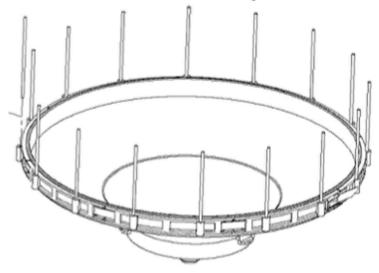


# WS-2902-RAINSPIKE Bird Spike Kit for WS-1550-IP, WS-1900, WS-2000, WS-2902 and WS-2902A Rain Gauge Funnel Kit



## **Suggested Tools**

QTY	Description	Image
1	Needle nose pliers	



Include	ncluded			
Qty	Description	<b>Image</b> (not to scale)		
2	Self-locking Stainless Steel Zip Ties - Only one is needed. The other is a spare.			
5	Flexible Silicone Strips			
10	Stainless Steel Spike			

#### Step 1: Insert Stainless Steel Zip Tie into the Silicone Strips

- Make sure all of the holes on the Silicone Strips, for the Stainless Steel Spikes, are facing the same direction.

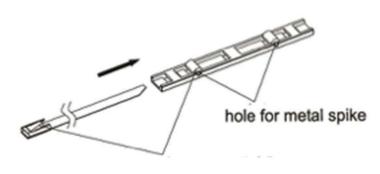


Figure 1





Figure 2

Step 2: Make the rain spike strip into a circle and insert the pointed end of the Stainless Steel Zip Tie into the self-locking clip

- DO NOT FULLY TIGHTEN. Leave some slack for Step 4



Ensure the holes in each silicone strip are facing up

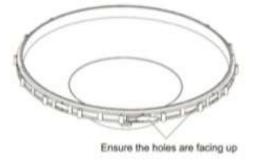


Do not fully tighten / remove the slack in the Zip Tie until Step 4

Figure 3



Step 3: Place the circle over the rain funnel.





Step 4: Using your needle nose pliers, firmly grab the tip of the Stainless Steel Zip Tie sticking through the locking clip. Tighten the Stainless Steel Zip Tie around the funnel by rotating the pliers, with Zip Tie firmly gripped between the pliers, away from the locking clip.

- If your funnel is the same configuration below, with Zip Tie pointing right and holes for Spikes facing up, you would rotate your wrist clockwise



Figure 5



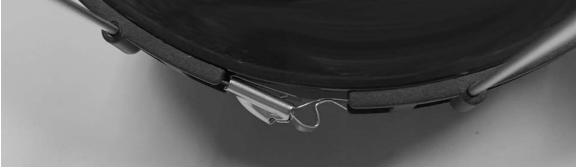


Figure 6

Step 5: Place the Stainless Steel Spikes into each hole of the Silicone Strip.

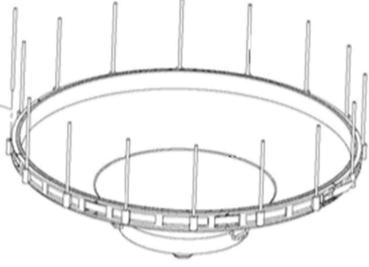


Figure 7



Step 6: Using the pliers, bend the Spikes over the opening of the rain funnel to prevent birds from nesting inside the funnel. Note, you will need to apply pressure to the silicone strip to prevent the Spikes from ripping the silicone material.



Figure 8

# Alternate Rain spike bending method

### **Required Tools**

- Combination Square
- Pliers
- Pencil
- 1) Remove ruler from combination square.

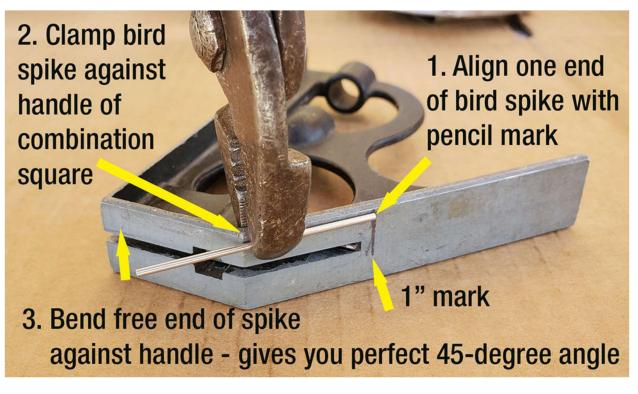




2) Pencil Mark 1" on handle

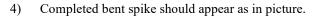


- 3) Following the procedure outline below
  - a. Align one end of the bird spike with pencil mark.
  - b. Clamp bird spike against handle of combination square.
  - c. Bend free end of spike against handle gives you perfect 45-degree angle.





The finished product





Step 7: Install the rain gauge funnel, spikes attached, into the sensor array. Rotate the funnel clockwise to attach to the sensor array. *Section 5.3.4 of WS-1900, WS-2000 and WS-2902A manual.* 

