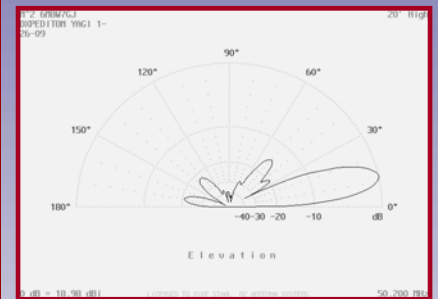
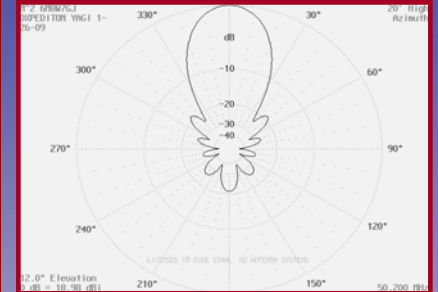
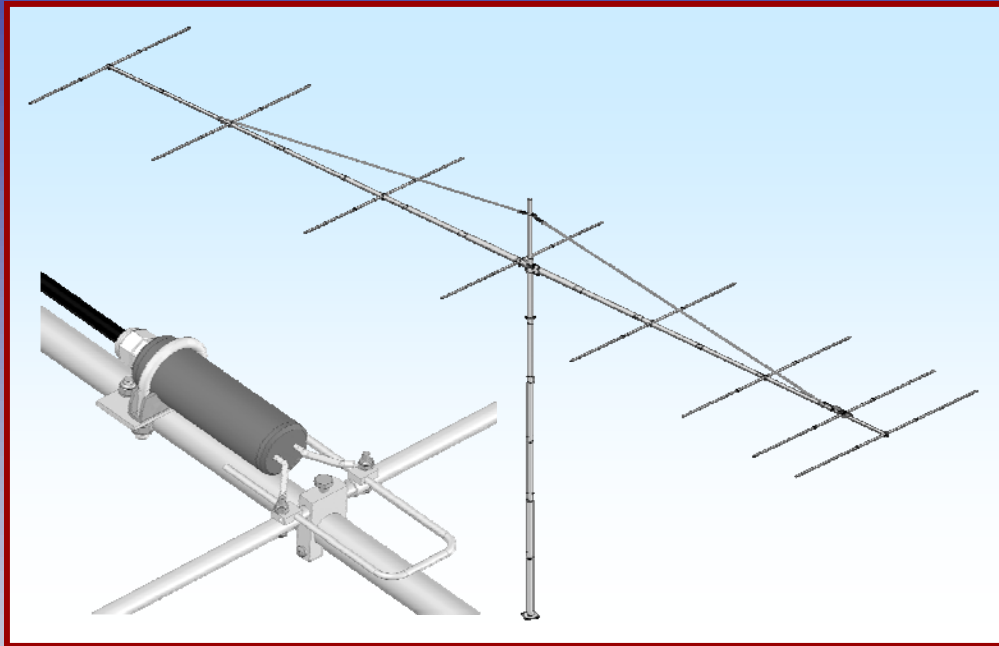




# M2 Antenna Systems, Inc.

## Model No: 6M8GJ



### SPECIFICATIONS:

Model .....	6M8GJ	Power Handling.....	3 kW, Higher avl.
Frequency Range .....	50.0 To 50.4 mHz	Boom Length / Dia .....	42' 8" / 2-1/2" To 1"
*Gain, (FS) / Over gnd.....	14.2 dBi / 19 dBi @ 20'	Maximum Element Length .....	9' 9"
Front to back.....	20 dB Typical	Turning Radius:.....	23' 6"
Beamwidth .....	E=33° H=38°	Stacking Distance .....	30' High & 30' Wide
Feed type.....	Direct feed	Mast Size .....	2" Nom.
Feed Impedance.....	50 Ohms Unbalanced	Wind area / Survival.....	4.3 Sq. Ft. / 100 MPH
Maximum VSWR .....	1.2 Typical	Weight / Ship Wt. ....	23 Lbs. / 28 Lbs.
Input Connector .....	"N" Female		

