

PINTLES & GUDGEONS

Another exercise in preparation, manufacture, and assembly.

Material required: 1/16" x 1/64" brass strip (annealed)

1/16" dia. brass tube

1/32" dia. brass rod

Solder (1 or 2 temperature values), flux, solder iron and/or small torch

1/16" Asbestos or 1/16" hardwood strips

Misc. drills, pliers, clamps, vice, etc.

Step No. 1:

*Anneal strip brass (if not already) with torch or over any flame (hold with pliers) until workable - let air cool.

*Cut off approximate lengths allowing for all bends. Fold over 1/16" dia rod or with chainnose pliers.

*Assemble 1/16" dia. tube and formed strips as shown in Sketch A. Straps must be a snug fit. Check to make sure they are straight. Flux and solder with hardest of the solders employed. Leave sawing space between straps.

*While still in vice, saw off straps and file saw cuts smooth.

*Set pintles (to be), one at a time, on edge of 1/16" x 1/4" x ? asbestos or hardwood clamped in vice. Insert 1/32" dia. rod thru pintle tube leaving 1/8" extending thru tube, flux and heat with iron and solder will run into tube and secure all - trim and file. See Sketch B

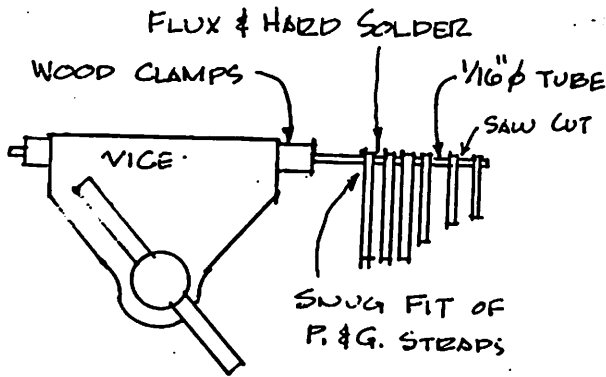
Step No. 2:

*Slip units over 1/16" hard material and centerpunch for nail (bolt) holes allowing for bend areas near pivot. Slip over wood (1/16") strip and drill thru at slow speed. See Sketch C.

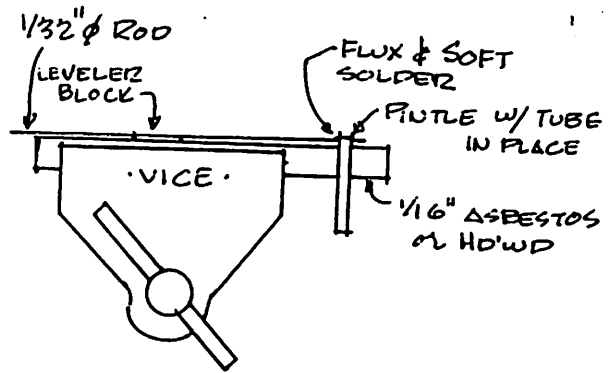
Step No. 3:

*Clamp unit in smooth needle nose and make first bend outward. Square corners with pliers. Center pivot point (in pliers) over a hardwood plug (sized a smite smaller than the rudder and stem) and make a second bend and square off corners. Make a final trim of lengths and shapes and you are ready for installation. May be blackened but don't dip pin (1/32" rod) - it can reduce a nice fit. See Sketch D & E.

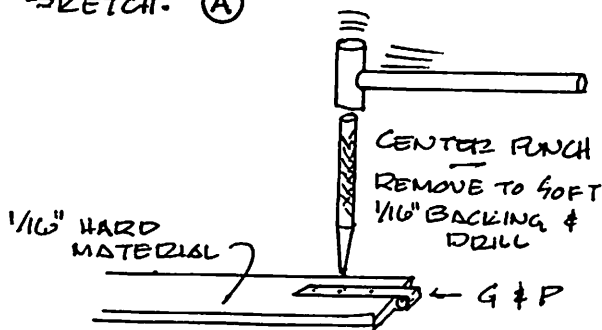
Roos' Assembly Line



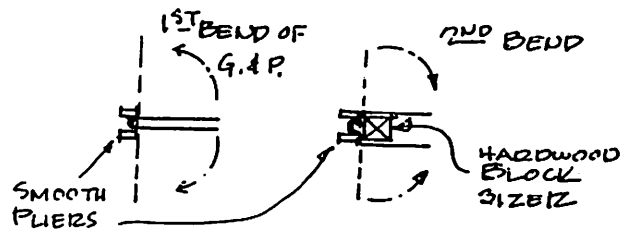
SKETCH (A)



(B)



(C)



(D)

(E)

• SQUARE OFF EACH BEND WITH SQUARE EDGE PLIERS