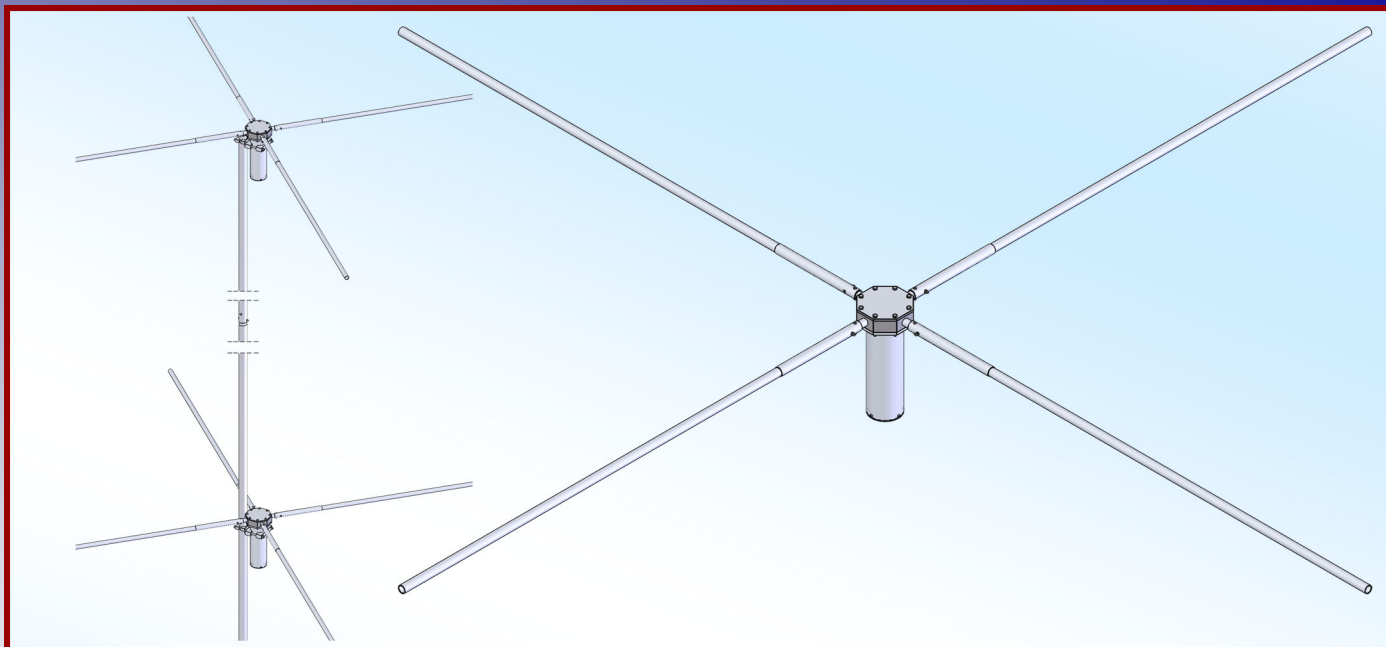




M2 Antenna Systems, Inc.

Model No: FG40.6CD

STACKED CROSSED DIPOLES 40.6 MHZ



Model	FG40.6CD
Frequency Range.....	38 MHz To 43 MHz
Gain.....	8.6 + 0-1@ 10° w/Lower Avt @ 25' - upp @41'
Bandwidth:	5 MHz
Feed Impedance.....	50 Ohms Unbalanced
Maximum VSWR.....	1.2:1 Typical
Input Connector.....	"N" Female
Power Handling.....	2 kW
Turning Radius.....	74-1/8"
Stacking Distance	15'
Mast Size.....	2" Nom.
Wind area / Survival.....	4.63 Sq. Ft. / 100 MPH
Weight / Ship Wt.	50 Lbs. / 60 Lbs.