**\*Subtract 2.14 from dBi for dBd / FS = Free Space**

### FEATURES:

The 6M8GJ Yagi is the culmination of many years & countless versions of the "40' Trip Yagi". Inspired by W7GJ who, for years has tirelessly promoted 6M EME & DXpedition activity, the product bears his amateur call suffix "GJ". Computer optimized for the exact conditions we find in most DXpedition locations, a height of 20' to 30', it turns out to be perfect for use at any height and in 2X or 4X array stacks.

Is it built strong enough for home use? Yes in spades! Boom center sections are 2-1/2" dia. & the rest of the sections all telescope in 1/2" or 1/4" increments. The entire boom breaks down to a 2-1/2" X 5" X 43" bundle (just 1.09M long). It will survive horrible DXpedition conditions (100 MPH). Rugged 1/2" X 40" element center sections and 3/8" dia. tips mounted on machined, "slip on" element to boom clamps guarantees this antenna will stay up for years to come. It is easy to assemble & breakdown and we will give you tips how to eliminate any field measurements on DXpeditions. Lastly, in the worst case scenario if you get to a location where it is impossible to put up the full 6M8GJ, we will give you a second set of dimensions allowing you to still get on the air with a hi performance short yagi still capable of EME and top terrestrial performance!

Optional items include: Nylon carry bag & portable 20-foot mast that telescopes as well and fits in the same carry bag with the antenna! The mast comes with Dacron guys, slip ring & guy anchors. Everything fits into the nylon carry bag and this package can be mailed or UPS'd almost anywhere in the world.

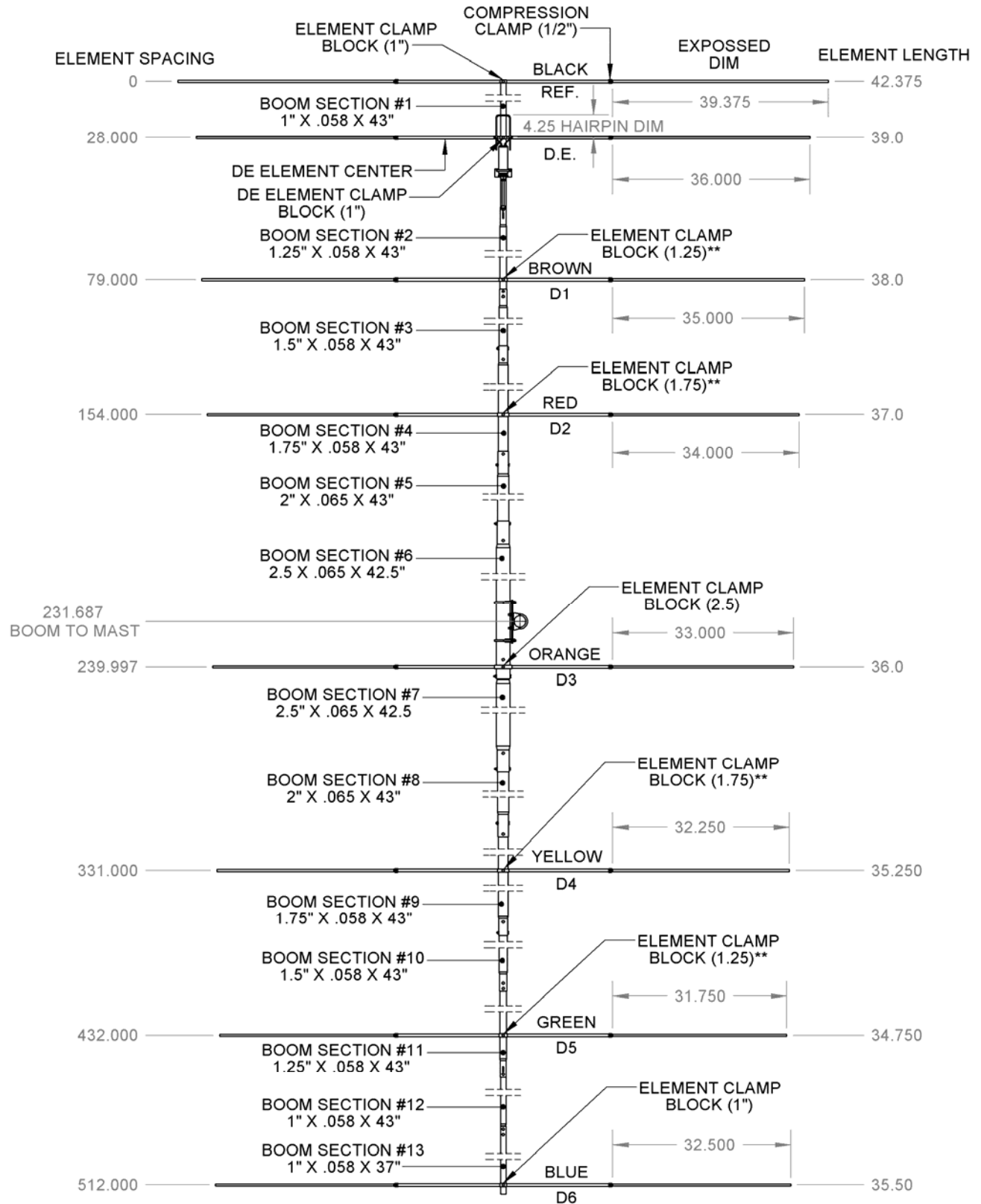
**M2 Antenna Systems, Inc. 4402 N. Selland Ave. Fresno, CA 93722**  
**Tel: (559) 432-8873 Fax: (559) 432-3059 Web: www.m2inc.com**

