

## SYSTEM 36

### 20, 15, 10 METERS TRIBANDER

Band MHz . . . . . 14-21-28	Longest Element: . . . . . 29' 6 1/2"
Maximum power input . . . . . legal limit	Turning radius . . . . . 19' 1"
Gain (dBd) . . . . . up to 9 dB	Maximum mast diameter . . . . . 2" O.D.
VSWR at resonance . . . . . 1.1:1	Surface area . . . . . 8.6 sq. ft.
Impedance . . . . . 50 ohms	Wind loading at 80 mph . . . . . 215 lbs.
F/B ratio . . . . . up to 20 dB	Assembled weight (approx.) . . . . . 53 lbs.
Boom (O.D. x length) . . . . . 2" x 24' 2 1/2"	Shipping weight (approx.) . . . . . 62 lbs.
No. elements . . . . . 6	Maximum wind survival . . . . . 100 mph

### PRELIMINARY INSTRUCTIONS

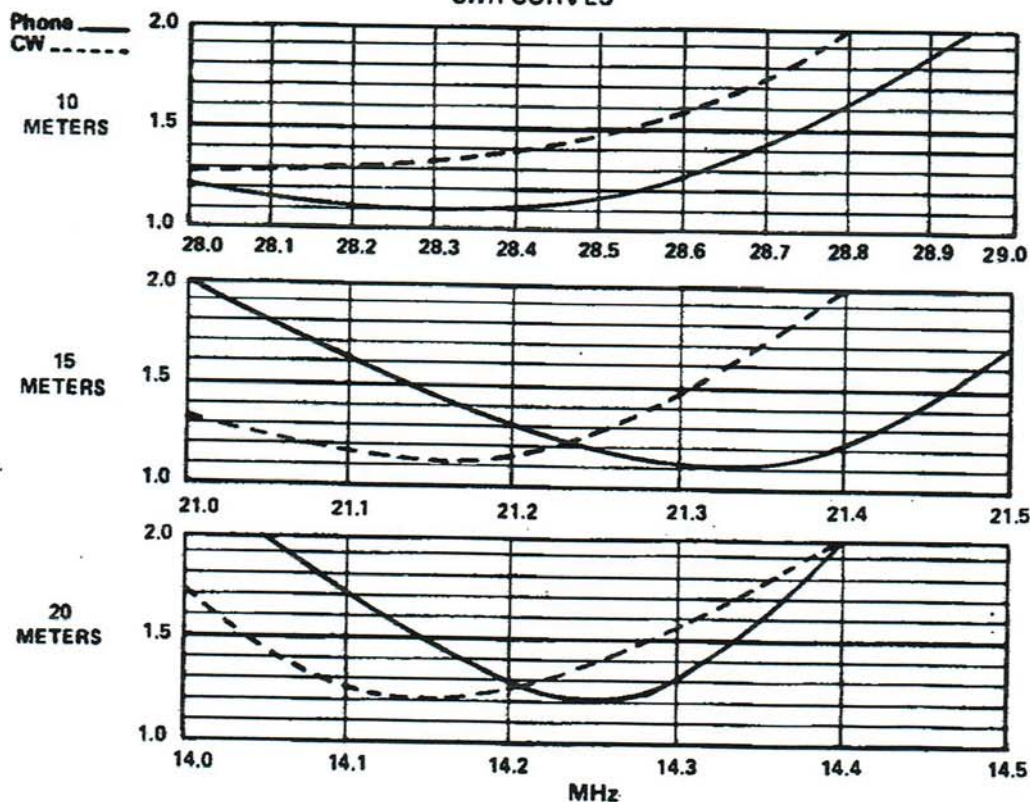
For the best results and the best use of your time, familiarize yourself with all parts and instructions before beginning assembly.

Begin assembly by unpacking everything and checking all your parts against the parts list. Do not proceed until you have determined that you have everything on the list, and each item in the quantity specified. If anything is missing, contact the Customer Service Dept. at Wilson Systems immediately, and tell us exactly what is missing. Do not begin assembling your antenna until you have all parts in hand.

Read your instructions completely, and be sure you understand them, before you start. Do not begin assembly until you are sure you have ample time to finish — a partially completed antenna is especially prone to damage, and parts scattered around are easily lost.

If you lose or damage any parts, or have any problems you cannot work out by yourself, call us! We have experienced dedicated people who understand your problems and are anxious to help you.

