# **3M Solutions for OEM Repair Procedures**

## 3M™ Panel Bonding and Impact Resistant Structural Adhesives

OEM requirements can change by make, by model, by model year and by procedure. Which structural adhesive is correct? 3M is referenced in OEM repair procedures for panel bonding and impact resistant structural adhesives.

#### 3M™ Panel Bonding Adhesive

Designed to meet specific strength requirements for outer sheet metal panel replacement; panel bonding adhesive is typically used in conjunction with welding, rivets or hem flange joints. Panel bonding adhesives do not offer the same level of impact resistance as impact resistant structural adhesives and should not be used for structural repairs unless recommended by the specific automotive manufacturer.

#### 3M™ Impact Resistant Structural Adhesive

Designed to meet specific strength requirements for parts such as frame rails, strut towers, sills, pillars and other members where impact resistance is important. This type of adhesive possesses a much greater ability than traditional bonding adhesives to absorb and manage energy under a variety of forces, especially peel and cleavage stresses in extreme temperature conditions. Typically impact resistant structural adhesive is used in conjunction with rivets, spot welds or mechanical fasteners.

The above are general descriptions, repairers must always refer to individual automotive manufacturer procedures specific to model year for accurate information.



### Following OEM recommendations is very important for several reasons:

Help Ensure Safety	Meet the adhesive standards that have been set by the OEMs to manage crash energy and help protect occupants.
<b>Use Trusted Products</b>	Use products that have been rigorously tested to the OEM's performance requirements for strength and corrosion resistance.
Mitigate Risk	Help protect yourself and your business from potential liability — the vehicle was repaired as directed by the OEM.
Simplify Your Process	Eliminate confusion about which adhesive should be used and where. You're using the OEM recommended adhesive that is specifically called out for that procedure.
<b>Get Reimbursed</b>	OEM recommendations, which include 3M products, enable you to provide documentation to justify correct product usage and procedures needed for safe and responsible repairs.

# **Feature Comparison**



**⊘** 3M<sup>™</sup> Panel Bonding Adhesive



## **⊘** 3M<sup>™</sup> Impact Resistant Structural Adhesive

Details	PN 08115 / 08116	PN 07333
Higher impact strength versus traditional bonding adhesives		
Recommended by many OEMs	<b>⊘</b>	<b>Ø</b>
Provides corrosion protection with lifetime warranty	<b>⊘</b>	<b>Ø</b>
Room temperature curing (accelerated with heat)	<b>⊘</b>	
Can be weld bonded or rivet bonded within working time	<b>⊘</b>	
Adheres to a wide variety of properly prepared steel and aluminum substrates	<b>⊘</b>	<b>Ø</b>
May be used on many plastic and composite substrates	<b>⊘</b>	
Dispenses silver, color changes to purple to indicate proper mixing and curing process has begun		
Glass bead technology protects against overclamping and maintains a minimum bond line thickness	<b>⊘</b>	
Has excellent shelf life opened or unopened, reducing unused product replacement costs	<b>⊘</b>	



### 3M™ Panel Bonding Adhesive

PN 08115 / 08116

Areas where Panel Bonding Adhesive may be used.

#### **3M™ Impact Resistant Structural Adhesive** PN 07333

Areas where Impact **Resistant Structural** Adhesive may be used.





- Roof Skin
- 2 Door Skin
- 4 Quarter Panel/Truck Box/Van Side



- Roof Skin
- 3 Body Side
- 5 Sill
- 2 Front Upper/Lower Rail
- 4 B Pillar/Uniside 6 Rear Unibody/Wheel Opening

## **OEM Recommendations**





## ✓ 3M™ Panel Bonding Adhesive ✓ 3M™ Impact Resistant Structural Adhesive

3M PN	Fiat/ Chrysler	Ford	General Motors	Honda	Hyundai/ Kia	Jaguar/ Land Rover	Nissan	Tesla	Toyota	Volvo
08115										
08116	<b>Ø</b>		<b>Ø</b>							<b>Ø</b>
07333										<b>Ø</b>

This information was compiled by reviewing OEM repair manuals during 2018 and it generally represents model years 2016 to present. Repair facilities must complete their own research to validate current OEM guidelines.

Model	Year	3M Applications		
Fiat/Chrysler				
Caravan/T&C	2016-19	11		
Chrysler 200	2015-17	17		
Chrysler 300	2016-18	15		
Dodge Challenger	2016-18	10		
Dodge Charger	2016-18	15		
Durango & Grand Cherokee	2017–19	10		
Jeep Cherokee	2016-18	16		
Jeep Compass	2018	18		
Jeep Renegade	2016-18	1		
Journey & Freemont	2016-18	12		
Pacifica	2017-19	20		
ProMaster Van	2016-19	1		
Ram 1500, 2500, 3500	2016–19	12		
Ford				
Edge	2016-18	5		
Escape	2016-18	7		
Explorer	2016-18	2		
F-150	2016-18	14		
F-250, 350, 450	2017-18	14		
Fiesta	2016-18	6		
Focus	2016-18	4		
Fusion	2016-18	8		
Lincoln MKC	2016-18	10		
Lincoln MKX	2016-18	8		
Lincoln MKZ	2016-18	6		
Mustang	2016-18	7		
Transit	2016-18	7		
Transit Connect	2016-18	9		
General Motors				
Acadia, Traverse,	2016-17	3		
Enclave	2018	15		
Cadillac ATS	2016-18	6		
Cadillac CT6	2016-18	42		
Cadillac CTS	2016-18	4		
Cadillac ELR	2016	1		
Cadillac SXR	2016	2		