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3/23/09  
Rev.01

# 6M8GJ DIMENSION SHEET

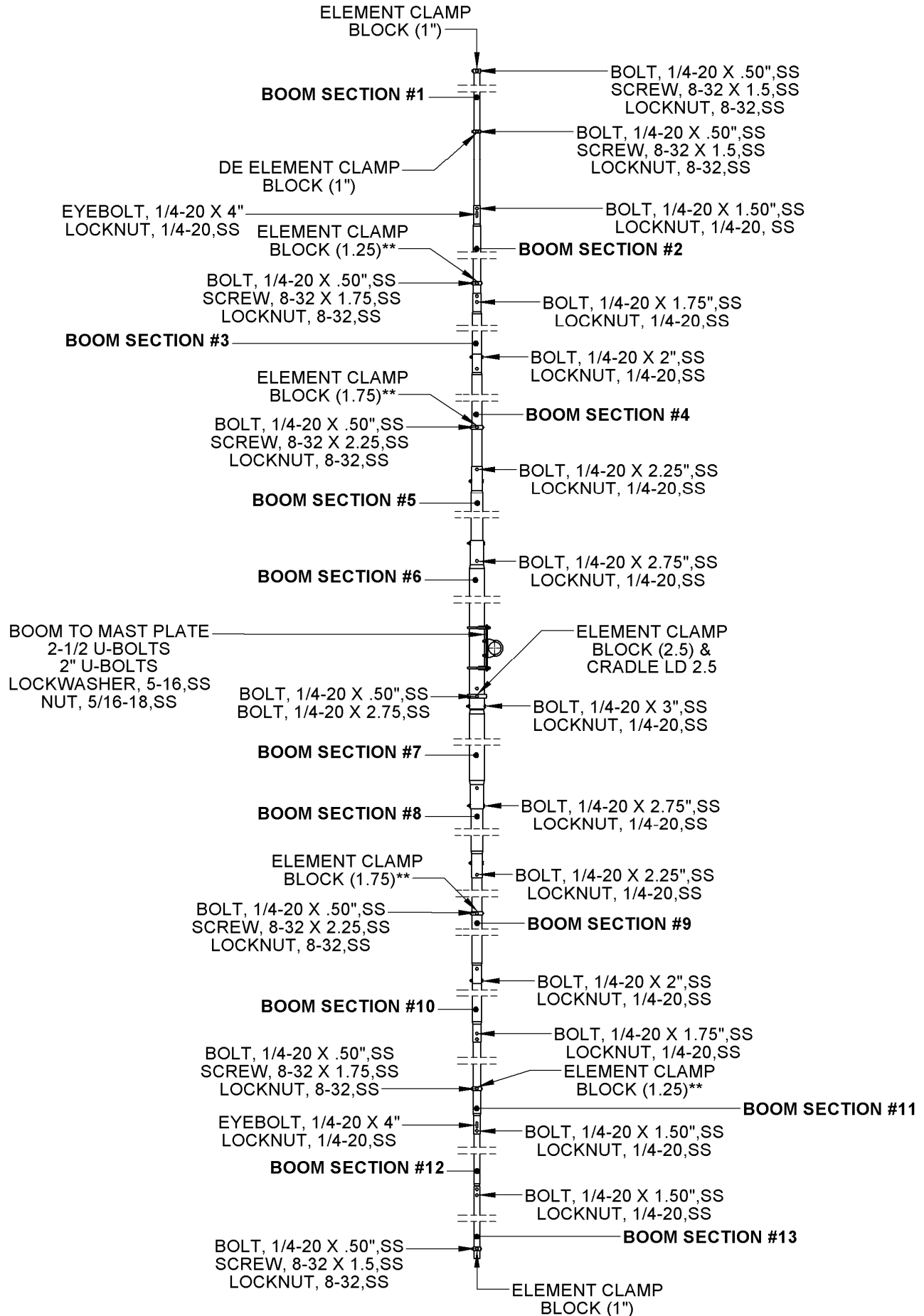
TOOLS REQUIRED: Screwdriver, 11/32 wrench, socket or spintite, a 7/16" and 1/2" wrench or socket, tape measure.



