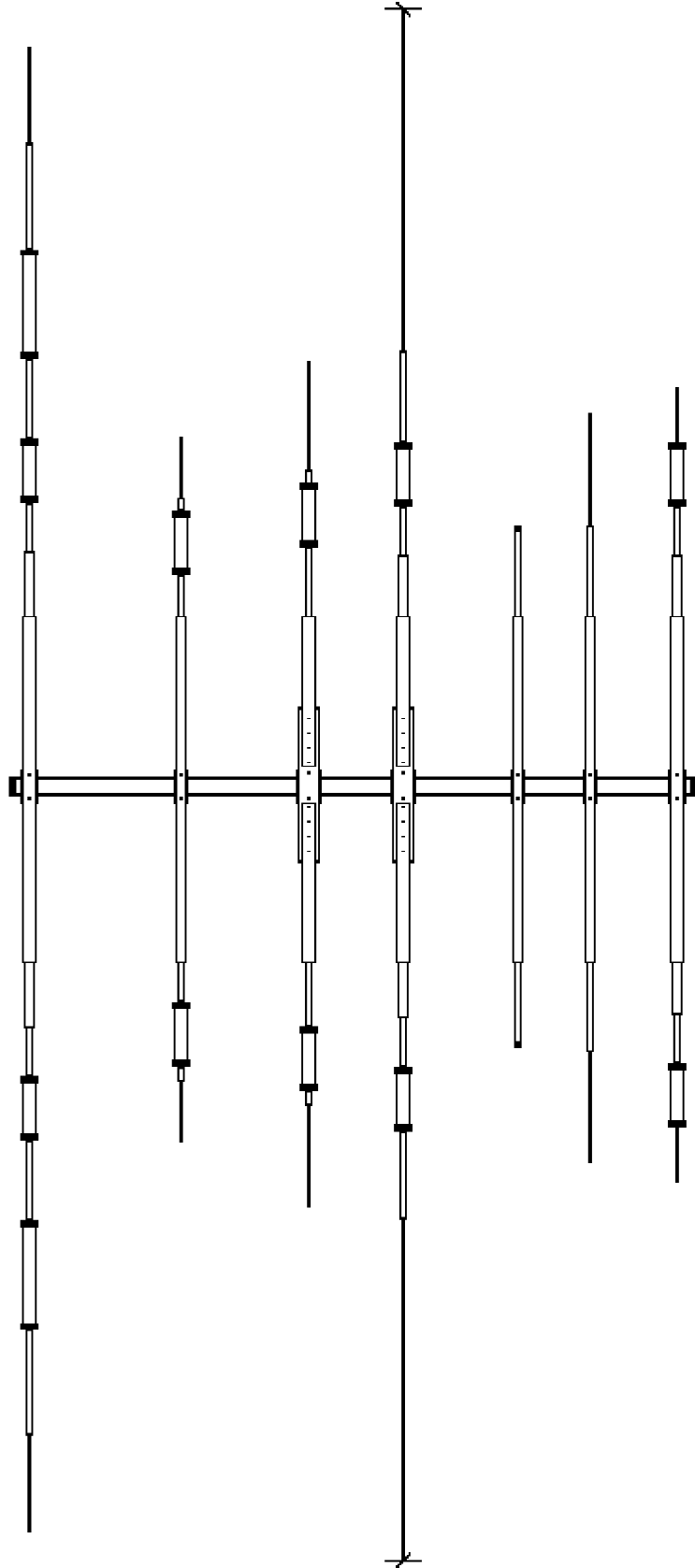


PRO-67-B Assembly Manual

PRO-67-B V.2.S



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PRO-67-B
Six Band High Performance Beam

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PRO-67-B

The high performance of your Mosley PRO-67-B can only be achieved if this beam is assembled in accordance with the instructions in this manual. Substitutions of materials or modification of design will greatly lessen it's performance. We recommend that you read through the assembly instructions and familiarize yourself with each step before assembling your antenna.

PART NUMBER	QUANTITY	ITEM
1	2	DRIVEN ELEMENT SUPPORT
2	16	A1002 INSULATORS
3	48	#10 LOCK WASHERS
4	32	10/32 X 1-1/2" MACH.SCREWS
5	16	10/32 X 1-3/4" MACH.SCREWS
6	58	#8 X 1/2" S.S. SHEET METAL
6A	6	#6 SHEET METAL SCREW
FRONT DRIVEN ELEMENT		
7	2	1-1/8" OD X .058 X 72" BROWN
7A	2	1" X .058 X 21", BROWN
8	2	7/8" OD X .058 X 24" BROWN
9	2	TRAP ASSEMBLY, 12" CODED BROWN
10	2	5/8" X .035 X 33", BROWN
BACK DRIVEN ELEMENT		
11	2	1-1/8" OD X .058 X 72" RED NOTE: THIS PIECE HAS A 1" X .058 X 58" TUBE SLEEVED INSIDE THE 1-1/8".
12	2	7/8" OD X .058 X 72" RED NOTE: THIS PIECE HAS A 1" X .058 X 36" TUBE STAKED OVER IT.
13	2	TRAP ASSEMBLY 12" CODED RED
14	2	7/8" X .058 X 17-1/4", RED
15	2	3/4" X .058 X 24", RED
16	2	5/8" X .058 X 46" SWAGED 3/8 RED
17	2	3/8" X .049 X 72", TAPPED
18	8	1/8" RADIALS
19	2	5/16-18 X 1" TH SCREW
20	2	5/16" LOCK WASHER
21	2	5/16" WASHER
22	2	3/8" END CAP
23	13	2" U-BOLTS, 5/16-18
24	7	#48 CLAMPING BLOCK
25	26	5/16" LOCK WASHER
26	26	5/16" NUT
27	2	PHASING LINES
28		
29	2	8/32 X 1" SCREW S.S.
29B	6	#8 LOCK WASHER
29C	2	8/32 NUT