Model	Year	3M Applications
<b>General Motors</b>		
Cadillac XT5	2017-19	5
Cadillac XT5	2016-18	18
Cadillac XTS	2016-18	3
Camaro	2016-18	10
Caprice PPV	2016-17	4
Captiva	2016	4
Cascada	2016-18	22
Cheyenne, Silverado, Sierra	2016–18	4
Colorado, Trail Blazer, Canyon	2016-18	3
Cruze (Gen 1 VIN P)	2016-17	14
Cruze (Gen 2 VIN B)	2016-18	21
Express, Savanna	2016-18	2
Impala	2016-18	3
LaCrosse	2016	1
LaCrosse	2017-18	2
Malibu (VIN 1)	2016	3
Malibu (VIN Z)	2016-18	3
Regal	2016-17	3
Regal	2018-19	21
Spark (VIN C)	2016-18	3
SS	2016-17	3
Suburban, Yukon, Tahoe, Escalade	2016–18	3
Terrain, Equinox	2016-17	3
Terrain, Equinox	2018	16
Volt	2016–18	28
Honda		
Acura NSX	2017–19	2
Acura RLX	2016-18	1
Acura TLX	2016-18	2
Accord	2018-19	8
Civic	2016-18	2
Clarity	2016-18	4
CR-V	2018-19	2
Fit	2016-18	1
Insight	2019	3
Odyssey	2018-19	1

		3M			
Model	Year	<b>Applications</b>			
Hyundai/Kia	Hyundai/Kia				
Various vehicle mode	ls and appli	cations			
Jaguar/Land Ro	ver				
Various vehicle mode	els and appli	cations			
Nissan					
Various vehicle mode	ls and appli	cations			
Tesla					
Various vehicle mode	els and appli	cations			
Toyota					
Avalon	2015-18	1			
Avalon	2019	3			
C-HR	2018–19	6			
Camry	2012-16	1			
Camry	2017–19	7			
Hiace	2006–19	3			
Highlander	2014–18	1			
Lexus CT 200	2016–17	2			
Lexus ES 350	2016–18	1			
Lexus GS 450	2016–18	2			
Lexus IS 300	2016–18	6			
Lexus LS 460	2016–17	6			
Lexus LX 570	2016–18	1			
Lexus NX 300	2016–18	4			
Lexus RC 350	2016–17	6			
Lexus RX 350	2016–18	5			
Lexus RX 450	2016–18	5			
Mirai	2017–18	4			
Prius	2015–18	5			
Sienna	2017–17	1			
Tacoma	2016–18	3			
Venza	2009–18	1			
Yaris	2012–18	1			
Volvo					
Various vehicle models and applications					

 $3M \text{ Applications references individual repair procedures per model recommending } 3M^{\tiny{\text{IM}}} \text{ Panel Bonding Adhesive or } 3M^{\tiny{\text{IM}}} \text{ Impact Resistant Structural Adhesive.}$ 

# **Ordering Information**







3M <sup>™</sup> Panel Bonding Adhesive				
Part No.	Size	Product	Case Qty.	
08115	200ml	3M™ Panel Bonding Adhesive	6/Case	
58115	450ml DMS	3M <sup>™</sup> Panel Bonding Adhesive	4/Case	
08116	200ml	3M <sup>™</sup> Panel Bonding Adhesive	6/Case	

3M <sup>™</sup> Impact Resistant Structural Adhesive			
Part No.	Size	Product	Case Qty.
07333	200ml	3M <sup>™</sup> Impact Resistant Structural Adhesive	3/Case

Accessor	ies		
Part No.	Size	Product	Features/Applications
08193	400ml	3M <sup>™</sup> Static Mixing Nozzle	3/8 in. nozzle, pack (36)
08194	400ml	3M <sup>™</sup> Static Mixing Nozzle	3/8 in. nozzle, Bulk pack (50)
09930	200ml	3M™ Performance Pneumatic Applicator	Pneumatic — For 200ml product
08117	200ml	3M™ Performance Manual Applicator	Manual — For 200ml product
50601	2:1, 1:1	3M <sup>™</sup> Dynamic Mixing Nozzles	DMS nozzle for adhesives, sealers and plastic repair products
58207	50:1, 2:1, 1:1	3M <sup>™</sup> Dynamic Mixing Nozzle Extension	Use with DMS nozzles to provide a thinner bead and to get into hard to reach areas
50600	All DMS Products	3M <sup>™</sup> Dynamic Mixing Applicator	Pneumatic — Professional applicator to dispense DMS products



#### **Automotive Aftermarket Division**

#### 3M United Kingdom PLC

Tel: 0845 603 9714 aadukenquiries@mmm.com www.3M.co.uk/bodyshop

#### 3M Ireland

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