

Type MACX650-26

Inner Conductor Only for MACXLine® Rigid Coaxial Transmission Lines



Description

Type MACX650-26 field kits are used for field trimming inner conductors to a non-standard length between 5 and 20 feet. The MACX650-26 kits are complete with bullet/bellows assembly, insulators, and hardware kit. The inner conductor supplied has provisions to attach the bullet/bellows assembly to either end. This feature eliminates the need to solder a stub to the inner when the length requirement interferes with the disk insulators. The inner conductor is marked with black ink to designate specific areas where cutting requires a special procedure. The outer lengths requiring the special procedure are **165.13 – 161.13 inches and 85.88 – 81.88 inches**. Outer conductor lengths outside of these two ranges do not require the special procedure. The "Special Procedure" involves the disassembly of the bullet/bellows assembly and installing it on the other end of the inner conductor.

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 Measure length of outer conductor from flange face to flange face, to within 1/32 of an inch. If the length is between 165.13 and 161.13 inches or 85.88 and 81.88 inches, proceed to "**Special Procedure**" on page 2. Otherwise, proceed to Step 2 below.
- 2 Subtract 1.16 inches (for inner cutback) from outer conductor measured length in Step 1. This is the required length of the inner conductor from the mid point of the "Strain Insulator" to the end of the inner conductor tube. See Figure 1.
- 3 Remove inner conductor assembly from outer conductor. Remove intermediate and strain insulators for an accurate measurement. Be careful not to damage bellows during handling.
- 4 Use tape measure to mark inner conductor at required length making sure the "turn handle" at the front of the bullet is fully engaged (bottomed out) prior to marking.
- 5 Wrap a piece of straight edged paper around outside of inner conductor as cutting guide. Scribe line along paper edge all the way around inner conductor. Cut inner conductor at marked position using miter box and hacksaw. Remove burrs from

inside and outside of conductor. Remove chips from inside of inner conductor.

- 6 Reinstall intermediate and flange insulators.
- 7 Carefully insert trimmed inner conductor into outer conductor with bellows toward antenna end of outer conductor. Push inner conductor back into outer conductor to fully seat flange insulator. Remove "turn handle" with screw from the front of the bullet prior to engaging into the next assembly.

Special Procedure

This procedure is used only when measured length is either between 165.13 and 161.13 or 85.88 and 81.88 inches.

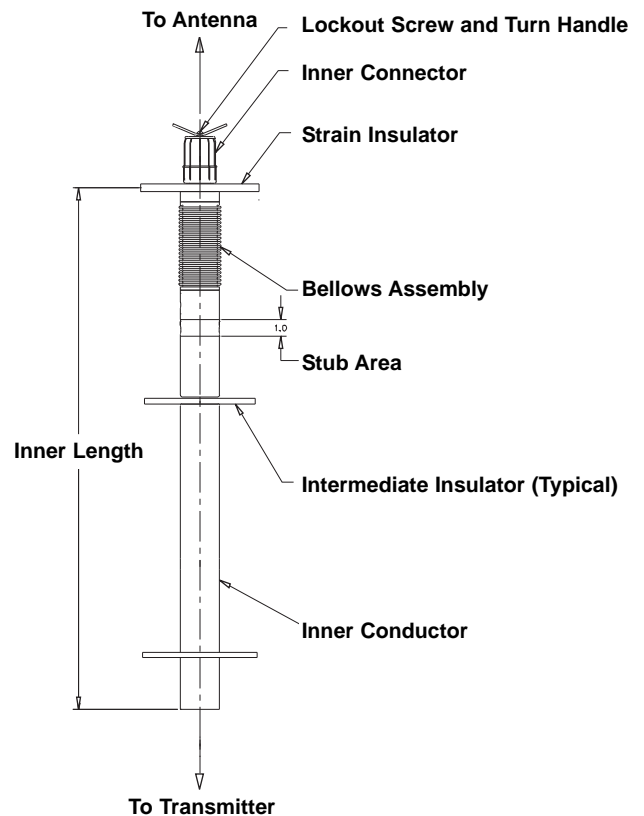


Figure 1

To invert the bullet/bellows assembly to the inner conductor, refer to Figure 2 and the steps below. Tools required; hack saw, 7/16" wrench for 1/4-20 hex head bolt, 5/32" Allen wrench for 10-32 socket head screw, 3/4" socket wrench, torque wrench capable of 25 lb-ft torque, pipe wrench or strap wrench capable of at least 2-5/8" outside diameter engagement.

- 1** Remove item 1 "turn handle"; remove items 2, 3, 4 and 5; remove items 6 and 7.
- 2** Carefully grasp the inner conductor tube with pipe or strap wrench taking care not to crush the tube by only clamping over the Stub area (see Figure1). Loosen item 8 with 3/4" socket wrench. The bellows assembly should rotate with the bolt. Do not try to remove the 1/2" bolt (item 8) from the bellows assembly.
- 3** Reassemble the bellows on the other end of the inner conductor tube. Take care not to gouge the inner conductor tube at the stub while using a pipe wrench. This area must be cleaned up with emery cloth if gouged. The assembly must be secured by tightening item 8 to 20 – 25 lb-ft or 240 – 300 lb-in.
- 4** Reattach bullet (item 7) in reverse order of Step 1.
- 5** Proceed to Step 2 of "**Installation Procedure**" on page 1.

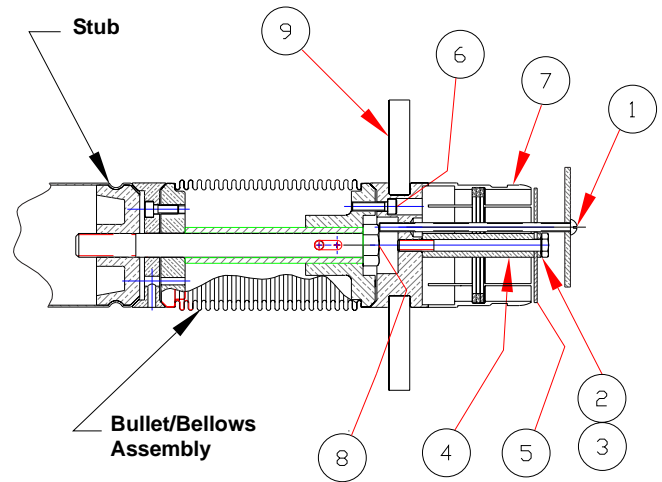


Figure 2