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29D		
30	6	#47 CLAMPING BLOCK
31	1	MAST PLATE
2ND DIRECTOR		
32	1	1-3/8" X .058 X 72", BLUE
33	2	1-1/4" X .058 X 72", BLUE
34	2	1-1/8" X .058 X 20", BLUE
34A	2	1" X .058 X 12", BLUE
34B	2	7/8" X .058 X 11-1/2", BLUE
35	2	12" TRAPS, BLUE
36	2	7/8 X .058 X 34-5/8", BLUE
36A	2	TRAPS, 18" COLOR CODED BLUE
36B	2	5/8" X .058 X 46", SWAGED TO 3/8"
36C	2	3/8" X .049 X 55" END TIP, BLUE
37	8	5/8" CAPLUG
REFLECTOR		
38	1	1-3/8" X .058 X 72" YELLOW
39	2	1-1/4" X .058 X 72", YELLOW
40	2	1-1/8" X .058 X 26", YELLOW
40A	2	1" X .058 X 26"
40B	2	7/8" X .058 X 18", YELLOW
41	2	TRAPS, YELLOW
42	2	5/8" X .035 X 15", YELLOW
1ST DIRECTOR		
43	1	1-1/8" X .058 X 72", WHITE
43A	2	1" X .058 X 72", WHITE
44	2	7/8" X .058 X 29", WHITE
45	2	TRAP 12", WHITE
45A	2	5/8" X .035 X 14", END TIP, WHITE
10 METER REFLECTOR		
46	2	3/4" CAPLUG
47	1	1" X .058 X 18", BLACK
48	2	7/8" X .058 X 72", BLACK
49	2	3/4" X .058 X 41", BLACK
15 METER REFLECTOR		
50	1	1" X .058 X 18", GREEN
51	2	7/8" X .058 X 72", GREEN
52	2	3/4" X .058 X 42", GREEN
53	2	5/8" X .035 X 46", GREEN
BOOM		
54	1	2" BOOM SECTION, YELLOW
55	1	1.768 X .120 X 24", SPLICE, YELLOW
56	1	2" BOOM SECTION, YELLOW/BLACK

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57	1	1.768 X .120 X 48", SPLICE, BLACK
58	1	2" BOOM SECTION, BLACK/GREEN
59	1	1.768 X .120 X 24", SPLICE, GREEN
60	1	2" BOOM SECTION, GREEN
61	10	1/4-20 X 2-1/2" BOLT
62	10	1/4-20 LOCK WASHER
63	10	1/4-20 NUT
64	2	2" END CAPS
65	2	1-1/8" PLUGS
65A	2	1" PLUGS
66	2	#1021 SOLDER LUG
67	1	WARRANTY CARD
68	1	INSTRUCTION MANUAL
69	3	PENATROX
70	1	DEBURRING NOTICE
71	1	WARNING NOTICE

ASSEMBLY

< > Start by grouping all element sections and traps according to color code.

DEBURRING

< > MAKE SURE that before attempting to sleeve ANY of the pieces of tubing together you check to see that all tubing pieces are DEBURRED!

In building the antenna we have removed the majority of the burrs, however, due to the number of pieces of tubing, the cost of labor, the time consumption; some pieces may still have a few remaining burrs. Double check the pieces before trying to put them together!

The tubing Mosley uses is made for us and the telescoping tolerances are very close. If you would try and force a piece of tubing to sleeve, which is not deburred, it will SEIZE. If this would happen you aren't going to get them apart.

This is a beautiful beam, we have put a lot of time and pride into it, take a few minutes and check the pieces.

NOTE: PENATROX, an anti-corrosion compound, **should be applied in a light layer** between coupled sections of tubing to prevent formation of high resistance and seizing of aluminum.

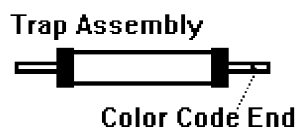
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CAUTIONS

< > In an attempt to keep the weight of the antenna down to a minimum, we are using a .035 wall on the small, single end tips. In their area of use, they are as strong as a heavier-walled piece. However, WHEN SECURING WITH THE #8 STAINLESS SHEET METAL SCREW, DON'T OVER TIGHTEN! Seat the screw flush with the tubing and stop.

< > CAUTION: Trap Assemblies are color coded on one end of the trap tubing. THIS COLOR-CODE SHOULD ALWAYS GO TOWARD THE BOOM. INSERT TOWARD THE CENTER. REVERSAL OF THE TRAPS WILL CAUSE HIGH S.W.R. AND OTHER MALFUNCTIONS.

< > Mark the color-coded ends of the traps by placing masking tape on the metal trap cover and note the side and color on the trap. This will solve any problems if the color code comes off when sanding or placing the penatrox on the trap tubing. THE TRAPS CAN GO INTO THE 7/8" CONNECTING PIECE EITHER WAY.



< > The various pieces of tubing used on the antenna elements are also color coded on one end. This end always goes in toward the boom.

< > Deburr tubing and use the enclosed PENATROX.

< > Mount All elements on TOP SIDE of Boom!

< > Review the drawings and READ the instructions before starting assembly.

< > Follow all safety procedures in assembly and raising of this beam. When installing the antenna, make sure the tower, all other associated hardware, and components are rated correctly for this antenna!

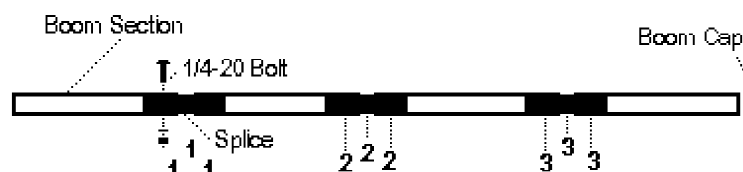
< > Avoid power lines and other electrical hazards!

< > Make sure you and the people helping you use good judgement and follow all safety rules which would apply.

ASSEMBLY OF BOOM

< > Insert one end of the 48" center boom splice (part 57) into one end of the boom section (part 56) marked #2 in BLACK. Align the numbers on the splice and boom section so they show 2, 2, this will position the holes correctly, and secure with screws (part 61), lock washers (part 62) and nuts (part 63). Insert opposite end of splice into the remaining section boom marked #2 in BLACK (part 58), and secure with hardware (parts 61, 62, 63).