FEATURES:

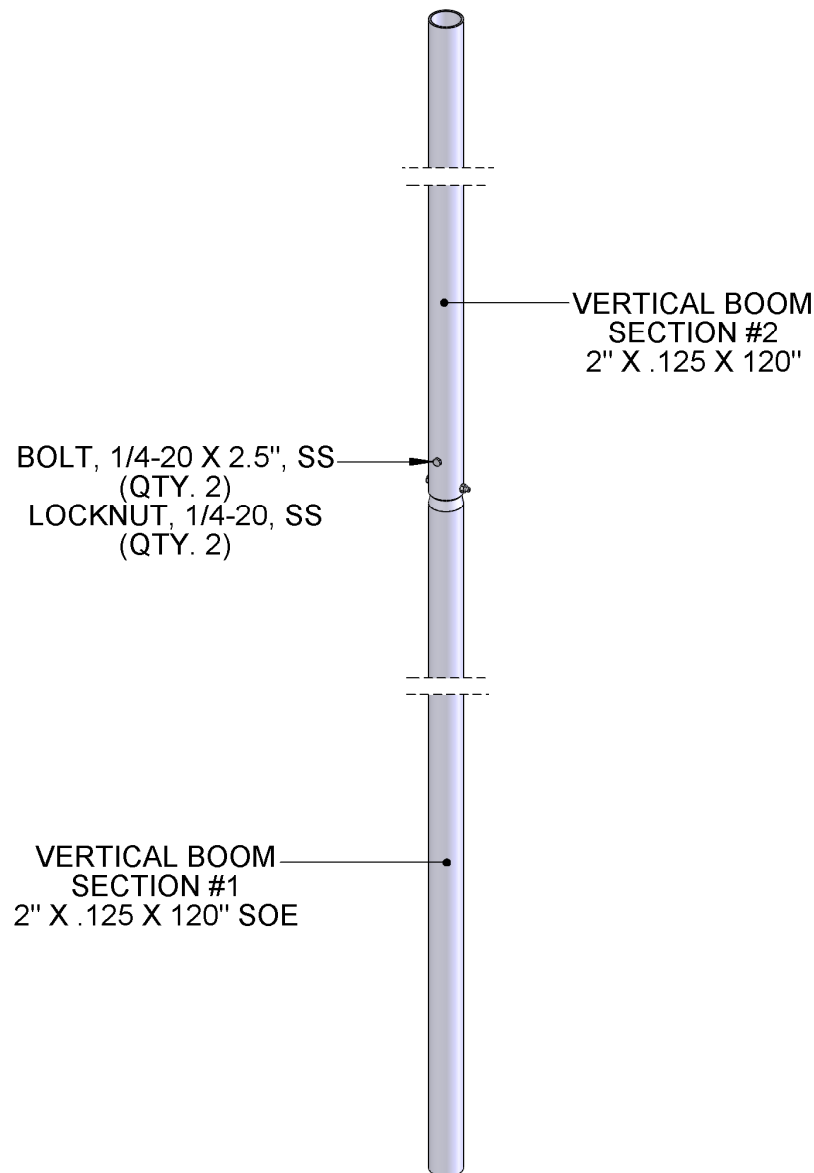
The M2 40.6 Stacked Crossed Dipole System is a commercial grade antenna designed for harsh environments and many years of trouble free operation. The Hybrid matching network has been enclosed inside a machined 6061-T6 aluminum canister that is O-ring sealed. Dipole components are Type II Black Anodized with stainless steel hardware throughout. The M2 40.6 Stacked Crossed Dipole System can be scaled up or down in frequency for your specific application.

This System was developed for the USDA-NRCS Meteor-Burst Network. This System collects data from both the SNOTEL (snowpack Telemetry) and SCAN (Soil Climate Analysis Network) programs across the United States. The SNOTEL program allows the NRCS to provide timely and accurate water supply forecasts for the western United States. Via the SCAN program, the NRCS is the leader of a cooperative nationwide, comprehensive soil moisture and climate information system designed to support natural resource assessments and conservation activities.

