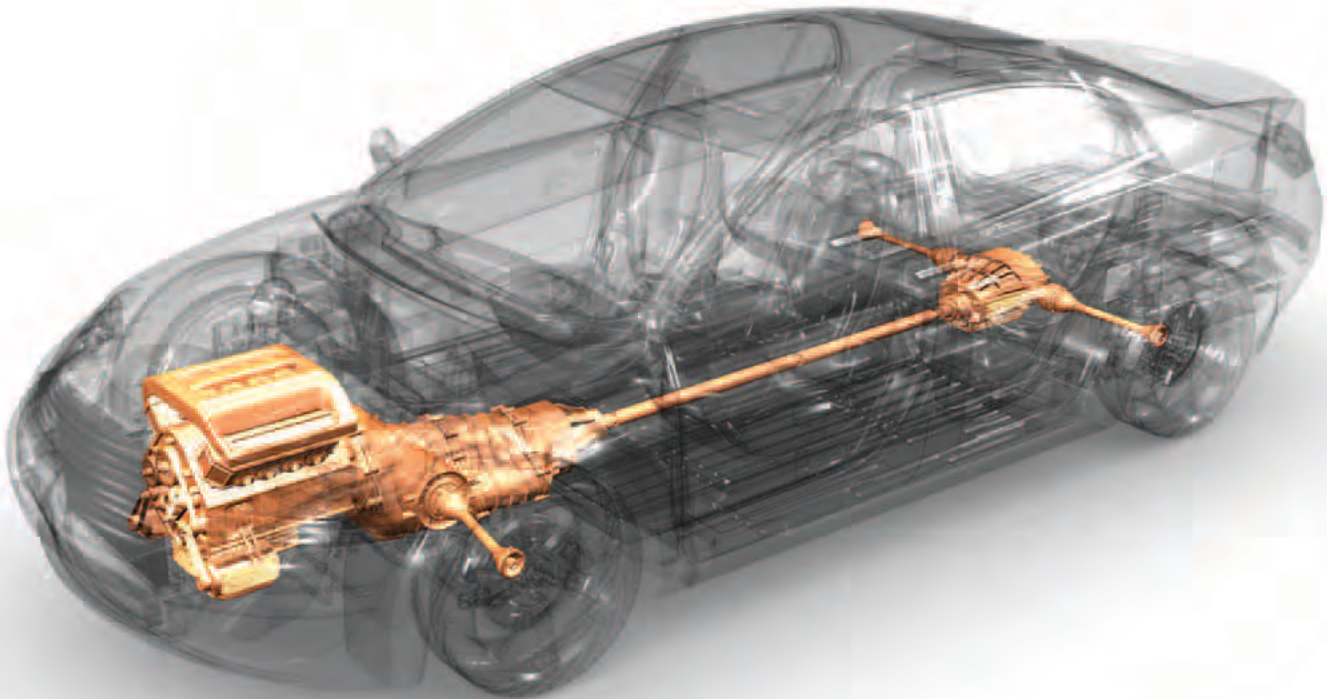


Proven Solutions for Challenging Powertrain Applications

Innovation and Expertise for Powertrain Performance, Economy and Durability



Meet your needs for:

- Rugged seals and gaskets
- NVH control with mass savings
- Reliable fluid and air delivery
- Reduced wear and corrosion
- Fuel efficiency and more



Advanced turbocharger hoses can be economically co-extruded with a patented-process adhesion package, using *Silastic*[®] high-consistency rubber (HCR) and fluorosilicone rubber (FSR) elastomers for optimizing adhesion compatibility.



Connect. Collaborate. Get solutions that work.

Meet your powertrain design needs. In an intensely competitive and dramatically changing global automotive industry, continuous improvement is essential. Better powertrain performance, economy and durability are key design objectives at every level of the value chain. You have tough challenges for increased driving comfort, operating efficiency, occupant safety and vehicle reliability. You must meet precise application requirements. And you need innovative technologies that deliver results. Dow Corning has powertrain solutions that work, and we are ready to put them to work for you.