< > The remaining boom sections (54 and 60), can now be attached to the center section at either end. Using



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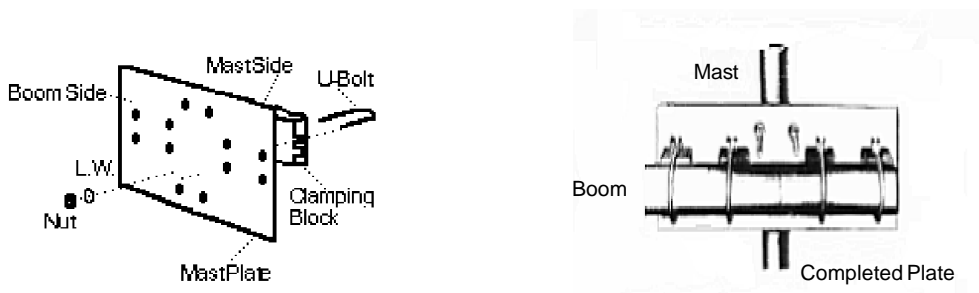
the smaller splices, align the numbers 1, 1, 1, which will position the holes correctly and secure with hardware (parts 61, 62, 63). Repeat this using the 3,3,3 for the last boom joint.

- < > Place caplug (part 64) on each end of boom.
- < > Check that all bolts are tight, and have lock washers in place.

ASSEMBLY AND PLACEMENT OF MAST PLATE

< > Place the mast plate on the boom (Part 31) between the RED COLOR CODE on the boom for the BDE, but between the BROWN COLOR CODE of the Front Driven Element, (FDE).

< > Place 4 #47 clamping blocks (part 30) between the boom and the mast plate and secure with the four 2"



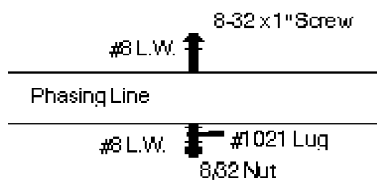
U-bolts (part 24).

< > Secure the U-bolts with lock washers and nuts (parts 26, 27).

DO NOT TIGHTEN AT THIS TIME. ONCE ALL ELEMENTS ARE IN PLACE, THE MAST PLATE WILL NEED TO BE MOVED BETWEEN THE RADIATORS TO GET THE BEST BALANCE POINT.

ASSEMBLY OF PHASING LINES

< > These two lines (part 27) are used between the Front Driven Element and the Back Driven Element.. These lines connect the two driven elements together, putting them in phase with each other.



< > Place the 8/32 x 1" screw, lock washers, and nut to each side of the phasing lines. (Parts 29, B, C). Set aside until needed.

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REVIEW OF DRIVEN ELEMENTS

NOTE: There are several adjustments to the antenna.

The Back Driven Element, color-coded RED, controls 12, 17 and 40. (The only pre-drilled adjustment on this element is the 40 meter end tips. However depending upon the installation the 12 and 17 meters can be adjusted. Contact our engineering department if you have a problem with the center frequency on these bands.)

The Front Driven Element, color-coded BROWN, controls 10, 15, 20. You are provided with three choices for 10, 15 and 20 on the inner 7/8" tubing. 1. Code I = cw, 2. Code II phone & cw, 3. Code III Phone.

The Front Driven Element, color-coded BROWN. This element also has an adjustment to the 5/8" end tip when using the CODE III setting on the inner 7/8" tubing.

The Yellow Reflector 5/8" End Tip has two settings: 1) 9-1/2" exposed 5/8" for CODE I, II: 2) 9" exposed 5/8" when using the CODE III setting.

The Blue Director Inner 7/8" tubing has two settings 1) CODE I and 2) CODE II & CODE III. The Blue Director End Tip has 3 settings for use on 40 Meters.

40 Meters: The first adjustment that can be made to the 40 meter radiator, is the end tip. (The RED 3/8" end tip for the BACK DRIVEN ELEMENT.)

There are 3 settings provided at 47", 49" and 57". (The director has corresponding settings to match the Radiator. These pre-drilled settings will be good at the test height of 45' to 65'. (The CODE II setting should fall between 7,070 and 7,270, depending on the height above ground both real and artificial. Also pay attention to what of a resonate nature is above or below the antenna. Since the "Q" of this antenna is very high and it is working on "6" bands it needs some room away from other objects to operate.)

Before installing the antenna at its final location, you can determine if the setting you have chosen is adequate for your installation and operating habits by following the test procedure to follow in the text.

When adjusting the antenna near to the ground, plan for a 70 to 125 kHz movement higher in frequency due to coupling with ground. Both real and artificial!

When assembling the Back Red Radiator start by putting the 40 meter radiator end tip in the 47" position and the director end tip in the 37" Code II setting. This will give you a good starting point to adjust from IF necessary.

Locate the center frequency at your installation. If the frequency is lower than you wish, you will need to shorten the end tip. If it is higher in frequency, you will need to lengthen the end tips. In our testing we have found that the pre-set setting will give you very good performance.

REFER TO DRAWINGS FOR PRE-SET dimensions for CODE I, II and CODE III for 40 meters.

10, 15, 20 Meters:

The second set of adjustments affects 10, 15, and 20 meters.

- 1) The Yellow Reflector 5/8" end tip;
- 2) The Blue inner Director 1-1/8" tubing;
- 3) The Brown front driven element 7/8" inner tubing. This piece has three pre-drilled settings, CODE I, CODE II, CODE III.
- 4) The Brown front driven element end tip controls 20 meters and has 2 choices.

