



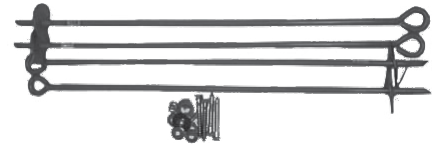
Wood Windmill Installation Manual



Outdoor Water Solutions Accessories

OWS Wooden Windmill Anchor Kit

Use this to anchor your wooden windmill. Kit includes 4 ground anchors and all hardware needed to attach each anchor to the four legs. Will not work in gravel or rock.



Weighted Air Line

Weighted Air Line can be used in the pond to keep your air line on the bottom. This allows easier fishing, boating, swimming, etc., and also keeps your air line from freezing on the surface in climates where ice is a possibility. Available in 50', 100', and 500' lengths.



Freeze Control System

An Outdoor Water Solutions Freeze Control System keeps your air line from freezing in the winter due to excess condensation in the line. A Freeze Control System is HIGHLY RECOMMENDED and will keep your warranty intact if freezing temperatures are common in the winter months.



2-Way & 3-Way Selector Valves

These high-quality valves allow you to adjust airflow between multiple airstones or between airstones and water pumps if you are running both with one windmill.



Airstone Housing Bucket

These high-quality buckets are ideal for protecting the airstone from the mud and debris common in most ponds and lakes.



Airstone Marker – Duck Decoy

The use of a duck decoy allows you to mark the airstone and can also serve as a way to lift your Airstone Housing Bucket (if needed) to move or service.



OWS Small Pond Accessory Kit

- Includes everything you need to aerate a 1/8-acre to 1-acre pond
- Includes pivot hinges, which help raise and lower your tower for maintenance
- Includes 50' of weighted air line, so your air line sinks to the bottom of your pond
- Includes 1 airstone housing bucket, 1 duck decoy marker, and hose connectors.



OWS Medium Pond Accessory Kit

- Includes everything you need to aerate a 1- to 2-acre pond
- Includes pivot hinges, which help raise and lower your tower for maintenance
- Includes 150' of weighted air line, so your air line sinks to the bottom of your pond
- Includes 1 extra airstone and foot valve, a 2-way selector valve to regulate oxygen flow, 2 airstone housing buckets, 2 duck decoys, and hose connectors.





The Outdoor Water Solutions 3/5 Year Limited Warranty

This warranty covers all Outdoor Water Solutions, Inc. Windmill products for 3 years from purchase date against defects in workmanship and 5 years from purchase date against defects in the compressor.

1. Outdoor Water Solutions, Inc. (OWS) will replace or repair any part deemed to be defective by Outdoor Water Solutions, Inc., due to defects in quality and/or workmanship within a 3-year period from the initial date of purchase. Functional windmill compressors are covered for 5 years from date of purchase against major defects. Note: Diaphragm and check valve replacement are considered routine maintenance, if needed.
2. Warranty does not apply to OWS products that are installed incorrectly, subject of an accident, neglect, or damage due to excess winds.
3. This warranty does not apply to damage caused by severe weather. Private insurance coverage is recommended.
4. When an OWS Freeze Control System has not been used, warranty coverage may not apply to damages incurred to an Outdoor Water Solutions Aeration System as a result of a blocked line. The use of an Outdoor Water Solutions Freeze Control System or an inline Pressure Relief Valve is **HIGHLY RECOMMENDED** in geographical areas where freeze may be a concern in order to keep excess back pressure off of the compressor.
5. Product returned for warranty repair must be returned to the address specified by the Manufacturer, and any warranty product sent to the customer will be sent freight prepaid.
6. Warranty coverage may be void if parts other than genuine Outdoor Water Solutions parts are utilized for repair or attached to an Outdoor Water Solutions Aeration System.
7. Proof of purchase date is required for warranty repairs.
8. If you have any warranty concerns, please contact Outdoor Water Solutions, Inc. at 1-866-471-1614 in Canada or the U.S.A. International customers can call 1-866-471-1614 or 1-479-756-1614 with any warranty concerns.

Safety Precautions

1. DO NOT attempt any service or repairs to the windmill in a high-wind situation.
2. Make sure the blades are secured when service or repair is necessary for compressor. We recommend laying the windmill down while working on it vs. trying to do repairs while it is standing. A sudden gust of wind can physically turn the rotor head, causing possible injury.
3. DO NOT get near the windmill in high-wind situations or in a thunderstorm.
4. DO NOT allow children to play on or near the windmill.

Return Materials Authorization

- A return materials authorization (RMA) number must be obtained prior to returning any product for warranty work.
- You can call the Outdoor Water Solutions warranty department at the following numbers:
 - Canada and the U.S. – 1-866-471-1614
 - International (outside Canada and the U.S.) – 1-866-471-1614 or 1-479-756-1614

Note: Serial Numbers are located inside the compressor.

Outdoor Water Solutions, Inc. recommends that, for future reference, you keep this Installation Manual in a convenient location.

