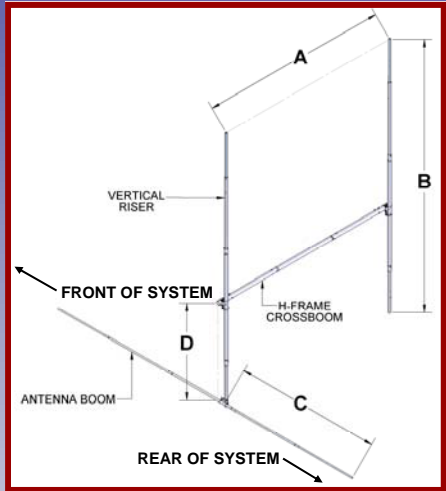
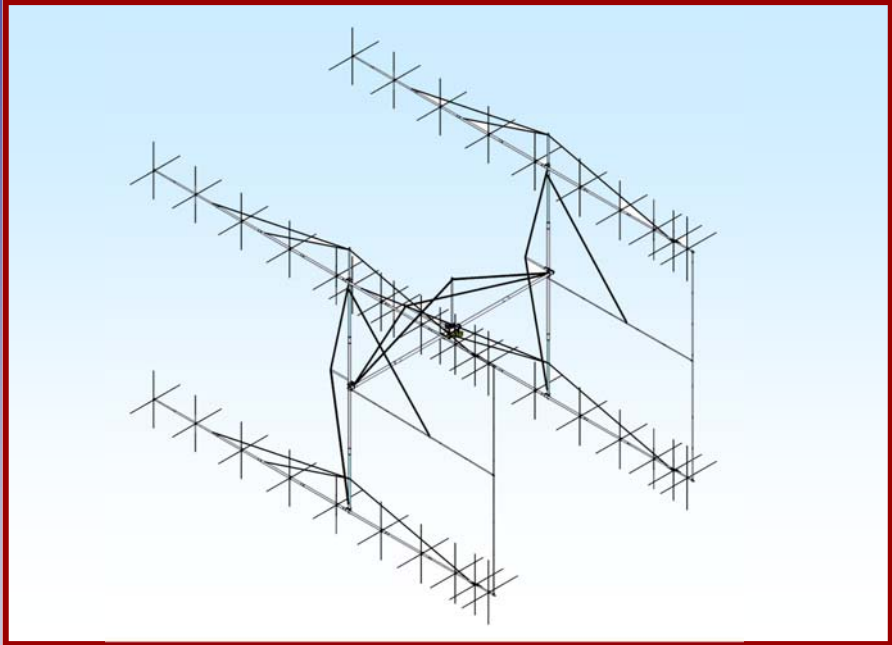




M2 Antenna Systems, Inc. Model No: HFTB6MXP20-2X2



SPECIFICATIONS:

Model	HFTB6MXP20-2X2	Weight	255 LBS
Band.....	6M	A Dim	420"
Antenna.....	6MXP20	B Dim	486"
T-Brace	Y	C Dim	320"
Cross Boom Dia	4.5"	D Dim	232"
Wind Load w/o Ant.....	27.29 SQ. FT.		

FEATURES:

M2 has been a leader in high performance antennas since it started back in 1984. In addition to specialized antenna designs, we also developed a diverse line of multiple antenna support structures (loosely referred to as H frames) to maintain that high level of performance. Just like the antenna, the support structure becomes nearly as complex and varied. All antennas have a defined near field size and shape and in order to achieve maximum "array performance", the support structure must accommodate the careful coupling of these near fields.

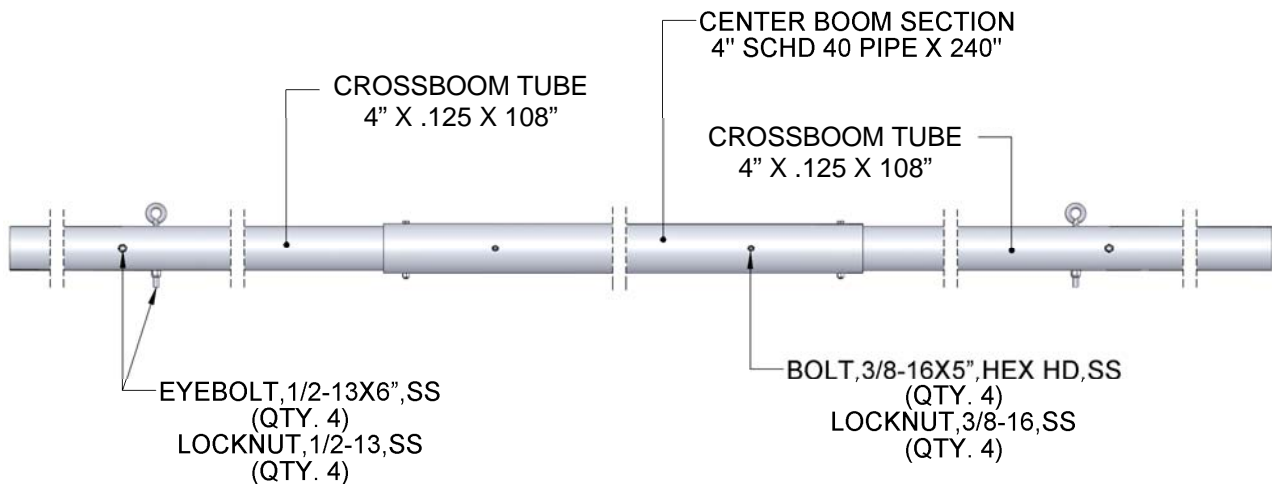
In many cases the support structure, has to meet special customer requirements like size, weight, wind speed or area, and weather issues. Our standard H frames then are a composite of these features that should satisfy most customer needs. We enjoy discussing your needs and offering our opinion regarding what best can meet your situation.