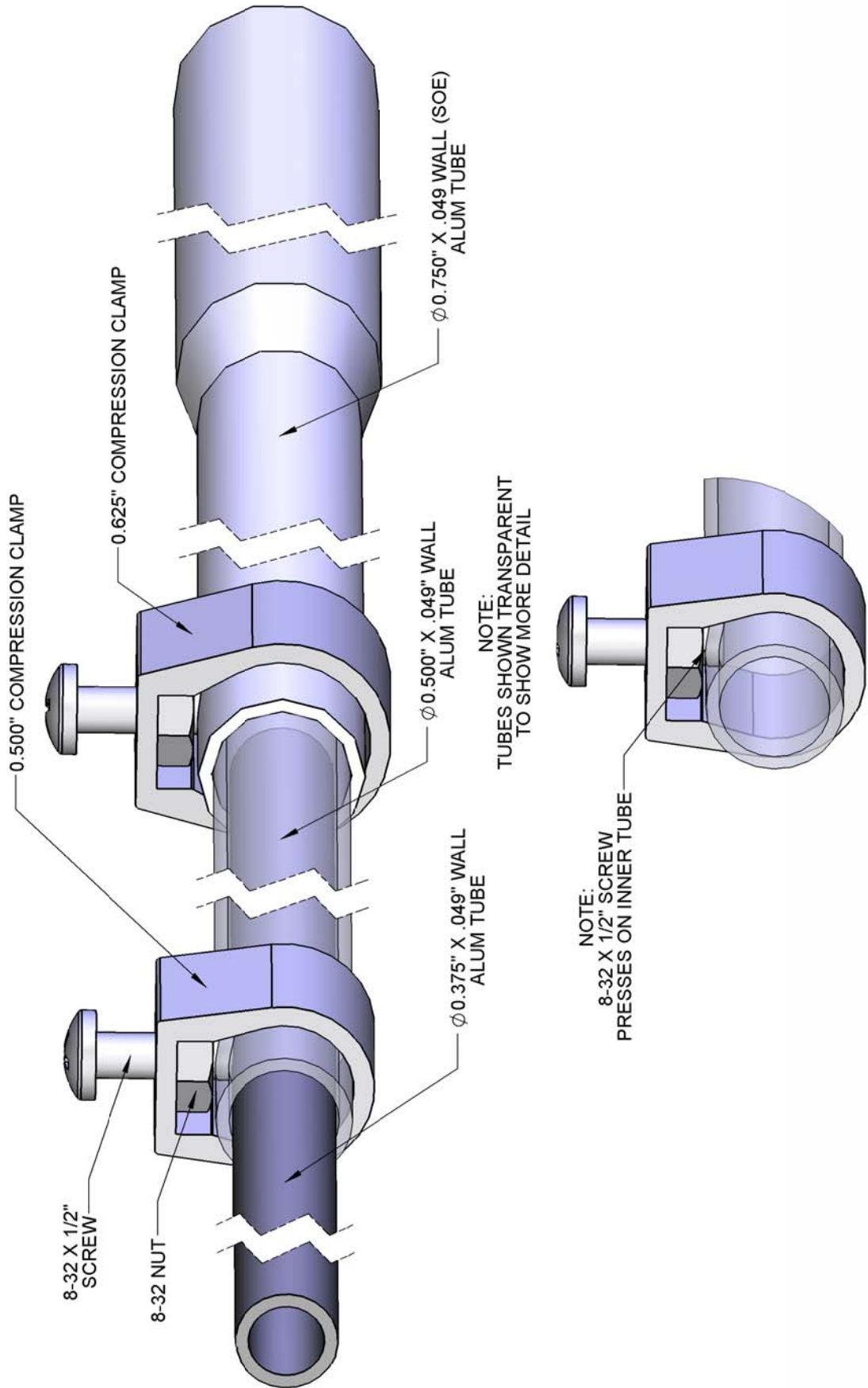
\*\*Please be sure to slip element clamp block before adding the next boom section.

**Note:** You may choose to color code your element clamps, center sections, tips & compression clamps for installation ease in the future. If you chose to color code your antenna, we recommend you follow the color scheme above. These colors are recommended because they are identifiable in the antenna industry.

