

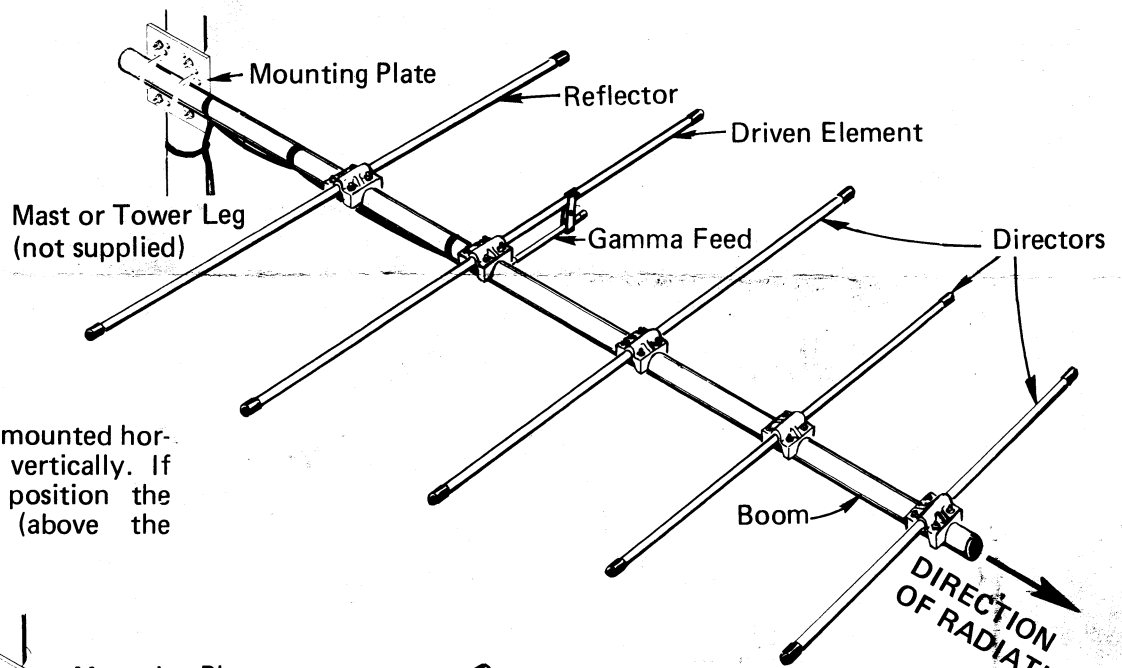
3 or 5 ELEMENT YAGI ANTENNA

VHF High Band 138-174 MHz

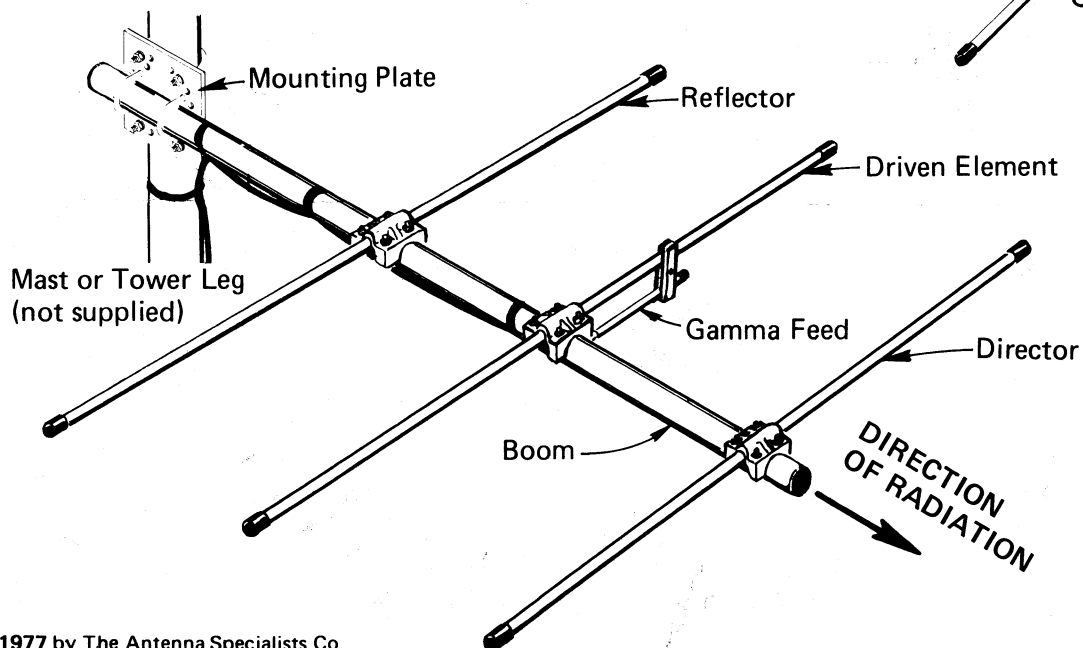
WARNING

IF THIS ANTENNA OR THE TOWER TO WHICH IT IS ATTACHED TOUCHES A POWER LINE OR IS BROUGHT IN PROXIMITY WITH A HIGH VOLTAGE ELECTRICAL FIELD, THERE IS DANGER OF ELECTRIC SHOCK OR ELECTROCUTION. FOR YOUR SAFETY, CARE SHOULD BE TAKEN TO STAY CLEAR OF ELECTRIC POWER LINES OR OTHER APPARATUS CARRYING HIGH VOLTAGE ELECTRICAL ENERGY. THIS WARNING IS BEING ISSUED IN THE INTEREST OF PUBLIC SAFETY.

The use of silicone grease compound on the threaded portions of the antenna prior to assembly, will protect from weather and ease future disassembly.



This antenna may be mounted horizontally (shown) or vertically. If vertically polarized, position the gamma match up (above the boom).



1. Locate proper element spacing by measuring and marking boom, starting with director 2" from end of boom. See FIG. 1 for 3 element spacing and FIG. 2 for 5 element spacing.
2. Cut directors, driven element and reflector to length for desired frequency on proper cutting chart. Use a hacksaw or tube cutter. Slide caplugs on ends of elements after cutting.

