

OWNER'S MANUAL

* * * Model HMC-6S * * *

Maldol

Multiple 6-Bands Mobile Antenna for 14/21/28/53/146/446MHz

Features:

- 1) You can enjoy multiple 6-bands communication without changing one antenna to the others.
- 2) 53/146/446MHz are wide bands, which require no tuning works. Each HF frequencies can be tuned easily, sliding the Elements and Capacitor Ring.
- 3) HMC-6S was developed under new concept for the prevention of noisy QSB and occasional hitting to the tree branches.
- 4) Operation of other HF is also available, using option coils.
(3.5MHz/HMC-35C, 7MHz/HMC-7C, 10MHz/HMC--10C, 18MHz/HMC-18C)

Specifications:

Frequencies	: 14/21/28/53/146/446MHz
Type & Gain	: 1/4wave, 0dB 14/21/28/53MHz 1/2wave, 2.15dBi 146MHz 5/8x2-step, 5.3dBi 446MHz
V. SWR	: Less than 1.5
Impedance	: 50 ohm
Max in-put power:	120W/SSB - 14/21/28MHz 150W/FM - 53/146/446MHz
Connector	: PL-259 (M-P) type
Length	: 1620mm approx.
Weight	: 790g

Assembling Works:

HMC-6S is divided to 2 sections.
Please joint Element-A and Center Coil, and fasten the Set Screws firmly.

After jointing, please confirm tight fastening of each screws and coils.

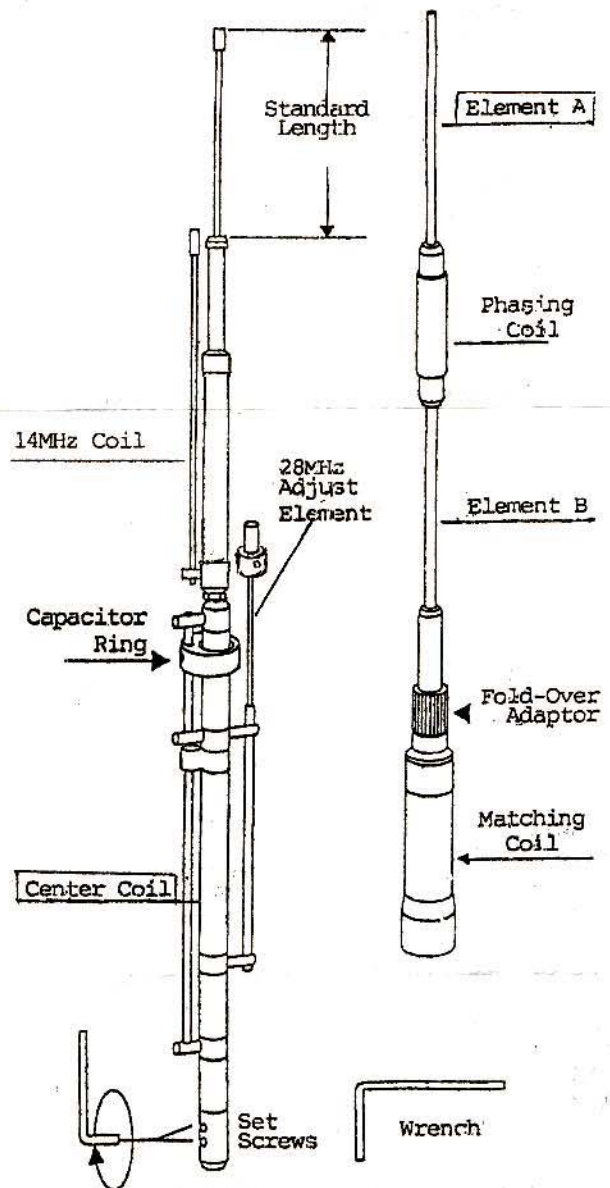
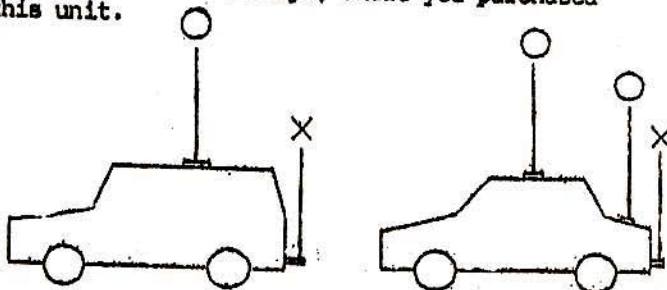
Mounting Works:

Please separately prepare heavy-duty mount and Cable Assembly, which you are planning to use for HMC-6S.

- 1) Initially, please decide the location for the antenna mounting.
- 2) For the frequencies 14/21/28/53MHz, sufficient grounding to the car-body is required perfectly. Otherwise it may not be so easy to find out good VSWR at some of the frequencies.

When mounting to the roof-rail, carrier or to mirror-pipe, same grounding works is also requested.

As for the perfect grounding works, please contact to the nam shops, where you purchased this unit.



Frequency Adjustment:

* Please proceed adjustment works at low power of less than 10W.

1) Initially, unfasten Set Screws of 14/28MHz. Confirm and fix each elements at Standard Length. The Capacity Ring is to be set to keep uniform distance from the center coil as shown below.

2) Then, confirm V.SWR of 53/146/446MHz.

3) Please start freq. adjustment from 14MHz initially, then 21MHz, and 28MHz finally.

- 14/28MHz - When the elements shortened - higher frequency,
extended - lower frequency.
21MHz - When the Adjuster is slided upper - lower freq.,
slided down - higher freq.

