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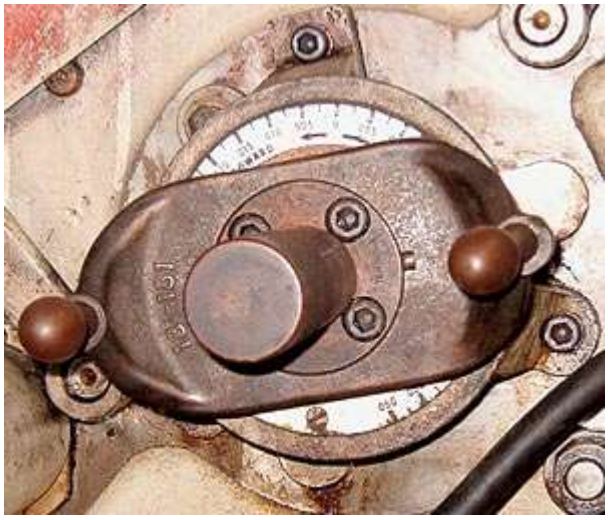
Pressman's
Toolbox

Fixing a sidelay hub

By Frank Bourlon

The Goss Community sidelay hub is made of cast iron. Occasionally, whenever the sidelay locks up at the end of its travel, it's not unusual for someone to use a long bar to unlock it.



Goss Community sidelay hub.

The bar is placed between the sidelay handle and the sidelay locking knob and pressure is applied. Using this procedure, however, can place excessive stress on the threads that support the locking knob and the threaded portion of the hub may break off (see Figure 1).

Fig. 1

Fixing is easy

Fortunately, the sidelay hub can be repaired without too much difficulty. First, drill a 5/8-inch hole through the center of the hub. Second, slip a 5/8-inch-by-5-inch-long grade 5 bolt through the back of the hub. Third, weld the bolt head to the hub.

Use a machine lathe to center the hole. If you don't have access to a lathe, a local machine shop can do it for you.

The first step is to mount the hub into the lathe, threaded end facing out, of course. If you can, use a three-jaw chuck.

Before you drill the hole, be sure to mill the surface where the threads have broken off. That will help you locate the center of the hub.

Drill incrementally, using ever-larger bits. This approach will help you ensure the hole is straight and reduce heat and stress on the drill bit. I normally begin with a 1/4-inch bit, moving to a 3/8-inch bit before finishing with the 5/8-inch bit.

Prepare the bolt

Once you're through drilling the 5/8-inch hole, you're ready to prepare the 5-inch bolt (see Figure 2).

Fig. 2

You have to modify the bolt's shoulder because its .620-inch size is small enough that it will slide through the 5/8 (.625)-inch hole.

To fix that problem, increase the surface of the bolt. First, place it in a vice. Use a chisel to mar the shoulder of the bolt evenly — from end to end, around the entire surface. Alternatively, you can place the bolt in a lathe and use a knurling tool to slightly enlarge the diameter of the bolt.

The goal is to enlarge the shoulder of the bolt just enough to cause resistance as you press or drive the bolt into the sidelay hub.

I normally press the bolt through the hub using a hydraulic press. Again, if you don't have access to a hydraulic press you can have the bolt pressed in by the local machine shop. Finally, weld the bolt head to the sidelay hub (see Figure 3).

Fig. 3

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