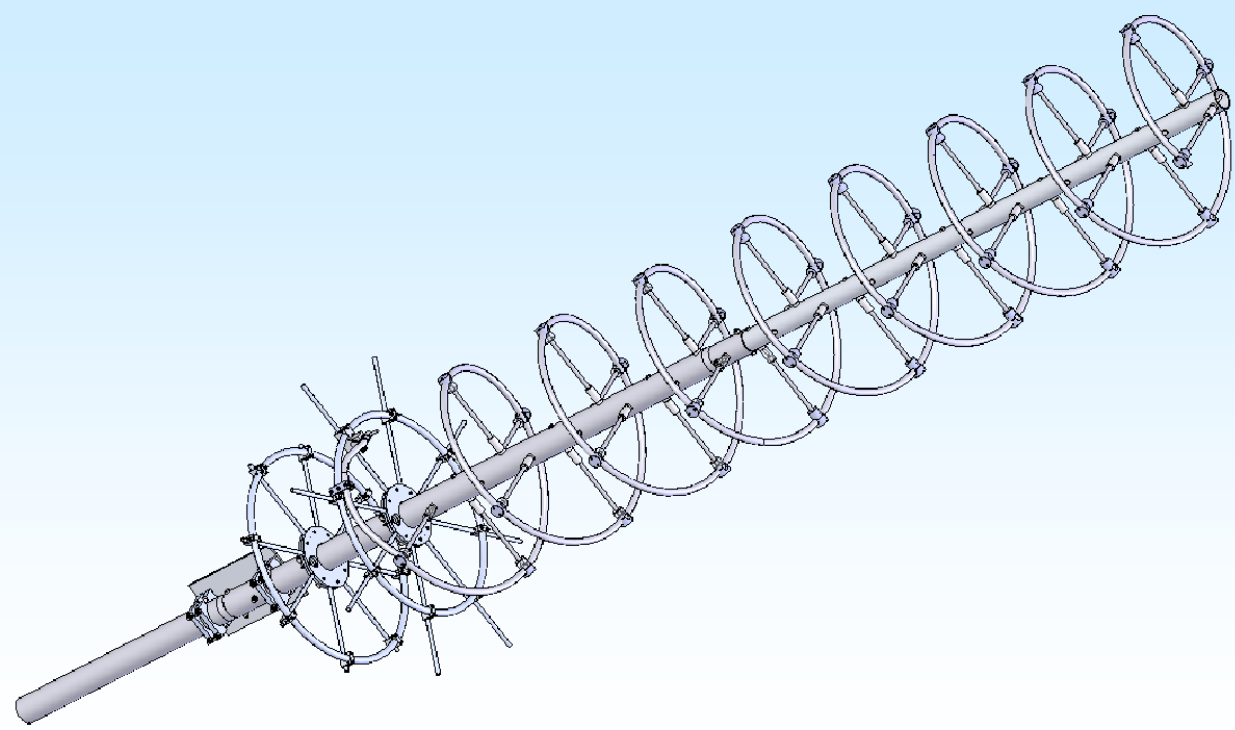




M2 Antenna Systems, Inc.

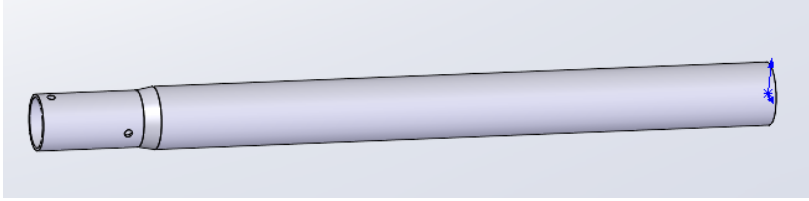
Model No: 195-225-8



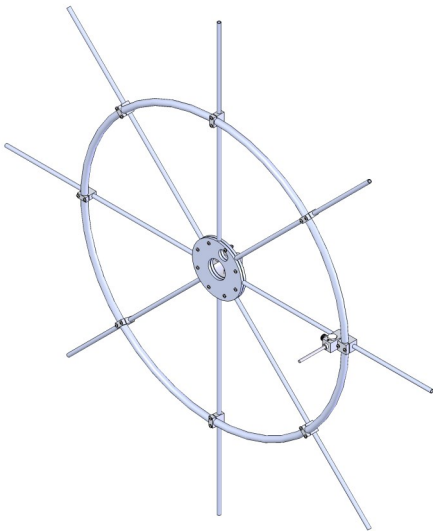
SPECIFICATIONS:

Model	195-225-8	Power Handling	1 kW, Higher avl.
Frequency Range.....	195 To 225 mHz	Boom Length / Dia.....	150" / 2" to 2.5"
*Gain	11.5 dBic Nominal	Turning Radius:	150
Beam width	210 mHz = 41°	Wind Area.....	4.1 Sq. Ft.
Impedance.	50 Ohms Unbalanced	Wind Survival	100 MPH
VSWR	1.6 Typical	Weight.	35 Lbs.
Polarity	RHCP		
Ellipticity	<3db		
Connector.....	Type "N" Female		

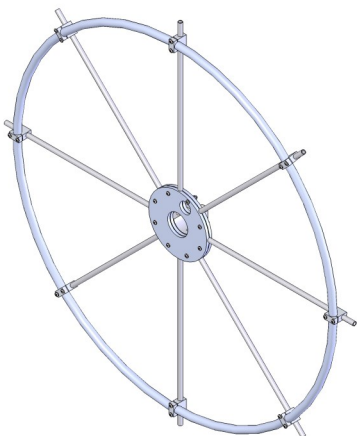
IDENTIFY PARTS & SUB-ASSEMBLIES



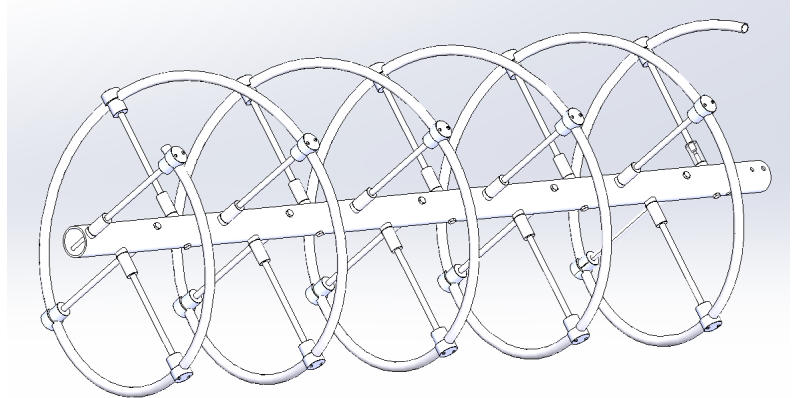
BOOM EXTENSION
TUBE
2.5 X 30" SOE



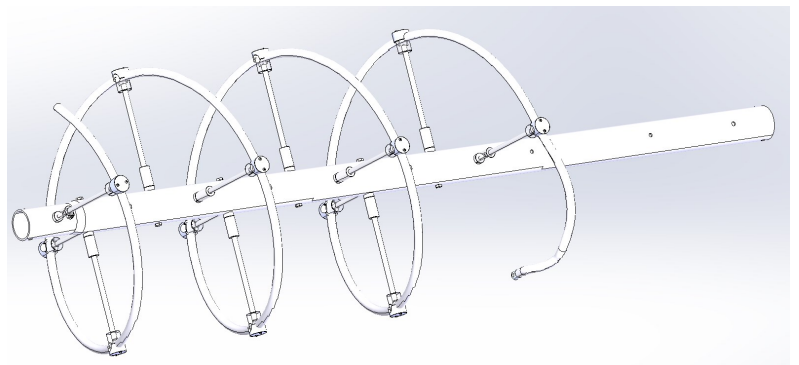
INNER
REFLECTOR ASSEMBLY
WITH FEED BLOCK ASSEMBLY