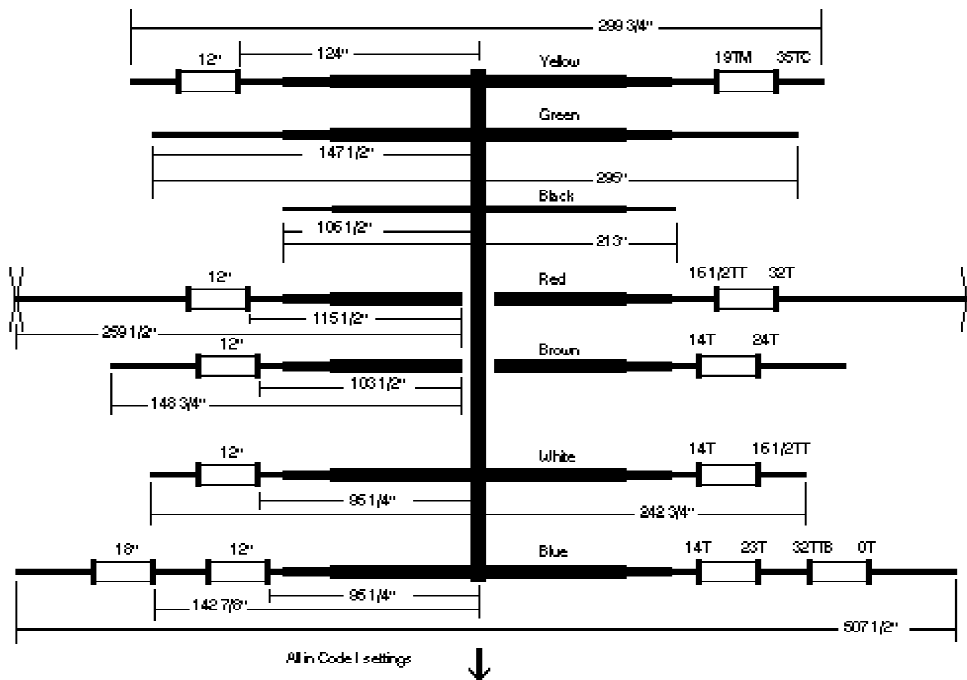
When selecting the Code settings, use the same Code dimensions throughout the entire antenna. DO NOT mix settings. The pre-drilled CODE II setting covers from 14,315 to 14091 at or below 1:5 to 1. This has been the most requested area of the band in which to configure the 20 meter section.

This element doesn't need to be as high above ground to verify as the 40 meter end tip since it does not couple with ground as readily. The CODE II setting on this element is centered at 14,187.

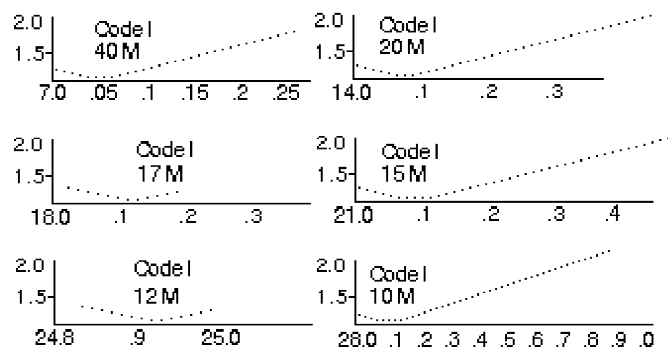
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Review the SWR charts and the CODE setting diagrams for the various settings and use the appropriate setting to give you the desired results.

