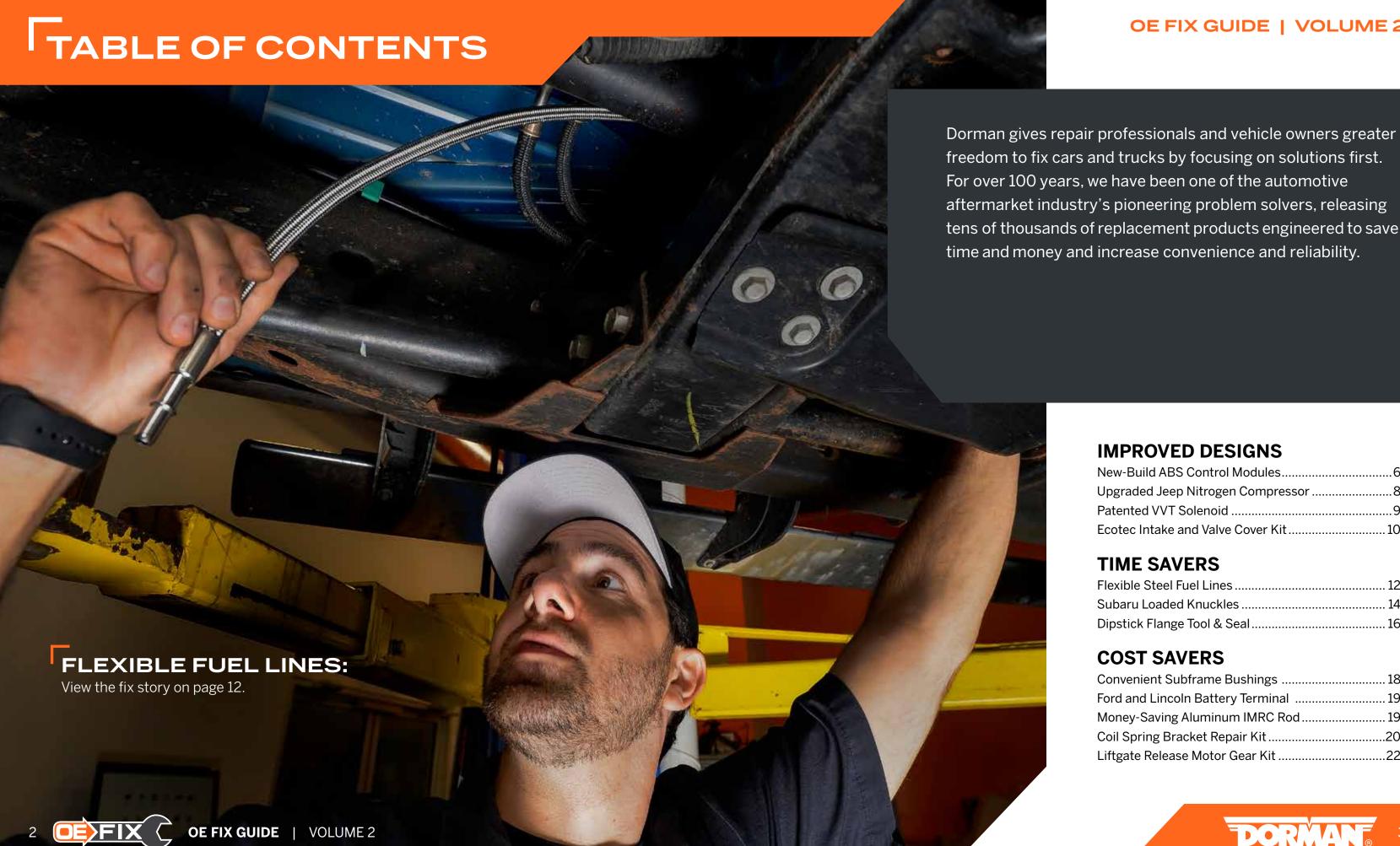


NEW-BUILD, HIGH-PERFORMANCE ABS MODULES

See page 6.

DORMAN



For over 100 years, we have been one of the automotive aftermarket industry's pioneering problem solvers, releasing tens of thousands of replacement products engineered to save time and money and increase convenience and reliability.