Serial number: _____ Date of Purchase: _____



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Tips and Suggestions for Installing an Outdoor Water Solutions Aeration Windmill

- **WE STRONGLY RECOMMEND THAT YOU READ THROUGH THIS ENTIRE MANUAL BEFORE BEGINNING ASSEMBLY. IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT US AT (866) 471-1614.**
- In order for your windmill to work properly, **YOU MUST LOCATE THE AREA WITH THE MOST WIND EXPOSURE NEAR YOUR POND.** The windmill can be positioned up to 1,000 feet away from the pond.
- Anchoring of the windmill tower is very important. We **STRONGLY** recommend an anchoring system such as concrete pilings, a concrete pad, or screw-in anchors. High winds or light soil conditions can cause the windmill to fall over, physically damaging the rotor head and other components. The customer is responsible to anchor the Windmill adequately or consult the appropriate people to do so.
- **NOTE: DURING THE TOWER ASSEMBLY, DO NOT COMPLETELY TIGHTEN ANY NUTS OR BOLTS UNTIL THE TOWER IS COMPLETED, UNLESS SPECIFICALLY DIRECTED OTHERWISE.**
- **NOTE: DO NOT TIGHTEN ANY OF THE BLADES ON THE HUB UNTIL THE BLADE BRACES HAVE BEEN INSTALLED.**
- **NOTE: HUB MUST FACE DOWN WHEN THE BLADES AND BLADE BRACES ARE BEING INSTALLED (FACE DOWN MEANS THE SMALLER BOLT HOLE IN THE FRONT MUST BE FACING DOWN. THE EXPOSED 1" HOLE FOR THE SHAFT SHOULD FACE UP). THIS ALLOWS THE PROPER BLADE PITCH, SLIGHTLY FORWARD, WHEN COMPLETE. IT IS ALSO HELPFUL TO SET THE BLACK HUB UP ON A TIRE, BUCKET, OR BOX WHEN INSTALLING THE BLADES AND BLADE BRACES. THIS ALLOWS EVERYTHING TO PITCH FORWARD VS. BACKWARDS.**
- **NOTE: IN COLD CLIMATE AREAS, WHERE FREEZING DOES OCCUR, WE RECOMMEND THE USE OF AN OWS FREEZE CONTROL SYSTEM TO AID IN KEEPING THE AIR LINE OPEN. CONDENSATION CAN FORM IN THE AIR LINE AND RESTRICT AIR FLOW, PUTTING UNDUE PRESSURE ON THE PUMPTING MECHANISM AND VOIDING THE WARRANTY.**

