



# FASTENING & JOINING SOLUTIONS FOR AGRICULTURE, CONSTRUCTION EQUIPMENT AND OTHER OFF-HIGHWAY APPLICATIONS

**Threaded Inserts** in Air Cleaners

**Compression Limiters** in Plastic Seat Framing

**Threaded Inserts** in GPS Receivers

**Compression Limiters** in Air Conditioning Ductwork

**Compression Limiters** in Plastic Framing of Head Liners

**Precision Shims** in Sensor Alignment

**Machined Nuts** on In-Cab Control Panels

**Coiled Pins and Solid Pins** in Interior Handles

**Coiled Pins** in Seat Adjust Mechanisms

**Alignment Dowels** in Hydraulic Pumps

**Threaded Inserts** in Throttle Controls

**Compression Limiters** in Dashboard Assemblies

**Machined Nuts** in Fuel Delivery Systems

**Precision Shims** for Engine Gaskets

**Disc Springs** in Steering Columns

**Compression Limiters** in Filters, Covers and other Engine Components

**Alignment Dowels** locate Cylinder Heads to Engine Blocks

**Coiled Pins** in Camshafts

**Threaded Inserts** in Lamp Assemblies

**Coiled Pins** in Fuel Pumps

**Coiled Pin** as Steering Column Shear Pin

**Spacers** in Rear Bucket Linkages

**Precision Shims** for Component Spacing

**Coiled Pins and Solid Pins** in Exterior Handles

**Wear Bushings** in all Pivot Points

**Coiled Pins** secure Teeth to Buckets

**Precision Shims** in Pivot Points

**Threaded Inserts** in Electronic Modules

**Disc Springs** in Transfer Cases

**Coiled Pins and Dowels** in Gearboxes and Transfer Cases

**Coiled Pins** in Drum Brake Assemblies

**Disc Springs** in Clutch Assembly

**Machined Nuts** in Brake Systems

**Alignment Dowels** in Clutch Plates

**Coiled Pins** in Brake and Clutch Master Cylinders

**Disc Springs** in Brake Clearance Adjusters

**Precision Shims** for Power Couplings

**Precision Shims and Thrust Washers** in Powertrain for Alignment and Wear Resistance

**Machined Nuts** for Fine Drivetrain Adjustments

**Delivering components to the off-highway market at the lowest-installed cost since 1948.**

# SPIROL®

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FOR AGRICULTURE, CONSTRUCTION  
EQUIPMENT AND OTHER OFF-HIGHWAY  
APPLICATIONS**



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**Coiled Spring Pins • Threaded Inserts • Precision Shims  
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Alignment Dowels/Bushings • Compression Limiters • Spacers**

Seemingly small components can play a major role in your overall manufacturing cost and product quality. Lowering your total assembly cost while improving quality enhances your competitive position in today's global market.

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