IMPROVED DESIGNS

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COST SAVERS

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OE FIX EXPLAINED

An OE FIX is a Dorman repair solution you can't get from the original equipment manufacturer. It means we found a situation where we believe the OEM wasn't giving repair professionals and vehicle owners what they wanted, so we fixed it. We offer well over 1,000 different OE FIX parts in our catalog today, with new solutions rolling out every month, but every one falls into one of the three categories below.





HVAC Heater Hose Assembly 626-325: Ram 2500 2015-13, Ram 3500 2014-13, Ram 4500 2014-13, Ram 5500 2014-13

> Eliminates need to route new antenna and cable through

Includes programmer tool to

Intake Manifold

615-380: 1.4L Ecotec engines; Buick Encore 2019-13, Chevrolet Cruze, Sonic, Trax 2019-13



Improved Designs

OE FIX parts meant to reduce known failure points in the factory designs, or increase serviceability for more convenient maintenance in the future.



Time Savers

OE FIX parts meant to speed up the removal, repair, installation or setup process, reducing labor time and helping installers turn service bays faster.



Radio Antenna Base Repair Kit

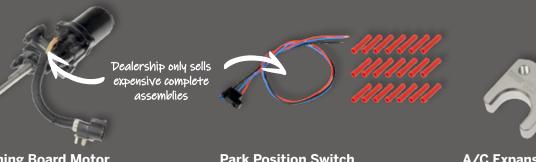
926-114: Cadillac 2014-02, Cadillac 2000-99, Chevrolet 2014-99, GMC 2014-99

Running Board Motor 747-953: Ford Expedition 2014-07, Lincoln Navigator 2014-07

Park Position Switch 905-026: Ford F-150 2014-11, Ford Lobo 2014-11, Lincoln Mark LT 2014-11



989-018: Ford 2006-00, Lincoln 2004-03, Mazda 2006-01, Mercury 2004-00



dashboard

A/C Expansion Valve Mount Plate 926-087: Chrysler 2011-06, Dodge 2011-06

Eliminates need to replace assembly



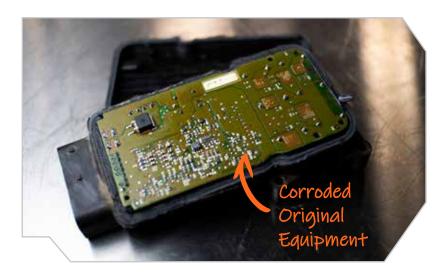
Cost Savers

OE FIX parts meant to eliminate unnecessary costs normally associated with getting replacements from the original manufacturer, such as needing to buy an entire assembly just to fix a failed component.

