

**DAUBERT**  
CHEMICAL COMPANY, INC.



**DAUBERT<sup>®</sup> AUTOMOTIVE**  
BEST IN CLASS AUTOMOTIVE SOLUTIONS



# WE HELP YOU PROTECT WHAT MATTERS MOST

WE'RE EXPERTS IN SURFACE PROTECTION, WITH AN 80-YEAR HISTORY OF INNOVATION THAT PROVIDE SOLUTIONS DEDICATED TO FUELING OUR CUSTOMERS' SUCCESS. PUTTING OUR HEARTS IN THE BUSINESS IS WHAT DRIVES OUR COMMITMENT TO HIGH QUALITY, DESIGN AND PERFORMANCE. WE WORK HARD TO MAKE THINGS BETTER.



COATINGS



ADHESIVES



LUBRICANTS



SPECIALTY





# COATINGS

CAVITY WAX / HOT MELT DIP / UNDERBODY SPRAY / COMPONENT-SPECIFIC



## RUST PREVENTIVE COATINGS FOR THE MOST DEMANDING ENVIRONMENTS.

With the push for thinner and thinner metal construction for lightweight cars, corrosion protection has come to the forefront of automotive engineering challenges. Creating structural integrity using less metal can create significant challenges for modern electroplate coatings. And the most dangerous corrosion is the corrosion you don't see.

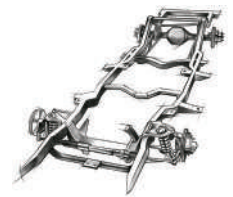
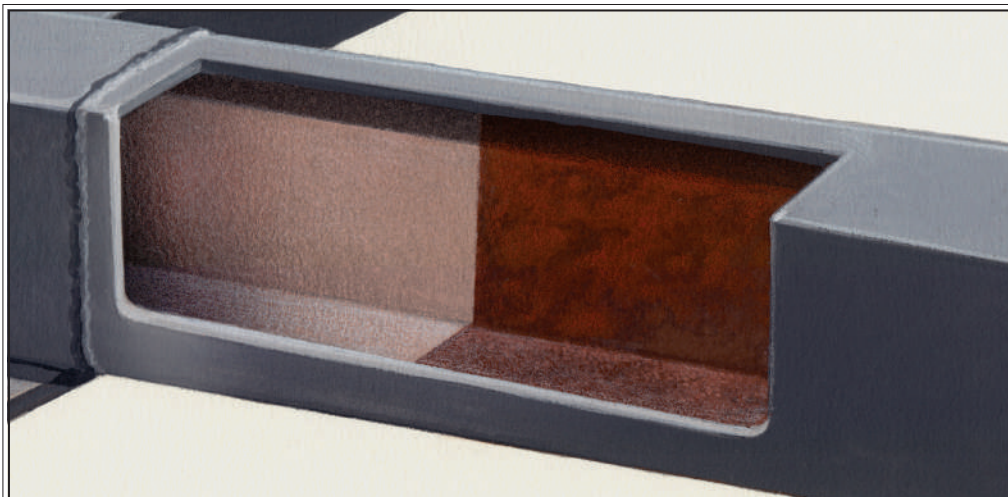
### CAVITY WAX

Many small body cars are built with lightweight parts with hollow interiors that provide higher strength-to-weight design. But these hollow interiors often have complex bends and welds, which do not get adequate protection from commonly-used electroplate coatings. The effectiveness of a rust preventive coating is only as good as its protection in the weakest areas. Corrosion in a critical support section of the design can lead to catastrophic failures. If water finds its way in from humidity, rain, puddles, etc., it collects and moves around, finding its way to a corner or

bend where it will settle and start the corrosion process.

The most economical solution is often to topcoat the assembled component with a 'cavity wax' to protect the hollow areas. Our state-of-the-art Nox-Rust® and Tectyl® rust preventive cavity waxes provide you with more reliable protection, penetrating the tightest spaces with a fast cure time. And our water-based, low-VOC options provide peace-of-mind through compliance with strict occupational safety standards.

