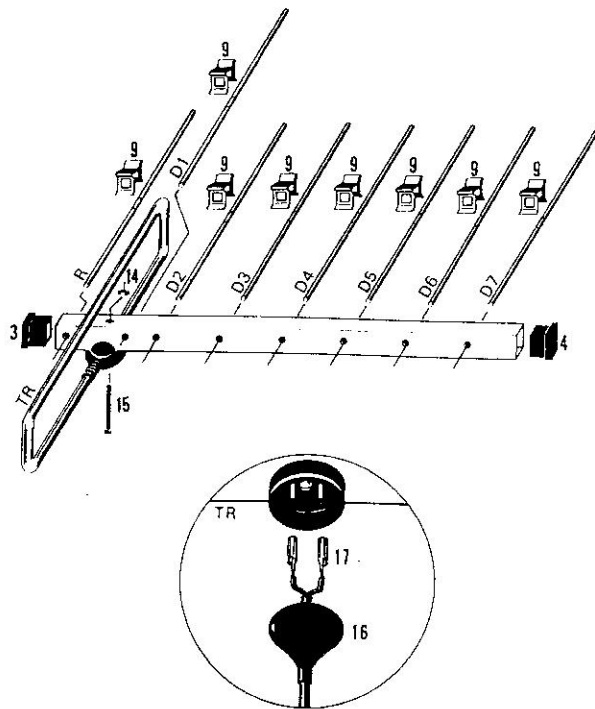


ASSEMBLY INSTRUCTIONS
435 / 9 ELEMENT F9FT ANTENNA

IMPORTANT:

When opening the box, check and compare all parts and hardware with enclosed part list.

ANTENNA ASSEMBLY:

The red cap indicates the front of the antenna, the black cap, the rear. Directors are counted up from front, and from longest to shortest.

1) Mount on boom reflector R and directors D1 through D7. The reflector is the longest element. On each element, grooves are provided, in which the spring clamp (#9 on diagram) must fit for proper position of element. Place a spring clamp over the each hole. Then stress spring clamp so that the clamp hole is tangent to the tube hole. This must be carried out with utmost care: make sure not to overstress the spring, for it may lose its elasticity and not come back. Some extra clamps are provided for tests and spare. Once holes are tangent, slide element through holes down to grooves, for proper position. Release clamp; element must be firmly held in place.

2) Slide driven element (TR on diagram) to proper hole on rear side of boom. Attach with Max35 bolt #15 and N4 nut #14.

CAUTION:

Before going any further, make sure that each successive director (from rear to front) is either the same or shorter than the prior director. Check if each director is properly centered on the boom. If those conditions are not correctly fulfilled, performance of the antenna may be drastically reduced!

ATTACHING THE FEED-LINE:

Use RG8/U, RG213/U, or similar coax of same outer diameter (50 Ohm).

1) Cut the protective boot (#16 on diagram) to allow a tight fit with the feed-line used, and slide onto coax. Strip off approximately 15 mm (1/2") of the outer PVC jacket. Spread apart the braid, and then, twist all wires together at a diameter of approximately 3 mm (1/8"). Remove about 10 mm (3/8") of the center insulator, to expose center lead. With a solder iron, slightly tin the center lead and twisted braid. After cooling, slide onto them the special female lug (#17 on diagram) and thoroughly solder. Remember the connections must be made as short as possible, otherwise SWR may

rise at unexpectedly high value!
 Plug with care the whole assembly into the driven element terminals.

CAUTION:

MAKE SURE THAT ANY LOOSE BRAID WIRE DOES NOT SHORT THE CONNECTIONS !!!

Trim off all unsoldered braid wires to avoid any short.

DO NOT FILL DRIVEN ELEMENT CAVITY WITH SILICONE GREASE OR SIMILAR MATERIAL BEFORE COVERING WITH BOOT !!!

Just coat lugs and soldered parts with a thin plastic spray.

After proper checking, slide boot down over the feed connection and snap boot into place. Make a short loop (not shorter than a quarter wave, i.e. 17 cm) coming down from the connection back to the boom; tape to the boom. This eliminates the need for an external balun.
 Drill a small hole at lower point of boot, to allow water to drain.

MOUNTING OF ANTENNA TO MAST:

The special bracket and clamp set accepts mast size up to 54 mm (2 1/16) outer diameter.

Mount first bracket alone on mast. Unravel to maximum the nut on U-clamp. Let hang clamp with slashed hole and apply bracket against mast. Replace clamp with slashed hole across U-clamp and tighten nuts. Loosen gusset plate, on other side of bracket, and slide rear side of boom into the gusset plate, then antenna having been set in the desired polarisation. Then tighten gusset screws.

It is recommended that the antenna points in direction of local dominant winds, when not in use.

ELEMENT LENGTHS:

	Millimeters	Inches
Reflector	350	13 3/4
Driven element	320	12 5/8
Director 1	330	13
Director 2	315	12 3/8
Director 3	305	12
Director 4	300	11 13/16
Director 5	297	11 11/16
Director 6	295	11 5/8
Director 7	295	11 5/8

PART LIST

PART #	DESCRIPTION	QUANTITY
1	Boom	1
3	Rear black cap	1
4	Front red cap	1
9	Stainless steel spring clamp	10
14	M4x35 Driven element screw	1
15	M4 Driven element nut	1
16	Protective boot	1
17	Connection lug	3

HARDWARE:

Complete mounting bracket with M6 U-clamp, Slashed hole clamp, two M10 tightening nuts for U-clamp, gusset plate with M6 tightening screws, all mounted on main bracket plate.