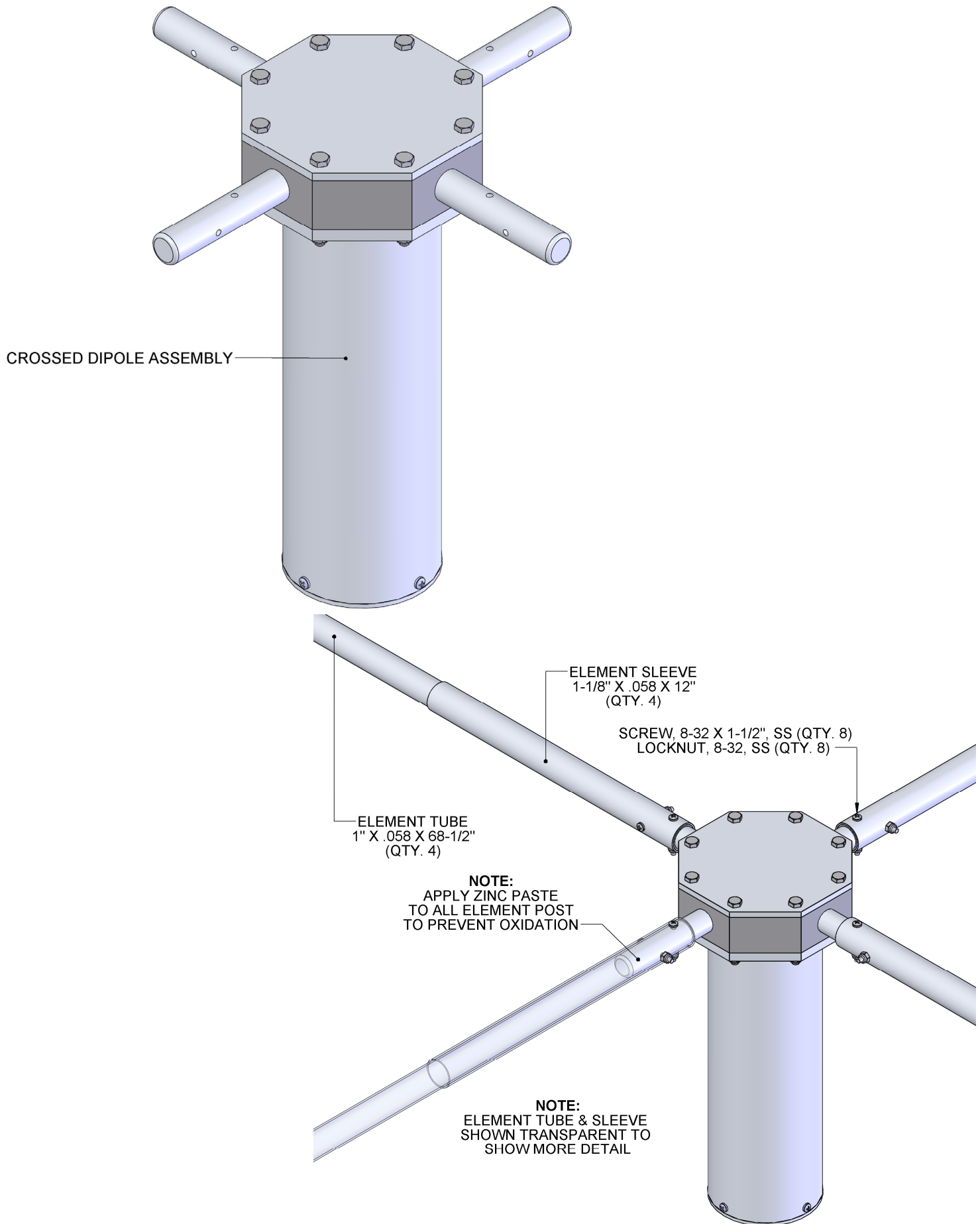
VERTICAL RISER ASSEMBLY

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.

