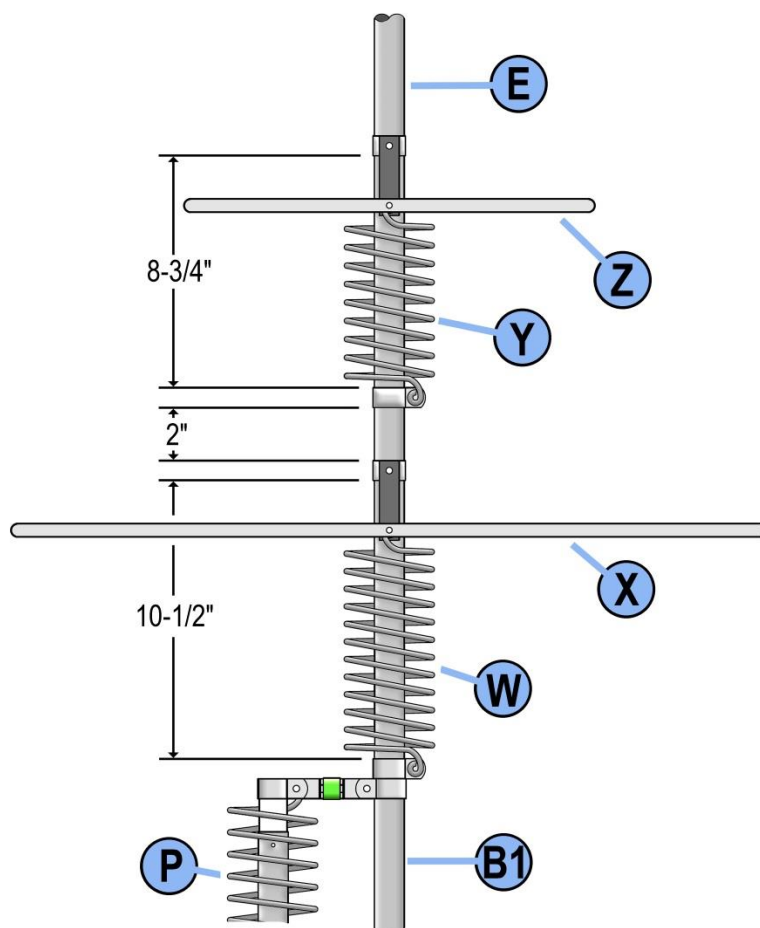


The A-17-12 unit consists of air-wound inductances inserted just above the upper end of the 30 meter coil.

ASSEMBLY

1. Attach the LONG aluminum strip (X) to the bolt that fastens the 17 meter coil (W) (the larger of the two coils) to the plastic insulator between the coil and the upper clamp. Use a flat washer, lock washer and a hex nut.
2. Attach the SHORT aluminum strip (Z) to the 12 meter coil (Y) in the same way. These strips provide circuit capacitance to resonate the two coils.
3. Remove the upper portion of the antenna (everything above B3 on the HF6V-X or everything above tube E on the HF6V).
4. Install the 17 meter assembly: Loosen the #10 hex nut on the bottom clamp and the wing nut on the upper clamp, and slide the assembly over the upper end of tube B3 (or tube E in the case of the HF6V) with the insulator end up.
5. Slide the unit down until the lower clamp of the 17 meter coil rests on the upper clamp of the 30 meter coil (P).
6. Tighten the hex nut and stretch the coil so that the distance between the upper edge of the lower clamp and the lower edge of the upper clamp is 10-1/2 inches, as shown to the right.
7. Install the 12 meter unit in the same way, so the lower edge of the lower clamp is about two inches above the upper clamp of the 17 meter unit. This distance is not critical.
8. Replace the upper section of the antenna and tighten all hardware securely.



TUNING

If mounted at ground level the antenna should be operated over a number of radial wires, each as least as long as the antenna is tall, in order to reduce the ground loss resistance and thus the feedpoint impedance to an acceptable low value. In above-ground installations at least two RESONANT radials 180° from each other should be used per band. The length of a quarter-wave radial for 17 meters is 13 feet 4 inches, and 9 feet 3 inches for 12 meters.

Feed a few watts of power to the antenna on 17 meters and note the frequency at which the SWR is lowest. Normal bandwidth is from 150 to 175 kHz for SWR of 2.5:1 or less. To move the SWR curve to a higher frequency loosen the wing nut on the upper coil clamp and STRETCH the coil about 1/4 in. at a time. To move the SWR curve to a lower frequency range COMPRESS the coil a like amount.

Similarly, apply a few watts of power to the antenna on 12 meters. The SWR bandwidth should be greater than 200 kHz. Stretch the 12 meter coil in increments of 1/4 in. or so to raise the resonant frequency, or compress the coil a like amount to lower the resonant frequency.

SWR on both 17 and 12 meters should be less than 2.5:1 at resonance, though the exact SWR at resonance on any band will depend on the quality of the antenna's ground system.

More information can be referenced in the complete BUT-HF9V manual, available on-line.

PARTS LIST

- 1 Strip 12 Meter
- 1 Strip 17 Meter
- 1 Coil Assembly 12 Meter
- 1 Coil Assembly 17 Meter