



OPERATION MANUAL

Model H-422 **4-Band Trap Dipole Antenna**

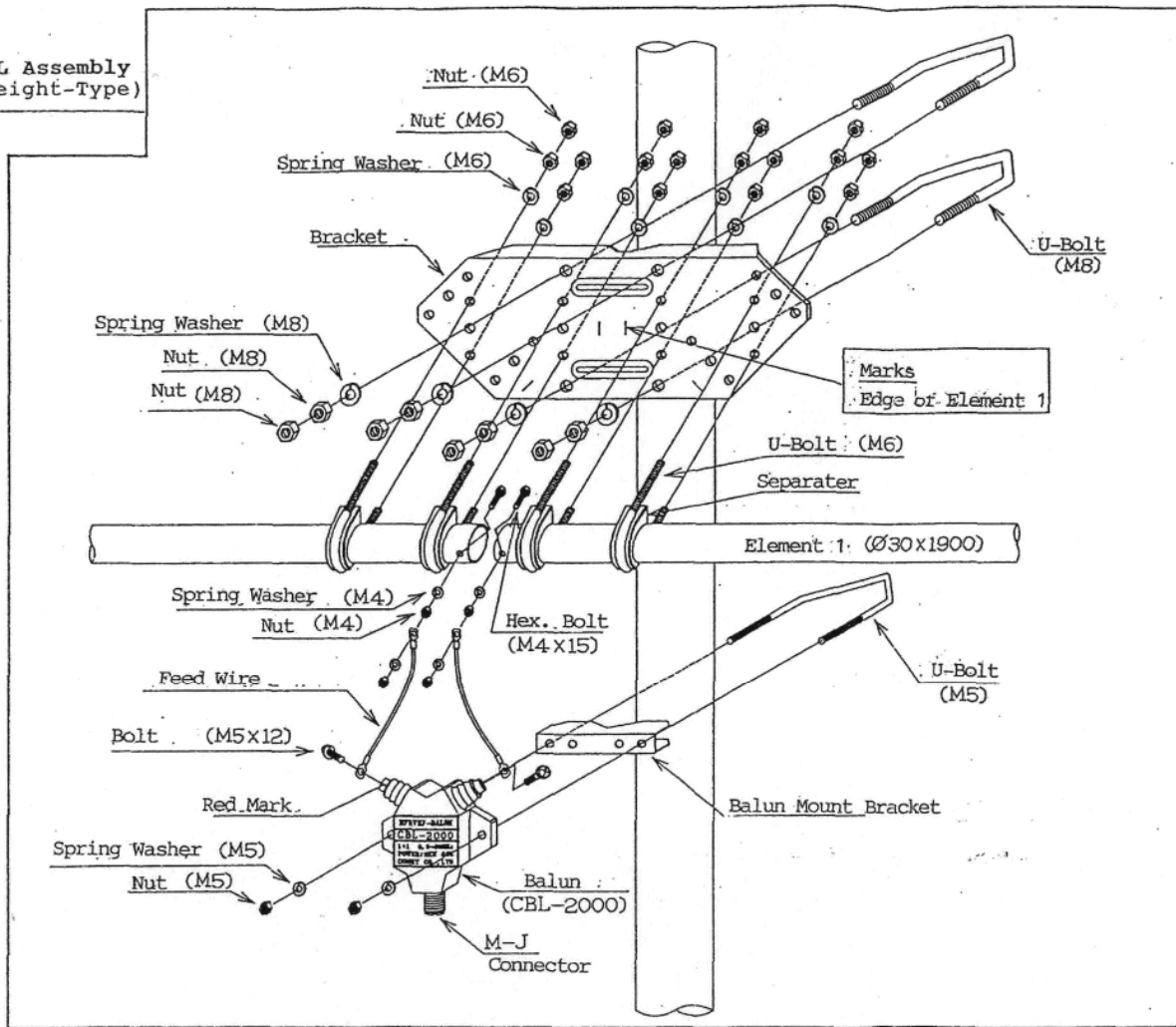
Features:

- 1) Newly designed Non-Space, Wide Band dipole antenna.
- 2) Can be used both Straight-type and/or V-type. When used as V-type, ready On-Air from low location of 3m high from the ground.
- 3) CBL-2000, high power 2KW/SSB balun, is included as the standard accessory, which helps for preventing TVI, BCI and other interference.
- 4) Specially developed High Power Trap Coils assure high power QSO constantly.
- 5) The 3 Radiator Sizes - LOW, MID, HIGH - were illustrated for much FB transmission at 21 & 28MHz.