Code I Settings

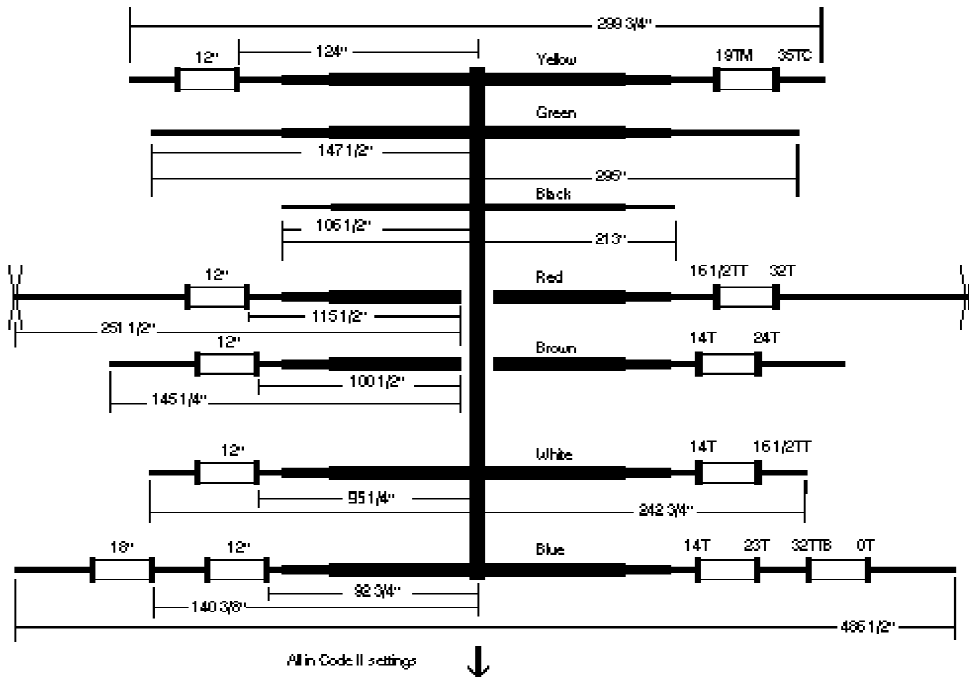


Typical SWR Curves for Code I

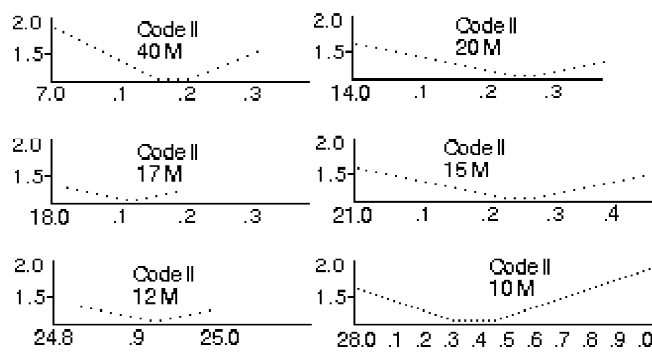


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Code II Settings

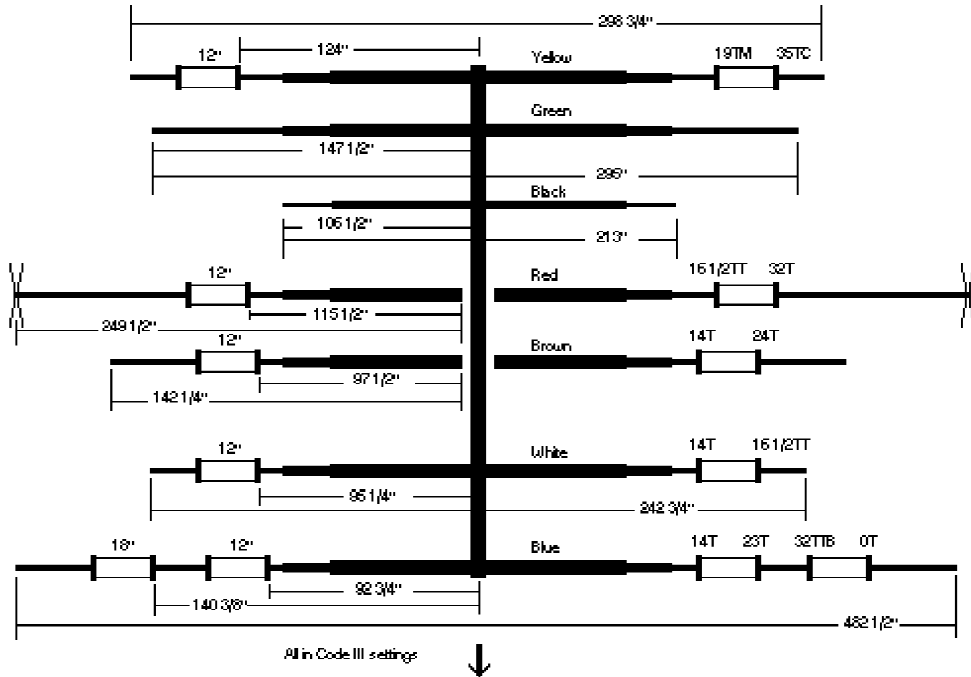


Typical SWR Curves for Code II

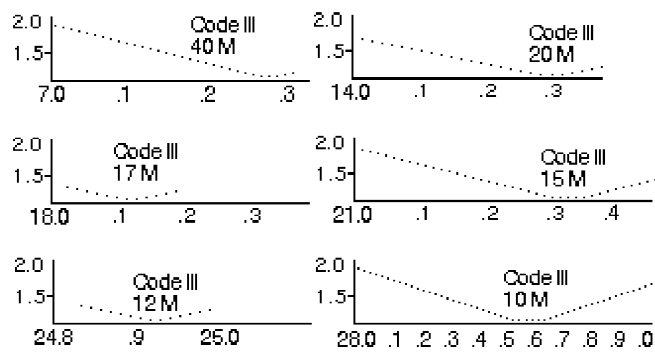


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Code III Settings



Typical SWR Curves for Code III



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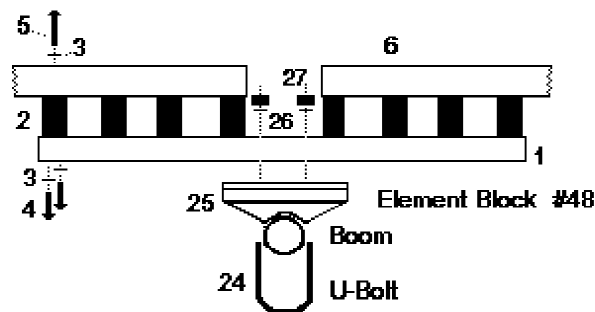
ASSEMBLY OF DRIVEN ELEMENTS

< > **FDE = Forward Driven Element, Color-Coded BROWN.**

< > **Loosely** install 8 plastic insulators (part 2) on the rectangle support plate (part 1) with lock washers and screws (parts 3,4). Place plastic caps (part 65) on the inboard end of the element sections (part 7) color coded BROWN. Place one element section into the "v" on the insulators (part 2) so that the screw hole on the outboard end is facing DOWN.. (This is necessary to assure proper position of trap assemblies which are provided with breather holes and should always face DOWN).

< > Insert screw (part 5) through lock washer (part 3), the small hole on one end of the phasing line through the element (part 6) and into the insulator (part 2). Insert screw (part 5) through the lock washer (part 3), element (part 7) and into the insulator (part 2). **DO NOT OVER TIGHTEN SCREWS INTO INSULATOR BLOCKS....**

< > Place the other element section (part 7) color coded BROWN over the opposite side insulators (part 2), insert screw (part 5) through lock washer (part 3), through the corresponding hole on the phasing line (part 27), the element



(part 7) and into the insulator (part 2).

< > Insert screw (part 5) through lock washer (part 3), element (part 7) and into the insulator (part 2). Tighten all screws in the element supports, BUT do not over tighten screws. Tighten enough to set lock washers.

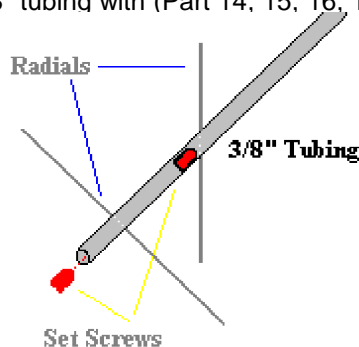
< > Continue assembly by inserting the BROWN coded end of the remaining sections and trap into the corresponding end of the next element coded brown. (Parts 7, 8, 9, 10, 37) Secure elements with screw (part 6).

ASSEMBLY OF RED BACK DRIVEN ELEMENT

< > Repeat the above procedure on the BACK RED DRIVEN ELEMENT, following the RED color code.

< > The difference between the RED and BROWN radiators is that the RED has more element sections in the element and has radials on the end tips. Also note that the ends of the "RED" 3/8" tubing is tapped to accept a 5/16-18 set screw.

