

## CAN'T GET THE STANDING WAVE DOWN ON BASE ANTENNAS?

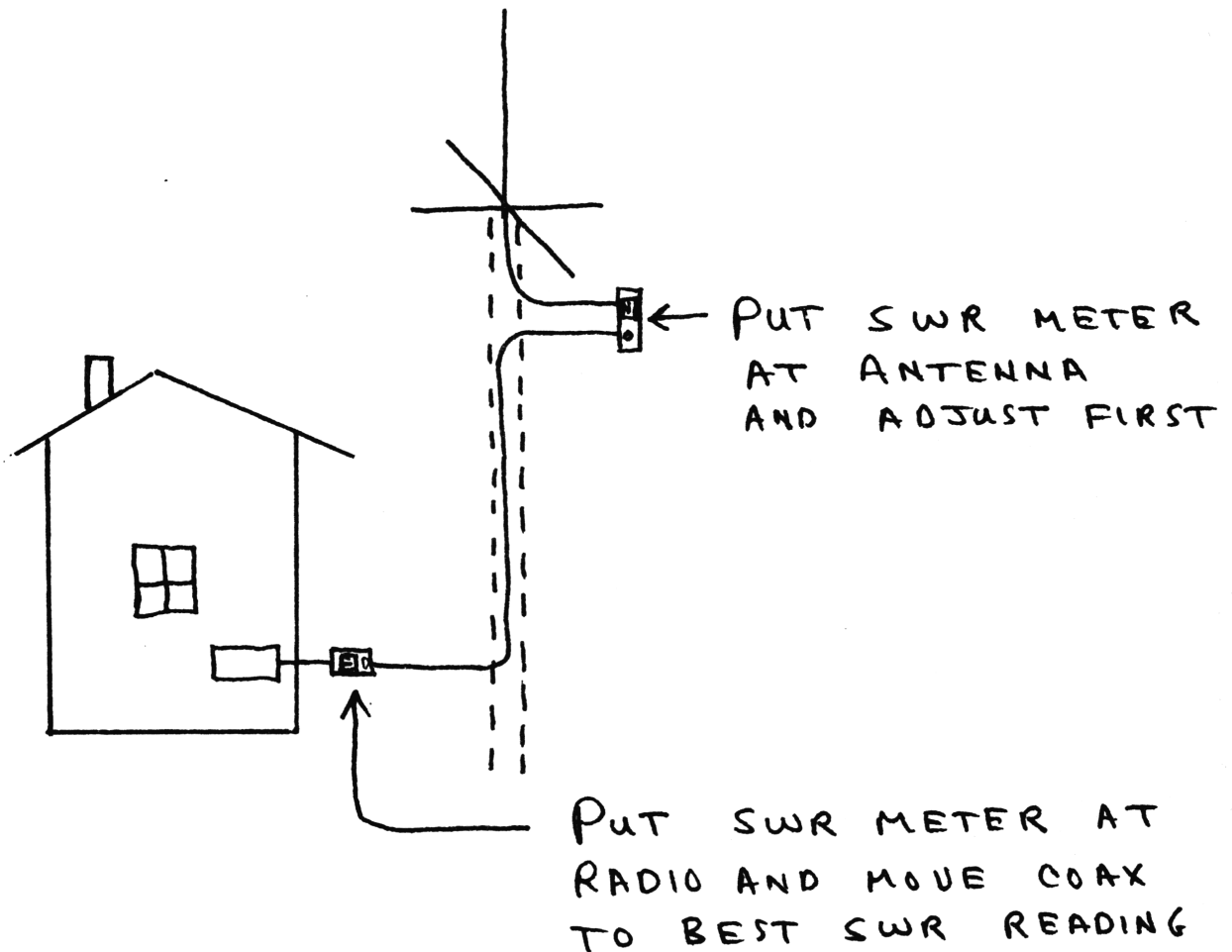
Many times problems with standing wave on base station antennas lie not in the antenna but in the coax. That extra 5 or 10 feet of coax, that was not needed coiled up or that band around a corner has caused many people to turn against the best antennas. Use only the length you need. Cut off all excess.

First let's start with the antenna. Put it together according to manufactures instructions, clear of all wires and metal objects. Make sure you have a ground rod installed and connected. Next, let's adjust the standing wave at the antenna. Once the standing wave has been set at the antenna remove the SWR meter and connect the coax to the antenna.

Now let's put the SWR meter on the radio. If the standing wave is higher than the antenna setting, move the coax around until the lowest reading is obtained.

This method will show you if the antenna or the coax is the problem.

This method will also work with some mobile antennas.



