

ASSEMBLING THE ANTENNA

We recommend you assemble the antenna on the ground in a flat, open area. Follow these steps to assemble the antenna using the supplied hardware.

1. Slip a $\frac{3}{8}$ -inch lockwasher (A) over the threaded end of the small top section (B), then turn that section clockwise and connect it tightly to the middle section (C).
2. Slip a $\frac{1}{2}$ -inch lockwasher (D) over the threaded end of the middle section (C), then turn that section clockwise and connect it tightly to the bottom section (E).

MOUNTING THE ANTENNA

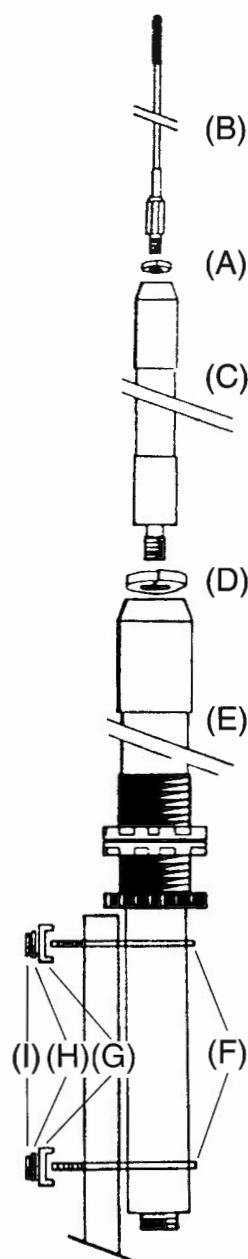
Using the supplied hardware, you can easily mount your antenna to a mast (not supplied), a building's vent pipe or other stationary object.

Note: For the best performance, mount your antenna at least 9 feet above the roof of the nearest building and 18 feet above or away from any metal object or structure.

1. Place the supplied U-bolts (F) around the bottom section of the antenna and the mounting location.
2. Slide a clamp (G) over each U-bolt, then slide a lock washer (H) over the end of each U-bolt.
3. To fasten the U-bolts in place, tighten the supplied hex nuts (I) tightly over the ends of each U-bolt.

Cautions:

- Be careful not to overtighten the hex nuts, otherwise you might damage the antenna.
- Do not use caulk or silicone sealant around any part of your antenna, otherwise moisture might not drain properly from around the antenna. This could damage the antenna or cause it to work improperly.



TUNING THE ANTENNA

Follow these steps to prepare your antenna and tune it with an SWR meter (not supplied) for use with radio equipment.

NOTE: Your antenna is pretuned to the middle of the CB band (27.205 MHz) for the lowest SWR (standing wave ratio). No tuning is necessary to use your antenna with a CB.

1. Look up the frequency you use most often in the Frequency/Antenna Length table on page 6, then carefully measure and cut off the recommended length of the antenna's top section.

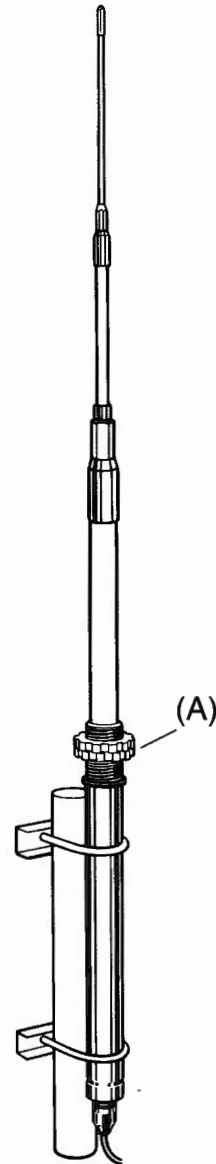
IMPORTANT! Be sure you cut off only the length recommended to operate on the desired frequency. If you cut off too much of the antenna, you might need to replace the antenna's top section to receive some lower frequency. If needed, you can purchase a replacement top section through your dealer.

Note: No cutting is needed to operate your antenna at 10–20 meters if you use an antenna tuner.

2. Using an SWR meter, check the SWR at the top and bottom of the band.

Notes:

- If you are using a watt meter, the meter should read full output power at the transmitter, and (after calibration) in the SWR position, SWR should be low (preferably 2:1 or less).
 - The best place to check SWR is at the antenna's coaxial connection. You can also check SWR at the transmitter's coaxial connection.
3. If the SWR is higher at the top of the band than it is at the bottom, turn both tuning rings (A) $\frac{1}{4}$ - to $\frac{1}{2}$ -turn counter-clockwise to raise them.



Note: For frequencies higher than 31.571 MHz, position the tuning rings at the top of the threaded section, then skip to Step 5.

4. Repeat steps 1 and 2 until the SWR reading is the lowest possible at both ends of the band.
5. To lock the tuning rings in place, turn the top ring clockwise and the bottom ring counterclockwise, so they rest tightly against each other.

