



# REDUCE NOISE WITH LOW TORQUE GEAR GREASE

**INDUSTRY:**  
Automotive

**APPLICATION:**  
Power Running Board

**COMPONENT:**  
Gear System

**LOCATION:**  
North America



## BACKGROUND

Electrically actuated running boards are a common feature on high-end pickup trucks and full-size SUVs. Environmental corrosion, gear wear, and noise emissions are all factors that engineers must consider during the design stage to ensure that a running board operates smoothly and reliably when a vehicle door is opened or closed. A leader in exterior powered equipment approached Nye to find the right lubricant for their new power running board assembly. During development testing, the assembly emitted an audible whistling noise during actuation. The supplier required a grease that would protect the gears within the assembly from wear and ensure quiet operation.

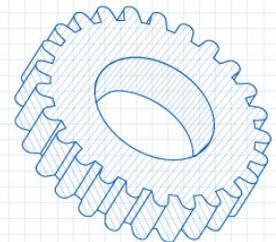
## CHALLENGES

- Can Nye's grease meet the suppliers extremely low torque requirements?
- Can Nye provide a grease that will extend gear life within the power board assembly while reducing noise?

## SOLUTION RHEOLUBE® 462CF

A light viscosity, lithium soap thickened synthetic hydrocarbon grease.

- Reduces noise and vibrations
- Prevents wear to extend gear life
- Excellent low temperature torque properties



## RESULTS

Nye recommended that the supplier sample Rheolube® 462CF, our advanced low-temperature gear grease that is fortified with an advanced additive package for advanced wear protection. The supplier conducted their own life cycle testing with the sample of Rheolube® 462CF. After successfully passing cycle testing and significantly reducing noise, the supplier was pleased with the results and has integrated Rheolube® 462CF into their power running board design.

Base Oil Properties	Conditions	Rheolube® 462CF	Test Method
Chemistry		Lithium Soap	
Temperature Range		-54 to 130 °C	
Kinematic Viscosity	40 °C	27.1 cSt	ASTM D445
	100 °C	5.5 cSt	
Viscosity Index		145	ASTM D2270
<b>Grease Properties</b>			
Oil Separation	24 h, 100 °C	6.98%	ASTM D6184
Evaporation	24 h, 100 °C	0.27%	CTM*
Low Temp Torque (-40 °C)	Starting Torque	428 g.cm	ASTM D1478
	Running Torque, 10 minutes	153 g.cm	
	Running Torque, 60 minutes	132 g.cm	

\*CTM: Nye Company Test Method

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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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