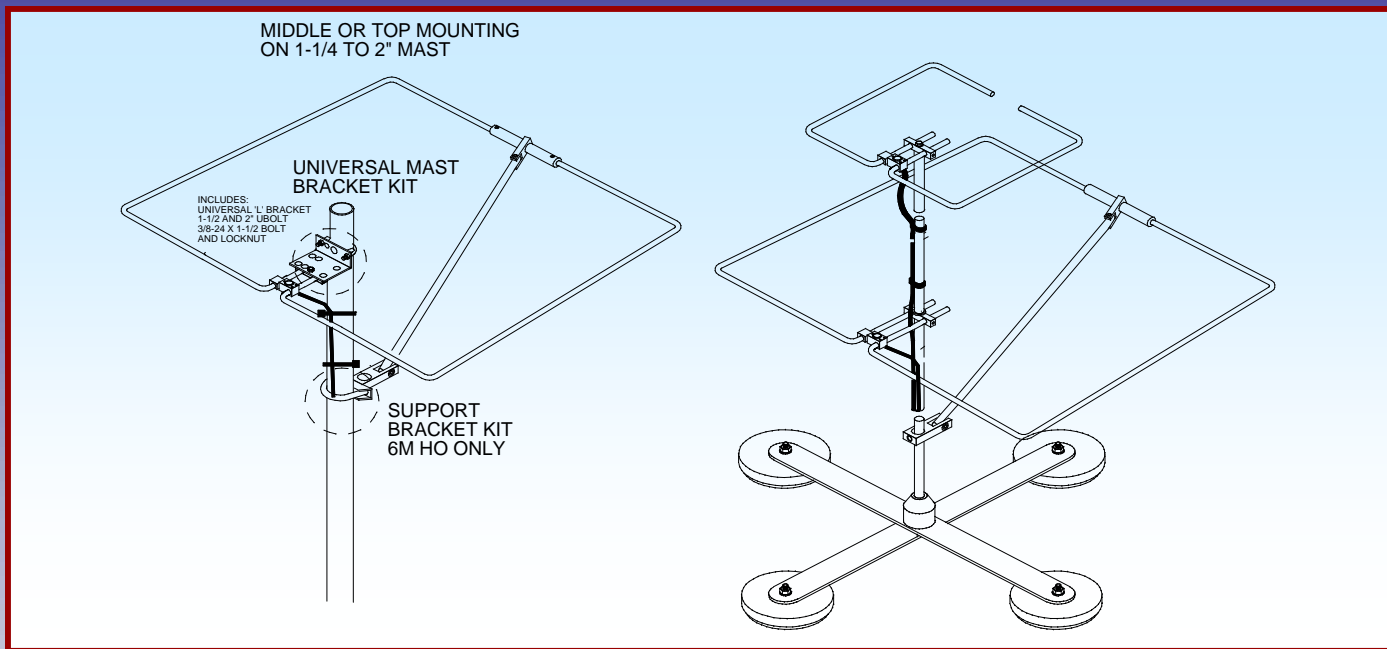




# M2 Antenna Systems, Inc.

## Model No: 6M HO LOOP

**ORDER NOW**



### SPECIFICATIONS:

Model ..... 6M HO LOOP  
 Frequency Range ..... 50 To 50.3 MHz  
 Gain, Typical @ 11 ft. .... 4.2 dBd @ 25 deg.  
 Gain, 2 Stack @ 40 & 52 ft. .... 8.2 dBd @ 6 deg.  
 Polarity ..... Horizontal Omni  
 Impedance ..... 50 Ohms Unbalanced  
 Power Handling. .... 800W, 1.5 kW for Stack

Feed Connector ..... SO-239  
 Mounting ..... 3/8-24  
 Vehicle Mounting Height ..... 30" or more  
 Stack Distance Btwn Loops ..... 9ft to 12ft  
 Maximum Element Length ..... 0.1 sq ft.  
 Turning Radius:..... 2 lbs.

**\*Subtract 2.14 from dBi for dBd**

### FEATURES:

Our new HO LOOP is a result of a continued evaluation and development on reduced size, omnidirectional HORIZONTALLY polarized loops. This new design is easy to match in any situation. Performance is better than anything we have ever seen and its wide bandwidth makes it immune to all weather conditions except heavy ice. Power handling is usually a problem with small loops but again this design can handle 800 Watts with ease and a stacked pair could easily handle 1.5kW. The patterns will give you a good idea how well the 6M HO LOOP will perform in your system. As with all horizontally polarized antennas, performance is usually tied to height above ground but even at 10 feet the HO LOOP yields an amazing 3.8 dBd at an angle of 27 degrees. On a vehicle at 11 feet above ground, the gain jumps to 4.2 dBd at 25 degrees! Twelve foot spacing is optimum for base station or portable use. Note the gain jumps over 3 dB for a stacked pair with this unique antenna.

