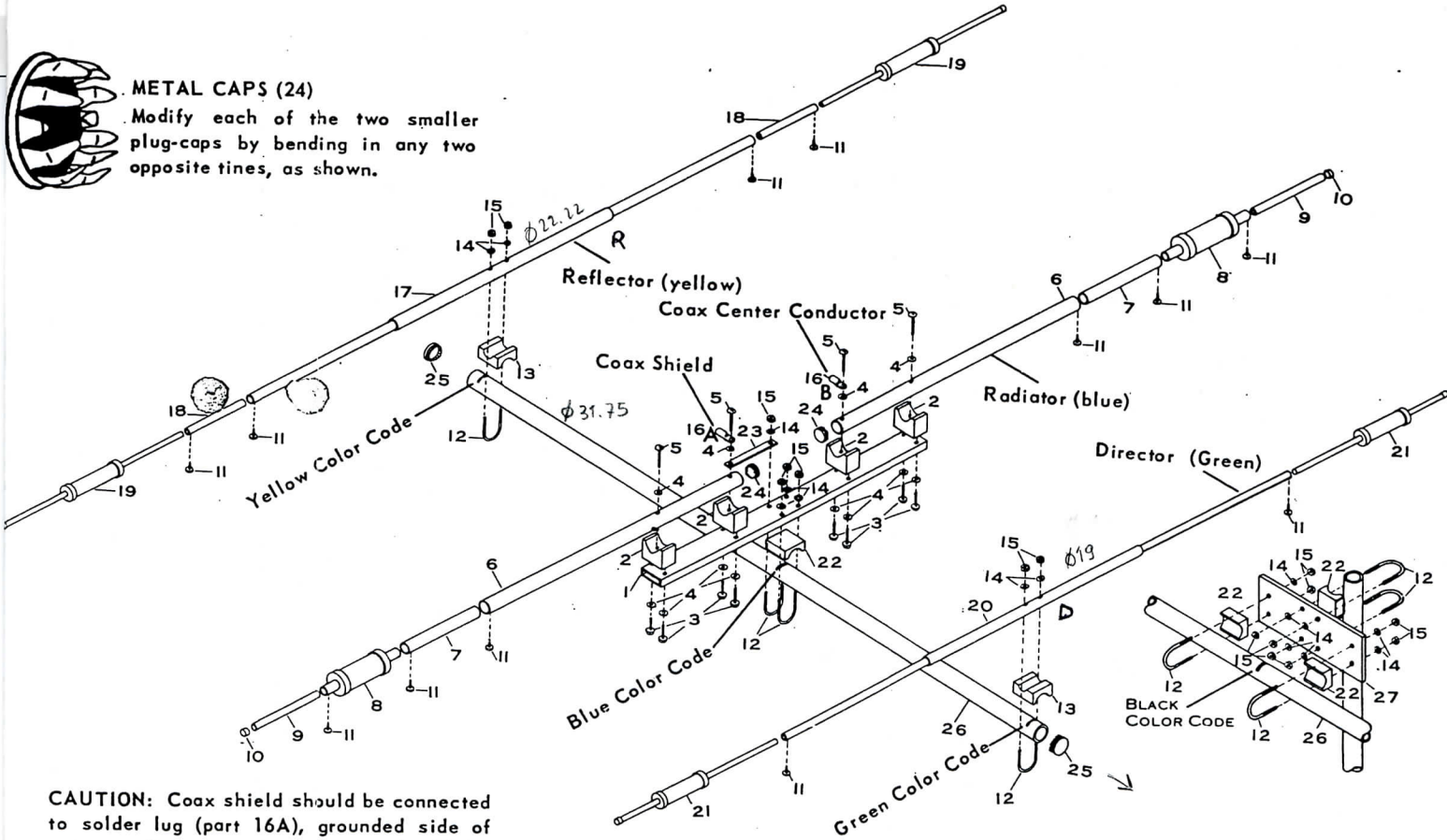




METAL CAPS (24)

Modify each of the two smaller plug-caps by bending in any two opposite tines, as shown.



CAUTION: Coax shield should be connected to solder lug (part 16A), grounded side of antenna; Coax center conductor should be connected to solder lug (part 16B).

Assembly

CAUTION: Coil assemblies are color coded on one end only; this color code should always be nearest the boom. Reversal of traps will cause high SWR and other malfunction of beam. The coding on the adjusting holes may be determined from the frequency chart. Adjusting holes do not appear on the reflector trap assembly (yellow) and radiator trap assembly (blue), but on elements sections (parts 18&7).

