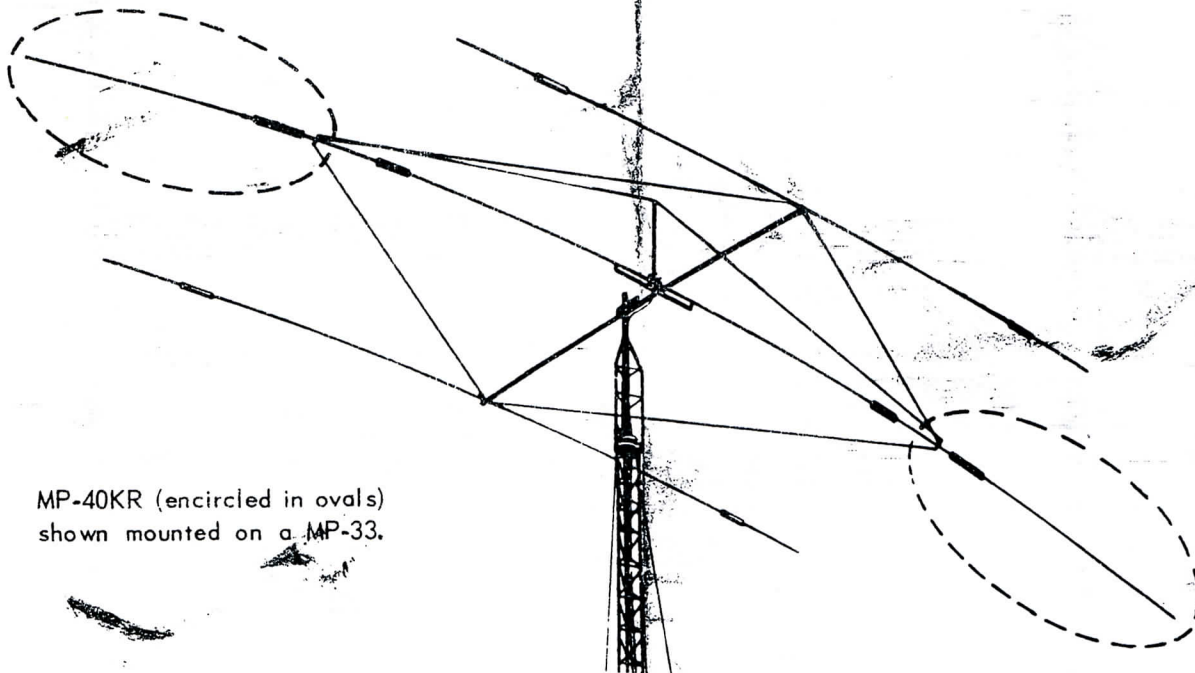


271318

# MOSLEY DIPOLE CONVERSION KIT MODEL MP-40KR

TO CONVERT MODEL MP-33 ANTENNA FOR OPERATION ON 40 METERS



MP-40KR (encircled in ovals)  
shown mounted on a MP-33.

*The high performance of your MOSLEY Antenna can only be achieved if the antenna is assembled in accordance with the instructions supplied. Substitution of material or modification of design will materially lessen this performance.*

## PARTS LIST

Mosley Part No.	Part No.	Quan	Description
1167	A	2	7/8" OD X .058 wall element section color coded blue
1213	B	2	Trap Assemblies color coded blue
1113	C	10	No. 6 x 3/8" long sheet metal screws
1217	D	2	Guy Rings
1173	E	2	5/8" OD x .035 wall element section color coded blue
1016	F	2	5/8" Caplugs
1175	G	1	Angle plate
1018	H	2	1/4-20 U-bolts
1168	I	2	Swage tubing color coded blue
1019	J	4	1/4" lockwashers
1020	K	4	1/4-20 Nuts
1037	L	2	No. 43 clamping blocks
1174	M	1	Vertical mast section
1080	N	8	3/16" Guy ring thimbles
1202	O	120 Ft.	Guy lines
1034	R	1	Ground strap
1172	S	2	Swage tubing

NOTE: THE EXTRA PARTS ARE FOR A DEFERENCE MODEL.

NOTE: When ordering replacement parts from instruction sheet refer to Mosley Part Number, Part Number, and Form Number H-145.

