

Introduction

These instructions show how to attach a Lufft ultrasonic sensor to the NRG Solar Tower. Consult the documentation from Lufft for information about configuration, wiring, and specs for your specific sensor.

#16105: Parts/BOM

NRG Part Number	Part Description	Part Specification Notes	Qty
14092	Mounting Bracket	0.125" Thickness Stainless	1
14476	Mounting Boom	48" length 6061 Aluminum Sch. 40 1.65" nominal OD	1
14391	Pipe cap	Red PE	2
14099	Clamping U-bolt	1.75" ID Galvanized steel With nuts	4
14232	Clamping U-bolt	3.625" ID Zinc-plated steel With nuts	2
16289	Sensor Mount	12" length 6061 Aluminum Sch. 40 2.875" nominal OD	1
17002	Mounting Bracket	0.125" Thickness Stainless Slotted holes	1
17727	Clamping U-bolt	2.5" ID Zinc-plated steel With nuts	2
17731	Washer	5/16" ID Galvanized	4

Tools



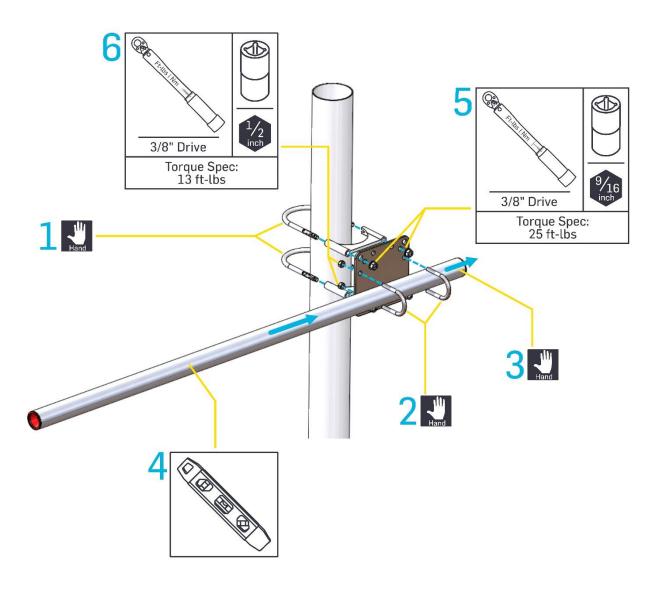




Procedures

Attaching Pipe Boom to Solar Tower

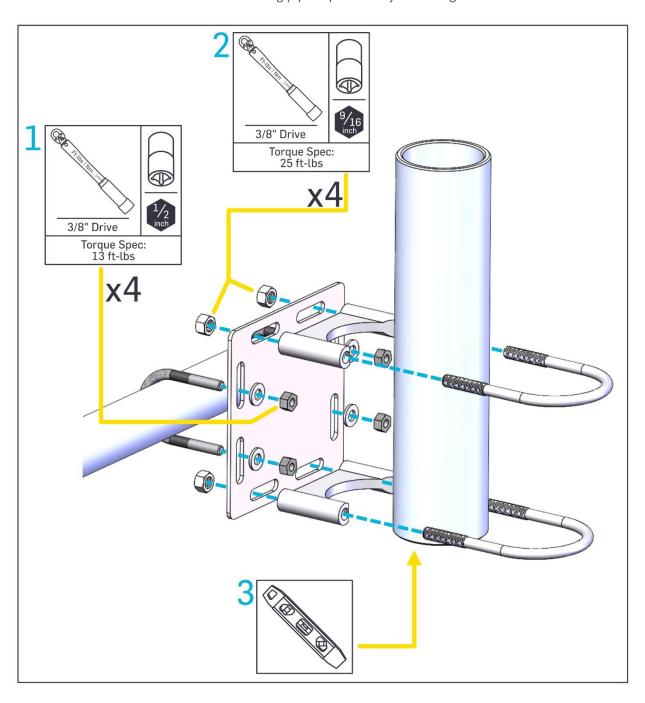
- 1. Place the #14092 bracket against the tower tube and feed two 3.625" U-bolts around the tower, through the clamping piece, and through the appropriate holes in the bracket.
- 2. Feed the 1.75" galvanized U-bolts through the appropriate holes in the bracket, from the side opposite of the tower. Thread the galvanized nuts onto the end threads of each U-bolt.
- 3. Feed the Sch. 40 aluminum pipe through the galvanized U-bolts to the desired location, depending on the intended length of boom on each side of the tower.
- 4. Orient the boom to your desired heading and level.
- 5. Torque the 3.625" U-bolt nuts to spec.
- 6. Torque the 1.75" U-bolt nuts to spec.





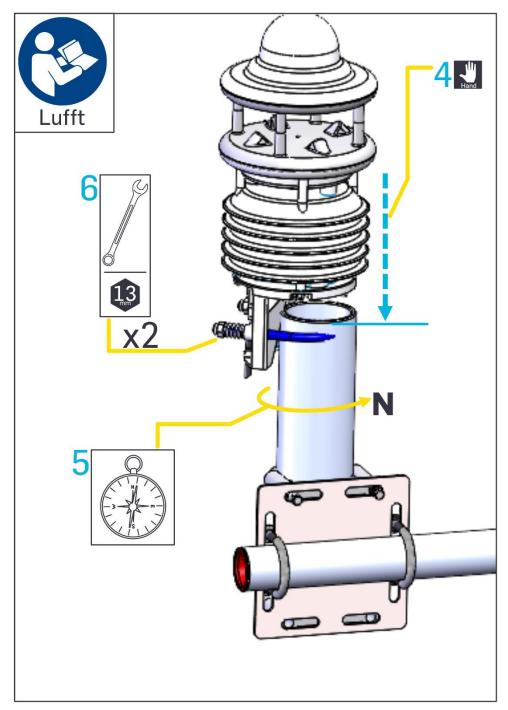
Attaching The Mount & Lufft Sensor to Pipe Boom

- 1. Attach the #17002 mounting bracket to the end of the pipe boom using the 1.75" galvanized U-bolts. Torque to spec.
- 2. Assemble the 4.25" bolts, clamping hardware & nuts to the mounting plate and around the Lufft sensor mounting pipe. Torque to spec.
- 3. Check that the Lufft sensor mounting pipe is plumb. Adjust & retighten hardware if needed.





- 4. Carefully place the Lufft sensor onto the mounting pipe.
- 5. Rotate the sensor until the North mark faces the proper direction. *
- 6. Tighten the nuts on the mounting U-bolt to manufacturer's specifications. *



*Note: Consult the corresponding Lufft sensor manual for the location of the North Mark and mounting hardware torque specifications.