

Riveting Helpful tips and hints

A rivet securely holds pieces of metal together without any heat or solder. It passes through multiple layers of metal and then is flared on each side to hold the material in place. "Practice makes perfect" is the best motto for learning to rivet.

Wire Riveting

1. Decide where you want the rivet to be, use a center punch to mark the spot.
2. Choose a drill bit the correct size for the gauge of the wire
3. Place the piece of wire either in a vice or a pair of parallel flat pliers. Using the flat side of your riveting hammer, hammer a plus shape on the top of the wire. This will flare the wire out, creating a nail head.

OR

3. Ball one end of the wire with a torch and file smooth, this will also anneal the wire or you can place the balled end into a Hexagon Anvil or Draw plate, tap gently and create a nail head.
4. Slide the rivet rod into the metals you want to connect and trim the raw end so that a tiny amount projects out of the metal. **File that end flat.**
5. Set the rivet along with the metal it is holding together with the balled end down on a solid surface.
6. Tap top end gently so that the metals starts to move, creating a nail head.
7. Flip work over and repeat process until parts are securely joined.
8. Use a flat piece of tool steel to smooth each end

Tube Riveting

1. Drill hole through both pieces you wish to join together.
2. Cut a length of the correct size tube 2MM longer than the combined thickness of pieces joining together. Sand ends to remove any burs. Pass tube through the holes you've just drilled and set the piece onto a steel block.
3. Gently tap the tube with the flaring tool (I use a center punch to start) until the top end starts to flare out. Do not hammer too hard or too much – it can cause the tube to bend. Turn your piece over and repeat on the reverse side until both ends are slightly flared.
4. Using the ball end of the chasing hammer or a dapping punch, tap the rivet unit it lays flat against the metal. You can finish off using a flat piece of tool steel.

Drill bits sizes for specific gauges of wires

Drill bit #	Wire Gauge
42	11
35	10
30	10
46	12
50	14 (for a looser fit)
52	14 (for a tighter fit)
55	16
59	18
65	20
67	22
72	24