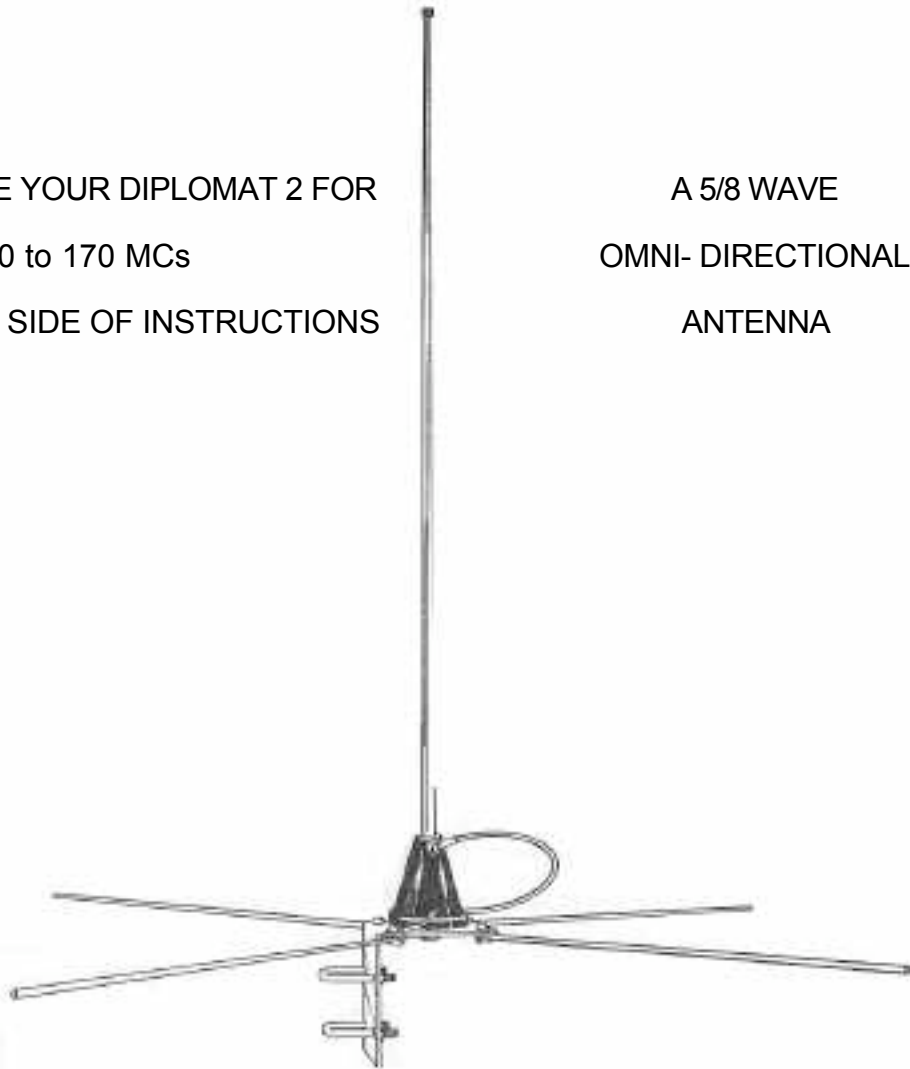


# ASSEMBLY INSTRUCTIONS FOR MOSLEY DIPLOMAT 2 2 METER ANTENNA MODEL DI 2

TO CUSTOMIZE YOUR DIPLOMAT 2 FOR  
150 to 170 MCs  
SEE REVERSE SIDE OF INSTRUCTIONS

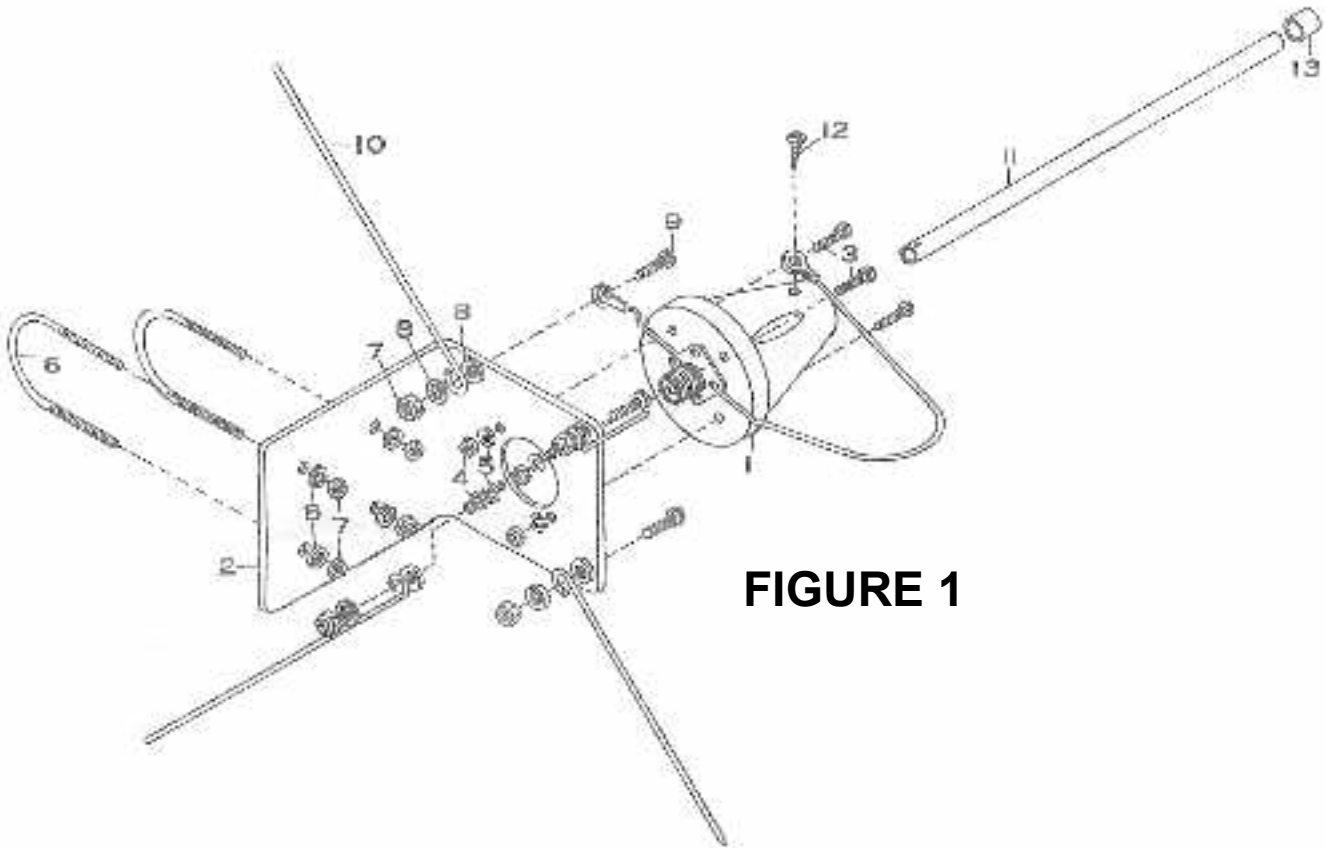
A 5/8 WAVE  
OMNI- DIRECTIONAL  
ANTENNA



*The high performance of your MOSLEY Antenna can only be achieved if the antenna is assembled in accordance with the instructions supplied. Substitutions of material or modification of design will materially lessen this performance.*

## DESCRIPTION

The Mosley Diplomat 2 is a two meter 5/8 wave omnidirectional antenna with a gain of 3.4 db compared to 1/4 wave ground plane. It features a VSWR of 1.5/1 or better, and is matched for 52 ohm coaxial cable. Mounting fits up to 1-1/2" O.D. mast.



**FIGURE 1**

## ASSEMBLY

**ASSEMBLY INSTRUCTIONS:** (See Figure 1).

Align the four holes in plastic base (item 1) with holes in bracket (item 2) securing with screw (item 3), lockwasher (item 5), and nuts (item 4). Insert screw (item 9) through solder lug on the shortest wire coming from the plastic base (item 1), and through hole in bracket (item 2), lockwasher (8), eye of radial (item 10), and secure with lockwasher (8) and nut (7). Attach the other three radials in the same manner.

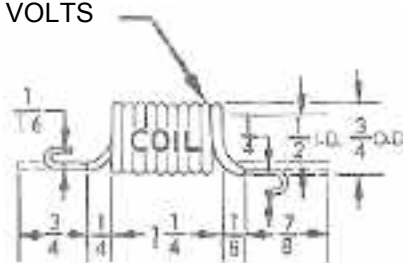
Place caplug (13) on vertical element (11) on opposite end from hole. Insert vertical element (11) into top of plastic base (1), and align holes. Bend the longest wire from plastic base assembly into a "U" and secure to base (1) and vertical element (11) with screw (12) as shown in figure 1. The remaining U-bolts (6) lockwashers (8) and nuts (7) are for mounting antenna on mast.