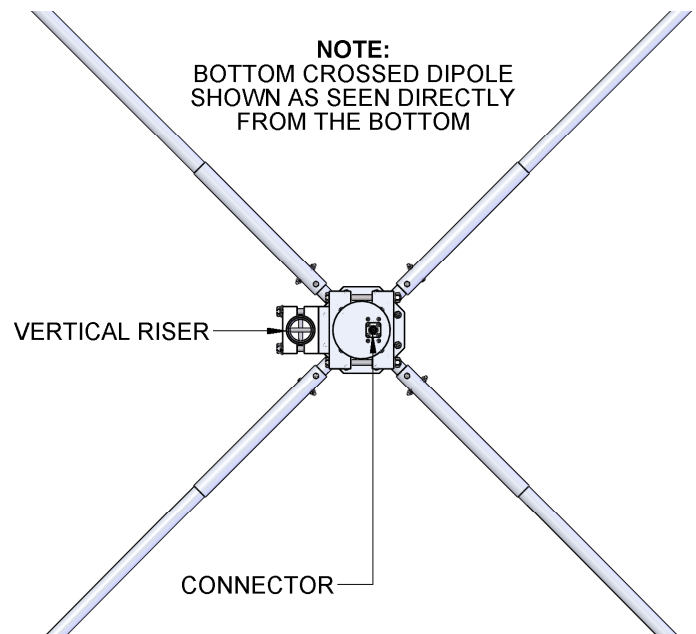
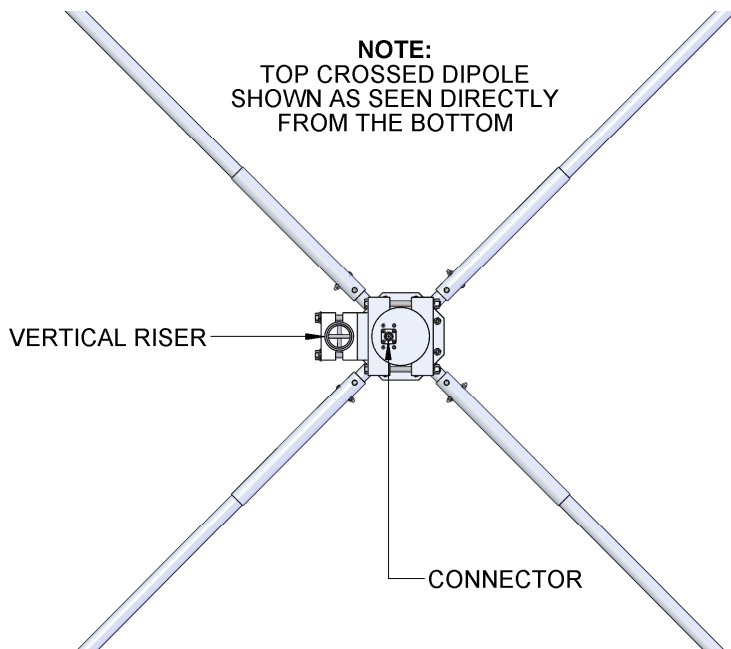
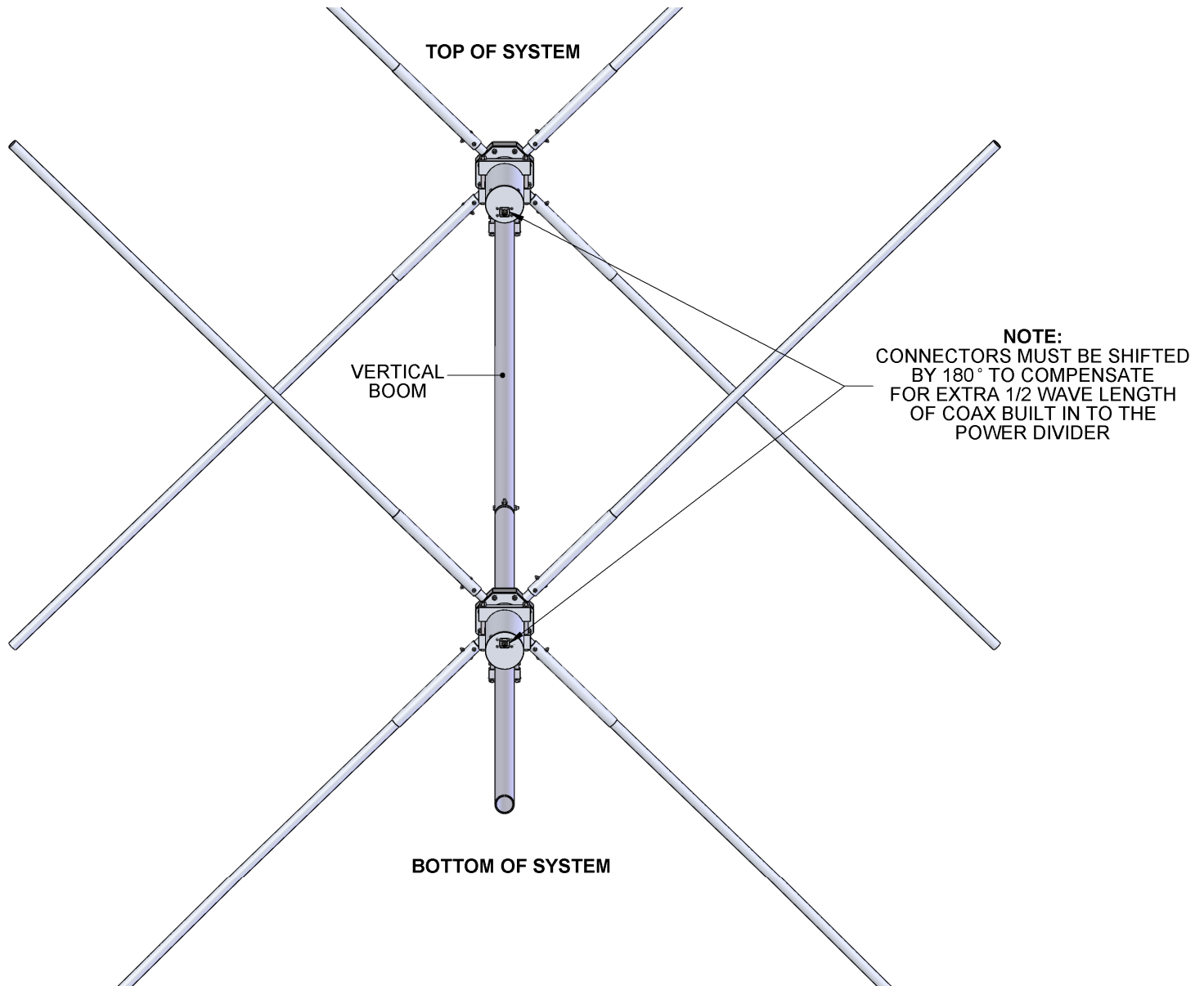
Two containers of zinc paste (Penetrox, Noalox, or equiv.) has been provided to enhance assembly. Apply a thin coat wherever two pieces of aluminum come in contact or any other electrical connections are made. It is also useful on screw and bolt threads as an ANTI SEIZE compound.