OUTER
REFLECTOR ASSEMBLY

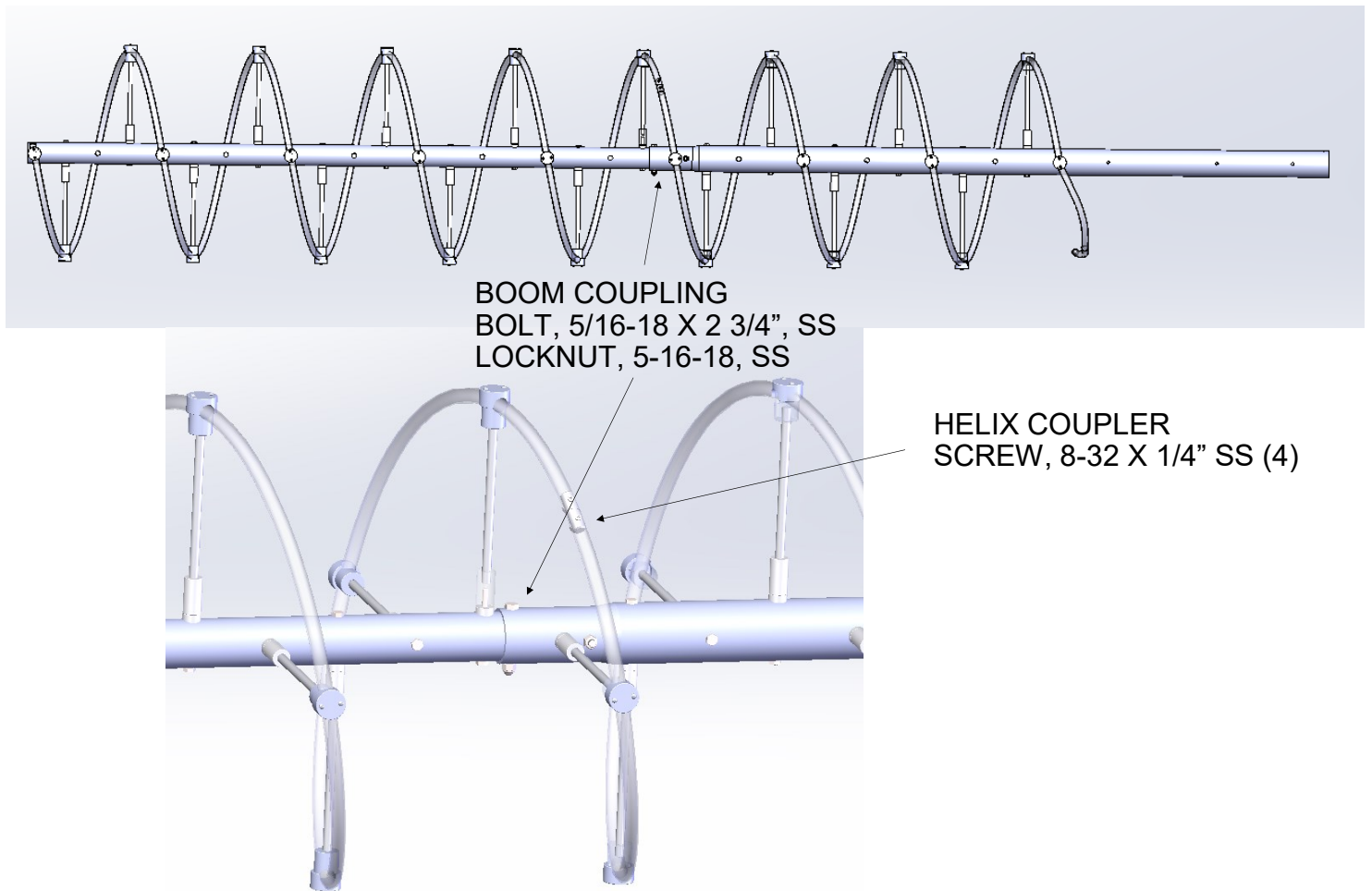


FRONT BOOM ASSEMBLY