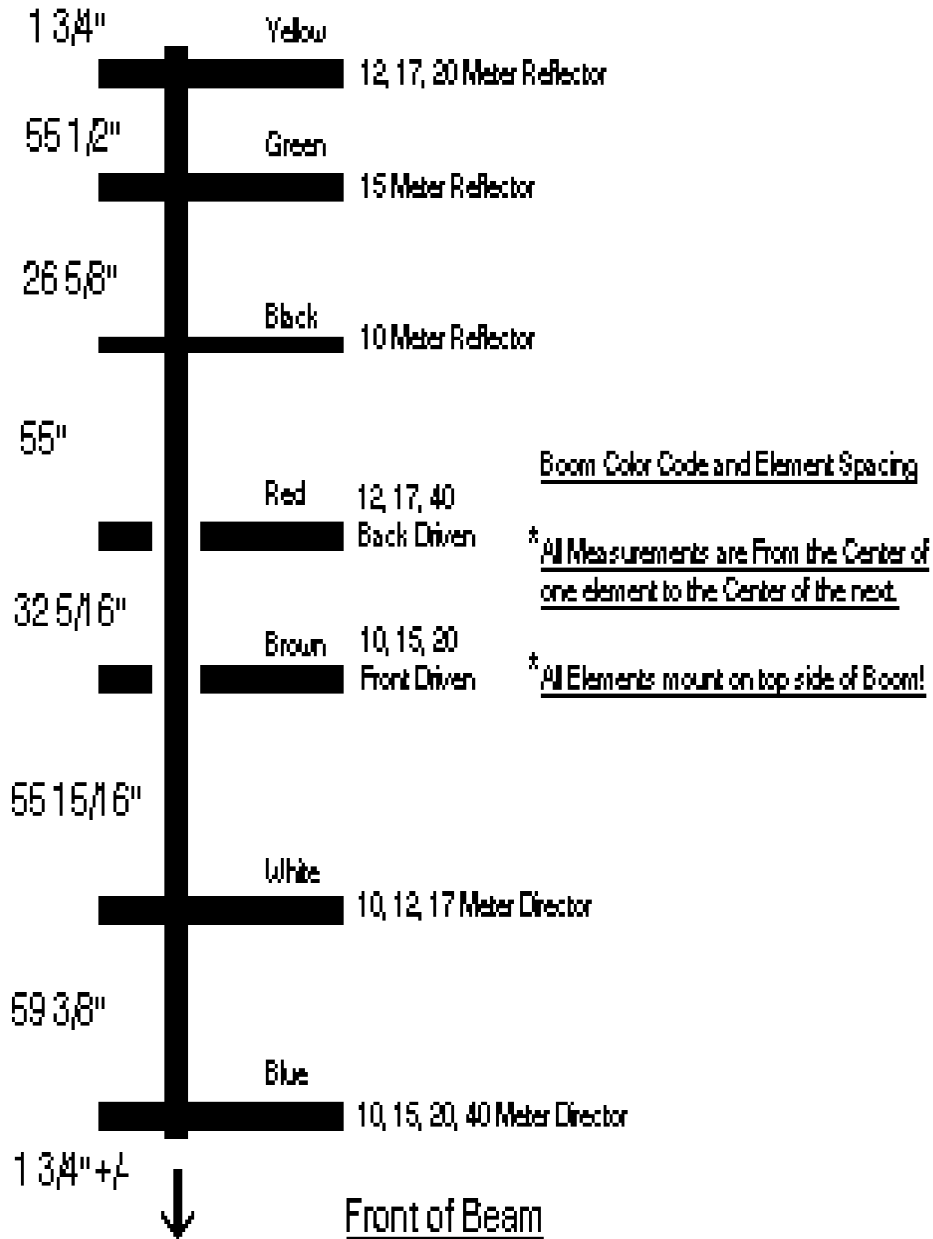
< > Add the remaining end sections and choose the setting you wish for 40 meters on the last end tip section of 3/8" tubing. Attach the 2 end radials to the 3/8" tubing with (Part 14, 15, 16, 17, 18, 19, 20, 21). Arrange evenly on the element so the radials form an "+".



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PLACING FDE/BDE ON BOOM

< > Locate the BROWN color code for the FDE on boom. Place assembled FDE over color code and insert #48 clamping block (Part 24) on boom between FDE and boom. Place U-Bolt (Part 23) around boom, through clamping block and element support. (Part 1).



< > Secure U-bolt with lock washers and nuts. (Parts 25, 26).

< > Tighten down element to boom, but don't completely tighten until all elements are aligned and are parallel to each other on boom.

< > Place BDE on boom in the same manner as FDE.

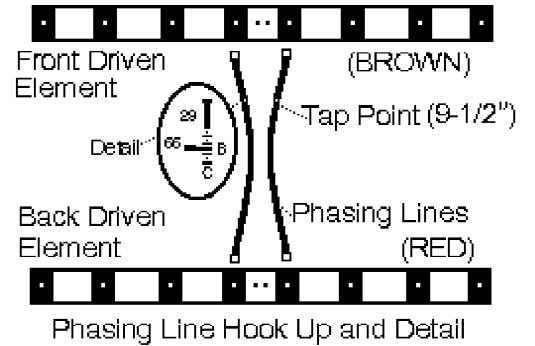
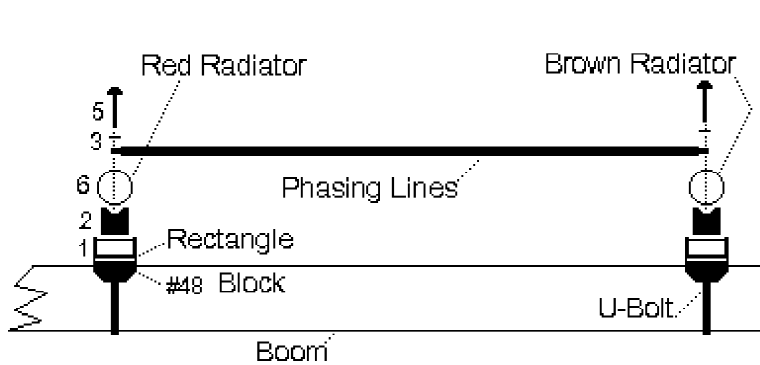
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PLACEMENT OF PHASING LINES ON DRIVEN ELEMENTS

< > Note: The BEND IN THE PHASING LINES GO IN TOWARD EACH OTHER OVER THE BOOM. This will ensure that the lines are clear of the mast, however the phasing line closest to the mast will run near the mast.

< > Lift the screws on the inner insulator blocks first on the front driven element (Note the BROWN color on the phasing lines) and place the color coded end of the phasing line on top of the element and secure with the lock washer and 10/32 screw. Refer to drawing.

< > Repeat this procedure to the opposite side of the FDE.