FIG. 1

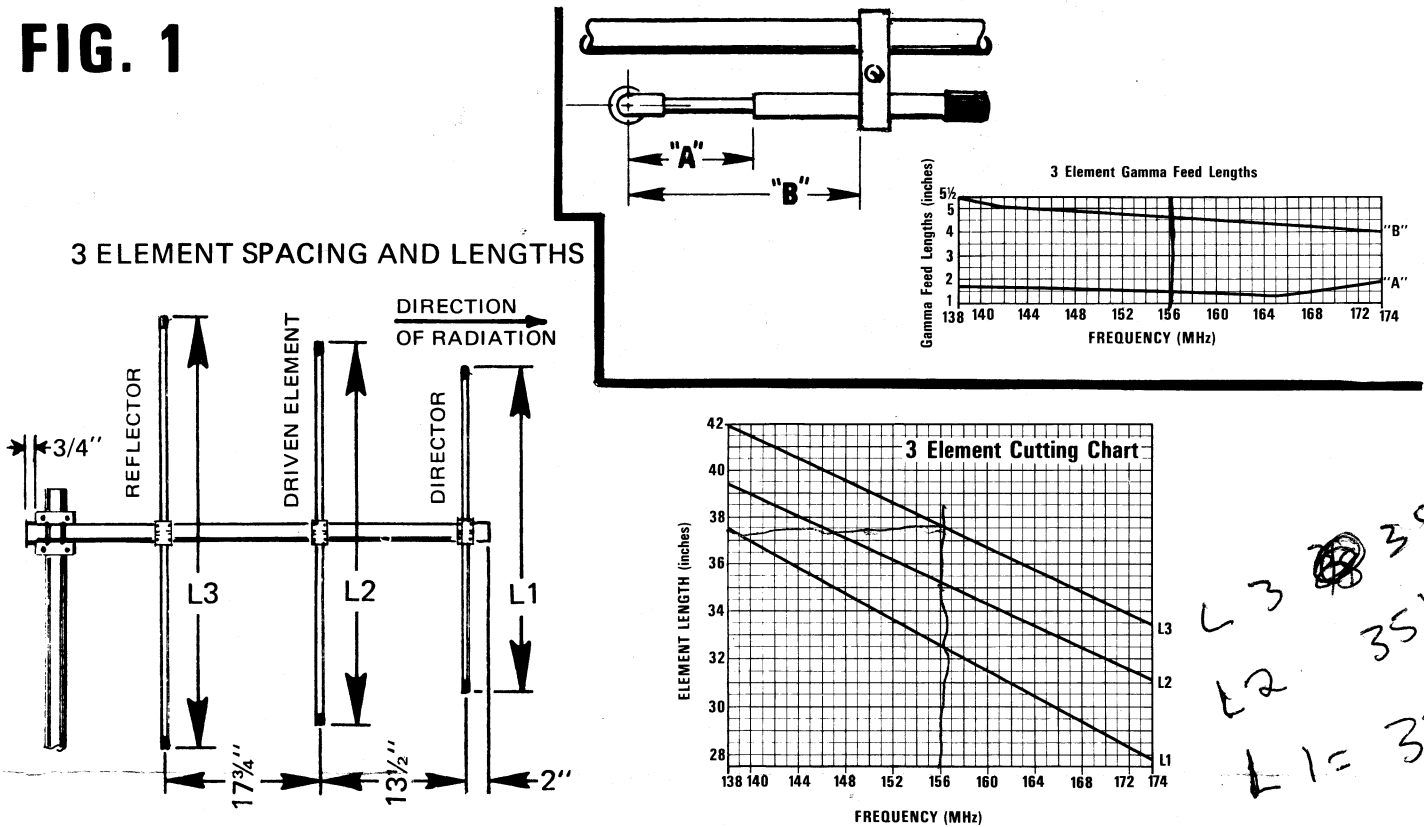


FIG. 2

