



OMNI-DIRECTIONAL HIGH GAIN COMMERCIAL/ HAM/CB BASE STATION ANTENNA

MODEL : HCS-100

Specifications

GAIN	DC Ground 5.75dB
VSWR	Less than or equal 1.5:1
FREQUENCY RANGE	26 ~ 31 MHz
POLARIZATION	Vertical
IMPEDANCE	50 Ohm
CONFIGURATION	half wave over a quarter wave variable mutual transductance tuned
POWER CAPACITY	2000 Watts
CONNECTOR	SO-239

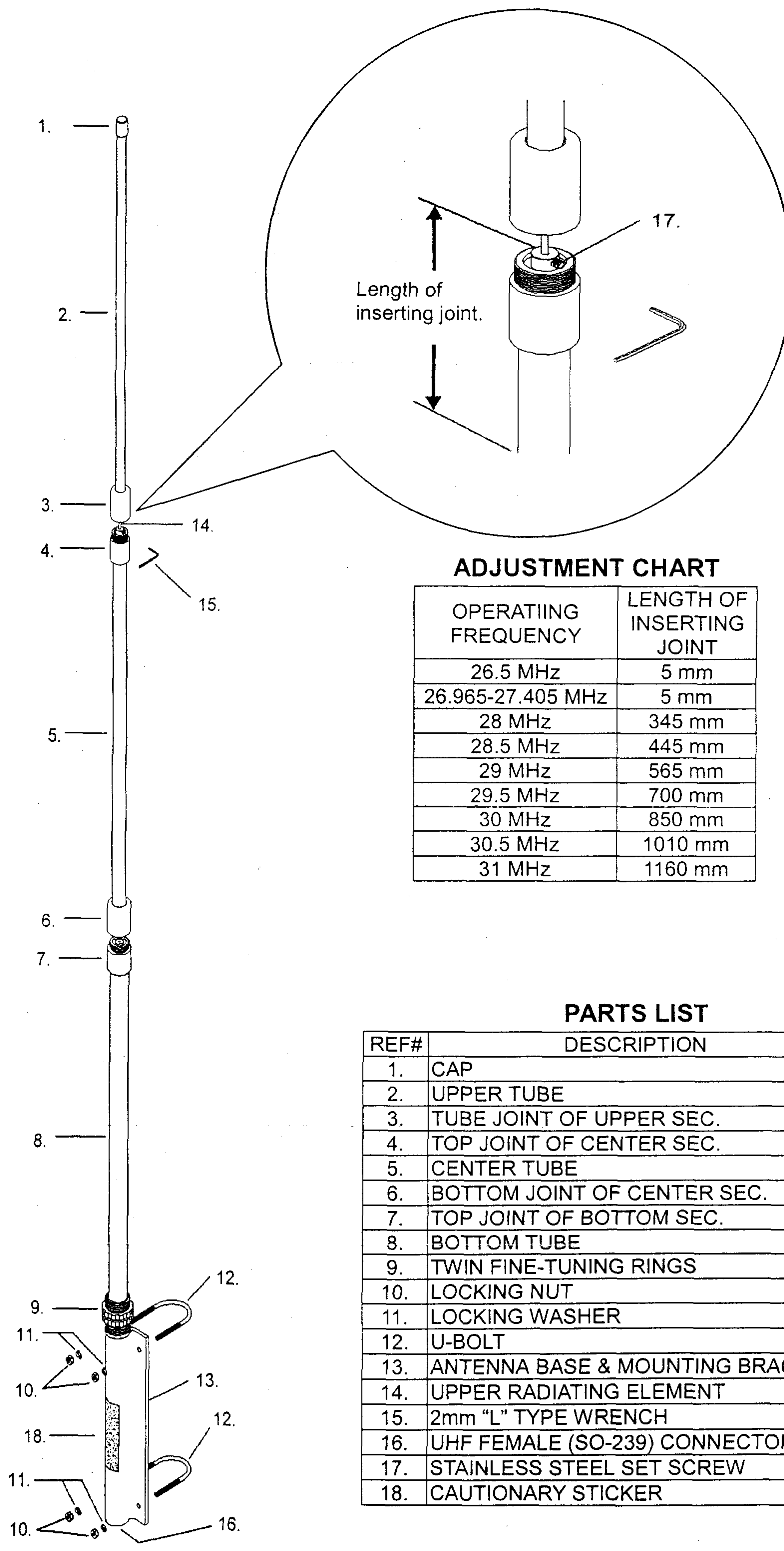
Installation

Before you begin installation, read this manual and the separate recommendation information sheet. For your safety and convenience, plan each step of the installation in advance.

1. Refer to drawing (rear side of this instruction). Loosen the set screw (part #17) using the supplied "L" wrench (part #15) , and slide the radiator element (part #14) into the radiator joint (part #4) to correct length of each frequency showing the adjustment chart, then tighten the set screw (part #17).
2. Screw up the bottom joint of upper section (part #3) tightly onto the top joint of center section (part #4).
3. Screw up the bottom joint of center section (part #6) tightly onto the top joint of bottom section (part #7).
4. Secure the mounting bracket (part #13) to mounting pole (not included) in desired location using U-Bolts (part #12), locking nuts (part #10), locking washers (part #11). Tighten it securely with wrench (not included).
5. Run the cable from radio to the bottom of mounting bracket (part #13) and screw PL-259 on cable end tightly onto SO-239 connector at the bottom of mounting bracket (part #13).

Fine-Tuning Procedure(After Roof-Mounting)

1. Check SWR at low and high of frequency band (for example ch.1 & ch.40 of the CB band).
2. If the SWR is better at low (ch.1-CB) than at high (ch.40-CB), Raise up the twin tuning-rings by 1/4~1/2 turn.
3. If the SWR is better at high (ch.40-CB) than at low (ch.1-CB). Lower down the twin tuning-rings by 1/4~1/2 turn. Repeat the step 2 & 3 till the SWR is nearly the same in the low band and the high band of frequency and the best performance will be obtained. Then tighten the twin tuning-rings against each other.



ADJUSTMENT CHART

OPERATING FREQUENCY	LENGTH OF INSERTING JOINT
26.5 MHz	5 mm
26.965-27.405 MHz	5 mm
28 MHz	345 mm
28.5 MHz	445 mm
29 MHz	565 mm
29.5 MHz	700 mm
30 MHz	850 mm
30.5 MHz	1010 mm
31 MHz	1160 mm

PARTS LIST

REF#	DESCRIPTION	Q'TY
1.	CAP	1
2.	UPPER TUBE	1
3.	TUBE JOINT OF UPPER SEC.	1
4.	TOP JOINT OF CENTER SEC.	1
5.	CENTER TUBE	1
6.	BOTTOM JOINT OF CENTER SEC.	1
7.	TOP JOINT OF BOTTOM SEC.	1
8.	BOTTOM TUBE	1
9.	TWIN FINE-TUNING RINGS	2
10.	LOCKING NUT	4
11.	LOCKING WASHER	4
12.	U-BOLT	2
13.	ANTENNA BASE & MOUNTING BRACKET	1
14.	UPPER RADIATING ELEMENT	1
15.	2mm "L" TYPE WRENCH	1
16.	UHF FEMALE (SO-239) CONNECTOR	1
17.	STAINLESS STEEL SET SCREW	1
18.	CAUTIONARY STICKER	1