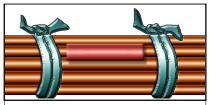
A splice conductors a perman mechanical either crimp See Sectior Requirement Hole Solde common act

SPLICES

A splice is the joining of two or more conductors together in a manner that results in a permanent electrical termination and mechanical bond, and may be completed by either crimp or solder process.

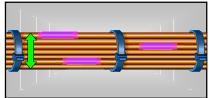
See Section 4.01 "Cable and Harness, General Requirements", and Section 6.01 "Through-Hole Soldering, General Requirements", for common accept / reject criteria.



PREFERRED GENERAL REQUIREMENTS

The splice exhibits a smooth profile, proper strain relief, and is located in an area of the harness not subjected to flexure.

Best Workmanship Practice



PREFERRED SPLICE ASSEMBLY PROFILE

The location of splices shall be staggered to minimize the increase in profile to the harness. Final assembly profile shall not impact form, fit, or function.

Best Workmanship Practice



PREFERRED SPLICE RESTRAINT

Cable ties / lacing shall be installed at both ends of a splice or solder sleeve, but placement shall not violate stress relief requirements.

Best Workmanship Practice



ACCEPTABLE CRIMP SPLICE - BUTT / INLINE

The contact has been deformed only by tool indenters. Indents are symmetrical and centered on the crimp barrel. No exposed base metal or other damage. Wire strand ends are visible. Proper insulation spacing (C).

NASA-STD-8739.4 [19.6.1.c]

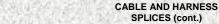
NASA WORKMANSHIP STANDARDS

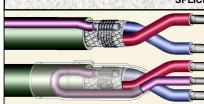


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Released: 04.05.2002	Revision:	Revision Date:
Book:	Section: 4.07	Page:

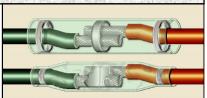




ACCEPTABLE LASH SPLICE SHIELD TERMINATION (TRADITIONAL)

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief.

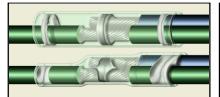
Best Workmanship Practice



ACCEPTABLE SOLDER SLEEVE SPLICE INLINE

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces.

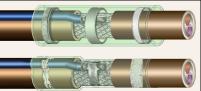
Best Workmanship Practice



ACCEPTABLE SOLDER SLEEVE SPLICE INLINE BRANCH

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces.

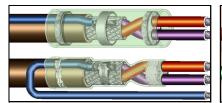
Best Workmanship Practice



ACCEPTABLE SOLDER SLEEVE SPLICE SHIELD TERMINATION (INLINE)

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces.

NASA-STD-8739.4 [11.4], [19.6.1]



ACCEPTABLE SOLDER SLEEVE SPLICE SHIELD TERMINATION (TRADITIONAL)

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces.

NASA-STD-8739.4 [11.4], [19.6.1]



ACCEPTABLE WESTERN UNION / LINEMAN SPLICE

The termination is fully wetted, smooth, and shiny. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces. Western Union splices are used for solid conductors

NASA-STD-8739.3 [13.6]

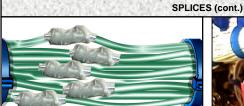
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Released: 04.05.2002	Revision:	Revision Date:
Book: 4	Section: 4.07	Page:



UNACCEPTABLE **EXCESSIVE PROFILE**

The location of splices shall be staggered to minimize the increase in profile to the harness. Final assembly profile shall not impact form, fit, or

Best Workmanship Practice

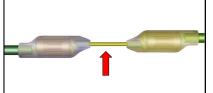


UNACCEPTABLE IMPROPER RESTRAINT

Cable ties / lacing shall not be installed across the splice / solder sleeve body, unless sufficient protection is provided to prevent compression damage to the termination and/or to the insulation of adjacent conductors.

Best Workmanship Practice

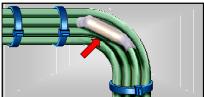
CABLE AND HARNESS



UNACCEPTABLE IMPROPER SPLICE GAUGE / SIZE

Replacement conductors shall be of the same voltage and current rating as the original conductor.

Best Workmanship Practice



UNACCEPTABLE SPLICES IN FLEXURE ZONE

Splices shall not be installed in areas where the harness is designed to flex.

Best Workmanship Practice

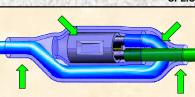


4

4.07

4

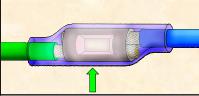




ACCEPTABLE CRIMP SPLICE - END

Tubing is tight and symmetrical. Overlaps meet minimum electrical spacing, while providing strain relief. The termination is visible. Conductor(s) exhibit proper bend radius and strain relief.

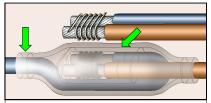
NASA-STD-8739.4 [19.6.1.c]



ACCEPTABLE CRIMP SPLICE - PARALLEL

Tubing is tight and symmetrical. Overlaps meet minimum electrical spacing, while providing strain relief. The termination is visible. Conductor(s) exhibit proper bend radius and strain relief.

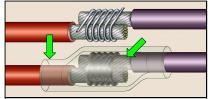
NASA-STD-8739.4 [19.6.1.c]



ACCEPTABLE LASH SPLICE END

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces.

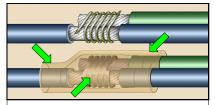
Best Workmanship Practice



ACCEPTABLE LASH SPLICE INLINE

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces.

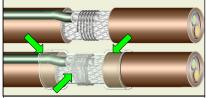
Best Workmanship Practice



ACCEPTABLE LASH SPLICE INLINE BRANCH

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces.

Best Workmanship Practice



ACCEPTABLE LASH SPLICE SHIELD TERMINATION (INLINE / RUNNING)

The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief, overlap, and no exposed conductive surfaces.

Best Workmanship Practice

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Released: 04.05.2002	Revision:	Revision Date:
Book:	Section: 4.07	Page: 2