TIMPROVED DESIGNS

Upgraded, New-Build **ABS Control Modules**

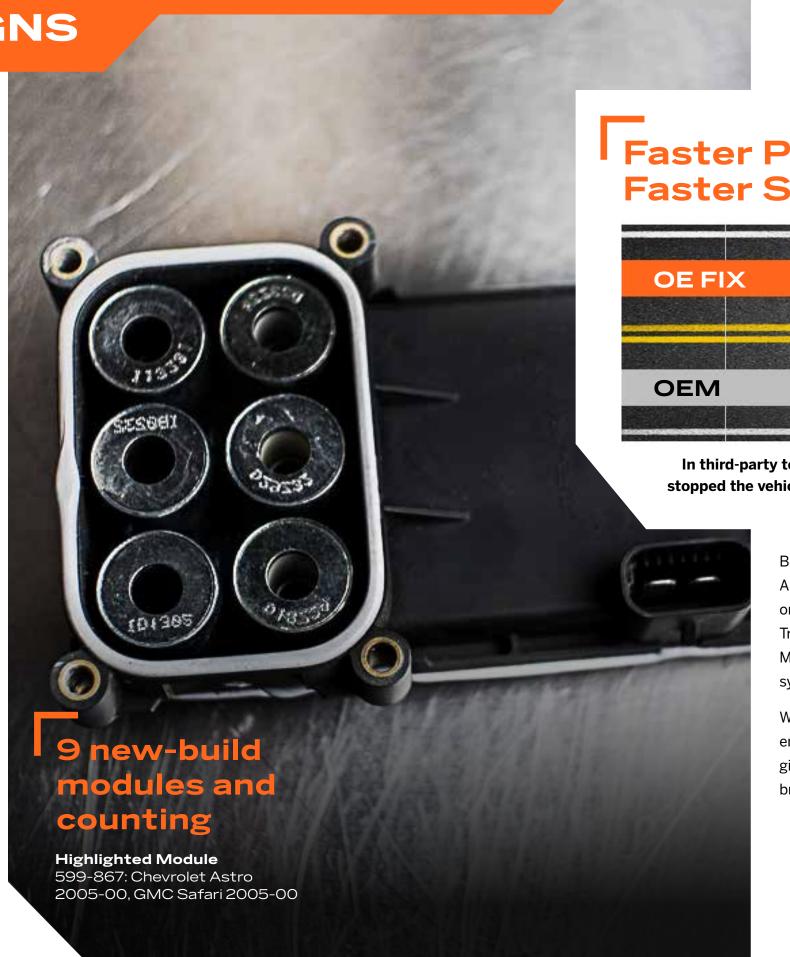
ABS control modules are essential to an effective anti-lock braking system, but they eventually break down from age, elements and wear. Solenoids are prone to corrosion, circuit boards warp, and the entire module eventually suffers from heat and vibration.



All the problems that make these modules fail also make remanufacturing difficult. You can't restore a module if the essential components are destroyed. That's why there are often shortages in aftermarket ABS modules – there simply aren't enough cores available.

In those cases, Dorman manufactures brand new modules at our advanced electronics facility in Lewisberry, Pennsylvania. We also make them OE FIX by adding thicker circuit boards that are designed to be less prone to warping, and adding state-of-the-art microprocessors for faster signal processing. When traveling at high speeds, even small advances in processing speed can help a vehicle stop several feet sooner.

(Continued on page 7)



Faster Processing, **Faster Stopping**

In third-party testing to NHTSA standards, a new Dorman ABS module stopped the vehicle an average of 5 feet sooner than a new OEM module

> Because the ABS system is safety critical, each new Dorman ABS module design is validated with lab, on-vehicle and on-road testing. They are certified by the National Highway Traffic Safety Administration (NHTSA) to pass the Federal Motor Vehicle Safety Standards for light vehicle brake systems (FMVSS 135).

when traveling at approximately 60 mph.

With durable construction, upgraded components and enhanced safety features, these new OE FIX modules help give vehicle owners confidence back in their braking systems.

IMPROVED DESIGNS

Upgraded solution for nitrogen suspensions

Air Suspension Compressor 949-300: Jeep Grand Cherokee 2019-11

PROBLEM:

Most air suspension systems take in and compress the air around the vehicle to manage ride height and firmness. However, some vehicles use a compressed nitrogen system that is closed off to the atmosphere, allowing for a more responsive suspension system. Also, unlike air, nitrogen gas is inert and contains no oxygen, reducing the chances of internal corrosion.

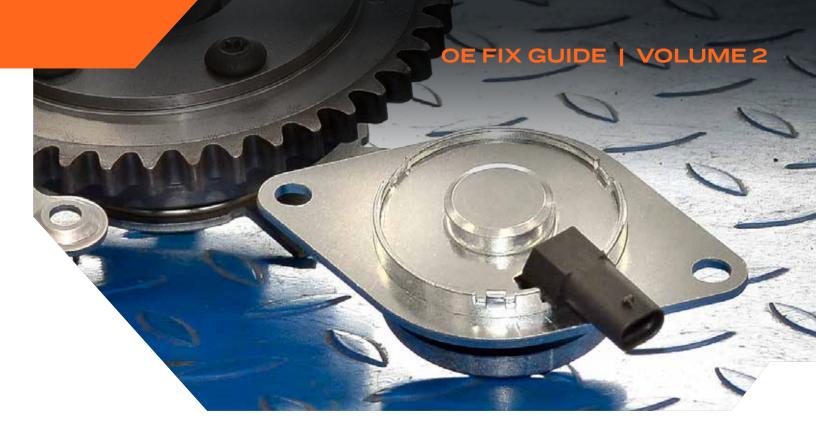
However, the nitrogen compressor in some vehicles uses a plastic piston that may melt from the heat of operation, causing this otherwise reliable system to malfunction.

