



MOPAR® COLLISION - THE MOPAR DIFFERENCE

**THE PARTS AND PROGRAMS TO
MAKE YOUR BUSINESS BETTER**





CONTENTS

02. The Mopar. Difference

See Mopar. take on the aftermarket and stand above the rest.

03. Critical Analysis

A comparison of the top 5 highest volume collision parts vs. the aftermarket brands.

05. Sheet Metal

You Decide: We demonstrate the Mopar sheet metal difference:

- Corrosion
- Fit
- Packaging

10. 2017 Chrysler Pacifica

What's inside the innovative and technologically advanced Chrysler minivan.

11. Glass

Why Mopar replacement glass clearly is better.

12. Mopar Reman Engines

What's inside Mopar reman engines that makes them better, stronger and more reliable than salvage and aftermarket.

13. Certified FCA Canada Repair Program

Certified FCA Canada collision repair facilities benefit from tools, customer referrals and training.

14. MoparRepairConnection.ca

Your 24/7 direct connection to all things collision related including body repair manuals, reference guides, position statements and more.

16. Magneti Marelli Offered by Mopar Radiators & A/C Condensers

A cool, new alternative to O.E. that bridges the gap between insurers and demanding customers.

THE MOPAR[®] DIFFERENCE

What do you really know about aftermarket collision parts?

It's important to keep some perspective when it comes to purchasing aftermarket collision parts. More unknown aftermarket parts manufacturers are entering the low cost market all the time, while technical complexity and safety integration from new car manufacturers continues to increase. So how do you really know if the collision parts you buy will actually fit and perform safely and reliably?

Risky Business

According to a recent survey, almost half the time (46%) body shop businesses use non-O.E. parts, the results are an unacceptable fit. That's an almost 50-50 roll of the dice. On the other hand, O.E. collision replacement parts provide an acceptable fit 93% of the time. In the same study, almost 30% of all aftermarket crash parts had to be returned to the vendor for some reason.

83%



83% of body shop business managers feel that OEM parts have a *positive impact* on their business.

58%



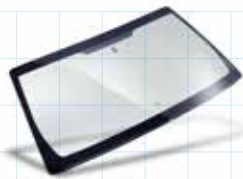
58% indicate aftermarket parts *negatively impact* their business.

It's clear. Aftermarket crash parts can adversely affect your day-to-day business. So don't leave your reputation and company bottom line to chance. Arm yourself with the facts and insist on Mopar[®] genuine collision parts.

[*Source: OEM Collision Industry Roundtable, 2015.]

Critical Analysis:

TOP 5 CRASH PARTS COMPARISON



Fascias

Fascias need to fit precisely for safety systems to work properly. Materials and construction are critical to ensure they fit accurately and do not warp or bind with steel body panels, causing them to rust or delaminate.

Glass

Critical for safety, performance and passenger comfort, windshields provide nearly one-third of roof strength. Passenger air bags rely on them for proper deployment. Drivers and collision avoidance cameras also need to see accurately through glass for optimum safety and drivability.

Sheet Metal

Today's sheet metal parts, such as hoods and quarter panels, are often integral to chassis structure and safety designs. Performance issues such as lack of corrosion resistance, poor fit and appearance consume extra labor hours and add to callbacks from customer complaints.

Lighting

Inferior headlamp assemblies may have improper alignment or defective seals, or may be prematurely yellow, which can diminish light output and hamper driver safety.

Mirrors

Along with convenience features like heaters, retractors and remote adjustment, proprietary crash avoidance and lane departure systems are now built into many side mirrors, making them increasingly difficult to reproduce in the aftermarket.

Not All Crash Parts Are Cosmetic

The squeeze from insurance adjusters pressing shops to use more generic or aftermarket parts instead of O.E. factory parts is greater than ever. The good news is, when armed with the facts, collision shops and consumers alike can make the case for using original factory collision parts over lesser known, lower quality aftermarket parts.

FOR SAFETY, PERFORMANCE, FIT AND WARRANTY COVERAGE, USE ONLY GENUINE MOPAR[®] O.E. COLLISION PARTS.



Corrosion Testing.

Our reputation is galvanized

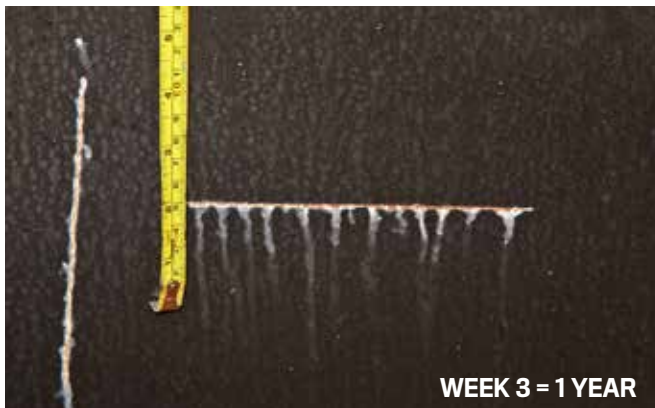
In laboratory corrosion tests, Mopar. subjected a Mopar O.E. fender to the same 12-week cyclical corrosion test as an aftermarket fender. The results were staggering. Both fenders were scratched and then static salt sprays were applied three times per week to simulate five years of exposure to the snow, humidity and salt fog you'd find in Halifax, Nova Scotia. Twelve weeks of testing under these extreme conditions is the equivalent of five years of real-world elemental damage.