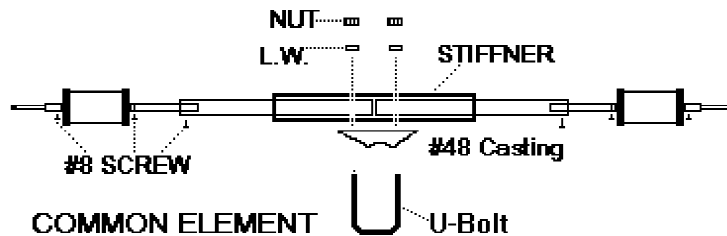
< > Repeat this for the back driven element.

< > Connect phasing line to BDE as was done on FDE.

ASSEMBLY OF SINGLE TRAPPED ELEMENTS

< > Assembly of the trap reflector, color coded YELLOW.

< > Insert a YELLOW coded element section (Part 38) on each end of the center section of (Part 39) and align the large holes, KEEPING end element holes for next section pointing down.



CAUTIONS

< > In an attempt to keep the weight of the antenna down to a minimum, we are using a .035 wall on the small, single end tips. In their area of use, they are as strong as a heavier-walled piece. However, WHEN SECURING WITH THE #8 STAINLESS SHEET METAL SCREW, DON'T OVER TIGHTEN! Seat the screw flush with the tubing and stop.

< > CAUTION: Trap Assemblies are color coded on one end of the trap tubing. THIS COLOR-CODE SHOULD ALWAYS GO TOWARD THE BOOM. INSERT TOWARD THE CENTER. REVERSAL OF THE TRAPS WILL CAUSE HIGH S.W.R. AND OTHER MALFUNCTIONS.

< > Mark the color-coded ends of the traps by placing masking tape on the metal trap cover and note the side and color on the trap. This will solve any problems if the color code comes off when sanding or placing the penetrox on the trap tubing. THE TRAPS CAN GO INTO THE 7/8" CONNECTING PIECE EITHER WAY.

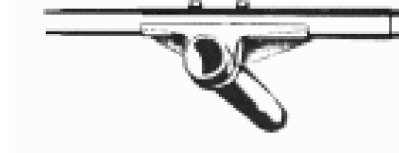
< > The various pieces of tubing used on the antenna elements are also color coded on one end. This end always goes in toward the boom. Secure with #8 Sheet metal screw.

< > NOTE: Select the correct END TIP SETTING if a choice is given.

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< > Place 5/8" end element into exposed end of trap. Place 5/8" end cap on element end tip. (Part 37)

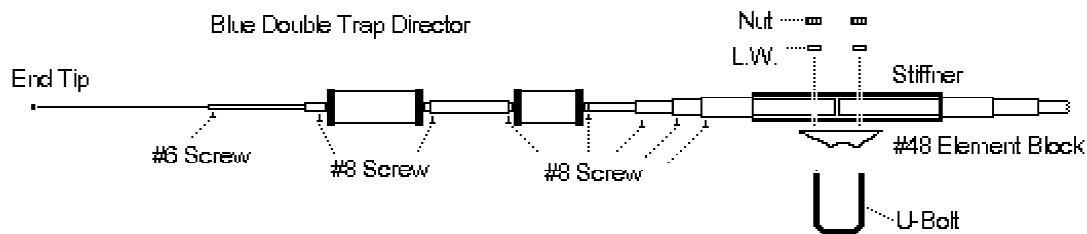
< > Place the YELLOW element on the YELLOW color coded spot on the boom. Tighten down, but remember elements will need to be checked for alignment along boom.



ASSEMBLY OF 2ND DOUBLE TRAPPED BLUE DIRECTOR

< > Insert the 1-1/4" BLUE coded element section (Part 33) on each end of the center section of (Part 32) and align the large holes, KEEPING end element holes for next section pointing down.

< > Ready to use #48 clamping block and 2" U-bolt.



< > Place #48 clamping block under center section of ELEMENT, and place U-bolt through #48 block and element center section making sure inner element sections are locked into position by U-bolt.

< > Loosely place lock washer, and nuts on U-bolt to keep it from coming out of element.

< > NOTE: Select the correct element code settings, 1. 7/8" inner. 2. 3/8" end tip.

< > Continue inserting next size of tubing color coded BLUE onto the element. Secure with #8 Sheet metal screw. (Parts 34 through 36c, 22)

< > Place BLUE color coded 12" trap onto element making sure color-coded end is pointing in (toward) the boom. Secure with #8 Sheet metal screw. Place 7/8" coupling element onto exposed end of trap.

< > Add the remaining BLUE 18" trap (part 36A) to the exposed element with the color code in (toward) the boom. (This end trap is the longer of the two traps). (Make sure trap drain holes and element screw holes are pointed down to ground side.)

< > Place 3/8" end caps on the end tip element. (Part 22).

< > Complete opposite side of driven element. Follow the same procedure.

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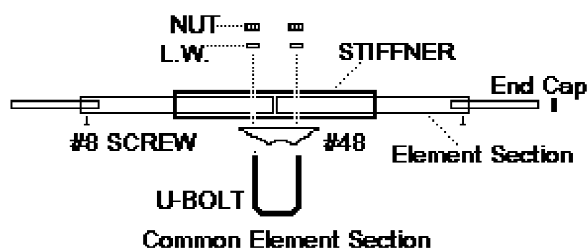
ASSEMBLY OF MONO-PARASITIC

Assembly of the 10 Meter Reflector, color coded BLACK

< > Start with the BLACK coded elements. Refer to the drawings on this element..

< > Place inner elements into larger stiffener (Parts 46, 47, 48, 49) making sure screw holes are to the ground or bottom side of the element.

< > Since these elements will be placed on inner sections of the boom, do not install the U-bolt and clamping block (Parts 23, 24, 25, 26) until you have the element over the color-coded portion of the boom which applies to that color coded element.



< > To keep the inner section of the element from moving, place a U-Bolt partially into the element center section at the point where the element extension join at the center stiffener tube.

< > COMPLETE ADDING OUTER ELEMENT SECTIONS BEFORE PLACING ON THE BOOM. MAKE SURE SCREW HOLES WILL BE POINTED DOWNWARD, THIS IS CONTROLLED BY THE CORRECT PLACEMENT OF PART 44 INTO PART 43. These parts are at the center of the element.