REAR BOOM ASSEMBLY
WITH SPECIAL BEND
FOR FEED

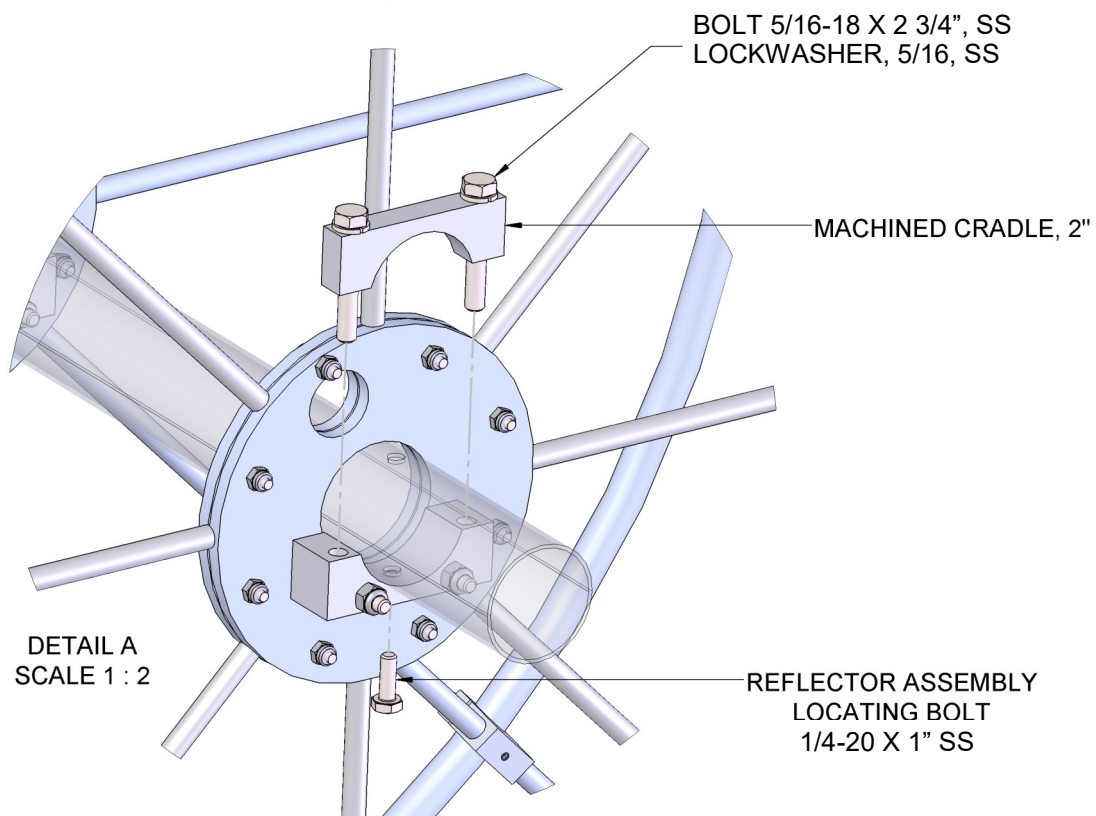
