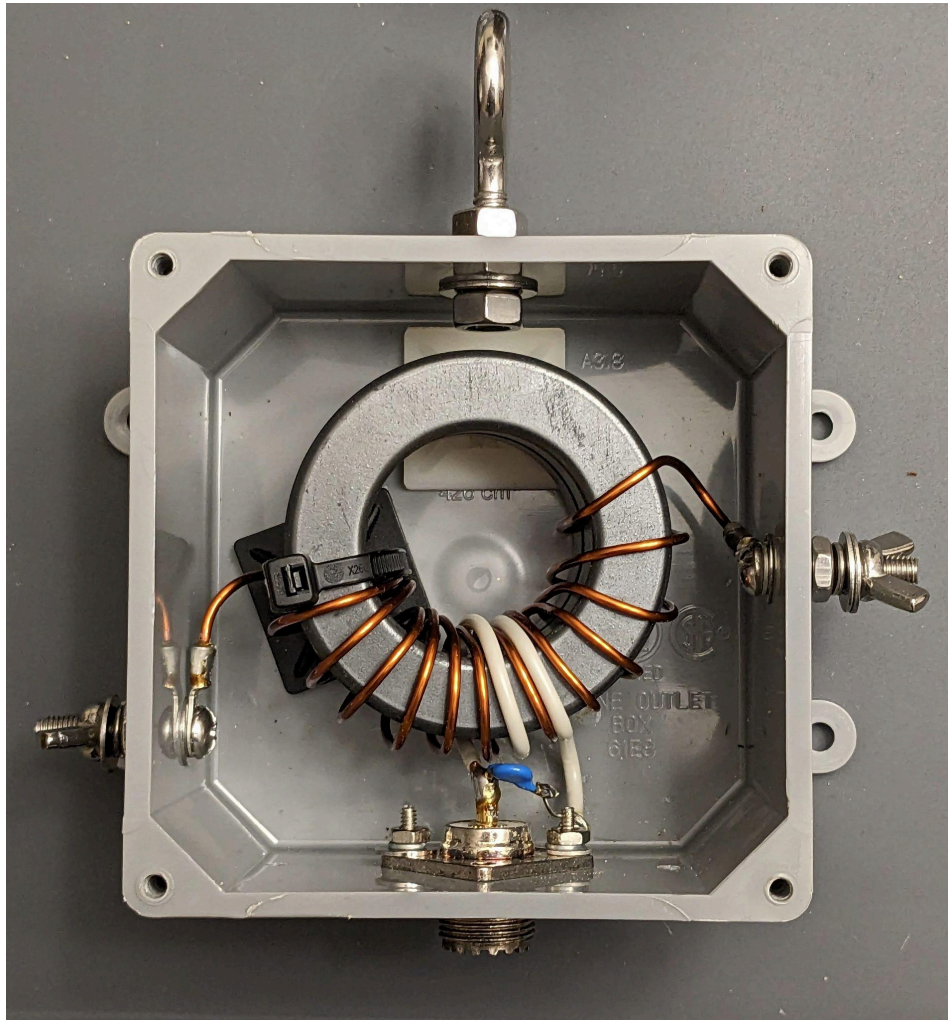


## 36-1 End-Fed Half-Wave Matchbox Designs

(Costs as of 12/8/2024)