## PARTS LIST

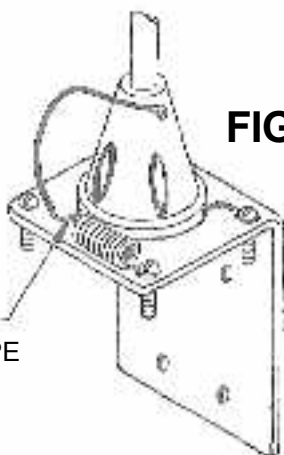
PART NO.	ITEM	QUAN	DESCRIPTION
A-2014	1	1	Base Assembly
2038	2	1	Bracket, Aluminum
1517	3	4	Screws, 10-32 x 3/4" long
1066	4	4	Nuts, 10-32
1004	5	4	Lockwashers, No. 10
1018	6	2	U-bolts, 1/4-20
1020	7	8	Nuts, 1/4-20
2053	8	12	Lockwashers, 1/4"
1481	9	4	Screws 1/4-20 x 3/4" long
2016	10	4	Radials, 1/8" dia. aluminum
2015	11	1	Tubing, 3/8" OD
1017	12	1	Screws, No. 7 x 1/2" long sheet metal
1423	13	1	Caplug, 3/8"

**NOTE:** When ordering replacement parts from instruction sheet, refer to **PART NUMBERS** shown above and **FORM NUMBER** on back page.

SOLID #14 TW. WIRE 600 VOLTS  
 PLASTIC COVERED  
 LENGTH 22 INCHES  
 10 TURNS  
 INDUCTANCE .8  $\mu$ h.



**FIG. 2B**



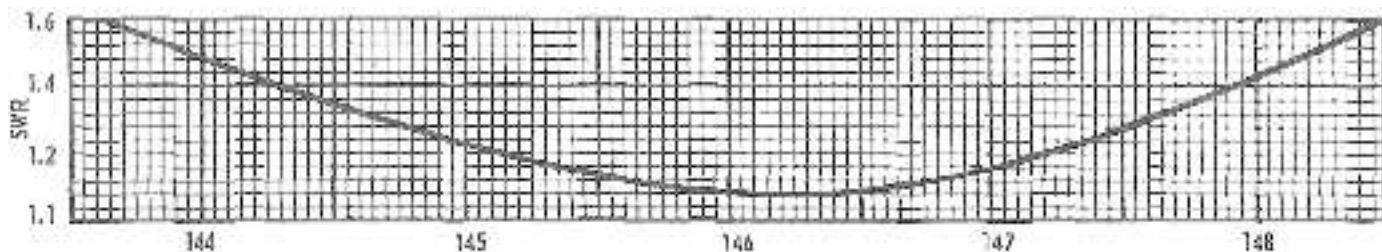
**FIG. 2A**

### **DIPLOMAT 2**

USE ON FREQUENCY  
 144 TO 170 MHz

The diplomat 2 antenna does not provide a complete ground at low frequencies and DC. Such a ground may be added by installing a choke coil as shown in FIG. 2. This choice gives added lightning protection and affords some reduction of precipitation noise. (This coil is not supplied.)

### **TYPICAL VSWR CURVE**



## TO CUSTOMIZE YOUR DIPLOMAT 2 FOR 150 to 170 MCs

The vertical element and each of the radial elements must be cut to new lengths.

1. Select the desired frequency.
2. To determine what the exact height of the vertical element should be in inches, locate the frequency desired on the left side of Chart No. 1.

