

X-Axis Motor Mount (WA-010-S-1)

Step 1: Fully drill 1/4" diameter holes where shown. four of these holes situated around the center of the rectangle will serve as mounting for the motor frame. The two outer holes are to fasten to the lower holes of the gantry side.

The larger 1/2" diameter holes are only counterbored to allow the head of the screw to not conflict with the motor frame. Drill these to a depth of 5/16" but not more than 3/8". The two top holes will provide for the screws that will hold the bearings. the lower two holes will contain screws that will fasten to the gantry side (WA-001-S). A Forstner bit is recommended for this counterbore.

Step 2: Fully drill the 1/4" holes that were previously counterbored. By drilling these holes after the counterbore, there should be a slight pilot hole from using either a spade, or Forstner bit.

Important notes:

The top and bottom bound of the rectangle must not be increased. If the height is increased, there will be a conflict with the table. If the bottom bound is lowered, it will protrude past the lowest part of the gantry side causing the machine not to sit flat on the surface that the machine will reside.

All measurements are derived from the top or the centerline of the part to insure proper positioning in relation to the table clearance and the symmetry of the mechanical assembly.

All counterbores are on the top face.

This is the part that will provide for the mounting of the x-axis motor. The position of this motor mount is under the table and fastens to the gantry side (WA-001-S). The holes in the motor mount provide for the bearings around which the timing belt will ride, the motor frame fastening and fastening to the gantry side. This is the first page of the step by step process to properly fabricate this part. The recommended material to use is MDO, Birch or MDF at 3/4" thickness. Variations in thickness can range from 18mm to 3/4". Larger thickness can be used since there are no conflicting parts; however, longer screws will be needed than what is stated in these pages.

