

## Installation Procedure for Duraseal \* Splices and Terminals

### 1. Products:

#### Duraseal\* Splice:

DS-XX-XX	D-406-XXXX
DS-MIXT-XX	

#### Duraseal\* Terminal:

DB-X-XX	DP-X-XX	B-106-XX
DF-X-XX	DR-X-XX	DS-MIXT-XX

### 2. Application Equipment:

- Crimping tool: AD-1522
- Hot air gun:

Gun	Reflector	Setting
HL1802E	HL-R-10	switch: 1
CV-1981	PR-25D	7

### 3. Wire Preparation:

- Strip the stranded wire as shown.

Configuration		Product						
		Red		Blue		Yellow		
		Wire Range	Strip Length L (±0.5)	Wire Range	Strip Length L (±0.5)	Wire Range	Strip Length L (±0.5)	
Terminal		0.5 < Sc < 1.5	L <sub>C</sub> = 6	1.5 < Sc < 2.5	L <sub>C</sub> = 6	3.0 < Sc < 6.0	L <sub>C</sub> = 6	see Fig. 1
Splice 1 to 1		0.5 < Sc < 1.5	L <sub>C</sub> = 7.5	1.5 < Sc < 2.5	L <sub>C</sub> = 7	3.0 < Sc < 6.0	L <sub>C</sub> = 8	see Fig. 2
Splice 2 to 1	øA < øB	1.5 < øA+øB < 3.7 and 1.5 < øC < 3.7	L <sub>A</sub> = 10	2.0 < øA+øB < 4.3 and 2.0 < øC < 4.3	L <sub>A</sub> = 10	3.0 < øA+øB < 6.4 and 3.0 < øC < 6.4	L <sub>A</sub> = 11	see Fig. 3
		0.5 < S <sub>A</sub> +S <sub>B</sub> < 1.5 and 0.5 < S <sub>C</sub> < 1.5	L <sub>B</sub> = 7	1.5 < S <sub>A</sub> +S <sub>B</sub> < 2.5 and 1.5 < S <sub>C</sub> < 2.5	L <sub>B</sub> = 7	3.0 < S <sub>A</sub> +S <sub>B</sub> < 6.0 and 3.0 < S <sub>C</sub> < 6.0	L <sub>B</sub> = 8	
	øA = øB	1.5 < øA+øB < 3.7 and 1.5 < øC < 3.7	L <sub>A</sub> = 10	2.0 < øA+øB < 4.3 and 2.0 < øC < 4.3	L <sub>A</sub> = 10	3.0 < øA+øB < 6.4 and 3.0 < øC < 6.4	L <sub>A</sub> = 11	see Fig. 4
		0.5 < S <sub>A</sub> +S <sub>B</sub> < 1.5 and 0.5 < S <sub>C</sub> < 1.5	L <sub>B</sub> = 10	1.5 < S <sub>A</sub> +S <sub>B</sub> < 2.5 and 1.5 < S <sub>C</sub> < 2.5	L <sub>B</sub> = 10	3.0 < S <sub>A</sub> +S <sub>B</sub> < 6.0 and 3.0 < S <sub>C</sub> < 6.0	L <sub>B</sub> = 11	

øA = diameter (mm) of the insulation of wire A.

Sc = cross section area (mm<sup>2</sup>) of wire C.

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			SIZE: A
			SHEET: 1 of 3

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Fig. 1.

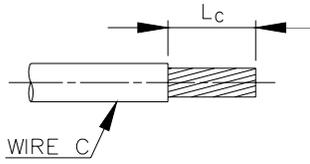


Fig. 2.

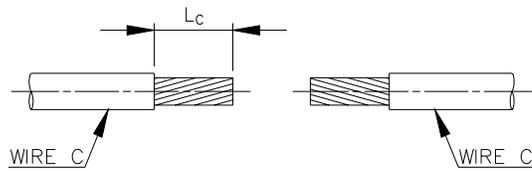


Fig. 3.

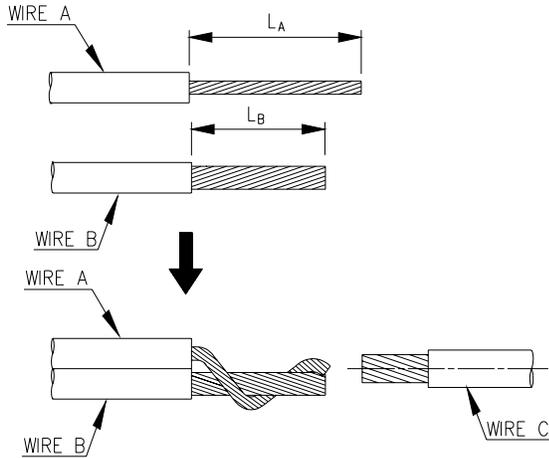
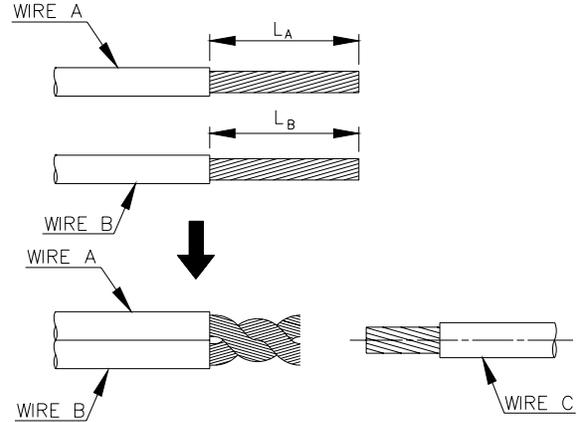