FIX:

Dorman's OE FIX suspension compressor has been designed with a durable aluminum piston, improved seals, and an upgraded compressor motor rated for greater thermal capacity than the factory version to help avoid future failures.

Because this closed suspension system uses a high-pressure storage tank to contain the nitrogen gas, replacing the compressor requires special equipment and a specific process to ensure it functions properly when the job is done. That's why we also provide comprehensive instructions, and a step-by-step installation video.





Patented VVT for stronger repairs

Engine Variable Valve Timing (VVT) Solenoid 916-886XD: Select General Motors work vans, pick-ups, SUVs and cars 2017-06, Isuzu NPR 2016-08

PROBLEM:

Dorman's engineers found that the original equipment VVT on more than 5.5 million GM and Isuzu vehicles with certain V8 engines – everything from Suburban and Silverado to Express and Hummer – may fail prematurely due to a weak stationary tube. If the tube wears out, excessive internal movement can occur, causing internal leaking and a loss of oil pressure.

FIX:

Our engineering analysis led to a new design that incorporates a durable brass tube. We also increased the oil flow through the part with additional oil passages. And, as a bonus, we added the hard-to-source gasket, and included it in the installation hardware kit to help provide a reliable repair.

1 of 8 VVTs with patented or patent-pending designs





Fix that Ecotec right the first time

Intake Manifold and Valve Cover Kit 615-380KIT: 1.4L Ecotec engine, Buick Encore 2019-13, Chevrolet Cruze, Sonic, Trax 2019-13

PROBLEM:

If the valve cover fails on a General Motors 1.4L Ecotec engine, you better check the intake manifold – it's often the true culprit.

What happens is the tiny umbrella valve in the manifold may dislodge over time, drop out of its mount, then get sucked into the intake and combusted. When it's gone, vaporized oil is free to pass through the system, resulting in higher oil consumption, and excessive vacuum that can destroy the fragile diaphragm integrated into the valve cover's PCV cap.

FIX:

Dorman's OE FIX intake manifold (**615-380**) takes care of the inherent problem in the original manifold design by incorporating a T-shaped

retainer that locks the valve in position, to help ensure it can't break free.

Since the manifold and valve cover (264-968) often need to be replaced together, along with the breather tube (46829) that connects them, we make them available separately as well as package them together (615-380KIT) to help you ensure all failure points are addressed right the first time.



Exclusive Pickup Truck Solutions



Truck Bed Side Rail Protector

Highlighted Part:

926-908 (Right), 926-909 (Left): Dodge 2010, Ram 2017-10



• FIX

Truck Bed Floor Support

Highlighted Parts:

926-983: Chevrolet 2000-88, GMC 2000-88 926-984: Chevrolet 2007-01, GMC 2007-01



Vehicle image for illustration purposes only. Parts shown with black borders are not OE FIX, but are still helpful aftermarket repair solutions.



TIME SAVERS

Flexible steel fuel lines: a fast, reliable repair

Fuel Lines 819-816, 819-846, 819-876: Standard, Extended and Crew Cab Chevrolet Silverado and GMC Sierra Pickups 2010-04

PROBLEM:

The problem with replacing corroded old fuel lines usually isn't removing them; it's the installation that'll get you. While the original lines were designed for efficient installation at the factory before other components are put in place, replacing them with the same type of pre-formed hard lines on a finished vehicle requires routing them through the chassis and around large assemblies.

FIX:

Dorman's new OE FIX flexible fuel lines are made of pliable PTFE tubing covered with braided stainless steel that can easily be routed through difficult chassis and body passages, reducing the need to remove any major components for a faster,

easier installation. Each set is manufactured to the exact length required for the vehicle and includes pre-installed, factory-style fittings for a leak-free connection.

In addition to being easier to install, these flexible fuel lines are more durable than many factory-style steel lines. The PTFE tubing will not rust - from either the inside or the outside – and the protective braided sheathing is made from corrosion-resistant stainless steel for abrasion resistance.



