

SNAPSHOT

STRETCHING SPRUE AND PLASTIC STOCK

YOU MAY FIND YOU NEED rivet details or thin plastic to replicate wiring, cables, or weld beads. In all of these cases — and many more — knowing how to stretch sprue is invaluable.

Captions and photos by Jim DeRogatis



1 Experiment with different sprue sections. The way plastic stretches differs from manufacturer to manufacturer. Transparent sprue performs differently than opaque plastic. When selecting sprue to stretch, look for longer straight lengths without ejector-pin marks or branches in the middle. Trim the sprue so there is enough to hold on to at each end during heating.



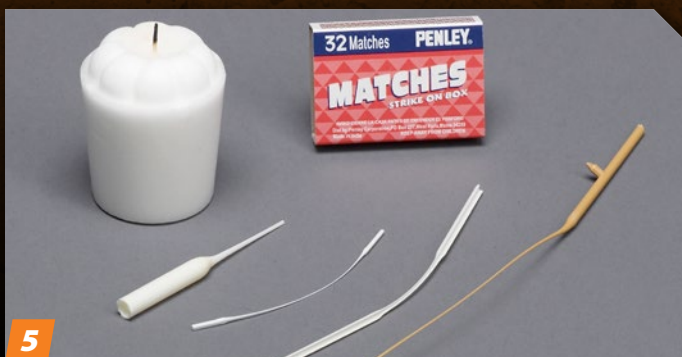
2 Light a candle and wait for the flame to burn steadily. Then grasp the ends of the sprue and hold the center section about $\frac{3}{4}$ inch above the flame, turning it slowly back and forth. Don't get too close! You don't want to burn the plastic. Not only does it smell bad, it can be toxic.



3 Keep your eye on the section of plastic over the flame. As it heats, the surface sheen will change and the plastic will swell, which means it's almost ready to stretch. Another way to check is to let go of one end; when it begins to bend and sag, it's ready to stretch.



4 As you move the sprue away from the flame, steadily pull the ends of the sprue apart and the plastic will begin to stretch. Be careful: If you pull too fast, you risk breaking the plastic; pull too slow and the plastic will cool and result in an uneven strand. Varying the speed can yield different diameters appropriate for different uses.



5 A magical aspect of stretched sprue is that the altered section retains the shape of the original. For example, if you stretch a half-round sprue, you should get a half-round segment with a smaller diameter. You can stretch styrene strip, rod, tube, or stock with the same effect.



6 As mentioned at the top, stretched sprue has many uses. You can make wires, ladders, door hinges, control levers, and rivets, just to name a few. You can use it to replace details or fill holes. On this KV-1 turret, it replicates weld seams. Place thin filaments on the surface and then apply liquid cement to glue it in place. **FSM**