

tuning

19 Assembled as described in the preceeding steps, the antenna will function satisfactorily. No further adjustment is necessary.

OMNI-DIRECTIONAL
CENTER FED VERTICAL ANTENNA

for 27 MHz Citizens Radio

This antenna mounts on 1" threaded pipe or 1-1/4" steel mast, NOT SUPPLIED (miximum 10' length). It may be mounted to a chimner, tower, rooftop or side of building by using proper mast and mount hardware, available at your dealer. Electrically, the antenna is designed with a 50 ohm impedance. Use 50 ohm transmission line, preferably RG-8/U, (RG-58/U may be used for runs of 60' or less). Fit antenna end, of transmission line with a PL 259 connector to mate with the coaxial fitting on the antenna. Use extreme care in preparing the transmission line ... make sure connections at both ends of the cable are soldered securely and that there are no shorts or opens in the cable before it is installed. Cables and connectors are available from your dealer.

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

THIS PACKAGE CONTAINS:

1 - Tube & Long Adapter 52%" long (19-2410)			
3 - Tube & Short Adapters 55" long (19-2411)		-	
1 - Tube - 5/16" d (3-455-1)	ia. x 31-5/8" lg.		
3 - Radial Tubes - 3/8" dia. x 55%" lg. (3-371-22)		l	
3 - Tubes - 7/16'' dia. x 15¼'' lg (3-413-4)			•
1 - Tube - 3/8" dia. x 24" lg. (3-454)			
3 - Radials - 10" lg. (2-91-15)			
1 - Hub, large (19-2412)		3 - Insulators, small (8-401)	2
		1 - Insulator 3-sided (8-400)	

Hardware Kit (19-2414) containing:

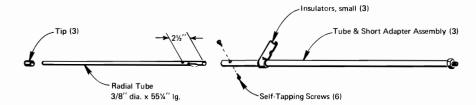
1 - Hub, small (19-2412-2)		16 - Self-tapping Screws	(S)
1 - Tip (Radiator)	Û	3 - Large Split Lockwashers	@
3 - Tips (large radials)	0	1 - Set Screw	
3 - Tips (small radials)	0	3 - Small Split Lockwashers	9
1 - Allen Wrench		3 - Hex Nuts	@



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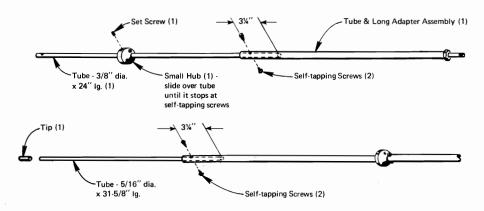
107" radial assembly

- 1 Carefully slide one small insulator onto each of the 3 tube and short adapter assemblies.
- Assemble radial tubes using 6 self-tapping screws.
- 3 Attach tips.



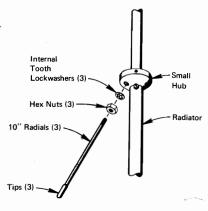
radiator assembly

- Assemble tube and long adapter assembly and 3/8" dia. x 24" lg. tube with 2 self-tapping screws.
- 5 Slide small hub over 3/8" dia. tube until it stops at the self-tapping screws.
- Secure hub to tube by tightening set screw with allen wrench.
- **7** Attach 5/16" dia. x 31-5/8 lg. tube to radiator using 2 self-tapping screws.
- 8 Attach tip.



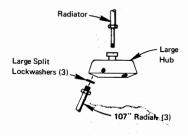
10" radial assembly

- Slide a tip, onto each plain end of the (3) 10" radials.
- 1 Attach the radials to the small hub using an internal tooth lockwasher and hex nut for each. Secure each radial by tightening the hex nut against the small hub.



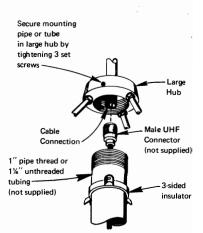
antenna assembly

- 11 Screw (3) 107" radials into the large hub using a large split lockwasher with each radial.
- 12 Screw radiator into top of large hub tighten all antenna rods securely.



mounting antenna

- **13** Feed cable through mounting pipe (cable, connector and mounting pipe not supplied).
- 14 Slide 3-sided insulator over pipe.
- 15 Attach cable connector to connection on bottom of large hub.
- 16 Screw large hub onto mounting pipe if threaded 1" pipe is used. If 1%" tube is used, insert tube into large hub and secure by tightening 3 set screws. When steel tubing is used, be sure end to be inserted into large hub is not flared or swaged and measures 1%" OUTSIDE DIAMETER and has a wall thickness of at least 1/16" (16 gauge). MAKE SURE CONNECTIONS ARE SECURE.



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