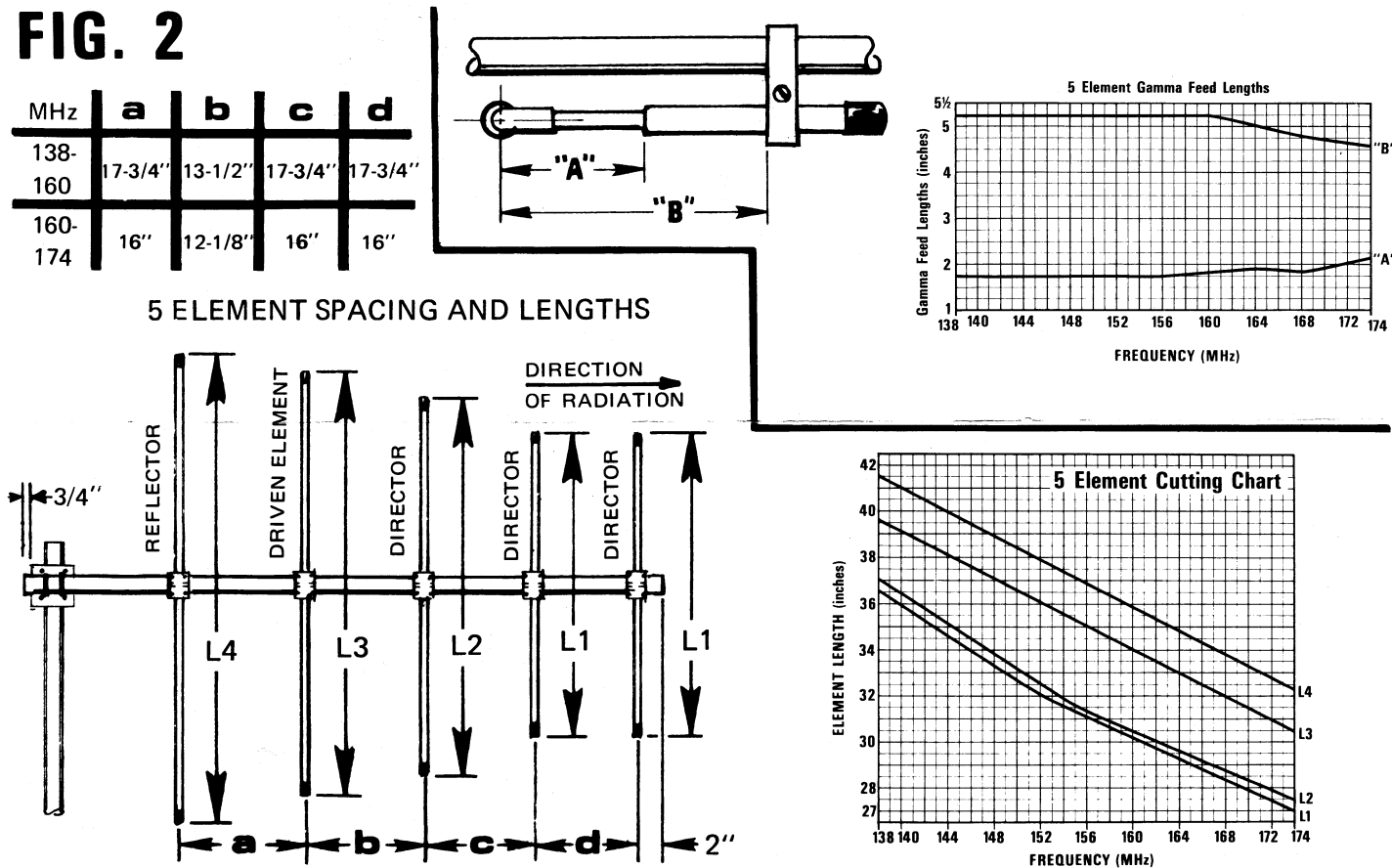
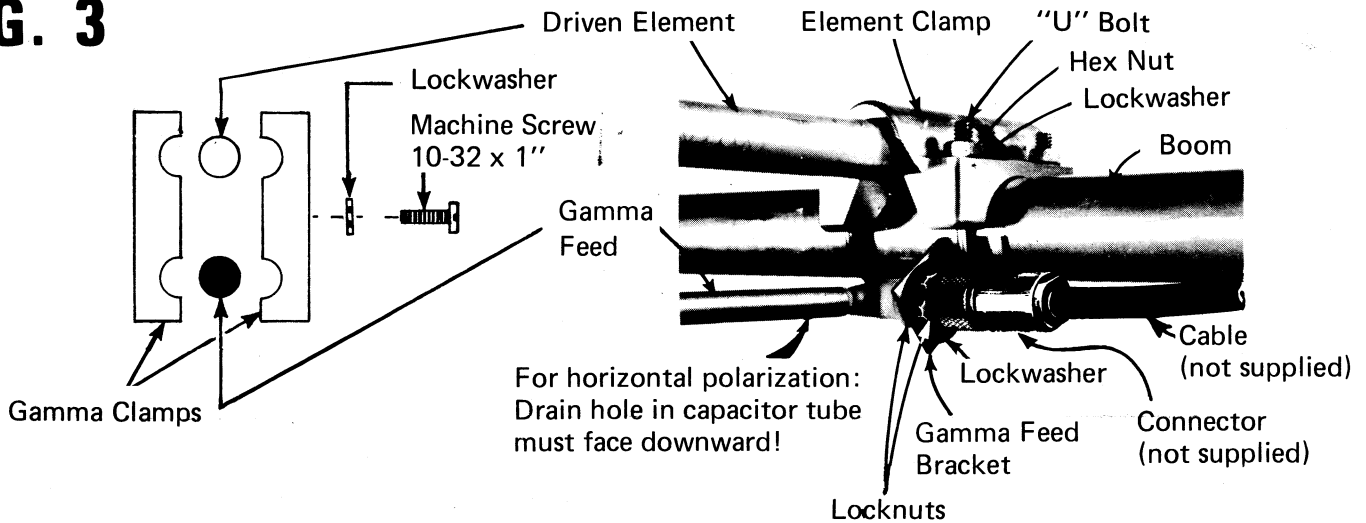
