

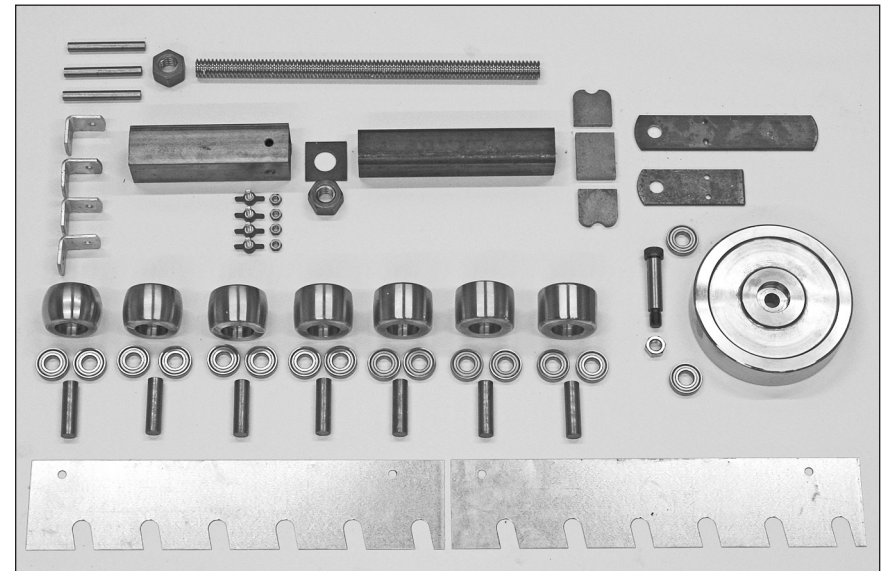


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Instruction Manual Part #28171Q - Rev. 5/05