TROUBLESHOOTING

If you are unable to obtain an acceptable SWR reading from your antenna, follow these suggestions to see if you can eliminate the problem. If you are unable to eliminate the problem, contact your dealer for assistance.

- Be sure the SWR equipment is working properly— check the SWR meter's owner's manual for assistance in operating it.
- Be sure the antenna's grounding location is grounded properly.
- Be sure the antenna is installed at least 9 feet above the roof of the nearest building and 18 feet above or away from any other metal objects in the area.
- Check the coaxial cable and all of its connections. Be sure the cable is not pinched, shorted, broken or kinked.
- Be sure any excess coaxial cable is not coiled, causing excess SWR.
- Check the equipment installation sequence, and be sure the amplifier is not installed out of phase.
- If you installed an optional ground plane kit on the antenna, be sure the radials are at least 9 feet above the roof.
- Be sure that no water is standing around the base of the antenna and that no caulk or silicone sealant has been used around the bottom of the antenna.

TIPS FOR ELIMINATING RFI

Your transceiver and antenna system might cause TV or radio frequency interference (RFI) even when it is operating properly. To determine whether your system is causing the interference, turn off the transceiver connected to the antenna. If the interference goes away, your system is causing it. Try one or more of the following suggestions to eliminate the interference.

- Be sure the mast or mounting location is grounded properly.
- Purchase a high quality, low pass filter like Solarcon's LP99.
- Check the transceiver to be sure it is operating properly.

If you are unable to eliminate the interference, contact your dealer for assistance.

SPECIFICATIONS

Maximum Power	2000 Watts
dBI Gain	9.9
Optimum SWR Range	Less than 1.5:1
Dimensions (height x diameter)	17 ft., 4½ in. x 1¾ in. ø (5.3 m. x 33 mm. ø)
Weight	5 pounds (2.27 kg)
Supplied Hardware	6 Lockwashers 2 U-bolts 2 Clamps 4 Hex Nuts

Specifications are typical, but individual units may vary. Specifications are subject to change and improvement without notice.

FREQUENCY / ANTENNA LENGTH TABLE

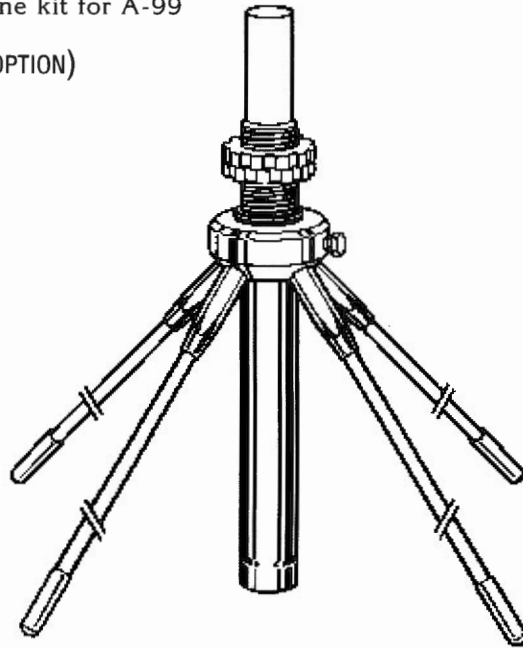
FREQ. (MHz)	TOP SECTION LENGTH (inches)	
	Remaining ▼	Cut Off ▼
28.016	64	8
28.106	63	9
28.267	62	10
28.372	61	11
28.468	60	12
28.565	59	13
28.630	58	14
28.723	57	15
28.840	56	16
28.956	55	17
29.102	54	18
29.205	53	19
29.528	52	20
29.456	51	21
29.528	50	22
29.633	49	23
29.743	48	24
29.890	47	25
29.965	46	26
30.090	45	27
30.204	44	28

FREQ. (MHz)	TOP SECTION LENGTH (inches)	
	Remaining ▼	Cut Off ▼
30.324	43	29
30.397	42	30
30.504	41	31
30.590	40	32
30.679	39	33
30.807	38	34
30.900	37	35
31.030	36	36
31.571	36	36
31.695	35	37
31.754	34	38
31.980	33	39
32.130	32	40
32.295	31	41
32.404	30	42
32.535	29	43
32.685	28	44
32.816	27	45
32.921	26	46
33.041	25	47
33.117	24	48

GPK-1

Groundplane kit for A-99

(OPTION)



INSTALLATION INSTRUCTIONS

NOTE: RADIALS MUST BE 9 FEET ABOVE OR AWAY FROM ANY EXISTING STRUCTURE FOR MAXIMUM PERFORMANCE.

1. Insert aluminum bottom tube into ground plane collar and raise collar to the base of plastic threaded section.
2. Tighten the set screw.
3. Install the four fiberglass radials.
4. Install the A-99.

**BE CAREFUL!
DO NOT STRIP THREADS!**