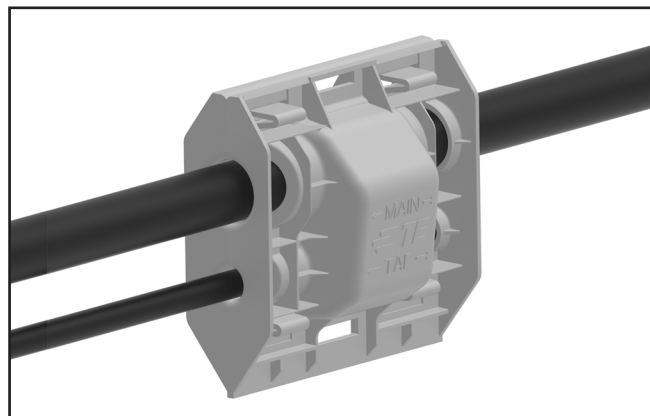


# INSTALLATION INSTRUCTIONS

PII 408-32287 (EPP-3429)

**GS-IPC-500U: GS-IPC-500U-ES &  
GS-IPC-500U-ES-H**  
**Solar Insulation Piercing Connector**  
**With Powergel Filled Cover**  
**For PV Cables**  
**Up to 1.5 kV DC**

## GS-IPC



### TE's Connectors and Fittings

#### **DANGER**

When installing electrical power system accessories, failure to follow applicable personal safety requirements and written installation instructions could result in fire or explosion and serious or fatal injuries.

#### **DANGER**

Working around energized high-voltage systems may cause serious injury or death. Installation should be performed by personnel familiar with good safety practice in handling high-voltage electrical equipment. De-energize and ground all electrical systems before installing product.

#### **DANGER**

Power distribution and transmission products must be properly selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures.

#### **CAUTION**

Read and understand the contents of these instructions before installation and follow all locally approved procedures and safety practices before installing or operating this equipment.

#### **CAUTION**

These instructions cannot cover all details or variations in the equipment, procedures, or processes described, nor provide directions for meeting every possible contingency during installation, operation, or maintenance. When additional information is desired to satisfy a problem not covered sufficiently for the user's purpose, please contact your TE sales representative. These instructions are not intended to supersede or replace existing safety and operating procedures.

#### **NOTICE**

Upon receipt of a product, inspect it thoroughly for damage and loss of parts incurred during shipment. If damage or loss is discovered, file a claim with the carrier immediately or contact your TE representative.

For more information: [te.com/energy](http://te.com/energy)



Please dispose of all waste according to environmental regulations.



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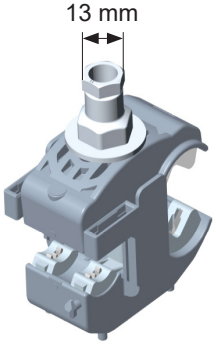
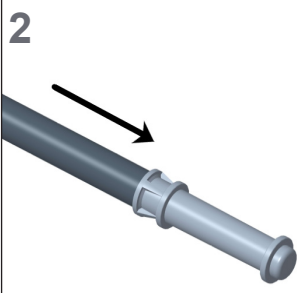
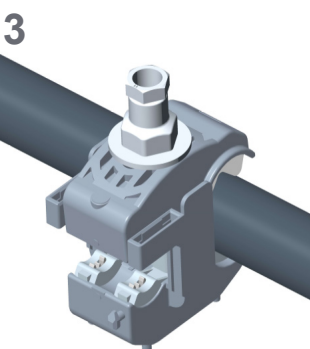
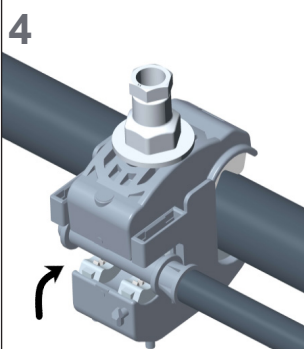
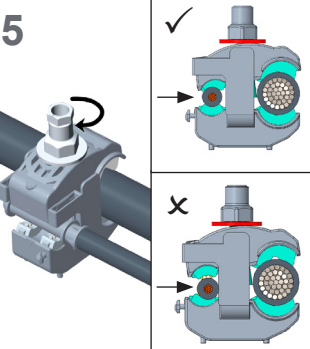
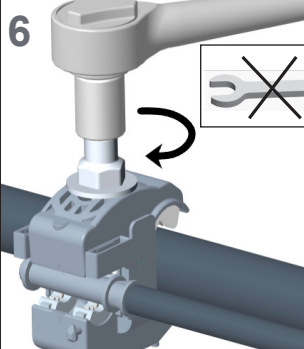
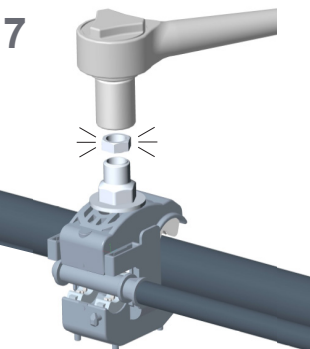
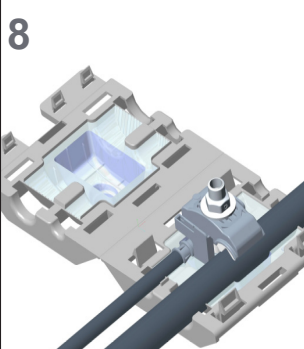
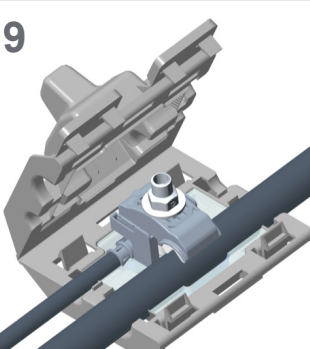
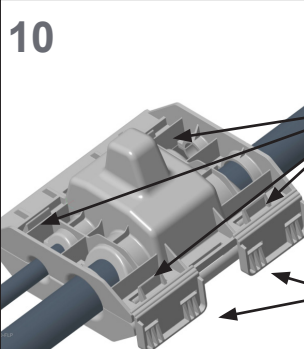
The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, TE Connectivity has no control over the field conditions which influence product installation.