< > Secure element sections with #8 sheet metal screw.

< > Attach the plastic 3/4" end cap to end of the BLACK element..

Assembly of the 15 Meter Reflector, color coded GREEN

< > Follow the same procedure which was used for assembling the black element. However, the Green element will have one more piece of tubing extension.

< > Start assembly with the center stiffener and follow the GREEN color code.

< > Attach the plastic 5/8" end cap to the end of the element.

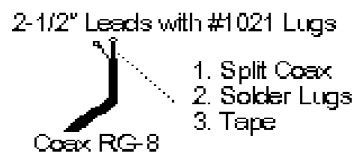
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PREPARING COAX FOR PHASING LINE HOOK UP

< > Cut insulation on coax back 2-1/2" and form the braid of the coax into a leg of the line. NOTE: (Make sure the leads are 2-1/2" long including the #1021 solder lug! This length is critical.)

< > Once the coax is in the form of a "Y", tape junction, (area where the coax stops and the two lines of the "Y" start), with a good 3-M type electrical tape. This will seal the coax from the weather.

< > Cut the insulation on the "HOT" or center of the coax line, back 1/4" and solder one of the #1021 solder lugs to the



exposed end of the center section of the coax.

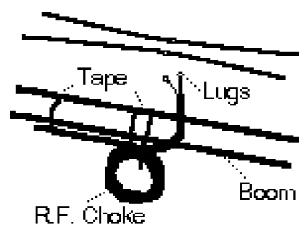
< > Before soldering the #1021 solder lug on the braided section, twist braid to ensure you have a good section of line.

< > Solder #1021 solder lug onto the braided line. Be careful not to over heat the braid line to avoid the melting of the insulation covering the center section of the coax.

USE OF RF CHOKE

< > You (may) want to insert a R.F.. Choke into the coax line to eliminate any RF on the coax line. (This choke is not a requirement.)

< > To make the choke, coil the feed line (10 turns in a 10" diameter) right after the point where the coax attaches to the phasing lines. Tape the coil in three places to keep the coil in position and then tape the completed coil to the under side of the boom directly under the feed point on the phasing lines. **DO NOT USE A BALUN!**



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PLACEMENT OF COAX TO PHASING LINES

< > Locate the pre-drilled hole in the phasing line to the opposite side of the mast plate. The hole is 9 1/2" back from the BROWN front radiator. This side of the phasing line will receive the center or "HOT" section of the coax. This is



important because it keeps the center of the coax the furthest from ground.

< > Place the #1021 Solder Lug with the "Center of the Coax" on the bottom side of the phasing line. Secure it to the phasing line with the 8/32 x 1" screw, 3 lock washers and 8/32 nut.

< > (Note: Place a lock washer on the screw first then put the screw through the phasing line. Place another #8 lock washer on the screw. Now place the #1021 solder lug with the "Center coax lead" onto the screw. Place the last lock washer and the 8/32 nut on the screw.). (Parts 29, 29b, 29c).

< > Tighten down screw keeping #1021 solder lug and coax lead pointing in over and toward the center of the boom.

< > Once the line is secure tape over the screw and down over the bottom side of the connection. This will protect the connection from the weather.

< > Repeat the above procedure with the braided side of the coax.

Re-check ALL CONNECTIONS

- < > Make sure all hardware is tight and all color codes were followed.
- < > Make sure the penatrox was used.
- < > Place any remaining end caps or boom caps in place.
- < > Check the coax attachment points.
- < > Review the drawings with end tip and inner dimensions.

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SUGGESTIONS

Before hauling your antenna all the way up a tower, check it at least 10 to 12 feet off the ground. In checking the antenna, DO NOT put the reflector on the ground and point the antenna up in the air. Place the antenna on a ladder, temporary pole, or to the side of your tower in the horizontal plane. This will enable you to get an over view of the antenna. That is, if you're showing 2:1 everywhere, you have a problem. However, if you are seeing the antenna trying to dip, but not going completely flat and/or the frequency is 50 to 80 kHz. lower in the band; the antenna is correctly assembled. Remember at this low height you are coupling with ground. That can be both real ground and artificial ground.

Due to the high "Q" of the antenna it will couple with ground. Artificial or real. This type of check will allow you to see that the antenna is trying to dip and does possess a SWR curve. However, due to its nearness to ground or other resonant objects this curve will be shifted lower in frequency and not totally bottom out to 1:1.

A problem with the assembly of the antenna would be indicated if all bands are showing in excess of 2:1 with no dip of any kind. A coupling problem would be indicated when only one or two bands are unusual and the remainder are within specifications.

WATCH OUT FOR ARTIFICIAL GROUND

Artificial ground is presented to an antenna through various means. Guy wires up under the antenna, roof top, other resonant antennas near by are the most common.

This would cause a disruption of a few bands and also degrade the front to back ratio.

The PRO-67-B is doing so much for one antenna, it needs to have a clear area in which to perform.

The antenna should be at least a 1/4 wave length from any artificial ground at the lowest operating frequency of the antenna. In the case of the PRO-67-B the lowest operating frequency is 40 meters or 7 MHz. With this in mind the antenna should be at least 34 feet away from any artificial ground. Remember this is a minimum, in a commercial installation this minimum would be 1/2 wave length.

To break up guy wires use an insulator ever 4' for the first 32', (8 insulators per leg), or use non metallic guys. This will give a non resonant length under the antenna and will allow the PRO to perform as shown in our specifications. If these procedures are ignored the antenna will still work very well, however, there will be some trade off in bandwidth, resonance and front to back.

Due to the Q feed being above ground, avoid attaching the coax line coming in from the PRO to a common switch which has other antennas with the same frequencies as the PRO or a harmonic to the PROs frequencies.

A high "Q" antenna needs to have a proper installation to get the most out of the system.

Doing these simple checks and following these basic rules concerning installation can save you and your crew a lot of frustration. If you think you have a problem, would like to discuss your installation or something is going on you don't understand, please call us, 1-636-583-8595 we will be glad to help. We want you to be as happy as we are that you chose MOSLEY!