Specifications:

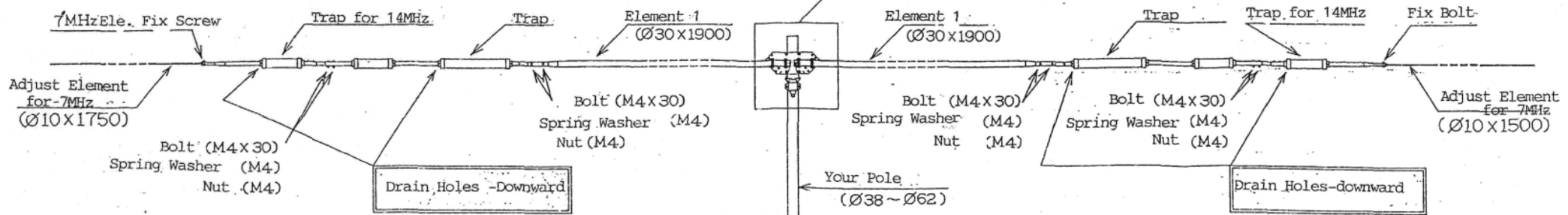
Frequencies	7, 14, 21, 28MHz.
Impedance	50 ohm
V. SWR	Less than 1 : 1.5 at center frequency
Max Input Power	1KW (SSB)
Connector	M-J (SO-239 type)
Max wind velocity:	35m / sec.
Length	10.3m (Straight type) 7.4m (V-type)
Weight	5.4 kgs.
Rotation Radius	5.3m (Straight type) 3.8m (V-type)
Suitable mast:	38 - 62mm dia

★ FULL Assembly
(Streight-Type)



