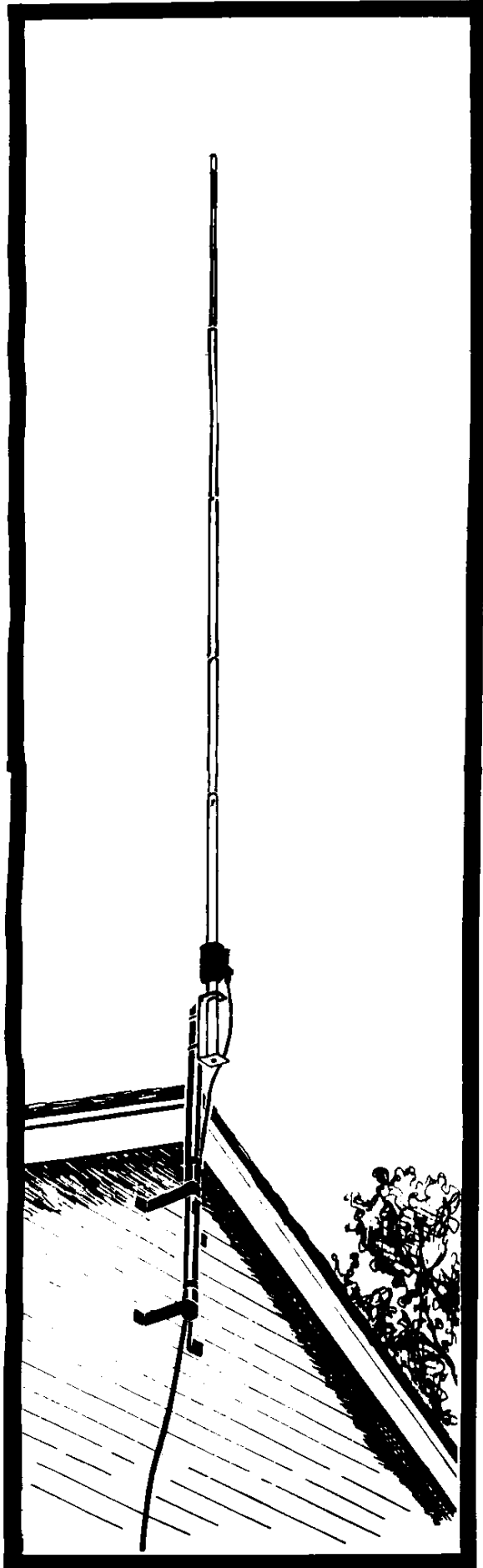


OMNI DIRECTIONAL BASE STATION ANTENNA

M-344

for 27 MHz Citizens Band



WARNING

INSTALLATION OF THIS PRODUCT NEAR POWER LINES IS DANGEROUS FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS ATTACHED.

Under some conditions, this antenna may not prevent electrocution. Users should keep antenna away from any overhead wires. If antenna contacts a power line, any initial protection could fail at any time. IF ANTENNA NEARS ANY OVERHEAD WIRES IMMEDIATELY LET GO, STAY AWAY, AND CALL UTILITY COMPANY.

BEFORE YOU START

The antenna is supplied complete. However, the mast, connectors and coaxial cable are not supplied. Tools required for assembling antenna are a regular blade screw driver and an adjustable wrench.

MOUNTING THE ANTENNA— Consult the attached installation booklet

Usually the antenna is mounted on a section of pipe or tube called a "mast". The mast should be $\frac{3}{4}$ " to $1\frac{1}{4}$ " diameter pipe. Attach the mast to a chimney, side of a house, top of a roof or tower. Use **guy wires** to secure the mast if necessary. The antenna must be positioned away from objects that may block radio signals, such as other towers, rooftop equipment and structures. The mast guy wires, tower and mounting hardware are not supplied, but are available at most dealers.

CONNECTING ANTENNA TO THE RADIO

Cable from radio to antenna is not supplied. Use a 50 ohm nominal impedance coaxial cable such as RG-58 or RG-213/U. "Hard-line" or "Heliac[®]" cable is suggested for lengths over 50 feet. The use of the larger cable will require using a Right Angle Adapter part number 14-103-1. Each end of the coax will need a connector. Purchase two male UHF (PL-259) connectors. Carefully attach each one following the instructions supplied with it. Test the coax for "opens" or "shorts" before it is installed. The coax is the only link between the antenna and radio. It must be prepared, installed and maintained carefully. Defective coax is a common cause of poor communication system performance.