*Typical application: Spray*



FRAMES



SUB-FRAMES



DOOR CAVITIES



PRECISION PARTS

### HOT MELT DIP

When there's no room for compromise, and durability matters most, our Hot Melt Dip Coatings are the gold standard in corrosion protection. Working with this alternative to e-coat, the risk of having an exposed corner or interior void is virtually eliminated. By completely submerging a part or frame in our proprietary hot melt coating, engineers can be confident of a total corrosion preventive solution. Since there is no reliance on electro-static fields to apply the coating, we can fully protect the interior voids of complex parts without the need for an additional topcoat like cavity wax.

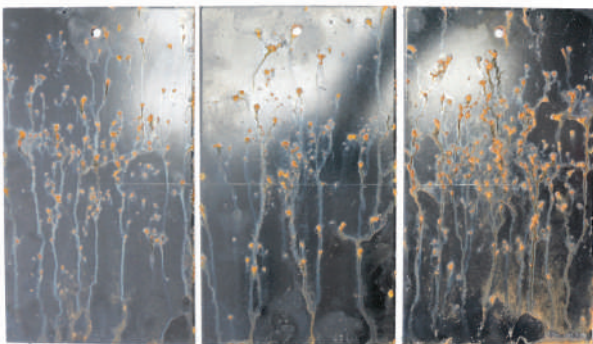
*Our hot melt coating protects in several ways.*

- > It completely starves the metal of oxygen, preventing the main mechanism of corrosion.
- > The slightly waxy finish heals from small scratches, further enhancing its longevity.
- > Our unique nano-engineered particles provide a chemical layer of protection on the metal in the event of major damage to the part, further protecting from corrosion even after the coating is removed.

*Typical application: Dip*

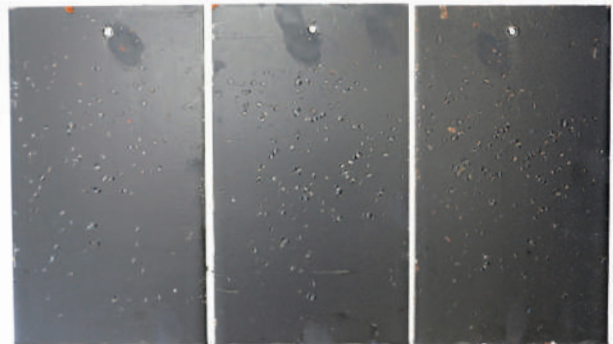


### E-COAT VS HOT MELT: PERFORMANCE COMPARISON



#### STANDARD BLACK E-COAT

OEM Cyclic Corrosion Test  
Average Rating of 4.7



#### NOX-RUST® 1290 HP

OEM Cyclic Corrosion Test  
Average Rating of 9.5

**UNDERBODY SPRAY**

For those customers who want the high performance rust protection of our Nox-Rust® hot melt coatings in a sprayable format for use during final assembly, we offer a wide range of underbody coatings which are easy to apply and VOC appropriate. For the North American market, we offer water-based underbody coatings with a fast dry time and a VOC content < 50 grams per liter.

*Typical application: Spray*

**ANTI-CHIP COATINGS**

Throughout Tectyl® product line, Daubert offers a variety of durable coatings with the ability to resist chipping caused by the most aggressive road debris. These coatings can be applied by dip or spray. Their advanced cross-linking action allows them to set rapidly and finish with a hard, glossy shell. Our anti-chip coatings are perfect solutions for any components that are sensitive to corrosion and highly exposed to road debris such as structural steel parts, or precision elements like control arms.

*Typical application: Spray or Dip*

**BLACK-OUT PAINT**

We also offer coatings that excel as a “black-out” paint, offering an aesthetically pleasing look with advanced performance to ensure a long-lasting finish. UV resistance, corrosion resistance and chip resistance make these coatings a dynamic option for any vehicle. Commonly applied in wheel wells and engine compartments.

