

MOBILE 2-METER 144 MHz SSB/CW "HALO"

Verdict is in: This HALO design is not ground dependent and can be mounted atop a section of PVC. See comments!

The gamma section isn't really a true gamma section. I found that if I feed the center of one of the 1/4 wave elements the antenna matched up pretty well. I ended up tuning this antenna for the FM portion of 2-meter band, trimming the elements to around 19 1/2" on each side of the Halo. Surprisingly, this antenna works well for FM, even if it is a horizontal design. What I like most is that it's low profile, so it doesn't smack the tree branches when mounted on top of my van. A plus!

[Some comments about the 2-meter HALO antenna.](#)

[Christopher KD7REM mounted a HALO on his 1955 Chevy Pickup.](#)

[The STEALTH HALO images! \(a small joke...\)](#)

2 METER SSB/CW MOBILE ANTENNA: HORIZONTAL HALO DESIGN

STEVE KB1DIG


PARTS:

- COPPER TUBING 1/2" RIGID CUT TO 20"
- ALUMINUM TUBING 3/4" INSIDE DIAMETER ABOUT 8"
- GROUNDING WIRE #4 SOLID COPPER ABOUT 5 FEET
- GROUNDING WIRE #8 SOLID COPPER ABOUT 1 FOOT
- RG-8 COAX ABOUT 30"
- 2 STAINLESS HOSE CLAMPS MUST FIT OVER THE ALUMINUM TUBING

SPECIAL TOOLS:

- HOT GLUE GUN
- BUTANE TORCH
- HD WIRE CUTTERS

START BY TIGHTLY WRAPING THE #4 WIRE ON TO THE COPPER TUBING -SQUEEZE THE COIL TIGHTLY TOGETHER AND POSITION VERY CLOSE TO ONE END

21"  21"

CUT WIRE 21" FROM THE COIL AND TUBING OUTWARD ON EACH SIDE


10"

PLACE A MARK 10" OUT ON THIS SIDE OF THE WIRE

USE THE TORCH AND SOLDER THE COIL ONTO THE COPPER TUBING

NOW CAREFULLY FORM THE HALO SHAPE SIMILAR TO THE DIAGRAM BELOW

LEAVE A 1" GAP BETWEEN THE 2 WIRES



NEXT TAKE THE #8 WIRE AND PUT A HOOK ON ONE END -SMALL LOOP TO AID IN ATTACHING TO THE LARGER WIRE OF THE HALO

NOW IT'S TIME FOR THE GAMA MATCHER

- BEND THE HOOK IN THE #8 WIRE AND SOLDER IT TO THE MARK MADE ON THE RIGHT SIDE OF THE HALO

1" GAP

BEND THE WIRE BACK TOWARDS THE COPPER TUBING AND CUT TO 5" IN LENGTH

FEED COAX INTO THE COPPER TUBING -CUT TO 4 3/4" LENGTH -REMOVE OUTSIDE COVERING

SOLDER

SCRAP WIRE

SAVE SOME OF THE SHIELD AND SOLDER

STRIP BACK ABOUT 1/2"

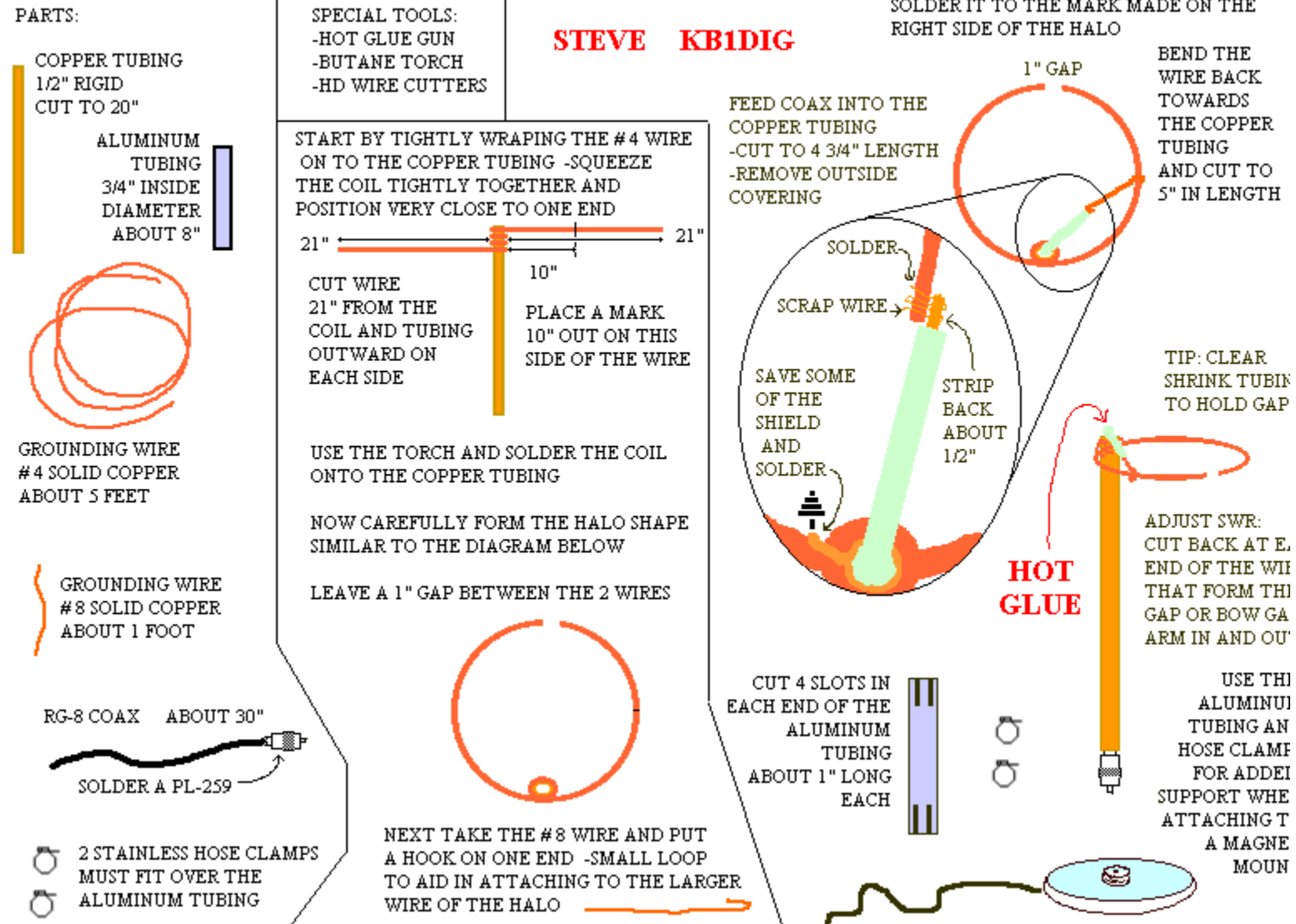
TIP: CLEAR SHRINK TUBIN TO HOLD GAP

HOT GLUE

ADJUST SWR: CUT BACK AT E. END OF THE WIT THAT FORM THH GAP OR BOW GA ARM IN AND OU

CUT 4 SLOTS IN EACH END OF THE ALUMINUM TUBING ABOUT 1" LONG EACH

USE THH ALUMINUI TUBING AN HOSE CLAMF FOR ADDEI SUPPORT WHE ATTACHING T A MAGNE MOUN



[Back to the KB1GTR & KB1DIG Hampage](#)

