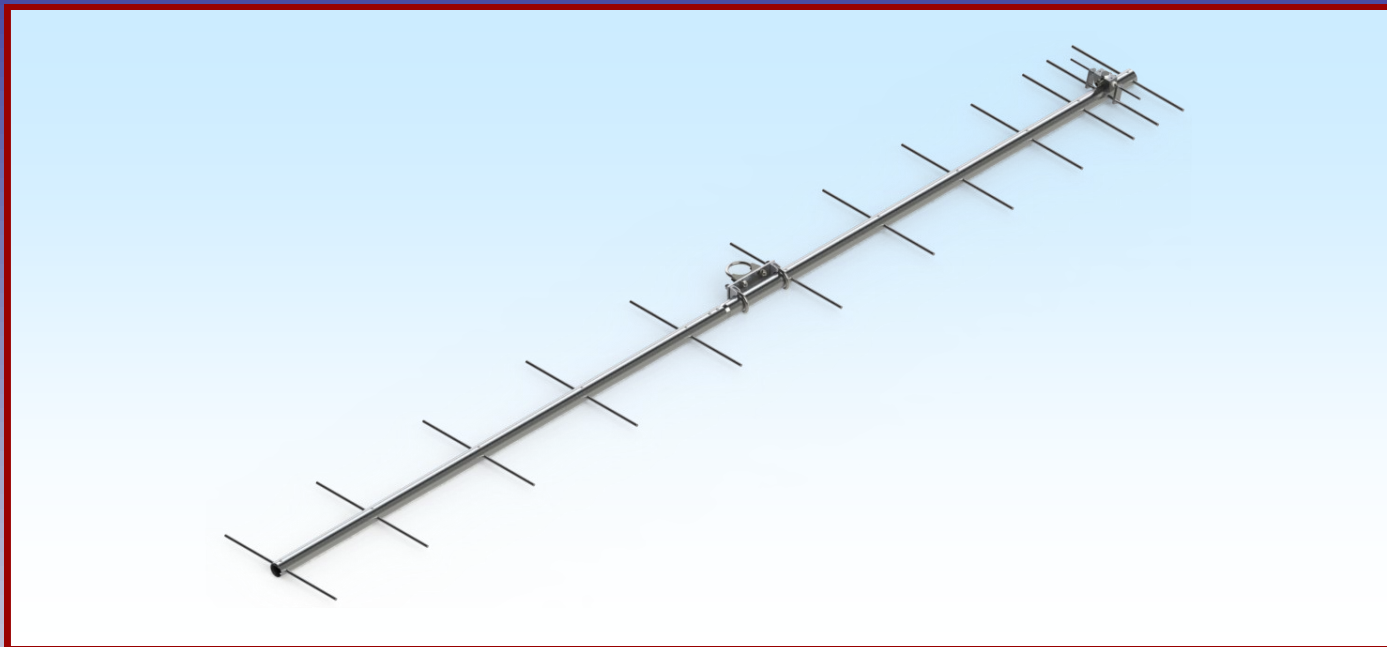




M2 Antenna Systems, Inc.

Model No: 348-12



SPECIFICATIONS:

ModelFG348-12
Frequency Range.....343 To 353 MHz
*Gain15.5 dBi
Front to back22 dB Typical
BeamwidthE=30 deg. H=35 deg.
Feed type“T” Match
Feed Impedance.....50 Ohms Unbalanced
Maximum VSWR.....1.5:1 Max
Input Connector.....“N” Female

Power Handling1200W
Boom Length / Dia.....110-1/2” / 1-1/2”
Maximum Element Length.....17-5/16”
Turning Radius:63”
Stacking Distance.....53”
Mast Size1-1/2” to 2” Nom.
Wind area / Survival0.82 Sq. Ft. / 100 MPH
Weight / Ship Wt.....7 Lbs. / 12 Lbs.

***Subtract 2.14 from dBi for dBd**

FEATURES:

Performance has been computer optimized to meet your application. Physical construction emphasizes long term electrical and mechanical durability. Elements are rod 5/16” 6061-T6 aluminum, grounded to the boom. The driven element “T” Match uses a CNC machined central block with O-ring sealed connectors. Internal connections are encapsulated in a silicone gel with a dielectric strength 3.7 times greater than air for enhanced power handling. Balun connectors are double O-ring sealed to the coax.

