

SECTION 13. SPLICING.

11-167. GENERAL. Splicing is permitted on wiring as long as it does not affect the reliability and the electromechanical characteristics of the wiring. Splicing of power wires, coaxial cables, multiplex bus, and large gauge wire must have approved data.

a. Splicing of electrical wire should be kept to a minimum and avoided entirely in locations subject to extreme vibrations. Splicing of individual wires in a group or bundle should have engineering approval and the splice(s) should be located to allow periodic inspection.

b. Many types of aircraft splice connectors are available for use when splicing individual wires. Use of a self-insulated splice connector is preferred; however, a noninsulated splice connector may be used provided the splice is covered with plastic sleeving that is secured at both ends. Environmentally sealed splices, that conform to MIL-T-7928, provide a reliable means of splicing in SWAMP areas. However, a noninsulated splice connector may be used, provided the splice is covered with dual wall shrink sleeving of a suitable material.

c. There should not be more than one splice in any one wire segment between any two connectors or other disconnect points, except; when attaching to the spare pigtail lead of a potted connector, to splice multiple wires to a single wire, to adjust wire size to fit connector contact crimp barrel size, and to make an approved repair. (Reference MIL-W-5088, now AS50881A, and NAVAIR 01-1A-505.)

d. Splices in bundles must be staggered so as to minimize any increase in the size of the bundle, preventing the bundle from fitting into its designated space, or cause congestion that will adversely affect maintenance. (See figure 11-18.)

e. Splices should not be used within 12 inches of a termination device, except for paragraph f below.

f. Splices may be used within 12 inches of a termination device when attaching to the pigtail spare lead of a potted termination device, or to splice multiple wires to a single wire, or to adjust the wire sizes so that they are compatible with the contact crimp barrel sizes.

g. Selection of proper crimping tool, refer to paragraph 11-178.

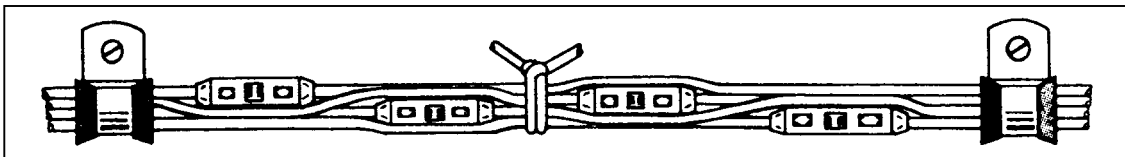


FIGURE 11-18. Staggered splices in wire bundle.

11-168.—11-173. [RESERVED.]