MOPAR FENDER

- Material - Galvanized steel
- Pretreatment Coating - Zinc phosphate
- Primer - High bake electro deposition

AFTERMARKET FENDER

- Material - Cold rolled steel
- Pretreatment Coating - None
- Primer - Refinish primer



THE RESULTS:

MOPAR FENDER

- Minimal corrosion creepback
- Limited corrosion run-out
- No rust through

AFTERMARKET FENDER

- Excessive corrosion creepback
- Long corrosion run-out
- Deterioration at panel edges

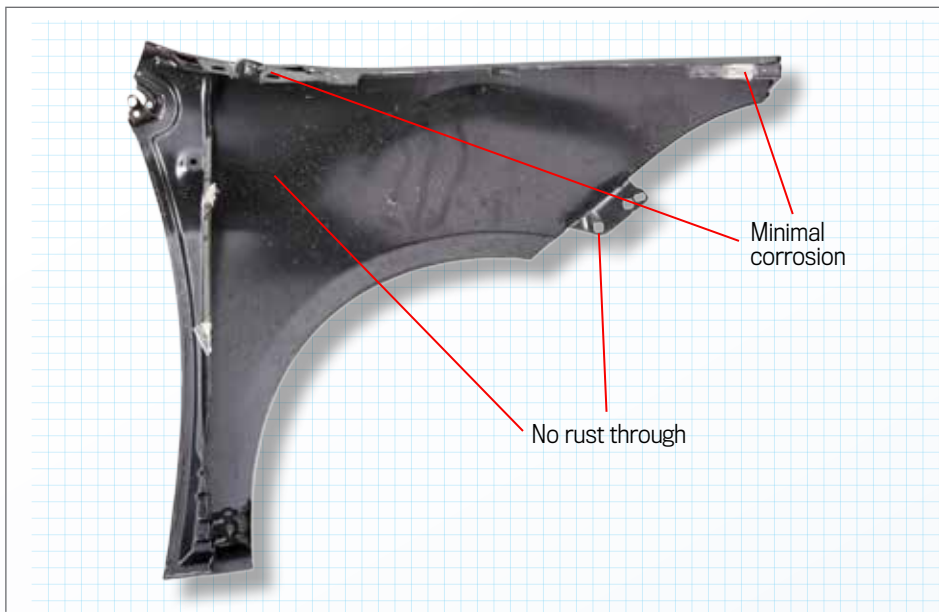
NOTE: Ruler (as seen in photos) used as visual comparison to show scale/size, not to show measurement.

Performance You Can Trust.

Mopar® Collision Parts always outperform the aftermarket for fit, finish and performance. Only authentic Mopar parts are made to propriety standards, using the best materials and manufacturing processes, to guarantee the right fit the first time. In side-by-side testing, Mopar fenders outperformed aftermarket fenders in the following: corrosion testing, dimensional accuracy testing and packaging comparisons.

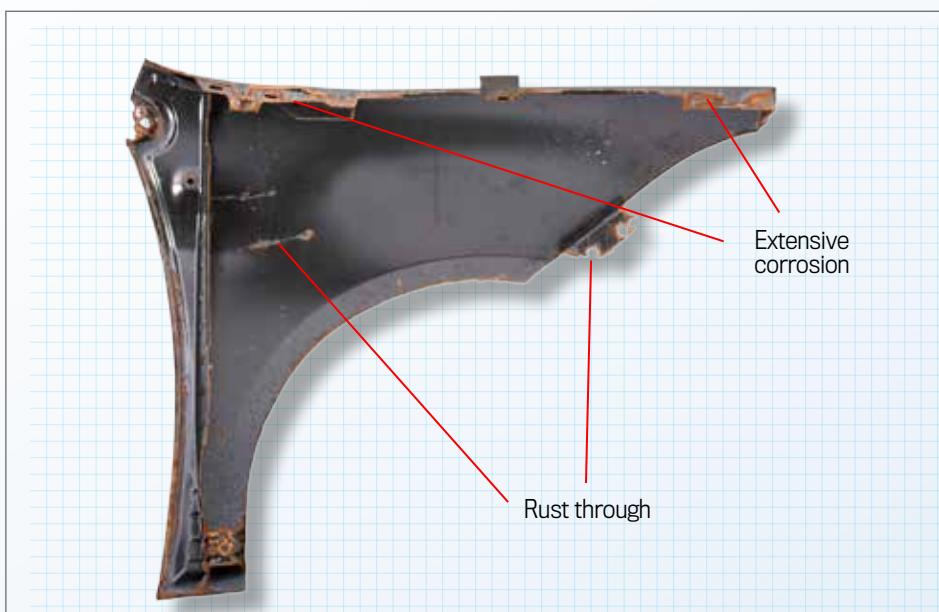
MOPAR FENDER

The Mopar fender 100+ days after testing completion



AFTERMARKET FENDER

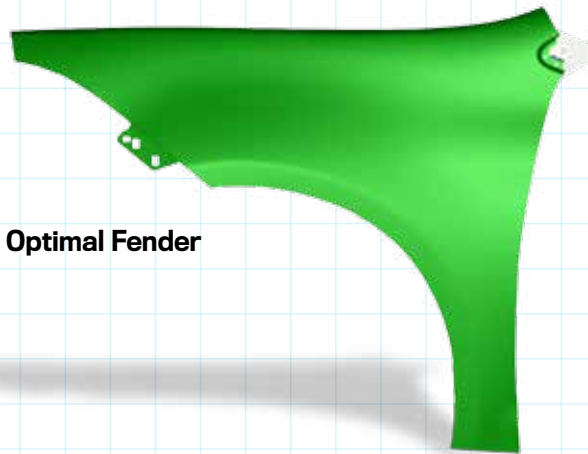
The aftermarket fender 100+ days after testing completion



Dimensional Testing.

