Appendix E

Cabling the TC-100 tube capsule

(CRS-1000/B version only)

E.1. Introduction

The primary sensors for the CRS-1000/B version of the cosmic-ray probe are enclosed in external TC-100 weather-proof tube capsules. This appendix explains how to connect one end of an RJ45-terminated cable to the TC-100 tube capsule. The other end of the cable goes to an RJ45 jack on a data logger/control unit located in a separate enclosure.

CAUTION	To avoid stripping threads, extra care should be taken while tightening the plastic nuts on feed-through connectors. Hand tightening is recommended.

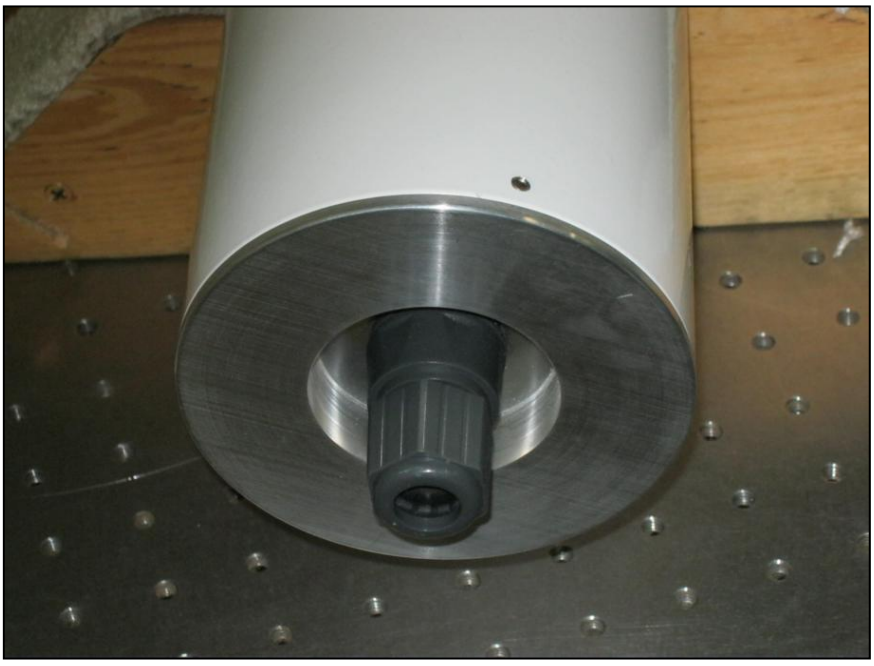

Figure E-1. TC-100 tube capsule showing the NEMA 4 rated RJ45 feedthrough connector.

E.2. Instructions

Figure E-2

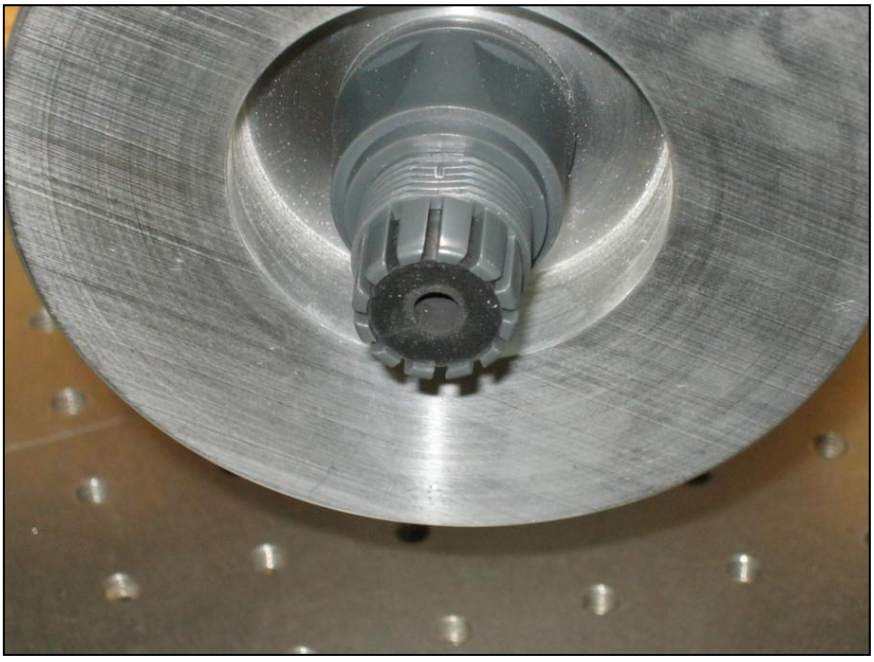

Figure E-3

Step 1. Unscrew the outermost nut to reveal a rubber sleeve and compression fitting as shown in Figures E-2 and E-3.

