INSTRUCTIONS FOR REMOVING AND REPLACING CABLES ON FILLED MODEL "K" COMPASS COMPENSATING COILS OF THE COMPOUND FILLED TYPE

This Pamphlet Should Be Placed In the Ship's Degaussing Folder.

General Information

There are four windings in the Heeling coil and four windings in each of the Inter Cardinal Coils connected in the terminal box to the two cables.

The complete wiring diagram is shown in Figure No. 1. The various wires from the coils are connected to the lower legs of the terminal lugs in the terminal box as shown in Figure No. 2. The Right hand and Left hand cable leads are connected to the upper leg of the terminal box lug as shown in Figure No. 3. The terminal box lug construction is shown in Figure No. 4. This clearly shows four rows of terminal lugs formed in a "U" shape. The two rows on the Right hand side are for the Right hand cable and the two rows on the Left hand side are for the Left hand cables. Note that the coil leads and the cable leads are numbered and connected in the terminal as listed.

Cable Replacing Instructions

Remove the four round head brass screws holding the cover and instruction plate in place (Parts K-107, K-114, and K-124 shown on Figure No. 4). This will permit the removal of the terminal box cover and Neoprene gasket underneath cover. A clear plastic gasket is directly under the Neoprene gasket which prevents the filling compound from stretching to the cover.

Use care that none of these parts removed are lost as they must be reassembled when the cover is finally replaced.

After removing the cover, it will be noted that the terminal box is filled with a black compound that is semi-hard in nature. Care-

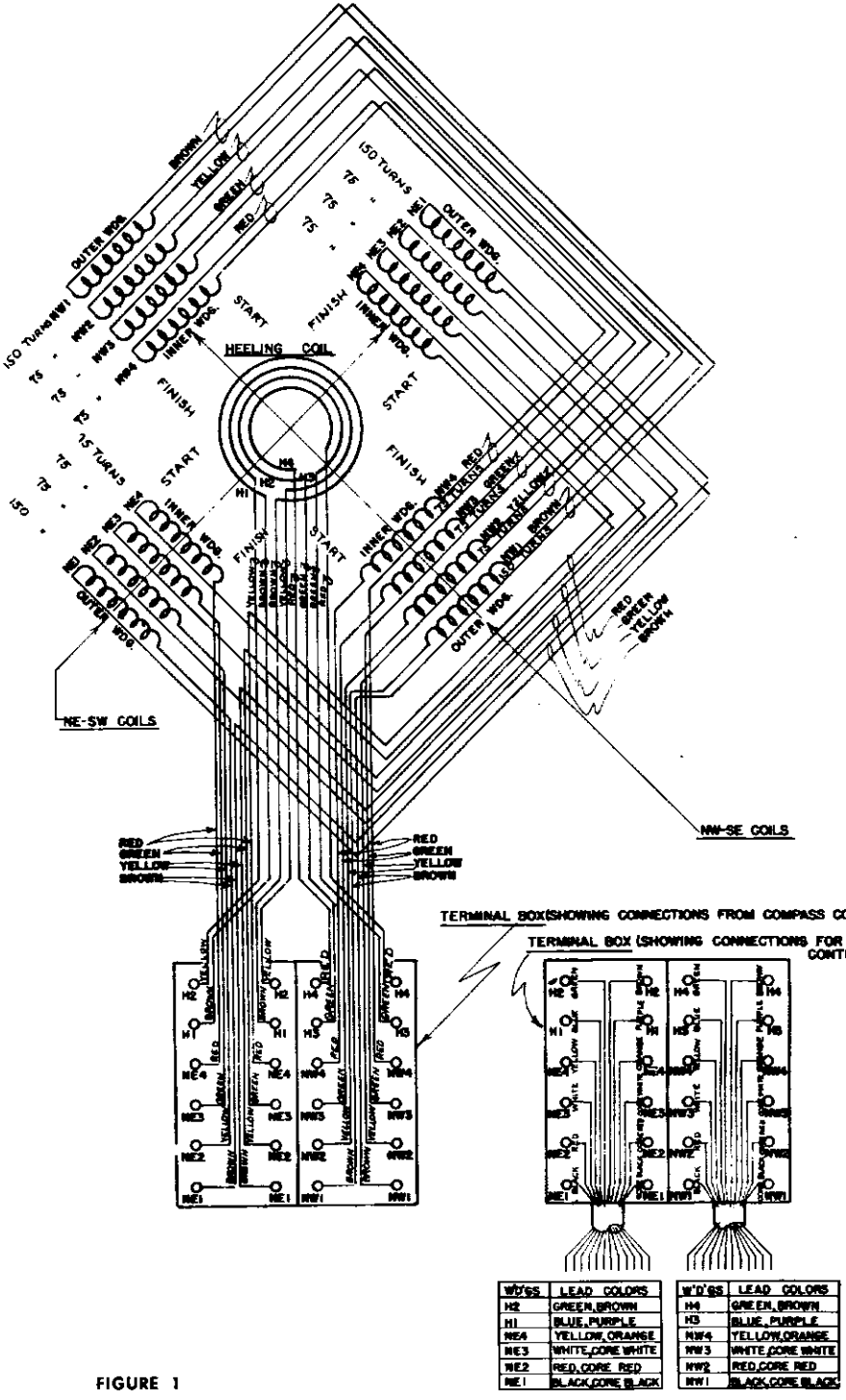
fully remove this compound with a dull knife or screw driver by breaking out small pieces starting at the top surface. After a quantity has been removed, the cable lead will begin to become exposed. They are soldered to the upper leg of the terminal lug and can be cut with end-nose cutting pliers.