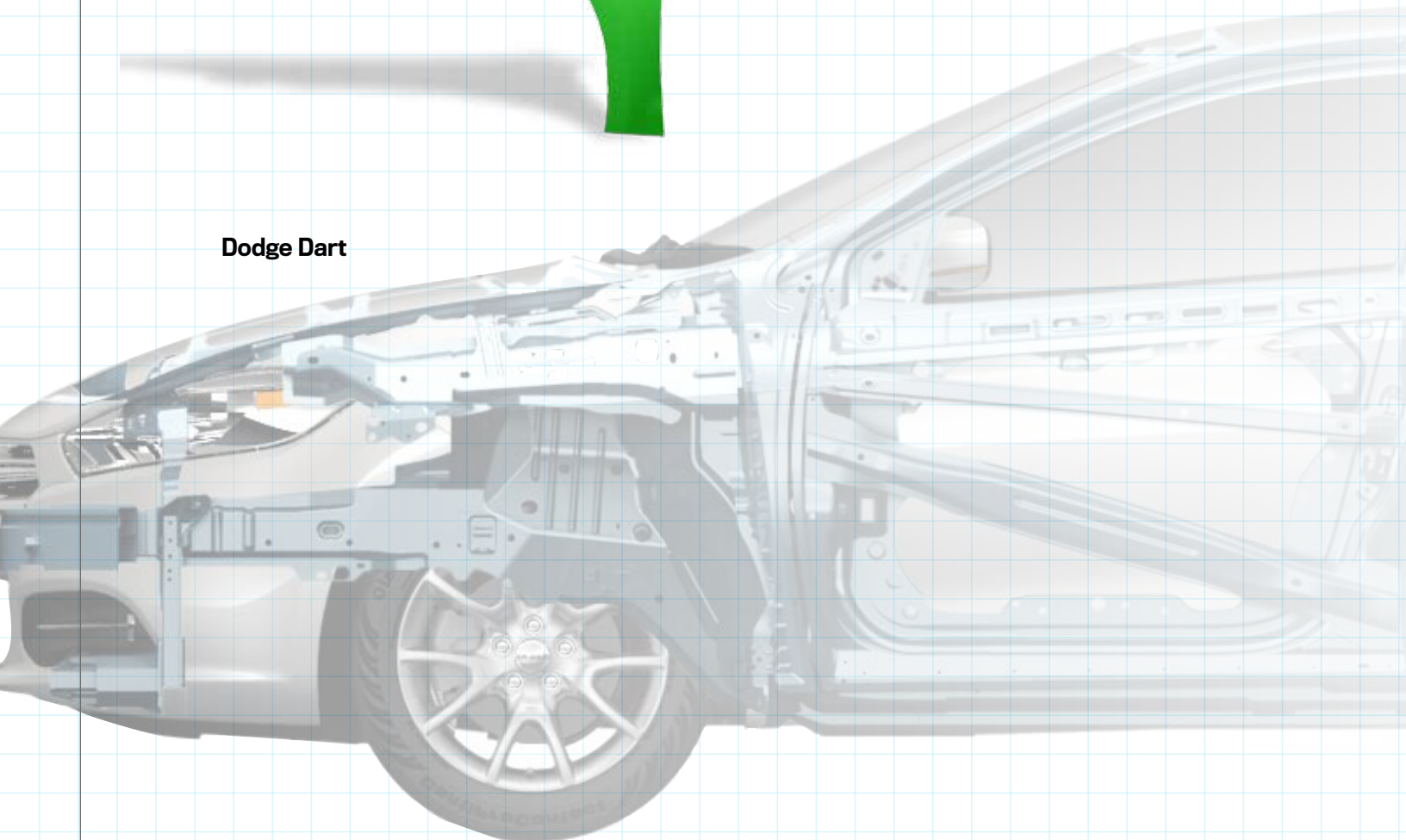
DIMENSIONAL ACCURACY TESTING OF AFTERMARKET FENDERS

Mopar, subjected two aftermarket fenders to dimensional testing, comparing them to Mopar design specifications. The aftermarket fenders were measured by a Coordinate Measuring Machine (CMM) using a touch probe, taking three-dimensional measurements at key points. Next, they were subjected to ATOS white light scans, which showed deviations from FCA US LLC design specifications as indicated by colour. **Green is optimal**, dark blue areas are lower than spec, dark red areas are higher than spec. With the high degree of deviation shown, these aftermarket fenders would require extensive adjustment for an acceptable appearance, proper fit and finish.



