

| CABLE AND HARNESS SPLICES | |
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| | <p align="center">SPLICES</p> <p>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.</p> <p>See Section 4.01 "Cable and Harness, General Requirements", and Section 6.01 "Through-Hole Soldering, General Requirements", for common accept / reject criteria.</p> |

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| | <p align="center">PREFERRED GENERAL REQUIREMENTS</p> <p>The splice exhibits a smooth profile, proper strain relief, and is located in an area of the harness not subjected to flexure.</p> <p>Best Workmanship Practice</p> |
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| | <p align="center">PREFERRED SPLICE ASSEMBLY PROFILE</p> <p>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.</p> <p>Best Workmanship Practice</p> |
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| | <p align="center">PREFERRED SPLICE RESTRAINT</p> <p>Cable ties / lacing shall be installed at both ends of a splice or solder sleeve, but placement shall not violate stress relief requirements.</p> <p>Best Workmanship Practice</p> |
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| | <p align="center">ACCEPTABLE CRIMP SPLICE – BUTT / INLINE</p> <p>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).</p> <p>NASA-STD-8739.4 [19.6.1.c]</p> |
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| CABLE AND HARNESS SPLICES (cont.) | |
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| | <p align="center">ACCEPTABLE LASH SPLICE SHIELD TERMINATION (TRADITIONAL)</p> <p>The termination is fully wetted, smooth, and shiny. Conductor contours are discernable. Tubing is tightly shrunk, with proper strain relief.</p> <p>Best Workmanship Practice</p> |
| | <p align="center">ACCEPTABLE SOLDER SLEEVE SPLICE INLINE</p> <p>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.</p> <p>Best Workmanship Practice</p> |
| | <p align="center">ACCEPTABLE SOLDER SLEEVE SPLICE INLINE BRANCH</p> <p>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.</p> <p>Best Workmanship Practice</p> |
| | <p align="center">ACCEPTABLE SOLDER SLEEVE SPLICE SHIELD TERMINATION (INLINE)</p> <p>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.</p> <p>NASA-STD-8739.4 [11.4], [19.6.1]</p> |

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| | <p align="center">ACCEPTABLE SOLDER SLEEVE SPLICE INLINE BRANCH</p> <p>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.</p> <p>Best Workmanship Practice</p> |
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| | <p align="center">ACCEPTABLE SOLDER SLEEVE SPLICE SHIELD TERMINATION (INLINE)</p> <p>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.</p> <p>NASA-STD-8739.4 [11.4], [19.6.1]</p> |
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| | <p align="center">ACCEPTABLE SOLDER SLEEVE SPLICE SHIELD TERMINATION (TRADITIONAL)</p> <p>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.</p> <p>NASA-STD-8739.4 [11.4], [19.6.1]</p> |
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| | <p align="center">ACCEPTABLE WESTERN UNION / LINEMAN SPLICE</p> <p>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</p> <p>NASA-STD-8739.3 [13.6]</p> |
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CABLE AND HARNESS SPLICES (cont.)

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| <p style="text-align: center;">UNACCEPTABLE EXCESSIVE PROFILE</p> <p>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.</p> <p>Best Workmanship Practice</p> | <p style="text-align: center;">UNACCEPTABLE IMPROPER RESTRAINT</p> <p>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.</p> <p>Best Workmanship Practice</p> |

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| <p style="text-align: center;">UNACCEPTABLE IMPROPER SPLICE GAUGE / SIZE</p> <p>Replacement conductors shall be of the same voltage and current rating as the original conductor.</p> <p>Best Workmanship Practice</p> | <p style="text-align: center;">UNACCEPTABLE SPLICES IN FLEXURE ZONE</p> <p>Splices shall not be installed in areas where the harness is designed to flex.</p> <p>Best Workmanship Practice</p> |

CABLE AND HARNESS SPLICES (cont.)

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| <p style="text-align: center;">ACCEPTABLE CRIMP SPLICE – END</p> <p>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.</p> <p>NASA-STD-8739.4 [19.6.1.c]</p> | <p style="text-align: center;">ACCEPTABLE CRIMP SPLICE – PARALLEL</p> <p>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.</p> <p>NASA-STD-8739.4 [19.6.1.c]</p> |

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| <p style="text-align: center;">ACCEPTABLE LASH SPLICE END</p> <p>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.</p> <p>Best Workmanship Practice</p> | <p style="text-align: center;">ACCEPTABLE LASH SPLICE INLINE</p> <p>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.</p> <p>Best Workmanship Practice</p> |

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| <p style="text-align: center;">ACCEPTABLE LASH SPLICE INLINE BRANCH</p> <p>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.</p> <p>Best Workmanship Practice</p> | <p style="text-align: center;">ACCEPTABLE LASH SPLICE SHIELD TERMINATION (INLINE / RUNNING)</p> <p>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.</p> <p>Best Workmanship Practice</p> |

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