Ask for our problem-solving help. Connect your ideas with ours. Collaborate with our experts. We can help you meet critical needs today and tough challenges tomorrow with:

- *Silastic*[®] brand engineered elastomers
- *Molykote*[®] brand specialty lubricants
- *Dow Corning*[®] brand adhesive/sealants

One company, many automotive solutions.

Meet your powertrain application requirements with Dow Corning materials innovation, application expertise, and technical service and support. We have proven, high-performance solutions to help you get the job done right. Discover how to:

- Improve engine sealing; increase reliability of fluid and air delivery; and control noise, vibration and harshness (NVH) with durable *Silastic* silicone and fluorosilicone engineered elastomers.
- Reduce component vibration and wear, improve fuel economy, and protect against corrosion with reliable, long-lasting *Molykote* specialty lubricants.
- Improve sealing integrity and increase assembly productivity with economical and easy-to-use *Dow Corning* silicone and fluorosilicone adhesive/sealants.



Improved fuel economy, reduced engine wear and reduced noise can be gained using a *Molykote*[®] anti-friction coating on piston skirts and rings.



Increased sealing reliability and bonding strength can be quickly achieved using robotically applied *Dow Corning*[®] silicone or fluorosilicone adhesive/sealants.

FOR ENGINE SEALS, TURBO HOSES, ENGINE MOUNTS AND MORE Rely on tough **Silastic®** engineered elastomers

Specify high-performance elastomer solutions. You can rely on tough *Silastic* silicone and fluorosilicone engineered elastomers from Dow Corning to help meet your needs for:

- **Comfort** with engine mounts and exhaust dampers that reduce NVH
- **Efficiency** with rugged seals, gaskets and hoses that eliminate fluid and air leaks
- **Safety** with durable constant-velocity joint (CVJ) boots that seal driveline joints without need for heat shields
- **Reliability** with fuel quick-connect seals and flexible diaphragms that resist failure

DOW CORNING

Proven in automotive powertrain applications. *Silastic* engineered elastomers include high-consistency silicone rubber (HCR), fluorosilicone rubber (FSR), liquid silicone rubber (LSR) and fluoro-liquid silicone rubber (F-LSR) compounds. Each offers processing flexibility, customized blends for special needs and a unique combination of physical properties and environmental resistance that many organic polymers cannot match. They can help you meet your precise application requirements for fabricated engine seals and gaskets, fluid- and air-delivery hoses, fuel seals, engine mounts, muffler hangers, constant-velocity joint (CVJ) boots, flexible diaphragms, and more.

Get lasting performance.



Engine mounts and muffler hangers fabricated with engineered elastomers can help control NVH and eliminate heat shields for mass savings.



Improve fuel-system reliability with quick-connect seals and flexible diaphragms economically fabricated with *Silastic®* fluorosilicone (FSR or F-LSR) elastomers.

FOR IMPROVED FUEL ECONOMY AND EXTENDED SERVICE LIFE Depend on durable *Molykote*[®] specialty lubricants

Choose *Smart Lubrication*[™] solutions. You can depend on durable Molykote specialty lubricants from Dow Corning to help meet your needs for:

- **Comfort** with greases and pastes that aid run-in and dampen unwanted engine noises
- **Efficiency** with anti-friction coatings (AFCs) that improve fuel economy and reduce wear
- **Safety** with solid-film lubrication that provides long-lasting protection against wear and corrosion
- **Reliability** with application-matched formulations that extend component service life

Proven in automotive powertrain applications. *Molykote*[®] brand *Smart Lubrication*[™] solutions include severe-duty greases, anti-seize pastes, anti-friction coatings and dielectric lubricating compounds. These advanced specialty lubricants can help you control friction and wear, reduce corrosion, extend lubrication intervals, and increase component service life. They stay in place and resist water washout, oxidation, abrasion, extreme heat and cold, and harsh operating conditions. They can help you meet your precise application requirements for long-term, reliable lubrication on engine, transmission, driveline, cooling and climate-control systems and components.



Get lubrication durability.



Improve reliability and service life of hotter-running powertrain components with *Molykote*[®] greases and pastes, especially formulated for severe-duty lubrication.



