



IMPROVING THE FEEL OF INTERIOR DOOR HANDLES

INDUSTRY:
Automotive

APPLICATION:
Door Handle

COMPONENT:
Spring

LOCATION:
USA



BACKGROUND

A prominent Automotive supplier came to Nye in search of a lubricant that would be compatible with the chrome finish on the interior door handle of their new pickup truck design. If not properly lubricated, components within the door handle experience friction during use which creates audible vibrations that passengers may find off-putting. Grease protects components and different viscosities allow engineers to control the torque and feel of handles. The supplier needed a lubricant to control the motion of the door handle to reduce the noise, vibration, and harshness emitted during use.

CHALLENGE

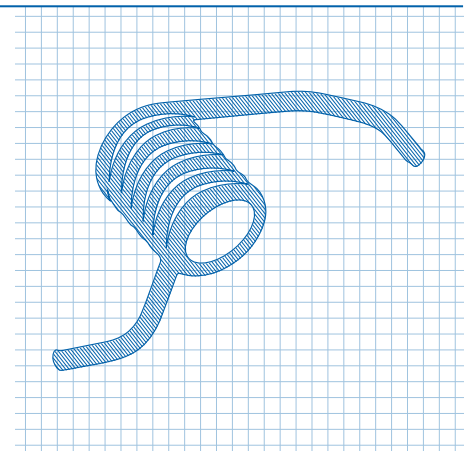
- Exhibit chrome compatibility.
- Extend the life of door handle components.
- Control motion to reduce noise, vibration, and harshness.

SOLUTION

UNIFLOR™ 8172

A PTFE thickened, light viscosity, completely fluorinated grease.

- Exceptional wide service temperature from -45 to 225°C
- Compatible with chrome and most plastics and elastomers
- Light viscosity provides a quality feel to eliminate backlash
- Specifications: GM: 9985880



RESULTS

The Automotive supplier completed compatibility and durability testing to validate Uniflor™ 8172 for their application. Uniflor™ 8172 passed all customer testing and improved the life of the door handle spring while also reducing noise emissions. The Automotive supplier ultimately selected Uniflor™ 8172 to lubricate the interior door handle of their new truck design and remain with its performance.

Base Oil Properties	Conditions	Uniflor™ 8172	Test Method
Chemistry		PFPE/PTFE	
Temperature Range		-45 to 225°C	
Kinematic Viscosity	40°C	167 cSt	ASTM D-445
Viscosity Index		120	ASTM D-2270
Grease Properties			
Penetration	Worked, 60x	278	ASTM D-217
Oil Separation	24 hrs, 100°C	3.8%	ASTM D-6184
Evaporation	24 hrs, 150°C	0.23%	ASTM D-972

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Nye Lubricants is a leader in the innovation, formulation and provision of synthetic lubricants, enabling and improving breakthrough products and critical new technologies. We bring proven experience, deep technical knowledge and customer focus to solve our customers' toughest challenges, adding tangible value to products in a wide range of industries and applications.

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