★ PARTS' LIST

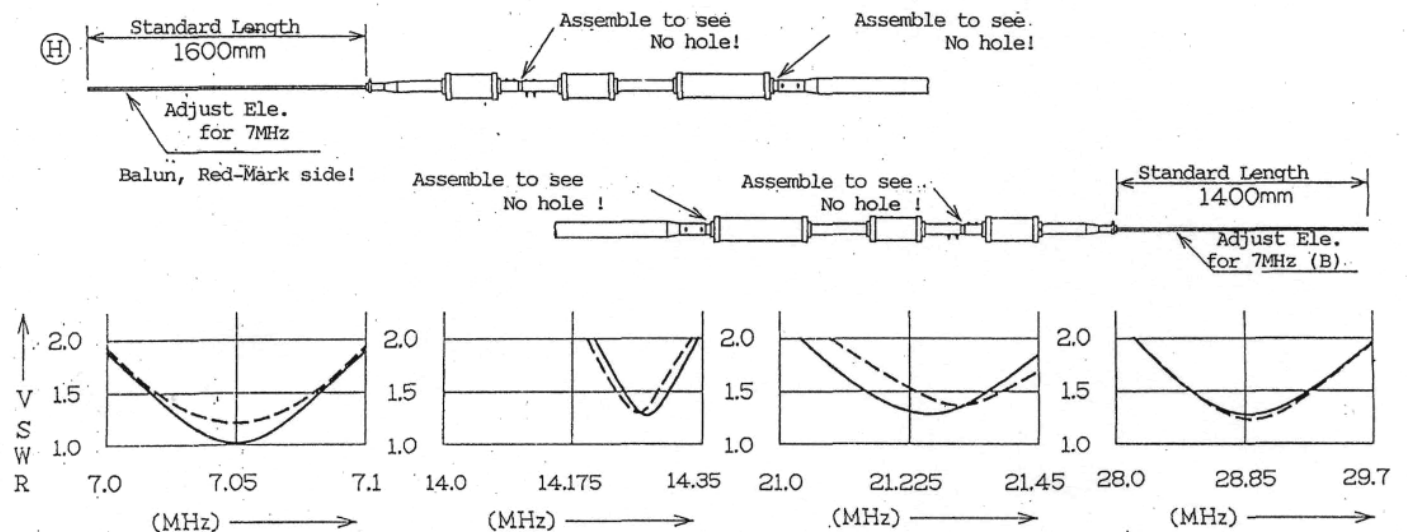
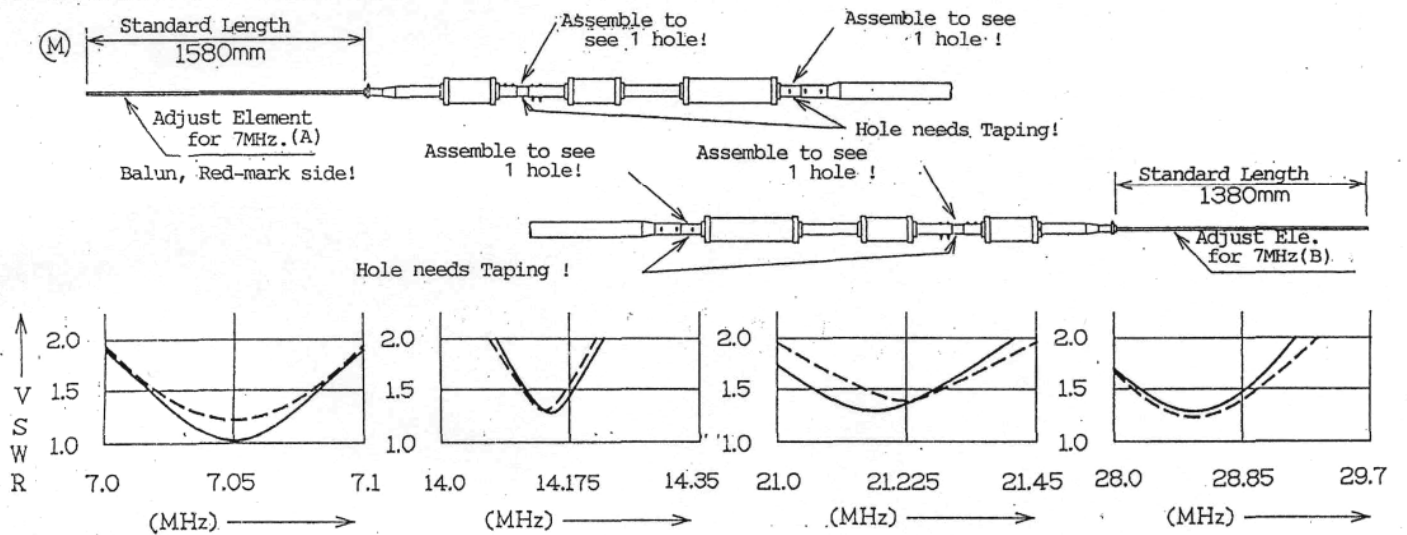
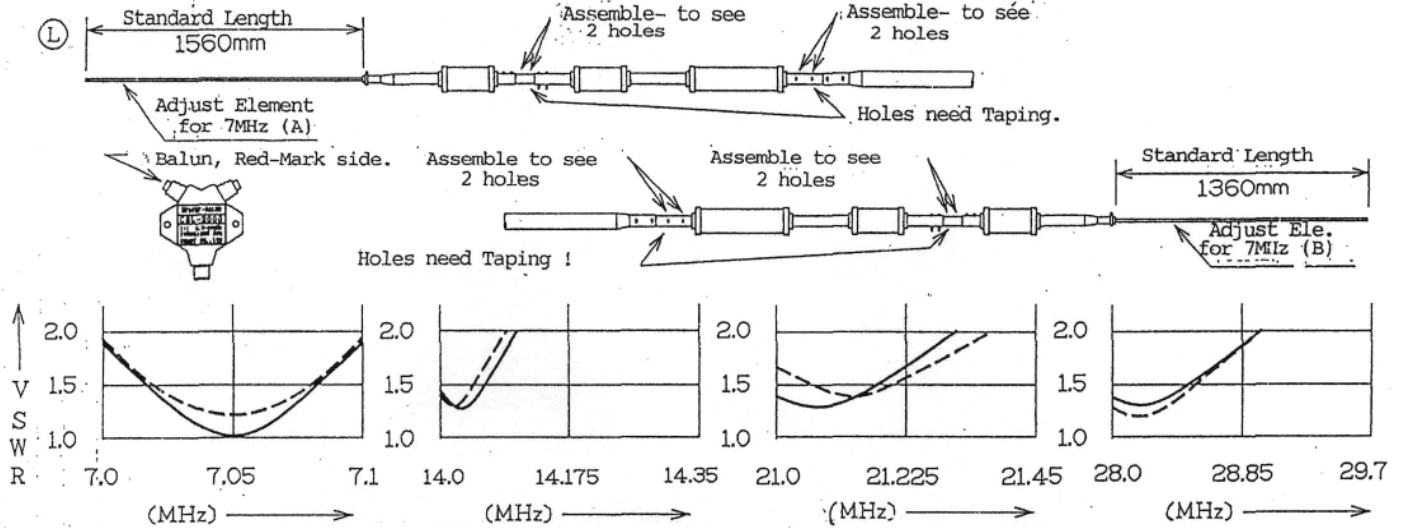
Nos.	Parts' Names	Qty
1	Element 1 (Ø30 x 1900)	2
2	Trap	2
3	Trap for 14MHz	2
4-1	Adjust Element for 7MHz(Ø10x1500)	1
4-2	Adjust Element for 7MHz(Ø10x1750)	1
5	Mounting Bracket Assembly	-
5-1	Bracket	1
5-2	Separator	4
5-3	U-Bolt (M6)	4
5-4	Spring Washer (M6)	8
5-5	Nut (M6)	16
5-6	U-Bolt (M8)	2
5-7	Spring Washer (M8)	4
5-8	Nut (M8)	8
6	Parts for Element Assembling	-
6-1	Bolt (M4 x 30)	8
6-2	Hex. Bolt (M4 x 15)	2
6-3	Spring Washer (M4)	12
6-4	Nut (M4)	12
7	Balun Mounting	-
7-1	Balun CBL-2000	1
7-2	Balun Mount Bracket	1
7-3	U-Bolt (M5)	1
7-4	Spring Washer (M5)	2
7-5	Nut (M5)	2
7-6	Bolt (M5x12)	2
7-7	Feed Wire (w/contal nut)	2