## DESCRIPTION

The Mosley MP-40KR Conversion Kit will convert the Mosley MP-33 antenna so that the radiating element of this system will also operate as a half wave dipole on 40 meters. All components included in this kit are listed under the parts list in alphabetical order rather than numerical order so these components may be distinguished from components which are normally included with the MP-33 antenna. Figure 1 shows the radiating element assembly. Guy ropes are attached to the parasitic element sections such as element (part 17) used on the MP-33 antenna. In figure 1 the asterisks (\*) denote color codes, position, and number of color code markings at these positions. Figure 2 shows the recommended method of securing the guys. Figure 3 shows an overall length schematic, and designates the number of turns on each radiator coil assembly. Before beginning with the MP-40KR assembly it must be decided at what frequencies the finished

assembly will be resonant. In order to do this, refer to the typical resonant frequency charts. Note from observing these charts, the resonant frequencies are first controlled by the standard adjustment of the MP-33; second, they are controlled by the setting of the 20 meter element section (part I); and third they are controlled by the setting of the 40 meter section (part E). Therefore, when choosing resonant frequencies, begin with the MP-33 settings and then set the 20 meter section; and last, the 40 meter section. A package of anti-corrosion compound is included and should be applied to all telescoping element sections as per instructions on package. When assembly is completed, apply antenna coat to parts of antenna except plastic parts. Apply as per package instructions.

## ELEMENT ASSEMBLY

Before beginning with the MP-40KR assembly, read all instructions thoroughly and study the drawings and charts carefully. Check parts against parts list to insure all items have been included. Remove antenna from its supporting tower and place on fairly level ground. Begin assembly by removing the nuts and lockwashers (parts 15 and 14) and ground strap from U-bolts (part 12) on the element support (part 1) of your MP-33 antenna. Align the four holes of the angle plate (part G) over the two U-bolts (part 12). See figure 1. Place ground strap (parts 23 or R) on one of the U-bolts (part 12), and secure both U-bolts with the nuts and lockwashers (parts 15 and 14). Install U-bolts (part H) in the holes to the top of angle plate (part G) and loosely install nuts and lockwashers (parts J and K). Place the flat side of clamping blocks (parts L) between U-bolts (part H) and against angle plate (part G) as shown in figure 1. Place vertical mast (part M), with the mashed end to top, between U-bolts (part H) and into radius of clamping blocks (part L) as shown in figure 1. Secure the nuts and lockwashers (parts K and J). Remove the end element extensions (part 9) on radiator element and store for future use. Telescope blue color coded end of tubing (part A) over traps (part 8), *Caution if antenna was coated with antenna coat, trap ends must be sanded before telescoping*; align holes and secure with screws (part C) as shown in figure 1. Telescope swage end of tubing (parts I) into tubing (parts A), align holes, and secure with screws (parts C). Place guy rings (parts D) over ends of traps (parts B) which are not color coded, and telescope this end over tubing (parts I) as shown in figure 1. Align the holes in traps (parts B) with holes in tubing (parts I) according to the frequencies listed on the frequency charts and schematic figure 3 and secure with screws (parts C). Telescope swage tubing (parts 5) with swage end out into blue color coded end of traps (parts B). Align holes and secure with screws (parts C). Telescope blue color coded ends of tubing (parts E) into swage end of tubing (parts 5). Align holes according to frequencies on frequency charts and schematic figure 3, and secure with screws (parts C). Press the caplug (parts F) over the ends of tubing (parts E). Assemble guy ring thimbles (parts N) to guy rings (part D) and holes in mashed end of vertical mast (part M) as shown in figure 2. Cut guy ropes AA 20 feet long from guy line supply (part O). Guy ropes AA are installed between guy rings (parts D) and vertical mast (part M). Figure 2 shows the preferred knot to be used at guy rings (parts D). Cut guy ropes BB 20 feet long and guy ropes CC 20 feet long. Guy ropes BB and CC should be installed to thimbles (parts N) on guy rings (parts D) with knot shown in figure 2 and the other ends tied to the reflector or director element as shown in figure 1. It may be necessary to readjust guy ropes after installation due to stretching and slipping of the knots.

**20 METERS NORMAL SETTING:** The distance of 29 inches between edge of trap covers (parts B and 8) as shown in schematic figure 3. The distance is obtained by aligning the hole color coded three blue in swage tubing (parts I) with the hole in trap assembly (parts B). See figure 1 and frequency charts.

**20 METERS EXTENDED SETTING:** The distance of 30 1/2 inches between edge of trap covers (parts B and 8) as shown in schematic figure 3. This distance is obtained by aligning the hole color coded two blue in swage tubing (parts I) with hole in traps assembly (parts B). See figure 1 and frequency charts.

**40 METERS WITH 20 METERS NORMAL:** The distance of 29 inches between trap covers (parts B and 8) and the setting of the holes color coded one blue or two blue on the tubing (parts E). See figure 1 and frequency charts.



## ELEMENT ASSEMBLY CONTINUED

40 METERS WITH 20 METERS EXTENDED: The distance of 30 1/2 inches between the trap covers (parts B and 8) and the setting of the holes color coded one blue or two blue on the tubing (parts E). See figure 1 and frequency charts.