Carefully pull the cut leads up and remove any compound surrounding the cable leads. After all cable leads are free of compound and cut loose from lugs, they are ready to be removed. After unscrewing the brass hexigon nut, allow it to slide down on cable. It is suggested a small piece of the colored cable be left attached to the lug to help identify the proper color connection for the new cable. Pull out the cable from the terminal box.

Any additional filling compound that can be removed without injuring the cable leads should be removed. Thoroughly remove any compound at the cable lead soldered connection to insure a good soldered connection for the new cable.

Cut the new cable to its proper length. Strip off the outer jacket by encircling the cable with a sharp knife 3-1/2 inches from the end. Slit the cable from this cut to its end and peel off outer jacket. Use care not to cut outer jacket too deeply, so insulated leads will not be injured. Strip the insulation off from ends of the leads for a distance of 3/8 inches. Note there is an inner core cable having colors white, red and black. These must be kept separate from same colors in the outer cable.

Place the brass hexagon nuts, brass washers and Neoprene washer upon cable from the above described stripped jacket end. Slide the cable leads through a hole in terminal lugs and solder securely. Connect all cable leads to their proper positions. (See Figure No. 3). Nest the cable wire in the terminal box in a neat manner to prevent them from grounding to each other on the brass case.



W'D'GS	LEAD COLORS
H2	GREEN, BROWN
H1	BLUE, PURPLE
NE4	YELLOW, ORANGE
NE3	WHITE, CORE WHITE
NE2	RED, CORE RED
NE1	BLACK, CORE BLACK

W'D'GS	LEAD COLORS
H4	GREEN, BROWN
H3	BLUE, PURPLE
NW4	YELLOW, ORANGE
NW3	WHITE, CORE WHITE
NW2	RED, CORE RED
NW1	BLACK, CORE BLACK

FIGURE 1

TERMINAL NO.	
13.	"H" Coil Prim. Fin.—Red
14.	"H" Coil Sec. Fin.—Green
9.	"A" Coil NE Fin.—Red
10.	"Q" Coil NE Fin.—Green
11.	"F" Coil NE Fin.—Yellow
12.	"M" Coil NE Fin.—Brown
1.	"H" Coil Ter. Fin.—Yellow
2.	"H" Coil Quad. Fin.—Brown
15.	"A" Coil SE Start—Red
16.	"Q" Coil SE Start—Green
17.	"F" Coil SE Start—Yellow
18.	"M" Coil SE Start—Brown

TERMINAL NO.	
19.	"H" Coil Prim. Start—Red
20.	"H" Coil Sec. Start—Green
3.	"A" Coil SW Fin.—Red
4.	"Q" Coil SW Fin.—Green
5.	"F" Coil SW Fin.—Yellow
6.	"M" Coil SW Fin.—Brown
7.	"H" Coil Ter. Start—Yellow
8.	"H" Coil Quad. Start—Brown
21.	"A" Coil NW Start—Red
22.	"Q" Coil NW Start—Green
23.	"F" Coil NW Start—Yellow
24.	"M" Coil NW Start—Brown

