Step 1:
Carefully enlarge the slot using files and sandpaper. The slot needs to be just large enough to allow the Axle Peg shaft to slide freely along its entire length.

Step 2:
Flatten out the outer top surface of the slot by about 1/32 of an inch using a file and sandpaper. This will help the Axle Peg slide along the top when it is ejected from the worm gear.

Step 3:
Taper the underside of the slot at this end. This will help prevent damage to the Axle Peg when being ejected.

Step 4:
Taper this end to guide the Axle Peg into the slot when captured by the worm gear. Because the Carriage Sleeve needs to be a loose fit, the Axle Peg will rarely line up with the slot on its own. This taper is critical.

Step 5:
Insert wood dowel into Worm Gear Carriage Body. Drill 1/16" pilot holes 1/2" deep and countersink for #4 screws. Screw the wood dowel into place.

Note:
The Worm Gear should extend 3/4" to 1" beyond the Carriage Body when fully inserted. Make adjustments if needed to the dowel plug size.

Materials List:
1 - Worm Gear Carriage Body
1 - 3/4" Wood Dowel
2 - #4 x 1/2" Flat head wood screws