

Speaker seals

Headrest slides

Head up displays

Rollover sensors

Seat belt mechanism

Airbag coating

Anti-squeak and rattle

Leather and textile treatment

LED headlamp controllers

Rear lighting

Door locks

Window lift mechanisms

Linear guides

Sliding guides

Mirror actuators

Sunroof seals

Acoustic barriers

Exterior trim

ABS/ESP controllers

Pedal systems

Hydraulic components

Clutch cables

Hand brake cables

Shock absorber sealing

Steering column

Tire pressure monitoring system

Wheel bolts

Gaskets

Position and knock sensors

Oil gaskets

Intake manifold gaskets

EGR-valve

Piston

Clutch actuation

Automatic gear shifting

CV joints

Electronic fuel injection systems

Fuel cap

Ignition cables

Spark plug boots

Connector seals and grommets

Starter assembly

Alternator assembly

Radiator hoses

Fan clutches

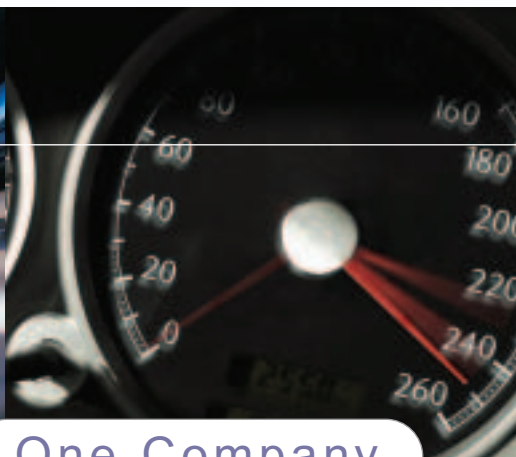
Cooling fan bearing

Electronic heating systems

Flap seals and air ducts

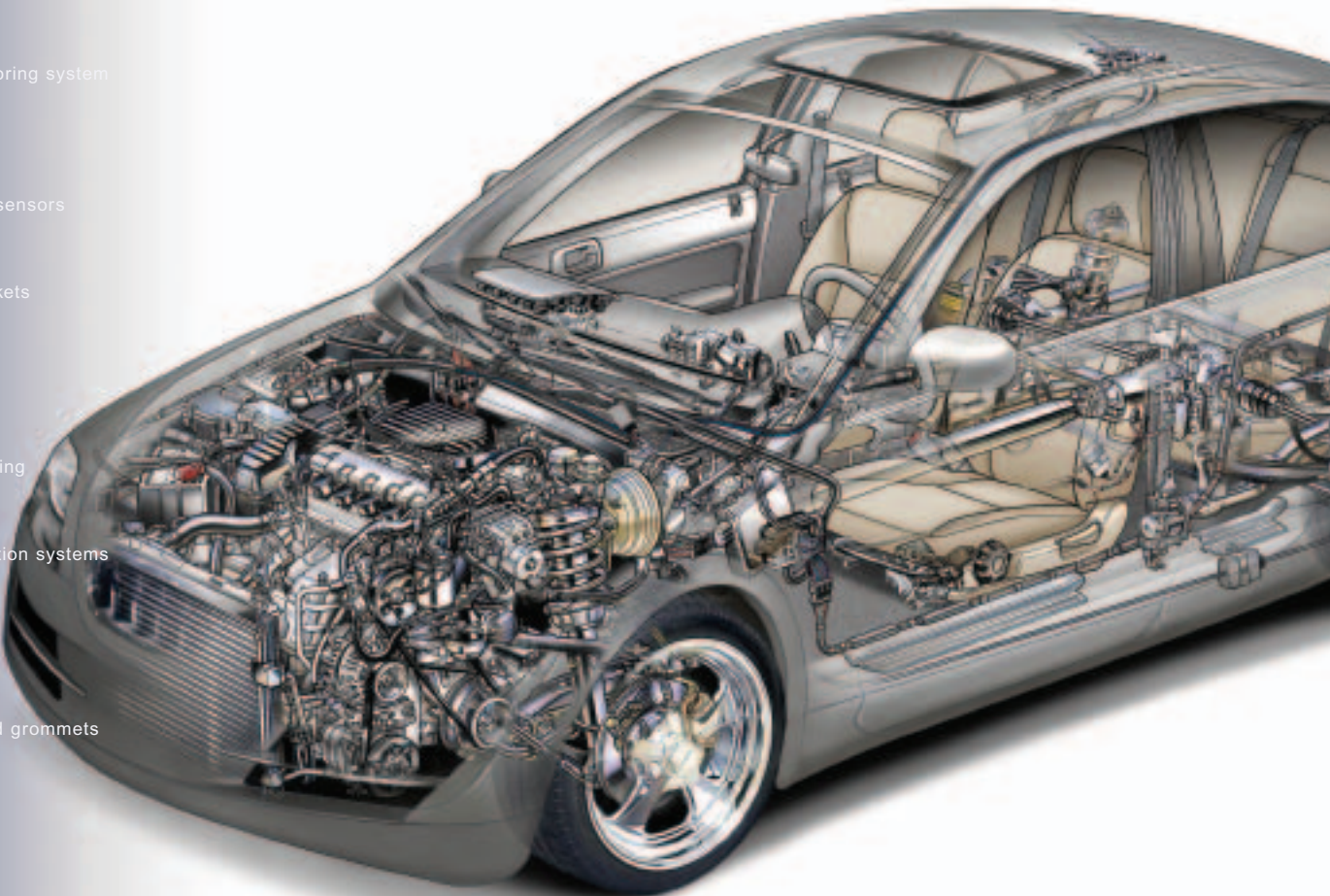
Compressor

Actuators



One Company

# Many Automotive Solutions



Automotive Solutions



One Company

## Many Automotive Solutions

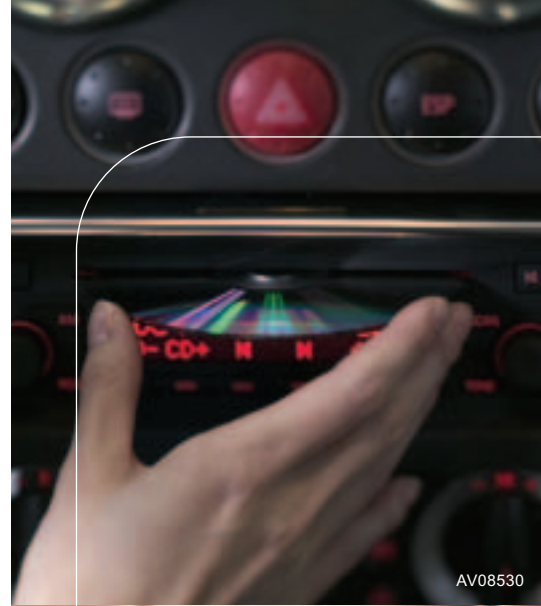
Dow Corning helps lower costs and boost performance of your automotive systems, modules and components.