Contents of Outdoor Water Solutions Aeration Windmill Boxes

Note: Make sure all components and accessories are accounted for before beginning assembly.

ITEM CODE	DESCRIPTION (Nut & Bolt Quantities are for a 20' tower)	TOTAL QUANTITY IN COMPLETE	DIAGRAM (not to scale)
BLA	Blade	12	
BBR	Blade Brace	12	
HUB	Blade Hub Assembly	1	
DOME	Dome	1	
COMP	Windmill Compressor	1	
PVT	Pivot Tube	1	
TA	Tail Arm – with one bent end	2	
TF	Tail Fin (2 pieces)	2	
	#10" x 1/2" Sheet Metal Screw – (4) used to attach dome to hub assembly	4	
	5/16" x 1/2" Bolts – (4) attach tail arms to compressor (1) to attach hub assembly to shaft	5	
	5/16" Flange Nuts – Used with 5/16" x 1/2" bolt (4) & used to tighten U-bolt to pivot tube	6	

Contents of Outdoor Water Solutions Aeration Windmill Boxes

Note: Make sure all components and accessories are accounted for before beginning assembly.

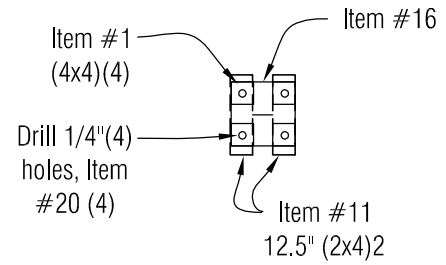
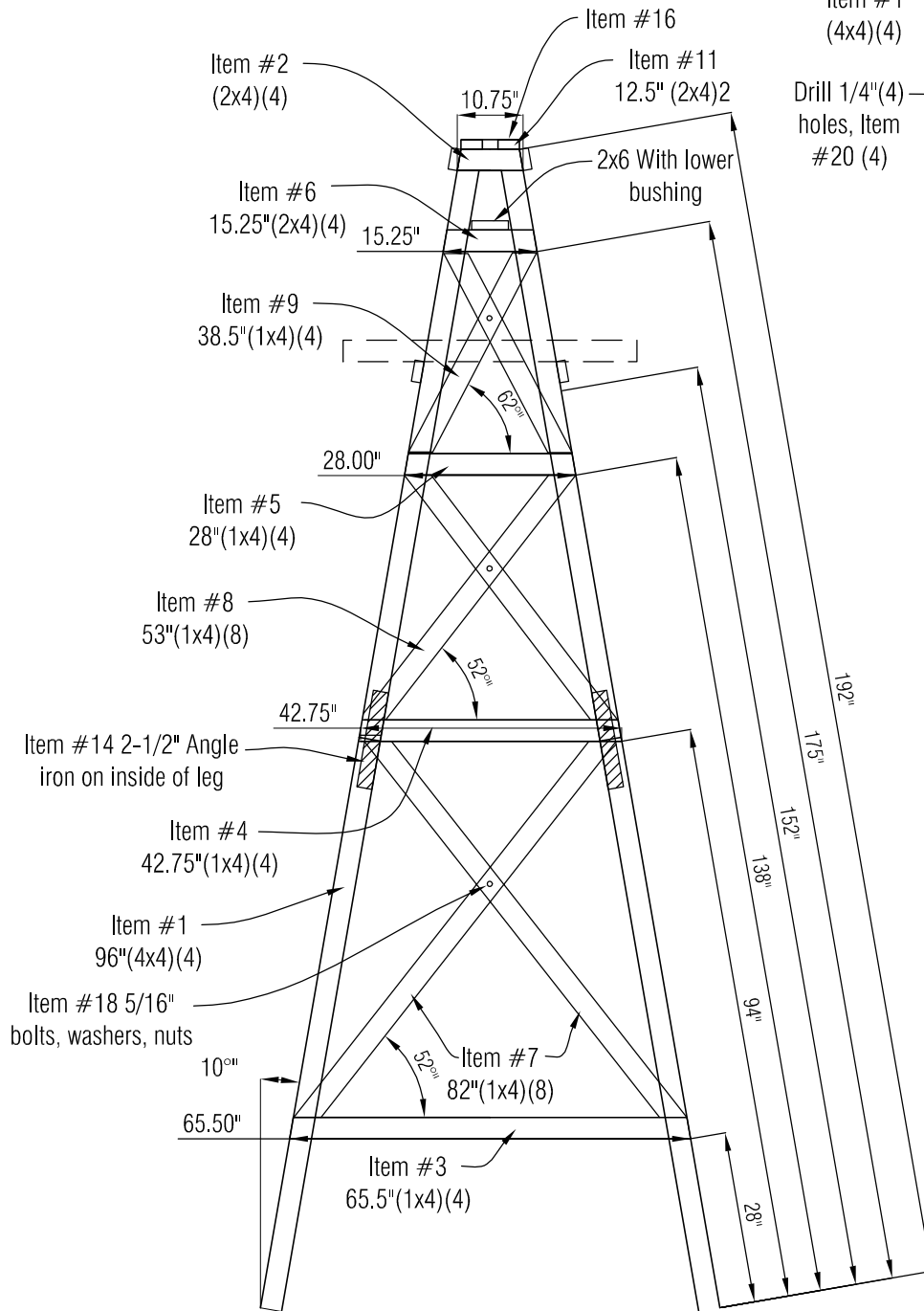
ITEM CODE	DESCRIPTION (Nut & Bolt Quantities are for a 20' tower)	TOTAL QUANTITY IN COMPLETE	DIAGRAM (not to scale)
	1/4" x 1/2" Bolts – (1) to install elongated hose clamp brackets (24) install blade braces (6) to join the two-piece Tail Fin	31	
	1/4" x 3/4" Bolts – (36) install blades to hub assembly (2) to connect tail arms to tail	38	
	1/4" Nuts – Used with all 1/4" bolts	69	
	1/4" Washers – (36) for blade to hub assembly	36	
	1/4" Lock Washers - Used with all 1/4" bolts	69	
	U-Bolts – Used to attach pivot tube to compressor	1	
	Pivot Tube Washer – Slide over pivot tube before installing rotor assembly into cone	1	
	Thrust Bearing	1	
	1/2" x 1/2" – 90-degree Hose Barb	1	
	Elongated Hose Clamp Bracket – (2 pieces)	1	
	5/32" Allen Wrench – Used to tighten locking collars to shaft	1	