Physically the HO loop is 29.5 inches square with a wind area of just 0.1 square foot. The 3/8" diameter tubing keeps it light but plenty rugged for mobile operation. The feed block is sealed and potted with silicon gel for extreme reliability and low loss. The feed blocks slide on the tubes for frequency adjustment and the shorting bar adjusts for a perfect match into 50 Ohm feedline.

Two HO LOOPS can be stacked using odd quarterwaves of 75 Ohm coax into a "T". Phase can be inverted by simply reversing the feed block mounting as required.

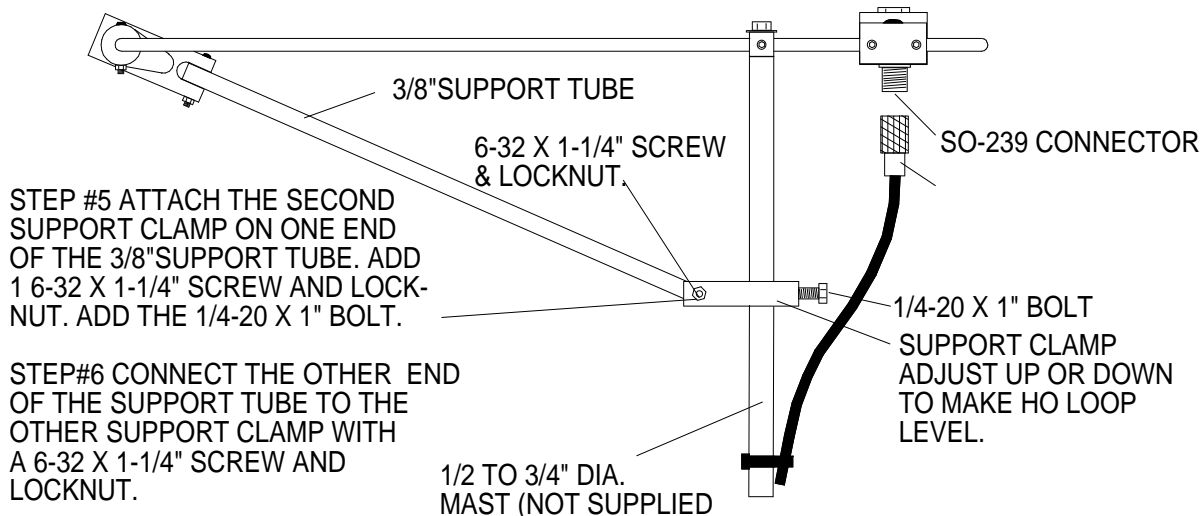
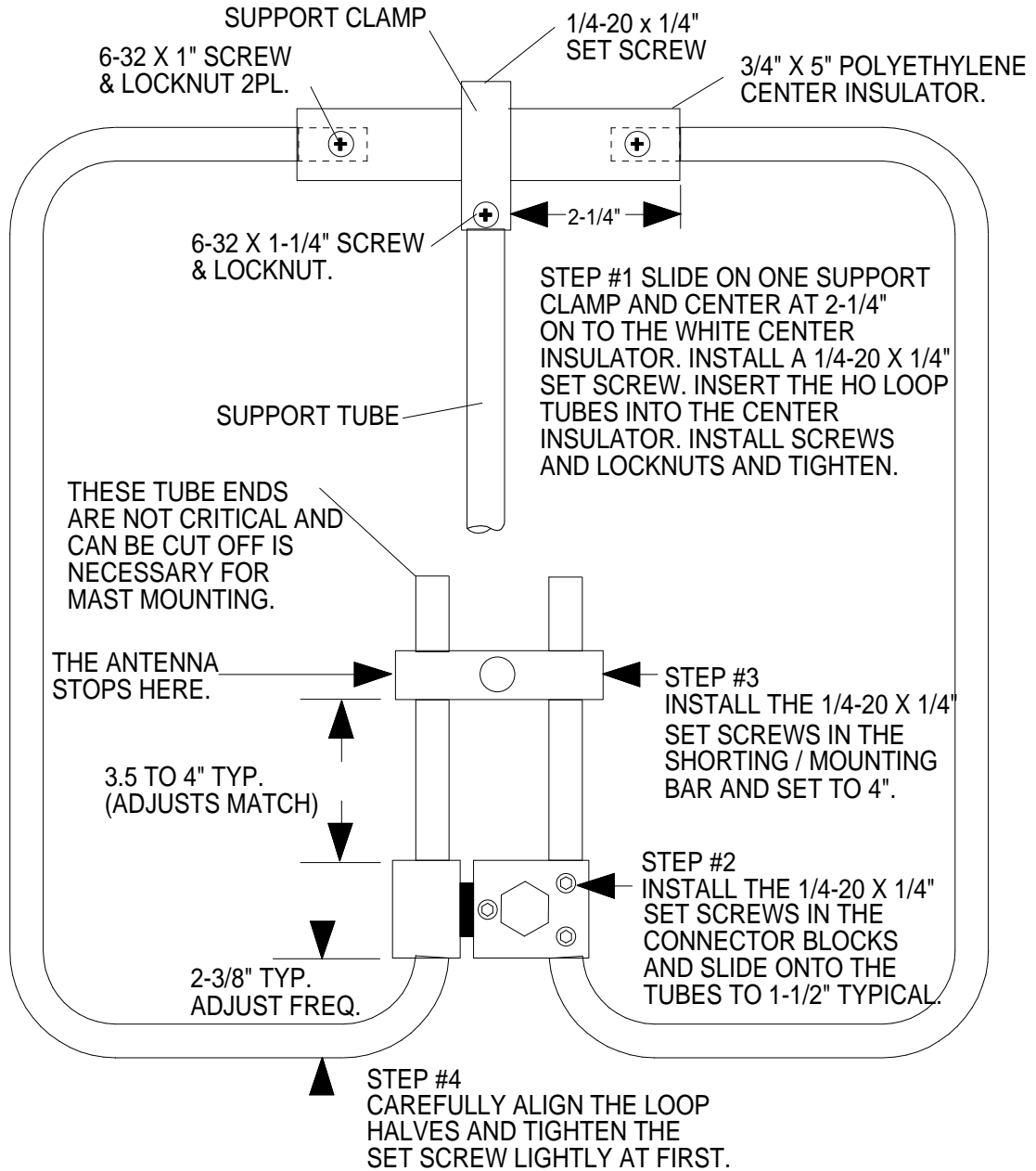
Optional items include various lengths of mobile masts, our BIG FOOT monster mag base, "Universal Mast Mounting Kit" with 'L' bracket, U-bolts and misc. hardware for tower mounting. We also offer phasing cables and T connector for stacking.