● Measurement & SWR Characters:
(Streight - Type)

- ⊙ CW-operation - (L) location
- ⊙ SSB-operation- (M) location
- ⊙ FM(28MHz) (H) location

———— 20m high from ground. - - - - 5m high from ground.

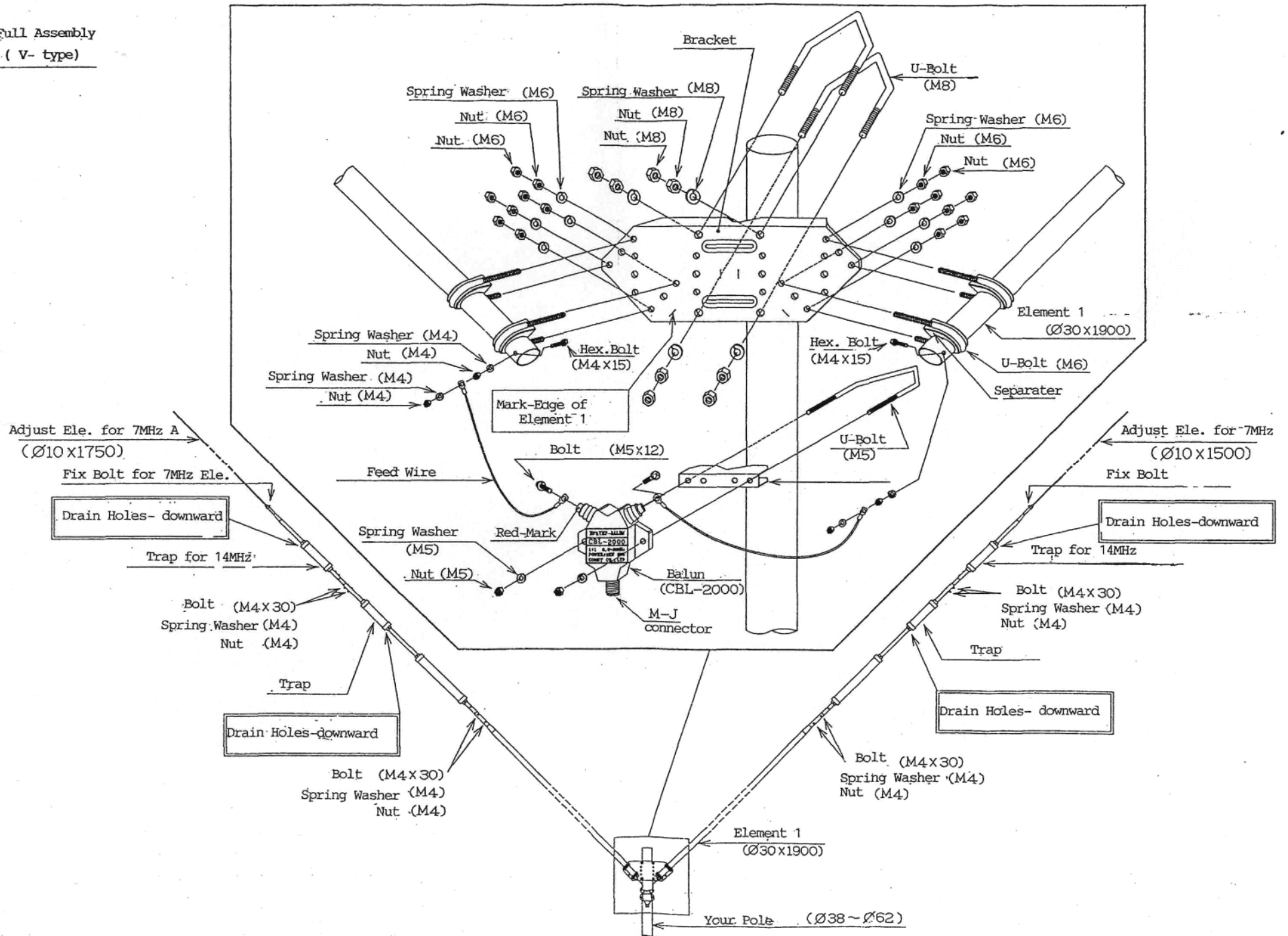


** You can change Center freq. of 7MHz by sliding the 7MHz Adjust Element, without any influence to other frequencies.