*Typical application: Spray*





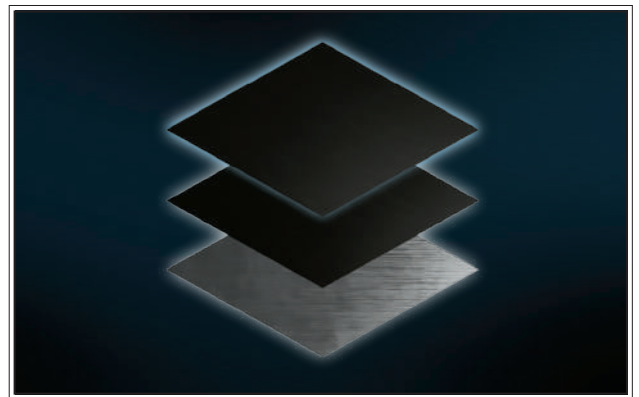


## THE ULTIMATE OVERCOAT FOR CORROSION PROTECTION.

As vehicles become lighter, the threats of corrosion and road debris become greater. Relying on eCoated or galvanized steel doesn't cut it anymore. That's why forward-thinking automotive engineers need Nox-Rust® ChipShield, the industry's most dominant, hard-shelled coating that delivers unmatched defense where it's needed most.

### THE TOUGHEST OF TOPCOATS

ChipShield is a lightweight solution delivering heavyweight protection to the critical vehicle parts consumers aren't thinking about. The coating is designed to work effectively with dry film-builds as low as 3-4 mils. ChipShield is a one-part, modified Urethane topcoat for ELPO (Electrocoat Paint Operation) coated parts and structural components. Its hard-shelled coating resists corrosion and withstands more punishment from road debris than any other option on the market.



### PROTECTION FOR THE ROAD AHEAD

ChipShield is the topcoat of the future and aligns directly with the industry's transition to lighter, thinner vehicle design. ChipShield is especially suited for use on electric vehicles, which are commonly made with fewer and lighter raw materials than conventional ICE (internal combustion engine) vehicles. ChipShield also provides an unprecedented level of durability to aluminum parts, allowing them to withstand virtually three times more debris in standardized gravelometer testing. This added durability will help EV manufacturers avoid catastrophic failures in sensitive areas such as steering controls or battery boxes.



### EXTRA DEFENSE FOR GALVANIZED STEEL

Today's vehicles are primarily made with zinc-coated galvanized steel. And while the zinc coating protects the steel from oxidation and moisture, road debris can eventually wear down this protective layer. By adding ChipShield's hard-shelled coating, vehicle manufacturers can add even more defense to their vehicles, delivering peace of mind to engineers and consumers alike.



## HEAVY-DUTY PROTECTION.

Tectyl® 3335 Black is a near zero VOC, air-dry, waterborne corrosion preventive coating for ferrous and non-ferrous materials.

### **FORMULATED FOR HEAVY-DUTY VEHICLES**

Tectyl® 3335 Black is formulated to provide excellent adhesion, hardness and durability to most substrates including primers, e-coat and oily steel. It's designed to resist chipping, scratches and gravel marks normally seen on bus, truck and trailer underbodies.

### **DESIGNED THROUGH INNOVATION**

Tectyl® 3335 Black is designed for application by airless spray and reduces sheet metal resonance and structural borne noise. Tectyl® 3335 Black can be recoated with most urethane, acrylic or alkyd resin formulated automotive topcoats.







# ADHESIVES

LAMINATING / THERMOFORMING / ASSEMBLY



## HIGH-STRENGTH ADHESIVES SPECIALLY DESIGNED TO BOND TO A VARIETY OF MATERIALS AND COMPLEX SHAPES.

Materials, chemistry and customer needs continue to change. As manufacturers press forward with new and innovative designs, process cycle time challenges emerge which can drive down productivity. Our full service lab offers adhesive application expertise to avoid this trade off, and can even advance your work with knowledge of new lightweight, high-strength material combinations desired by the industry. This is where our 80 years in the business come in handy.

Daubond® adhesives bring peace of mind when working with difficult-to-bond substrates used in automotive interiors.

