

Tools of the Pros

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So you want to start scratchbuilding? Great! Scratchbuilding your own frame is fun and the pride one has in making their own to race is a very special feeling.

Here some of the tools that you will need to get to be on your way to make that first “my own” frame.

The Parts

Your local raceway, hobby shop or online source should have what you need to make your scratchbuilt frame. The Pros use K&S brass and piano (music) wire. K& S has brass tubing as well as strips and sheets. They also carry all sizes of piano (music) wire. The typical sizes used in building are .032, .047, .055, .063 and .078. Some of the more common strip sizes are .032 and .063.



Cutting, Trimming, Bending, and Measuring Tools

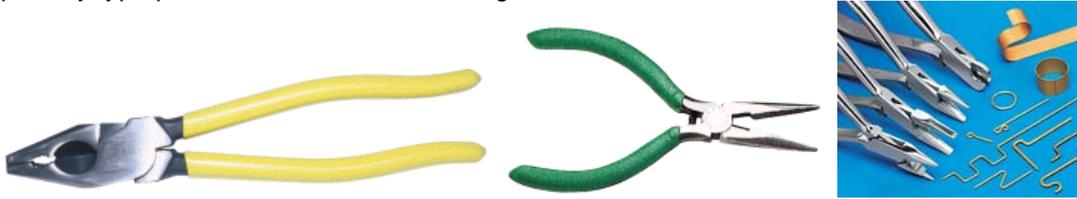
One of the main tools used is of course a Dremel tool. They come with cords and as cordless models. They are often sold in kits with many kinds of bits to include cutting discs. They also have polishing bits.



Another great tool to have is a Nibbler. It allows you to cut off small pieces at a time.



Pliers are a must. You should have a pair of needle nose and lineman pliers to make those bends. There are also some specialty type pliers made for exotic bending.



Clamps of various types are handy to hold things in place. Alligator clips are good to hold axles in place and the larger types for holding pans, etc.



Files are a must for sure. It's good to have a good larger flat file as well as a set of smaller files for more delicate work and cleaning up solder joints.



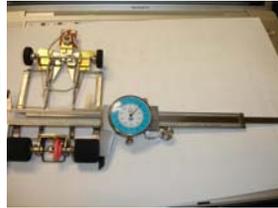
It helps to have some other cutting tools tool and the X-Acto knife set and saw are great. A jeweler's saw also helps.



Serious builders might want to invest in a cutting machine like this one.



You will need tools to do some measuring. A good 6 inch steel ruler is a must. Other items such as a square and calipers are also handy. The R-Geo Retro Tool has also become a very good item to have.



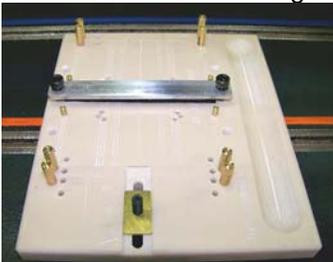
A set of various feel gauges is good to have to check your .050, .015 or other clearances.



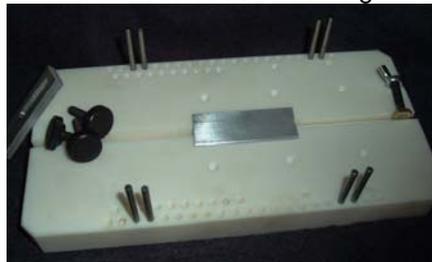
Jigs, etc.

The best frames are made using "Jigs" made for the hobby. Several new ones have hit the market lately and seem to be the choice for scratchbuilding. Both are excellent for getting your frame made just right.

This is the "BackTrack Jig"



This is the "R-Geo – Rick Jig"



Jig wheels can be various things but what is important is that you use the right ones to achieve the desired clearance. For almost all retro scratchbuilt classes, you could simply use 29 tooth Parma crown gears (with 3/32 axle sleeves) for the rears. Some jig wheels are also commercially available. It's always good to have a set of the tires that you want to use to make sure everything is right. If your jig does not come with them, you will need some 3/32 piano (music) wire to make the axles for the jig wheels.



Soldering

There are many irons out there but a couple that the Pros like are the Inland 100 Watt (Gets REALLY hot) and the Weller 50 Watt. Other builders like to use mini butane torches too.



A Soldering station with a dial controller or just the dial controller itself is good to have to help preserve your iron from not being on full blast all the time.



You will need solder and flux of course. The preferred types of the Pros is Kester 44 Rosin Core Solder 60/40 .031 and Stay Brite/Clean Acid Flux. Some also use the Stay Brite Silver Solder. Some folks also keep a can of Radio Shack Tip Cleaner & Tinner around for the iron tip.



One of the items now being used by those building a lot is the new Inland Fume Trap that captures and filters any fumes from soldering.



Preparation & Cleaning

Piano wire and brass need to be prepped before soldering. Some use fine sandpaper to do this as well as Scotchbrite industrial type pads. They are also used to clean the frame during various phases of building and when you are all done. Other clean-up items are wire brushes, steel wool pads and good old Comet. This is all done to get the excess flux off the frame so it does not rust. The Never Dull is a great polisher.



And for those that want to get serious, you can always get a tumbler to clean that frame up.

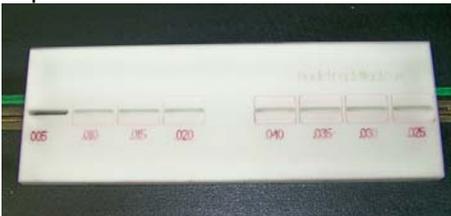


Some other neat tools:

A good tire truer is usually found in use by the Pros



A new item that has become available is the new BackTrack special test block with various recesses to set up guide depth.



This clear body mounting block comes in handy when you mount your body on that new self-built scratchbuilt frame!