OE FIX GUIDE | VOLUME 2

1-2 Hour Time Savings

Source: Dorman internal installation testing.

Application-Specific Designs

Engineered to exact fit for simple installation, no cutting or modification necessary.

Chevrolet Silverado and GMC Sierra Pickups 2010-04





Installation Highlights



With the old fuel lines removed, route the new lines through the original path on the body and frame, starting at the fuel tank.



Connect the new fuel lines at the fuel tank and engine to ensure everything is properly located.



Using the supplied hardware, install new mounting brackets in the same positions as the original mounts.



TIME SAVERS

Sure repair for rusty Subaru bearings

Wheel Bearing and Hub Assemblies 698-416 (Rear Right - Disc), 698-417 (Rear Left - Disc): Subaru Forester 2008-01; 698-418 (Rear Right - Drum), 698-419 (Rear Left - Drum): Subaru Forester 2008-01

PROBLEM:

Pre-assembled hub and bearing assemblies, better known as loaded knuckles, are a great way to save bay time compared to pressing old, rusty bearings out and pressing new bearings back into old housings. But sometimes just getting the old knuckle out is half the battle.

Subaru Foresters use a long bolt to run through the bushings of the lateral links, connecting them to each rear knuckle. This specialized bolt is largely exposed to the elements and may seize in the bushings making it virtually impossible to remove without damaging either the bushings or the knuckle.

FIX:

When Dorman's team developed the loaded knuckles for these vehicles, they heard from technicians in the field how difficult it was to make this repair without the bolt and new bushings on hand.

To help ensure the installer has all the right hardware to do the job right, Dorman's OE FIX loaded knuckles for these vehicles include that hard-to-source bolt along with the bushings, allowing the old hardware to be cut off or otherwise sacrificed during removal, as seen in the procedure on the opposite page.



Estimated Bearing Replacement Time

In hours, based upon internal testing and field research











Conventional Solution Low Level of Rust



Dorman SolutionAny Level of Rust

Installation Highlights



Step 1Use penetrating solvent to soak all hardware.



Step 2Disconnect the lateral control arms at the rear subframe.



Step 3Disconnect the trailing arm, brake hardware and sway bar from suspension knuckle.



Step 4Disconnect the strut mount at the knuckle and remove the axle assembly as



Step 5Cut the nut off the through-bolt and remove the old bushings.



Step 6
Install new lateral link bushings, install the new loaded knuckle, and reassemble using the new through-bolt.

SAFETY WARNING: Please note that these are not the complete installation instructions, and the procedure shown is solely intended to highlight parts of the replacement installation process. Follow factory-approved workshop manual for all removal, installation and other assembly procedures. Please use caution when performing this service. Always support the vehicle securely before beginning work. Eye and hand protection should be worn at all times. Work only in a well-lit, well-ventilated workspace.



TIME SAVERS



Very simple diesel V8 fix

Engine Oil Dipstick Flange Repair Kit 904-423: Ford 2003-94, IC Corporation 2004-02, International 2004-94

PROBLEM:

Vehicles equipped with Ford's 7.3L Power Stroke diesel V8 engines have an O-ring between the oil pan and the dipstick mounting flange that eventually may deteriorate, causing leaks. Because the dipstick flange is installed from inside the oil pan, replacing this basic seal may lead to hours of labor to remove the oil pan for access.

FIX:

Dorman's OE FIX dipstick flange repair kit includes new O-rings, including pan-to-flange and flange-to-tube, plus our exclusive tool that allows the flange to be resealed in place, without having to remove the oil pan. Developed with technicians in mind, each kit contains enough pieces for five complete repairs.

SAFETY WARNING: Please note that these are not the complete installation instructions, and the procedure shown is solely intended to highlight parts of the replacement installation process. Follow factory-approved workshop manual for all removal, installation and other assembly procedures. Please use caution when performing this service. Always support the vehicle securely before beginning work. Eye and hand protection should be worn at all times. Work only in a well-lit, well-ventilated

Installation **Highlights**



Step 1 Insert flange rod.