Tower Components

ITEM No.	Lumber Size	Length	Quantity
1	4 x 4	96"	8
2	2 x 4	10.75"	4
3	1 x 4	65.5"	4
4	1 x 4	42.75"	4
5	1 x 4	28"	4
6	2 x 4	15.25"	4
7	1 x 4	82"	8
8	1 x 4	53"	8
9	1 x 4	38.5"	4
10	2 x 4	48"	4
11	2 x 4	12.5"	2
12	2 x 4	48"	2
13	Wood Screw	2.5"	250
21	Wood Screw	3.5"	6
14	2 ½" Angle Iron	16"	4
15	2 x 6 with lower bushing	18"	1
16	Square Plate with top bushing		1
18	5/16" bolts, washers, nuts		10
19	3/8" Lag Screw	2"	28
20	3/8" Lag Screws	4.5"	4

NORTH AND SOUTH SIDES

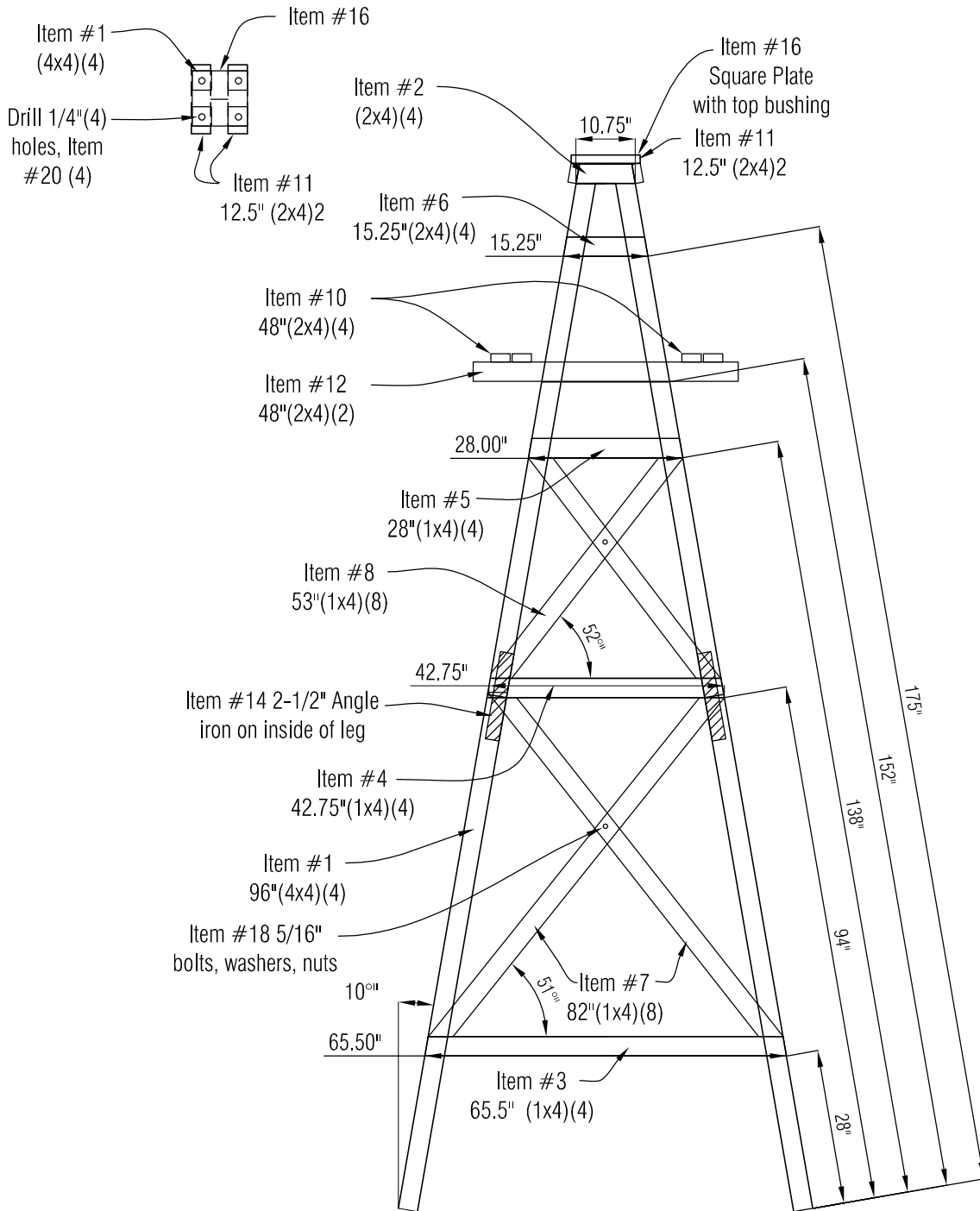
OVERHEAD VIEW ITEM 16
SQUARE PLATE WITH TOP BUSHING



SCALE: 1"=30'

OVERHEAD VIEW ITEM 16
SQUARE PLATE WITH TOP BUSHING

EAST AND WEST SIDES



SCALE: 1"=30'

Wood Tower Assembly Instructions



Figure 1

Step 1: Attach two of Item 1 (4"x4" legs) together using one of Item 14 (angle iron) and (6) $\frac{3}{8}$ " lag screws. Repeat this step to produce four 16 foot legs. See Figure 1 (left).

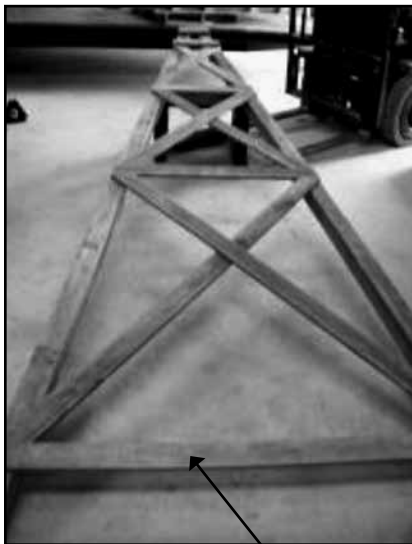


Figure 2

1" x 4" Cross Member – Item 3

Step 2: Position the legs with the angle iron braces (Item 14) toward the inside and touching the ground. Measuring from the bottom of the legs, mark the outer edge of both legs at the following measurements: 28", 94", 138", 152", and 175".

Step 3: Spread the bottom of each leg outward to form an upside down "V". Attach an Item 3 (1"x4") above the 28" mark and flush with the sides of the legs. See Figure 2. Attach an Item 2 (2"x4") even with the top and flush with the sides of the legs. See Figure 3.



Figure 3

Step 4: Attach an Item 4 above the 94" mark, an Item 5 above the 138" mark, and an Item 6 above the 175" mark. Attach two of the Item 7 cross braces (1"x4") in the lower section, two of the Item 8 (1 x 4") in the center section, and two of the Item 9 (1 x 4") in the upper section. See Figure 2. Drill a $\frac{5}{16}$ " hole where the two cross braces overlap and insert the $\frac{5}{16}$ " bolts, washers and nuts for stability. Repeat Steps 2, 3, and 4 to produce two sets of leg braces.



Figure 4

Step 6: Attach an Item 6 above the 175" mark Center and attach an Item 12 (2"x4") above the 152" mark (see Figure 6).

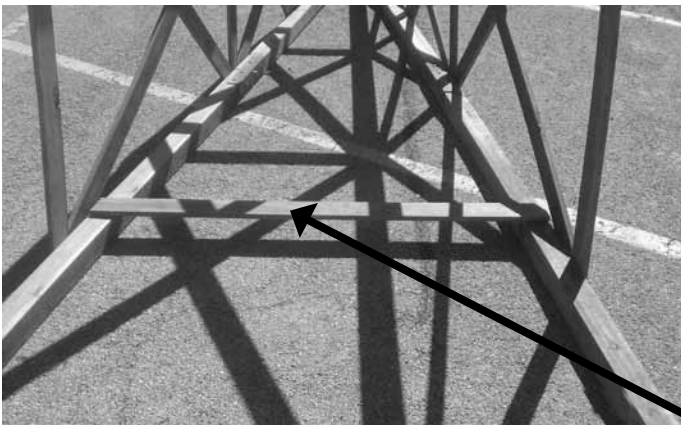


Figure 7



Figure 8



Figure 5

Step 5: Set both leg braces beside each other (Figure 4) and attach an Item 2 even with the top and flush with the sides of the legs. Attach an Item 3 above the 28" mark, an Item 4 above the 94" mark, and an Item 5 above the 138".

NOTE: Make sure the top is level before securing the top 2 x 4" (Item 2) or the windmill head will tilt when finished. See Figure 5.