CROSSBOOM ASSEMBLY DETAIL

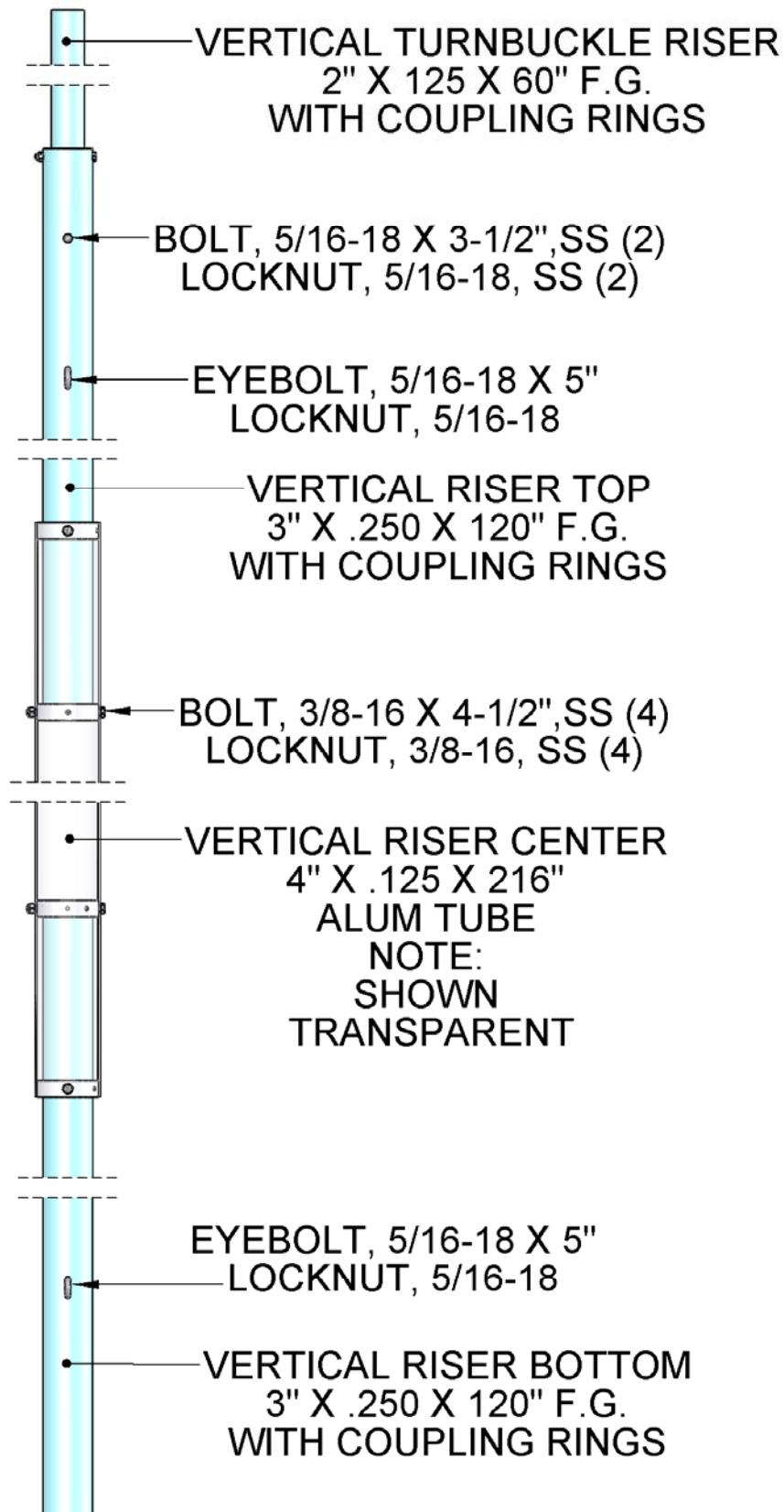
All installations are unique in some way, which means it's OK to preassemble certain hardware, or rearrange the assembly process to meet specific site requirements. A quick review of the assembly notes and drawings should help firm up the appropriate strategy. Please remember to double-check all hardware for tightness BEFORE it becomes inaccessible.

