

## Operation Manual

# CA-F22GF

### High Gain VHF Base Station Antenna

#### Features:

Heavy duty Fiber Glass constructin provides long durability and complete water-proof. High Gain of 6.0dB is achieved.

Specifications:

Frequency: 136 - 175MHz (to be fixed)

Gain : 6.0 dB Impedance : 50 ohm

V. S.W.R. : Less than 1:1.5

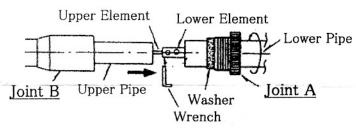
Max Power : 150 watt
Weight : 1.3 kg approx.
Length : 2.7 m approx.
Connector : M type (SO239)

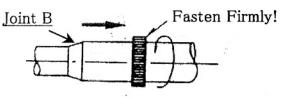
Assembling & Mounting:

1) Joint the Lower Element and Upper Element, using Hex. wrench.

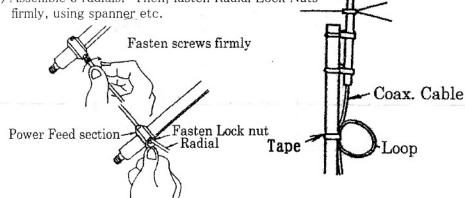
Then, insert Upper Ant. Pipe to Lower JOINT-A, and joint it to upper JOINT-B

JOINT-A, and joint it to upper JOINT-together with Rubber Washer strongly.



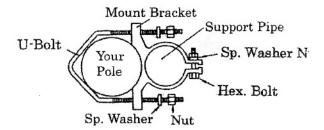


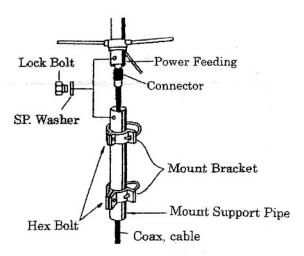
3) Assemble 3 radials. Then, fasten Radial Lock Nuts



4) Then, mount 2 Mount Brackets onto the Mount Support Pipe. Pass the coax. cable through the Pipe and connect to the Power Feeding Section. Please fasten Hex.Bolts firmly. Then, assemble such Support Pipe to whole antenna and fasten Lock Bolt strongly.

5) Finally, mount all assembled antenna to your mast. Because CA-F22GF is long, 2.7m high antenna, please pay attention on the balance and use strong pole as possible, 25-62mm dia.





#### Note:

CA-F22GF is high gain antenna. Please use high quality coaxial cable loss.

Available Mast Dia is 25 - 62 mm φ.

#### Parts List:

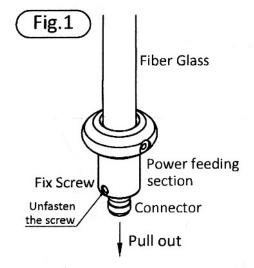
No. Parts Name:

- 01 Element
- 02 Radial w/nut
- 03 Power Feeding Section
- 04 Hex Bolt w/sp. washer
- 05 Mount Support Pipe
- 06 Mount Bracket
- 07 U-bolt w/sp. washer, nut



## MODEL CA-F22GF

[How to adjust frequency 120-175MHz]



- [1] Loosen fix screw at the bottom of Power Feeding section. (Fig.1)
- [2] Pull out the entire wiring assembly, as shown in Fig.2
- [3] Upper and lower elements are attached to the brackets at both ends of the coil.

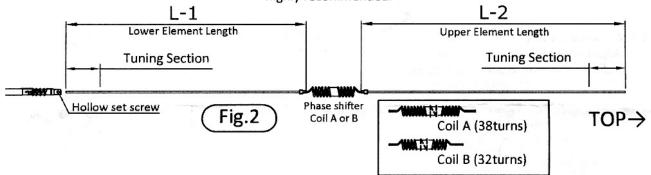
Remove the hollow-set screws to disassemble elements.

[4]Adjust L1 and L2 length, following to the Adjustment Chart. Below 150MHz, use Coil A(many-threads).

Above 150MHz, use Coil B(few-threads).

After both length adjustment done, fasten all fix screw tightly.

- [5] Put wiring assembly all the way into fiber element, and fasten fix screw tightly.
- [6] Prior to insertion, waterproofing silicone on the connector is highly recommended.



#### Element Adjustment chart

Frequency	L-1	L-2
120.0MHz	1160 mm	1436 mm
125.0MHz	1060 mm	1340 mm
130.0MHz	973 mm	1258 mm
135.0MHz	899 mm	1185 mm
140.0MHz	833 mm	1120 mm
145.0MHz	776 mm	1062 mm
150.0MHz	~ 725 mm	- 1011 mm
155.0MHz	674 mm	997 mm
160.0MHz	627 mm	950 mm
165.0MHz	586 mm	908 mm
170.0MHz	551 mm	872 mm
175.0MHz	520 mm	840 mm

\*Element length at 150MHz is w/t Coil A

■ Specifications or appearance is subject to change without notice.