Figure 6

Step 7: Roll the stand over and repeat Steps 5 and 6 to complete the final side. Be careful when turning the windmill tower over as you only have 3 sides completed. It might be best to attach 1 or 2 boards to the inside of the unfinished section to add stability when turning it over. See Figure 7.

Note: Placement of an inside brace board adds stability when turning the windmill over onto it's other side.

Step 8: Prop the upper portion of the stand on a stool. Center and attach four of the Items 10 on top of Items 12. See Figure 8.

This completes the wood tower assembly.

Head Attachment

Step 9: Attach two of Item 11 (2"x4"'s) on top of the 4x4 legs and flush with Items 2, leaving a hole for the pipe that supports the head. See Figure 9.



Figure 9

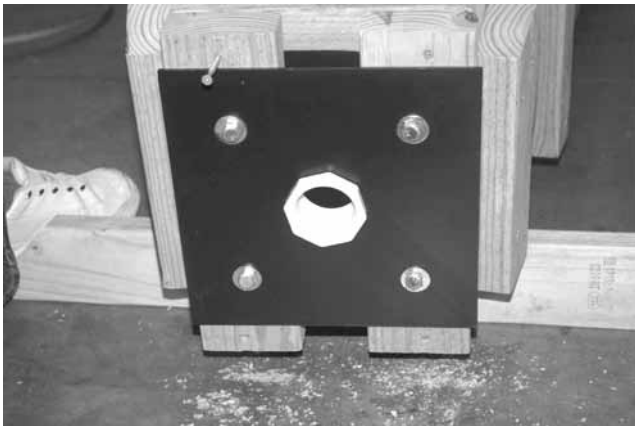


Figure 10



Figure 11

Step 10: Using the (4) 4.5" x $\frac{3}{8}$ " lag screws, center and attach Item 16 (Black square plate with bushing) on top of the four 4x4's and the Item 11's (2"x4"'). Drill a pilot hole directly through the Item 11 (2 x 4's) and in the center of each 4 x 4 using a $\frac{1}{4}$ " drill bit using the square plate as a template before attachment. Try to drill into the center of the 4x4 if possible for maximum strength. See Figure 10.

Step 11: Next attach the lower pivot tube bushing (Inside of the Item 15 2"x6" to the Item 6 2"x4" using the (6) longer 3.5" wood screws. NOTE: Before attaching this piece, make sure the pivot tube spins freely and isn't in a bind. You can adjust the placement of the 2" x 4" to make sure the tube spins freely. Just insert it into the top pivot tube bushing (Item 16) and down thru the Item 6 and turn it by hand. You may have to adjust one or two of the Item 6's to get the angles correct. The pivot tube must be allowed to spin fairly easily for the windmill head to turn in the wind. See Figure 11.

About 5 or 6" below the pivot tube, you will attach the two piece hose bracket to secure the airline. You can use one of the 2" lag screws to attach the long part of the bracket to a leg then a smaller $\frac{7}{16}$ " bolt and nut to attach the hose bracket. This secures the airline below the pivot tube so it is forced to turn on the 90 degree hose barb as the head turns.

HEAD ASSEMBLY:

STEP 12 — BLADE INSTALLATION:

Note: Do not tighten any of the blades on the hub until the blade braces have been installed.

Note: Hub must face down when blades and blade braces are being installed ('face down' means the smaller bolt hole in the front must be facing down. The exposed 1" hole for the shaft should face up). This allows the proper blade pitch—slightly forward—when complete.

1. Install all twelve blades (BLA), as shown in Illustration 3. Make sure the bolts and washers go through the 3 holes in the blade, with the nuts attached on the inside of the hub. **DO NOT** finger-tighten — keep VERY LOOSE!

Illustration 3

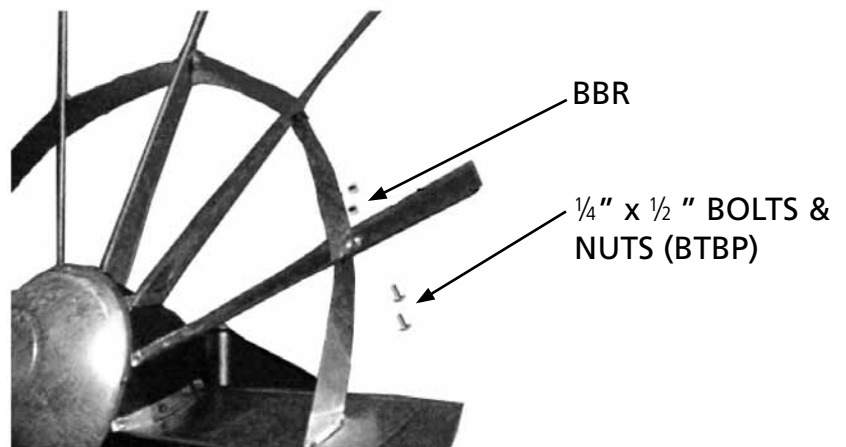
¼" x ¾" BOLTS & NUTS
(Package C)



STEP 13 — BLADE INSTALLATION:

Illustration 4

1. Install all twelve blade braces (BBR), as shown in Illustration 4 above. Keep all nuts very loose until AFTER the last blade brace has been installed. Again, it will help if the hub is elevated up on a tire or bucket, allowing the blades to fall downwards, giving us a forward pitch. **MAKE SURE** the small hole in the hub is on the bottom and the 1" hole is on top!