348-12 ASSEMBLY MANUAL

TOOLS REQUIRED: *Phillips screwdriver, 11/32" wrench, socket or spintite, a 7/16" and 1/2" wrench or socket, and tape measure. For best results please review instructions before assembly.*

STEP 1:

Assemble the BOOM. (SEE DIMENSION SHEET).

STEP 2:

Install the BOOM TO MAST PLATE with two 2" U-bolts and cradles.

STEP 3:

Layout the ELEMENTS and install using 6-32 X 1" screws to hold elements in place.

NOTE: *Leave DRIVEN ELEMENT ROD SCREW lose until SHORTING BARS are positioned.*

STEP 4:

Install DRIVEN ELEMENT ASSEMBLY and SHORTING BARS.

STEP 5:

Locate the 1/2 wavelength BALUN CABLE ASSEMBLY and form into a large "U" shaped loop. Tighten the BALUN CONNECTORS gently with a 7/16" end wrench. Tuck BALUN CABLE into rear of BOOM and secure.

STEP 6:

Install the FEED LINE. Route FEED LINE on the underside of BOOM towards BOOM TO MAST PLATE and secure with nylon ties.

This completes the assembly.

M² ANTENNA SYSTEMS, INC.

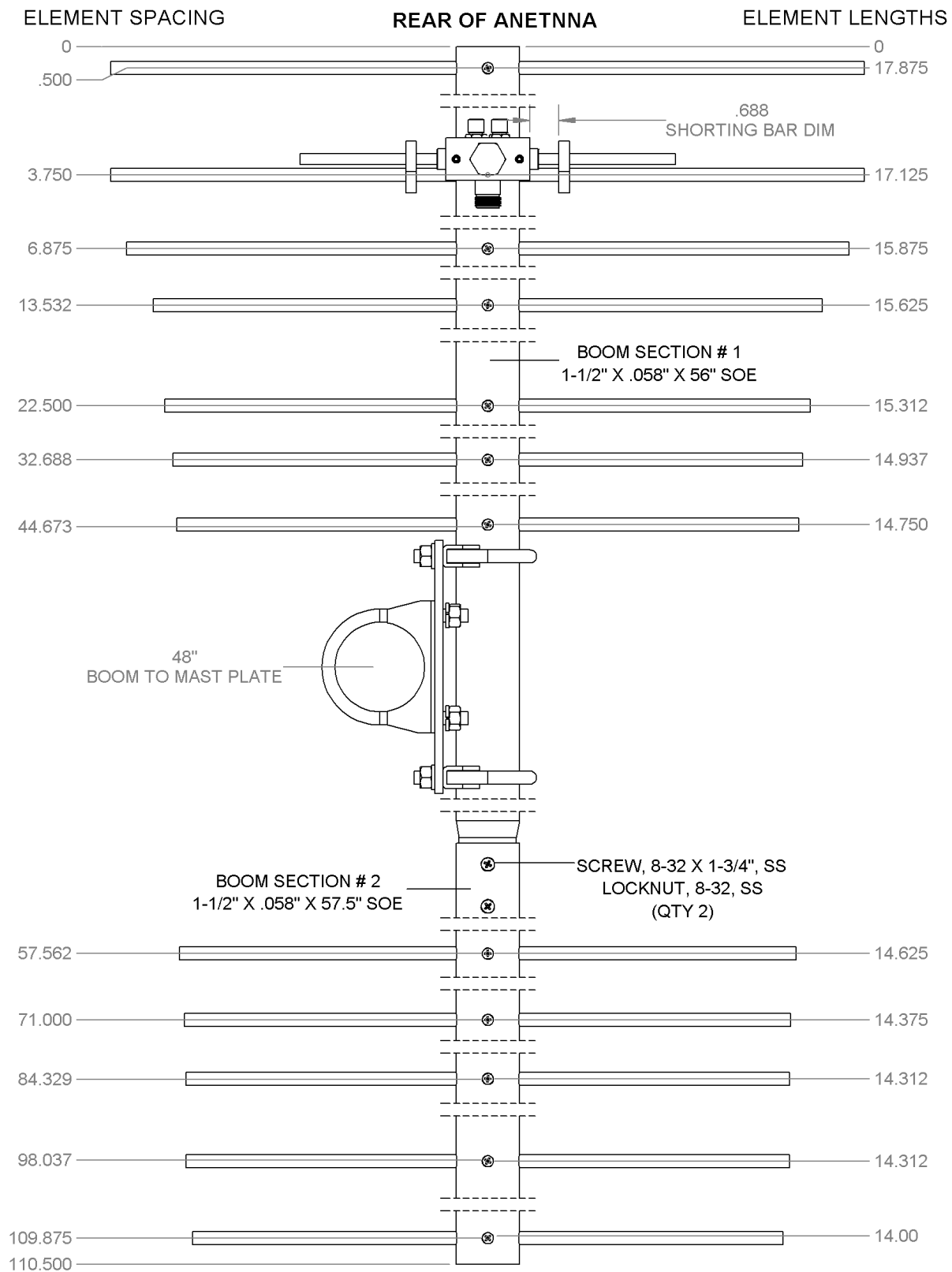
4402 N. Selland Ave.

