

May 3, 2003

Notes on X-Rockets' X'lent Idea No. 2 - Split Wire Ignition:

1. Start by clipping the end of the 24 Ga. wire to make a clean end.
2. With a knife, carefully split the wire starting 1-1/2" from the end. Make a small 1/8" to 1/4" split, and open up to place over the NOS stem. BE CAREFUL not to cut into the wire and cause a ground-out to the stem.
3. Pull the wire down to the GOX tube and mould it tight against the top of the tube with your fingers. MAKE SURE your GOX tube end is smooth so it
4. does not cut the wire.
5. Tape the wire to the GOX tube about 1" down. The cut end of the wire should lay over the tape to prevent grounding at that point, but the wire will spring out and touch the side of the grain after it is inserted - this is a good thing!
6. You can pull on the length of wire running down the GOX tube to see how the wire will spring out to the grain. You may also place another piece of tape at the base of the stem. This holds the wire to the tube making for an easier insertion through the nozzle.
7. Load the rocket down the rail and insert the stem up the motor. YOU MAY have to hold the wire at the tip of the GOX tube to help it in. WARNING: DO NOT make the split too wide, otherwise it could slip over the GOX tube during insertion!

It's really a lot easier than I explain here, and once you do it, it's a no-brainer!

This technique answers many of the FAQ's about how to do the ignition wire. The split wire sits on top of the GOX tube with about 1-1/2" end that touches the grain. When the GOX comes on, some gas shoots right around and down the wire to the tip where the spark is, and that flame propagates onto the grain. In this case, the GOX pressure helps PUSH the wire against the grain wall to give better contact, and away you go in less than a second every time!

Also - Try using a 2<sup>nd</sup> tie wrap if you wish.

Enjoy - Martin L. Dorociak [www.x-rockets.com](http://www.x-rockets.com)

X-ROCKETS<sup>1</sup> X'lent Idea No. 2