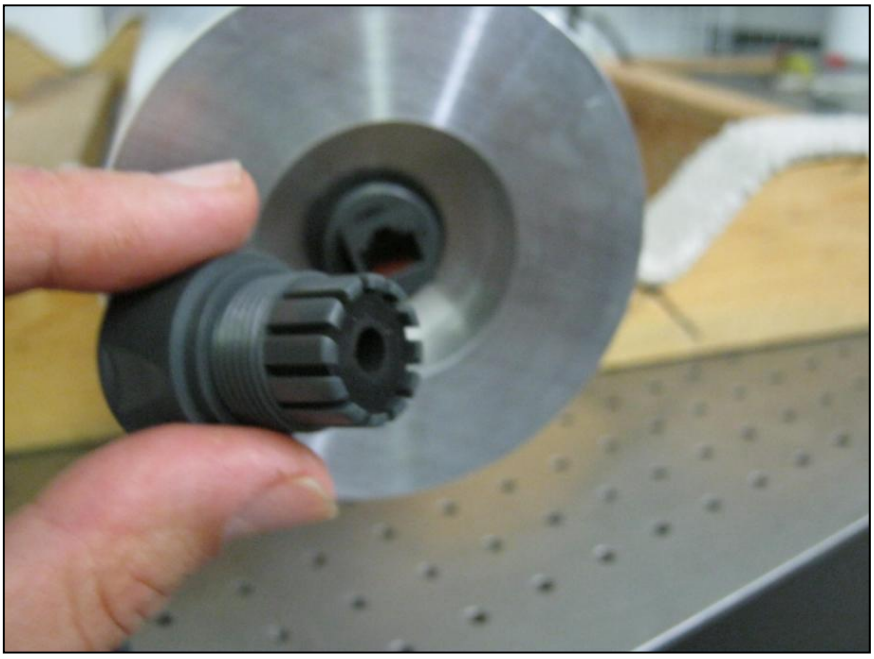

Figure E-4

Step 2. Gently remove the rubber bushing using a small tool such as a jeweler's screwdriver. If necessary, the entire outer connector assembly can be removed (Figure E-4) to provide easier access to the sleeve.

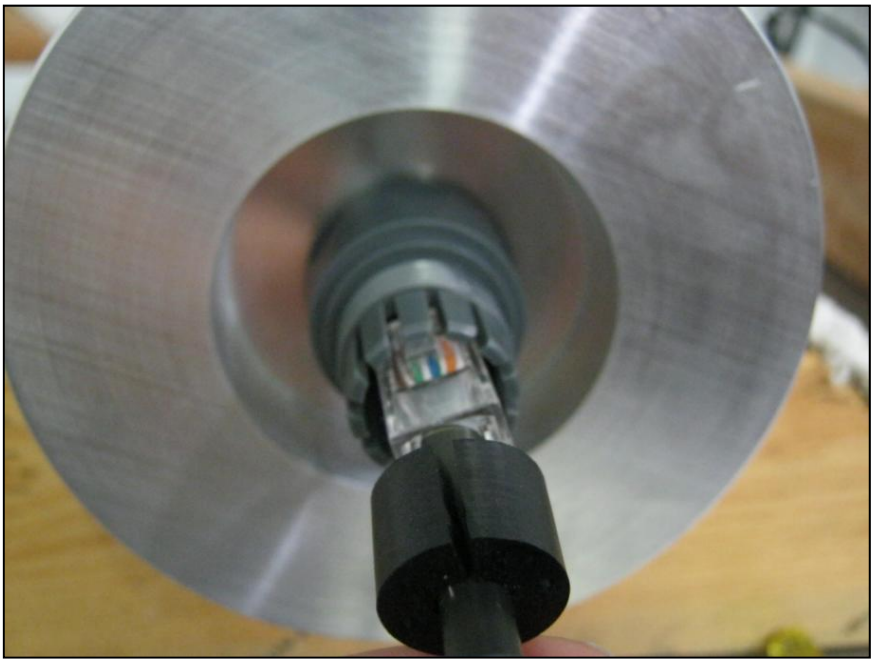

Figure E-5

Step 4. Place the rubber bushing over the RJ45-terminated cable. The sleeve should have a slit to allow the cable to pass to through the side of the bushing (Figure E-5).

Step 5. Insert the RJ45 connector into the connector assembly until it *clicks and locks into place*.

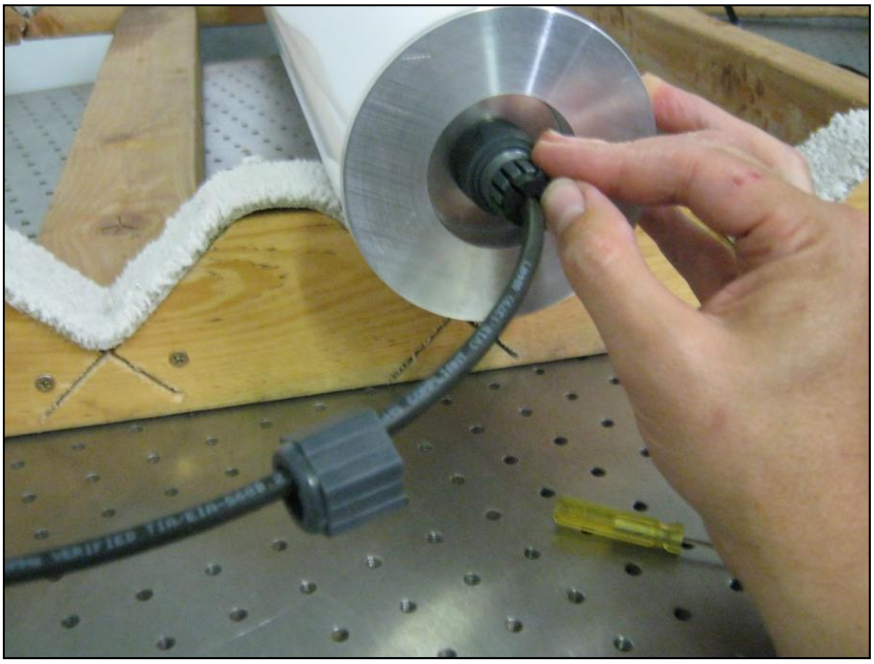

Figure E-6

Step 6. Slide the rubber sleeve into the compression fitting and press it flush as in Figure E-6.

Step 7. To ensure a weather-tight connector, compress the sleeve around the cable by hand-tightening the outermost nut.