" PVC pipe cut into a 6" length

Two 1" pipe plugs

One 1 1/4" pipe cap

One threaded 1 1/4" coupler

One threaded 1 1/4" cap

Now I know your saying to yourself "NBK2000 thinks that PVC pipebombs are something new?". Well I know they've been done to death before but this isn't what you think. Just keep reading.

You take the two 1" pipe plugs and trim them down so there's only a 1/4" instead of an inch of the part that goes into the pipe. You glue a plug into one end. This plug isn't to provide confinement, but merely to protect the filler from exposure to air and water.

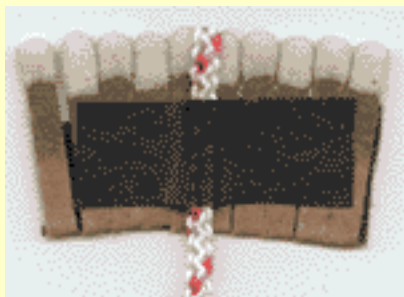
An ideal filler would be AP putty since it's powerful, easy to make, stable (if made right), and doesn't need a detonator to set it off, just a flame.

You fill the pipe half full with the putty, making sure to remove any gaps or air pockets. Then you take a waxed dowel 1/2" in diameter and center it in the pipe. Press small blobs of AP putty in the gap between the dowel and the pipe with a small stick.

Once you're a 1/4" from the top, pull out the dowel (slowly). This leaves a space for your igniter. Place a few ground up match heads or sugar/chlorate powder in the bottom to insure ignition.

If you want to use a more powerful and safer explosive, use a high order explosive.

With any explosive you should add lighter flints or magnesium shavings to insure a shower of hot sparks to ignite any flammable materials or fuel that might be released by the penetration of the shrapnel into a target, such as a cars gas tank. Boom!



Now you make your igniter. This is done by taking a length of fuse long enough to provide a 5 second delay and, taking a book of matches, make a pull fuse igniter. You make this one very short though by laying out the match section and placing a strip of tape just below the match heads (unseen on back side in picture). Then you cut off all the cardboard a 1/2" from the match heads. Tape holds the fuse lined up properly with the match heads.



Next you lay your fuse on the match igniter and fold up the matches in 3 sections around the fuse with the heads lined up with the fuse end. Wrap some tape around the cardboard part of the matches to keep them from unfolding and keep wrapping down around the fuse to keep it in place.

Next you take the paper part of the match book with the striker pad and cut off the paper on the short end just below the striker. Fold it in half around the match heads.



Fold the paper back so that there's a total of about 1" of paper, put on your pull ring, and rubber band the tab around itself to keep it from unfolding and to provide the friction to the striker pad to ignite the match heads.

Make sure the ring is either small enough to pass through the coupling or leave the match cover unfolded (but wrapped) so you can put it on later.

Pass the free end of the fuse through a hole (slightly larger than the fuse) that has been drilled in an end plug. Make sure you put a single wrap of tape around the fuse where it comes in contact with the plug to prevent a fizzle.



Slip a length of 1/2" O.D. or so plastic tubing cut to such length that a quarter inch of fuse end is exposed. Center the fuse in the tubing and pack the space between with small beads of wax that are hand softened and pressed in with a small stick. This is to prevent premature explosion from fuse blow by.

DO NOT melt the wax into the tube, this will soak into the fuse and render it useless.

Now pack the space in the end cap with wax in the same manner. This stabilizes the fuse into the center and prevents any possible flame from the burning fuse getting out around the tube and prematurely exploding the grenade. You may want to use putty epoxy instead if you expect hot weather to prevent any possible melting of the wax and failure of the fuse.

If you'd prefer a pull cord, you can take a length of string about 8-12" long and pass it through the fold in the paper of the pull igniter and tie a knot around the igniter. A small bead (or bottle cap) is slipped on the string and knotted into place on the end. Take the string and pass it through the threaded connector which you now slip over the pipe and glue into place.

There should be enough string hanging out that you can get a good yank without there being so much that it's hanging down to the ground. Not too long, not too short.

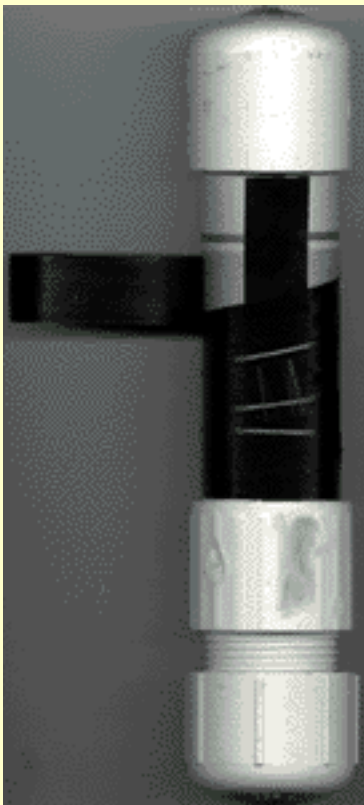
The string is folded down into the hole so it won't tangle, the bead (or cap in this case) put in, and the cap screwed into place.