These notes assume an assembled cross boom of adequate dimensions and U-bolts of the same size for attaching H-frame plates. Unless you ordered a COMPLETE M2 'H' FRAME. If you just ordered the vertical booms and specified a cross boom U-bolt size when ordering, some drilling or other fabrication may be necessary. Stainless locknuts or nuts and lock washers are supplied for all kit U-bolts. All other assembly hardware is stainless steel unless otherwise noted. Forged steel parts are galvanized.

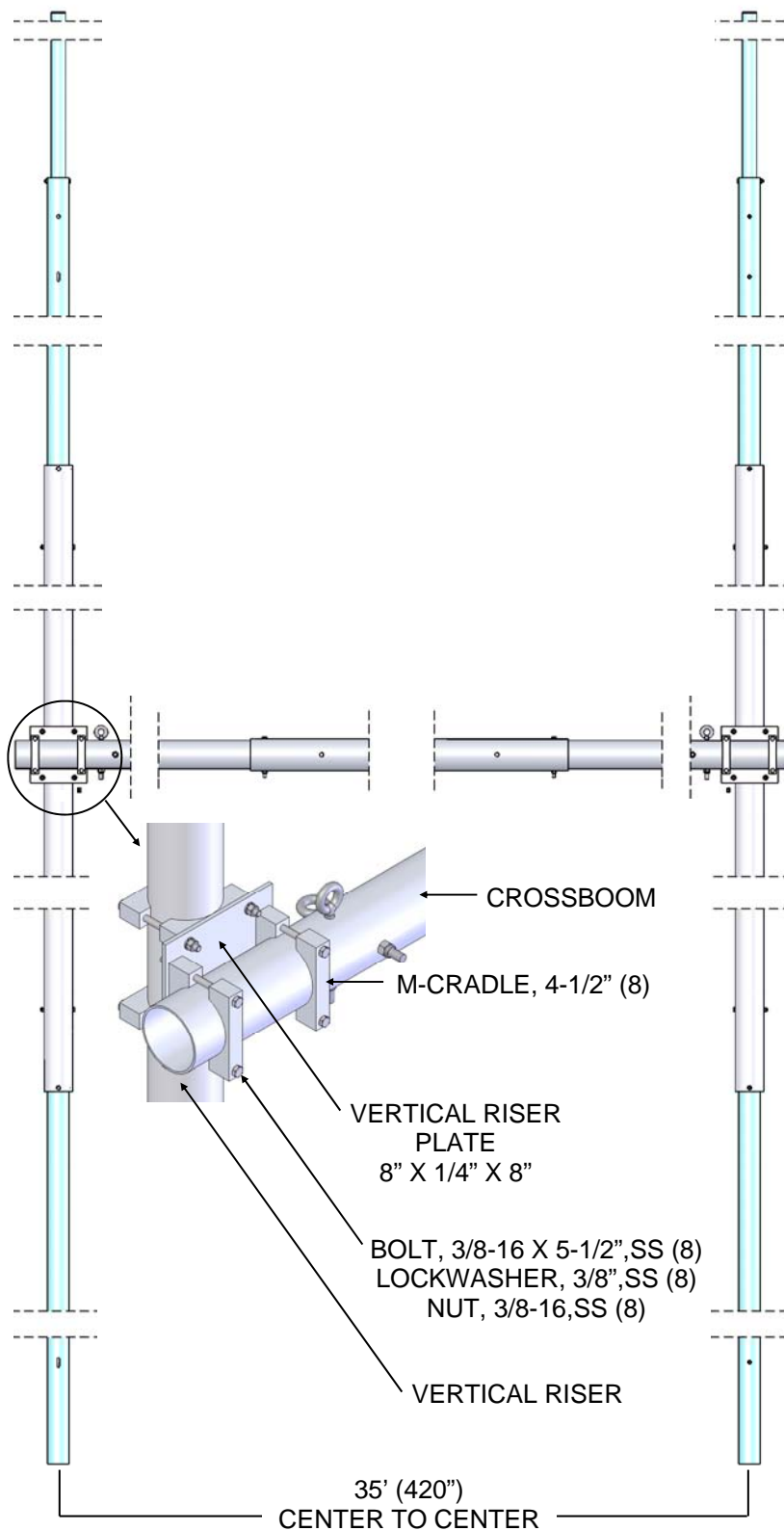
Two containers of zinc paste (Penetrox, Noalox, or equiv.) has been provided to enhance assembly. Apply a thin coat wherever two pieces of aluminum come in contact or any other electrical connections are made. It is also useful on screw and bolt threads as an ANTI SEIZE compound.



