

Antennas  
1600 Decker Ave.  
San Martin, Ca. 95046  
(408) 683-4240

# KLM ELECTRONICS

Amplifiers  
2140 Jeanie La  
Gilroy, Ca. 95020  
(408) 842-7344

## ASSEMBLY INSTRUCTIONS

### VHF band pass Antenna

1. Assemble the boom using  $1\frac{1}{4}$ x8-32 screws, nuts and lockwashers. (  $1\frac{3}{4}$ x8-32 for  $1\frac{1}{2}$  inch dia. booms. )
2. Mount the four feed element insulators with  $1\frac{3}{4}$ x8-32 screws, nuts and lockwashers. (  $2\frac{1}{4}$ x8-32 for  $1\frac{1}{2}$  inch dia. booms. ).
3. Place insulating sleeves on three straps and mount the straps and driven elements as shown in the assembly drawing. Use  $1\frac{1}{4}$ x8-32 screws for two meter antennas and 1x6-32 screws for 220 antennas. Tighten all nuts securely. Then add a flat washer and a nut to both halves of the front driven element.
4. If shown on the dimension drawing, mount the loop as shown in the assembly sketch.
5. Mount the directors and reflector with 2x8-32 screws, nuts and lock washers. (  $2\frac{1}{2}$ x8-32 for  $1\frac{1}{2}$  inch dia. booms ).
6. If you ordered a KLM balun with the antenna, mount the balun clip on top of the first director using the director mounting screw. Snap the balun into place with the drain hole near the connector down. Attach the balun leads to the feed points keeping the leads as short as possible. Route the coax along the boom and down the mast.
7. Attach the antenna mounting U-bolt assembly through the holes provided for either horizontal or vertical mounting. For antennas with  $1\frac{1}{2}$  inch booms, attach the boom to mast bracket over the center splice or at the antenna balance point. For best performance when mounting the antenna vertically, use a mast section of hard wood or other nonconducting material for four feet either side of the antenna mounting point. KLM will provide phasing instructions for installations using more than one antenna upon request.

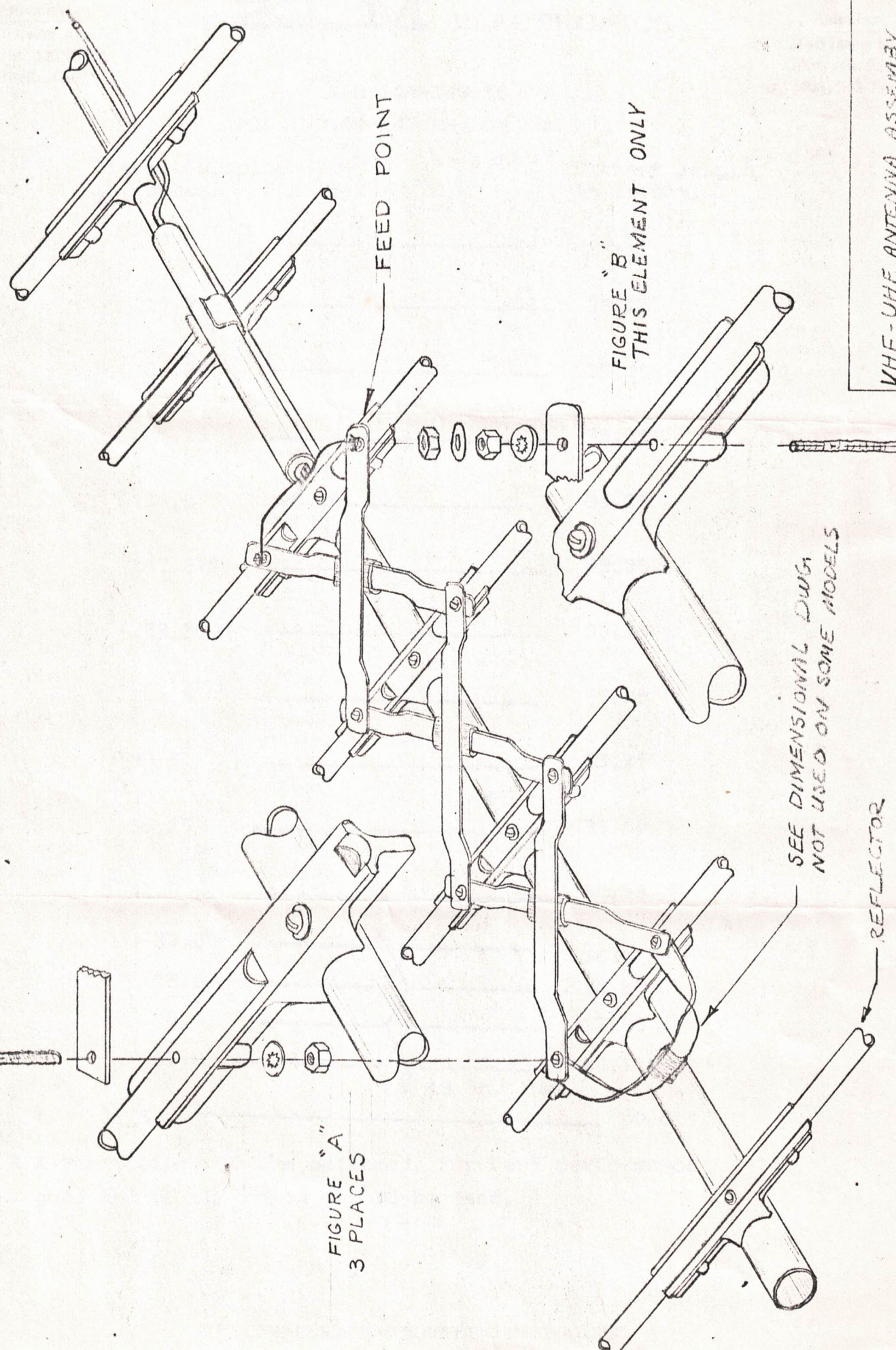


FIGURE "A"  
3 PLACES

FEED POINT

FIGURE "B"  
THIS ELEMENT ONLY

SEE DIMENSIONAL DWG.  
NOT USED ON SOME MODELS












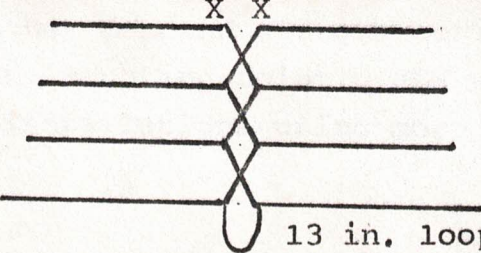




REFLECTOR

Antennas  
 1600 Decker Ave.  
 San Martin, Ca. 95046  
 (408) 683-4240

# KLM ELECTRONICS

Amplifiers  
 2140 Jeanie Lane  
 Gilroy, Ca. 95020  
 (408) 842-7349

KLM 144-148-16  
 144-148 MHz 50 ohm

Element spacing in inches.		Element length in inches.
247.0		33.25
227.75		35.25
208.25		35.25
185.25		35.25
165.875		35.25
147.875		35.25
129.5		35.25
101.0		35.25
80.50		35.25
56.25		35.50
44.0		35.75
32.0		16.0
25.0		16.5
18.0		17.75
11.0		18.125
.5		40.0

X X Feed point, 50 ohm balanced. For best performance a good 1:1 50 ohm balun should be used.