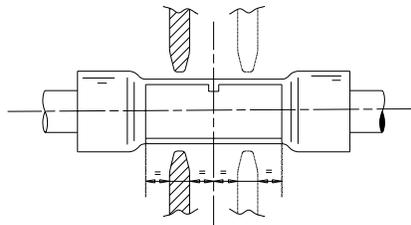
Fig. 4.



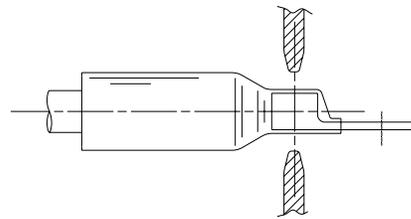
**4. Installation Procedure:**

- Select the correct duraseal crimp.
- Match its color with the color of the cavity of the crimp tool.
- Get the jaws in touch with the tubing.

Duraseal\* Splice



Duraseal\* Terminal

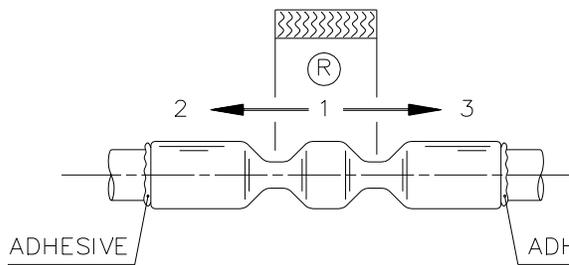


- Insert the stripped wire until it butts inside the duraseal crimp.
- Crimp the wire in place.
- Repeat the operation symmetrically for the duraseal splice.
- Allow the hot air gun to warm up.
- Position the duraseal crimp in the reflector (R).
- Apply heat to shrink the sleeve until the adhesive melt and flow around the extremities of sleeve.

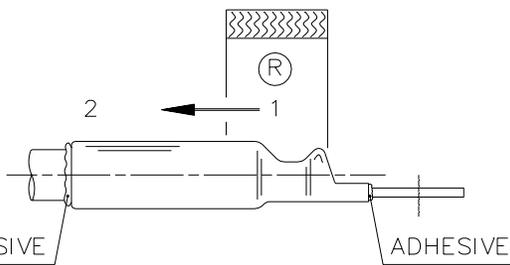
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### Duraseal\* Splice

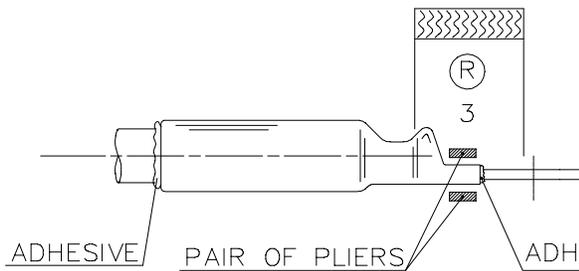


### Duraseal\* Terminal

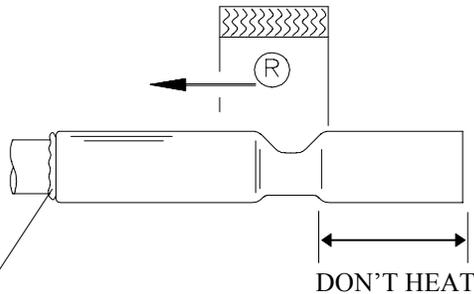


Note: For duraseal terminals, in order to achieve maximum sealing (except for duraseal push-on) heat the terminal at 3 and press the flat part with a pair of pliers until the assembly cools.

### Ring Terminal



### Push-on Terminal



Note: Do not heat the terminal for the push-on terminal.  
Do not bend the splice or the terminal assemblies until they have completely cooled.

## **5. Inspection of Assembly:**

- Check:
- Wire insulation is positioned inside the duraseal sleeve.
  - Adhesive has flowed to form a fillet around the ends of the sleeve.
  - Sleeve is completely shrunk on to the wire insulation.
  - Sleeve is not cut, split or discolored.
  - Wire insulation has no signs of mechanical damage or overheating.

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