### LAMINATING

Large surfaces inside a car, such as headliners and floors, require high strength adhesives that can keep up with a rapid pace of production. Daubond® Reactive Polyurethane Hot Melt offers fast setting and ease of application. A low application temperature and wide range of environmental resistance is provided after curing, while retaining flexibility.

*Typical application: Roller, Slot Nozzle and Spray*

### THERMOFORMING

Dashboards and other complex shapes of an auto interior require specially designed adhesives to ensure a uniform finish, with enough heat resistance to withstand the extreme temperatures of a car baking in the noon sun. Our Daubond® Polyurethane Dispersions have superior wetting for easy application and will not delaminate once cured. Low reactivation temperatures and long reactivation times fit easily into any production process.

*Typical application: Spray*

### ASSEMBLY

Thousands of different parts complete the interior of a car. From door panels and firewalls, to clip assemblies and small trim parts, these pieces are made with a wide range of materials. Choosing the right assembly to handle all of these materials can be a critical step to ensuring a driver's long-term satisfaction with their vehicle. Daubond® Reactive Polyurethane Hot Melt adhesives provide auto makers with a solution that can handle a wide range of substrates in assembly applications with unsurpassed strength and durability.

*Typical application: Spray*



DASHBOARDS



HEADLINERS  
& TRUNK LINERS



SEATS



INTERIOR TRIM



# LUBRICANTS

STAMPING & FORMING FLUIDS / GREASES



## EXCELLENT LUBRICITY WITH UNPARALLELED RESISTANCE TO CORROSION AND WEAR.

Light-weighting. Fuel economy. Advanced electronics. The pace of evolution in the auto industry is astonishing. Higher strength structural materials require higher strength forming fluids. More electronics controlling more moving parts means more points of failure. Proper grease selection can help prevent premature component failure, preventing a costly recall.

Our specialty lubricants are designed for the most demanding manufacturing challenges where extreme pressures, corrosion resistance and long life are crucial. Daubert has custom-tailored new solutions for tomorrow's auto components.

### STAMPING & FORMING

Advanced automotive structural designs require high strength materials that can be difficult to craft into the ideal shape. Cool Form<sup>®</sup> is Daubert's multi-purpose draw lubricant, blank cleaner and flex roll lubricant suitable for forming various grades of steel and aluminum. It also doubles as an effective rust preventive for cold rolled sheet and galvanized coated steel.

*Typical application: Dip, Spray or Roll Coater*

### GREASES (MECHANICAL)

**TECPL<sup>®</sup>EX** greases are a special form of calcium sulfonate grease designed to endure extreme pressures related to frequent start/stop high torque motion. Our grease is unique with its combination of high thickener content, formed of nano-scale calcite crystals in a calcium sulfonate micelle, surrounded by 100% low viscosity synthetic base oil.

This grease is perfect for next generation parts with tight tolerances and long service lives. The grease also acts as a powerful rust preventive for exposed metal parts and cables.

*Typical application: Grease Gun*

### GREASES (ELECTRICAL)

Small electric motors and electrical connectors can unknowingly be susceptible to rust and wear. The vibration from the motion of the car while driving can cause fretting wear on delicate electronics. The connectors themselves can act as wicks for condensed moisture from the air, causing corrosion. Small drop applications of **TECPL<sup>®</sup>EX** grease in electronics can prevent phantom electronics failures.