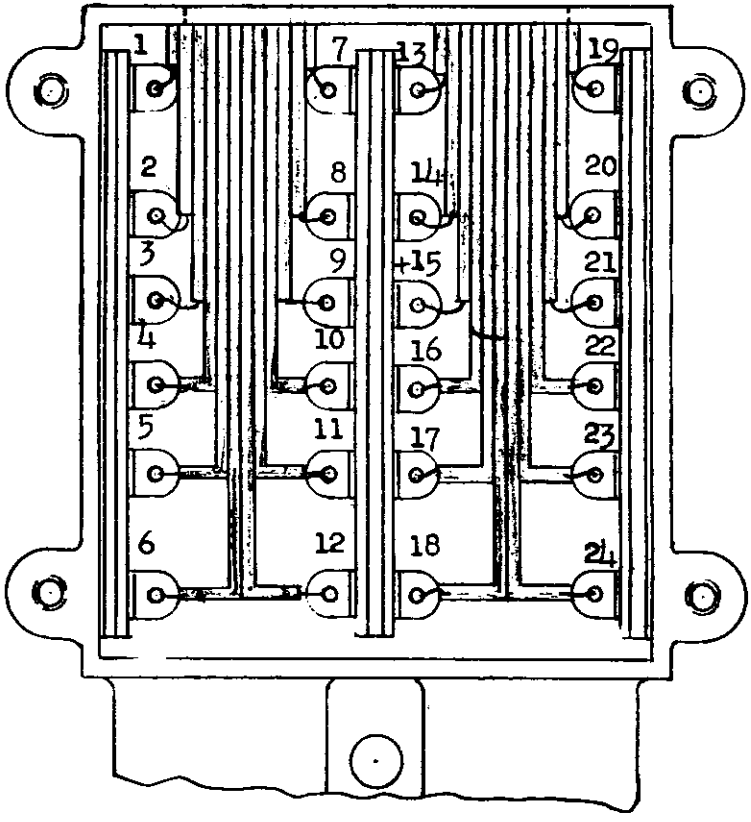


FIGURE 2

12 CONDUCTOR CABLE

1. "H" (2) Ter. Fin.—Green
2. "H" (1) Quad. Fin.—Blue
3. "A" (4) Coil SW Fin.—Yellow
4. "Q" (3) Coil SW Fin.—White
5. "F" (2) Coil SW Fin.—Red
6. "M" (1) Coil SW Fin.—Black

7. "H" (2) Ter. Start—Brown
8. "H" (1) Quad. Start—Purple
9. "A" (4) Coil NE Fin.—Orange
10. "Q" (3) Coil NE Fin.—Inner White
11. "F" (2) Coil NE Fin.—Inner Red
12. "M" (1) Coil NE Fin.—Inner Black

13. "H" (4) Prim. Fin.—Green
14. "H" (3) Sec. Fin.—Blue
15. "A" (4) Coil SE Start—Yellow
16. "Q" (3) Coil SE Start—White
17. "F" (2) Coil SE Start—Red
18. "M" (1) Coil SE Start—Black

19. "H" (4) Prim. Start—Brown
20. "H" (3) Sec. Start—Purple
21. "A" (4) Coil NW Start—Orange
22. "Q" (3) Coil NW Start—Inner White
23. "F" (2) Coil NW Start—Inner Red
24. "M" (1) Coil NW Start—Inner Black