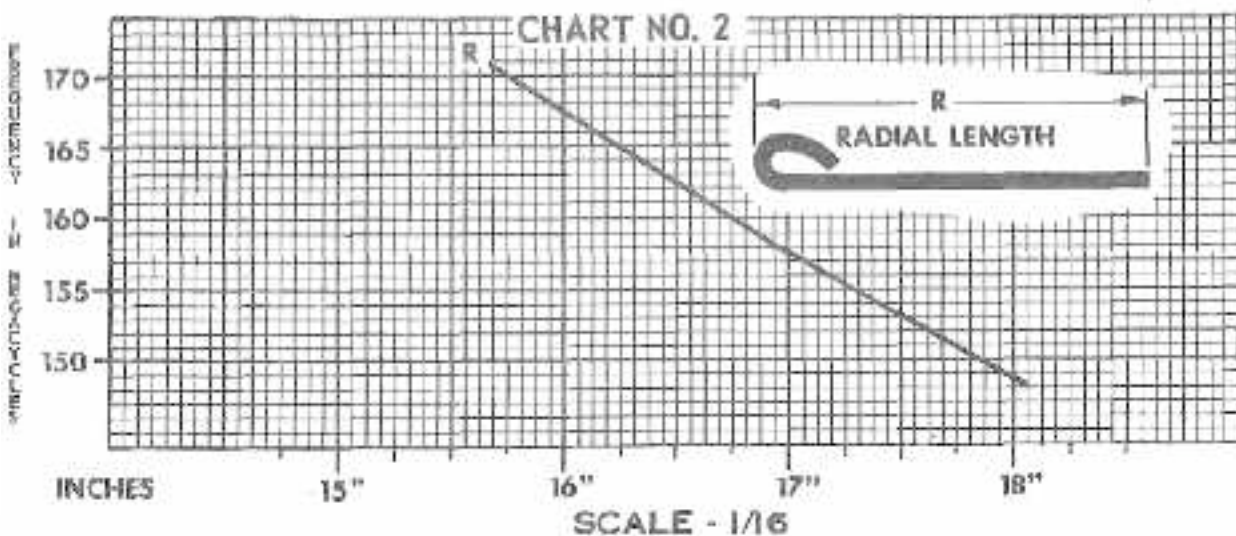
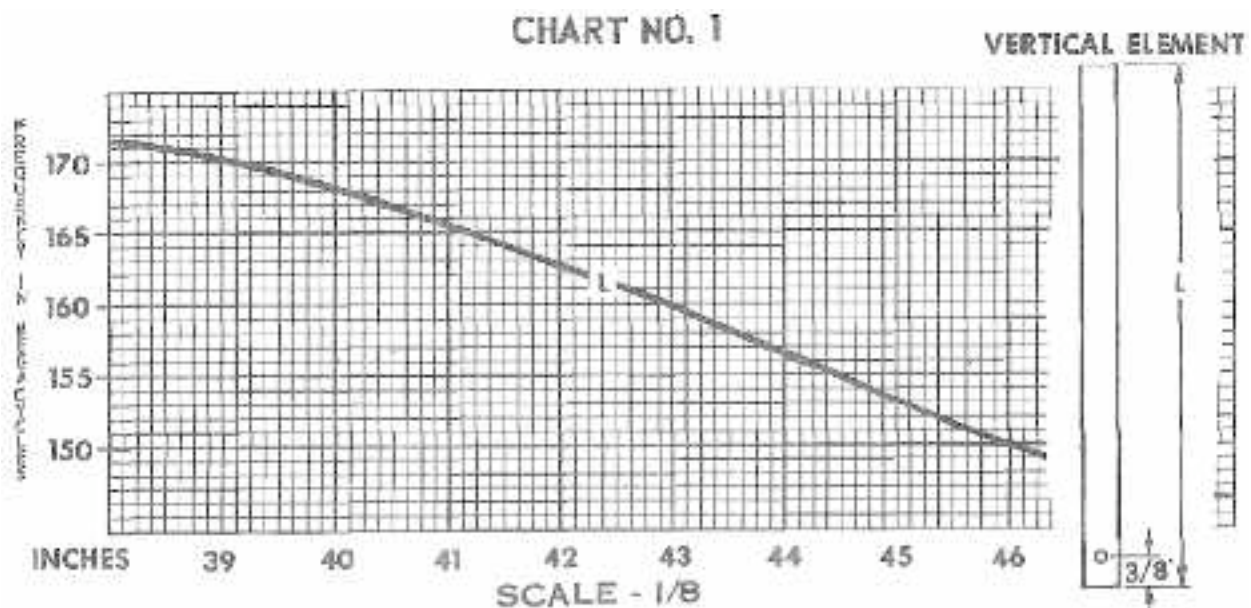
Follow the horizontal line to the curve.

Follow the vertical line down from the curve to the scale at the bottom of the chart.

This scale, in inches, will determine the exact height to which the vertical element should be cut for the desired frequency.

**IMPORTANT:** When cuffing excess tubing from vertical element, be sure to cut from the end opposite the drilled hole.

3. To determine what length the radial should be, follow the same procedure using Chart No. 2



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