"Heliac" is a registered trademark of Andrew Corp.

The use of PTFE or similar lubricant on the threaded portions of the antenna, prior to assembly, will protect from weather and ease future disassembly.

FIG. 1

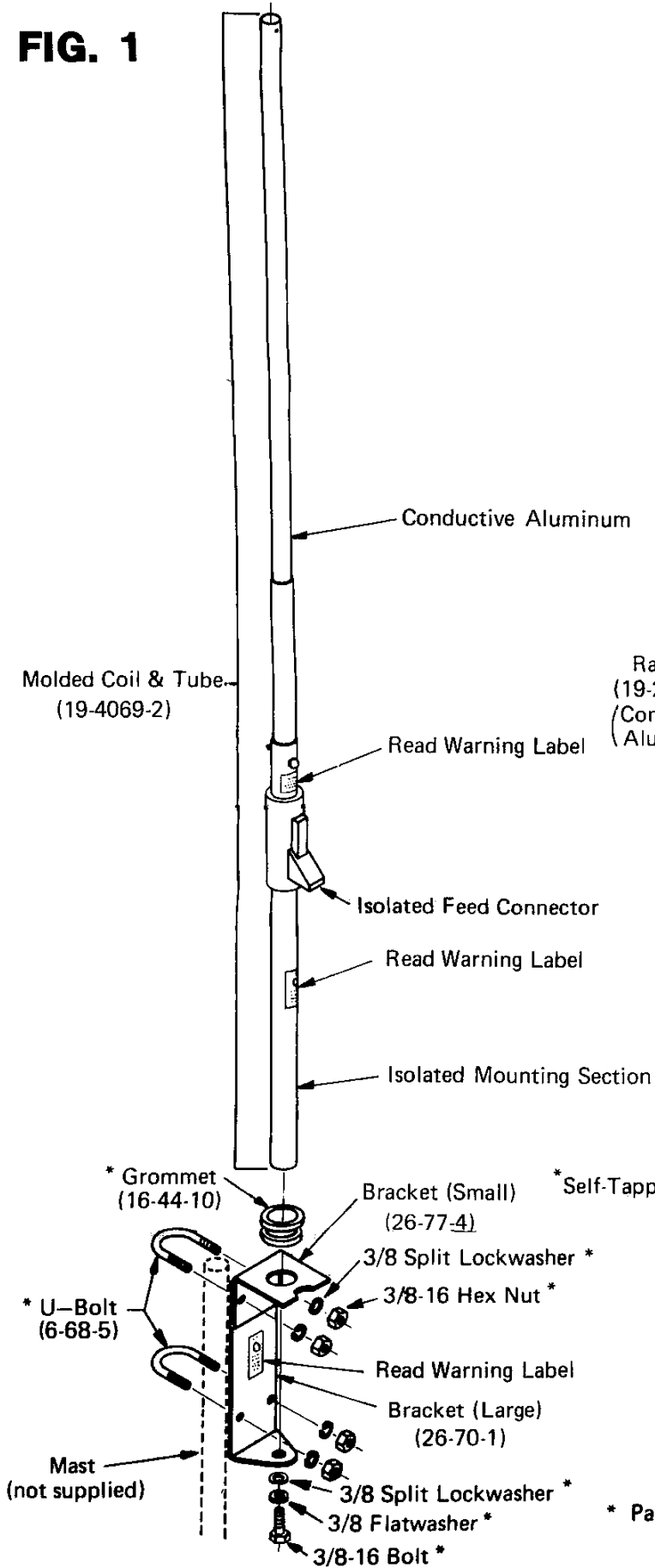
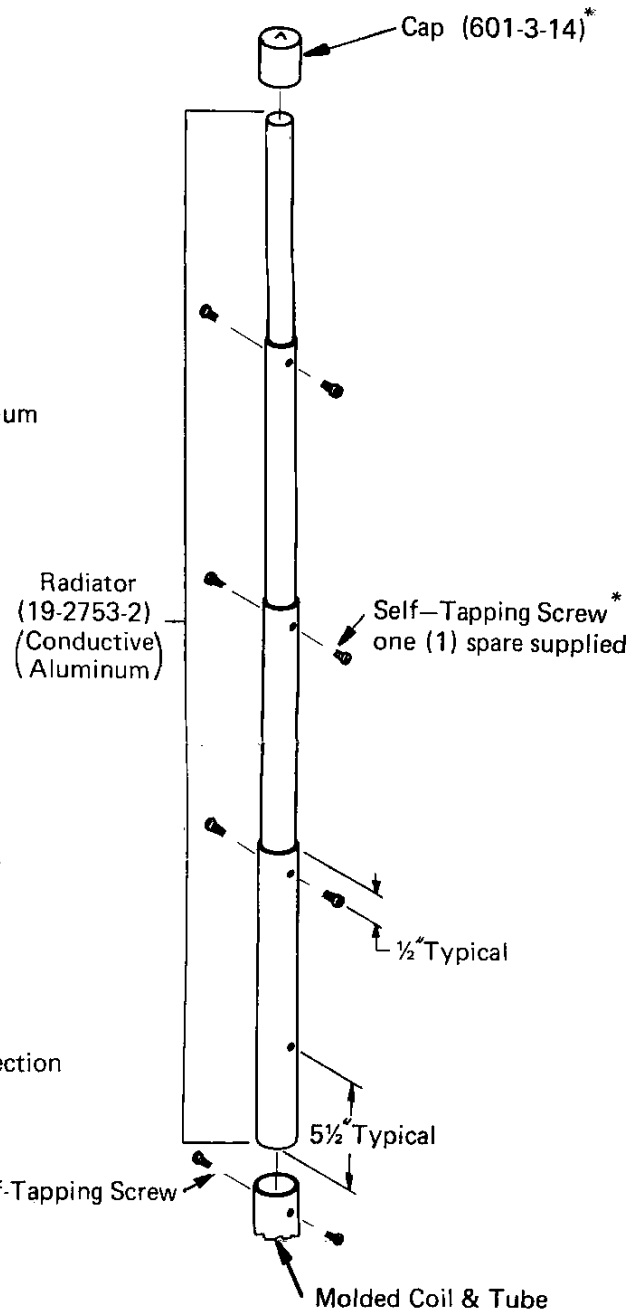