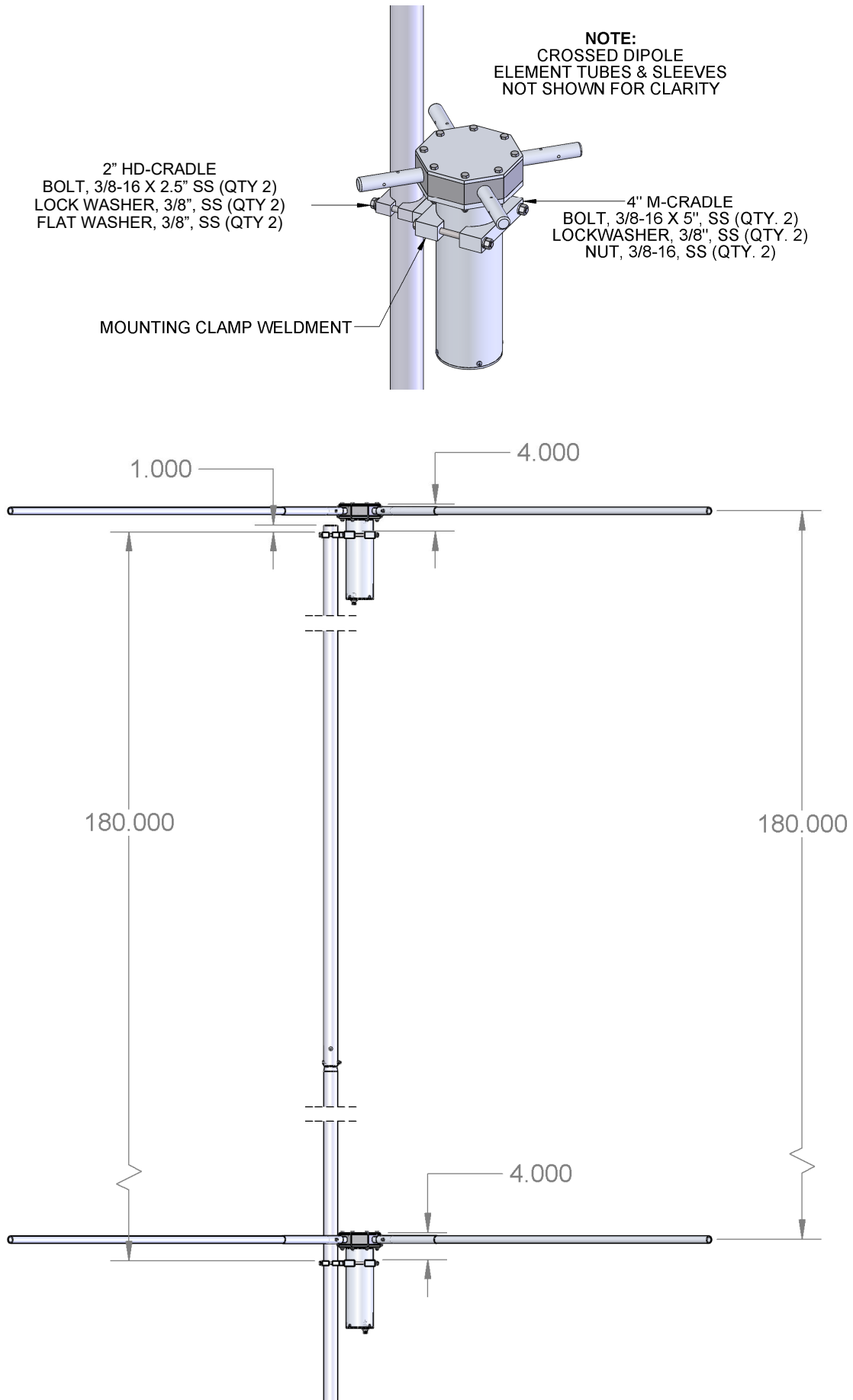
CROSSED DIPOLE ASSEMBLY



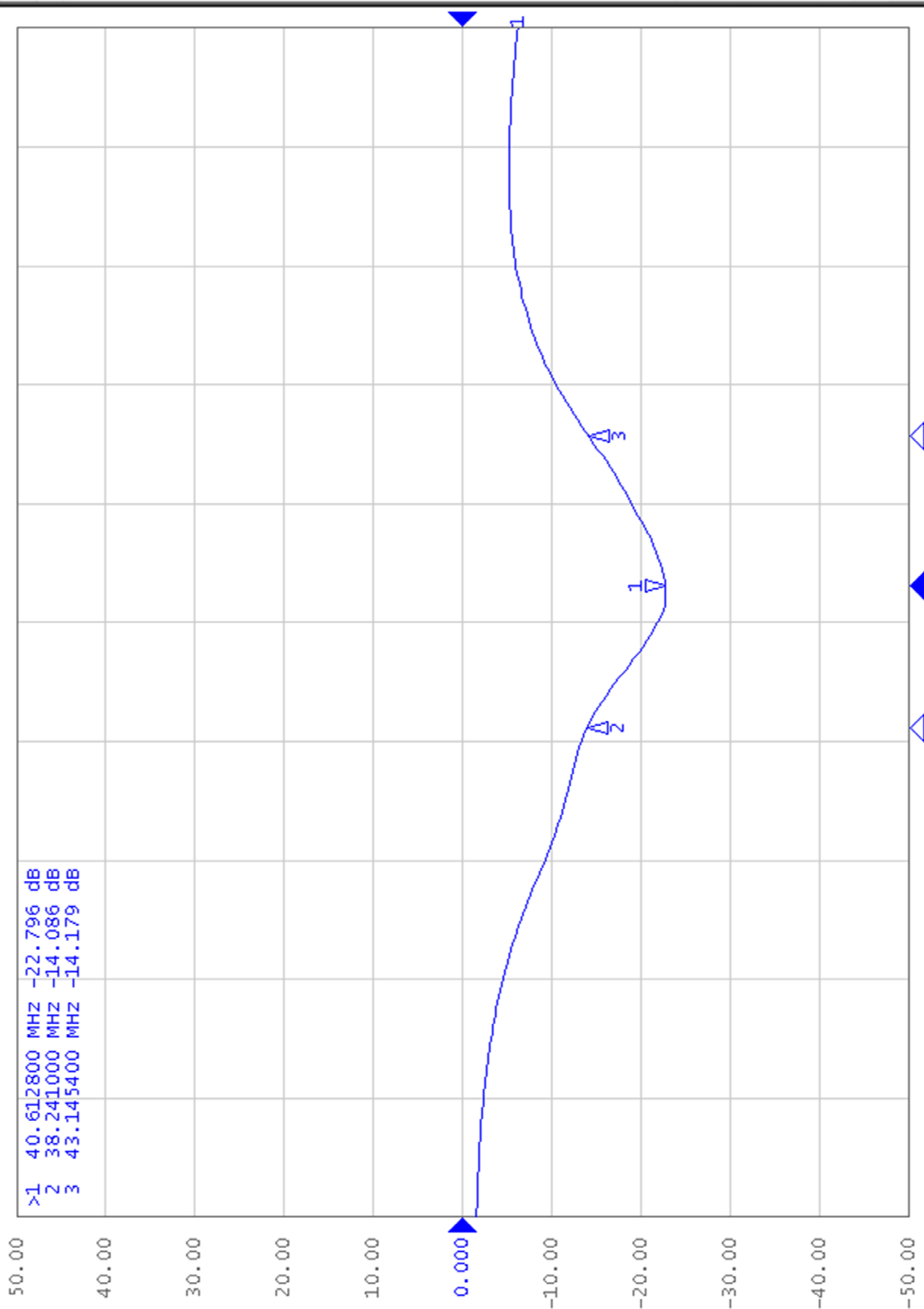
180° PHASE SHIFT DETAIL



MOUNTING & SPACING



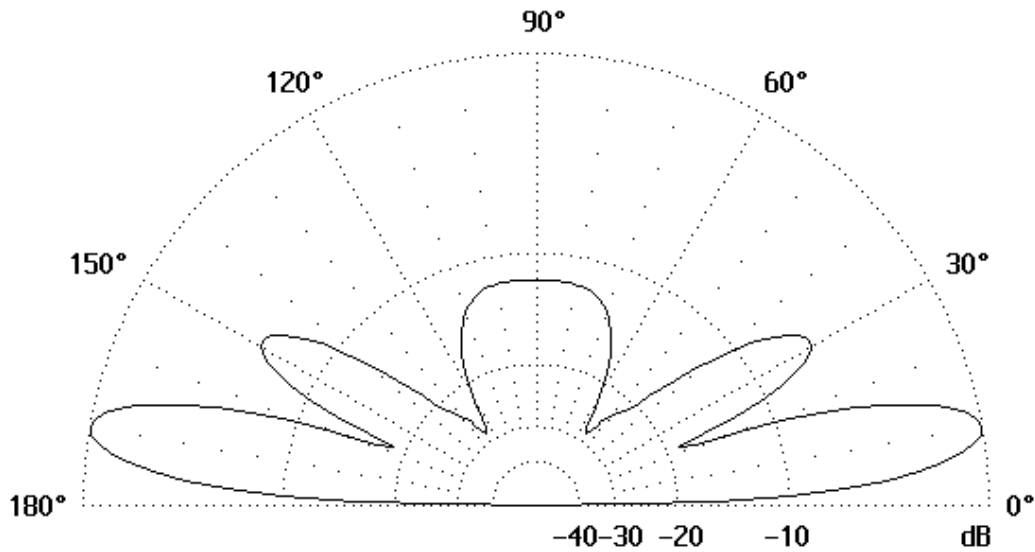
CROSSED DIPOLE 40.6 RETURN LOSS



E & H PLANE PATTERNS

DIPL41 (40.6 MHz)
DIPOLE of 1"
MATERIAL

OVER GROUND



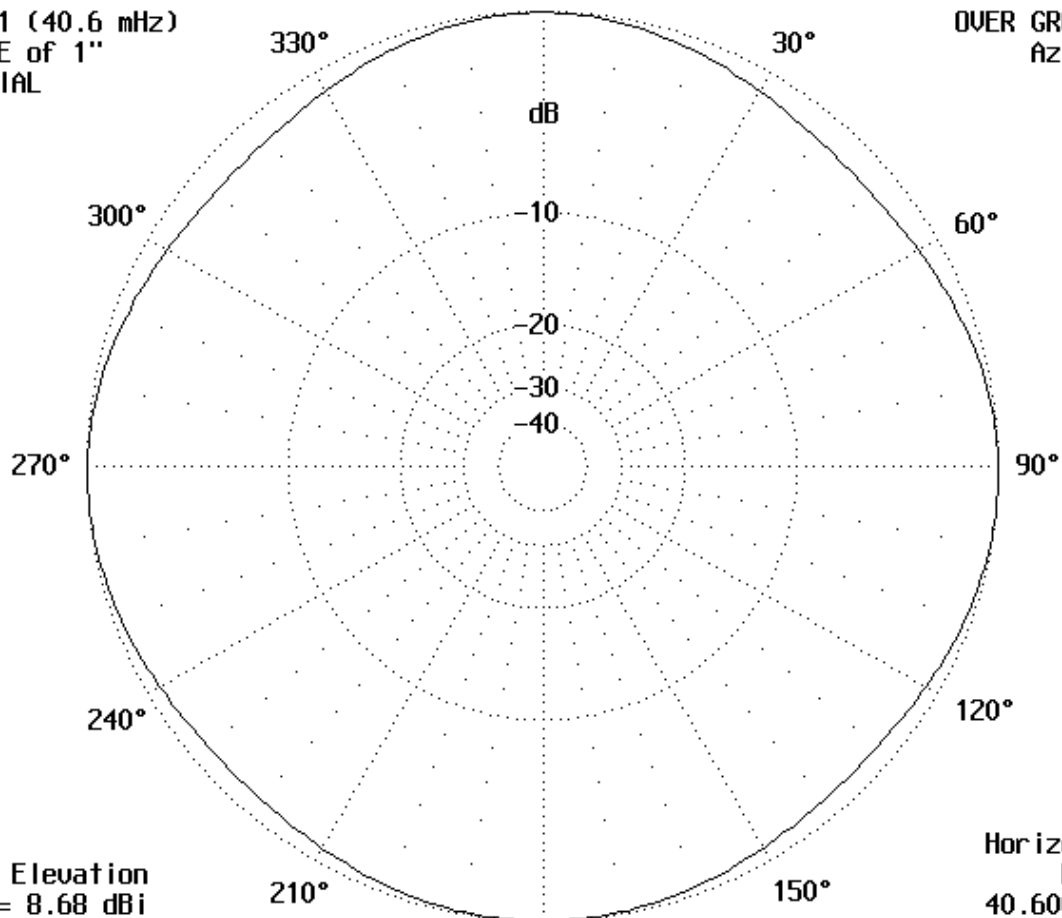
Elevation

0 dB = 8.67 dBi

DIPL41 (40.6 MHz)
DIPOLE of 1"
MATERIAL

