

INSTRUCTION MANUAL

ORDER NO. 579 PN 805792
**GOLDENROD, 1/2 WAVE OMNIDIRECTIONAL
 BASE ANTENNA**

GENERAL DESCRIPTION:

The "Goldenrod" is an extended one half wave length, base fed, vertically polarized, omni-directional base station radiator. Special arcuate radials are used to broad band the antenna at a very low VSWR across the entire band.

THEORY OF OPERATION:

The extended one half wave length design utilizes a shunt fed transformer for a perfect 52 ohm match. Electrically the antenna is at "DC Ground" which substantially lowers the residual noise level. This "receiver quieting" results in gains up to 20db over a normal vertical. Its longer length offers a lower angle of radiation due to pattern compression. Its performance surpasses that of any other half wave length design.

FEEDLINE:

Terminated at 52 ohms, its base uses an SO-239 coax receptacle. Use 52 ohm coaxial cables such as RG-58/U (runs under 50 feet), RG-8 or RG-8/AU for lower cable losses.

CONSTRUCTION:

All gold irridite treated for a lifetime of service. No dissimilar metals are used. Commercial quality construction is used throughout the "goldenrod" antenna. Taper swaged seamless tubing along with self tapping sheet metal screws provide perfect electrical and mechanical connections. The heavy ribbed, heavy gauge, metal mast bracket secures the goldenrod solidly to the mast. The twelve inch bracket provides two points of support insuring the goldenrod will stand erect and secure at all times. Bracket fits masts up to 1 5/8" in diameter. Entire antenna weight is only 5.5 lbs.

ASSEMBLY:

All tubing has been predrilled to exact measurement. Mated sections are secured by self tapping #8 Hex x 3/8" sheet metal screws.

() Unpack the goldenrod, check each part against the parts list. Refer to the drawings for help in becoming familiar with the parts.

() Slip the M2 section of tubing into the M1 section, align holes and insert the 3/8" sheet metal screw. Tighten securely.

() Slip the M3 section of tubing into the M2 section, securing with 3/8" sheet metal screw.

() Slip the M4 section of tubing into the M3 section and secure the sheet metal screw.

() Place a 7/16" caplug on top of the M4 section.

- () Select the R1 radials, mount on the top side of the supporting bracket as shown in the figure. Use a 1/4" lockwasher and 1/4-20 hex nut and tighten.
- () Make sure the radial rods are arranged so they are 120 degrees from each other. Tighten all three securely.
- () Place the two U-bolts in the bracket as shown and install the antenna on your mast. Tighten the antenna securely.

CAUTION

Be sure to use the lower and upper U-bolt holes when installing antenna.

- () Now attach the coax feedline to the SO-239 connector and you have completed the installation.

NOTE

It is good installation practice to weather seal the coax fitting by covering it with neoprene or similar type of weather resistant compound.

GROUNDING:

A good ground is essential for lightning protection. We recommend using one 8' x 3/8" copper ground rod. Connect a copper wire (no smaller than #12) from the rod to the antenna supporting mast or tower. This will by-pass mast static charges direct to earth.

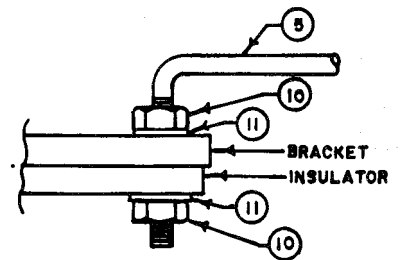
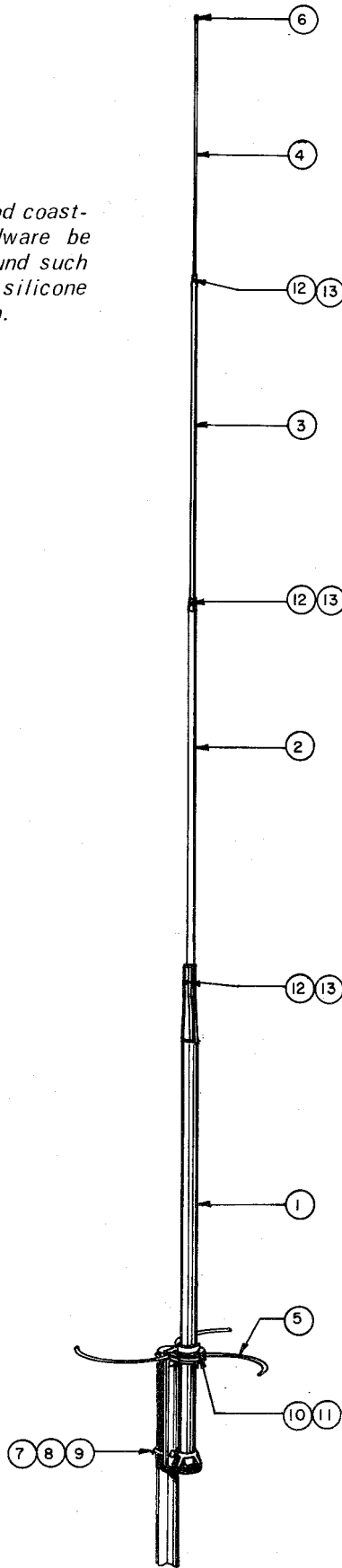
PARTS LIST for MODEL 579

Item No.	Description	Qty
1	Base Assembly M1	1
2	Tubing, 7/8 x 55" Drl. M2	1
3	Tubing, 5/8 x 55" Drl. M3	1
4	Tubing, 7/16 x 55" Drl. M4	1
5	Radials	3
6	Caplug, 7/16"	1
7	U-Bolt, 5/16 x 1 5/8 x 2 1/4"	2
8	Nut, 5/16-18 Hex	4
9	Lockwasher, 5/16" Int.	4
10	Nut, 1/4-20 Hex	6
11	Lockwasher, 1/4" Int.	6
12	Screw, #8-3/8 HH Type A	5
13	Lockwasher, #8 Int.	5

Printed in USA

NOTE

To prolong the life of this product in or around coastal areas, it is recommended that all hardware be encapsulated with a silicone rubber compound such as DOW-CORNING silastic rubber or G. E. silicone seal to prevent atmospheric deterioration.



DETAIL OF
RADIAL ATTACHMENT