All trap assemblies are provided with breather holes and should face down.

The reflector and director trap assemblies have a 1/2" plastic cap on one end, indicating that it is the outside end of the element and a moisture seal. **DO NOT REMOVE!**

Begin assembly by grouping all elements and coil sections according to color code. For proper matching, RG8/U 52 ohm coax is recommended.

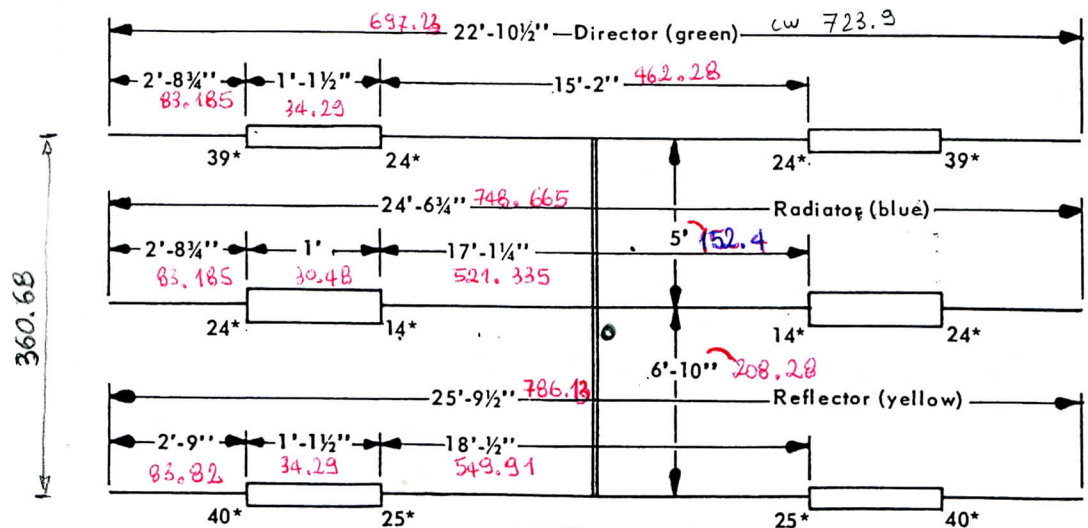
NOTE: This Mosley beam is supplied with an anti-corrosion compound that prevents the formation of high resistance corrosion. Apply compound between coupled tubing sections. Elements will not telescope without it.

RADIATOR ELEMENT ASSEMBLY- Color Coded Blue

Loosely install insulator (part 2) to element support (part 1) with screw and lockwasher (parts 3 and 4). Place element section (part 6) into "V" of insulator (part 2) so that screw hole on blue color coded end of element (part 6) is facing down. This is important to assure proper position of the coil assemblies that are provided with breather holes and should face down. Place screw (part 5) through lockwasher (part 4) and secure to outermost insulator (part 2). Place screw (part 5) through solder lug (part 16A), lockwasher (part 4), ground strap (part 23), element (part 6) and secure to insulator (part 2). Insert screw (part 5) through solder lug (part 16B), lockwasher (part 4), element (part 6) and secure all insulators. Insert blue color coded end of element section (part 7) into corresponding color coded end of element (part 6). Align holes according to frequency chart and secure with screw (part 11). Insert blue color coded end of trap assembly (part 8) into element section (part 7) and secure with screw (part 11). Insert blue color coded end of element section (part 9) into end of trap assembly (part 8) and secure with screw (part 11). Place plastic cap (part 10) over ends of element sections (part 9) and press metal cap (part 24) into inboard ends of radiator element (part 6).

Part List

MOSLEY PART NO.	QUAN.	PART NO.	DESCRIPTION
1001	1	1	Element support
1002	4	2	Insulators
1003	8	3	10-32 x 1 1/4" long, screws
1004	12	4	No. 10 Lockwashers
1005	4	5	10-32 x 1 3/4" long, screws
1006	2	6	1" OD x .058 wall, Element (coded blue)
1007	2	7	7/8" OD x .058 wall, Element (coded blue)
1008	2	8	Trap Assembly (coded blue)
1015	2	9	5/8" OD x .035 wall, Element (coded blue)
1016	2	10	5/8" Coplugs
1113	12	11	No. 6 x 3/8" long sheet metal screw
1018	8	12	U-bolts
1061	2	13	No. 41 Clamping blocks
1014	16	14	1/4" Lockwashers
1020	16	15	1/4-20 Nuts
1021	2	16	5/16" Solder Lug
1344	1	17	3/4" & 7/8" OD x .058 wall, Element (coded yellow)
1283	2	18	5/8" OD x .058 wall, Element (coded yellow)
1275	2	19	Trap assembly (coded yellow)
1346	1	20	5/8" & 3/4" OD x .058 wall, Element (coded green)
1278	2	21	Trap assembly (coded green)
1266	5	22	No. 44 Clamping blocks
1034	1	23	Ground strap
1036	2	24	1" Metal caps
1267	2	25	1 1/4" Metal caps
1280-1	1	26	Boom 1 1/4" x 12' long
1030	1	27	Mast plate

