How to make Shell Explosions

Introduction

This is a basic article on how to make quick and easy shell explosions from some foam rubber sheets and a washer.

Materials

Foam rubber sheets – commonly found as packing material for delicate objects, thinner pieces (1/4" - 1/2") are preferred) and lengths of 4" or more are useful. Colors such as white, black and grey are preferred to minimize the amount of painting required.

Superglue – Cyanoacrylate glue, either liquid or gel

Scissors

1" diameter washers to use as bases

Permanent marker to draw on the foam

Ruler – to measure lines and height

Instructions

Determine what scale explosions you wish to create. For instance, for 15mm figures, 35mm high explosions are large, while the same explosion for 25mm figures would just be a small one. For the purposes of this article, I will be making 1.5" high explosions.

Draw a line with the permanent marker 1.5" tall across the foam (the longer the strip you can make, the better) (Fig. 1A). Cut the strip of foam off. If you don't have thinner (1/4" thick) foam rubber, you may need to split the strip in half to reduce the thickness. To do this, nip around the edge, splitting the foam in half. (Fig. 1B) It may take several passes to completely cut through the foam (Fig 2). After splitting the foam completely, you should have two roughly equal halves (Fig. 1C).



Figure 1. Foam sheet marked, cut and split in half.



Figure 2 – Foam sheet partially split in half

Take one of the foam pieces and cut slits, about $\frac{1}{4}$ " apart and to within $\frac{1}{4}$ " of the bottom (Figure 3A).

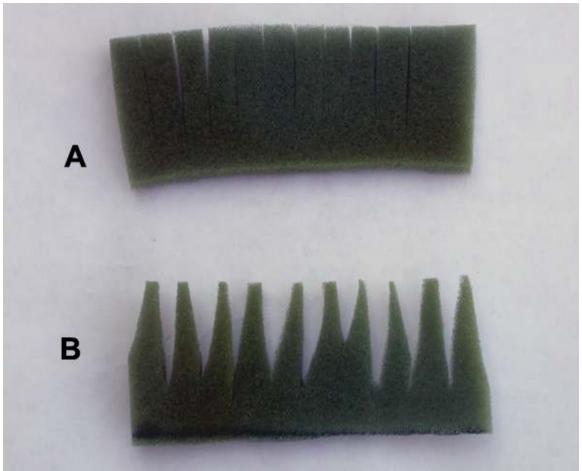


Figure 3 – Foam with slits cut and "fingers" cut into wedge shapes

After cutting the slits, trim the fingers into wedge shapes (Fig. 3B).

Repeat the trimming on the other two sides of each wedge to form tall "pyramids" (Fig. 4)

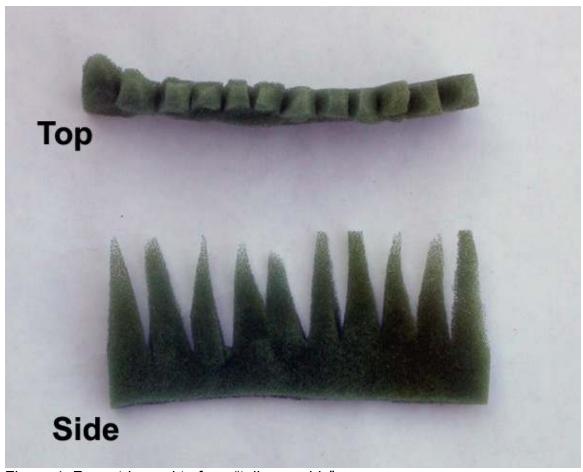


Figure 4. Foam trimmed to form "tall pyramids".

Gently roll the foam into a cylinder, being careful not to crush the foam (Fig. 5). Glue the end of the foam using a dab of CA glue (Fig. 6) Pinch the end down firmly to get a smooth transition. Be careful not to glue your fingers together or glue them to the foam.



Figure 5 –Rolling the foam.



Figure 6. End glued down with CA glue.

By simply adding additional strips – use CA glue to attach one end -and continue rolling the cylinder, you can make larger explosions. Try to keep the base edge as level as possible. (Fig. 7)



Figure 7. Gluing an additional foam strip to extend the explosion.

After sealing the additional piece, rearrange the strands for a "fuller" looking explosion (Fig 8).

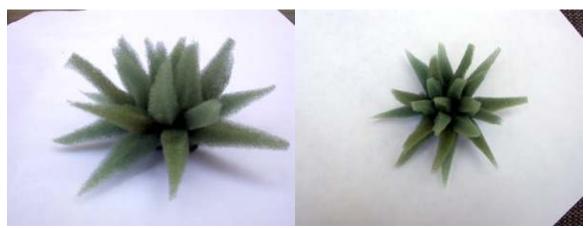


Figure 8 – Fluffed and arranged explosion

To add weight, a 1" washer is glued to the base (Fig. 9)



Figure 9. Bottom view of various explosions, some with washers attached.

Additional trimming can be done, such as splitting larger fingers into either two smaller ones, or making them less square. If split in two, often one half is trimmed a little shorter to provide more "depth" to the appearance (Fig. 10)



Figure 10. Explosion after a final round of splitting and trimming.

The explosion can be used as is, or additionally painted using reds and oranges for flame, and black, white or gray highlights for various colored smoke.