More than 60 years as a leading automotive supplier gives us a strong foundation of expertise and know-how to meet your unique requirements. We have a long track record of exceeding customer expectations for consistently high quality products and services in just about every aspect of automotive manufacturing. That is the Dow Corning difference.

Around the world, we help companies solve their most demanding business problems. Whether your company is an established leader or a fast-growing start-up, we offer a wide range of products and related services that will keep your business moving forward.

Innovative technology is designed into every one of our products—from our Molykote® brand of automotive lubricants, greases and anti-friction coatings to our Dow Corning® brand of sealants and gaskets. Every product is backed by our commitment to provide design and processing answers when you need them. Our functionality testing, application engineering, and equipment/material integration provide you with a total systems solution.

Learn how we can tailor our products and services for your business.



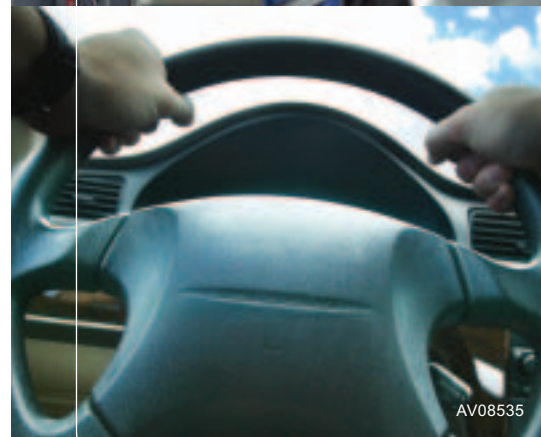
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# Total Automotive System Solutions

Dow Corning offers exactly what you need: Choice. You will find that our Molykote® and Dow Corning® solutions meet just about every automotive manufacturing requirement. We can provide you with the products and services to enhance the value of your system or components.