Optimal Fender

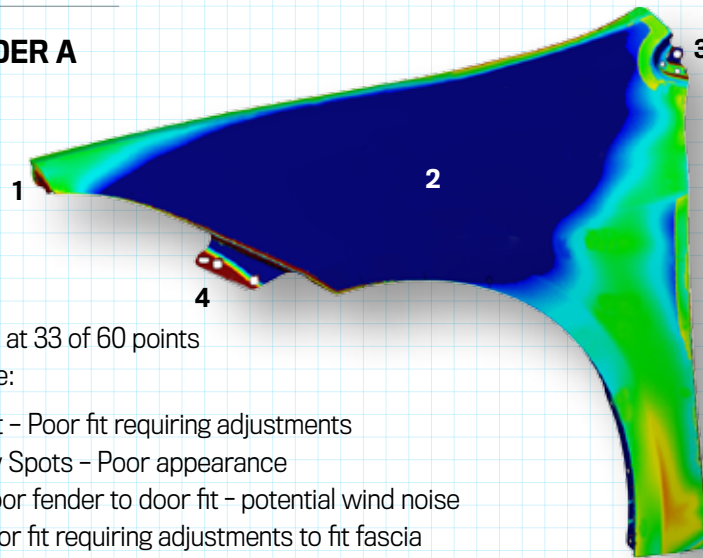
Dodge Dart



Failure To Fit.

AFTERMARKET DIMENSIONAL INACCURACY - WHITE LIGHT SCAN

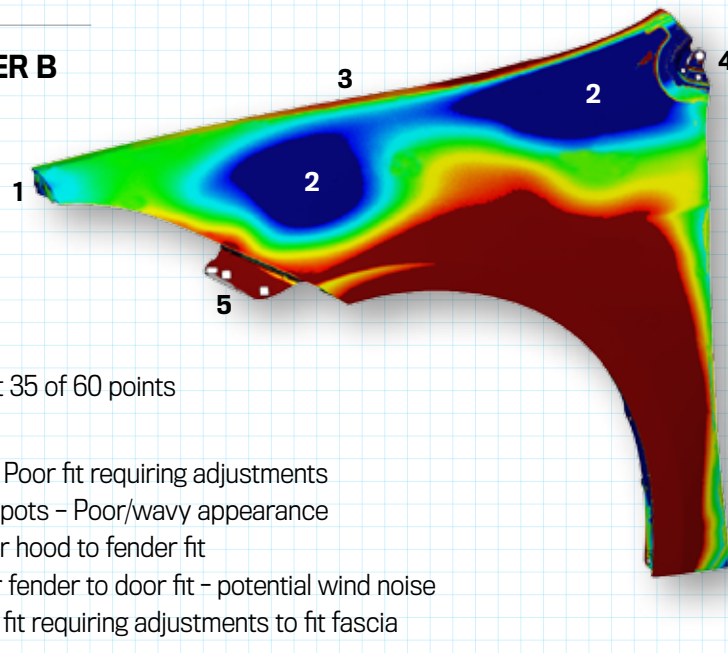
AFTERMARKET FENDER A



Dimensional standards failed at 33 of 60 points checked – a 56% Failure Rate:

1. Upper Fender Attachment – Poor fit requiring adjustments
2. Upper Half of Fender Low Spots – Poor appearance
3. Upper Mounting Hole – Poor fender to door fit – potential wind noise
4. Attachment Tab High – Poor fit requiring adjustments to fit fascia

AFTERMARKET FENDER B



Dimensional standards failed at 35 of 60 points checked – a 58% Failure Rate:

1. Upper Fender Attachment – Poor fit requiring adjustments
2. Upper Half of Fender Low Spots – Poor/wavy appearance
3. Catwalk (Upper Edge) – Poor hood to fender fit
4. Upper Mounting Hole – Poor fender to door fit – potential wind noise
5. Attachment Tab High – Poor fit requiring adjustments to fit fascia

SUMMARY:

With the high degree of deviations from FCA US LLC specifications, these fenders would require extensive rework for acceptable appearance, proper fit and finish.

CHOOSE MOPAR. PARTS FOR PROTECTION YOU CAN TRUST

Packed To Perform.

Here's our wrap on packaging

Mopar® packaging specifications require parts to be secure and completely protected to ensure the dimensional accuracy of every part.

Even if the aftermarket fender offered accurate dimensions, which reverse engineering and substandard materials and processes won't allow, aftermarket packaging is not designed to adequately protect the part during shipping and delivery.

The results are clear. Only authentic Mopar Collision Parts offer factory-engineered fit, finish and performance in every part we sell. Always get the Mopar Difference. Ask for Protection you can trust – Mopar.

Save time, money and your reputation: Insist on authentic Mopar sheet metal parts.

PACKAGING COMPARISON

MOPAR PACKAGING

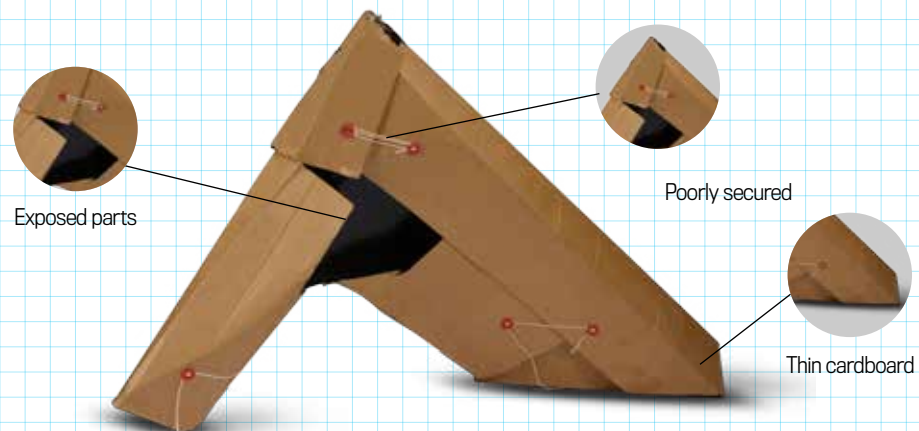
- Fully secured contents, no exposed product
- Strong, double-wall corrugated cardboard
- Foam padding and bubble wrap protects surfaces*
- Clear Mopar brand and handling instructions
- Orientation arrows and hand holes for safe lifting
- Guaranteed satisfaction