## GUY RING ASSEMBLY

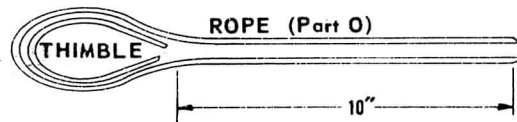


Fig. 2



## SCHEMATIC

40 METERS WITH 20 METERS NORMAL

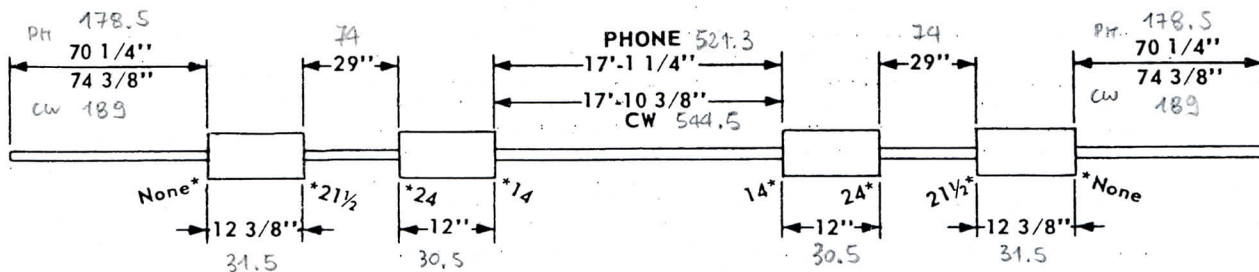


Fig. 3

Code One CW Code Two PHONE

\*Indicates number of coil turns

40 METERS WITH 20 METERS EXTENDED

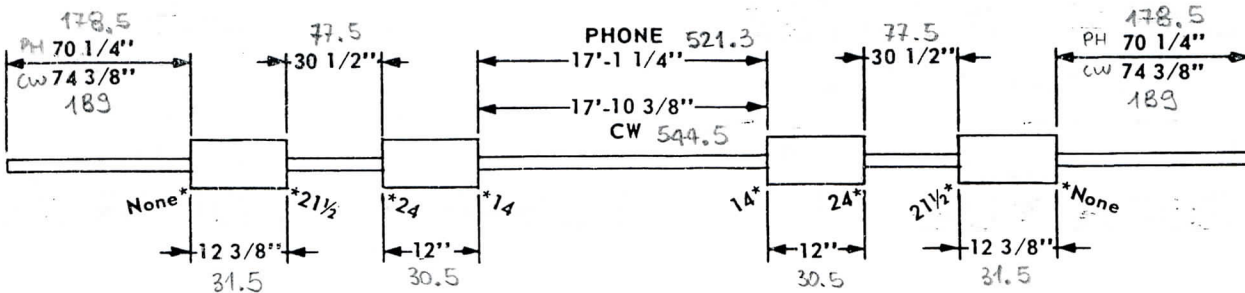


Fig. 3

Code One CW

Code Two PHONE

\* Indicates number of coil turns

# FREQUENCY CHARTS

MP-33 ANTENNA

ELEMENT	COLOR	BAND	CODE ONE	CODE TWO
RADIATOR	BLUE	10 Meters	28.1	28.8
REFLECTOR	YELLOW	15 Meters	21.050	21.3
DIRECTOR	GREEN	20 Meters	14.050	14.275
CODE ONE CW			CODE TWO PHONE	

MP-33 ANTENNA WITH MP-40KR ATTACHED

MP-33 Antenna Set For CW

BAND	CODE 1	CODE 2	CODE 3
10 Meters	28.100	Not Used	_____
15 Meters	21.050	Not used	_____
20 Meters Normal	Not Used	Not Used	14.200
40 Meters with 20 Meters Normal	7.120	7.250	Not Used
20 Meters Extended	Not Used	14.100	Not Used
40 Meters with 20 Meters Extended	7.100	7.200	Not Used

MP-33 Antenna Set For PHONE

BAND	CODE 1	CODE 2	CODE 3
10 Meters	Not Used	28.800	_____
15 Meters	Not Used	21.300	_____
20 Meters Normal	Not Used	Not Used	14.300
40 Meters with 20 Meters Normal	7.150	7.250	Not Used
20 Meters Extended	Not Used	14.200	Not Used
40 Meters with 20 Meters Extended	7.130	7.200	Not Used