*Typical application: Centralized Drip System Application*



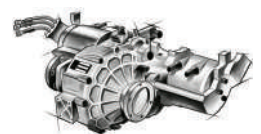
STAMPED PANELS



BEARINGS & JOINTS



CV JOINTS



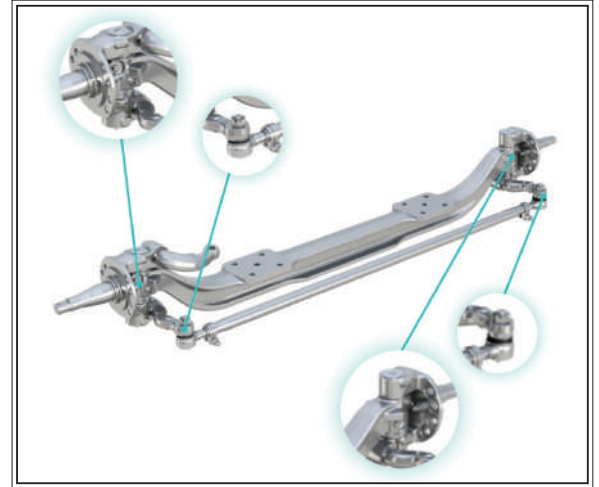
ELECTRIC MOTORS

**TECPLEx® 2220: HEAVY DUTY CORROSION RESISTANT GREASE.**

**TECPLEx® 2220** provides heavy duty protection to a wide range of vehicles and small motors. It employs next-generation calcium sulfonate technology to lubricate while protecting from salt and corrosion using Daubert's proven military-grade rust preventive chemistry.

**VERSATILE PERFORMANCE**

**TECPLEx® 2220** protects a variety of moving parts in an automobile, including tie rod ends and kingpins found in steering axle assemblies. Our unique thickener matrix uses no polymers, known to create deposits on gears and other precision parts at high temperatures and speeds.

**STABILITY IN EXTREME CONDITIONS**

**TECPLEx® 2220** delivers unparalleled stability under high shear and high temperatures, with virtually no consistency change during or after usage. This environmentally friendly formulation contains no antimony, barium, chlorine, phosphorous, zinc or free sulfur.

**TECPLEx® 2460TK: HIGH VISCOSITY, HEAVY DUTY CORROSION RESISTANT GREASE.**

**TECPLEx® 2460TK** delivers heavy duty protection with Daubert's advanced corrosion inhibiting technology, and takes it a step further with a polymer-enhanced matrix to provide the maximum level of resistance to water-wash and fling-off. **TECPLEx® 2460TK** is suitable for exposed joints such as U-Joints and Slip Assemblies.

**KEEPS RUST AWAY**

**TECPLEx® 2460TK** is formulated with next-generation, calcium sulfonate grease technology. It uses Daubert's proven military-grade rust preventive chemistry to provide lubrication while protecting against salt and corrosion.

**HEAVY PROTECTION FOR HEAVY MACHINERY**

**TECPLEx® 2460TK** is made to protect heavy duty equipment such as cranes, shovels and various off-road vehicles, as well as shovel pins and bushings and diamond drill rods. It provides maximum resistance to centrifugal forces, water spray-off and washout. Plus, it has outstanding high-temperature properties, is mechanically stable and is environmentally friendly.



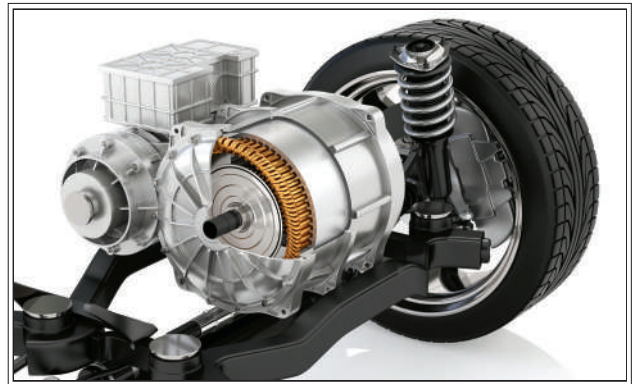


## **TECPLX**® PURE EM-2: MINIMALLY COMPOUNDED, LONG LIFE AND LOW NOISE GREASE.

**TECPLX**® PURE EM-2 is redefining what's possible for the next generation of electrical motors and passenger vehicles.

### **LUBRICATION FOR THE ESSENTIALS**

Using an enhanced polyurea thickening system, **TECPLX**® PURE EM-2 delivers pure ISO 100 lubricating oil with unmatched precision to sensitive parts and high velocity bearings. It features excellent resistance to water washout and features a non-soap thickener to reduce failure due to oxidation.



