

# MATERIALS

1. & 2. SOLDERSHIELD SPLICE (OUTER & INNER):

INSULATION SLEEVES: Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene fluoride. SHIELD: Solder impregnated, flux coated, tin plated copper braid.

SOLDER: TYPE Sn63 per ANSI-J-STD-006.

FLUX: TYPE ROM1 per ANSI-J-STD-004.

MELTABLE RINGS: Thermally stabilized thermoplastic. Color: gray.

3. SEALING SLEEVE:

INSULATION SLEEVE: Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene fluoride. SEALING RINGS: Immersion resistant thermoplastic. Color: one clear, one blue.

4. CRIMP SPLICE: Tin plated copper alloy. Color code: blue

BASE METAL: Copper Alloy 101 or 102 per ASTM B-75.

PLATING: Tin per MIL-T-10727, Type 1

# APPLICATION

- 1. This kit is used to provide an environmentally protected 1 to 1 splice in Raychem 55A6087-20 shielded cables. They may be used in harnesses where the cable temperature does not exceed 150°C.
- 2. Temperature range: -55°C to +150°C.

| <b>TUCD</b> /Electronics/Raychem<br>307 Constitution Drive Menlo Park, CA 94025, USA                    |   |           |  | V<br>H<br>J  | Wire and<br>arnessing<br>Products | TITI | E:<br>SHIELDED SINGLE CABLE 1 TO 1<br>SPLICE ENGINE HARNESS, 150°C |        |               |        |
|---|---|-----------|--|--|-----------------------------------|------|--|--------|---------------|--------|
| Unless otherwise specified dimensions are in millimeters.<br>Inches dimensions are in between brackets. |   |           |  |  | DOCUMENT NO.: <b>D-150-0194</b>   |      |  |        |               |        |
| TOLERANCES:<br>0.00 N/A<br>0.0 N/A<br>0 N/A   | ANGLES: N/A Tyco I<br>this dr<br>ROUGHNESS IN evalua<br>MICRON applic |           | Tyco Electronic<br>this drawing at<br>evaluate the sui<br>application. | co Electronics reserves the right to amend<br>s drawing at any time. Users should<br>uluate the suitability of the product for their<br>plication. |                                   |      | dcr number:<br>D020065   |        | REPLACES: N/a |        |
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| m. foronda  |   | 13-Feb-02 |  |  | А                                 |      | 1  | None   | А             | 1 of 2 |

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# SPECIFICATION CONTROL DRAWING

## CABLE PREPARATION AND INSTALLATION PROCEDURE

Application Equipment:

or

- a) AD-1377 crimp tool or equivalent.
- b) Steinel HL1802E Heat Gun with a soldersleeve reflector (Setting of 13 14)

HT-900B Compressed Air/Nitrogen Heating Tool (fueled aircraft applications)

### For purposes of clarity, one of the cables to be spliced shall be "Cable A" and the other shall be "Cable B".

1. Prepare both cables.

- a. Remove outer jacket 40.64 (1.600).
- b. Trim outer shield to 12.70 (0.500) length.
- c. Fold back outer shield over outer jacket.
- d. Remove inner jacket to 27.94 (1.100). Push inner shield toward outer jacket "bunching" it to open the weave of the braided shield. Then pull the shield back to its original position.
- e. Trim inner shield to 10.16 (0.400) length.
- f. Strip primary wire to 6.35 (0.25).
- 2. Slide the outer SolderShield splice (larger of two splices), then the inner SolderShield splice (smaller of two splices) on Cable A. Slide splices on small end first (to aid in final positioning). Install Cable A primary wire into crimp barrel using a Raychem AD-1377 crimp tool.

3. Slide the Sealing sleeve (large end first) on Cable A beyond crimp barrel.

NOTE: Make sure that three sleeves (one for crimp plus two shield splices) have been prepositioned on Cable A side.

Crimp Cable B side of primary wire.

### Caution: Do not overheat adjacent wires when using heat gun.

- 4. Center Sealing sleeve over crimp barrel and shrink until sealing inserts melt and flow. Use Steinel HL1802E Heat Gun with an appropriate soldersleeve reflector or HT-900B Compressed Air/Nitrogen Heating Tool with large SolderSleeve reflector.
- 5. Center inner SolderShield over sleeve and shrink until both solder and sealing inserts melt and flow. To shrink, begin in the center and heat until solder melts and sleeve recovers. After center section of SolderShield has melted and recovered, move assembly through heat towards one end slowly enough to keep solder melting and sleeve recovering after doing one end, move heat toward other end.
- 6. Fold outer shield back into place over the end of the inner splice. Then center outer SolderShield over the inner splice and outer shield ends and shrink as in 5 above.

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| D-150-0194     | А                     | 1 | D020065     | 13-Feb-02 | 2 of 2 |