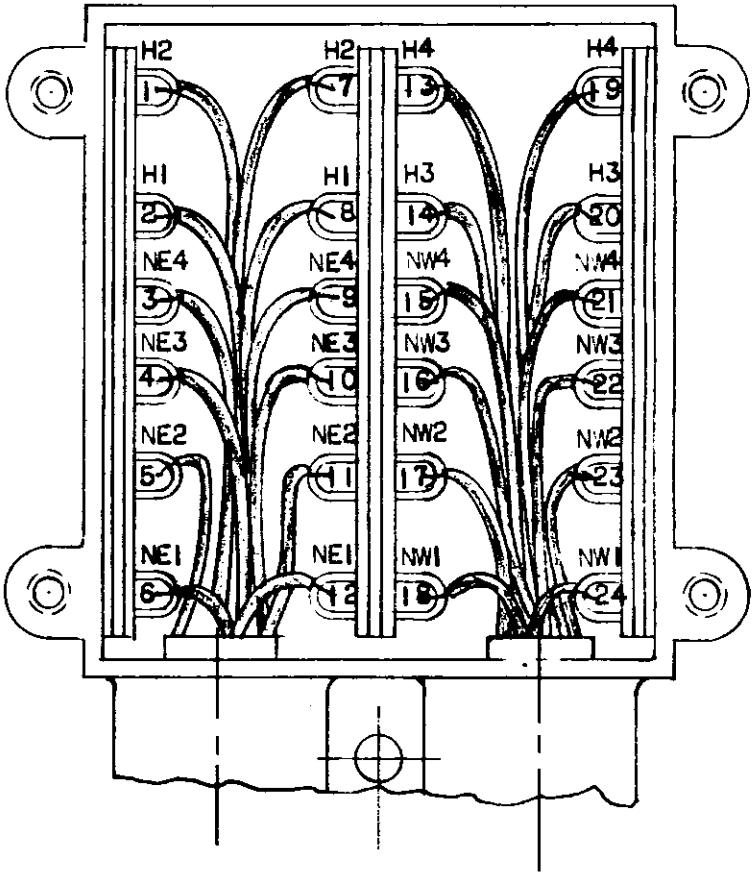


FIGURE 3

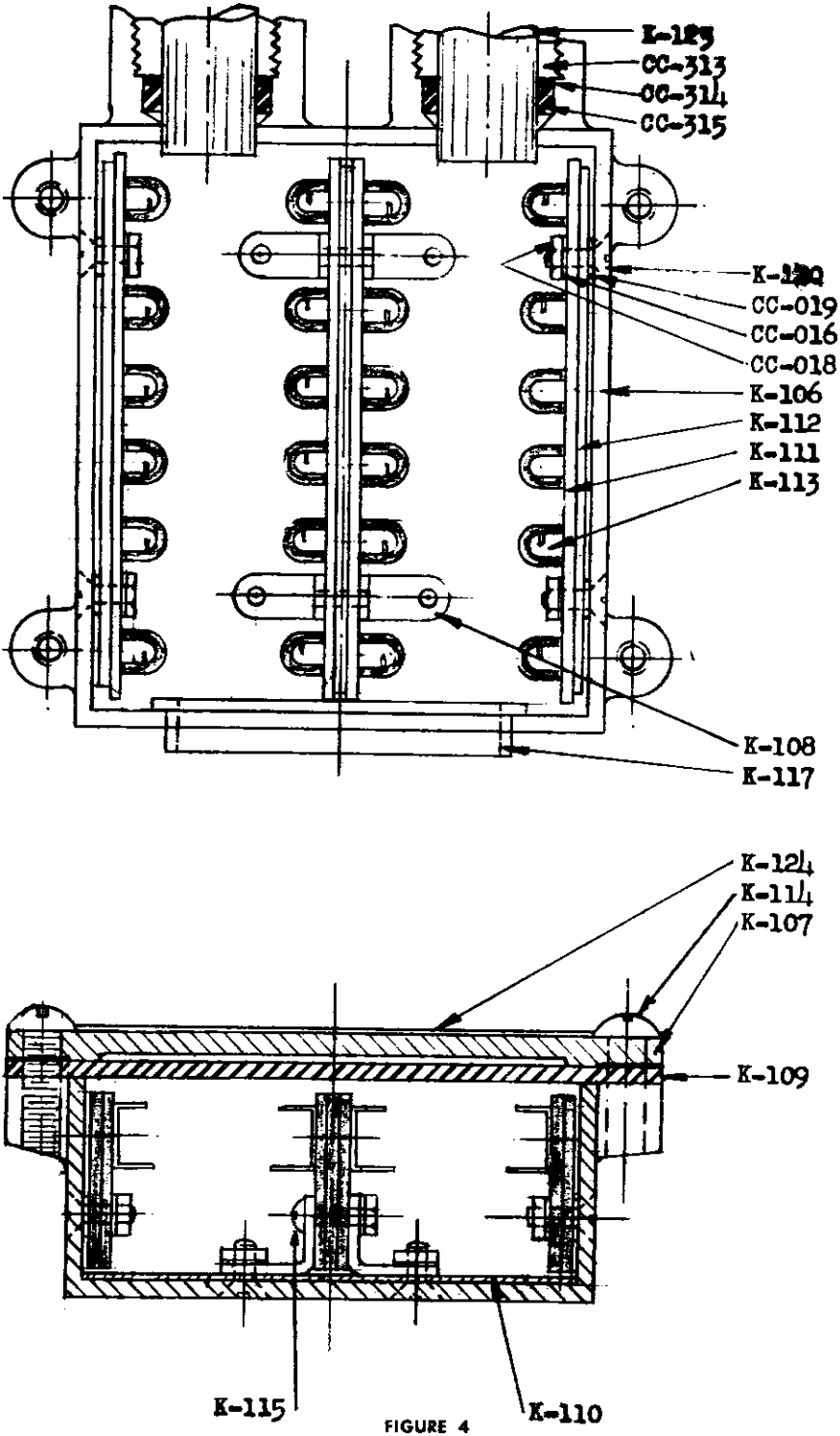

K-123
CC-313
CC-314
CC-315
K-120
CC-019
CC-016
CC-018
K-106
K-112
K-111
K-113
K-108
K-117
K-124
K-114
K-107
K-109
K-115
K-110

FIGURE 4

Allow approximately 3/8 inches of the cable jacket inside of terminal box, then slide Neoprene and brass washers into terminal box gland. Lock in place by tightening brass hexagon nut.

Check all connections to be sure they are correct, then completely fill the terminal box with Silicone grease.

Replace gasket and cover.

Be sure that non-corrosive soldering fluxes are used.

When mounting the coil assembly onto the binnacle, bolt to be used in flexible end of mounting brackets.