## Lubrication

### Molykote® Lubricants. Dow Corning® Solutions.

Simply put, the right lubricant for a moving part can mean the difference between high performance and failure. When you select Dow Corning as your preferred lubricant supplier, you get access to our extensive offering of Molykote brand lubricants, specialty greases, pastes, anti-friction coatings, oils and dispersions, as well as unmatched application expertise.

Molykote lubricants can be used in situations requiring high pressure or in extreme temperatures, where you have vibration and shock loads, or between sliding surfaces operating under heavy loading. Our anti-friction coatings are designed for many uses, including body and interior applications, which will help you reduce or eliminate problems associated with squeaks and rattles.

Molykote lubricants are designed to perform optimally on a variety of substrates, including metals, elastomers and engineered polymers.

Regardless of the scope and scale of lubrication support you require, we can provide the exact combination of products and/or services that you need to succeed.

### Smart Lubrication™ Increases Customer Satisfaction

Molykote® can help you optimize performance and extend the life of component parts and vehicle systems. Combine that with a reduction of squeaks, rattles, noise, vibration and harshness and you get an increase in customer satisfaction.

Following three simple steps can increase customer satisfaction; lead to successful lubrication and long-term component performance.

#### 1. Start Early.

Selecting the right lubricant early in the process can improve product start up and reduce costs by minimizing design changes. Also, proper lubricant selection can prevent component failures and eliminate costly warranty callbacks.

#### 2. Involve Outside Experts to Prevent Problems.

Effective lubricant selection demands support from experts who know the right lubricants to use. This expertise can help prevent problems during the OEM design stage or with long term component and vehicle system failures.

#### 3. Identify a Global Supplier that Delivers Locally.

You can add value by working with Dow Corning. We can provide the same quality from a design concept to the production of parts worldwide. We offer a complete line of automotive lubricants, application expertise and functional testing to assist you.



**MOLYKOTE**  
FROM DOW CORNING

Smart Lubrication™

# Sealing Methods

## Sealants and Gasketing

Durable Dow Corning silicone-based sealants provide exceptional sealing and gasketing performance in demanding environments, including extreme temperatures.

Typical features of Dow Corning® automotive silicone sealants include:

- Fuel and oil resistance
- Chemical stability in automotive fluids
- UV, ozone and weather resistance
- Superior adhesive strength
- Stability over a wide temperature range
- Excellent dielectric properties

Dow Corning sealants are formulated using a variety of product technologies, each providing strengths and characteristics unique to its chemistry. Dow Corning sealants can be used for many automotive application such as in-place-gasketing for valve covers, transmission covers, and differential covers, as well as adhesive applications such as head lights, mirrors and emblems.

When sealing integrity and component endurance are important, our Dow Corning® Cured-in-Place and Dispensed Foam Gasketing materials can dramatically lower the cost of applying a seal and offer higher value to those providing OEM and/or Tier1 integrators with sealed modular assemblies.

As the leader in silicone technology, Dow Corning has developed the cure technology to meet your application needs that require conventional cure (acetoxo), low odor (oxime), neutral cure (alcoxy), coatings and surface preparation products.

Let us know which product features are most important to your application. We can tailor our products and services according to your specific requirements.