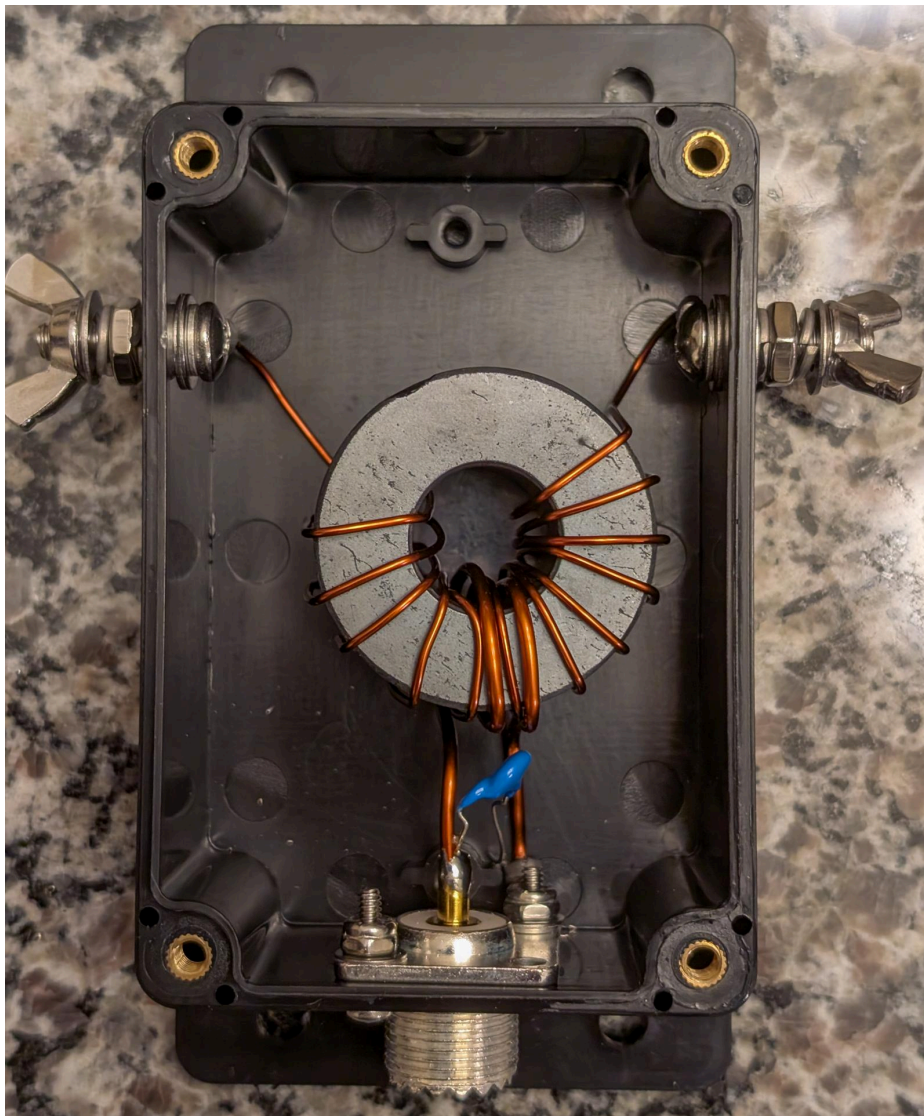
### High Power Matchbox

- SSB - 750W
- CW - 500W
- Digital - 250W
- [FT240-43 Cores \(Fair Rite 5943003801\)](#)
  - \$9.94 each
  - \$66.60 for 10
  - **Uses 2 stacked cores**
- Matchbox Cost = \$30-45 (including case)
- Weight = 20.6 ounces