### **EXTENDING AND OPTIMIZING PERFORMANCE**

By reducing the reliance on unnecessary short-lived additives common in most lubricants, **TECPLX**® PURE EM-2 provides only the pure necessities for optimal performance over the entire life of a bearing. It also eliminates impurities that can be a source of noise in electric motors.

## **TECPLX**® 2006S-H1: FULL SYNTHETIC, COLD APPLICATION HEAVY DUTY GREASE.

When the temperatures hit their low point, **TECPLX**® 2006S-H1 is there to keep your equipment operating when you need it most.

### **RELIABILITY IN THE COLDEST CONDITIONS**

**TECPLX**® 2006S-H1 combines a very low viscosity PAO base oil with Daubert's next generation calcium sulfonate grease thickener to keep your equipment performing at temperatures as low as -50°F. This grease is perfect for starter motors, where a typical grease might fail in the coldest winters or northern climates.



### **SUITABLE FOR A VARIETY OF APPLICATIONS**

The synthetic base oil in **TECPLX**® 2006S-H1 allows it to provide premium lubricity to a variety of automotive parts, especially for high-speed bearing applications that might encounter chemically harsh conditions like those found in salt spreaders on snowplow trucks. This grease formulation is environmentally friendly, with no antimony, barium, chlorine, phosphorus, zinc or free sulfur. It is registered with NSF as an H1-compliant grease that is even clean enough to be used in food processing equipment.





# SPECIALTY

SOUND DEADENING / FIELD-APPLIED REPAIRS



WE ARE CONTINUALLY CREATING NEW SOLUTIONS FOR A WIDE RANGE OF NEEDS.

Always innovating, Daubert offers a variety of unique products that can improve product quality and service to automotive customers. Here is a sampling of additional offerings popular with our automotive partners.

#### **CABIN SOUND DEADENING**

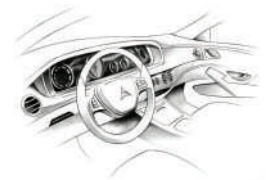
Introducing V-Damp® by Daubert... a unique viscoelastic, liquid applied sound deadener (LASD) with the unsurpassed ability to eliminate noise carried by metallic surfaces. As lighter metals are used in modern automobile design, their ability to carry vibrations increases. V-Damp® Sound Deadeners are coatings that effectively dissipate the energy caused by these vibrations, ensuring a smooth, quiet ride that all passengers come to expect in a quality vehicle. In contrast to sound suppressing pads that can only be applied in a few targeted areas, our sprayable sound deadeners can virtually coat the entire cabin and encapsulate the interior of the car with near-perfect silence.

*Typical application: Spray*

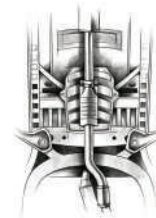
#### **FIELD-APPLIED REPAIR PRODUCTS**

Occasionally, there is the need to have a service bulletin or recall to fix a design oversight. Often, the repair to the component may require removing the corrosion protective coating. Once reassembled, there is no way to repair the e-coat with a similar coating.

Luckily, our Nox-Rust® underbody sprays and cavity waxes are available in aerosol format, and can be purchased by car dealers directly from our website. We have supported numerous recalls for the major auto OEMs, and can help you in the event that an unexpected service bulletin or recall needs to be issued. We assure rapid delivery to help your dealers repair cars quickly and keep sales moving.