# Applications

## Body and Interior Components

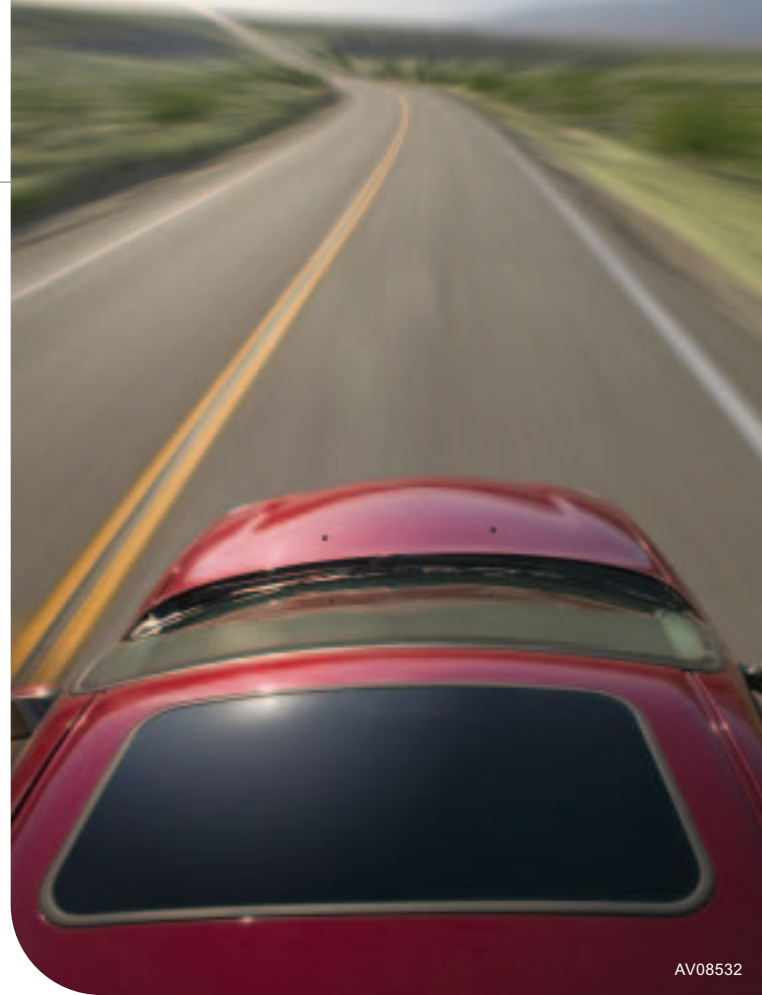
Body component applications are critical to automotive comfort and reliability. Whether you are a systems integrator, modular component assembler, or individual component manufacturer, Dow Corning has a full range of Molykote® anti-friction coatings and lubricants and Dow Corning® adhesives and sealants to meet your cost and performance requirements.

Dow Corning products are used in a variety of body component applications, including:

- Door and lock systems
- Sun roof
- Mirrors
- Weather seals
- Wiper systems
- Glazing
- Lighting

Interior component applications include:

- Restraint systems
- Multimedia systems
- Seating systems
- Instrument panel systems
- Interior trim
- Accessories (mirror mounts, sun visor, lighting)

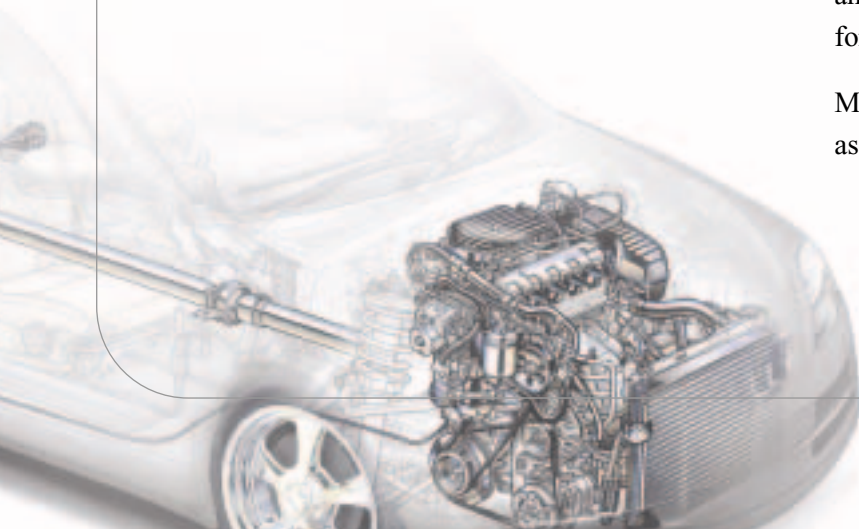


## Powertrain Components and Systems

Dow Corning is a leader in powertrain sealing and lubrication and is committed to providing you with cutting-edge solutions to meet your every-day needs. We are also dedicated to developing products for the next generation powertrain technologies such as fuel cells.

Our Molykote anti-friction coatings and lubricants reduce friction and help to increase the performance and part life of engine gaskets, pistons, air conditioning components, bearings and gears. Our torque transfer and viscous coupling fluids are known industry-wide for their performance in very demanding applications.

Molykote specialty lubricants even include lubricant assembly aids at the OEM/Tier 1 plant level.





## Applications

### Chassis and Brake Systems

For decades, Dow Corning products have met stringent safety and performance requirements for applications in chassis and brake systems. We are a global leader in lubrication technology with a network of experts available to solve your application issues.