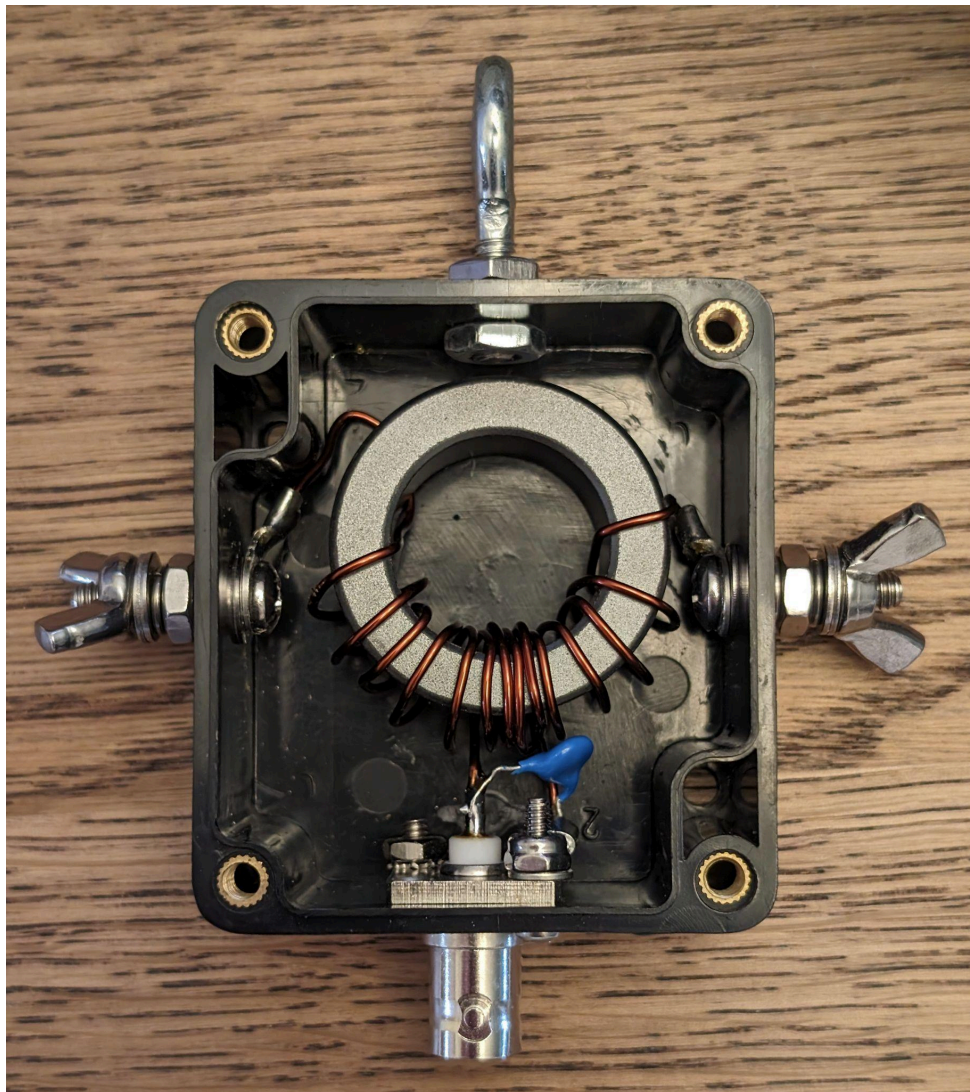
### Recommended Matchbox for 100W Stations

- SSB - 400W
- CW - 300W
- Digital - 150W
- [Large Bead Type 43 Core \(Fair Rite 2643251002\)](#)
  - \$7.54 each
  - \$64.30 for 10
  - **Uses only 1 core**
- Matchbox Cost = \$20 (including case)
- Weight = 10 ounces



### **Medium Power Matchbox**

- SSB - 150W
- CW - 100W
- Digital - 50W
- [FT140-43 Core \(Fair Rite 5943002701\)](#)
  - \$2.59 each
  - \$21.70 for 10
  - Uses only 1 core
- Matchbox Cost = \$15 (including case)
- Weight = 4.6 ounces



## **Common Parts List**

- [56pF Capacitor \(3kV\)](#)
- Enclosure Options
  - High Power: [Carlson 4" x 4" x 2" NEMA 4X](#)
  - High Power: [4.5" x 3.5" x 2.2" ABS IP65](#)
  - 100W Matchbox: [4" x 2.7" x 2" ABS IP65](#)
  - Medium Power: [2.5" x 2.3" x 1.4" ABS IP65](#)
- Load Capacitor & Bleed Resistor (required for 80-10M EFHW antennas)
  - [150pF Capacitor \(3kV\)](#)
  - [2.7M Ohm Resistor \(1W\)](#)
  - Strain Relief (use an insulator to prevent antenna strain from acting on capacitor/resistor assembly)
- Hardware (stainless steel preferred)
  - Antenna & Counterpoise Connections
    - #10 or #8 bolts ( $\frac{3}{4}$ " & 1" work well) for antenna connections
    - Matching nuts, split washers, and flat washers
    - Wingnuts are useful for portable antennas
  - Coax Connection
    - [SO-239 Chassis Mount](#)
    - [BNC Chassis Mount](#)
    - #4 bolts ( $\frac{1}{2}$ " )
    - Matching locknuts and flat washers
- Eyebolt, nuts and washers (if using)