

# Antenna Field Repair Procedure

If you suspect the mat connector has been damaged in some way i.e. Pulled off, you can replace it by following this procedure.

## Tools Required

- Craft knife (1)
- Side cutter (2)
- Crimp tool suitable for SMA – LMR195/RG58 cable (3)
- Coaxial cable wire stripper (4)
- Replacement connector (SMA jack), ferrule and centre pin (5)
- Heat shrink (6)
- Multimeter (8)
- Heat gun or similar
- Ruler



Figure i



Figure b



Figure c

## Procedure

### Step 1: Check the mat is still functional

- With the multimeter, check for a resistance of 10K Ohms across the SMA jack or coaxial cable shield and inner core (Fig. d). The resistance can deviate plus/minus 1%.
- If the mat reads circa 10K Ohm resistance, the mat is still functional but requires a new connector to be fitted.

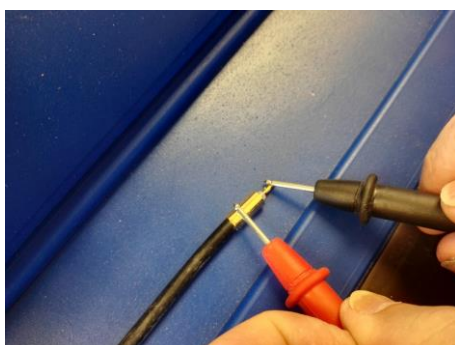


Figure d



Figure e

### **Step 2: Remove the old heat shrink**

- Carefully remove the old heat shrink which covers the crimped ferrule of the connector using a craft knife or side cutters.

### **Step 3: Prepare the cable**

- Slide the heat shrink over the cable (Fig. f).
- Slide the ferrule over the cable (Fig. f)
- With the coaxial cable wire stripper, prepare the cable by stripping back the outer sheath and inner core as specified by the connector instructions (Fig. b, 7). If a wire stripper is not available, use a craft knife instead.



Figure f



Figure g

### **Step 4: Crimp on the connector**

- Brush back the braid and crimp the centre pin to the inner core of the cable.
- Push the connector housing (with the threaded part) over the centre pin so it sits flush with the top of the Teflon insulator.
- Slide up the ferrule and crimp to the base of the connector housing (Fig. j).
- Use the heat gun to shrink the heat shrink over the ferrule (Fig.k).

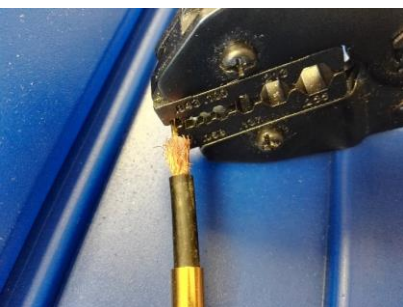


Figure h



Figure i



Figure j



Figure k