



Fastening & Joining Solutions for Agriculture, Construction Equipment and other Off-Highway Applications

Brass Inserts in Air Cleaners

Compression Limiters in Plastic Seat Framing

Brass Inserts in GPS Receivers

Compression Limiters in Air Conditioning Ductwork

Compression Limiters in Plastic Framing of Head Liners

Metal 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

Brass Inserts in Throttle Controls

Compression Limiters in Dashboard Assemblies

Machined Nuts in Fuel Delivery Systems

Metal 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

Brass Inserts in Lamp Assemblies

Coiled Pins in Fuel Pumps

Coiled Pin as Steering Column Shear Pin

Spacers in Rear Bucket Linkages

Metal Shims for Component Spacing

Coiled Pins and Solid Pins in Exterior Handles

Solid Pins and Compression Limiters in Grab Handles

Wear Bushings in all Pivot Points

Coiled Pins secure Teeth to Buckets

Machined Nuts in Brake Systems

Coiled Pins in Drum Brake Assemblies

Alignment Dowels in Clutch Plates

Coiled Pins in Brake and Clutch Master Cylinders

Metal Shims in Pivot Points

Brass Inserts in Electronic Modules

Disc Springs in Transfer Cases

Disc Springs in Clutch Assembly

Alignment Dowels in Clutch Plates

Coiled Pins and Dowels in Gearboxes and Transfer Cases

Metal Shims for Bearing Preloads

Machined Nuts for Fine Drivetrain Adjustments

Metal Shims and Thrust Washers in Powertrain for Alignment and Wear Resistance

Disc Springs in Brake Clearance Adjusters

Metal Shims for Power Couplings

Over 60 years experience in delivering components to the off-highway market at the lowest-installed cost.

CHALLENGE US!

SPIROL®

Since 1948

Coiled Spring Pins • Threaded Inserts • Precision Shims
Disc Springs • Solid Pins • Machined Nuts • Thrust Washers
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.

Take advantage of over 60 years of manufacturing and technical experience with **SPIROL's Optimal Application Engineering** service available online at: **SPIROL.com**

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