**For larger parts, such as hoods, an elastic band system is used to keep high-density EPP pads in place to protect crucial points during shipping.*



AFTERMARKET PACKAGING Aftermarket Fender

- Not secure
- Thin gauge cardboard
- Exposed areas
- Banker's Box string

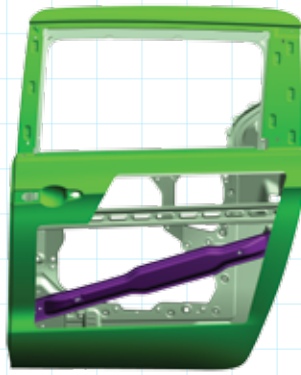
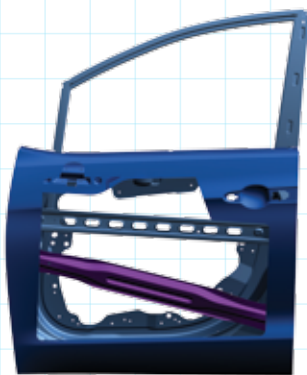
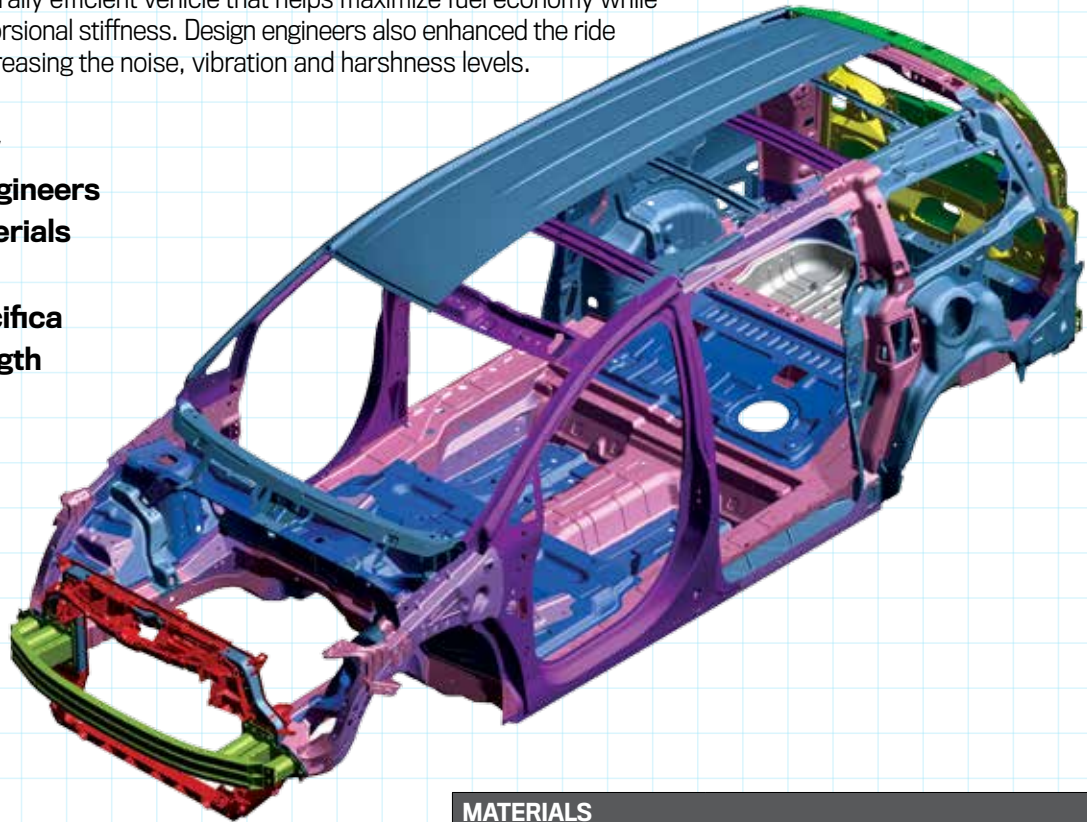


Material Strength.

2017 Chrysler Pacifica

Engineering the latest Chrysler minivan was an exercise in architecture and design that is rewriting the book on vehicle framing. The clever strategy for design and placement of high-strength steel and aluminum has resulted in a lightweight, structurally efficient vehicle that helps maximize fuel economy while offering class-leading torsional stiffness. Design engineers also enhanced the ride and handling while decreasing the noise, vibration and harshness levels.

The visuals below exemplify how engineers used varying materials to make the new 2017 Chrysler Pacifica a beacon of strength and durability.