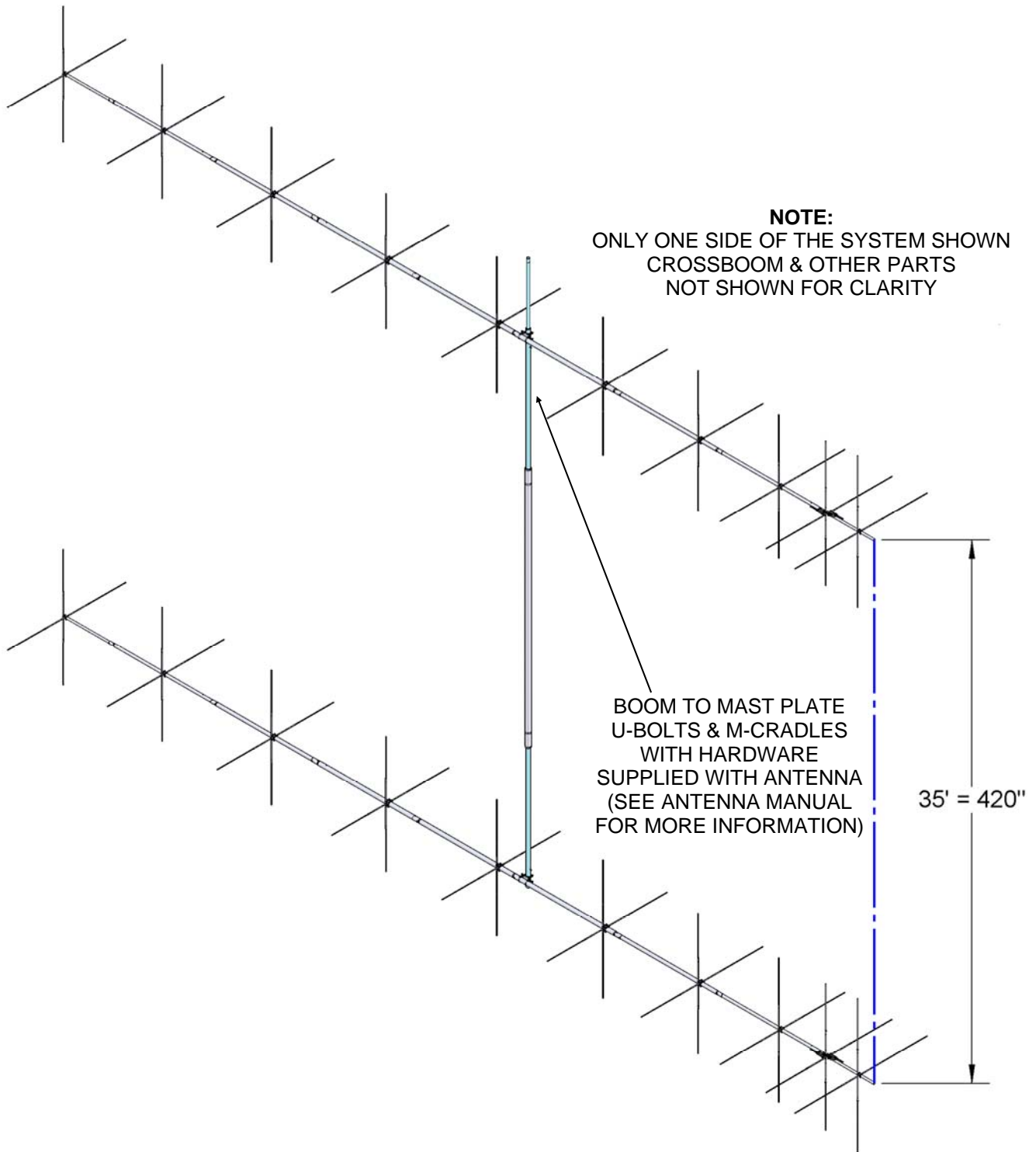
VERTICAL RISER ASSEMBLY DETAIL



VERTICAL RISER PLATE DETAIL

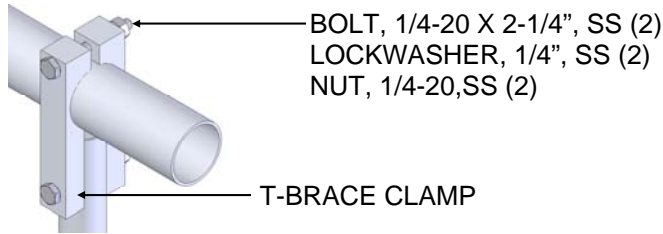


ANTENNA STACKING DETAIL

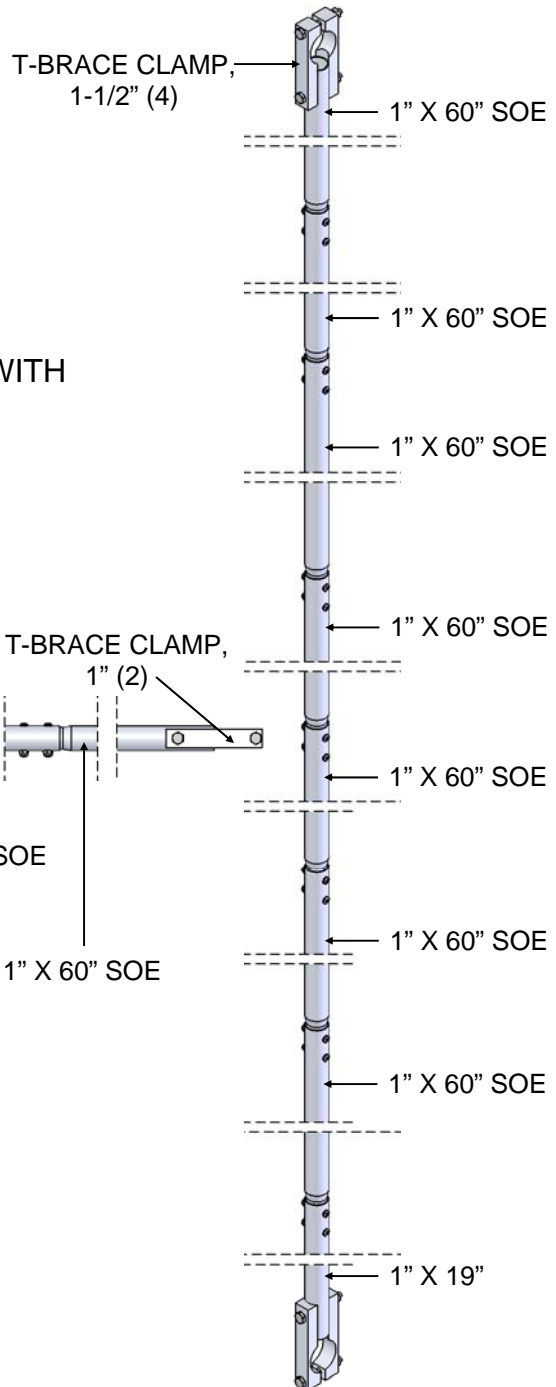