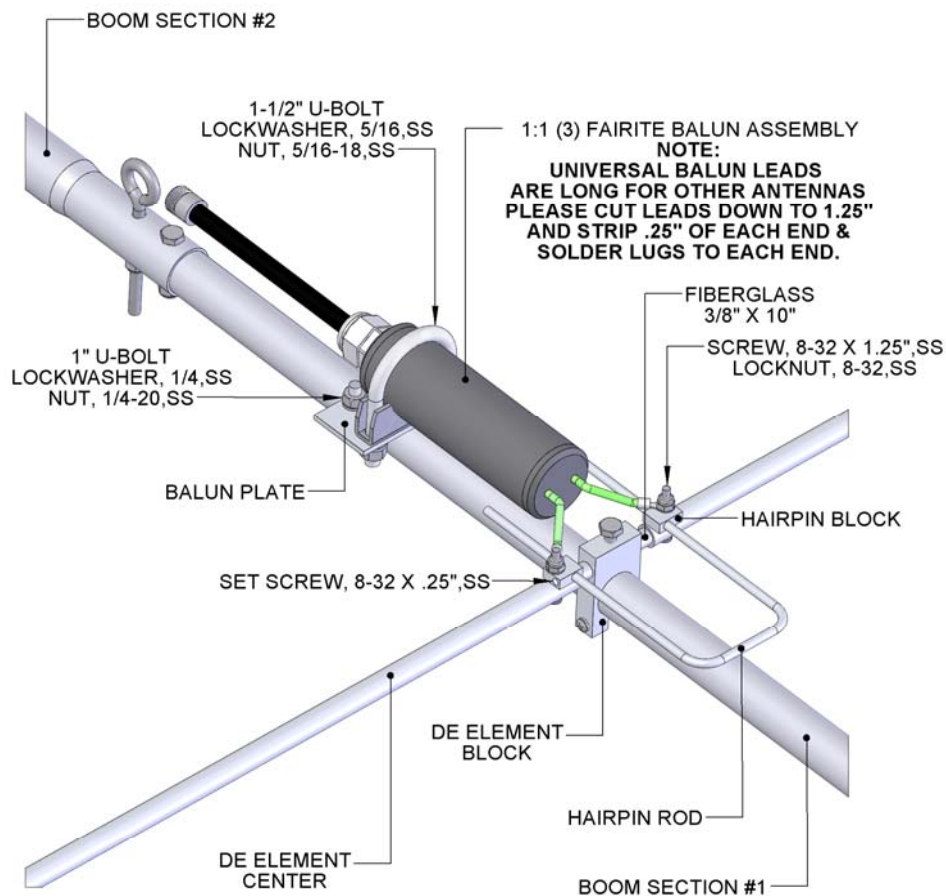
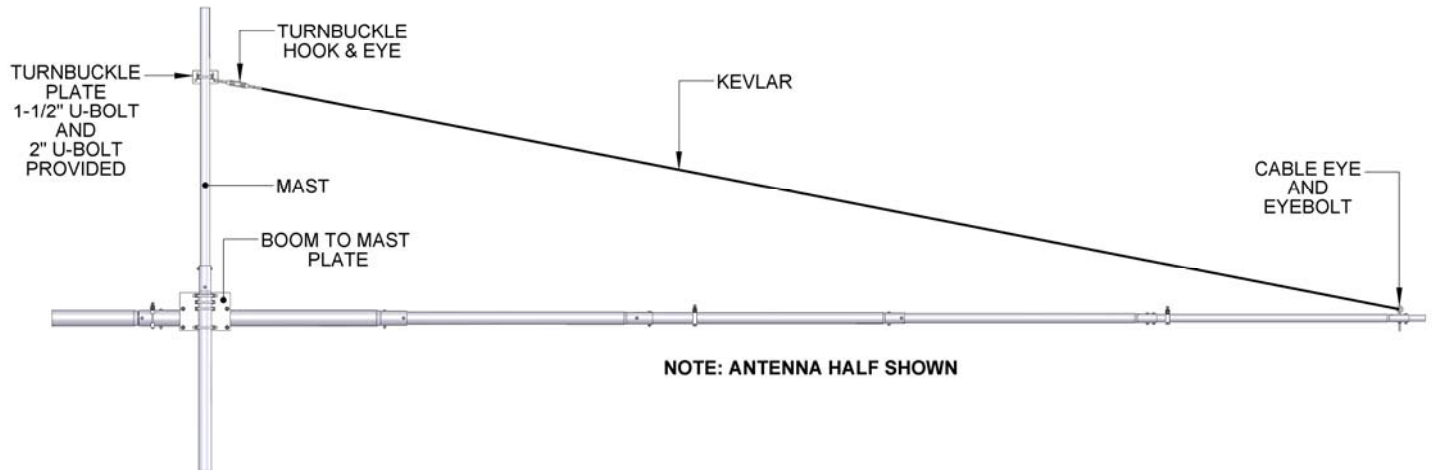
# 6M8GJ BOOM LAYOUT



# 6M8GJ COMPRESSION CLAMP DETAIL



# OVERHEAD SUPPORT & BALUN DETAIL



NOTE:  
FOR STACKING  
PLEASE LOOK FOR PHASING DOTS  
ABOVE ONE LEAD.  
FOR MORE STACKING INFORMATION  
PLEASE CALL THE FACTORY.