Horizontal
Field
40.600 MHz

OVER GROUND
Azimuth



10.0° Elevation
0 dB = 8.68 dBi

Horizontal
Field
40.600 MHz

PARTS & HARDWARE

DESCRIPTION.....	QTY
VERTICAL BOOM SECTION #1: 2" X .125 X 120" SOE	1
VERTICAL BOOM SECTION #2: 2" X .125 X 120"	1
ELEMENT TUBE, 1" X .058 X 67"	8
ELEMENT SLEEVE, 1-1/8" X .058 X 12"	8
MOUNTING CLAMP, (M2ACD0160)	2
CROSSED DIPOLE 40.6 ASSEMBLY	2
M-CRADLE, 4" (M2AMC0138)	2
M-CRADLE, 2" HD (M2AMC0131)	2
PHASE LINE, RG-11, 3/4 WAVE LENGTH (177")	1
PHASE LINE, RG-11, 1/4 WAVE LENGTH (59")	1
ADAPTER, "N" FEMALE "T"	1
ZINC PASTE CUP	1
ASSEMBLY MANUAL	1

HARDWARE:

BOLT, 3/8-16 X 5", SS	4
BOLT, 3/8-16 X 2.5", SS	4
FLATWASHER, 3/8", SS	8
LOCKWASHER, 3/8", SS	8
NUT, 3/8-16, SS	4
BOLT, 1/4-20 X 2.5", SS	2
LOCKNUT, 1/4-20, SS	2
SCREW, 8-32 X 1-1/2", SS	16
LOCKNUT, 8-32, SS	16

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