**M2 Antenna Systems, Inc. 4402 N. Seland Ave. Fresno, CA 93722**  
**Tel: (559) 432-8873 Fax: (559) 432-3059 Web: www.m2inc.com**

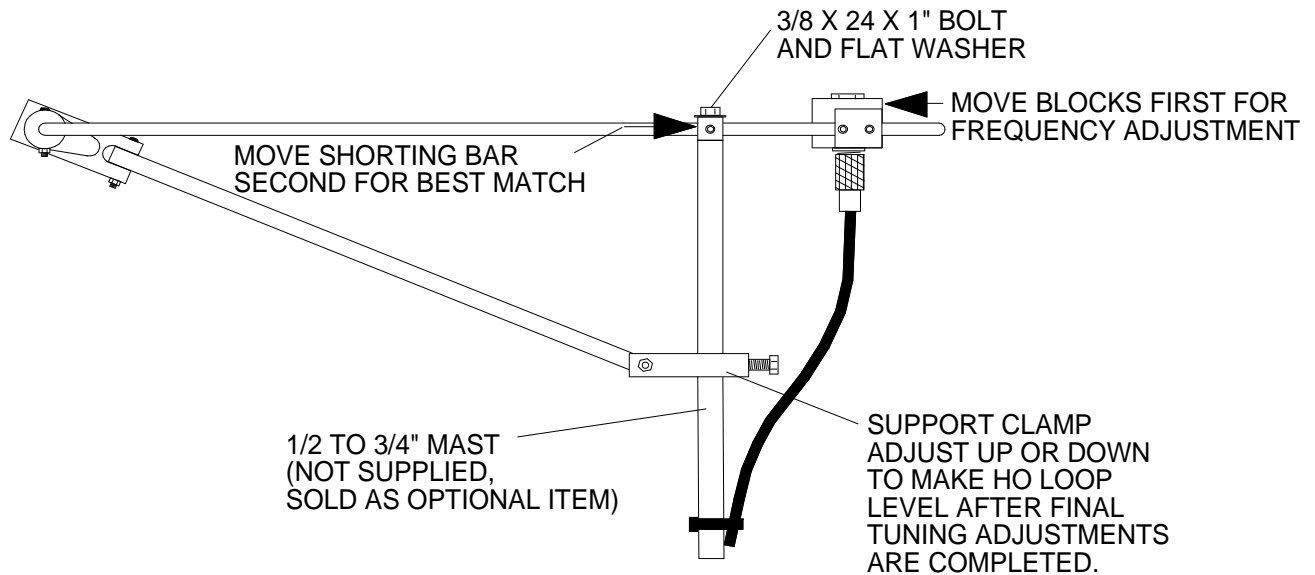
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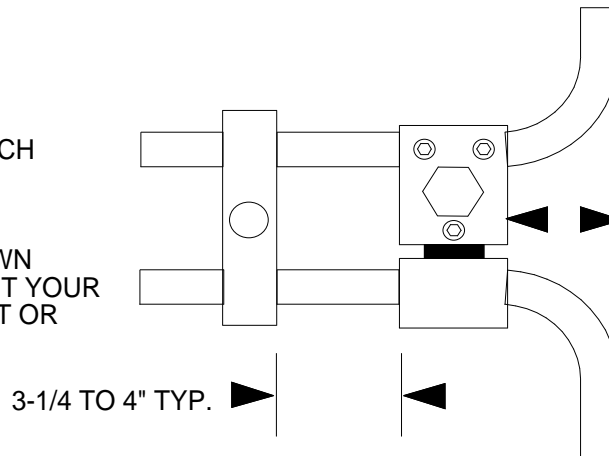
# 6M HO LOOP ASSEMBLY MANUAL