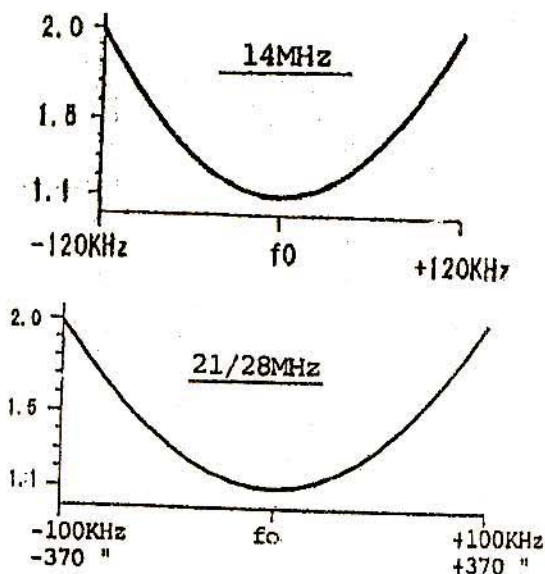
As for the Freq. Shift per each 1cm, please refer to the Right Table.

4) Finally, please confirm VSWR of each freq. throughly.

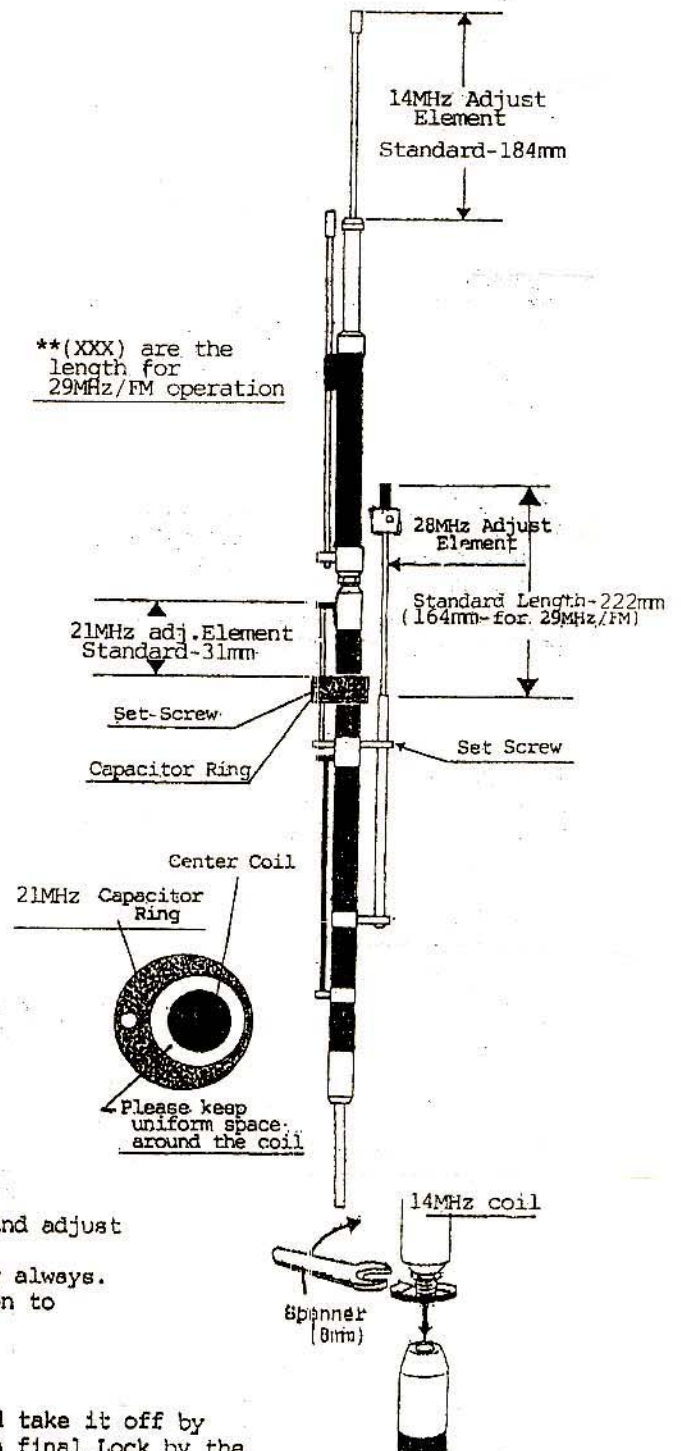
Note: When you operate other frequencies, using Option Coils, VSWR of 21/28MHz may be changed depending on the locations. Then, please confirm VSWR of each frequencies again.

Freq.	Freq. shift per each 1cm
7MHz	140KHz
21MHz	250KHz
28MHz	200KHz

V. SWR Characters:



** (XXX) are the length for 29MHz/FM operation



Remarks:

- * While transmitting, please refrain from touching to the antenna.
- * Excessive power than the specified may damage your transmitter as well as the antenna. Please operate at the lower power than the specified.
- * Before each car-driving, confirm tight fastening of Set Screws, Nuts also fold-over adaptor.
- * When the mounting location is changed, please confirm and adjust VSWR of each frequencies newly.
- * While driving the car, please keep the antenna standing always.
- * Enjoy at your safe car-driving, paying careful attention to tree-branches, and other obstacles.

Replacement of Option Coils:

First, unfasten the Nut of 14MHz Coil by 8mm Spanner, and take it off by your hand. Then, assemble Option Coil by the hand, with final Lock by the Spanner. Please refrain from giving excessive power, which may give damage on the coil.