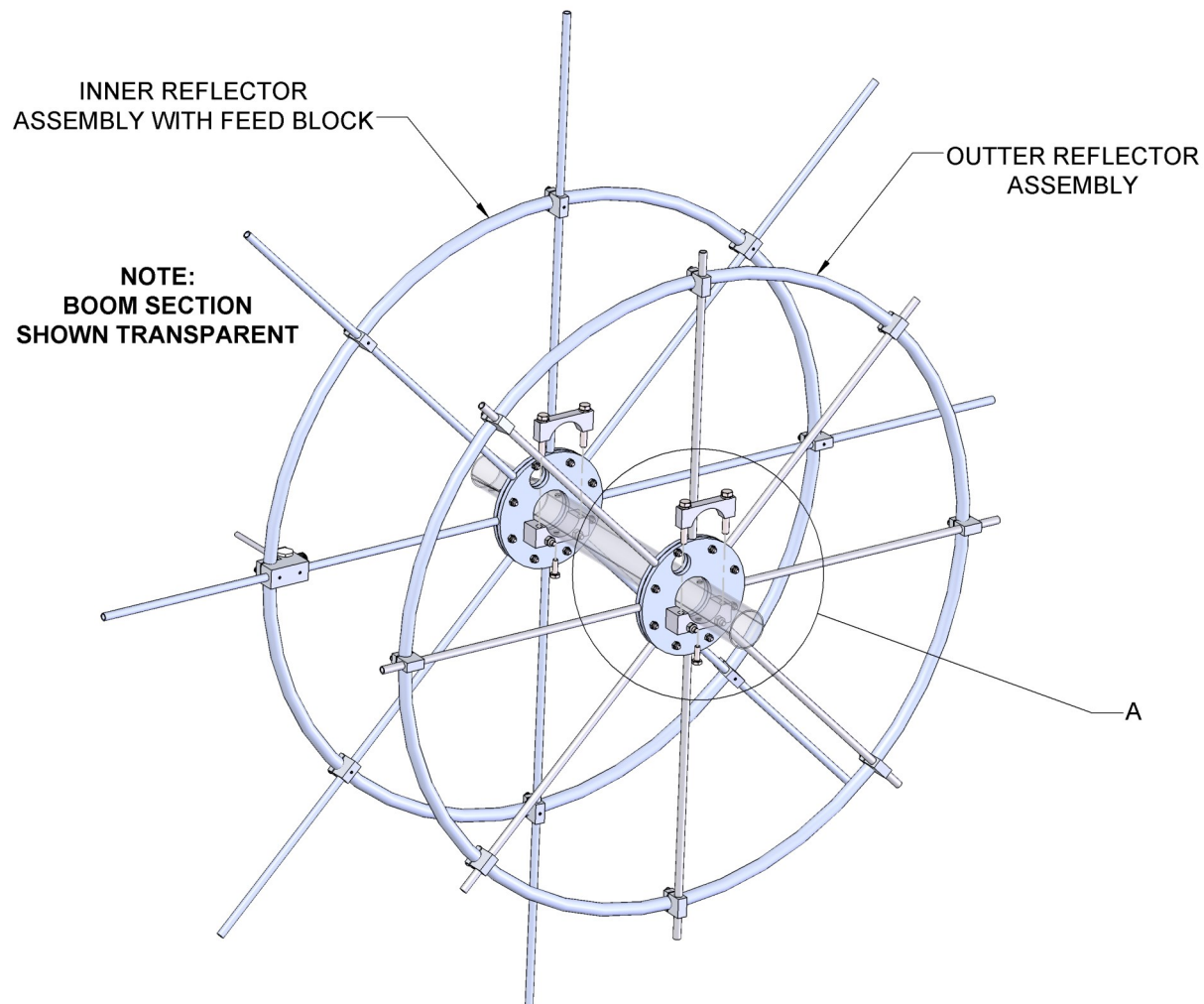
195-225-8 ASSEMBLY MANUAL



