



## AMP WELD: THIRD RAIL PROPULSION BOND -QV/LS SYSTEM

QV LUG FOR 150 LB. BETHLEHEM RAIL (EXOTHERMICALLY WELD)  
LS LUG TO 2X500 MCM CONDUCTOR (EXOTHERMICALLY WELD)

### KEY FEATURES

- Low resistance, superior ampacity connections
- Permanent welded connections
- No external power source required
- Tooling - improved ergonomics
- Visual inspection

TE Connectivity (TE)'s AMP Weld process is utilized for the QV/LS transit propulsion bonding application. AMP Weld exothermically welds a lug (QV) to the foot of the rail and a lug (LS) to dual propulsion conductors.

AMP Weld premium exothermic welding material is engineered to produce welded connections that provide a permanently fused connection that will not loosen, corrode, or increase in resistance. The process enables the connection of dissimilar metals copper and steel. The welded connections will perform the lifetime of the installation.

AMP Weld exothermically welded connections have an ampacity that surpasses that of the conductors being joined and will withstand repeated fault currents, without failing during operation. AMP Weld has been qualified to the stringent IEEE Std.837-2014 testing standard for permanent substation connections. Reference TE Report 502-47480(I).

Quality of completed connections are easily verified by visual inspection.

**Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.**

# Third Rail Propulsion Bond - QV/LS System



## PRODUCT SELECTION GUIDE:

Connection	Catalog Number	Description
LS Connection	TELS-150B-2X500B	Mold 1/2x2 LS lug to 2x500MCM (2x250WM)
	LS LUG	LS Lug 1/2x2 Straight 1-hole dog ear
	250WM	Weld Metal 250WM (Two/weld)
	TELSFX-2X500	Welding fixture and handle for TELS-150B-2X500B
	HCLAMP-4-NS	Handle Clamp for mold TELS-150B-2X500B
QV Connection	TEQV-150B-0.5X2-B-M	Mold Only 1/2x2 QV lug to 150lb rail (3x200WM)
	TEQVFRM-150B	QV Welder Frame Assembly
	QV LUG	QV Lug 1/2x2 Straight 1-hole
	200WM	Weld Metal 200WM (Three/weld)
Hardware	SHBB5/8-11X2	SqHead Bronze bolt 5/8-11 x 2 in long 651 alloy
	BN5/8-11	5/8-11 nut 651 Bronze Alloy
	BLW5/8	5/8 Lock washer Bronze

### LS Connection System

<p><b>Welding Fixtures/Clamps</b></p> <p>TELSFX-2X500      HCLAMP-4-NS</p>	<p><b>LS Lug</b></p> <p>LS LUG</p>	<p><b>Mold Assembled</b></p> <p>Mold - TELS-150B-2X500B</p>	<p><b>Weld Metal</b></p> <p>250WM</p>
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### QV Connection System

<p><b>Welding Fixtures/Clamps</b></p> <p>TEQVFRM-150B</p>	<p><b>QV Lug</b></p> <p>QV LUG</p>	<p><b>Mold Assembled</b></p> <p>Mold - TEQV-150B-0.5X2-B-M</p>	<p><b>Weld Metal</b></p> <p>200WM</p>
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### Hardware

<p>SHBB5/8-11X2</p>	<p>BLW5/8</p>	<p>BN5/8-11</p>
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