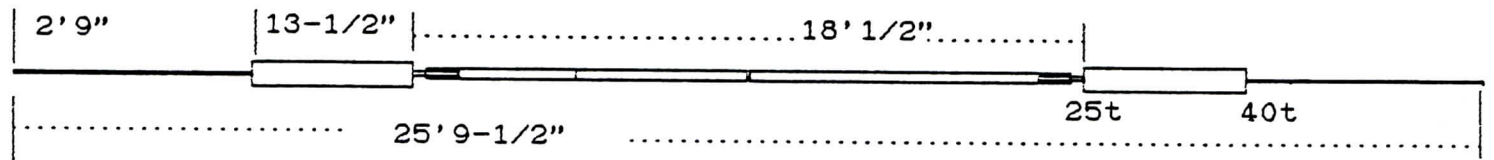


Settings are for Code II, add 10 1/2" to center dimension for Code I.
 * Indicates number of coil turns.

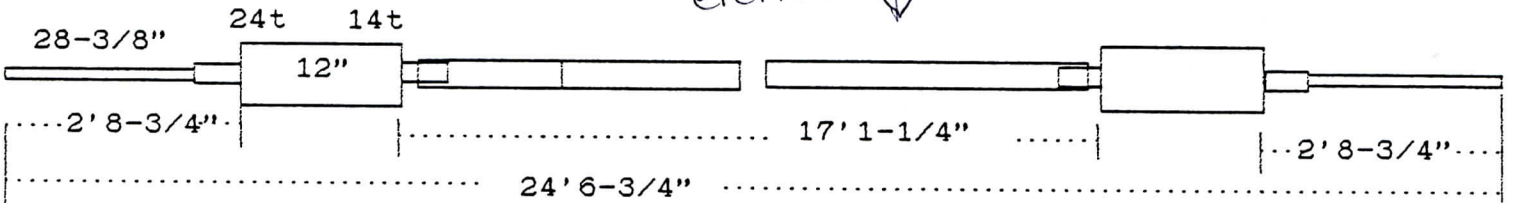
r 432

MP-33-N

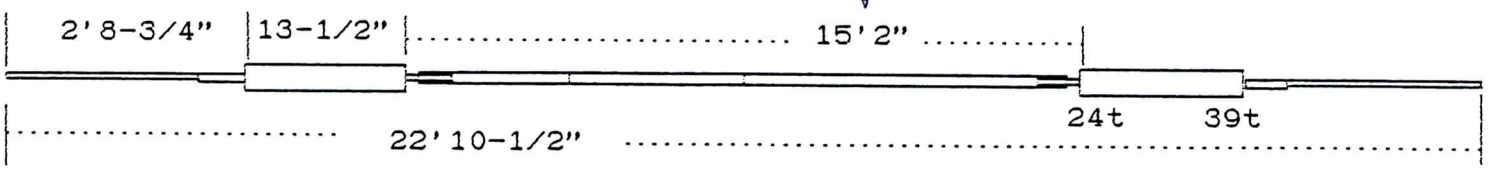
REFLECTOR YELLOW



6' 10" -
Center-to-center
between
elements



5' -



DIRECTOR GREEN

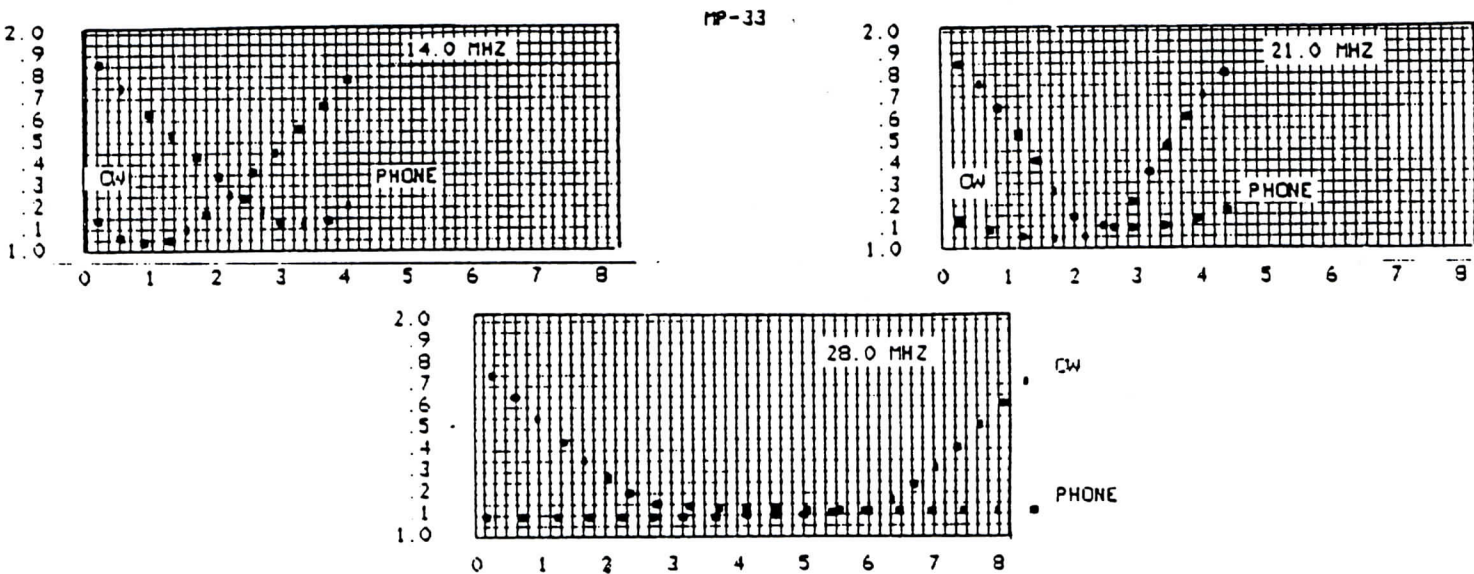
Dimensions shown are for Code II, the phone setting.

: DO NOT MIX SETTINGS. IT WILL CAUSE POOR PERFORMANCE.

To order replacement parts from the instruction sheet, refer to the model of antenna and part number.

FREQUENCY CHART				
ELEMENT	COLOR	BAND	CODE I*	CODE II**
RADIATOR	BLUE	10 Meters	28.1	28.8
REFLECTOR	YELLOW	15 Meters	21.050	21.3
DIRECTOR	GREEN	20 Meters	14.050	14.275
			*Best for CW	**Best for Phone

SWR Frequency Curves



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 this curve might be shifted lower infrequency and not totally bottom out to 1:1. This is normal.

A problem would be indicated if all bands are showing in excess of 2:1 with no dip of any kind.

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.

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 MP-33-N the lowest frequency is 20 meters or 14 MHZ. With this in mind the antenna should be at least 17 feet away from any artificial ground. Remember this is a minimum.

To break up guy wires use an insulator ever 4' for the first 16' or non metallic guys. This will give a non resonant length under the antenna and help its performance.

