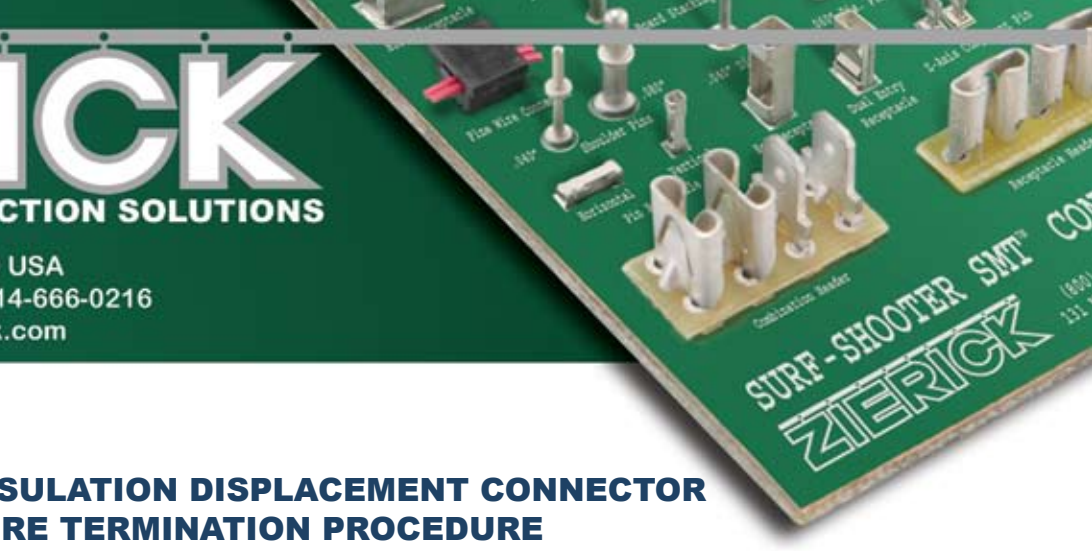
ZIERICK
ENGINEERED INTERCONNECTION SOLUTIONS
131 Radio Circle, Mt. Kisco, NY 10549 USA
800-882-8020 • 914-666-2911 • Fax: 914-666-0216
www.zierick.com • contactus@zierick.com



Zierick's award-winning Torsion-Lok™ Insulation Displacement Connector (IDC) allows connection and insulation shear in one motion. The Torsion-Lok™ IDC received the PMA-Higgins Design Award based on its ability to deliver exceptional performance while saving costs, since pre-stripping wire is unnecessary.

Torsion-Lok™ IDCs are available in loose and reeled, surface-mount or through-hole configurations for #30 through #14 AWG wire sizes. PCB assembly can be accomplished manually with Zierick hand tools or by semi and fully automated applicator systems, including surface mount feeder systems designed to fit your existing placement machines.

INSULATION DISPLACEMENT CONNECTOR WIRE TERMINATION PROCEDURE

STEP ONE

Using the chart below select appropriate notched end of 4-sided wire insertion blade for your part number.

STEP TWO

Fully seat and center blade into handle placing desired end facing out (see Fig. 1), then firmly tighten by rotating top handle knob in clockwise fashion.

IDC PART NO.	IDENTIFICATION BLADE NOTCHES (See Fig. 1)	WIRE RANGE (AWG)
1174 / 6174	Four	14-16
1119 / 6119	Three	18-24
1183 / 6183	One	26-30
6072	Three	18-19 MAG. Wire
1039	Four	18-24
1185 / 6185	Four	18-24
6114	One	26-30
1245	Two	18-26
1235	One	26-30
1227 / 6227	Two	18-26
1182	One	26-30
1296	Two	18-26