Step 2 Loosen dipstick flange.



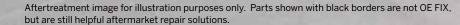
Step 3 Remove old seal with hook.



Step 4 Secure dipstick flange nut.

New Aftertreatment Solutions







COST SAVERS

Would you replace a subframe just to change a bushing?

Suspension - Subframe Bushing Kit 523-511 (Front Rearward): Nissan Altima 2006-03, Nissan Maxima 2006-04

PROBLEM:

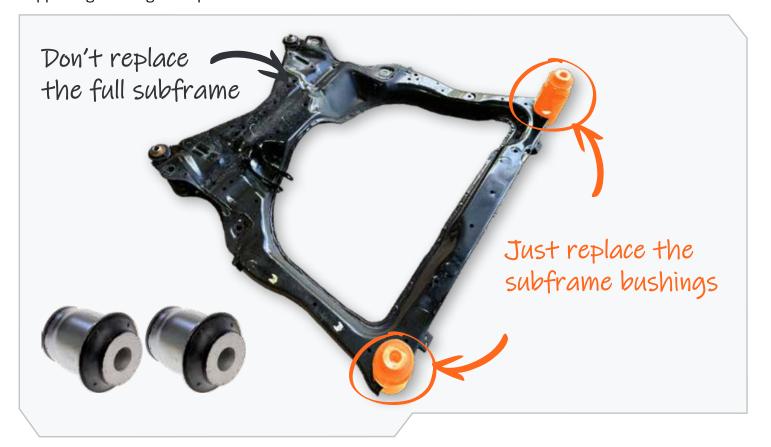
When front subframe bushings wear out, the handling and steering can become loose and unpredictable. Replacing the bushings should be a straightforward repair, but on some Nissan Altima and Maxima sedans the only way to service them is to buy an entire new front subframe.

Not only is the subframe a vastly more expensive part than bushings alone, it also requires disconnecting everything from the subframe and supporting it during the repair.

FIX:

Dorman's OE FIX solution was to simply rethink this repair process and develop new bushings that could be replaced without removing the subframe and all its attached components.

This new bushing kit is deigned to match the fit and function of the original parts to help restore safe, predictable handling. They also aim to save installers hours of labor, and vehicle owners significant money.



Battery Terminal Repair Kit



926-882: Ford Edge 2014-11, Ford F-150 2014-11, Lincoln MKX 2015-11

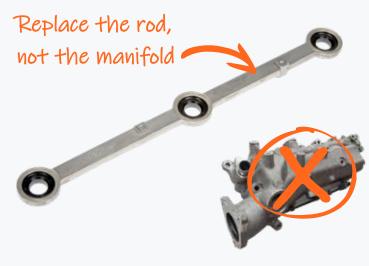
PROBLEM:

When the uniquely designed positive battery cable terminal on some Ford and Lincoln models wears out, the only factory replacement currently available is a complete new cable with the terminal already installed.

FIX:

Dorman developed this OE FIX battery cable terminal as a cost-saving alternative to replacing the entire cable. It's a direct replacement, including the special mounting flange for the battery fuse, a threaded lug for accessory circuits, and plating for superior corrosion resistance.

Intake Manifold Runner Control Connecting Rod



615-907: Sprinter cargo vans 2018-10, Jeep Grand Cherokee 2009-07

PROBLEM:

When the plastic intake manifold runner control (IMRC) connecting rods break, they cause rough running and an engine light. The original manufacturer doesn't offer replacement connecting rods alone, requiring you to the replace entire intake manifold to make a simple repair.

FIX:

Dorman's OE FIX upgrades the IMRC connecting rod material to aluminum for enhanced durability and makes them available individually, saving significant money compared to purchasing a new intake manifold.

COST SAVERS

Safer, faster way to fix spring brackets

Suspension - Coil Spring Seat Repair Kit 926-078 (Front Lower Right), 926-079 (Front Lower Left): Jeep Grand Cherokee 2004-99

PROBLEM:

Front axle coil spring mounts are prime targets for corrosion, and failure could lead to a dangerous loss of control. If they're looking rusty, you don't want to wait for them to give out.