Our Molykote® materials improve the durability of your chassis and drivetrain systems. You can increase the long-term performance of your brake systems by using Molykote lubricant and friction control additives. For a wide range of brake applications, use Molykote pastes, anti-friction-coatings, low-friction silicone compounds and Dow Corning® automotive sealants.

### Electrical Applications

Dow Corning automotive materials extend the performance life of small electrical motors and devices and boost the integrity of other electrical devices throughout the vehicle.

Our Molykote specialty lubricants are designed to meet a wide variety of electrical applications for reliable operation of your automotive switches, bearings and wiring harnesses.

For automotive lighting, our Dow Corning specialty sealants will meet your requirements for high-temperature sealing and non-fogging.

### Cooling and Climate Control

Dow Corning materials are used in a wide variety of cooling and climate control applications that include the following:

#### Engine Cooling

- Radiators
- Water pumps
- Thermostat housing
- Charged air coolers
- Fan clutches
- Hose assemblies
- Cooling fans

#### Climate Control

- HVAC flapper doors and modules
- Ducts
- Firewall portals and seals
- Cabin filtrations
- AC compressor pistons and clutches
- O-ring assemblies
- Actuators



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## Services

# Specify and Provide the Best Solution the First Time

Our application engineering provides you a tailored solution. Our process integration assures this is a broad-based solution, not just for a material. Our technical service experts are available to be involved from start-up through production. Leverage these services and our other unique capabilities to gain efficiency improvements. Dow Corning is proud to be your one source supplier by offering:

- One of the most complete line of automotive technologies available from any single supplier (solid, liquid and anti-friction coating lubricants, as well as sealing and gasketing materials)
- Functional testing capabilities, engineering, and prototyping consultations that helps identify problems in the design stage as a means of reducing time to market and engineering design change costs
- Custom prototyping and testing services to help you visualize new product concepts, customize products and services and test them in end-use environments
- One of the most comprehensive ranges of products and services available from a single supplier
- An Equipment Manufacturing Alliance network to provide access to a total system solution from an individual delivery work cell to a completely installed assembly line
- Highly skilled application engineers and technical staff who can relate to car OEMs and Tier I and II suppliers on an engineering basis



## Technical Specifications

As part of Dow Corning's ongoing commitment to the automotive industry, we continuously strive to meet and comply with all relevant technical specifications and quality improvement systems.

We are aligned with the automotive quality system standards by transitioning our existing QS-9000 certifications to the certification of ISO/ TS16949:2002.

We will continue to ensure that our operations remain at the highest level of efficiency and productivity in supplying top quality products and services to our customers.

## Dow Corning Automotive: A Total Solutions Offering

Over the past 60 years, Dow Corning has worked to meet and exceed customer needs for consistently high quality products and services for automotive applications. Our capabilities go far beyond lubrication and sealing products and services described in this brochure. The expertise of the various Dow Corning divisions that work for the automotive industry ranges from airbag coatings and electronic insulation materials to ignition wiring and leather coatings.

The illustration below shows you numerous examples of our expertise and gives you an idea of the extensive reach of Dow Corning's offerings for automotive applications.

To learn more about our total solutions approach, visit us at [www.dowcorning.com](http://www.dowcorning.com) or [www.molykote.com](http://www.molykote.com).

