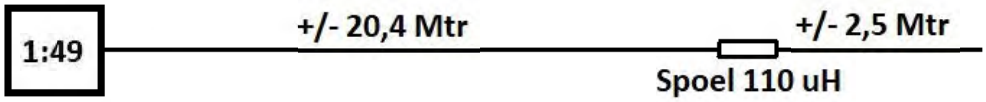
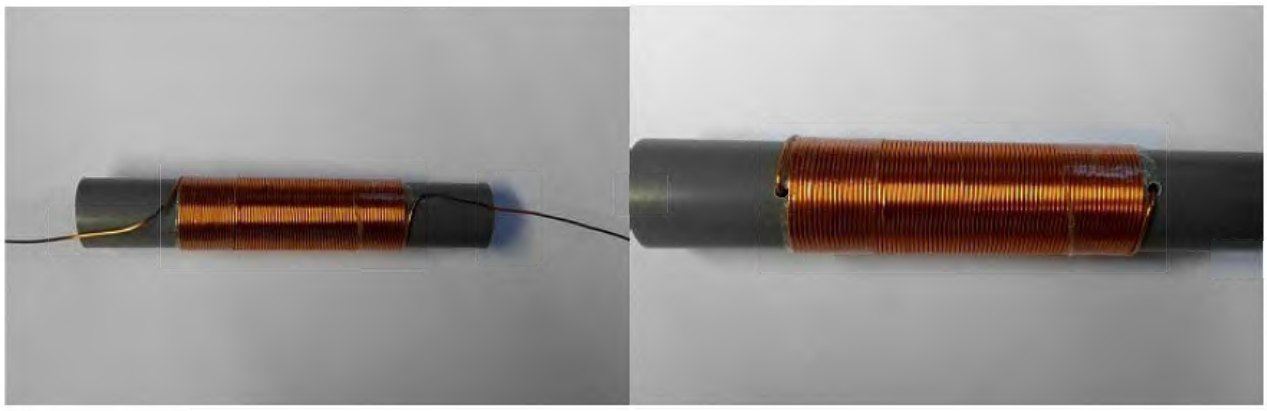
**ARRL 80-Meter Extension Kit**
**– for use with ARRL's End-Fed Half-Wave Antenna**

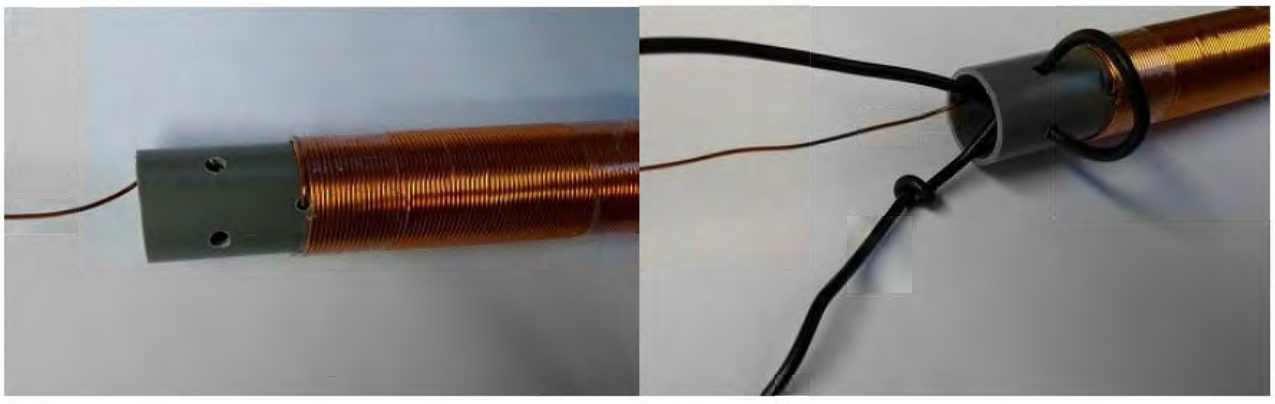
**10, (15), 20, 40, and 80-meter band, with coil**



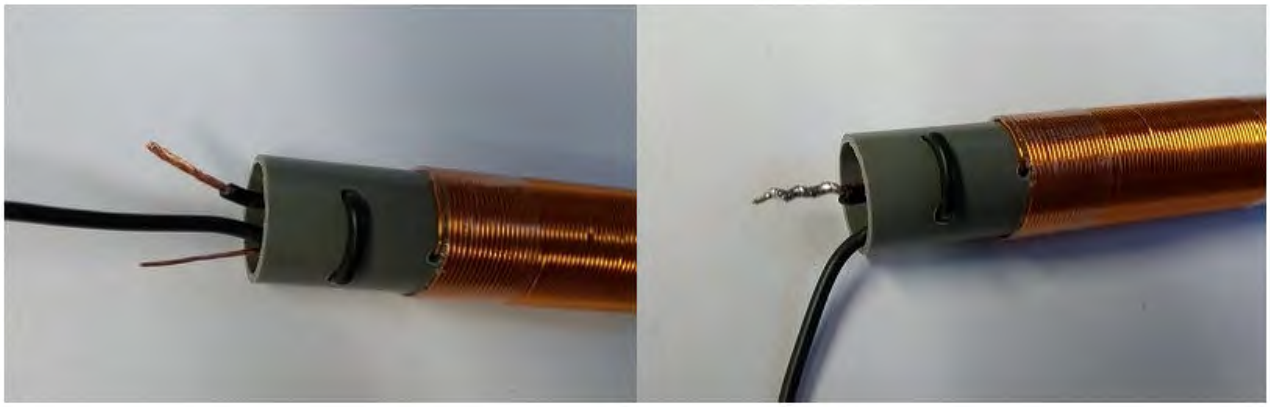

There are, of course, many ways to incorporate the coil into the antenna wire. A proven method is shown below. To obtain a 35 µH coil around a 19 mm PVC pipe, you can use 80 turns of 0.75 mm (0.44 mm²) winding wire. For the 110 µH coil, you can make 170 turns with 0.5 mm (0.20 mm²) winding wire.



Wind the coil as tightly as possible, making sure there is no space between the windings. Fix the whole thing with some tape. Drill two small holes right next to the coil to insert the ends.



Drill two more holes as shown in the photo above to then put the litz wire through. This will be the strain relief. Put a knot in the litz and then tighten it.



Now cut off the excess winding wire and litz wire to leave just enough length to make a solder. Make sure the winding wire is properly stripped of the enamel layer. This can be done with a sharp knife or sandpaper. Solder the wick to the coil and then insert it into the pipe.

Now apply the heat shrink tubing and heat evenly until the heat shrink fits nicely.

**Fine tuning**

Place the finished End-Fed Hafl-Wave antenna in the desired spot, with some extra wire length attached to it. The first step is to tailor the wire for higher frequencies. This is the piece of wire that is connected directly to the impedance transformer. Keep in mind: it’s possible to cut it off, not to put it back on. So don’t cut too enthusiastically If the higher frequencies show an average and acceptable SWR, you can start to tailor the part of wire behind the coil for the lowest band.