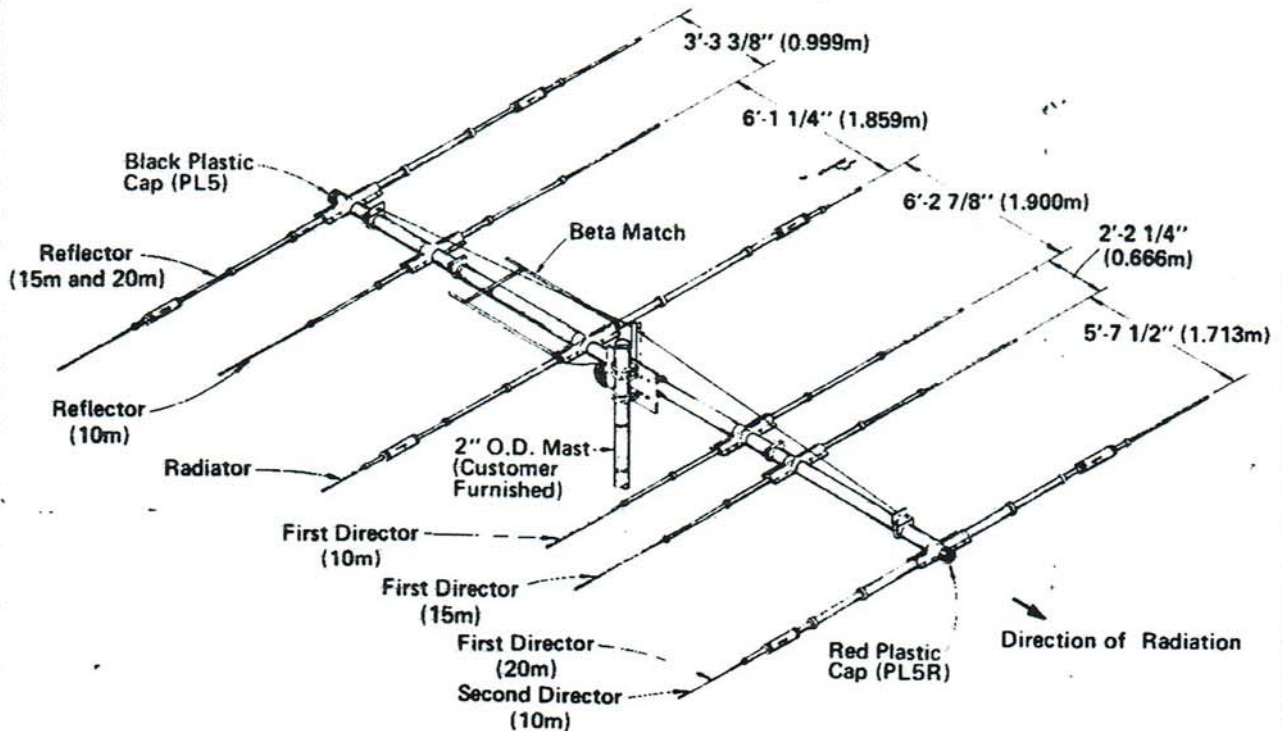
### SWR CURVES



OVERALL DIMENSIONS

	Phone	CW
Reflector (15m and 20m)	29'-2 1/2" (8.896m)	29'-6 1/2" (8.997m)
Reflector (10m)	17'-10" (5.431m)	17'-10" (5.431m)
Radiator	24'-6" (7.461m)	24'-8" (7.513m)
1st Director (10m)	16'-7" (5.050m)	16'-7" (5.050m)
1st Director (15m)	21'-1" (6.420m)	21'-1" (6.420m)
1st Director (20m)	25'-6 3/4" (7.785m)	25'-6 3/4" (7.785m)
2nd Director (10m)		

For exact element dimensions see Figure 4.



BASIC ASSEMBLY PROCEDURE:

This figure shows what the antenna should look like when assembled. Specific assembly details are shown on following pages. Your basic order of assembly should be:

1. Put the boom together as shown in Figure 2.
2. Then assemble each element as shown in Figures 3, 4 and 5. Do the driven element first; and then each of the others in any order you choose. Mount each element loosely on the boom as soon as it is assembled. Locate them only approximately, and do not put the plastic caps on the ends at this time.
3. After the elements are all in place, move them to their exact positions, set them square to the boom and parallel to each other, and tighten all bolts and clamps. Recheck all dimensions, and correct any errors.
4. Install the guy cables per Figure 7A.
5. Recheck all dimensions again, and check the tightness of all bolts and clamps. Coat all bolts, screws, and nuts with silicon sealant. Put plastic caps on the ends of boom and elements.
6. Attach your coaxial cable to the balun as illustrated, and secure to the boom with tape.
7. Install the antenna on the mast per Figure 7B. Dress your coaxial cable down the mast and secure in several places with tape.

Figure 1

DRAWN \_\_\_\_\_  
 APPROVED *WT*

**SY36**

08-01-79