



# 155-S Center Insulator for Doublet-type Antenna

## **INSTRUCTION MANUAL**

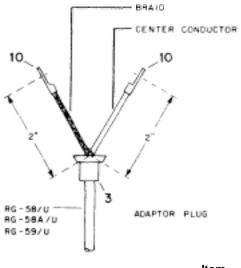
### **General Description**

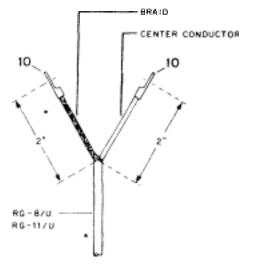
The "CI" is a weatherproof, lightweight, high strength center insulator. It is used for connecting coaxial feedline to a doublet-type antenna. The "CI" will accept RG-8/U type, RG-213/U, RG-11 /U, RG-58/U, and RG-59/U. The insulator can be hung from a supporting mast.

#### **Coax Assembly Instructions**

if you are using RG-8/U type, RG-213/U or RG-1 1 /U, strip the end of the coax as shown in Figure 1, Detail B. If you are using a smaller coax (RG-58/U or RG-59/U), insert the adaptor plug over the coax before stripping back as shown in Figure 1, Detail A.

Solder two 1/4" solder lugs on the coax as shown in Figure 1





Item

**DETAIL A** 

3 Insulator, Adaptor Plug

**DETAIL B** 

10 Solder Lug, 1/," ring

Figure 1
Coax Assembly



Attach the coax and dipole wires to the eyebolts exactly as shown in Figure 2. The dipole is put through the eyebolt twice and wrapped around itself at least five times. The free end is soldered to the solder lug for electrical connection.



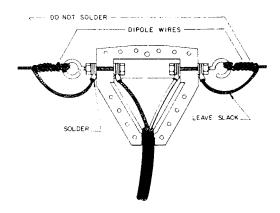
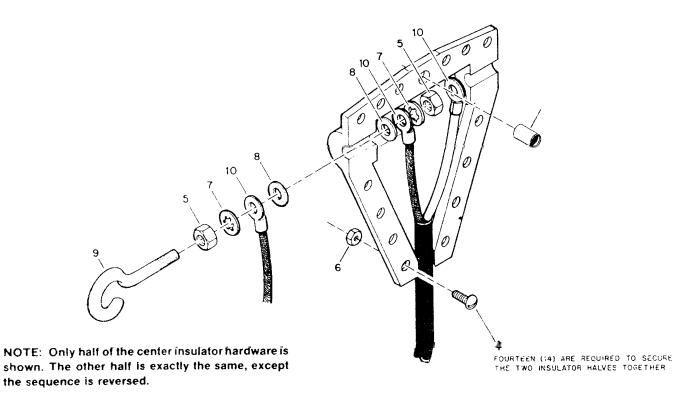


Figure 2 **Dipole and Coax Attachment** 





Item No.	Description	Item No.	Description
1	Sleeve Suspension, 5/16" x 5/8"	7	Lockwasher, internal, 1/4"
4	Bolt, round head, #6-32 x 1/8"	8	Flatwasher, 1/4"
5	Nut, hex. 1/4" - 20	9	Eyebolt, 1/4" x 1 1/2" x 1/2"
6	Nut, hex, #6-32	10	Solder Lug, 1/4" ring

Figure 3
Illustrated Parts Breakdown of Dipole and Coax Attachment



Attach the pigtails of the coax to each eyebolt as shown in the exploded view, Figure 3.

Lay the coax connectors, eyebolts and the dipole wires in one half of the insulator exactly as shown in Figure 3.

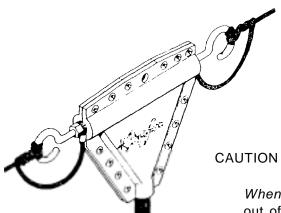
Apply silicone grease, Vaseline or some similar substance to seal the coax and edges against weather.

Assemble one half of the insulator to the other half and secure using fourteen (14) #6 x  $^{3}$ /8" bolts and nuts. The outer 1/4" nut on each eyebolt is then tightened to insure a good connection. *Do not twist the eye boll!* This will disturb the internal connections and damage the antenna.

#### **Mounting Instructions**

As with any dipole, it is important that this antenna be mounted in the clear. The higher the better, as general rule. In this respect, a little additional transmission line with accompanying transmission losses is preferred over the close proximity of surrounding objects.

The light weight of the Model "CI" center insulator allows it to be supported either by the antenna itself or suspended from a support. A hole is provided in the top of the insulator for suspension from the center. When supporting the antenna by the center insulator, do not let the insulator contact any of the





When supporting the antenna by the ends only, do not try to take all sag out of the antenna. This will cause tremendous stress to be built up and cause failure of the antenna. Several feet of sag in the center will do no

Figure 4 Completed
Assembly

PΑ	RT	SI	LIST
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m	Part No.	Description	Qty
2	465460	Insulator, Triangle, 1/8" x 4'"	2
9	540066	Eyebolt, $_{1/4"}$ x 1 1/2" x $1/z$	
	872078	Parts Pack 155S, Stainless Steel	
1	171586	Sleeve, Suspension, <sup>5</sup> /16" x S/8	
3	465570	Insulator, Adaptor Plug	
4	501118	Bolt, round head, #6-32 x 3/8"	15
5	554099	Nut, hex, <sup>1</sup> /4" - 20	4
6	555888	Nut, hex, #6-32	15
7	562961	Lockwasher, internal, ¼"	5
8	566344	Flatwasher, 1/4	
10	677555	Solder Lug, ¼" ring	4