** Shift of 7MHz band per each 1cm, is 15KHz.

** Difference of Left & Right 7MHz element is to be 200mm constantly.

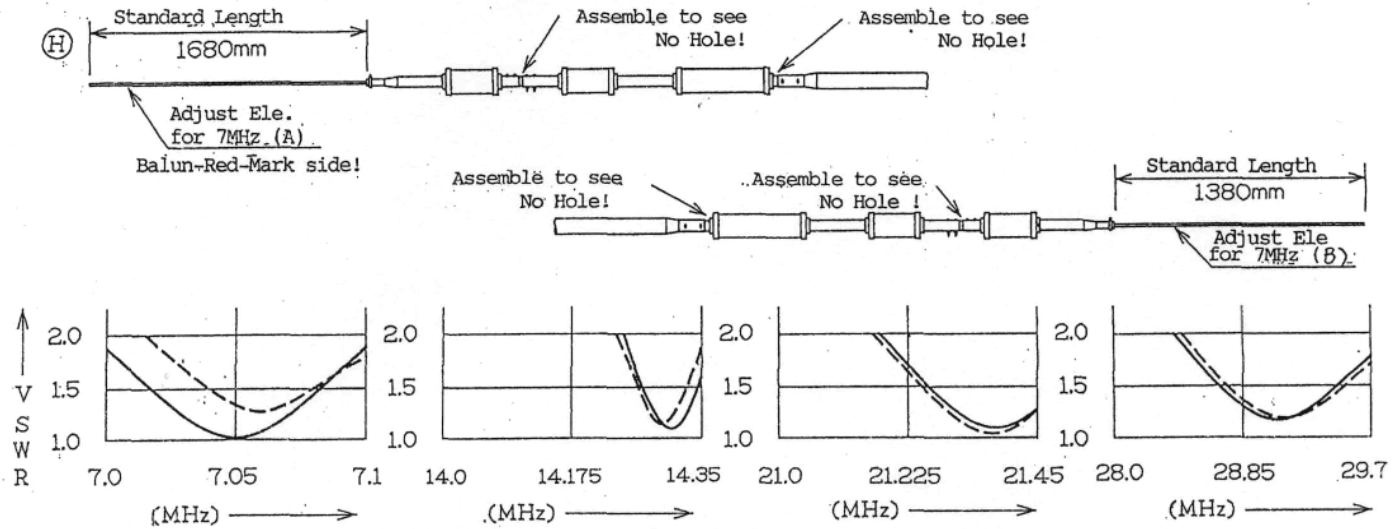
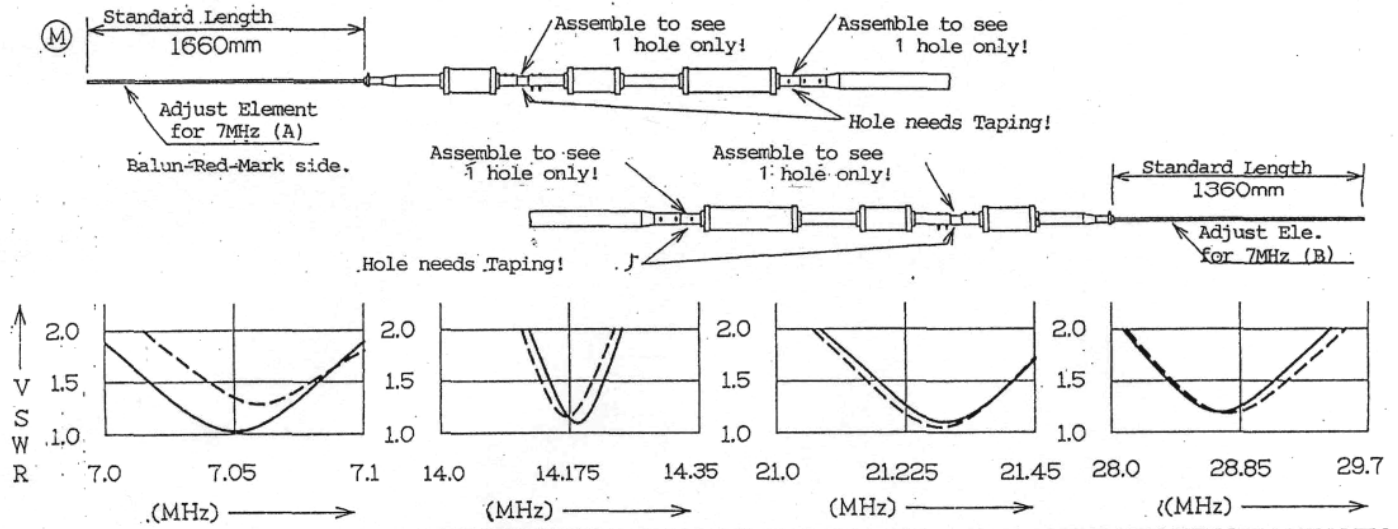
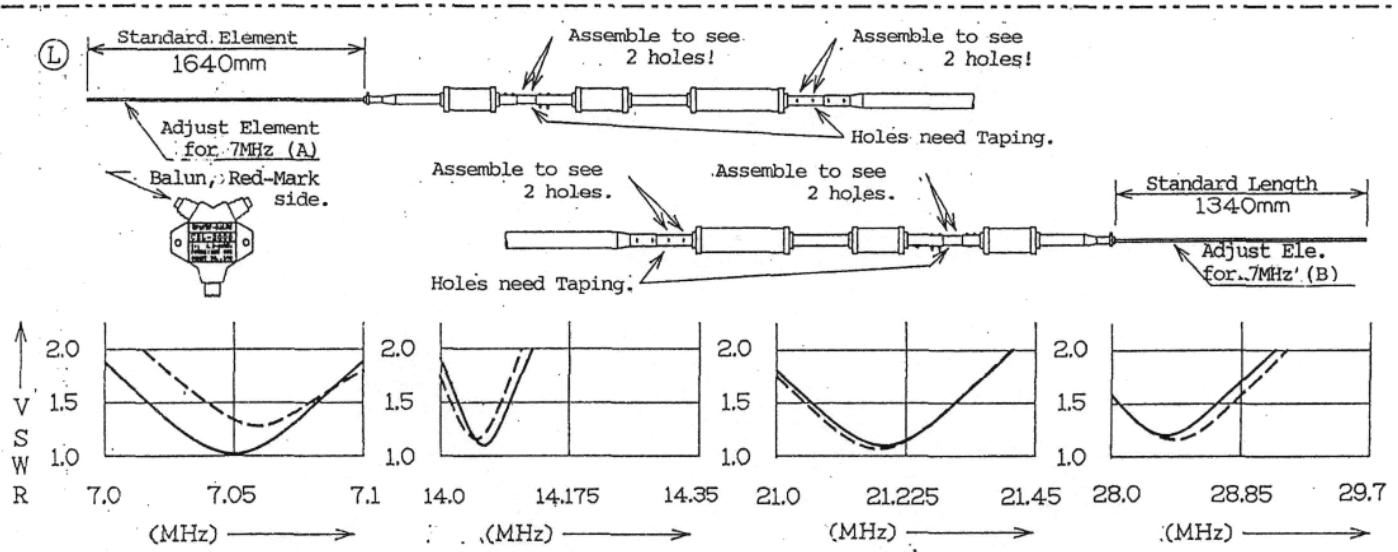
★ Full Assembly
(V- type)