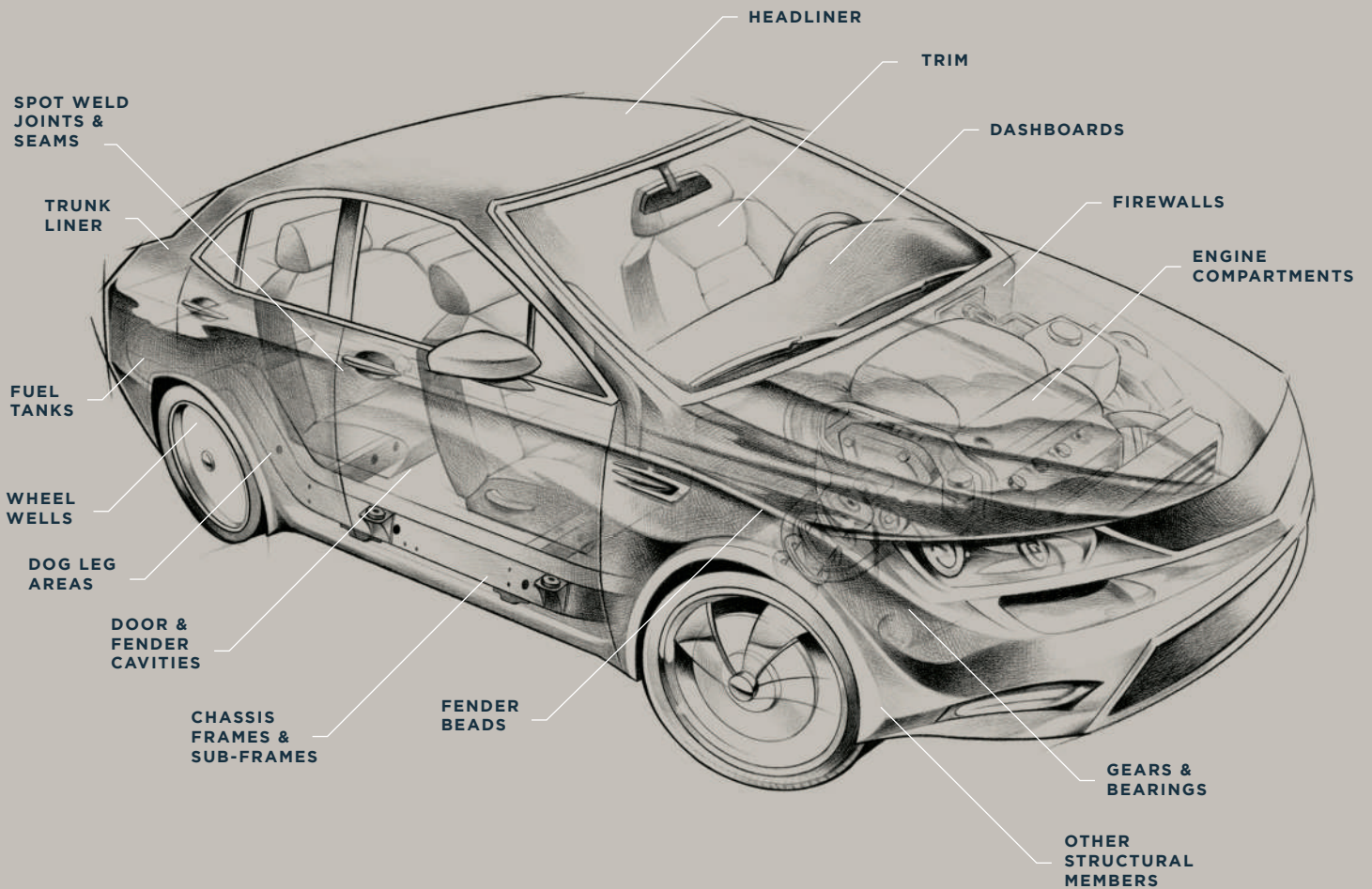


LUXURY CABINS



UNDERBODY REPAIRS

# SOLUTIONS FOR THE LIFE OF THE VEHICLE





# A GLOBAL LEADER

DAUBERT IS READY TO SERVE GLOBAL CUSTOMERS WITH A NETWORK OF REGIONAL PARTNERS AND LICENSEES IN OVER 40 COUNTRIES WORLDWIDE. OUR PRODUCTS, TECHNICAL EXPERTISE AND ABILITY TO CUSTOMIZE SOLUTIONS TO MEET YOUR CHALLENGES CAN BE DELIVERED ALMOST ANYWHERE YOU DO BUSINESS.

## DAUBERT CHEMICAL HEADQUARTERS

For all product inquiries, please direct questions to:

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