Fresno, CA 93722

(559) 432-8873 FAX: 432-3059

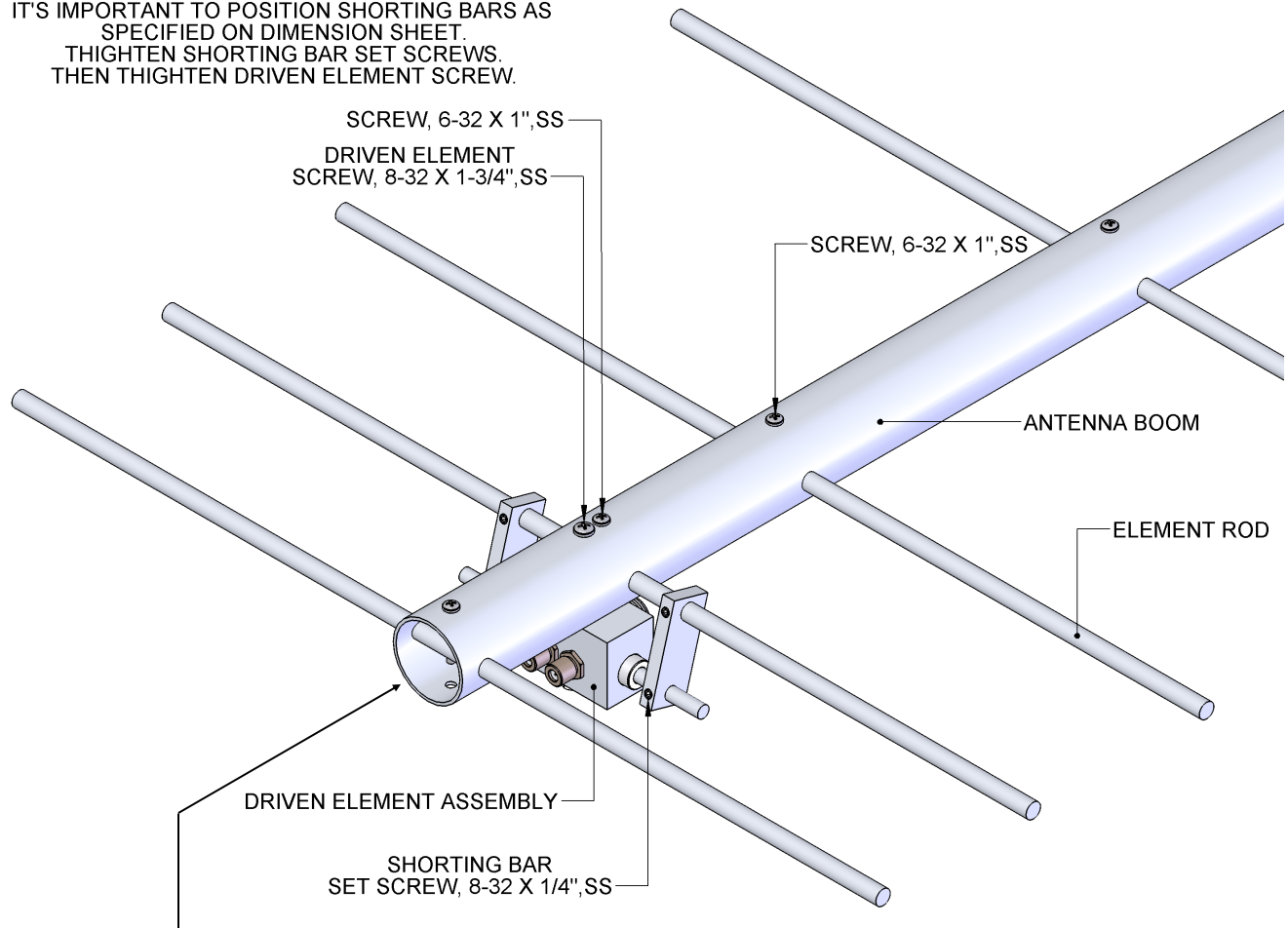
www.m2inc.com Email: sales@m2inc.com

348-12 DIMENSION SHEET

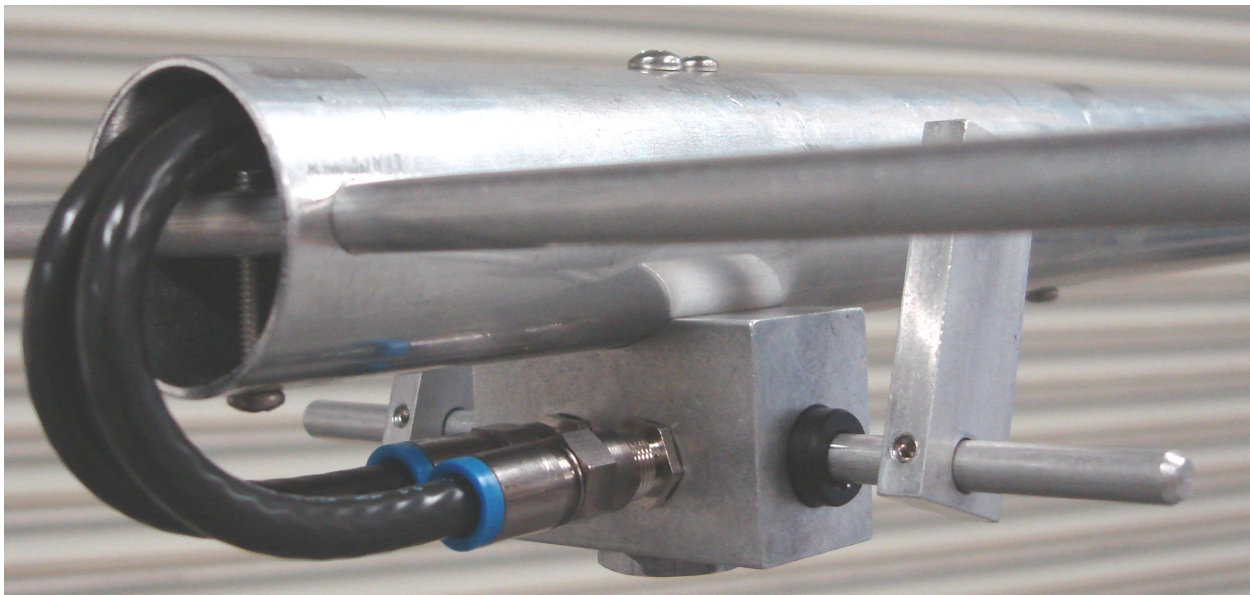


348-12 DRIVEN ELEMENT DETAIL

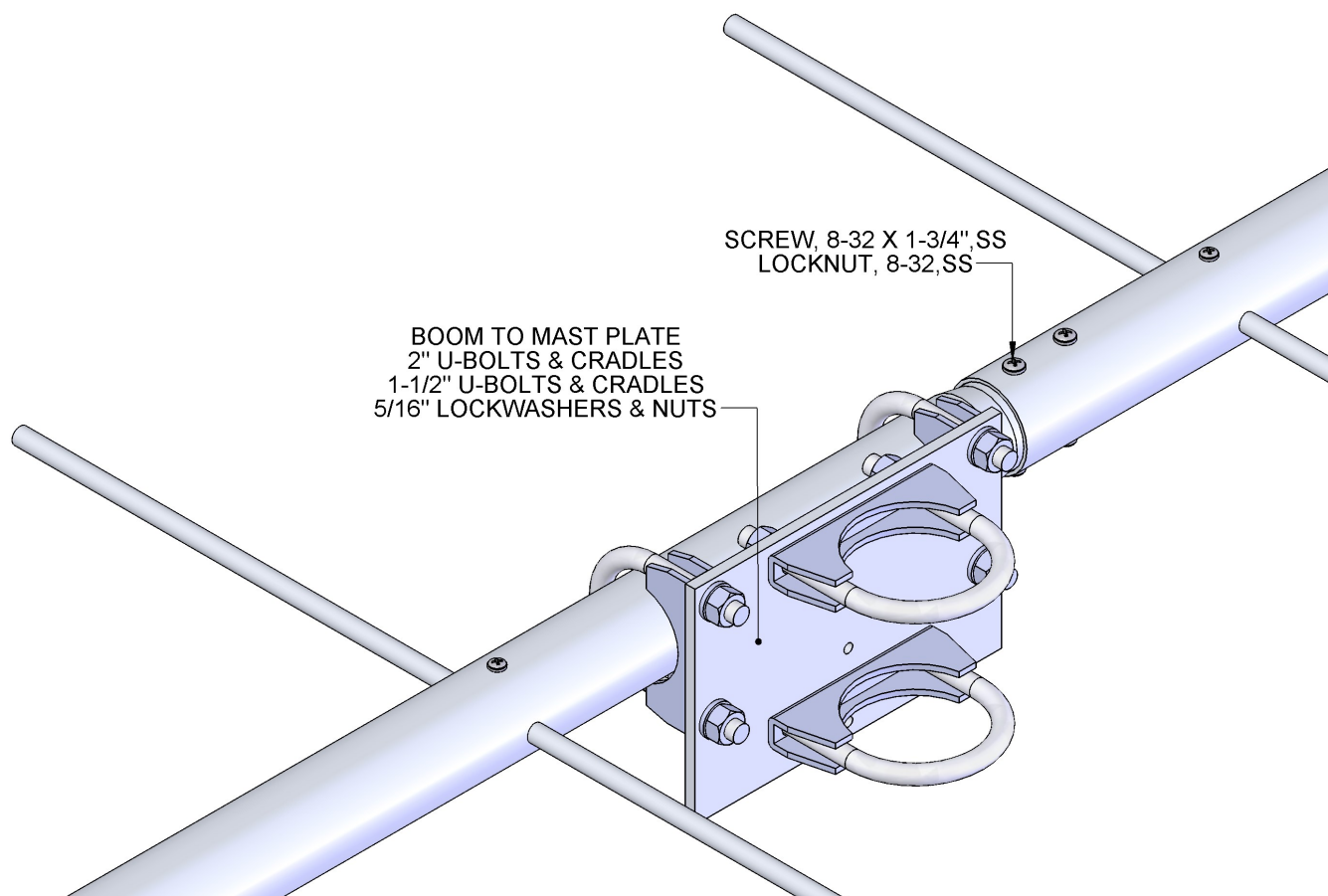
NOTE:
INSTALL DRIVEN ELEMENT ASSEMBLY & SHORTING BARS
AS SHOWN, BUT KEEP HARDWARE LOOSE.
IT'S IMPORTANT TO POSITION SHORTING BARS AS
SPECIFIED ON DIMENSION SHEET.