It is the user's responsibility to determine the suitability of the installation method in the user's field conditions.

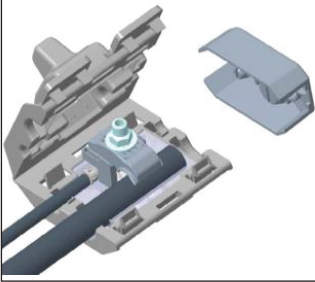
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## Installing IPC Assembly to Main & Tap Conductors

<p><b>1</b></p> 	<p>Make sure the cables are not energized prior to any installation. Clean and dry the cable jacket before starting the installation. Make sure that the assembly is compatible with the conductor sizes being used. There is no need to strip the main or tap conductor insulations. Do not back off/remove the shear nut.</p>	<p><b>2</b></p> 	<p>Insert the tap conductor fully into the cap for dead-end application.</p> <p><b>NOTE</b> Use the cap only for dead-end application. Do not use for dual tap application.</p>
<p><b>3</b></p> 	<p>Assemble the IPC over the main conductor and hand tighten the shear nut to snug fit the IPC over the conductor until it holds in place freely.</p> <p><b>NOTE</b> The IPC accommodates Main Line Trunk cable ranging from 350 to 500 kcmil, Stranded/Str, AL9CU.</p>	<p><b>4</b></p> 	<p>Place the tap conductor on the tap side.</p> <p><b>NOTE</b> Ensure that seal remains in place while positioning Tap cable/Cap in connector jaw.</p> <p><b>NOTE</b> The IPC accommodates String Line Tap cable ranging from #10 to #6 AWG, Stranded/Str, AL9CU.</p>
<p><b>5</b></p> 	<p>Hand tighten shear nut to snug fit IPC over main/tap cables.</p> <p>Assembled conductors must be seated properly between contact blade support grooves as shown.</p> <p><b>NOTE</b> Make sure that both cables are properly placed and centered.</p>	<p><b>6</b></p> 	<p>Use socket wrench or low torque impact gun for tightening the nut.</p> <p><b>NOTE</b> Do not use battery powered torque wrench that exceeds free speed of 300 rpm or fastening torque of 55 Nm (40 ft-lbs).</p> <p>Only use 6-point shallow socket.</p>
<p><b>7</b></p> 	<p>Further tighten the nut until nut shears.</p> <p>Nominal shear value of about 11Nm (8ft-lbs)</p> <p>Installation Temperature of 14°F (-10°C) to +130°F (55°C)</p>	<p><b>8</b></p> 	<p>Align the cover with the hinge closest to the tap cable and the bolt head towards the deeper side of the cover. Refer to orientation markings if necessary.</p>
<p><b>9</b></p> 	<p>Press the deeper side of the cover around the bolt head until the cables are partially seated in their ports.</p>	<p><b>10</b></p> 	<p>Bring the opposite side of the cover closed until all four latches engage.</p> <p>Snap closed the two side latches.</p>

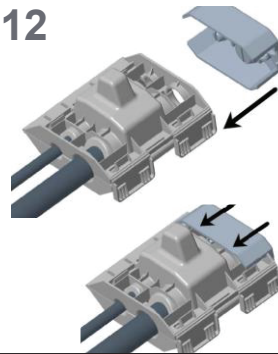
11



Steps 11 and 12 are only required when the Main cable terminates inside of the cover on an end-run installation.

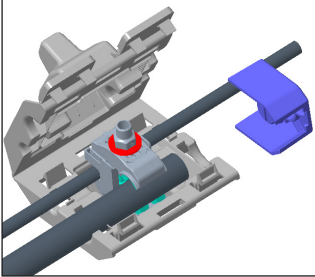
Ensure main trunk cable ends within the cover enclosure. Do not add any pvc tape on the cables.

12



Insert the End Shield Cap to the open end of cover assembly.

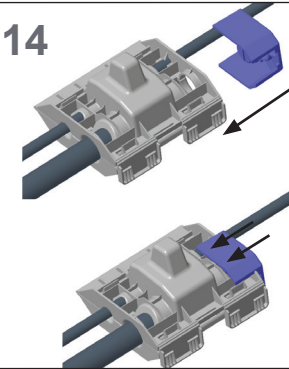
13



Steps 13 and 14 are only required when only the Main cable terminates inside of the cover the tap cable run through for installation.

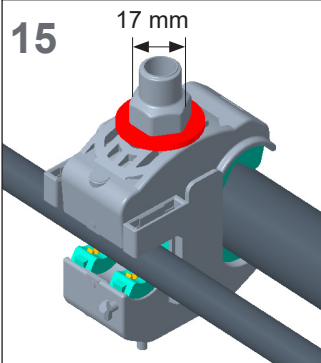
Ensure main trunk cable ends within the cover enclosure. Do not add any pvc tape on the cables.

14



Insert the Half End Shield Cap to the open end of cover assembly on the Main cable side.

15



To remove the connector use a 17 mm deep socket to remove the nut.