

Very Important

METAL SAW GRINDING INSTRUCTIONS

GOOD RESULTS FROM ANY MACHINE are only obtained when the tool is kept in perfect condition.

A metal Saw must be kept reasonably sharp, have a proper clearance for each tooth and be perfectly round.

It does not require a blade of **Extreme Hardness** to saw ordinary steel or iron. Keep the blade well lubricated, run at a low speed, see that the work is firmly fastened to the cutting table and does not move.

GRINDING INSTRUCTIONS

EACH tooth must have a clearance of $\frac{1}{16}$ inch. Place the saw blade on Grinding Table with pin in center hole of saw, bring front of tooth against the $\frac{3}{16}$ -inch pin, then move the adjusting screw until the saw tooth barely touches the emery wheel. Be sure to keep the front of the tooth against the $\frac{3}{16}$ -inch pin and move the table backward and forward two or three times across the face of the emery wheel, then you are ready to change to next tooth. Before changing see that the table is pushed from you, then lift the blade over the $\frac{3}{16}$ -inch pin to next tooth, being careful not to lift it off of the large pin in the center of saw. Now proceed as before, and so on through all of the teeth in the saw. The entire dullness must not be ground off at one revolution of the saw, but after you have ground around once adjust the screw slightly and go around again. A chalk mark placed on the blade will show you where to start each time. If the saw is very dull it is better to grind around four or five times so as not to disturb the temper of the blade. After the saw teeth have been worn down say $\frac{1}{8}$ inch, the rear corner should be rounded off each time the saw is sharpened, so as to present a smooth surface to the driving sprocket.

It is also well when cutting hard stock to chamfer off the corners of the teeth, taking care not to destroy the clearance. It is absolutely necessary that these instructions are carefully followed out. Every blade that we send out is carefully tested before leaving our works and is of correct temper for cutting iron and steel (unless of unusually high carbon) when properly used. Blades when received from us are always properly ground. If blades dull quickly you are running or feeding too fast for the stock you are cutting.

We recommend the following lubricant for our saws: 10 pounds whale-oil soap, 15 pounds sal soda, 2 gallons best lard oil.

Shave the soap so that it will dissolve readily, put the whole in a clean 40-gallon cask and fill with water. When thoroughly dissolved it is ready for use. The whale-oil soap can be obtained from any wholesale druggist. For less quantities use the same proportion.

THE Q & C COMPANY