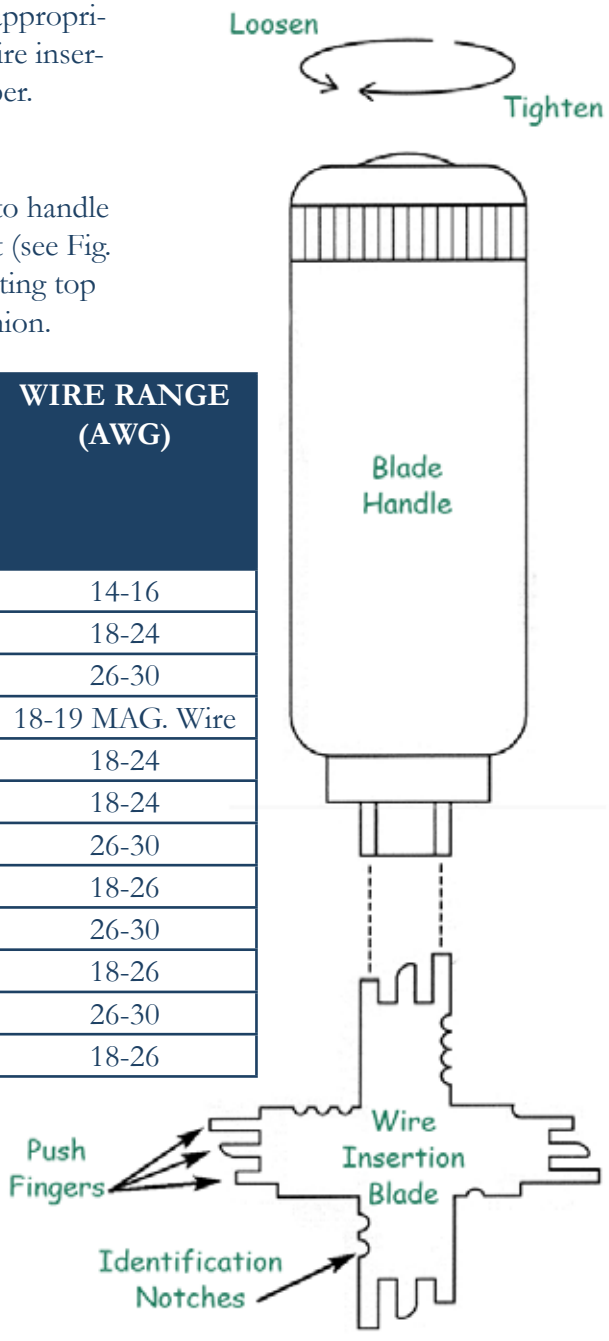


Fig. 1

FEATURES & BENEFITS

Zierick IDCs ...

- Are the most economical way to terminate a wire to PCB;
- Are designed for demanding applications with shock, vibration, and elevated temperatures;
- Eliminate the need for hand soldering wires to the board;
- Eliminate pre-stripping since insulation is cut with wire insertion
- Have built-in wire strain relief which prevent wire motion from transmitting to contact interface;
- Can be mated and unmated several times;
- Feature continuous clamping which provides a gas-tight interconnection;
- Terminate a large range of wire gauges; and
- Are designed for automation.
  - o THT IDCs come on a reel which can be fed through one of Zierick's family of terminal insertion systems.
  - o SMT IDCs are designed for automation using the customer's existing pick and place equipment and a special feeder; or they can be taped.

INSULATION DISPLACEMENT CONNECTOR WIRE TERMINATION PROCEDURE (continued)

STEP THREE

Preload wire into connector by placing wire across top of IDC having free end protrude 1/8" past shearing slot. Bring insertion blade over the top of wire such that the two longer push fingers straddle the strain relief slot. Then press wire into strain relief slot (Fig. 2).

Note: Not applicable for part number 1185 / 6185.

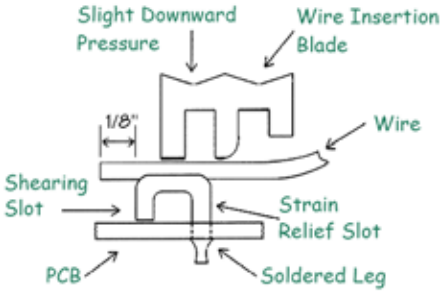


Fig. 2: Preloading Wire into IDC

STEP FOUR

Move insertion blade forward until two longer push fingers now straddle the shearing slot (Fig. 3). While maintaining hand tool perpendicularity to PCB surface, increase downward pressure until wire snaps into connector and rests against PCB surface (Fig. 4).

Note: Part number 1072 / 6072 insert first wire .010" above bottom of slot, insert second wire .025" above bottom of other slot. Part number 1185 / 6185 insert wire .225" into tab.

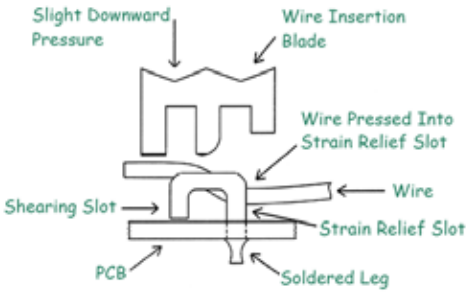


Fig. 3: Just Prior to Wire Termination

STEP FIVE

Remove blade straight out of connector and properly inserted wire should resemble Figure 4.

Note: Strain Relief Slot can be altered for different wire insulation diameters.

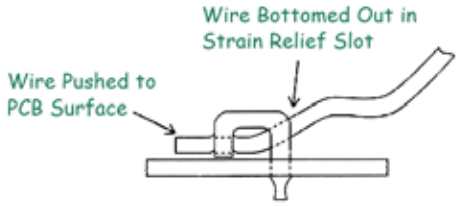
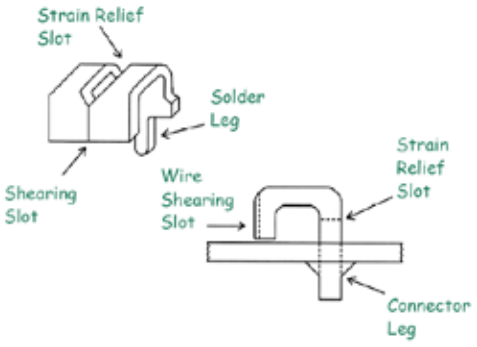


Fig. 4: Properly Inserted Wire into IDC

NOTICE: Enclosed wire insertion tool is strictly a prototype for sampling purposes only. Zierick production insertion tools (manual or semi-automatic) combine higher quality, repeatable wire insertions while providing enhanced operator ease-of-use.



Anatomy of Torsion-Lok™ IDC