

### Delphi Grounding Systems

Delphi Grounding Systems offer easy, one-step preassembly of multiple wiring harnesses to one centrally located grounding base. While most systems today are limited by the number of parts you can preassemble, this simple, manual process allows the assembly of multiple components (limited only by the length of the grounding bolt). They have the added flexibility of allowing preassembly either at the wiring harness plant or vehicle assembly line.

The systems feature an innovative ring terminal design that allows the assembly of several stacked terminals onto one grounding bolt. The terminals are secured into position utilizing their unique locking and anti-rotation latches. These design features help to ensure integrity of the preassembled harnesses and to optimize the electrical and mechanical interfaces.

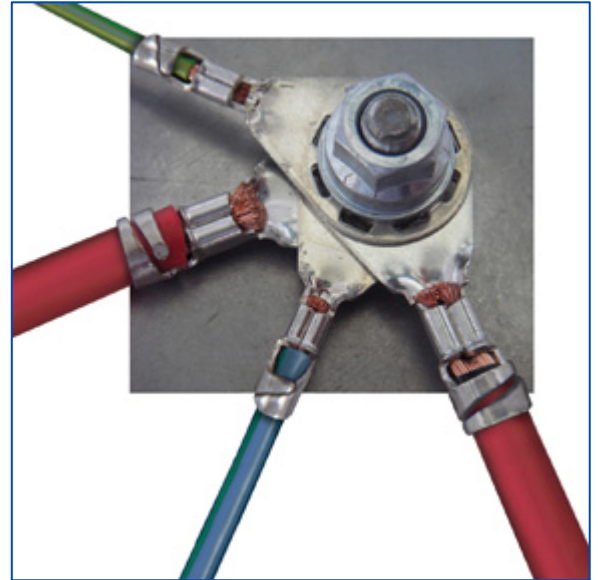
Delphi's grounding systems provide simplicity and flexibility. The terminal has one standard base design with five different crimp sizes offered. This allows unmatched flexibility in the build sequence, since all assemblies use the one, common ring design. The terminal's simple design allows production with high-speed stamping processes, which helps improve manufacturing costs compared to traditional systems.

#### ► Benefits

- Improves buildability and system integrity
- No chassis modification necessary for OEMs (original equipment manufacturers)
- Simple design can be produced with high-speed stamping processes
- Assembly without additional tools required
- Assembly is in a clockwise direction and counter-clockwise is possible
- Common terminal design
- Five crimp sizes available
- Flexible assembly allows 1 to 5 terminals per standard bolt (bolt length determines the limit)
- Anti-rotation: between terminal-to-bolt and terminal-to-terminal
- Defined position (angle) of ring terminals to bolt
- Packaging comparable to conventional systems

#### ► Typical Applications

Delphi Grounding Systems are designed for automotive and commercial vehicle interiors and industrial applications, whenever multiple grounding points are required.

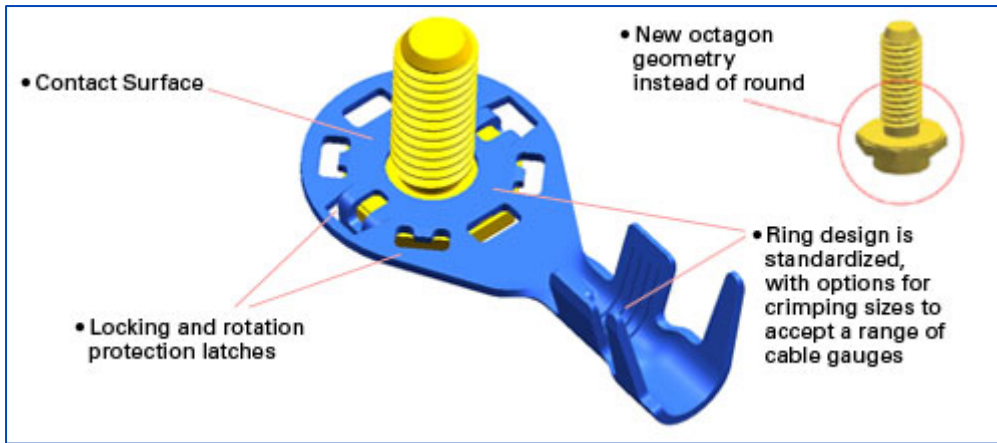


Delphi Grounding System assembled view



System sealing with heat shrink

► **Ring Terminal Design Features**



The assembly sequence is flexible, because the ring terminal has a standard, common base design.

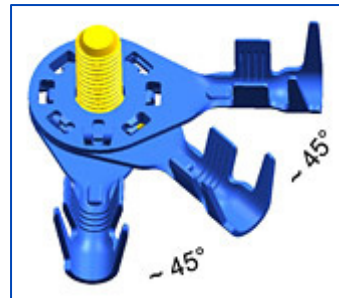
Single ring terminal for grounding system



One-ring terminal on grounding bolt



Two-ring terminals – typical locked position



Three-ring terminals – typical locked positions



Four-ring terminals – typical locked positions

► **Part Numbers**

Delphi Stripped Part Number	Delphi Single Part Number	Cross-section (mm <sup>2</sup> )	Material	Plating	Material Thickness	Hole Ø (mm)	Bolt
13673776	13673775	0. 50 to 0.75	CuSn6	Tin	0.8	6.4	M6
13673774	13673773	1.00 to 2. 00	CuSn6	Tin	0.8	6.4	M6
13673772	13673771	2.00 to 4.00	CuSn6	Tin	0.8	6.4	M6
13673770	13673769	4.00 to 6.00	CuSn6	Tin	0.8	6.4	M6
13673768	13673766	6.00 to 12.00	CuSn6	Tin	0.8	6.4	M6