

## Stainless Steel Radar Arch

### Parts List:

- x4 – Assembled Feet Castings (Male / Female Components – with Nylon Isolation Washer)
- x2 – Fore (Bow) Legs, 1.90” S.S ---80”---
- x2 – Rear (Aft) Legs, 1.90” S.S ---77 3/16”---
- x4 – Elbow Section 1.90 S.S ---60”---
- x4 – Machined Aluminum Elbow Plugs
- x6 – Assembled Gusset Sections 1.90” S.S Various Lengths; Includes (x12) Angled Arch Castings
- x2 – Center Section Tube 2-3/8” S.S ---24”---; Includes (x4) Center Plate Castings
- x1 – Anodized Aluminum Center (Radar) Plate
- x1 – Bolt Bag

### Optional: *\*\*See Attached\*\**

- 200 Lb. Davit System
- Wind Turbine Generation Pole (6’-5”)
- Antennae Bracket
- Adjustable Solar Panel Pole

### Assembly:

1. Steps 8-10 are easiest on the ground with two or more people, take advantage of a mast crane or boom truck at your local marina to lift the assembled unit on board. Attempting to build this unit onboard, or by yourself can be dangerous. Assemble the Arch on its ‘back’, and then slowly raise it into an upright position once everything is tight. We suggest working on a soft surface (Grass, Blankets, or Cardboard) to prevent scratching your Arch.
2. Start by taking measurements of your boat, and where you would like the arch. The Arch is adjustable in width (between 4’-10’). In most cases the arch is wider than required, the Elbow Section tubes will need to be cut to suit your boats beam. Foot ‘Centre’s’ are at 21” fore and aft.
3. The Angled Arch Castings connected to the Gusset Sections have different angles; they have been marked for proper Up and Down and Fore and Aft placement. It is critical the Angled Arch Castings are installed correctly so they contact the Legs completely.

### Note:

**If Davits or other fittings (collars) are to be used, ensure they are on the appropriate tubing before assembling the arch.**

4. Build the Leg Sections of the arch. Lay one Fore and Aft Leg side by side on the ground. Refer to the attached schematic to determine the ‘top’ and ‘bottom’ of the tubes. Choose three appropriate Gusset sections, and loosely attach each end to the Fore and Aft Legs using the supplied 3” Flat Head Phillips Screws. It is important to loosely assemble to begin with, and slowly tighten everything together; this ensures everything is connected properly. Repeat for Port and Starboard Legs.

5. Insert the four Aluminum Plugs into the 'top' of the Leg Assemblies, and the Feet Castings into the 'bottom'; loosely lock in place using the supplied ¼"-20 set screws.
6. Build the Center Plate Assembly. The top side of the Centre Plate has been counter sunk to accept flat head screws. We have marked the Centre Plate for hole placement, ensure it is mounted properly
7. Elbow Section Tubes will need to be cut as per the desired width of the arch. Once assembled, a minimum of 4" of this tube should always remain inside of the Centre Section Tubes. Ideally, these tubes will be cut perfectly so they 'butt' up against the screws connecting the Centre Plate Castings. As it is not always clear how much tube is inside the other, we suggest first inserting the Elbow Tubes into the Centre Tube until it hits the inner screw; Mark the Elbow Tube where they meet to determine how much tube might be left inside once the arch is assembled. Masking Tape works well.

*Keep in mind that the arch is tapered. Once assembled the top of the arch is narrower than the base. Use your measurements from earlier to ensure the Elbow Tubes are cut correctly. We suggest putting everything together to first determine how much tubing needs to be cut. See Next Step*

8. Have one person tilt and hold the assembled Leg Section so the Aft Leg is on the ground, and the Fore Leg is in the air. Connect the Elbow section tubes to the Aluminum Plugs, and loosely lock them in place by ensuring the ¼"-20 set screws are in the grooves of the plugs. Repeat for opposite Leg Assembly. Angle (flare) the legs so the Elbow tubes are horizontal, and insert them into the Center Plate Assembly at equal speeds to ensure tubes slide together smoothly. The last couple inches will be extremely tight which is normal as the arch 'sets', and takes its shape. You might require a wood block and mallet to tap the final bits together.
9. Determine if the width of the arch is suitable for its location, measure this at the base. If the Arch is too wide, return to *Step 8*. If the width is suitable, use the supplied ¼"-20 set screws where required to lock everything together. Ensure all screws are tight before raising the arch into an upright position, the arch is 'aft heavy', it is not self-supporting when upright.
10. Raise the Arch onboard into position, and mark deck for foot placement. Feet will be through bolted using supplied ¼"-20 Screws, we recommend using a backing plate to protect the inner surface. Drill through, and prepare the deck for adhesive (Clean, and Tape). Caulk a small bead of adhesive around each mounting hole, screw the base down, and then caulk around the base itself.
11. Holes have been drilled into the legs to help conceal any wiring for electronics. Wire sleeves are recommended to protect against chafing.
12. Take a Photo and Share on with our global following on Facebook, Instagram, or Google.