



Cable Assembly Instructions

General Notes:

- 1) All cuts when trimming cable should be square and of precise depth. Nicking the layer underneath the layer being cut will weaken the cable mechanically and adversely affect electrical performance.
- 2) The hole in the side of the cable entry hole in contacts is there for two reasons: A) To visually inspect for proper cable insertion, and B) to allow gases formed during the soldering process to escape. It is NOT for feeding solder into the contact. Even the steadiest operator will end up with a glob of solder on the outside of the contact when using the inspection hole to feed solder. This solder on the outside of the contact makes the connector hard or impossible to assemble, and degrades electrical performance. Filing the solder glob off the contact removes plating. The proper procedure is to tin the cable center conductor, and add some liquid flux to the tinned end just before soldering to the contact. Simply insert the tinned and fluxed cable into the contact and reheat until the solder has melted.
- 3) Always avoid excessive heat when soldering. Carbon-jawed resistance pliers are much more precise and faster than soldering irons.
- 4) Always heat the sleeve, body, or contact, not the cable component being soldered.
- 5) When soldering nickel-plated connector bodies to semi-rigid cable, use Kester #2331 flux. This flux is active enough to ensure good solder bonding and is water-soluble.
- 6) When soldering to the jacket of semi-rigid cable, the cable and solder ferrule or connector body should be fixtured as tightly as possible. The soldering operation should be carried out as rapidly as possible and the joint cooled by brushing with alcohol. This, combined with a thermal cycling of the bent cable before assembly, will minimize Teflon extrusion during soldering. All major semi-rigid cable manufacturers outline cable thermal cycling procedures in their literature.
- 7) When cable sub-assemblies are threaded into bodies, always turn the nut, not the body, to prevent twisting the cable and breaking the center conductor.
- 8) After trimming cable for use with crimp connectors, rotate the dielectric several times to flare the cable braid slightly. This step prevents braid wires from sliding inside the crimp tail during assembly.
- 9) When installing assemblies into equipment using screw-on connectors, use a torque wrench for mating. Overtorquing the plugs will damage both the cable connector and the equipment-mounted jack and will void any warranties.
- 10) For best results when soldering SMA series connectors, use interface mates (TA-0434) with plugs and (TA-0435) with jacks.