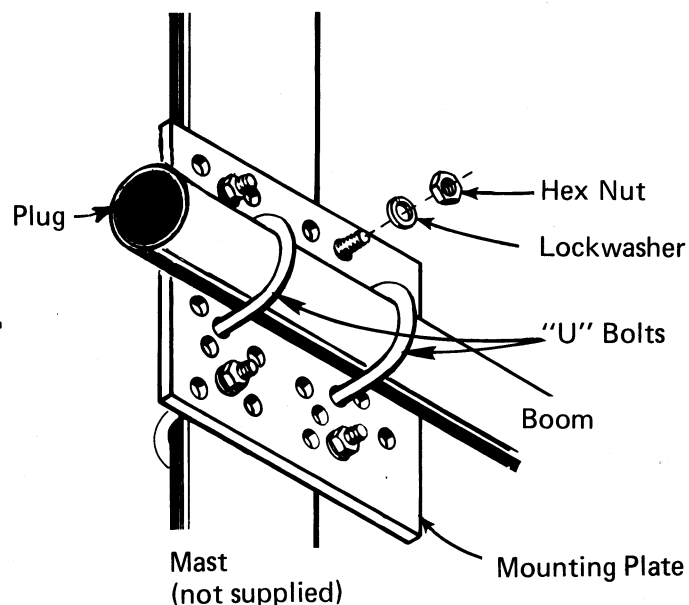


