Installation Instructions

Types MACX350A-41 and MACX675B-41
MACXLine® Rigid Line
Less than 5-Foot Lengths

Description
Types MACX350A-41 and MACX675B-41 Rigid Line Field Kits are used for field trimming to nonstandard lengths of less than 5 feet. The Field Kits are supplied with an outer conductor with one flange attached, fixed field flange (for attachment), 5 ft inner conductor, captivated inner connector, and hardware kit. The inner and outer conductors must be field cut to the desired length to fit into the rigid line installation. The outer conductor must be trimmed and the fixed flange soldered to the cut end.

Notice
The installation, maintenance, or removal of antenna systems requires qualified, experienced personnel. ERI installation instructions have been written for such personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

ERI disclaims any liability or responsibility for the results of improper or unsafe installation practices.

Installation Procedure

1. Determine the exact length of transmission line section required and deduct 17/64 inch for MACX350 or 7/16 inch for MACX675.

2. Wrap a piece of straight-edged paper around the tubing on the cutting point on the outer conductor to aid in scribing. Scribe a line completely around the outer conductor tubing at the cutting point to aid in making a square cut.

3. Cut tubing with a hacksaw. Make certain cut is square to permit the flange to seat properly.

4. Remove all burrs and clean the end of the tubing with garnet cloth. Do not use emery cloth or steel wool. Keep all foreign matter from entering the tubing.

5. Insert silver solder ring into solder groove of fixed ring or flange. Add silver solder flux to solder groove and to cleaned end of tubing. Seat fixed ring or flange onto tubing and solder assembly with even heat around area permitting even flow of silver solder. Remove excess flux from assembly with hot water then clean assembly again with garnet cloth.

6. Measure length of outer conductor with new flange attached.

7. Subtract 1-3/4" for MACX350A-41 and 2-1/2" for MACX675B-41 (for inner cutback) from outer conductor measured length. This is the required length of the inner conductor.

8. Cut inner conductor to the required length using a miter box and hacksaw. Remove all burrs from where inner conductor has been cut.

9. Carefully insert the trimmed inner conductor into the outer conductor. Extend the inner conductor beyond the flange face by a few inches and fully insert the inner connector into the inner conductor with the protective washer and 3/8" bolt head exposed and toward the antenna. The shoulder of the inner connector must “bottom out” on the end of the inner conductor. Use a small hand wrench to tighten the 3/8" bolt on the end of the captivated inner connector. Tighten to 3 in-lbs. Do not make inner bulge while tightening bolt. Push the inner conductor back into the outer.