Now your probably saying to yourself "So what! PVC isn't going to do much damage because it's too light to go any distance and too soft to penetrate." True enough, but that's the whole idea behind a blast grenade, that the blast, not fragments, do the killing and destroying because you're within the danger range of a regular frag grenade. Ideally you'd make the case out of cardboard tube instead of PVC pipe, but pipe is very readily available. If you can get it though I'd recommend the cardboard. Much safer.

With just the explosive filler, the grenade has a lethal radius of 2-3 yards, so obviously you have to get it right on target for lethal effect. But, because an explosion will also produce a deafening roar and blinding flash, it will daze and stun an opponent for at least a few seconds or longer, allowing you to close in and finish them off before they can recover their senses.

Inside of a room the blast would be absolutely devastating.

The fragmentation sleeve is made on the grenade itself out of newspaper and electrical tape. It's constructed so that it can easily be slipped off in a second to convert the grenade from fragmentation to blast.



Here we see the beginning of the sleeve. First, a single wrap of newspaper cut to exactly the width between the cap and the coupler is taped by the edges to keep it in place. This keeps the sleeve from sticking to the grenade if the grenade gets hot, the tape oozing adhesive when hot.

Next, a wrap of electrical tape is wound around the paper, sticky side OUT. This is to hold the paper envelope in place later on.

Be sure to make at least one total wrap around both ends so that NO paper is showing.



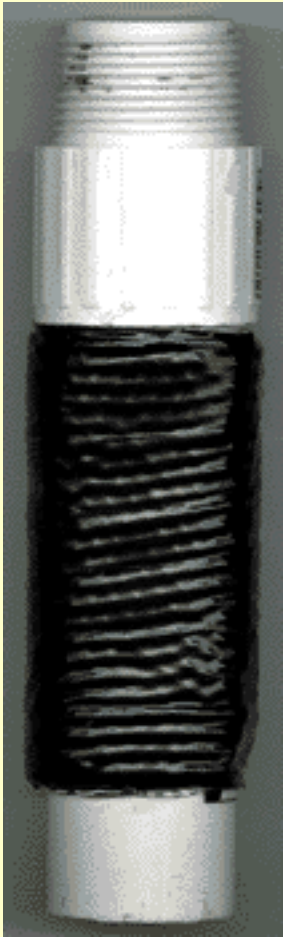
Next, a paper envelope is made from newspaper cut to such width that it can be folded in half with an extra 1/2" that folds back over the open edge, and still fit between the coupler and end cap. The paper envelope is about 1' in length.

One edge is taped shut by folding a strip of tape over the open end and trimming to size. Then the envelope is laid on the tape wrap.



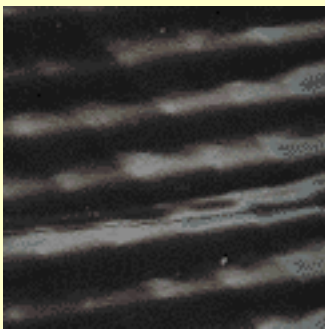
Now the envelope is filled with BBs. Pour in about a hundred at a time. You gently shake it side to side to settle them as closely together as possible. Keep your fingers flat against the envelope as you slowly rotate it, flattening the BBs into a single layer as you roll the envelope onto the tape. Add more BBs as needed.

Once you've rolled it completely around the grenade, spiral wrap electrical tape, sticky side DOWN, around the paper till none is showing. Don't do this too tightly or the sleeve will be difficult to slid off.



This is the completed frag sleeve. When constructed as described, using the dimensions listed, you'll have about 720 BB fragments in the sleeve. If you double layer the sleeve, you'll have about 1,500. More than enough to kill anyone near it when it explodes.

I've left the end cap off so you can see how the sleeve will slide off without it in place.



This is a close up of the frag sleeve. Note the uniformity of the dimples (BBs). Uniformity is important to a consistent fragmentation pattern.

The end cap should have a layer of BBs in it held in place with cotton wool or such to keep it from rattling.

In use, the frag sleeve is already on the grenade and removed by pulling off the unglued 1 1/4" cap and sliding off the sleeve when blast only is desired. Before putting on the end cap, drill a tiny hole in the

bottom, otherwise vacuum will make it difficult to pull off. It also wouldn't hurt to grease both end caps with a very light coating of vaseline to keep them from sticking.



There it is. You now have a waterproof (with cap screwed on), non-metallic (with no frag sleeve and pull cord), pull fused grenade that converts in a second from lethal fragmentation with hundreds of fragments to lethal blast with a half pound (or more) of high explosive.

And if you want you can push a length of wood dowel or PVC pipe into the open end of the threaded adaptor, use a longer string, and have a potato masher style grenade that you can throw even farther.

The grenades cost about \$5 each, not counting filler or frags.