



# BYLER RIVET SUPPLY

**SEAL YOUR CONNECTIONS. MAKE PERMANENT REPAIRS!**



# Why the need for a Sealed Electrical System?

**STOP WIRE CORROSION**

**MAKE PERMANENT REPAIRS**

The advertisement is split into two vertical panels. The left panel has a red background and features the text "STOP WIRE CORROSION" in large, white, bold, sans-serif capital letters. Below the text is a photograph of a metal wire that is heavily corroded, with a thick, irregular layer of blue and green rust covering its end. The right panel has a dark grey background and features the text "MAKE PERMANENT REPAIRS" in large, white, bold, sans-serif capital letters. Above the text is a photograph of a metal wire with a ring terminal at one end. The wire is encased in a clear, yellowish, cylindrical sealant. The sealant has "SES" and "10-1/2MM NG SES" printed on it. The wire is shown against a dark background.

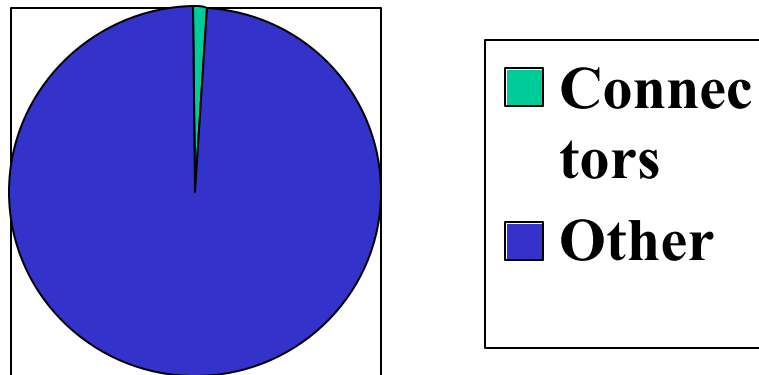
For more information on our products and services: 800-475-6792 • [www.BylerRivet.com](http://www.BylerRivet.com)

# Why the need for a Sealed Electrical System?

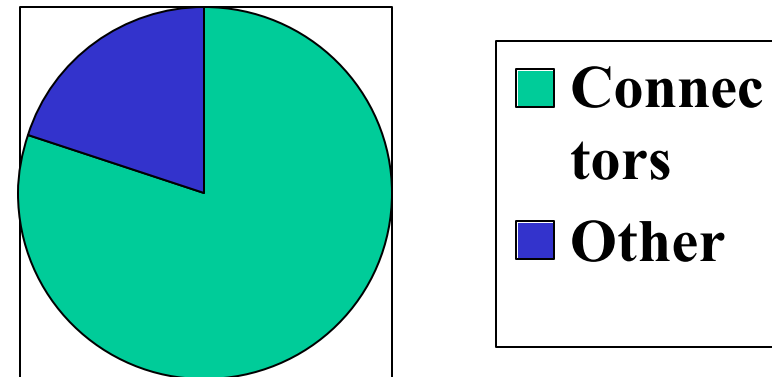


Less than 1% of an electrical system's cost is in electrical connectors, yet 80% of failures occur at the point of termination<sup>1</sup>

**Electrical System Cost**



**Electrical System Failures**



<sup>1</sup> Tully-Peterson, Dorothy. "Wire connectors come in countless types. Electrical Business, July 2001.





# Why the need for a Sealed Electrical System?



## Corrosion

Corrosion damage in the transportation industry is estimated at over \$23,000,000,000.00 dollars.



- 1 Gerhardus, "Corrosion Costs and Preventive Strategies in the United States." Federal Highway Administration (FHWA), Office of Infrastructure Research and Development, Report FHWA-RD-01-156, September 2001.

# Why the need for a Sealed Electrical System?



**A small initial investment in sealed electrical connectors will pay big dividends in future savings:**

SMALL INVESTMENT



BIG SAVINGS →

- NO FINES
- FEWER SERVICE CALLS
- LESS EQUIPMENT DOWNTIME
- LOWER MAINTENANCE COSTS
- AVOID UNSATISFIED CUSTOMERS



# Why the need for a Sealed Electrical System?



How **STRONG** are your electrical connections?

## PULL TEST ANALYSIS

	Vinyl	Nylon	Sealed Crimp	Sealed Solder	Sealed Crimp and Solder
Tensile Strength*	57 lbs	70 lbs	89 lbs	102 lbs	103 lbs
Tensile Strength (+/-) over Vinyl	-	22%	56%	78%	80%
Tensile Strength (+/-) over Nylon	-18.57%	-	27%	45%	47%
Tensile Strength (+/-) over Sealed Crimp	-35.96%	-21%	-	14%	15%

All terminals were installed on SAE 14 AWG SXL copper stranded wire. All terminals were installed using the T-R-15 multi-purpose crimping tool.