T-BRACE ASSEMBLY DETAIL

TYPICAL T-BRACE CLAMP DETAIL



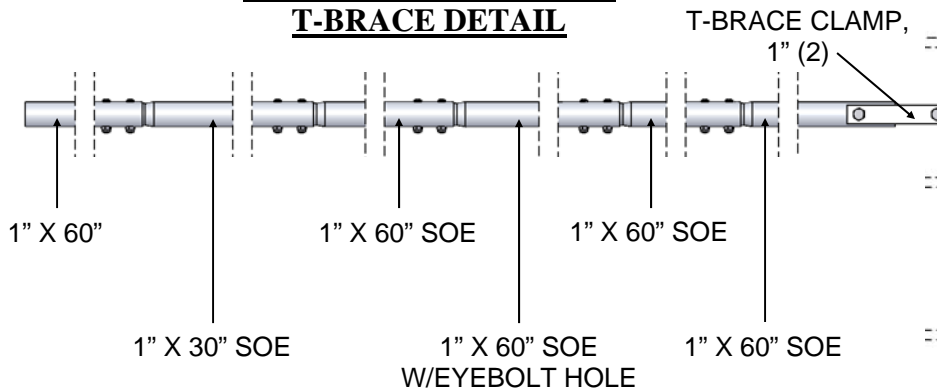
TYPICAL VERTICAL T-BRACE DETAIL



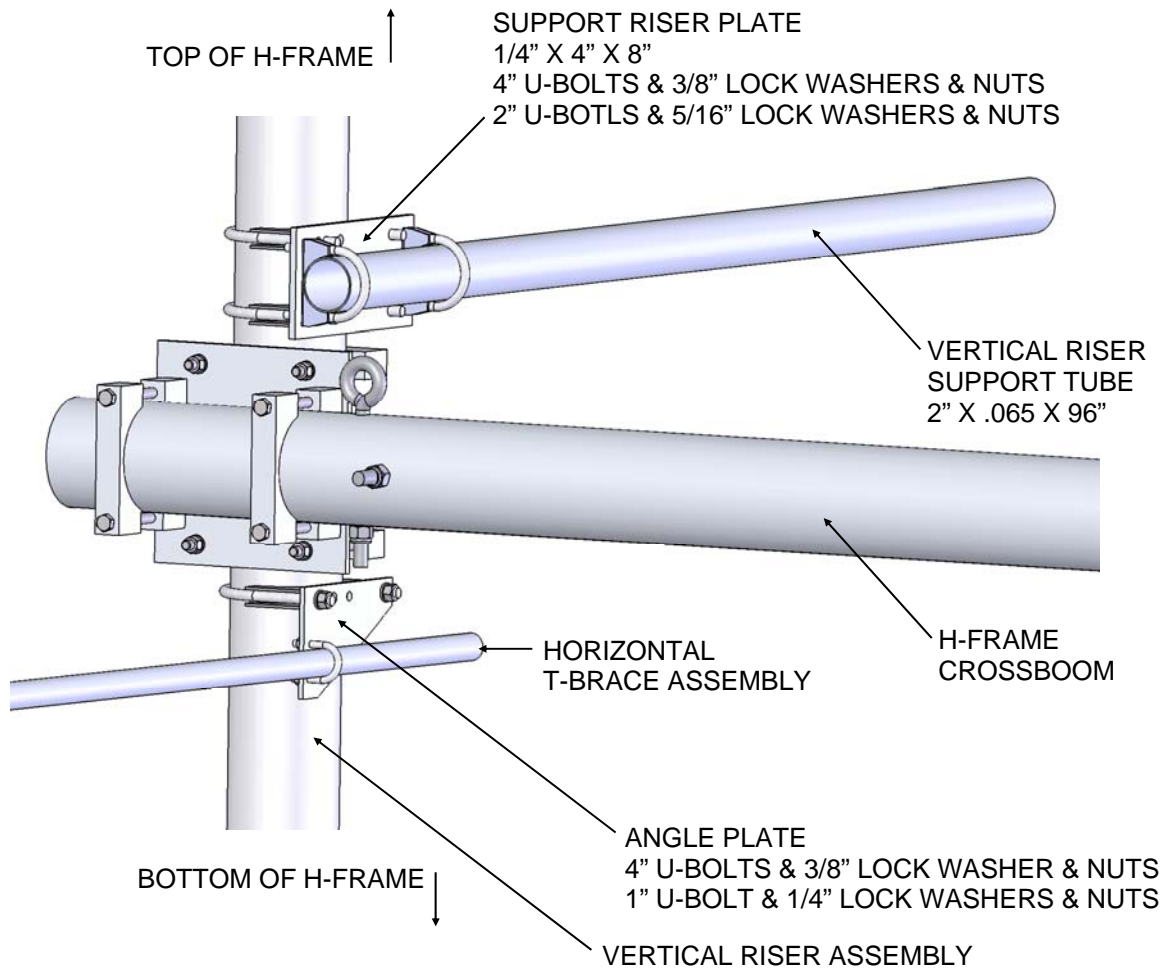
NOTE:

ALL T-BRACE JOINTS ARE HELD WITH
 SCREW, 8-32 X 1-1/4", SS
 LOCKNUT, 8-32, SS

TYPICAL HORIZONTAL T-BRACE DETAIL



T-BRACE & SUPPORT RISER



NOTE:
LEFT SIDE OF H-FRAME SHOWN ABOVE.

MT-3000 & OVERHEAD SUPPORT

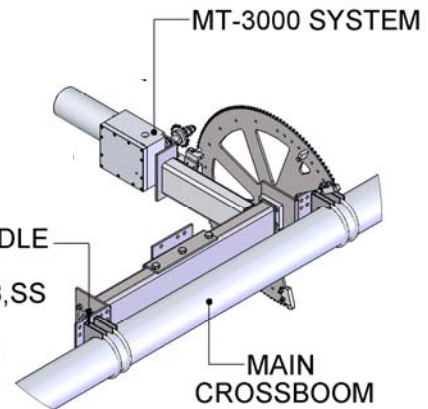
NOTE:

WE HAVE SUPPLIED A HEAVY DUTY 3" MOUNT KIT.
WE RECOMMEND THE USE OF 4-1/2 CRADLES WITH 3/8"
HARDWARE TO MOUNT MT-3000 TO CROSSBOOM.

&

3" HD U-BOLTS & 3/8" HARDWARE TO MOUNT
MT-3000 TO YOUR MAST.

4.5 U-BOLT & CRADLE
(QTY. 4)
LOCKWASHER, 3/8, SS
(QTY. 8)
NUT, 3/8-16, SS
(QTY. 8)



ANGLE TURNBUCKLE PLATE
2" HD U-BOLT & 3/8" HARDWARE

TURNBUCKLE
HOOK & EYE

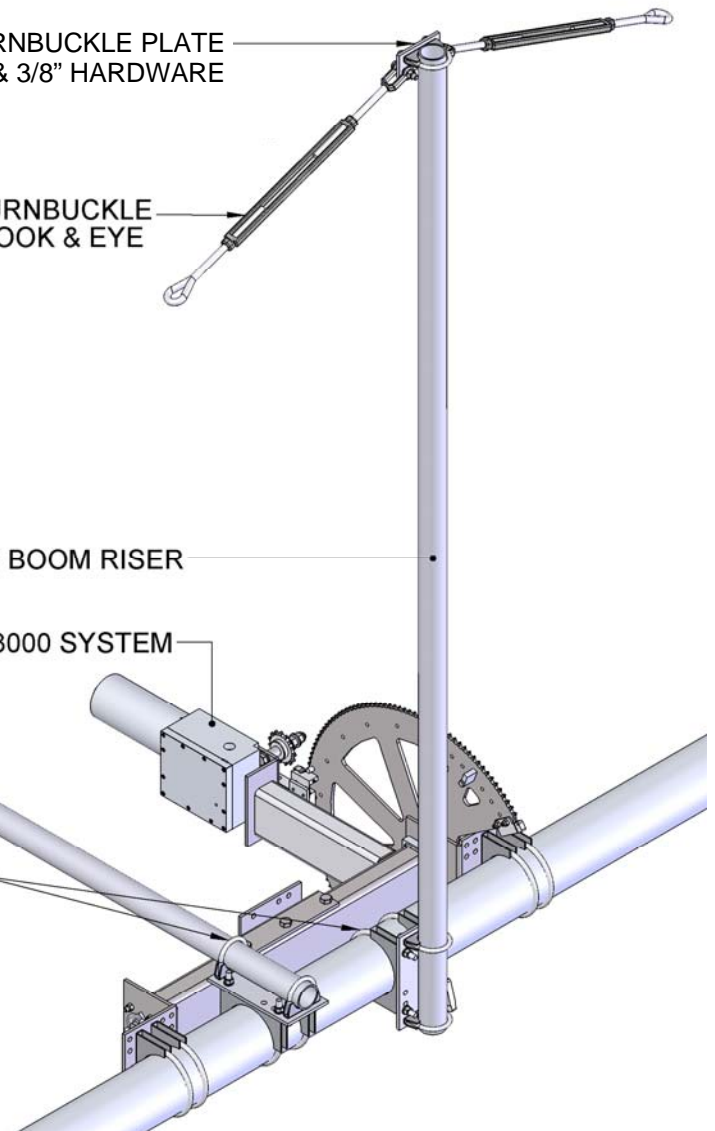
NOTE:
USE SUPPLIED WIRE ROPE ASSEMBLIES
FOR BOOM SUPPORTS.