### *Cooling and Climate Control*

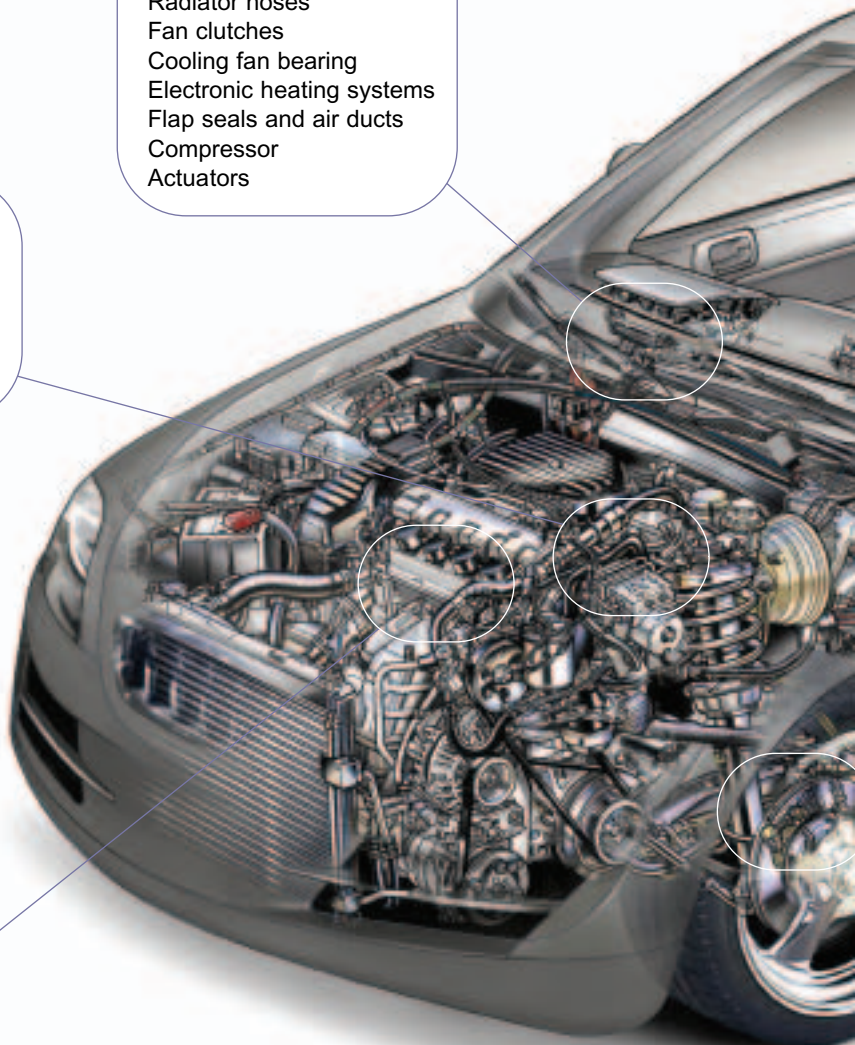
- Radiator hoses
- Fan clutches
- Cooling fan bearing
- Electronic heating systems
- Flap seals and air ducts
- Compressor
- Actuators

### *Electrical*

- Ignition cables
- Spark plug boots
- Connector seals and grommets
- Starter assembly
- Alternator assembly

### *Powertrain*

- Position and knock sensors
- Oil gaskets
- Intake manifold gaskets
- EGR-valve
- Piston
- Clutch actuation
- Automatic gear shifting
- CV joints
- Electronic fuel injection systems
- Fuel cap