MATERIALS	
STEELS	Low-Strength Steels
	High-Strength Steels
	Advanced High-Strength Steels
	Ultra-High-Strength Steels
	Press-Hardened Steels
ALUMINUM	Aluminum Sheets: 6xxx series
	Aluminum Sheets: 5xxx series
	Aluminum Extrusion Profiles: 6xxx
MAGNESIUM	Cast Magnesium
PLASTICS	Fiber Reinforced Plastics
OTHER MATERIALS	

Mopar® Glass, Clearly Better.

When it comes to replacement windshields and glass, only Mopar® offers O.E. factory performance and reliability.

Plus, Mopar offers fast replacement glass delivery – 48 hours or less, in most cases.

Structurally Sound Safety

Aside from providing a clear view of the roadway, windshields provide structural integrity to the overall vehicle chassis and are critical to proper passenger airbag deployment.

Perfect Fit

Making sure your replacement glass fits right ensures that windows and windshields do not leak or allow unwanted road or wind noise. Long term, improper glass fit can lead to water damage and corrosion inside the vehicle and along window frames. Mopar offers sound-deadening glass laminates to reduce wind and road noise.

Seeing Things Clearly

Optical clarity ensures sensitive collision avoidance systems have a clear view, too, and are not adversely affected by distorted optics.

SPF - Solar Protection For All

Mopar glass comes with UV filtering that blocks out 90 percent of ultraviolet light to optimize the efficiency of the vehicle air conditioning system.

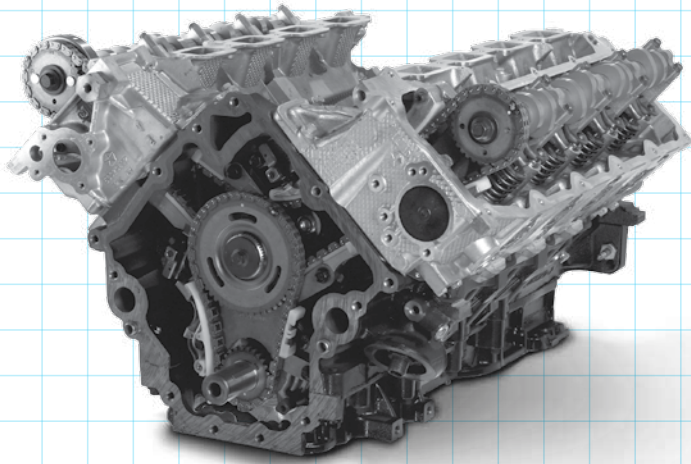


COMPARE THE MOPAR DIFFERENCE IN AUTOMOTIVE REPLACEMENT GLASS.

	O.E. GLASS (MOPAR)	NON-O.E. GLASS (NON-MOPAR)		
	BEST	GOOD	SATISFACTORY	POOR
Safety	✓	✓		
Fit	✓	✓		
Finish	✓		✓	
Quality	✓		✓	
Wind Noise	✓		✓	
Prevention of Water Leakage	✓		✓	
Moulding Fit	✓		✓	
Attachment Fit	✓			✓
Solar Protection	✓			✓
Optical Clarity	✓			✓
Conformance to O.E. Specs	✓			✓

Authentic To The Core.

Mopar® vs. The Aftermarket Reman Engine



Mopar® purchased an aftermarket 4.7L remanufactured engine from a national auto parts store and subjected it to the same 625-hour general durability dyno test as a Mopar remanufactured engine. After a mere 15 hours, the aftermarket engine suffered a catastrophic failure.

DURING TEARDOWN ANALYSIS, MOPAR DISCOVERED SEVERAL ADVANTAGES OVER THE AFTERMARKET:

- Mopar replaces worn components in mandatory replacement locations with 100% new O.E. parts (fig. 1). This aftermarket manufacturer did not. In fact, the aftermarket remanufacturer reused torque-to-yield connecting rod bolts (fig. 2). This resulted in a connecting rod failure (fig. 3) and, ultimately, the catastrophic failure of this aftermarket engine.
- The Mopar bearings look brand new after 625 hours of testing (fig. 4). The aftermarket bearings showed signs of significant wear and fatigue after just 15 hours (fig. 5).
- Mopar remanufactured engines use the correct replacement parts and include the latest engineering upgrades to ensure optimal performance and reliability.

DYNO TESTING RESULTS

MOPAR

6 2 5
HOURS

AFTERMARKET

1 5
HOURS

FIGURE 1

Mopar Reman Engine Bolt. Original finish.



MOPAR

FIGURE 2

Aftermarket Reman Engine Bolt. Silver colour indicates a used bolt cleaned by material blasting.



AFTERMARKET



FIGURE 3

Destroyed Aftermarket Connecting Rod with failed bolt.

AFTERMARKET

FIGURE 4

Mopar Reman Engine Bearings.



MOPAR

FIGURE 5

Aftermarket Reman Engine Bearings.



AFTERMARKET

Get Certified. Get Busy.

Certified FCA Canada Collision Repair Program

With more advanced materials and technologies used on FCA brand vehicles than ever before, staying ahead of the technology curve – and the competition – is more important than ever.

The future of automotive collision service is here.

The Certified FCA Canada Collision Repair Facility program is the leading factory collision repair certification program and it can transform the way your collision shop does business.