● Measurement & SWR Characters
(V-type)

- ⊙ CW-operation - (L) location
- ⊙ SSB-operation - (M) location
- ⊙ FM(28MHz) - (H) location

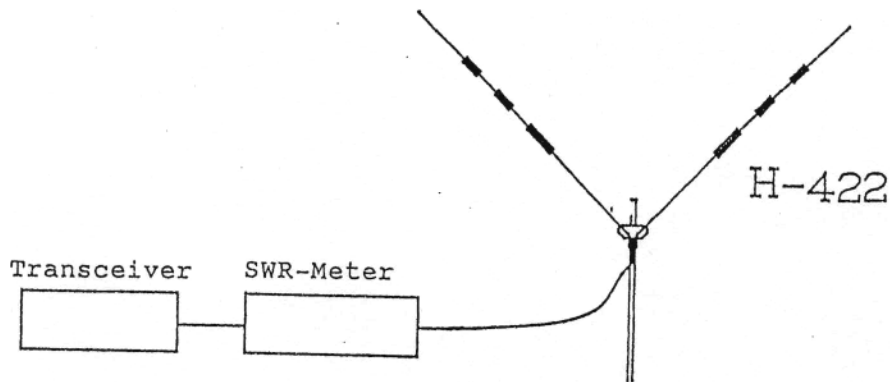
————— 20m high from ground - - - - - 5m high from ground



** You can change Center Freq. of 7MHz by sliding the 7MHz adjust Element, without any influence to other frequencies.
 ** Shift of 7MHz band per each 1cm, is 15KHz.
 ** Difference of Left & Right 7MHz Element is to be 300mm.

Frequency Adjustment:

- 1) Please connect SWR meter between H-422 and transceiver, as shown below:



- 2) 14, 21 and 28MHz are Wide bands, then No Frequency adjustment is necessary. But, kindly check which location of is preferred.
- 3) Antenna location may give great influences on the 7MHz band. Then, adjust the length of 7MHz Adjust Ele. of both (A) & (B) watching your SWR meter. Element sliding of 1cm changes the frequency by 15KHz.

Remarks:

- 1) Drain Holes on the Trap coils must be assembled to face Downward, to prevent water-inflow.
- 2) Kindly proceed necessary Water-Proof works, on the cable-joint section etc., using self-amalgamating tape and/or vinyl tapes.