### *Interior*

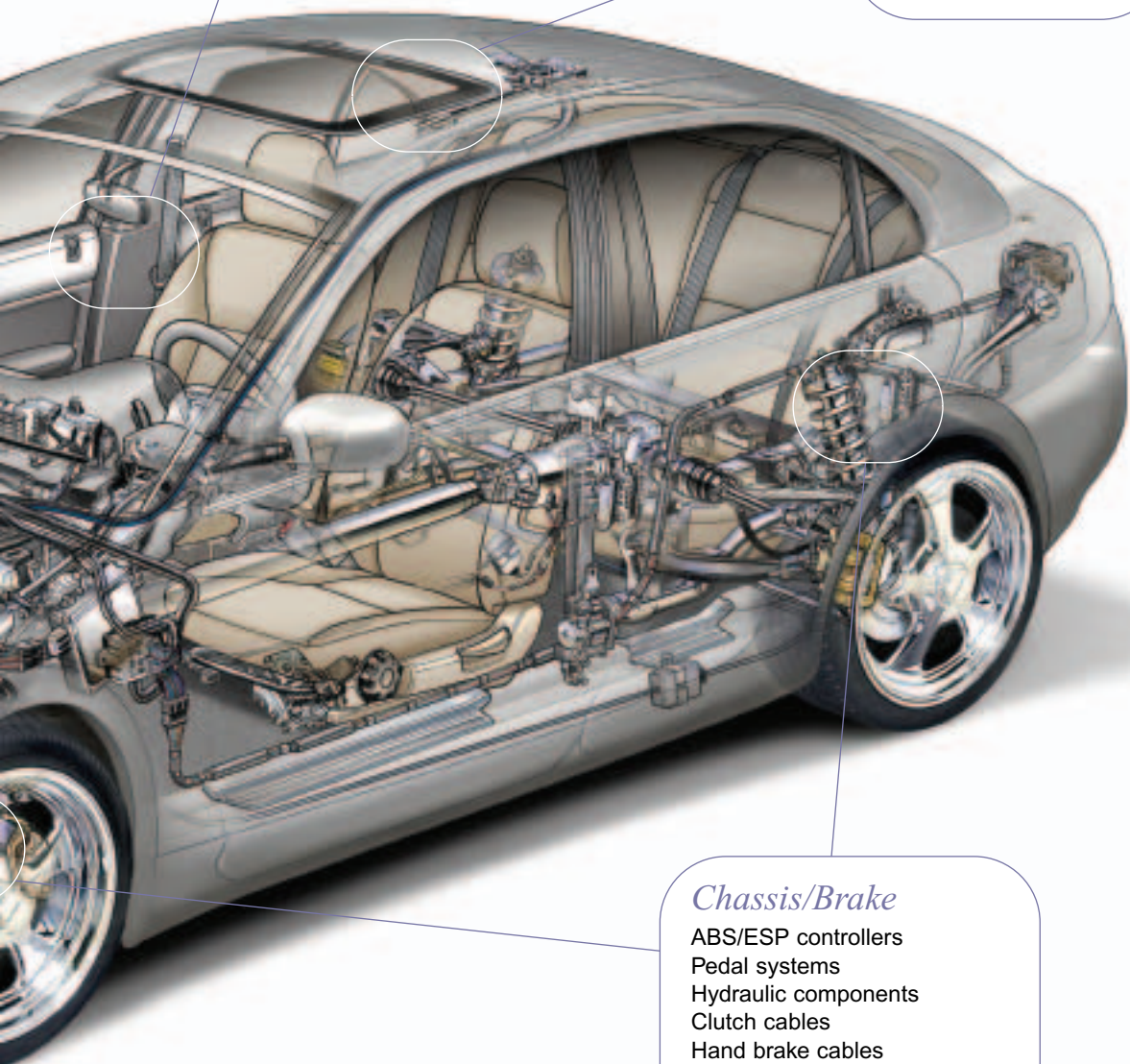
- Speaker seals
- Headrest slides
- Head up displays
- Rollover sensors
- Seat belt mechanism
- Airbag coating
- Anti-squeak and rattle
- Leather and textile treatment

### *Body*

- LED headlamp controllers
- Rear lighting
- Door locks
- Window lift mechanisms
- Linear guides
- Sliding guides
- Mirror actuators
- Sunroof seals
- Acoustic barriers
- Exterior trim

### *Chassis/Brake*

- ABS/ESP controllers
- Pedal systems
- Hydraulic components
- Clutch cables
- Hand brake cables
- Shock absorber sealing
- Steering column
- Tire pressure monitoring system
- Wheel bolts
- Gaskets



## How To Contact Us

Dow Corning has sales offices, manufacturing sites, as well as science and technology laboratories around the globe. For more information, visit [www.dowcorning.com](http://www.dowcorning.com) or [www.molykote.com](http://www.molykote.com), or call one of our primary locations listed here.

## Your Global Connection

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Automotive Development Center N. America  
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Dow Corning do Brasil Ltda.  
Telephone: + 55 11 3759 4300

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FAX: + 81 3 3287 1088

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FAX: + 86 21 6288 2727

#### *India*

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FAX: + 91 22 5694 6848

#### *Korea*

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FAX: + 82 2 551 6400

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Telephone: + 39 0298 8321

#### *Spain*

Dow Corning Iberica  
Sales Office  
Telephone: + 34 93 363 6900

#### *United Kingdom*

Customer Service Center Northern Europe  
Sales Office  
Telephone: + 44 1676 528 000

## Global Presence. Local Support.

Dow Corning's global presence in the automotive market enables you to develop specifications centrally while providing consistent high-quality products and services locally. Through our global sales, application engineering, product development, and manufacturing and delivery capabilities, our quality is consistent around the globe. This also enables a more effective and efficient product customization process—no matter where you are located!

#### 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 Dow Corning's products are safe, effective, and fully satisfactory for the intended use. Suggestions of uses should not be taken as inducements to infringe any particular patent.

Dow Corning's sole warranty is that the product will meet the Dow Corning 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.**

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*We help you  
invent the future.™*

[www.dowcorning.com](http://www.dowcorning.com)

**DOW CORNING**