Because our Mopar. collision program provides certification, as well as customer referrals to FCA Canada certified facilities, you'll gain a competitive advantage that will keep you ahead of the competition in today's fast-paced collision industry.

Best of all, you'll build more referrals from improved customer satisfaction and better long-term repairs.

- FACTORY TRAINING
- CERTIFICATION TESTING
- CUSTOMER REFERRALS
- RAPIDLY GROWING NETWORK OF CERTIFIED SHOPS
- IMPROVES CUSTOMER SATISFACTION SCORES
- INCREASES BUSINESS VALUATION

Tools and Technical Support

Back up the leading collision training and certification program and win new FCA Canada collision business with the best collision tools to maximize production efficiency and quality. Factory-backed, the Mopar Essential Service Tools and Equipment program gives your shop the inside track on Mopar branded shop equipment and tools specific to servicing FCA brand vehicles.



Custom Paint Booths



PR015 i5 Smart Spot Welder



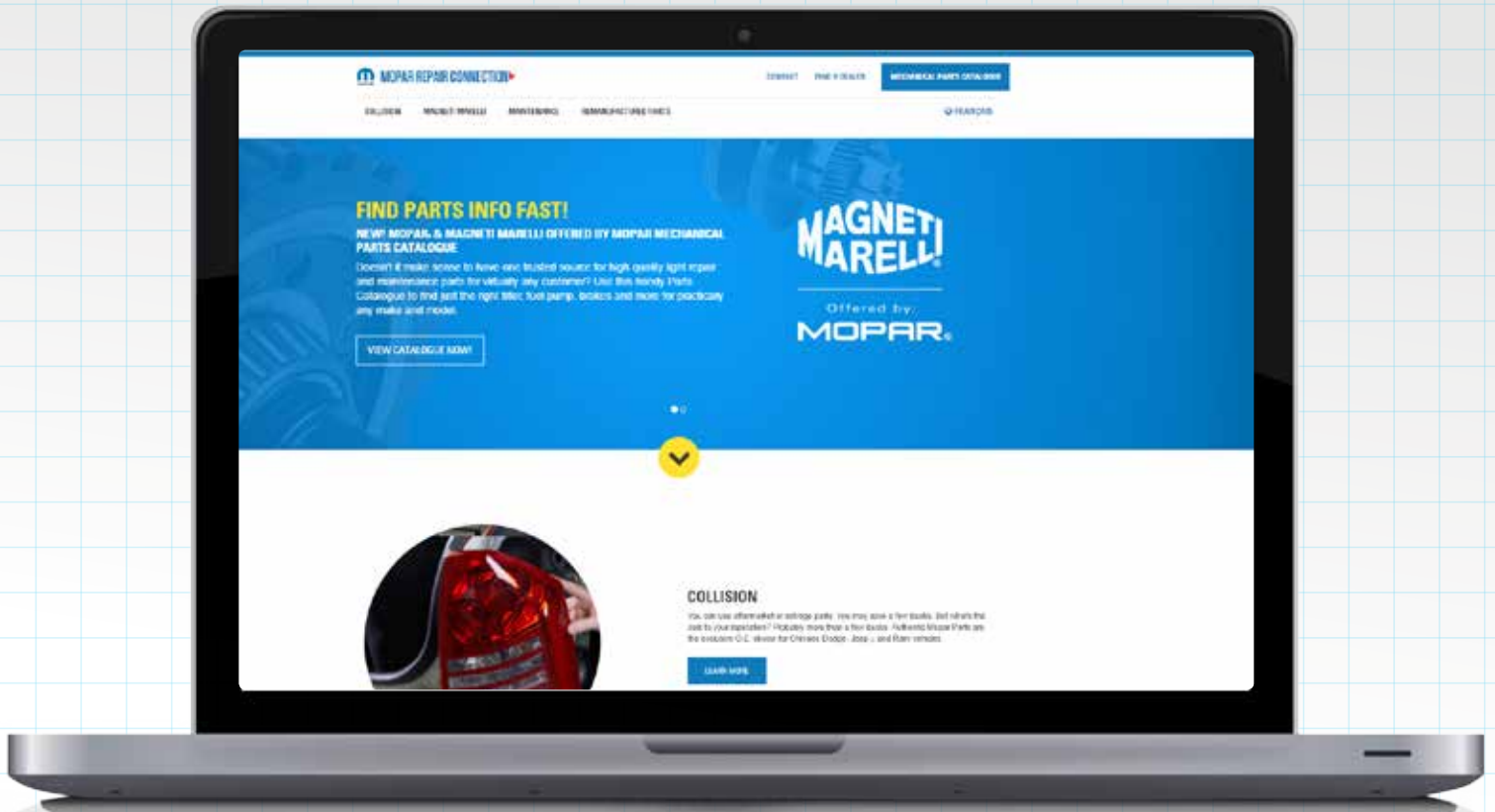
LaserLock Live Mapping System

Go to MoparEssentialTools.com to learn more and to order the best collision tools for your FCA collision repairs.

Build A Winning Service Reputation.

MoparRepairConnection.ca – The Inside Scoop on Everything Mopar.

If you regularly work on FCA brands – Chrysler, Dodge, Jeep®, Ram or FIAT® – or simply want to build a winning service reputation using Mopar® collision parts – then MoparRepairConnection.ca is for you. It's where you can access all the latest information related to Mopar collision parts, technical support and more; and best of all, it's complimentary.