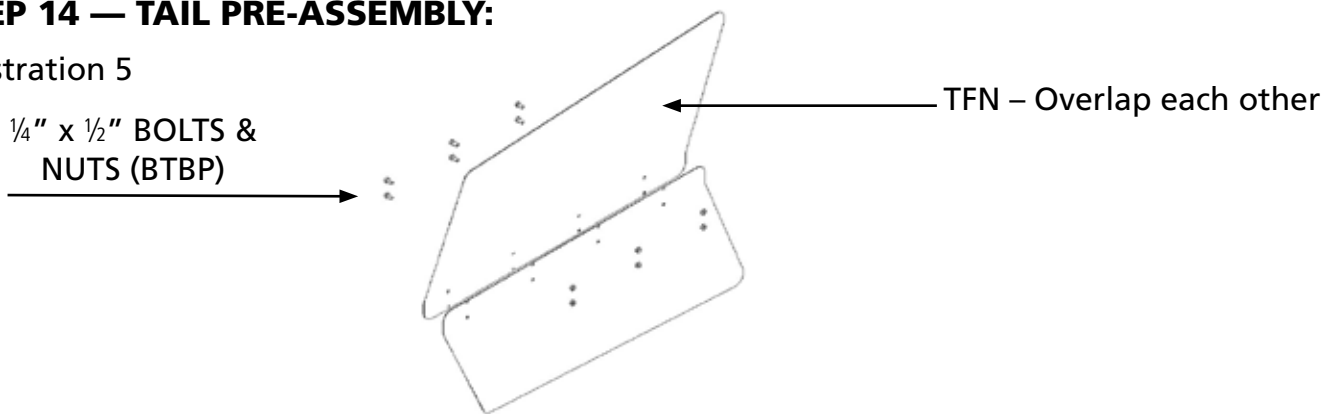


2. After ALL of the blades and blade braces have been installed, you can flip the windmill head over onto the other side (small hole on top). This makes it easier to reach the bolt heads on the blades for tightening. Completely tighten all bolts on both the blades and blade braces. A small impact driver or impact wrench with a deep socket placed inside the hub along with an open ended wrench on the outside can speed tightening of all bolts.

STEP 14 — TAIL PRE-ASSEMBLY:

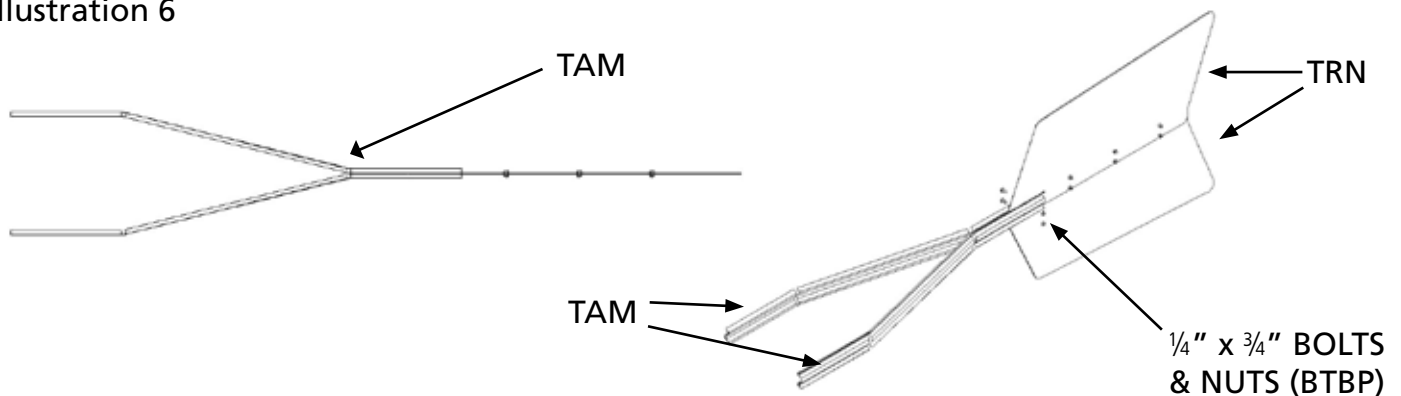
Illustration 5

$\frac{1}{4}$ " x $\frac{1}{2}$ " BOLTS &
NUTS (BTBP)



1. Pre-assemble tail fins (TFN) for Step 10. Overlap each tail fin by lining up the bolt holes in the channel of both. Insert $\frac{1}{4}$ " x $\frac{1}{2}$ " bolts & nuts (BTBP) in the back six bolt holes and tighten (see Illustration 5).
2. Attach tail arms to tail fin in the front two bolt holes using $\frac{1}{4}$ " x $\frac{3}{4}$ " bolts and $\frac{1}{4}$ " nuts (as shown in Illustration 6 on the next page). Tighten when tail arm and tail fin are straight.

Illustration 6

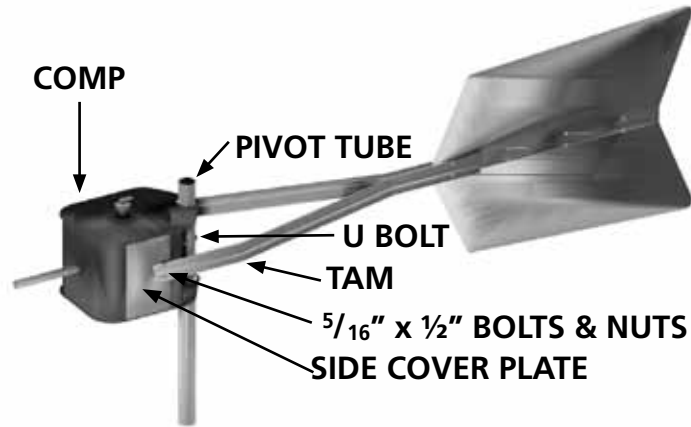


STEP 15 — PIVOT TUBE and TAIL INSTALLATION:

1. Insert the "U" bolt (package G) through the two holes in the back of the compressor and secure with $\frac{5}{16}$ " flange nuts (package B). Do not tighten tightly — leave loose until pivot tube has been installed.
2. Slip the pivot tube (PVT) (hole at the top of the tube) through the compressor bottom, through the "U" bolt clamp, and through the compressor top plate. Align the hole in the pivot tube to the compressor air line hose. Tighten the "U" bolt clamp with $\frac{5}{16}$ " nuts from inside the compressor until the pivot tube is held securely in place (see Illustration 7).
3. Install your pre-assembled tail arms and tail fins onto the compressor. The tail arms and tail fins are attached to the compressor body using $\frac{5}{16}$ " x $\frac{1}{2}$ " bolts (package A) and $\frac{5}{16}$ " flange nuts (package B). Note: Insert bolts from the outside and use nuts on the inside of the compressor housing. Tightening these nuts is done from the inside of the compressor, through the side opening (see Illustration 7). After these are tightened, replace the side cover plate.

Note: Cover plate will be very snug when sliding behind the tail arms. If too tight, slightly loosen the two bolts, insert side cover plate, then re-tighten the bolts.

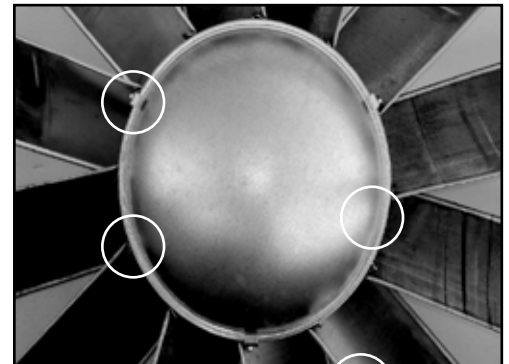
Illustration 7



STEP 16 — SETUP OF WINDMILL COMPONENTS:

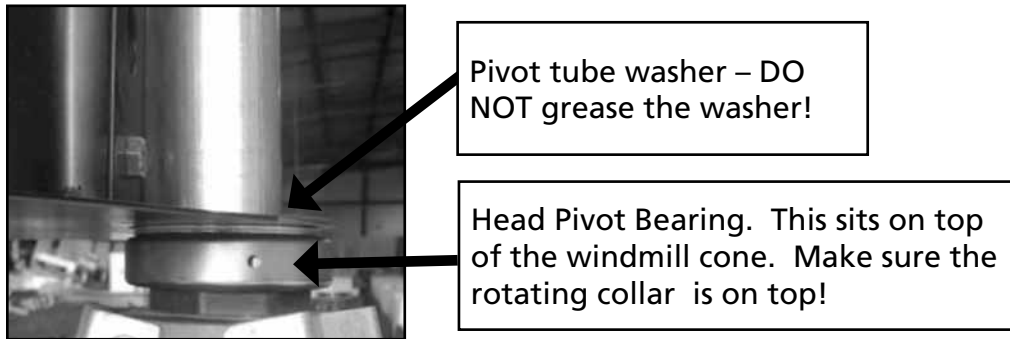
Setup of Windmill Components

1. Install the blade assembly onto the compressor crankshaft and tighten the Allen screws in locking collar with supplied $\frac{5}{32}$ " Allen wrench (package A) on the flat sections of the crankshaft (photo 1). Note: A little lubricant on the crankshaft can help make this step easier. If needed, place the blade assembly on the ground and gently push down on the compressor to secure it into the two locking collars. Attach blade hub assembly (HUB) to the crankshaft using $\frac{5}{16}$ " x $\frac{1}{2}$ " bolt (package A) into the end of the shaft (photo 2). Make sure all Allen screws and the front mounting bolt are tight.



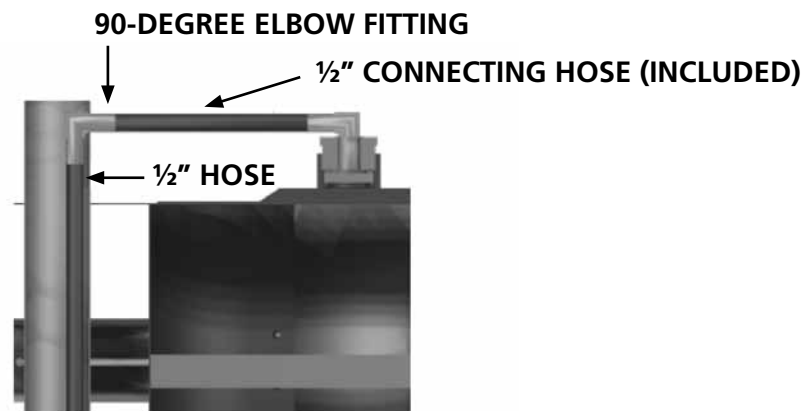
OWS Windmill Head Pivot Bearing

Our new Windmill Head Pivot Bearing allows the windmill head to turn much easier. This is ideal for areas of low wind or areas where you might be closer to tree's or building's than recommended. This item now comes standard on all wooden windmills.



2. Slide the Pivot Tube Washer onto the pivot tube (Do Not Grease). Then slide the Windmill Head Pivot Bearing onto the pivot tube shaft. Make sure the rotating collar is on top and the fixed bearing plate is on the bottom. Slide the pivot tube and compressor into the windmill bushings.
3. After the completed rotor head unit has been mounted at the top of the tower, insert the air line up through the tower (starting at the bottom and going out the top of the pivot tube). Put a small amount of grease onto each end of the ½" x ½" ninety-degree hose barb. Connect one end of the ninety-degree hose barb to the line running down the tower and to the pond. Push the air line back down and insert the ninety-degree hose barb through the ⅛" hole in the pivot tube and into the ½" air line connecting the compressor (see Illustration 8). A long-handled screwdriver or wrench can help leverage the hose barb into the ½" connecting hose.
4. Insert the hose into the elongated hose bracket and air line clamp that was attached to the tower, just below the cone in the top 4' section. Tighten to secure the air line in the clamp. This allows the air line to spin on the hose barb and prevents kinking of the hose when the head spins.
5. Install the dome (DOME) on the outside of the blade hub assembly (HUB). Secure with the four #10 x ½" sheet-metal screws (package G) to blade hub assembly (HUB).