Eastwood Weld-Up English Wheel

Part #28171



Instructions

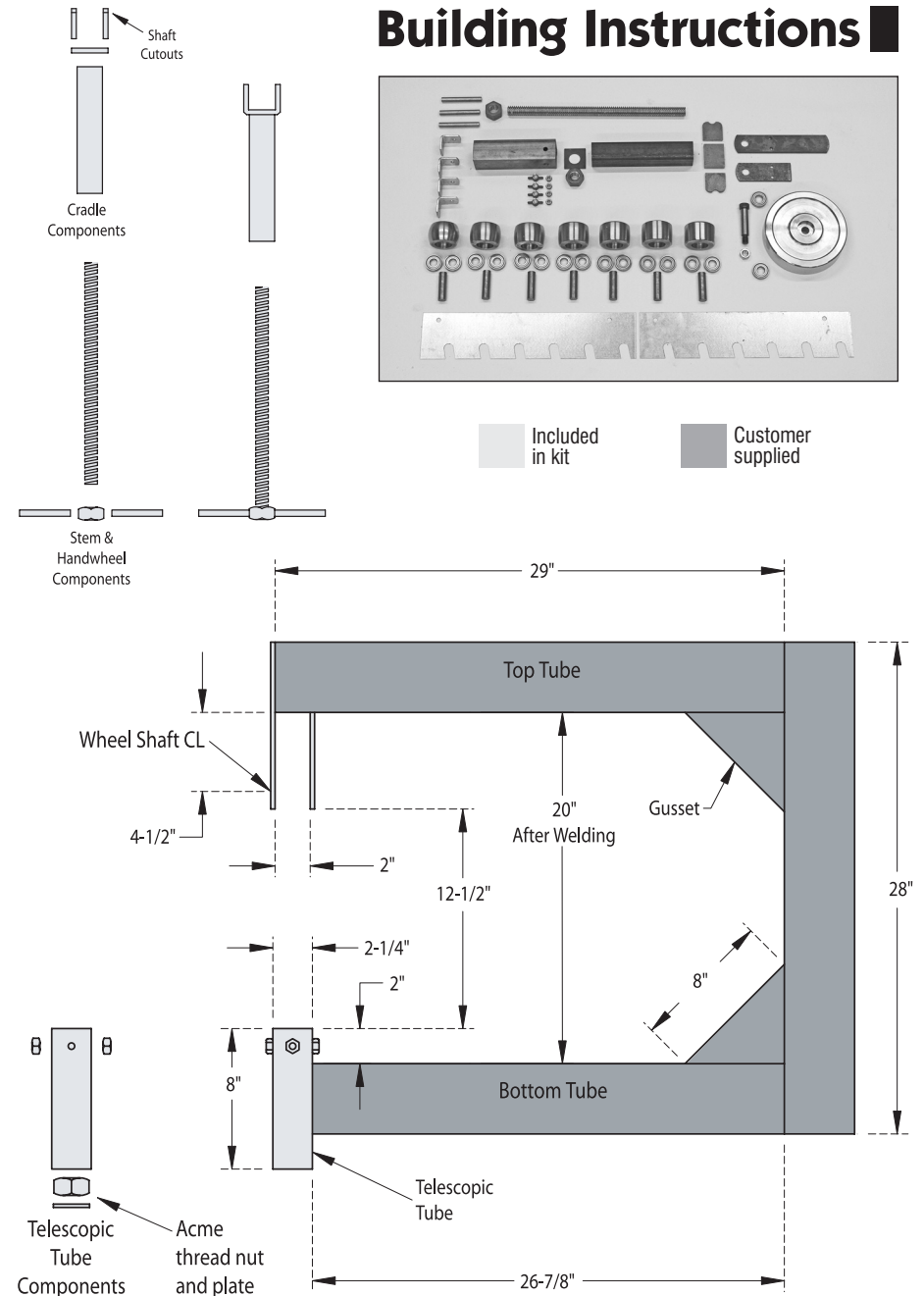
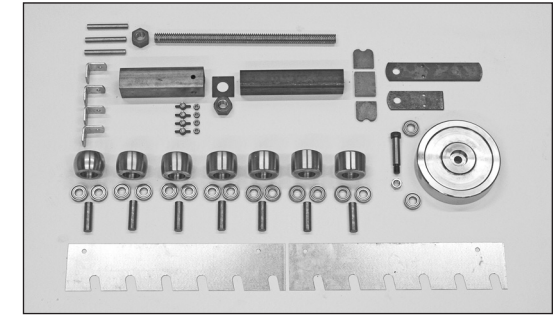
Introduction

Thank you for purchasing the # 28171 Eastwood Weld-up English Wheel Kit. Please note that this kit is intended for those with an advanced level of welding expertise. Please read and understand the instructions thoroughly before beginning construction of your English Wheel. The Weld-Up English Wheel Kit cannot be returned once work has begun. Eastwood is not responsible for damage to components incurred during construction or failure to operate properly after assembly. Observe proper safety procedures. Also wear appropriate protective gear while fabricating and welding.

Components List

- (1) Hardened 4130 Chro-Mo 8" x 2" wheel with bearings, shoulder bolt shaft & nut.
- (7) Hardened 4130 Chro-Mo anvils with bearings and 3/4" x 2-3/4" shafts. Anvil sizes are 2"R, 3"R, 4"R, 6"R, 8"R, 12"R and Flat.
- (1) 17-1/2" long 1"-5 acme thread shaft with a 1"-5 acme nut and 3 pieces of 1/2" round to make the Stem/Handwheel assembly.
- (2) pieces of 1/4" x 2" at 5-1/2" & 9-1/2" long with pre-punched 3/4" holes for wheel mounting.
- (1) 2-1/16" square x 3/16" plate with pre-punched 1-3/16" hole and (1) 1"-5 acme thread nut.
- (1) 8" length of 2-1/4" square 12 Ga. outer telescoping tubing with 4 pre-punched holes and (4) 1/4-20 nuts.
- Cradle Components, (2) 3/8" x 2" CR pieces with 3/4" half round 5/16" deep cut-outs pre-punched to accept anvil shafts, (1) 3/8" x 2-3/4" CR base and (1) 10" length of 2" x 2" x 3/16" wall inner telescoping tubing.
- (2) Washers used for shimming 8" wheel to center it over the anvil after assembly.
- Also includes 2 anvil storage racks, 4 wing bolts and 4 pre-punched and formed mounting angles.