A sign of artificial ground will be a shift lower in frequency of the SWR curves and possibly a dip that doesn't reach 1:1 at its lowest point. Also, the SWR will rise at a faster rate when tuning to the higher portions of the band.

If you need any assistance with this type of a problem, please call us on our engineering line (314-994-7872) and we will be glad to discuss your installation with you.

USE OF A BALUN OR NOT

We do not require the use of a balun. It is not needed. The only time it would be useful is if there is to be another antenna, such as a two meter beam less than 8 foot above the MP-33-N. The use of a Balun in this case will help, but not guaranteed to solve any coupling problem.

If a Balun is used make sure it is a 1:1. Keep the leads running from the balun to the radiator as short as possible. Also, DISCONNECT the ground strap. The ground strap is not used if you are using the 1:1 Balun ONLY.

We recommend an 8 to 12 foot separation between the MP-33-N and any other beam on the same mast.

USE OF AN R.F. CHOKE

A lot of users confuse a Balun and a Choke. They are not the same. If you are experiencing some RF down your feed line or if you want to insure you have no RF down your feed line then a simple R. F. Choke made with your feed line will work well. This choke can be made by coiling 5 turns of your feed line in a 6" Inside Diameter right at the connection of the feed line to the RADIATOR. 5 turns 15.24 cm

This coil is just a loop of your feed line rolled up like a rope in the size mentioned. This coil is then taped immediately after the connection point to the radiator at the boom.

If you have any questions, or if we can be of help, please let us know. Thank you for choosing **MOSLEY!**