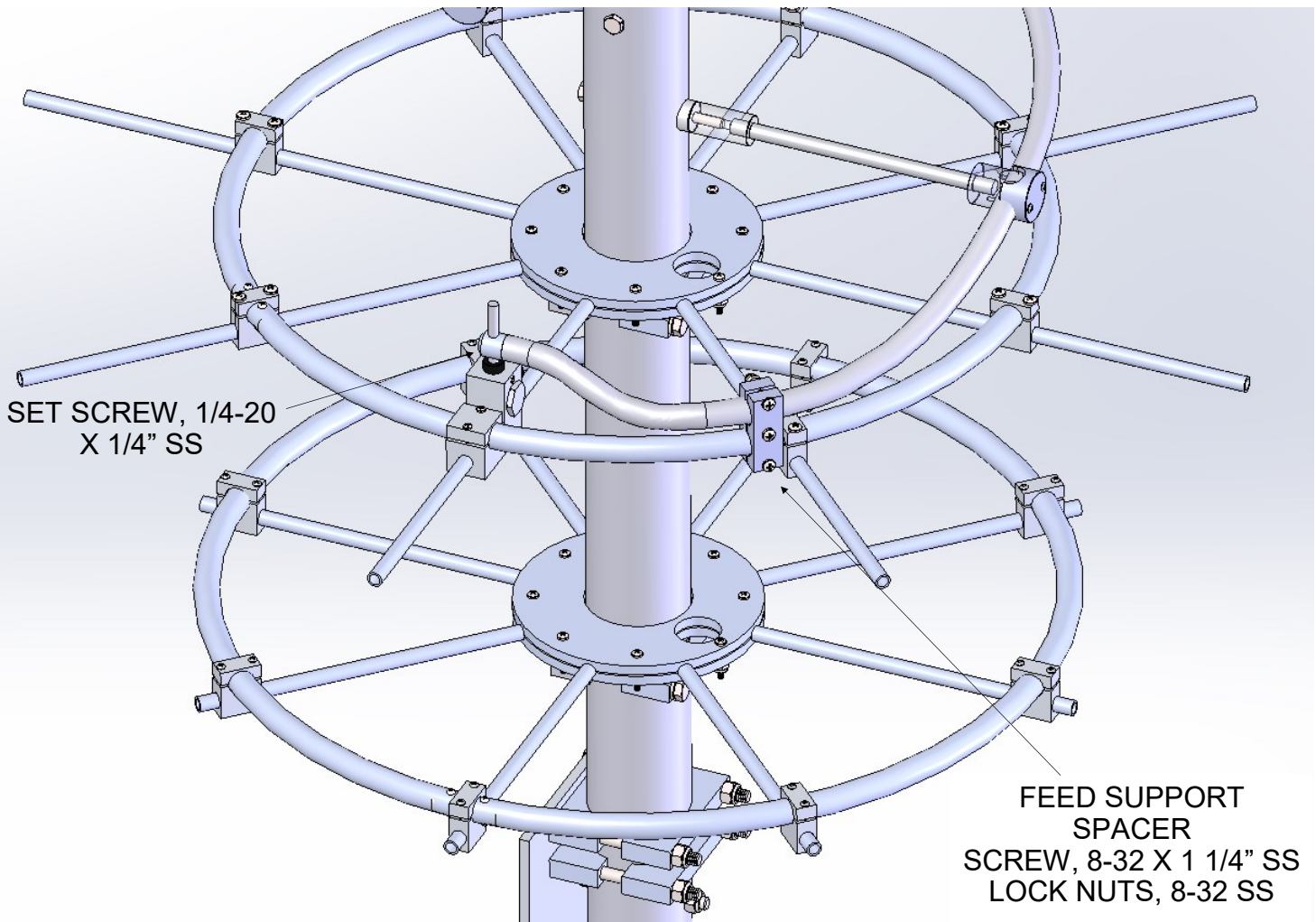
The 195-225-8 helical antennas have been pre-assembled and tested, so look for the couplings for connecting the helix tubes. Use zinc paste at these connections. Align the boom section and carefully slide the front boom section into the swedge section of the rear boom section and add the hardware. Carefully flex the helix tube together and insert the coupler into both ends of the helix tubes and add the hardware.