Building Instructions



Building Instructions

Tack components together and check your work before running beads. It is critical to check and maintain all dimensions during construction. Please pay particular attention to those steps marked “**Caution**” throughout the assembly process.

Carefully unpack the Weld Up English Wheel Kit and make sure all parts listed above are included. Refer to the Layout Drawings on page 3 and 5 for position of components.

The frame (supplied by customer) is constructed of 1/4” wall 2” x 4” rectangular tubing. Suggested lengths are; vertical tube = 28”, top tube = 29”, bottom tube = 26 -7/8” and 2 triangular gussets cut with 8” sides.

Lay out the frame parts as shown in the drawing on page 3.

CAUTION: The dimension between the bottom of the upper 2” X 4” tube and the top of the bottom 2” x 4” tube should be 20-1/8” in front and 20” in the back. Split the 1/8” with 1/16” top and 1/16” bottom. This is to compensate for pulling that will occur when final welding is done.

Begin by tacking the 4 pieces making up the cradle together so you can have it to test your spacing. Make sure your slots are in alignment using one of the 3/4” rounds. It is helpful to tack some stops on your table or plate to help you keep it square and centered.

For the frame, clamp the three 2” x 4” tubes to a heavy T-slotted table. If one isn’t available, a good heavy welding table or a heavy plate to clamp to will work.

1st, clamp it squarely; tack the outside corner, inside corner then the top surface and then tack in the gussets (customer supplied). It is very important to tack one side first; it will keep it from twisting.

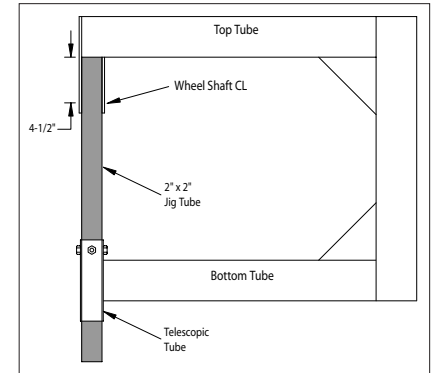
Then flip it, check all dimensions for squareness and flatness then tack the other side.

CAUTION: check all dimensions for squareness, and flatness again. Then you are ready to completely weld the seam. It is advisable to check for squareness and flatness often as you weld the various joints as pulling can occur.

Place the Telescopic Tube against the lower 2” x 4” tube with the clamping holes up. The top of the telescoping tube should be 2” above the upper surface of the lower 2” x 4” tube as shown in the layout drawing.

Building Instructions

When welding on the telescopic tube, lay the “C frame” down on 1/8” spacers to account for the 2-1/4” outside dimension of the telescopic tube. A 2” x 2” tube about 30” long is recommended as an alignment jig (customer supplied). Drill a 3/4” hole 4-1/2” down from the top through both sides of the jig tube, slip it through the telescopic tube and lay it in place. Place the jig tube against the top 2” x 4” tube and bolt upper wheel brackets to it. Shim spacers are recommended to keep the 2” x 2” jig tube centered in the telescopic tube and the clamping wingscrews will help center it.



CAUTION: The telescopic tube should extend no farther than 2” above the top surface of the lower 2” x 4” tube so as to allow insertion of the anvil cradle. Again, tacking is recommended. Double check your alignment and spacing with the cradle and post before completing the welds.

CAUTION: The 5-1/4” x 2” bracket has a tendency to pull in when welding, the use of a 1/6” spacer between the jig tube and this part will help to maintain 2” spacing.

Remove the jig tube. Then weld an acme nut to the 2-1/6” x 3/16” plate with the 1-3/16” hole in it ensuring it is centered. Next, run the acme thread stem up through the nut and put the acme nut inside the telescopic tube. Place the acme thread stem in the telescopic tube making certain it is centered, tack and weld.

CAUTION: this weld is going to take all the pressure from jacking so make it strong and it must be centered as proper operation of the anvil cradle is dependant on it.