FIG. 2



* Parts contained in Hardware Kit (19-4010-1).

ASSEMBLING THE ANTENNA

Follow these antenna assembly instructions carefully. No modifications to parts or assembly technique is recommended. Steps 1 thru 8 are to always be done on the ground or a flat roof.

1. Telescope the four tubes of the Radiator until hole alignment is achieved, as shown in FIG. 2. Using six (6) of the Self-Tapping Screws, affix Radiator tubes in position. Securely tighten the Screws until heads bottom on the tube surface. Assembled length of Radiator should be 167".
2. Slip Cap onto top tube of Radiator (FIG. 2).
3. Assemble Radiator into Molded Coil & Tube and align holes. Using two (2) Self-Tapping Screws, finish assembly by tightening these Screws until the heads bottom on tube surface. Length of this assembly should be 226¾".
4. Assemble Grommet into hole of Bracket (small) (FIG. 1).
5. Slide end of Molded Coil & Tube through Grommet and nest end projection into hole of Bracket (Large). Warning Labels on Molded Coil & Tube should face away from Bracket for high visibility. Using 3/8-16 Bolt, Flatwasher and Split Lockwasher, affix Molded Coil & Tube to Bracket as shown in FIG. 1, and tighten securely.
6. Remove protective caplug from Isolated Feed Connector and discard (FIG. 1).
7. Attach cable (not supplied) to Isolated Feed Connector and wrap connection with plastic electrical tape (not supplied) to protect connection from weather.
- ~~8. Install the assembled antenna onto the mast (not supplied) using U-Bolts, Split Lockwashers and Hex Nuts. End of mast must be flush with top of Bracket (small). If antenna is to be mounted on a pre-erected "tower", do so during this step, instead of on mast.~~
9. While installing cable strap or tape it to the mast and/or tower every two to three feet to restrict buffeting during high wind conditions.
10. If entire Antenna/Mast combination is to be erected in one piece, it is now ready to be installed in its final operating position. Again, consult the INSTALLATION BOOKLET for recommended SAFE installation procedures. DO NOT install this antenna near power lines. If unsure about the presence of power lines, contact the local electric utility company for assistance before proceeding to install or erect the antenna.
11. Install the extra Warning Label supplied in a prominent place on the support mast or tower.
12. Fasten the cable with appropriate devices (Tie-wraps, cable clips, etc.) along the route to the radio to avoid damage.