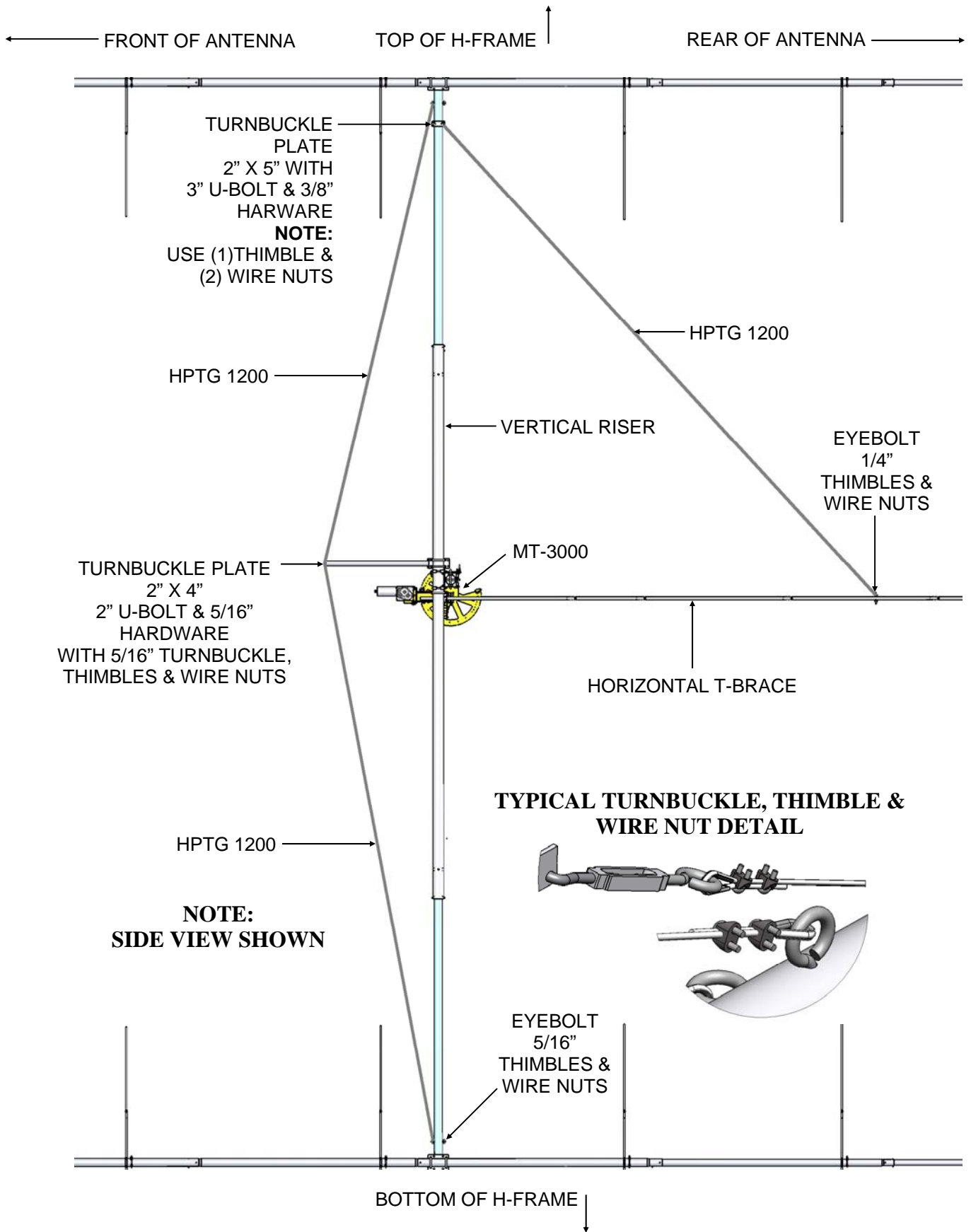
MAIN BOOM RISER

MT-3000 SYSTEM

VERTICAL BOOM RISER PLATE (QTY. 2)
4.5 U-BOLT AND CRADLE (QTY. 4)
LOCKWASHER, 3/8, SS (QTY. 8)
NUT, 3/8-16, SS (QTY. 8)
2" U-BOLT & CRADLE (QTY. 4)
LOCKWASHER, 5/16, SS (QTY. 8)
NUT, 5/16-18, SS (QTY. 8)