Weld the 4-1/4-20 nuts over the clamping holes of the Telescopic Tube.

Weld the 3 pieces of 1/2” round to 3 flats of the acme thread nut then weld the acme nut to the end of the acme thread stem to create the handwheel/ stem assembly.

Your Eastwood English Wheel is now ready for final assembly and use. Please read and follow the operating instructions.

Operating Instructions

PLEASE OBSERVE THE FOLLOWING OPERATING SAFETY PRECAUTIONS:

- Always wear eye protection while operating the English Wheel.
- Avoid placing fingers between wheel and metal being worked as pinching could occur.
- Make sure that the frame is securely mounted to the work surface.
- Wear gloves while handling sheet metal to prevent cuts and scrapes.

OPERATING INSTRUCTIONS

1. Raise or lower the Anvil Yoke until the metal you wish to shape is contacted, but not too tight that it is difficult to move. It is better to roll something 50 times with a looser fit than 5 times with a tight fit because you can pinch the metal and cause creasing which will ruin your piece.
2. The 4 Lock Screws may be threaded in to hold The Anvil Yoke in place once desired pressure is achieved. Practice will demonstrate how varying the pressure affects performance of the tool and the curving of the metal.
3. Pull the metal down over the anvil as you are rolling. Move the metal forward and back in an “X” or “W” pattern to avoid over working an area.
4. Once the metal is bent it is difficult to un-bend it so work slowly and double check your work often. **NOTE:** The more metal is shaped, the harder it becomes.

Other Suggested Products

#28030 Panel Beater's Sandbag

Provides a yielding surface for rapid metal shaping.

#28035 Teardrop Mallet, 2"

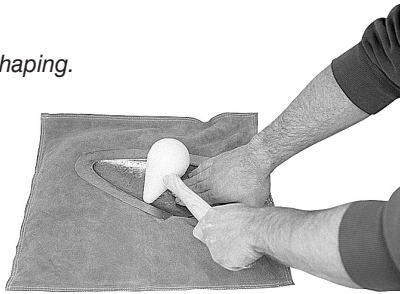
Dual faces for high crown work.

#28036 Teardrop Mallet, 2 1/2"

Dual faces for medium to high crown work.

#28037 Teardrop Mallet, 2 3/4"

Dual faces for low to medium crown work.



28030

#28046 Set of 3 Teardrop Mallets

One each of the above Teardrop Mallets.

#28005 Round Mallet, 2"

Cylindrical faces for flat to low crown work.

#28006 Round Mallet, 2 3/4"

Cylindrical faces with heavier weight for flat/low crown work.

#28007 Round Mallet, 3 1/4"

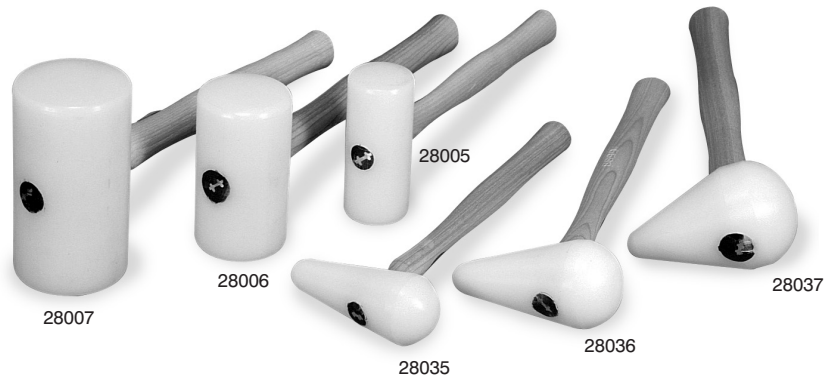
Cylindrical faces with heaviest weight for flat/low crown work.

#28011 Set of 3 Round Mallets

One each of the above Round Mallets.

#28044 Set of 6 Mallets

One each of the Teardrop and Round Mallets.



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If you have any questions about the use of this product,
please contact The Eastwood Technical Service Department

1-800-CAR-TEC1 (1-800-227-8321)