Pre-coating powertrain assembly parts with advanced *Molykote*[®] dry-film lubricants can provide long-lasting lubrication and rust prevention.



FOR FORMED-IN-PLACE SEALS AND STRONG ASSEMBLY BONDS
Count on reliable *Dow Corning*[®] adhesive/sealants

Use high-strength adhesive/sealant solutions. You can count on reliable *Dow Corning* silicone and fluorosilicone adhesive/sealants to help meet your needs for:

- **Comfort** with component bonding that prevents squeaks, rattles and buzzing vibrations
- **Efficiency** with cure-in-place seals and component mounts that speed production assembly
- **Safety** with durable seals and gaskets that prevent leaks and premature system failures
- **Reliability** with heat- and fuel-resistant seals that provide extended component service life

DOW CORNING

Proven in automotive powertrain applications.

Dow Corning adhesive/sealants include silicone and fluorosilicone pastes, coatings, form-in-place gasketing materials and hot-melt assembly adhesives. They are longer lasting and more versatile, and they provide better resistance to heat, cold, chemicals and contaminants than most organic-polymer sealants. All are easy to use. Many are self-bonding, require little surface preparation, seal irregular surfaces and cure quickly with good bond strength. They can help you meet your precise application requirements for wet-dispensed seals and gaskets and for bonding dissimilar materials.

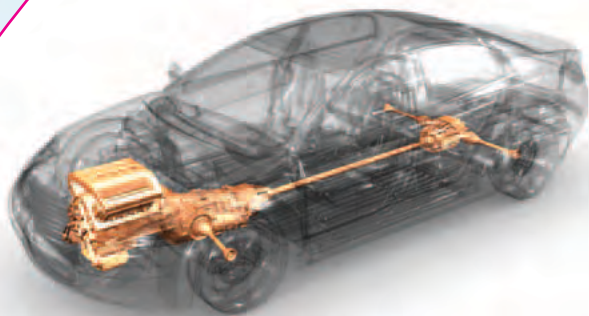
Get increased productivity.



Wet-dispensed *Dow Corning*[®] silicone and fluorosilicone adhesive/sealants can provide durable sealing and bonding used on intake manifolds, engine covers, oil pans, water pumps, radiators, fan clutches, and HVAC doors and ducts.



Dispensable one- and two-part *Dow Corning*[®] adhesives/sealants provide integrated bonding and sealing solutions with various robotic form-in-place gasketing (FIPG) processes. Materials for dispensed foam gasketing (DFG) are available.



Challenge us

Connect your ideas with our solutions. With more than 65 years of success innovating for the world's transportation industry, Dow Corning can help you get the tough jobs done right. Add us to your powertrain problem-solving team. Challenge us with your specialized performance needs or unique application requirements. Our strengths go beyond high-performance materials alone. See how close collaboration can turn basic design ideas into cost-effective solutions.

dowcorning.com/auto

Your Global Connection

Dow Corning customer service and engineering centers are strategically located worldwide. Our team of application and materials experts can provide local support in all automotive manufacturing regions. Call us for the proven engineered elastomers, specialty lubricants and adhesive/sealants you need. Please visit dowcorning.com/ContactUs for addresses and phone numbers of locations in your geography.

Learn More

Get details about Dow Corning's innovation, expertise and support to help you develop high-performance solutions for your challenging automotive powertrain applications.

Please visit dowcorning.com/auto or e-mail automotive@dowcorning.com.



Images: Cover: AV13675, AV01065, AV10013, AV04092; Page 2: AV15688, AV15017; Page 3: AV07388, AV03219; Page 4: AV01065, AV11414, AV15181; Page 5: AV01056, AV00749, AV10013; Page 6: AV04092, AV02117, AV03636; Page 7: AV15689

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Dow Corning, Silastic and Molykote are registered trademarks of Dow Corning Corporation.

We help you invent the future and *Smart Lubrication* are trademarks of Dow Corning Corporation.

©2011 Dow Corning Corporation. All rights reserved.

Printed in USA

AGP10767

Form No. 80-3502-01

DOW CORNING

We help you invent the future.™