\*The pull test data was based on the average of the sample size.

# DO IT ONCE. DO IT RIGHT!



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# 3 Optimal Solutions for your Electrical Problems.



## THERE ARE MANY WAYS TO JOIN A WIRE



Sealed Crimp & Solder Connectors

***BEST***



Sealed Solder Connectors

***GOOD***



Sealed Crimp Connectors

***GOOD***



# 3 Optimal Solutions for your Electrical Problems.



## YOU HAVE A CHOICE!

The Sealed Electrical System has a solution for EVERY installers preference.

### Sealed Crimp & Solder Connectors



### Sealed Solder Connectors



### Sealed Crimp Connectors





# Sealed Crimp & Solder Connectors



## THE ULTIMATE CONNECTION!

Crimp provides  
maximum reliability

Solder adds strength  
and conductivity



[ Cut-A-Way View ]

Seal prevents corrosion  
and pull-out



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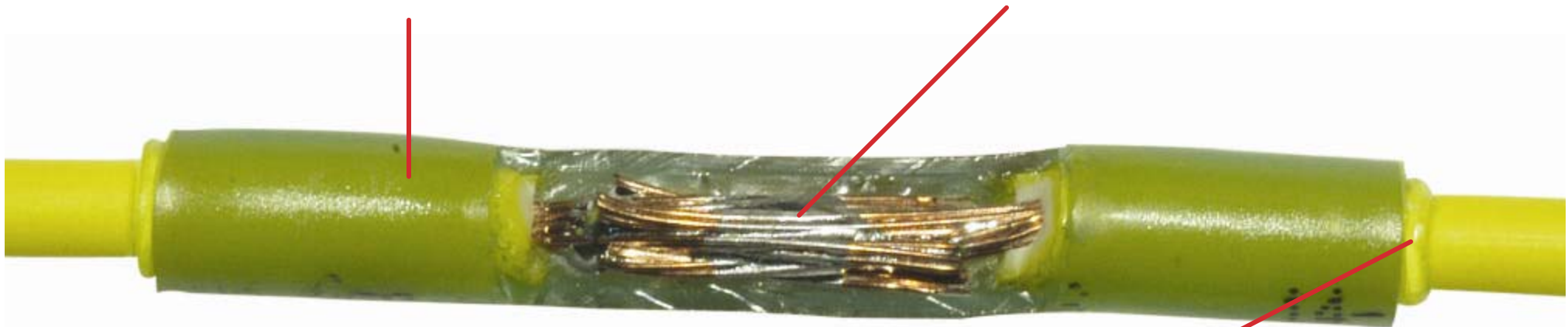
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# Sealed Solder Connectors



Heat shrink tubing adds strain relief to prevent wire pull-out

Solder adds strength and conductivity



[ Cut-A-Way View ]

Seal prevents corrosion and pull-out



# Sealed Crimp Connectors



The most popular and economical style of heat shrink terminal



Crimped to provide a reliable mechanical connection

Sealed to prevent corrosion and pull-out





# SOLUTIONS FOR RECURRING ELECTRICAL PROBLEMS...



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# Sealed Solder Connectors



## SOLUTIONS FOR RECURRING ELECTRICAL PROBLEMS

### PROBLEMS:

Corrosion on wire causes voltage drop.



Cannot see if terminal is properly installed.

Wire pulled loose due to strain or vibration.



Standard terminal bare part



.032" thickness

### SOLUTIONS:

Adhesive-lined tubing prevents corrosion on the wire.



Translucent tubing allows visual inspection of installation.

Solder termination provides maximum tensile strength & conductivity



Greater material thickness of terminal bare part -



.040" thickness

- 1/3 more copper
- Less chance to break from flexing



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# Sealed Crimp Connectors



## OUR'S



Our Uniform Adhesive Flow  
Adhesive will not impede contact of terminal



Our Tubing Does Not Shrink in Length  
Additional insulation support  
Additional strain relief



Our Wire Gauge Imprint  
Easy identification

## COMPETITION



THEIR Runny Adhesive Flow  
Adhesive can impede contact of terminal



THEIR Tubing Shrinks in Length  
Less insulation support  
Less strain relief



THEIR No Wire Gauge Imprint  
Easy identification



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# Installation Tools



## Self-Igniting Micro Blaster Torch

- Butane powered micro torch
- Includes a refillable gas lighter
- Produces flame temperatures up to 2400°F
- Hundreds of uses ranging from heat shrinking to soldering
- A must for every tool kit
- Self-igniting mechanism with a "lock-on" feature



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## Self-igniting Super Blaster Torch

- Plastic canister torch
- Self-Igniting, Piezo Electronic Ignition System
- 2500°F/1300°C
- 120 minutes of continuous use
- Refillable
- Windproof flame
- Hand held or table top



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# Sealed Electrical Connectors



**DO IT ONCE.  
DO IT RIGHT!™**



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