



Case Study: New GORE® Rubber Acoustic Vents in Smartphones

Unlocking Design Freedom with GORE® MEMS Protective Vents

? CHALLENGE

Customers expect **waterproof** phones with excellent **sound quality**. A leading smartphone manufacturer **risked failure in these exact areas**: the assembly process damaged the acoustic vents, reducing sound quality — three months before mass production. The manufacturer asked Gore for a **more robust solution**: a waterproof device and with excellent sound quality. Gore provided a suitable acoustic vent and **solved the assembly problems** to keep production on schedule.

Want to know how we did it?

Leading OEMs choose Gore for materials, process expertise, and support that reduce risk and accelerate development.



Visit gore.com/smartphone-rubber-vents-story to find out how exactly we helped our customer to overcome assembly challenges without compromising acoustics — and how we can do the same for you!

💡 SOLUTION

Gore replaced the standard foam layer with a rubber-based material, a novelty in Gore's portfolio. Drawing on an efficient supply chain and rapid development capabilities, the new material was applied quickly. The client benefited from Gore's collaborative approach and dedication to cost control. Agile testing and sampling ensured the right balance between acoustic performance and cost efficiency.

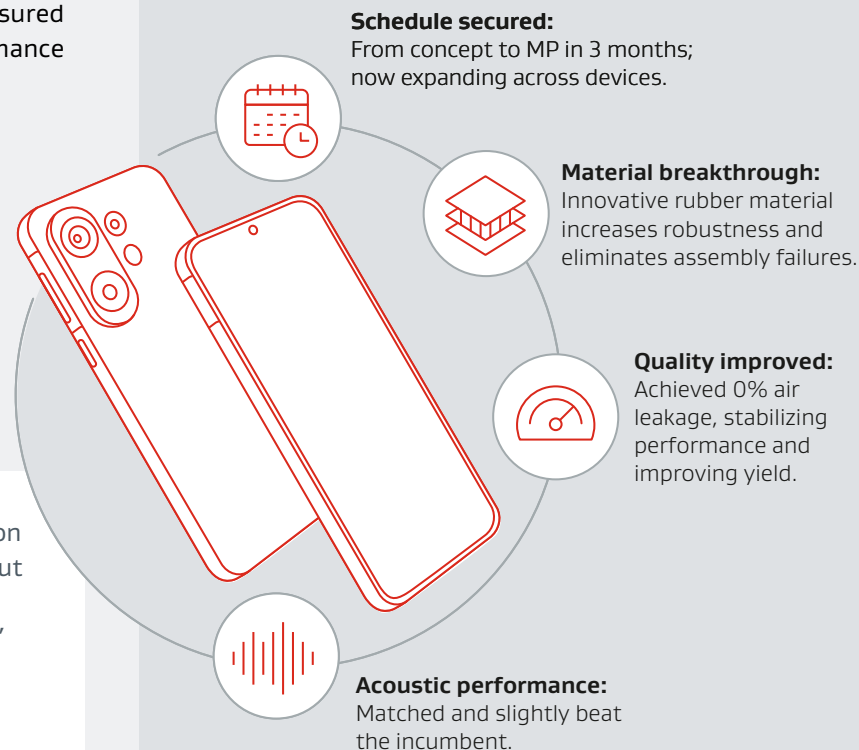
Beyond supplying the right vent, Gore addressed the root cause. They recreated the breakage with an air gun and identified the vacuum pick-up nozzle. The remedy: keep the existing vacuum setting but reposition the nozzle to prevent further damage.

"We have developed the optimal solution for our customer. And we hope to roll out the implementation of rubber acoustic vents for the other customers' benefit."

Eric ZZ Chu, Field Sales Associate

★ RESULTS

The program delivered a fast, scalable fix that cut assembly-induced failures while enhancing acoustics, thus ramping up from pilot to multi-million-unit mass production.





Why Choose GORE® Portable Electronic Vents for Your Electronic Devices?

Leading OEMs have purchased over 10 billion GORE® Portable Electronic Vents because they know our products and services can help accelerate their development of innovative and differentiated devices in fast-paced, highly competitive markets.



PRODUCT AND APPLICATION LEADERSHIP

- Deep expertise in material science and acoustics
- Balancing trade-offs of mobile electronics design



RELIABLE PERFORMANCE

- Highest standards of quality, performance, and reliability
- Comprehensive understanding of end-use applications



FAST DEVELOPMENT

- Fast response to customer requests
- Availability of easily integrable designs and prototypes



SUPPLY SECURITY

- Sufficient availability of products without waiting periods
- High-quality vent supply for projects of over 10 million devices per year



MATERIAL SCIENCE

- Development of materials with exceptional performance features
- Broad applicability in products for various industries and markets



GLOBAL SUPPORT

- Agile and robust support for customers worldwide
- In-depth consultation by our sales, engineering, and research experts

Interested in Testing Our Products or Talking to Our Experts?

For additional assistance, please contact a Gore representative.

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