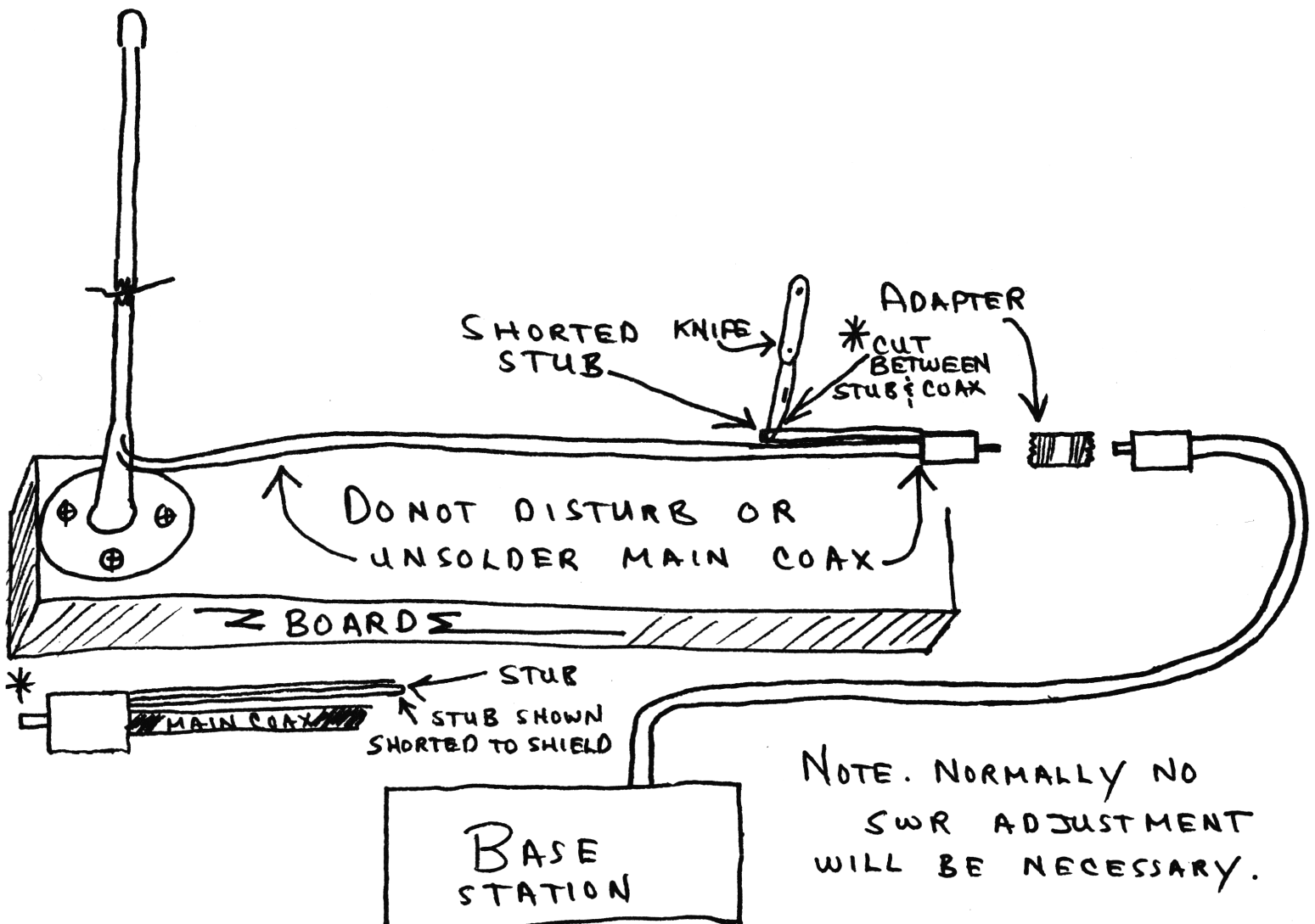
## APARTMENT ANTENNA IDEA THAT WORKS

There are many people living in apartments who would like to use a base station, but due to the restrictions on attaching antennas to apartments, some people have all but given up the idea. Also, some so called apartment antennas' that were on the market did or do not perform with any satisfaction.

Here is an antenna that performs quite well in apartments. Purchase a Shakespeare 388 Marine antenna from your local CB store. Place the antenna on a board and you will be able to shove the antenna out the window and bring it in when you have finished talking. This antenna can be used inside also.

IMPORTANT: You may add coax by an adapter, sometimes called a barrel connector, or "double male". Be sure not to splice the coax from the 388 antenna. If the antenna wire is cut you will not be able to use the antenna. (NOTE WE FOUND THIS OUT THE HARD WAY).

If the SWR's are high on the upper channels, you may adjust the SWR's by trimming back the shorted stub. NOTE that the center conductor is shorted to the shield. Unsolder the center conductor and trim slightly. Re-check SWR. If all OK, tape shorted stub back to coax.



## GROUNDING MOBILE

- 1-Your power cord is not sufficient for RF ground. A separate cable must be used, (Belden 8663 or you may strip the shielding from 6 pieces of old coax). A length of hookup wire will not work for RF ground. The thing you must remember about RF is that it travels on the surface of the conductor and you must have a large surface to conduct RF.
- 2-Rust and oxidization will not pass RF because it is on the surface of the material. All connections must be rust free and clean. Remember rust and oxides disrupt RF path's and ground connections.
- 3-The antenna must have a ground plane of 108 inches to work properly.
- 4-You can not measure RF ground with a ohmmeter. A special RF Bridge must be used.
- 5-The rule of thumb is,if it is clean, bright, and shiny it is a good RF ground.
- 6-All insulated joints such as hood, trunk, and side mirror's must have a ground strap to the car body.
- 7-Silicon or zinc ointment will help oxidization from causing you trouble at your antenna by keeping it down.  
(I prefer zinc ointment).

\*\*\*\*\*COPS! WE COOFED!\*\*\*\*\*

### CORRECTIONS FOR VOLUME 4

Page 50-should be Clarifier Modification R187 (Cut)

Page 45-Under item 4,R301 should be R310

Page 5--Item 7, the drawing is found on page 35.

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SPACE BELOW FOR YOUR PERSONAL NOTES