Trouble is, the original manufacturer often doesn't offer a direct repair solution for this type of failure. Because these mounting brackets are welded to the front axle assembly, replacing them often means replacing the entire axle.

Some people try to fabricate a repair on the original one, but that's not easy given the importance of maintaining proper alignment and ride height on this critical component.

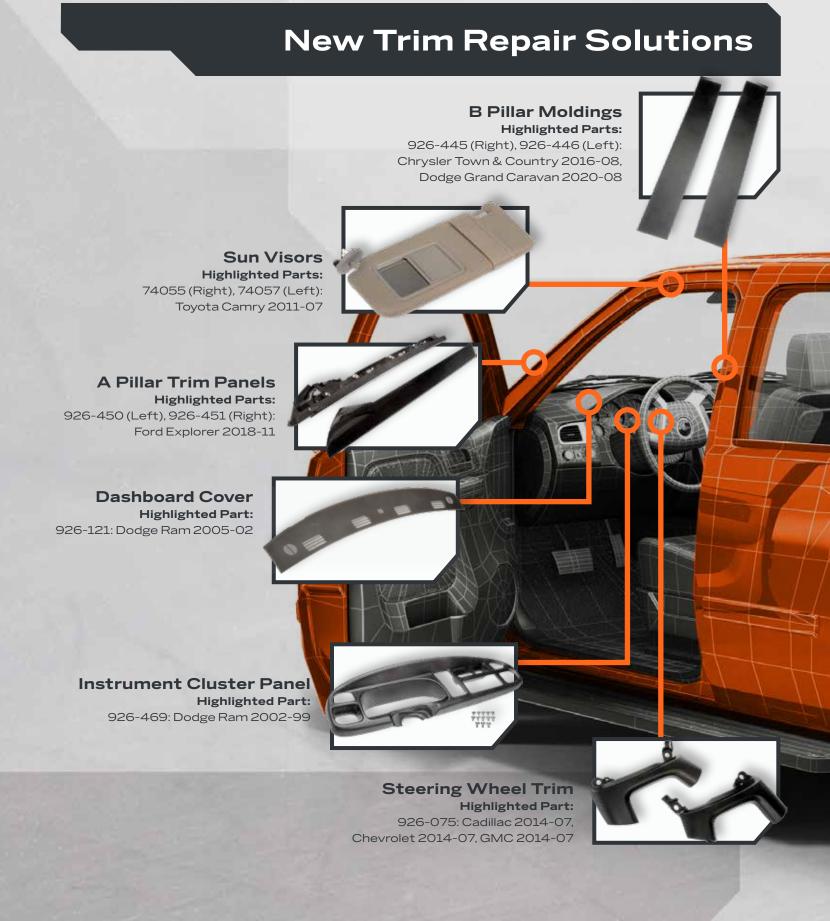
FIX:

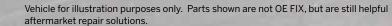
Dorman created OE FIX coil spring mounts to directly replace corroded factory perches, while retaining the original axle on 2004-99 Grand Cherokee models.

Made of stamped steel, these brackets bolt into place on the axle after the original spring mounts are cut or ground off, potentially saving hours of labor compared to replacing the axle or fabricating new parts.

Better still, no welding is required to install them, and they are designed to align with the upper perches to help restore a safe ride.











PROBLEM:

The powered liftgate on many General Motors SUVs may start making a terrible sound, and stop working, if the plastic teeth of the drive gear wear out over time.

That's when many owners and auto repair professionals learn that the only factory replacement option currently available is the entire motor and gear assembly – an expensive fix for a stripped-out piece of plastic.

FIX:

Dorman's OE FIX liftgate release motor gear kit is a cost-effective way to solve this problem. Made of durable plastic to factory dimensions, the replacement gear assembly mates to the original drive motor, making the liftgate work properly again, and making both the installer and vehicle owner happy.

Exclusive Infotainment Solutions 12 direct replacements and counting Infotainment Displays* Highlighted Part: 586-045: Chevrolet 2011-10, GMC 2011-10 Infotainment Displays* **Highlighted Part** 586-102: Cadillac SRX 2016-13 Wehicle image for illustration purposes only. Modules shown are not OE FIX, but are still helpful