# 6M HO LOOP ASSEMBLY & PARTS LIST

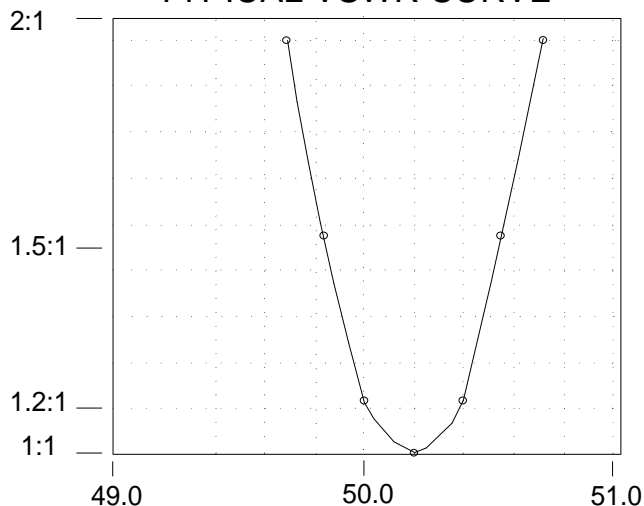


THE FINAL POSITION OF THE SHORTING BAR DETERMINES THE MATCH. A PERFECT MATCH CAN BE ACCOMPLISHED BY CAREFUL ADJUSTMENT. DROPLETS OF WATER WILL CAUSE THE LOOP TO GO DOWN IN FREQUENCY. WE SUGGEST YOUR BEST MATCH WHEN DRY IS AT OR SLIGHTLY ABOVE 50.200.



DURING THE TUNE UP PROCEDURE, YOU MUST BE AT 20 FEET FROM WALLS AND OTHER LARGE OBJECTS. REMEMBER THIS IS AN OMNI DIRECTIONAL ANTENNA AND IT HAS A LARGE FIELD. RESONANCE AND MATCH WILL BE AFFECTED.

TYPICAL VSWR CURVE



## PART LIST

DESCRIPTION	QTY
HO LOOP 3/8" BENT TUBES	2
SUPPORT TUBE, 3/8X23.5"	1
FEED BLOCK ASSEMBLY	1
SHORTING BAR	1
CENTER INSULATOR	1
SUPPORT CLAMP	2
BOLT, 3/8-24 X 1" SS	1
LOCKWASHER, 3/8 SPLIT RING SS	1
BOLT, 1/4-20 X 1" SS	1
SET SCREW, 1/4-20 X 1/4" SS	7
SCREW, 6-32 X 1-1/4" SS	2
SCREW, 6-32 X 1" SS	2
NUT, 6-32 NYLOCK	4
ALLEN WRENCH 1/8"	1
ASSEMBLY SHEET	1

# MOUNTING AND OPTIONAL KITS

