## HARBOR FREIGHT TUBING ROLLER ELECTRIC DRIVE/BOTTLE JACK KIT

## **Tools needed for assembly:**

- ✓ Welder
- **✓** Basic Shop tools
- ✓ HF 4 Ton Bottle Jack
- **✓** HF Electric Pipe Threader
- ✓ 20 HF Tubing Roller



Note: The installation instructions are very simple as the pictures below should say it all.

**Step 1.** Separate the laser cut tabs and grind down the rough edges where the parts were connected to each other.





**Step 2.** Dismantle the HF tubing roller down to the three pieces shown below.





**Step 3.** Install the parts as shown below, using the provided 5/16" fasteners on the bottom. If you have an earlier model tubing bender you will need to enlarge the rectangular window down 3/16" in order to insert the spring mount.



**Step 4.** The pin below is attached to the pipe clamping vise that comes in the electric pipe threading kit from Harbor Freight. You will need to press out this pin out of the clamping vise. The total length needs to be  $\sim$ 5" long. If pressing the pin out is difficult you may also cut it out of the vise.



Step 5. Weld the parts as shown below, be sure to keep the anti rotation pin vertical then fully into position as shown below in the  $4^{th}$  picture..

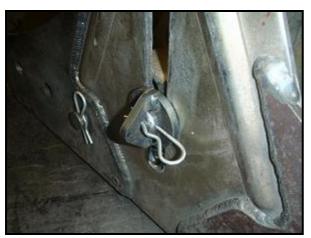








**Step 6.** Install the 20MM pin and bottom spring mount bracket as show below in the first picture. Be sure to keep the cotter pin parallel to the ground, as the opposing side of the pin will get the anti rotation bracket welded to the shaft, first tack into position and make sure the top die assembly freely slides up and down then fully plug weld the 20MM pin to the anti rotation bracket.





**Step 7.** Using the ½" pipe thread die that came with the HF pipe threader, remove the 4 Phillips screws and remove the chrome cap off the ½" pipe die, take a punch and pry back the 4 cutting teeth. This will allow you to slide the die ~2.75" down on the shaft then tack weld the die into position as shown below. Be sure to center up the die prior to welding, this will reduce the wobble of the pipe threader when installed.







**Step 8.** Install the drive axle, 4 ton bottle jack clamp, and springs as shown below.





**Step 9.** Finished assembly. Note you will need to add grease between bottom spring mounts and the tubing roller frame to ensure the assembly slides freely up and down.





If you looking to help speed up the learning process of the Harbor Freight tubing roller type in Google search "Harbor Freight tubing roller review" it's the first thing that shows up. Read the forum post on Pirate4x4 and Happy rolling.