Be sure to tighten boom joint hardware as to remove any clearance from the boom swage sections.

195-225-8 REFLECTOR ASSEMBLIES



120-150-9 ASSEMBLY MANUAL



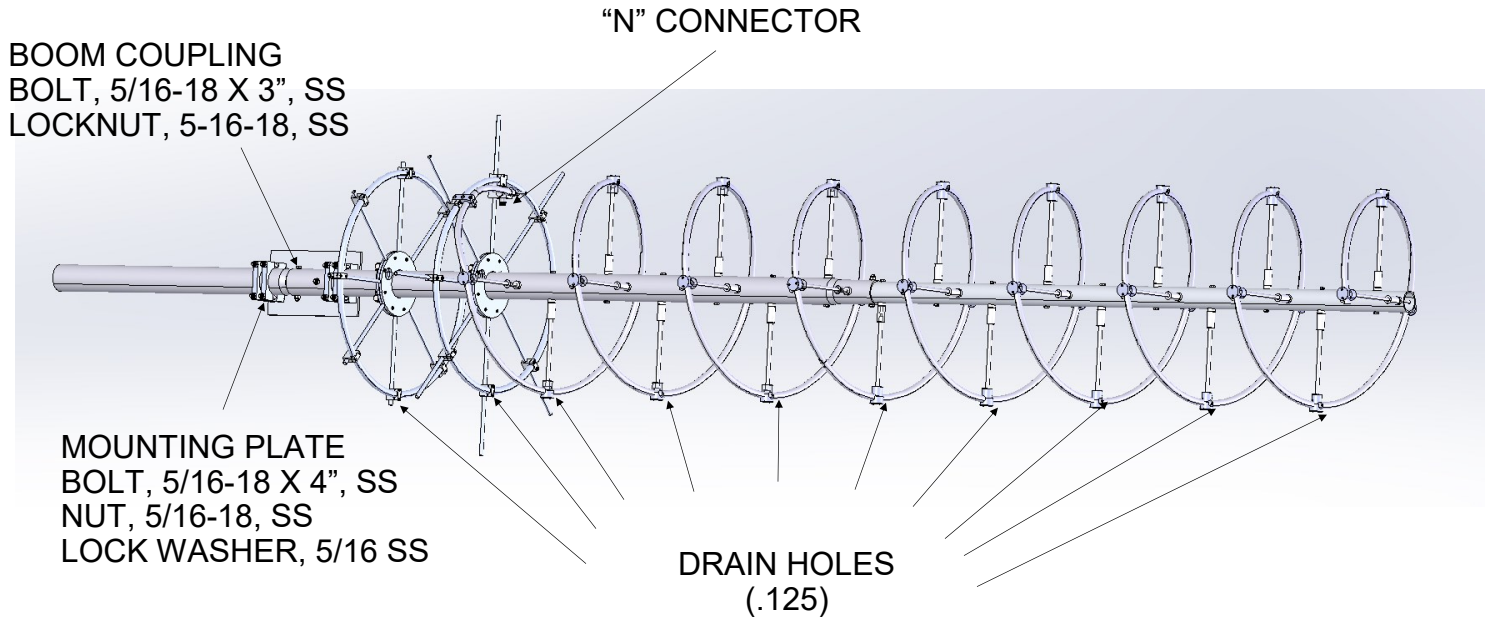
All 195-225-8 helical antennas have been pre-assembled and tested, so look for any tune up marks for positioning the feed support spacers.

Carefully flex the feed end of the helix tube over the feed post, be sure to get the feed tube plug all the way down to the Delrin insulator, and add the 1/4-20 x 1/4" set screw and tighten. Now add the feed support spacers to the marking on the helix tube and reflector ring, add the 8-32 screws and nuts and tighten.

It is always a good idea to test each antenna with a VNA or some kind of VSWR meter.

Be sure to use zinc paste on all aluminum to aluminum connection and water proof feed and feed connectors according to your water proofing techniques.

120-150-9 MOUNTING



The proper orientation for mounting this helix would be with the feed block in the up position. This allows a drip loop for the N connector with the feed coax positioned through the ground plane assemblies and exiting to the rear of the helix. Drain holes (.125) should be added to the down side of each helix turn to avoid water build up inside each loop.

A mounting plate has been provided with 2.5 inch diameter cradles. Modify add this plate as needed to fit your mounting situation.

195-225-8 PRE-ASSEMBLED PARTS LIST

DESCRIPTION.....	QTY
FRONT BOOM ASSEMBLY.....	1
REAR BOOM ASSEMBLY.....	1
REAR BOOM EXTENSION TUBE, 2.5 X .125 X 30" SOE.....	1
INNER REFLECTOR ASSEMBLY.....	1
OUTTER REFLECTOR ASSEMBLY.....	1
FEED SUPPORT SPACER, (DELFIN).....	2
HELIX COUPLER.....	1
BOOM TO MAST PLATE, 1/4" X 4" X 4-1/2".....	1
M-CRADLE, 2-1/2"HD (M2AMC0150).....	10
PENETROX (ZINC PASTE) CUP.....	1
ASSEMBLY MANUAL.....	1

HARDWARE:

BOLT, 5/16-18 X 4", SS.....	8
BOLT, 5/16-18 X 3", SS.....	6
BOLT, 5/16-18 X 2 3/4", SS.....	2
LOCK WASHER, 5/16 SS.....	12
LOCKNUT, 5/16-18, SS.....	4
NUT, 5/16-18, SS.....	8
BOLT, 1/4-20 X 1", SS.....	2
SET SCREW, 1/4-20 X 1/4", SS.....	1
SCREW, 8-32 X 1 1/4", SS.....	3
SCREW, 8-32 X 1/4" SS.....	4
LOCKNUT, 8-32, SS.....	3
ALLEN KEY, 1/8".....	1

Note: Use penetrox or zinc paste on all re-assembled hardware.

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