Illustration 8



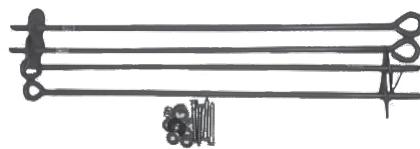
6. After the previous procedures are done, stand up the completed unit on the site. Be sure to have enough people to hold the base of the tower and to help lift up the tower.

Anchoring the Windmill:

Outdoor Water Solutions will not determine soil and wind conditions for any windmill erection. Therefore, these conditions must be determined by the customer. Anchoring of the windmill tower is very important. It is the customer's responsibility to adequately anchor the tower. High winds or light soil conditions can cause the windmill to fall over, physically damaging the rotor head and other components.

There are several options for how to anchor this wooden windmill tower. You can purchase angle iron and lag bolts, attach them to the bottom leg and set them into a concrete footing. You can also purchase 4"x 4" post anchors and attach them to the bottom legs with lag bolts and setting them in concrete or attaching them to an anchor bolt set in concrete. Lastly, you can also purchase screw in earth anchors and lag bolt the eye to each leg once installed. We strongly recommend using concrete footings and/or anchors.

Outdoor Water Solutions now sells a wooden windmill anchoring kit which contains 4 screw in earth anchors and all of the mounting hardware. Please contact us about ordering Item # WNP0154.



Post Anchor



Screw In Anchor



Angle Iron

To keep your pond clean without using chemicals, we recommend using our line of All Natural pond products. Using supplemental aerobic bacteria and all natural pond dyes can help keep your pond clean, especially when combined with bottom diffused aeration.

OWS Pond Pack

A complete kit of all-natural products that will jump-start your pond and help keep it clean for the whole season. Each kit is designed to treat ¼ acre of water and includes 10 lbs. of a water clarifier; 12 lbs. of bacteria in a barley-straw medium, packaged in water-soluble pouches, and 2 lake & pond dye packs – all of which are safe to fish! Multiple kits should be used for larger-size ponds. Products help break down organic matter, diminish nutrient overload, and help reduce odor to create a clean, clear pond without having to use commercial algacides and chemicals. All products are packed dry for ease of handling and less risk of spillage. Made in the USA.

Item # PSP0001 (23 lbs.)



OWS Lake & Pond Bacteria

Each pack includes 12 lbs. of bacteria in a barley-straw medium, packaged in water-soluble pouches. Our bacteria help break down organic matter, diminish nutrient overload, and help reduce odor to help create a clean, clear pond.

Item # PSP0074 (12 lbs.)

Item # PSP0132 (25 lbs.)



OWS Lake & Pond Muck Pellets

This is a new, highly concentrated product designed to clean up areas of muck around a pond, swimming area, or dock. Contains sludge-eating bacteria, which allows you to focus on problem areas with a self-sinking, highly concentrated bacteria blend, designed to break down the muck and sludge in a specific area.

Item # PSP0153 1 lb. Trial Size

Item # PSP0150 10 lbs. Pail

Item # PSP0151 25 lbs. Pail (value-priced)

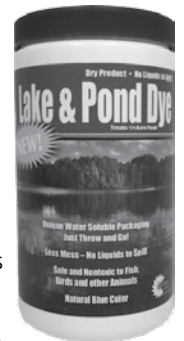


OWS Lake & Pond Dye

A high-quality proprietary blend of environmentally friendly, non-toxic, water-soluble dyes that are formulated to help maintain your pond or lake by filtering sunlight and adding an aesthetically pleasing blue color. Each packet treats a ¼-acre pond and is packed dry in a water-soluble pouch for ease of handling and less risk of spillage. Purchase multiple packs for larger bodies of water.

Item # PSP0002 (.375 lbs.)

Item # PSP0196 Twin Pack (.75 lbs.)



All-Natural Blue Pond Dye

If you're looking for a highly concentrated liquid blue dye for your ponds, we've got it! This product is equivalent to other companies' ONE Gallon containers and is 4X Concentrated! Pond Dye helps prevent weeds and algae from growing by naturally blocking out the sun's harmful UV rays. A "must-have" to naturally keep your pond weed-free, and also to add an attractive blue color to your pond. Contains highly concentrated Acid Blue #9, which is safe for recreational ponds, horses, cattle, birds, fish, wildlife, and the environment.

Item # PSP0125 (3 lbs.)

OWS Fish & Game Feeder

OWS Fish & Game Feeder

Manage a better pond and grow bigger, healthier fish with the new Outdoor Water Solutions fish feeder. If you're looking for accurate feeding, less waste, and larger, healthier fish, then this one is for you! We've designed a system that has everything you need, and at an affordable price.

Features include:

- 30-gallon, taper hopper (200-lb. capacity)
- Tripod design with powder-coated legs for long life
- Metal feeder feet included, so you can bolt or stake your unit down to keep it intact in high wind conditions
- Narrow directional casting of fish food or corn out to 20 ft.
- Programmable digital timer; schedule up to 6 feedings a day
- Customize feed-dispense times between 1 and 20 seconds
- High-quality 6v battery included
- Solar-panel recharger included
- 1-year warranty on all parts

Item # FDR0084 (41 lbs.)