SYSTEM LAYOUT



HFTB6MXP20-2X2 PARTS & HARDWARE

<u>DESCRIPTION</u>	<u>QTY</u>
CROSSBOOM CENTER, 4" X SCHD 40 PIPE X 240"	1
CROSSBOOM TUBE 4" X .125 X 108"	2
VERTICAL RISER CENTER, 4" X.125 X 216"	2
VERTICAL RISER TOP W/COUPLING RINGS, 3" X .250 X 120" FIBERGLASS.....	2
VERTICAL RISER BOTTOM W/COUPLING RINGS, 3" X .250 X 120" FIBERGLASS.....	2
VERTICAL TURNBUCKLE RISER W/COUPLING RINGS, 2" X .125 X 60" F.G.	2
VERTICAL T-BRACE TUBE 1, 1" X .047 X 60" SOE	2
VERTICAL & HORIZONTAL T-BRACE TUBE, 1" X .047 X 60" SOE	16
VERTICAL T-BRACE TUBE 8, 1" X .047 X 19"	2
HORIZONTAL T-BRACE TUBE 1, 1" X .047 X 60" SOE	2
HORIZONTAL T-BRACE TUBE 3, 1" X .047 X 60" SOE	2
HORIZONTAL T-BRACE TUBE 5, 1" X .047 X 60"	2
HORIZONTAL T-BRACE TUBE 6, 1" X .047 X 30 SOE"	2
CROSSBOOM SUPPORT TUBE, 2" X .125 X 96"	2
VERTICAL RISER SUPPORT TUBE, 2" X .065 X 48"	2
T-BRACE CLAMP, 1-1/2" TO 1" (M2AMC0310)	8
T-BRACE CLAMP, 1" TO 1" (M2AMC0320)	4
M-CRADLE 4", 1" X 1-1/2" X 5-3/8" (M2AMC0138)	16
VERTICAL BOOM RISER PLATE 1/4" X 8" X 8"	2
SUPPORT BOOM RISER PLATE 1/4" X 4" X 8" (M2APT0200)	4
TURN BUCKLE PLATE, 2" X 5" X 3/16" (M2APT0113)	2
TURN BUCKLE PLATE, 2" X 4" X 3/16" (M2APT0101)	2
TURNBUCKLE ANGLE PLATE, (M2APT0175)	2
ANGLE PLATE, 4 X 6 X .188 (M2AHF0005)	2
ANTI CRUSH TUBE PLUG, UHMW	2
U-BOLT & CRADLE, 4.5"	4
U-BOLT & CRADLE, 4"	6
U-BOLT & CRADLE, 3"	2
U-BOLT & CRADLE, 2" HD.....	2
U-BOLT & CRADLE, 2"	10
U-BOLT, 1"	2
WIRE ROPE ASSEMBLY 3/16" X 240" (20') WITH EYEBOLT	2
WIRE ROPE ASSEMBLY 3/16" X 228" (19') WITH EYEBOLT	2
TURNBUCKLE, HOOK & EYE 3/8" X 6" FORGED.....	4
TURNBUCKLE, HOOK & EYE 5/16" X 6-1/2", ZINC.....	4
WIRE NUT, 3/8	8
THIMBLE, 3/8.....	4
EYEBOLT W/NUT, 5/16" X 5", ZINC.....	4
EYEBOLT W/NUT, 1/4" X 4", ZINC.....	2
HPTG 1200 X 240" (20')	6
THIMBLE, 1/8"	12
WIRE NUTS, 1/8"	24
ZIP TIES, (LARGE)	60
PHASING LINES.....	8
6M 4 PORT POWER DIVIDER COAX	2

HFTB6MXP20-2X2 PARTS & HARDWARE

HARDWARE

BOLT, 3/8-16 X 5-1/2" SS	16
BOLT, 3/8-16 X 5-1/4" SS	4
BOLT, 3/8-16 X 4-1/2" SS	8
NUT, 3/8-16, SS	45
NUT, 3/8-16, NYLOCK SS	12
LOCKWASER, 3/8" SS.....	45
BOLT, 5/16-18 X 3-1/2" SS	4
NUT, 5/16-18 SS	25
NUT, 5/16-18, NYLOCK SS	4
LOCKWASER, 5/16" SS.....	25
BOLT, 1/4-20 X 2-1/4" SS	12
SET SCREW, 1/4-20 X 1/4" SS.....	12
NUT, 1/4-20, SS	20
LOCKWASER, 1/4" SS.....	20
SCREW, 8-32 X 1-1/4" SS	50
NUT, 8-32, NYLOCK, SS	50
ZINC PASTE (Penetrox, Noalox or equivalent) container.....	2

HEAVY DUTY 3" MOUNT KIT

M-CRADLE, 4-1/2"	8
M-CRADLE, 3" HD	8
BOLT, 3/8-16 X 6" SS.....	8
BOLT, 3/8-16 X 4-1/2" SS	8
LOCKWASHER, 3/8" SS.....	16
NUT, 3/8-16, SS	16

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