

There are three basic components to an electrical connection: CPI uses the best materials available in the design and manufacture of the Tap Connector series.

1) Mechanical

A356 heat-treated aluminum is used in the design of the tap connector's "C" body. When applied under pressure or heavy electrical load the "C" body keeps constant and consistent connecting pressure on the conductors. A living breathing connection is created that is able to withstand fluctuating environmental and heat cycling conditions.

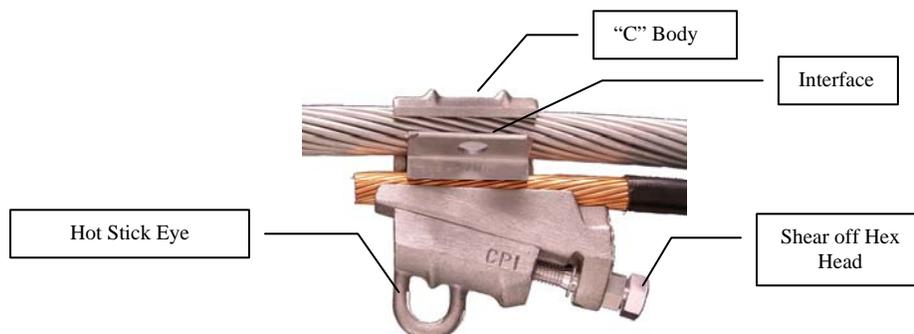
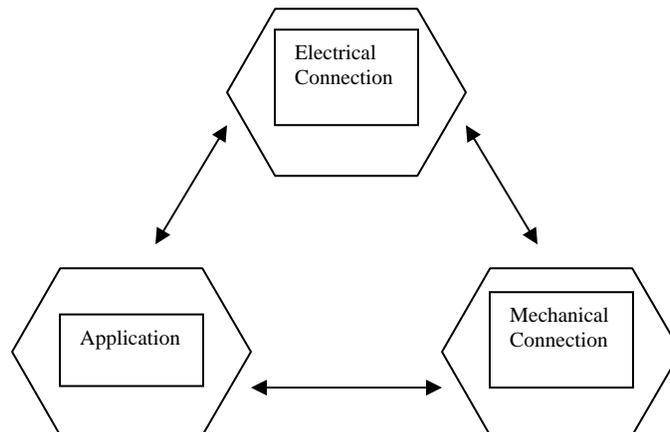
2) Electrical

EC grade 6101 aluminum is used in the design of the tap connector's "Interface." The interface is inserted directly between the main and tap conductors and is the main current carrying component of the connector. On average the contact surface of the interface has an 8:1 advantage over the cross sectional area of the conductor. Overall, the CPI tap uses superior materials combined with maximized contact surface area to create an extremely low resistance connection.

3) Installation

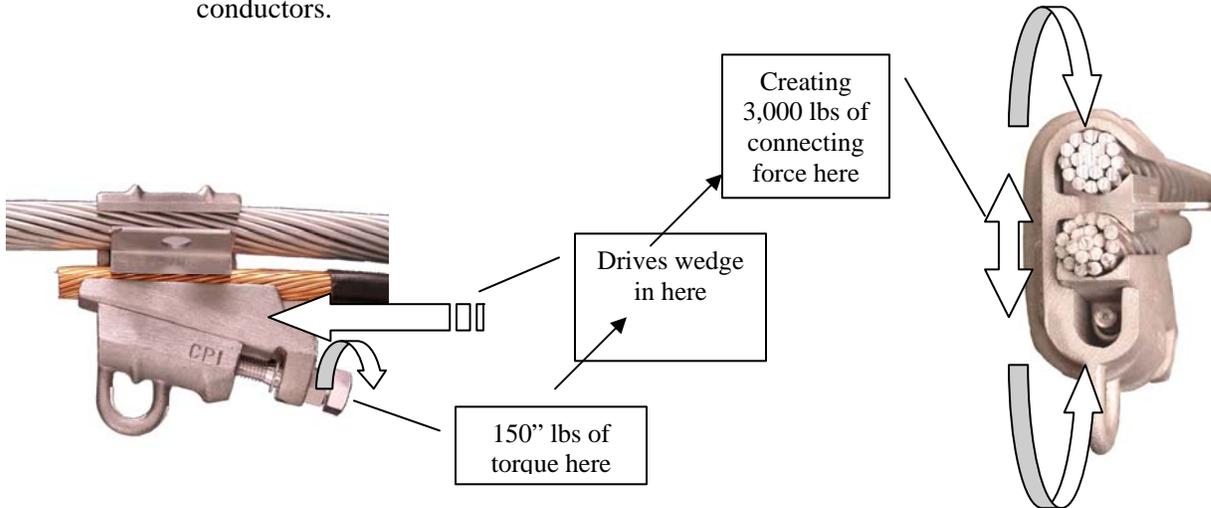
CPI Tap Connectors can be easily installed by tightening one single Shear Head Drive bolt. The drive bolt can be tightened using a simple hex head wrench of any variety. This feature allows the tap connector to be installed with a hot stick or gloves and gives positive indication of a correctly completed connection.

What makes a good connector great is the combination of a good mechanical and electrical connection and ease of installation.



What Just Happened?

When the conductors and the interface are in place within the connector the Shear Bolt can then be tightened using any hex head wrench, ratchet, or speed socket. When 150" pounds of torque is applied to the drive bolt the hex head shears off. This process drives the wedge into the connector and creates approximately 3,000 lbs of connecting force on the conductors. The force that has been introduced into the connector causes a .015" deflection of the "C" member. At this point a spring has been created that maintains a constant and consistent connecting force on the conductors.



A Completely Universal Connector

Throughout the installation process absolutely NO SPECIAL Tools are needed to install or remove the CPI Tap Connector. This feature allows the Tap Connector to be completely universal easy to integrate with other connecting systems. Switching to the CPI system is easy because there is no need to outfit an entire fleet of line crew trucks with special tools.

Key Benefits

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| <ul style="list-style-type: none">• NO SPECIAL TOOLS REQUIRED.• The "Spring Like" qualities of the high-strength C-Body insure permanent connection with consistent pressure on the conductors.• The special Shear Bolt on the drive screw mechanism gives positive indication of a correctly completed connection. It also insures that the same force will be used on each connector.• The Connectors can be easily removed with a wrench and reused by the installation of a new Shear Bolt. | <ul style="list-style-type: none">• Drive Wedge creates connecting force while maintaining conductors in locked position.• The exclusive high conductivity Aluminum Alloy Interface offers a low resistance conductive path for a more efficient connection.• Exclusive high conductivity Grit Inhibitor Compound is factory supplied for ease of installation.• The TAP never mars or damages the conductor• Easy to install with either hot stick or glove. |
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