New Scan Tool Position Statement Available On MoparRepairConnection.ca



Collision

Get the latest on collision parts, technical resources and repair tips on MoparRepairConnection.ca. This section has technical bulletins on cutting and welding advanced materials, collision repair manuals, factory position documents, parts promotional materials and more.

Body Repair Manuals

Choose from dozens of free online body repair manuals for FCA products including popular Chrysler, Dodge, Jeep, Ram, FIAT® and Alfa Romeo brand vehicles. The library also covers Plymouth, Viper and Alfa Romeo brands for extensive coverage. Comprehensive and up-to-date, they provide technical information, collision repair instructions and the latest FCA service bulletins.

Position Statements

Arm yourself with the facts on important industry issues from Mopar® with FCA position statements available on MoparRepairConnection.ca. Excellent resources for addressing insurance industry requirements, these documents cover important topics such as the use of salvage and reconditioned parts, safety and passenger restraint systems, scan tools, high-strength steel/carbon fiber repairs and more.

Technical References

Not sure where to cut or which welding materials to use? Check out the FCA Technical Reference section on MoparRepairConnection.ca. Get valuable information on a variety of technical issues from bonding and frame dimensions, to sheet metal and body panel repair guides.



Visit **MoparRepairConnection.ca** today and get the inside scoop on everything Mopar.

A Cool, New Alternative.

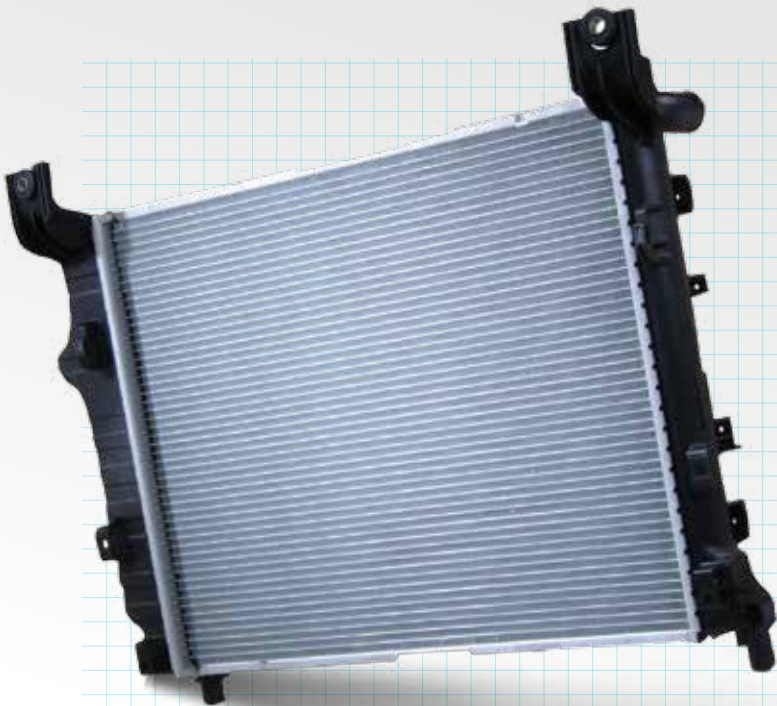
Magneti Marelli Offered by Mopar® Radiators and A/C Condensers, Superior Quality and Aftermarket Value

Whether it's for your trusted work truck or the family minivan, Magneti Marelli Offered by Mopar® radiators and A/C condensers deliver the best of both worlds: Tier 1 quality and aftermarket value.

Each radiator and condenser is designed exclusively for North American weather conditions and manufactured to exact O.E. specifications using state-of-the-art production facilities and ISO quality control processes.

Only Magneti Marelli Offered by Mopar radiators and A/C condensers provide the leading quality and value that shops, vehicle owners and insurance adjusters can agree on.

TECHNICAL HIGHLIGHTS: RADIATORS



HD Ribbed Tanks

Strengthen the entire assembly and help prevent failure due to flexing and vibration.

Shoulder Screws

Allow the aluminum core to expand and retract freely, reducing metal fatigue on radiator tubes.

Tube Inserts

Strengthen corner tubes to prevent tearing and minimize flange failures.

Redesigned Header and Gaskets

Provide a stronger tank crimp and optimize sealing surface when oval-shaped gaskets are compressed.

Stress Cuts

Minimize thermal stresses on radiator tubes.

Installation Hardware

Premium O.E. hardware, fittings and installation guidelines included in each box.

Why Stock Magneti Marelli Offered by Mopar[®] Radiators and Condensers?

- Extensive radiator coverage for Chrysler, Dodge, Jeep[®] and Ram (156+ part numbers) with additional brands and makes to be added.
- Excellent crash market coverage with the most extensive vehicle coverage in the industry.
- Dedicated Tech Line customer support and 2-year, unlimited kilometre warranty.

Call your local Mopar[®] dealer to order.

TECHNICAL HIGHLIGHTS: A/C CONDENSERS

O.E. Design

Designed to expertly match O.E. form factor and mounting points for easy “drop-in fit” installation.

High-Density Fins

Maximize thermal transfer for optimum cooling efficiency.

Heavy-Gauge Brackets

Offer precise mounting holes for ease of installation, reduced vibration and in-vehicle movement.

Nitrogen Tested

Each condenser is nitrogen leak tested under high pressure to ensure every product is leak-free and ready to install.