**M<sup>2</sup> ANTENNA SYSTEMS, INC.**  
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# 6M8GJ PARTS & HARDWARE

DESCRIPTION	QTY
BOOM SECTION #1: 1" X .058 X 43"	1
BOOM SECTION #2 & #11: 1.25" X .058 X 43" SOE	2
BOOM SECTION #3 & #10: 1.5" X .058 X 43" SOE	2
BOOM SECTION #4 & #9: 1.75" X .058 X 43" SOE	2
BOOM SECTION #5 & #8: 2" X .065 X 43" SOE	2
BOOM SECTION #6: 2.5" X .065 X 42.5" SOE	1
BOOM SECTION #7: 2.5" X .065 X 42.5" SBE	1
BOOM SECTION #12: 1" X .058 X 43" SOE	1
BOOM SECTION #13: 1" X .058 X 37"	1
ELEMENT CENTER, .50" X .049 X 40"	7
DE ELEMENT CENTER, .50" X .049 X 19"	2
ELEMENT TIPS 3/8", .375" X .049 X SEE CHART	16
FIBERGLASS DE CENTER, .375" X 10"	1
DE CLAMP BLOCK 1", 1.25" X .500 X 2.126"	1
ELEMENT CLAMP BLOCK 1, 1.25" X .625 X 2.126"	3
ELEMENT CLAMP BLOCK 1-1/4, 1.5" X .625 X 2.375"	2
ELEMENT CLAMP BLOCK 1-3/4, 1.75" X .625 X 2.625"	2
ELEMENT CLAMP BLOCK 2-1/2, 3.25" X .625 X 1.25"	1
CRADLE LD 2-1/2, 3.25" X .500 X .75"	1
DE HAIRPIN BLOCK, .50" X .250 X .625"	2
HAIRPIN ROD 3/16"	1
BALUN PLATE, .125" X 1.5" X 3"	1
TURNBUCKLE PLATE, 2" X .125 X 4"	1
BOOM TO MAST PLATE, 6" X .125 X 8"	1
(3) FAIRITE 1:1 VHF BALUN ASSEMBLY	1
PENETROX / ZINC PASTE CUP	1
ASSEMBLY MANUAL	1

## HARDWARE:

TURNBUCKLE, 1/4" X 5-1/4, HOOK & EYE	2
KEVLAR .075 X 17'	2
CABLE EYE, 1/8"	4
COMPRESSION CLAMP, 1/2"	16
U-BOLT AND CRADLE, 2-1/2"	2
U-BOLT AND CRADLE, 2"	5
U-BOLT AND CRADLE, 1-1/2"	2
U-BOLT, 1"	1
LOCKWASHER, 5/16, SS	18
NUT, 5/16-18, SS	18
EYEBOLT, 1/4-20 X 4", ZINC	2
BOLT, 1/4-20 X 3", SS	2
BOLT, 1/4-20 X 2-3/4", SS	6
BOLT, 1/4-20 X 2-1/4", SS	4
BOLT, 1/4-20 X 2", SS	4
BOLT, 1/4-20 X 1-3/4", SS	4
BOLT, 1/4-20 X 1-1/2", SS	4
BOLT, 1/4-20 X 1/2", SS	8
LOCKWASHERS, 1/4, SS	2
NUT, 1/4-20, SS	2
LOCKNUT, 1/4-20, SS	24
SCREW, 8-32 X 2-1/4", SS	2
SCREW, 8-32 X 1-3/4", SS	2
SCREW, 8-32 X 1-1/2", SS	3
SCREW, 8-32 X 1-1/4", SS	2
SCREW, 8-32 X 1/2", SS	16
SET SCREW, 8-32 X 1/4", SS	2
NUT, 8-32, SS	16
LOCKNUT, 8-32, SS	9
ALLEN HEAD WRENCH, 5/64"	1

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