

Installation Instructions PT-E(SR) Miniature Solder Connectors

SECTION I

SOLDERING PROCEDURE

- 1-1. Wire and Cable Preparation
- 1-2. Provision should be made for sufficient cable slack to permit easy installation of the connector. The wire, cut to a predetermined length, should be prepared as follows:
 - 1-3. It is recommended that stripping be done after the wires are threaded through the grommets. If difficulty is encountered, cut the wire at a 45° angle to permit easier threading.
 - 1-4. Strip each individual conductor 1/4" for insertion into size 16 contacts and 1/8" for use with size 20 contacts.
 - 1-5. If multi-wired, non-shielded jacketed cable is used, refer to L-555, Table 1 for stripping dimensions.
 - 1-6. Pretinning.
 - 1-7. The solder pot (if used) should contain a good grade of 60/40 tin-lead solder, and should be kept clean at all times. For most tinning operations, a bath temperature of about 550°F is satisfactory.
 - 1-8. Clean the conductors, and dip them approximately 1/16" into a good grade of rosin-alcohol flux. With the solder bath at correct temperatures, dip the conductors approximately 1/16" into the bath. Pre-tinning should be confined to the lower half of the conductor to maintain flexibility.
 - 1-9. Soldering.
 - 1-10. Secure the connector in a suitable, protected holding device that will not damage the connector finish. Position the connector with the solder well end of the contacts facing the operator and with the cutaway portion of the wells up. Tilt the connector at a 45° angle to provide easy access to the contacts.
 - 1-11. The PT solder contact wire well is not pretinned. Tinning may be accomplished by dipping .040 diameter wire solder into a rosin alcohol flux and then into the contact wire well. Apply enough heat to the outside of the wire well to properly tin the interior.
 - 1-12. Insert the pretinned conductor into the well of the contact. Apply heat to the closed side of the contact until the solder has liquified. Add more solder as required. Remove the heat and allow the

joint to cool. Do not move the conductor or assembly while the solder is still in a molten state. Contact identification guide L-494 is available to assist in correct wiring.

- 1-13. A resistance soldering unit of approximately 125 watts is recommended. If a soldering iron is used (30 to 80 watts for size 20 and 80 to 150 watts for size 16 contacts), place the flat tinned surface of the iron against the closed side of the contact.
- 1-14. When soldering high density contact arrangements, the 11-6470 Contact Identifier may be used to speed up contact identification and act as a guide for correct wiring. Refer to MG-972 for operating instructions.
- 1-15. Wipe or brush excess flux from the contacts. If proprietary ethyl alcohol has been used, allow to air dry 30 minutes before enclosing the rear section with a termination device.

SECTION II

TERMINATION DEVICES

- 2-1. Assembly Procedures, Strain Relief (SR).
- 2-2. A strain relief clamp is available in the class E (SR) series to provide additional support for the wire bundle where extremely rugged service conditions are to be encountered. Slide the rubber bushing (if used), clamp and sleeve up the wire bundle. Thread the wires through the proper grommet hole as illustrated in Figure 1. Strip and solder as outlined in Section I. Seat the grommet over the wire wells and against the insert. Fill all unused grommet holes with a nylon sealing plug 10-405996-20 for size 20 contacts and 10-405996-16 for size 16 contacts. Slide the sleeve over the grommet. Lubricate the external surface of the sleeve and internal surface of the clamp with a U.S.P. grade of white petrolatum (Parmo 12 from Esso Standard Oil Co.) or a premium RB grease (available from Texaco, Inc.). Slide the clamp forward and tighten. Work the rubber bushing (if used) under the strain relief bars and tighten the clamping screws. If a bushing is not used, build up a layer of vinyl tape under the clamp to protect the wire bundle from possible damage.

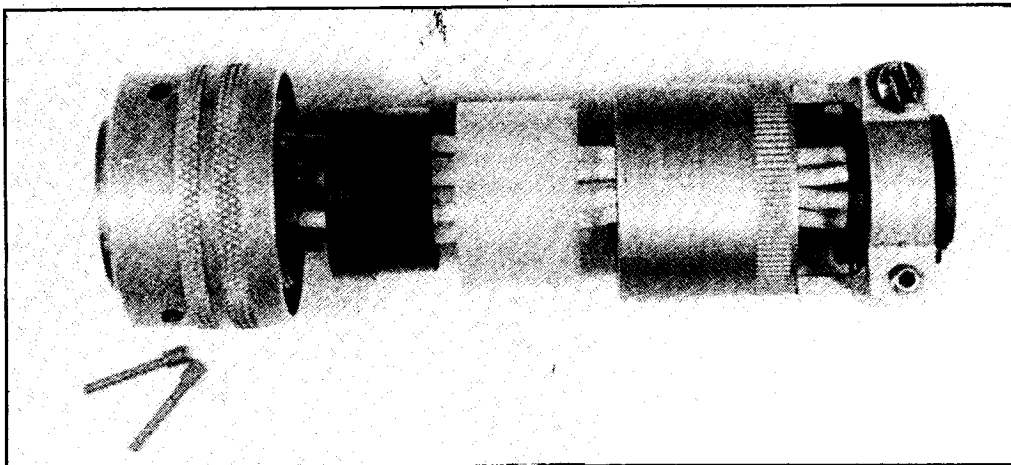


Figure 1