

Installation Instructions for the Outdoor Water Solutions Windmill Tower Hinges

OWS Windmill Tower Hinges allow you to lay the windmill down for repairs or regular maintenance. Some customers may also choose to lay their windmills down if they are in a Hurricane zone along the coast and expect extremely high winds. Once your windmill has been assembled, you can install the windmill tower hinges.

- 1) Lay the tower down on it's side in the location where it will be installed.
- 2) Insert the hinge bolt into the two piece pivot hinge. Do not completely tighten the upper hinge bolt yet. (See Figure 1).
- 3) Place each ground stake rod in line with the mounting hinge plate and pound the stake rod into the ground leaving 4-5 inches of stake rod out of the ground. **NOTE: Make sure the welded end of the stake rod is pointed up.**
- 4) Slide the hinge plate onto the ground stake rod and install the two lower clamp bolts. **Note: You may have to use a hacksaw and cut the top 1 ½" to 2" off of the ground stake rod for mounting.**
- 5) Stand up the windmill and insert the hinge post into the bottom of the stake clamp bracket and install the 6 bolts with nuts on each. **NOTE: It's easier to do this if you do not have the windmill head on.**
- 6) Tighten the 6 stake clamp bolts securely onto the hinge post.
- 7) Lower windmill tower down and install head. Now raise the entire windmill tower up using the hinge system. **Note: It is recommended that you have a minimum of three people erecting the tower.**
- 8) Place the third ground stake rod into the remaining stake clamp and hammer into the ground
- 9) Install the 6 bolts on the last stake rod. Do not tighten yet.
- 10) Level the windmill using a level if possible. You can adjust the height of each leg by raising or lowering the hinge plates or in the case of the third leg (the stake clamp bracket).
- 11) Once level, **securely tighten** all bolts including the upper hinge bolts on each hinge plate. All bolts should be very tight to prevent the windmill from raising up in high winds.
- 12) **OPTIONAL:** You can drill a hole thru the stake clamp bracket and hinge post and install another bolt as a preventative measure to prevent the windmill from raising up on the hinge post.

Pictures

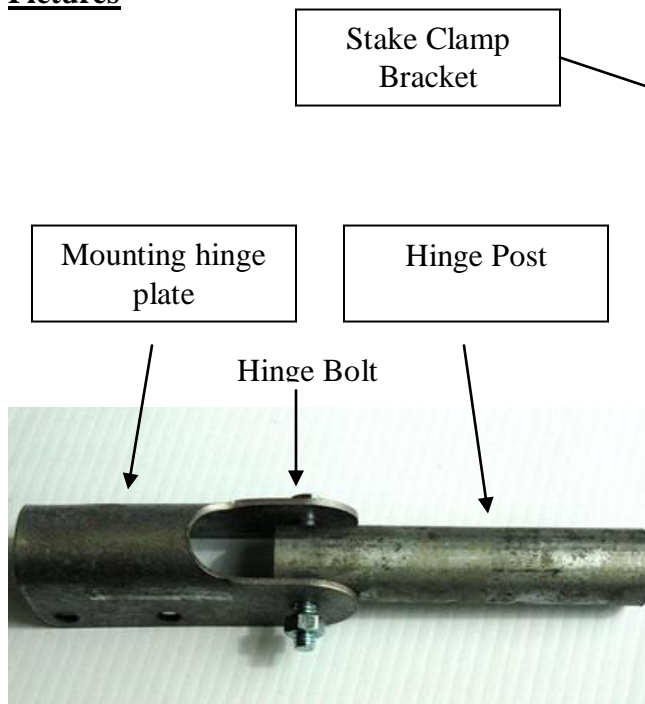


Figure 1 (Hinge Assembly)

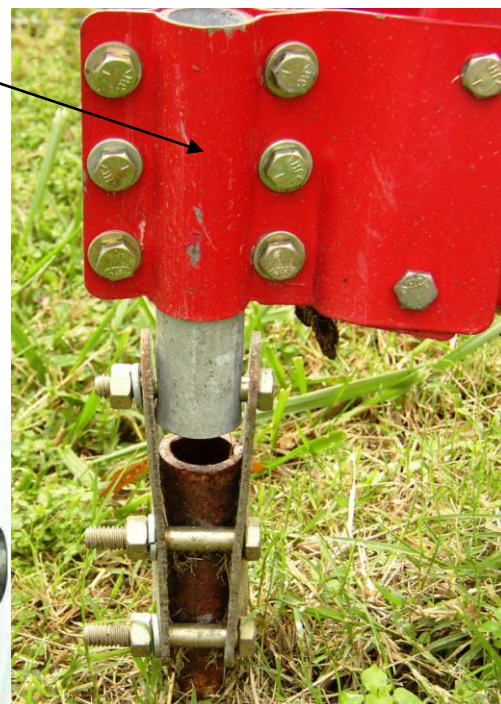


Figure 2 (Final Assembly)