TIGHTEN SHORTING BAR SET SCREWS.
THEN TIGHTEN DRIVEN ELEMENT SCREW.



NOTE:
TUCK BALUN INTO REAR OF BOOM AS SHOWN BELOW.
SECURE WITH TAPE OR NYLON TIES.



348-12 BOOM TO MAST PLATE DETAIL



348-12 ASSEMBLY MANUAL

DESCRIPTION	QTY
BOOM SECTION #1, 1.5" X .058" X 56", SOE.....	1
BOOM SECTION #2, 1.5" X .058" X 57.5"	1
ELEMENT ROD, 5/16" X SEE DIMENSION SHEET	12
DRIVEN ELEMENT ASSEMBLY (SADEA348-12)	1
BALUN CABLE, RG-6U, 1/2 λ	1
SHORTING BAR, 3/4" X 1/4" X 1-7/8" (M2ASB0302)	2
BOOM TO MAST PLATE, 4 X 6 X 1/4" (M2APT0022)	1
U-BOLT AND CRADLE, 2"	2
U-BOLT AND CRADLE, 1-1/2"	2
ASSEMBLY MANUAL.....	1

HARDWARE

NUT, 5/16-18, SS	8
LOCK WASHER, 5/16", SS.....	8
SCREW, 8-32 X 1-3/4", SS	3
SET SCREW, 8-32 X 1/4", SS	4
LOCKNUT, 8-32, SS.....	2
SCREW, 6-32 X 1", SS	12
ALLEN WRENCH, 5/64"	1
NYLON TIES, LARGE	5

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