1. **SPECIFICATION DISTRIBUTION**  
No restrictions for issue

2. **SCOPE**  
This specification contains the application notes for the 9177-500 series IDC contacts.

3. **PRODUCTS**  
70-9177-001-5XX-006 – IDC contact 12-18AWG  
Sales drawing 70-9177-001-7XX-006S  
Product specification 201-01-208  
UL reference E90723 (US & Canada).

4. **70-9177-001-5XX-006 CONTACT**

SMT mount contacts available in each of 4 wire sizes 12AWG, 14AWG, 16AWG and 18AWG, either solid conductor or most stranded conductor styles. Refer to sales drawing for correct contact part number for wire gauge used.

5. **WIRE INSERTION TOOL**

Three tool sizes are available depending on wire insulation diameter, use of the correct size will ensure the correct position of the wire in the contact after assembly. The tools are available in metal for volume production and in plastic for sampling and small volumes. Plastic tools should be regularly checked for damage.
6. WIRE ASSEMBLY PROCESS – CONTACT

1. It is important to support the underside of the PCB during the assembly procedure.

2. The wire is placed over the “V” slot in the contact. Both sides require aligning correctly.

3. Place the tool over the wire insulation, there should be a small overlap at the end (2.0mm minimum). It is important to choose the correct tool to match the insulation diameter.
   
   The tool is pushed down using a flat top tool (flat rock tool) in a press. Typical insertion forces are between 200N to 400N depending on wire type and size.

4. Remove tool and check the wire is fully inserted

7. UL REQUIREMENTS FOR PAD SPACING

UL approval based on 3.2mm gap between pads, contact centre spacing 11.70mm.

For non UL applications the gap may be reduced at the customers discretion depending on voltage applied.

For UL applications 3.2mm minimum.