

Plug Assembly Instructions: Series 1807 Bayonet and Threaded Coupling

<u>**P/N 167-9709**</u> 7 pin plug. Non-shielded, bayonet coupling



<u>**P/N 167-9693**</u> 7 pin plug. Non-shielded, threaded coupling



Note: These instructions apply only to assemblies using .090 Dia. silicone coated FEP cable <u>P/N 178-8315</u>. While the bayonet coupled plug is illustrated, the instructions apply equally to the plug with threaded coupling. Reynolds does not recommend customer assembly of the shielded version of the Series 1807 plug due to the added complexity of the shielded version.

Step 1

Cut cable to length, clean and square. Apply a thin coat of General Electric RTV 162 adhesive over the cable in the area shown. Slide the rubber sleeve onto the coated area of the cable and position it so the end of the sleeve is flush with the end of the cable. Cure in a humidity oven with a relative humidity of at least 50% for 24 hours at 100°F.

Step 2

Strip the cable and the sleeve to the dimension shown. Make sure there are no severed strands and not more than two strands nicked. Hot tin dip the exposed conductor and remove all flux.

Step 3

Flux conductor and solder contact to conductor through the feed hole using SN60 solder. Completed solder joint must have a continuous fillet of solder between the cable conductor and the contact. Solder in the feedhole must be free of pin holes and flush or below flush. Rear of contact shoulder must be as flush as possible with insulation of cable as shown. Mask the contact in the area shown. Lightly abrade the contact area as shown using either clean abrasive cloth or air blast with clean sand. Do not abrade the cable or the sleeve. Brush a thin film of General Electric SS4004 primer over contact in area shown. Do not prime the cable or the sleeve. Allow primer to dry for 1 hour at room temperature.

Step 4

Slide the cable retainer, the skid washer and the clamp nut over cables. Brush a light film of General Electric RTV 162 adhesive over the primed surface of the contact and rubber sleeve.

Immediately insert the contact into the connector insulator. Rotation of the contact is okay during insertion. Apply enough forward pressure to displace residual air at the interface. Make sure the contact shoulder butts against the internal flange of the insulator and that the *Control Dimension is maintained. Repeat steps 1 through 3 for each cable that is to be installed into the connector. Place assembly in a humidity oven with a relative humidity of at least 60% for 24 hours @ 100°F.

Step 5

Slide cable retainer into back of connector. Make sure retainer is properly aligned according to identification numbers (1-7). Slide skid washer and clamp nut up in place. Tighten clamp nut firmly. Before mating the connector for the first time, verify the *Control Dimension for each cable installed.

