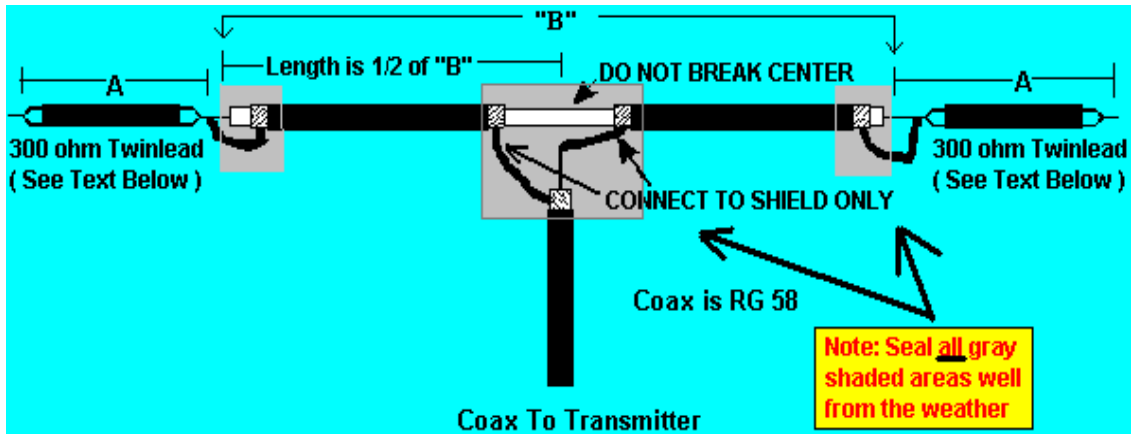


# THE DOUBLE BAZOOKA ANTENNA

## Notes on Assembly of the Double Bazooka About The Double Bazooka Antenna

The Double Bazooka Dipole is a very efficient single band antenna which is very quiet, and does not require the use of a balun. This antenna consists of coax (RG58) or other 50 ohm type with the shield split at the center and the feedline attached to the open ends. Do not break the center conductor. With the feedline attached directly to the two open ends this acts as a half wave dipole along with the open wire end sections. This double bazooka can be cut for any operating frequency and is broad banded. It can be mounted as a flat top or an inverted vee and will handle the legal limit. As an added plus, it can be operated as a multiband antenna by using a suitable tuner. As with most antenna projects, get the double bazooka up as high as possible. Some tuning of the length for best swr may be required and you can use materials that are easily obtainable.

**Experiment!**



THE MATH	
1. TOTAL LENGTH OF ANTENNA:	$460 / \text{FREQUENCY Mhz}$
2. TOTAL COAX LENGTH (B):	$325 / \text{FREQUENCY Mhz}$
3. TOTAL TWINLEAD LENGTH A + A:	TOTAL ANTENNA LENGTH MINUS TOTAL COAX LENGTH
4. TWINLEAD EACH SIDE	1/2 OF RESULTS IN STEP # 3

Example: Double Bazooka cut for 3.800Mhz

- $460 / 3.8 = 121$  feet total antenna length
- $325 / 3.8 = 85.52$  feet total coax length (divide by 2 for each half DO NOT CUT!)
- 121 minus 85.52 feet = 35.53 feet
- Results of 3 above divided by 2 = 17.76 feet

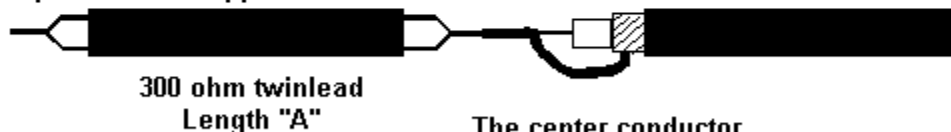
Allow several inches to a foot or more on each end for any needed swr tuning and tie off of end insulators

N4UJW

## End Detail

Tie both ends together if using twin lead.

Instead of twin lead I used 1 piece of #12 copper wire



The center conductor, shield and both twinlead wires together

**Additional construction information:  
(This tip from Jay, W5IB)**

On the cable ends you do not need to use twin lead. You can make these antennas using a single piece of 12 gauge copper wire or larger for each end or you can also use ladder line etc.

I would advise using heavy end wires for strength purposes. The weakest part of this antenna is at the junction of the coax and the end wire or twinlead. To prevent the joints from breaking especially for long lengths, I picked up some 1/2 inch PVC pipe.

I cut the PVC in half length wize so it would overlap a few inches on the joints.

Place the PVC at the joints in "splint fashion" and secure with regular screw hose clamps. Put the clamps close to the ends of the "splint", tighten snugly and it should take the strain off the joint and should give a strong joint.

Do this at the center using a " T " support from PVC or use your own engineering. When designed for the lower hf bands, this antenna can be a bit heavy since coax is used. It can be supported along it's entire length with non-conductive cord, rope, cable, etc by suspending and attaching the antenna from the support cable with nylon wire ties every few feet.

This relieves the tension and strain from the center and end connections.