In-Cabin Noise Reduction Application

Cost-Effective, Easy to Apply, Lifetime Lubrication Solution Solves Parking Break Noise Issue

**Premium Car Maker Eliminates Noise Issue with High-Performance Lubricant**

A premium European motor manufacturer with a famous sporting pedigree needed to eliminate a persistent and annoying noise issue found in the parking brake mechanism that had been supplied by a key partner.

**The Challenge**

This example of "buzz, squeak and rattle" was not consistent with the brand values and aspirations of the vehicle manufacturer. It was, therefore, essential to improve the in-cabin experience for the end user by eliminating the problem. An easy to apply, cost-effective and life-long lubrication solution was needed that worked where multiple components made from different materials were coming into contact.
The Solution
Our automotive experts, working with the manufacturer’s design engineers, identified that the noise was originating where contact was occurring between the seal and the metal piston rod in the brake actuator mechanism.

We suggested the application of Krytox™ GPL 205 grease to act as a PFPE film on the seals, which would ensure components worked together without friction. As soon as this was done, the noise was eliminated. Further life testing confirmed that the solution was effective.

Key Advantages
- A quick, easy to apply and odorless solution that immediately eliminated the noise issue.
- A cost-effective solution with only 10 kg of Krytox™ GPL 205 needed for 40,000 parking brake applications.
- A single application of Krytox™ GPL 205 was also found to be sufficient to provide a lifetime solution to the issue.
- Krytox™ GPL 205 was effective across a wide range of temperatures from -40 to 120 °C (-40 to 248 °F).
- The solution was also resistant to DOT4 hydraulic fluid, ensuring increased durability.
- End users were satisfied with quick and effective noise elimination.

Why Krytox™ High-Performance Lubricants?
Today’s technological evolution in the auto industry is possible only because engineers aren’t taking any chances. They rely on the certainty long-lasting Krytox™ high-performance lubricants provide: precision formulas engineered to help drive performance by reducing component failure, extending vehicle life, and eliminating noise—even under the broadest range of temperatures and harshest conditions. For 60 years, we’ve considered reliability and performance non-negotiable. That’s why we’re the perfect partner for whatever is next.

Together, let’s reconsider possible.