

## HOMEMADE AND HANDY

By Gene Paulus

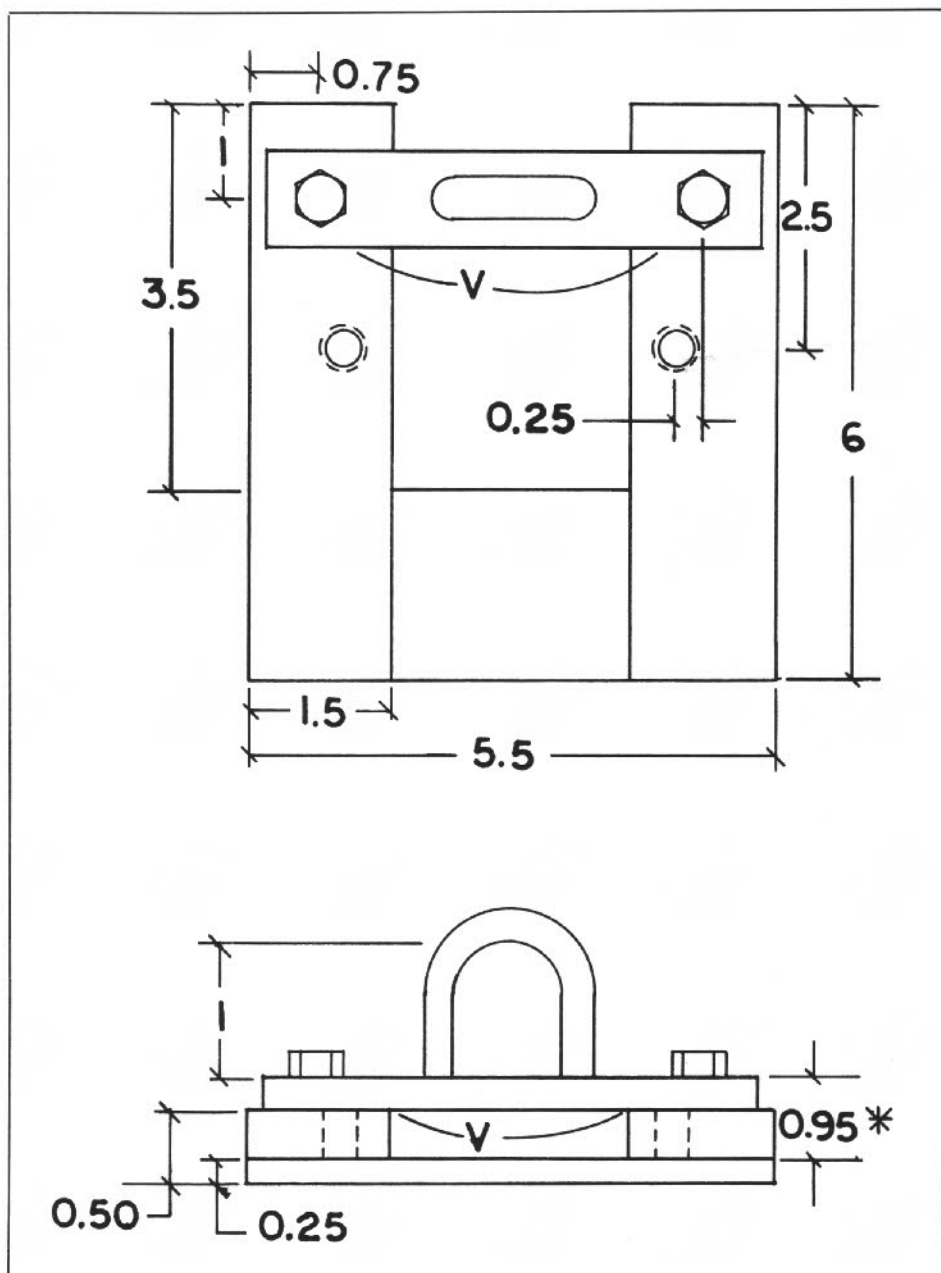


Gene Paulus with his reel bearing puller.

Now that summer is nearly over, most of us who work in golf course shops are beginning to think about winter maintenance and just starting to get organized with those thoughts in mind. Two years ago we approached the Ransomes Motor 180 reel maintenance program with the intention of replacing the reel bearings. After some initial frustration and question of how to get them off without breaking the bearing carrier housing, it appeared we were confronted with another "mechanic's nightmare" and decided there had to be a better way than time robbing, broken hammers and broken housings. The better way developed after putting together a few pieces of flat and round stock steel, developed after putting together a few pieces of flat and round stock steel, 5/16" — 3/8" bolts with some welding. The mechanical drawings illustrate our solution, and it has worked very well for me and quite a number of other golf course mechanics.

The drawing accompanies this article so that you can build one of these yourself or have a machine shop put one together for you. Also, Hanley Implement in Sun Prairie has made them available. This adapter is used along with a bearing puller of some sort. Harmonic 2-bolt Balance Puller or the OTC Model #515 (Owatonna Tool Company) like we use will work. Taking the bearing adapter, unfasten the two bolts from the U-clamp section, slide flat section down stem of bearing housing and attach U-clamp section over knob of bearing housing. Put on shop bearing puller. It is important to make some sort of protective sleeve to protect the end of the threads on the reel shaft. This can be made out of a threaded rod coupling nut or a short pipe counter drilled to slide over the threaded area so that the bearing puller can push against it. Press out old bearing using an arbor or shop press and press the new bearing into the bearing housing. The job is done! This homemade implement has been very helpful to us and I hope you will find it useful also.

*Editor's Note: Gene Paulus has been the mechanic at Maple Bluff Country Club for 5 years and he has a number of "inventions" to his credit. The mechanical drawings were made for us by Jim Berbee of Madison. Jim is a graduate student in Mechanical Engineering at the UW—Madison and worked five summers at Blackhawk Country Club.*



These drawings are 1/2 scale. The asterisked dimension is critical. To obtain it, washers may be added at position "V".