FIG. 3



3. Assemble driven element and gamma feed to boom using brackets and hardware (FIG. 3). Before finally securing gamma feed, set capacitor tube and gamma clamps to dimensions shown in FIG. 1 or FIG. 2. After following proper chart, secure element (equal length on each side of boom) and gamma feed. Finer tuning is described in step 7.
4. Assemble directors and reflector to boom, an equal length on each side of boom, using brackets and hardware. Slide plugs in ends of boom.
5. Mount assembled antenna to mast or tower leg using mounting plate and hardware (FIG. 4). DO NOT SHORTEN BOOM-use the full length supplied. Position mounting plate with edge 3/4" from end of boom.

FIG. 4



6. Connect cable, fitted with type "N" male connector, to feed termination on antenna. Tape connection with plastic tape to waterproof. Tape or strap cable to boom and mast to prevent damage. Use any 50 ohm nominal impedance cable such as RG-8/U (or any 50 ohm "hard-line" for lengths over 100 feet).
7. If required, tune antenna after final installation as follows:

Using a thru-line wattmeter or VSWR bridge, adjust gamma for minimum reflected power at the operating frequency. This is accomplished by first setting the gamma capacitor tube and gamma clamp to the approximate dimensions shown in FIG. 1 or FIG. 2.

Adjust the capacitor by telescoping the tube (either up or down) for minimum VSWR, then move the gamma clamp on the driven element. Again, adjust the capacitor tube for minimum VSWR. Securely tighten all hardware on the gamma and driven element clamp and re-check the VSWR.

This antenna is capacitor-fed; no dc continuity exists between the center of the coax connector and any other part of the antenna.