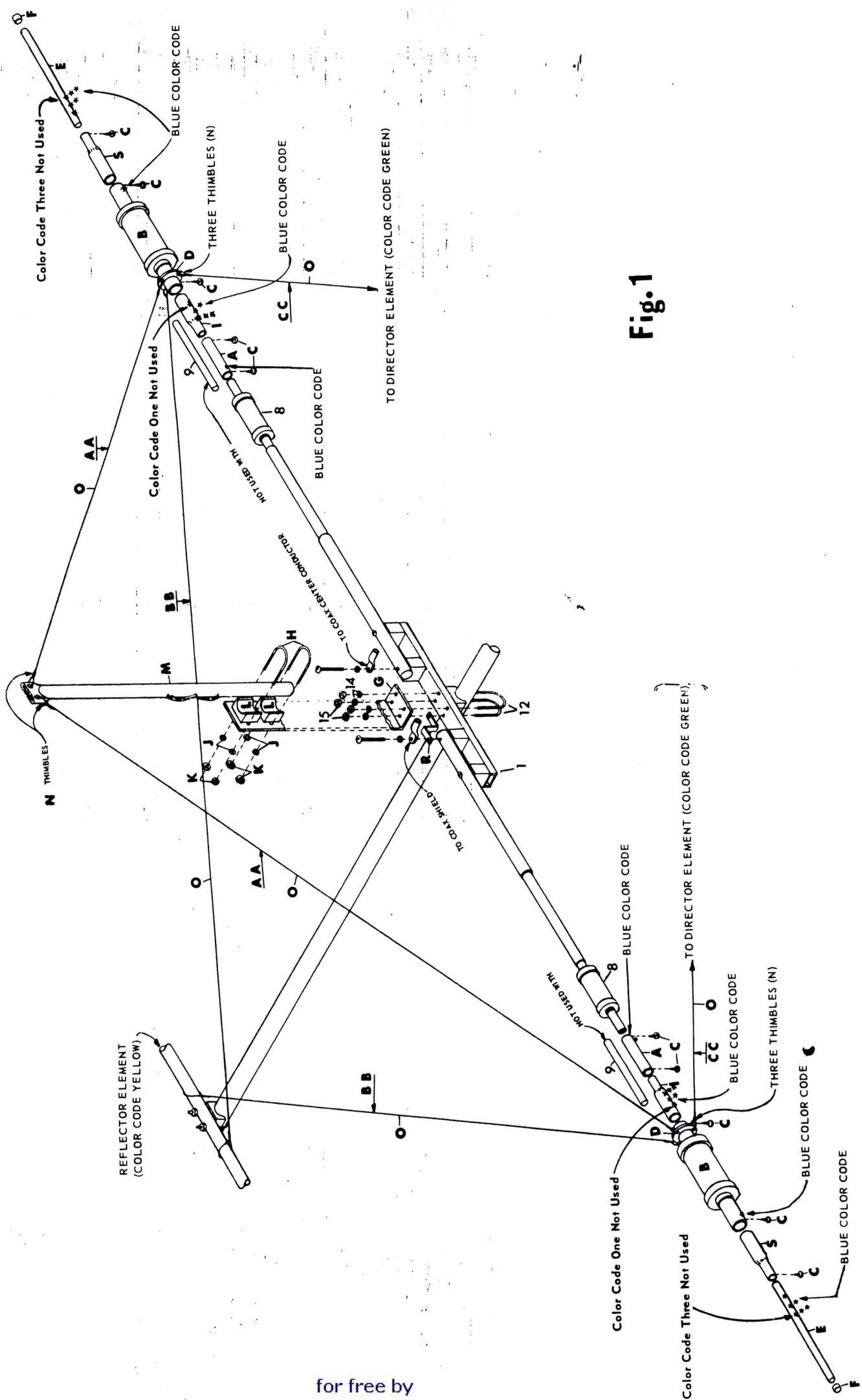


Fig. 1

## SPECIAL INSTRUCTIONS

YOUR TA-40-KR WAS SPECIALLY PACKAGED AT YOUR REQUEST FOR SHIPMENT VIA U.S. MAIL.

IN ORDER TO COMPLETE YOUR ASSEMBLY, FIRST COMPLETE THESE 3 STEPS AND THEN PROCEED WITH NORMAL ASSEMBLY INSTRUCTIONS.

(1) ASSEMBLE TRAPS:

Install the  $\phi$  turn coil into the half-assembled trap. Insert & tighten screw. Install trap seal. (Hardware is in separate Hardware bag labeled "Trap Assembly Hardware".

(2) ASSEMBLE 1 $\frac{1}{4}$ " x 48" - WITH FLATTENED END,

Parts are coded with a number "A".

Use 10-32 x 1 $\frac{1}{2}$ " machine screws

(3) ASSEMBLE 2 EACH 5 $\frac{1}{8}$ " x 59" END TIPS  
USING #8 x  $\frac{1}{2}$ " SCREWS

ONE ASSEMBLY IS CODED WITH NUMBER "1"  
The second assembly is coded with number "2"

(A separate hardware bag is provided for steps 2 & 3 and labeled "FOR CUT DOWN PARTS")