## gm

## Doc ID 5807146 - Repairs & Inspections required after a Collision

<u>Warning:</u> Proper operation of the Supplemental Inflatable Restraint (SIR) sensing system requires that any repairs to the vehicle structure return the vehicle structure to the original production configuration. Not properly repairing the vehicle structure could cause non-deployment of the air bag(s) in a frontal collision or deployment of the air bag(s) for conditions less severe than intended.

<u>Warning:</u> Do not repair or replace the seat stitching or seams in the seat back trim cover with an internal mounted seat side airbag module. Replace the complete seat back trim cover from the OEM. Non-OEM seat stitching may cause improper airbag deployment which could result in personal injury.

<u>Note:</u> General Motors (GM) vehicles, systems and components are engineered, tested and manufactured to protect vehicle occupants based upon both government mandated and internal corporate requirements relative to durability, NVH (noise/vibration/harshness), occupant protection, and vehicle safety. Only authentic Genuine GM Parts are designed, engineered, manufactured and tested to the General Motors internal and government mandated standards and are the only ones equivalent to the original equipment installed on the vehicle.

- 1. After ANY collision, perform the following belt operational and functional checks:
  - Turn the ignition switch to the ON position. Verify proper operation of the seat belt reminder lamp with the belt buckled and with the belt unbuckled.
  - For each seating position:
    - 1. Inspect the shoulder belt guide to ensure that the seat belt webbing is seated flat in the guide slot and that the seat belt webbing does not bind.
    - 2. Verify that the seat belt buckle is accessible.
    - 3. Fully extend the seat belt webbing. Verify that the seat belt webbing does not have any twists or tears.
    - 4. Allow the seat belt webbing to retract. Verify that the seat belt webbing returns freely and completely back into the retractor.
    - 5. Snap the seat belt latch plate into the buckle. Sharply tug on the seat belt latch plate and the buckle. Verify that the seat belt latch plate and the buckle remain locked when tugged.
    - 6. Push the button on the buckle. Verify the seat belt latch plate releases easily from the buckle and the button returns to its original position.
  - 2. In instances of vehicle collision where damage is limited to minor outer body panel cosmetic distortion: visually inspect vehicle for extent of damage, repair and replace components as necessary.
  - 3. In instances of vehicle collision where damage exceeds minor outer body panel cosmetic distortion, unrelated components can be subject to damage outside of obvious visual detection method in the area of impact. The table below references components requiring inspection or

replacement to promote a safe and quality repair. Some inspections may require disassembly of vehicle components or additional functional tests. If you detect any damage, replace the component.

Brakes & Steering						
Component	Notes or Additional Instructions	Exceeds Minor Outer Body Panel Cosmetic Distortion without Airbag Deployment	Pretensioner Deployment	Seat Side Airbag Deployment	Frontal Airbag Deployment	
Brake Pedal		Inspect	Inspect	Inspect	Inspect	
Steering Column	Refer to Steering Column Accident Damage Inspection in Steering Column and Wheel.	Inspect	Inspect	Replace	Replace	
Steering Wheel		Inspect	Inspect	Replace	Replace	
Steering Wheel Airbag	If not deployed, visually inspect the top trim cover of the airbag module for deformation, distortion, or indentations as a result of damage. Replace if found.	Inspect	Inspect	Inspect	Replace	
Steering Wheel Air Bag Coil and Coil Wiring Pigtail	If deployed, inspect for melting, scorching, or other damage due to excessive heat.				Inspect	
Steering Wheel Air Bag Mounting Points and Hardware					Inspect	



	Impact Sensors							
Component	Notes or Additional Instructions	Exceeds Minor Outer Body Panel Cosmetic Distortion without Airbag Deployment	Pretensioner Deployment	Seat Side Airbag Deployment	Frontal Airbag Deployment			
Front and/or Side Impact Sensors	<ul> <li>Impact Sensor Replacement Guidelines:</li> <li>The impact sensor replacement policy requires replacing sensors in the area of the accident damage. The area of accident damage is defined as the portion of the vehicle which is crushed, bent, or damaged due to a collision. If the impact sensor or the mounting structure of the impact sensor is damaged, the impact sensor must be replaced.</li> <li>Replace the impact sensor whether or not the air bags have deployed.</li> <li>Replace the impact sensor even if it appears to be undamaged.</li> <li>Impact sensor damage which is not visible, such as slight bending of the mounting bracket or cuts in the wire insulation, can cause improper operation of the SIR system. Do not try to determine whether the impact sensor is undamaged, replace the impact sensor. Also, if you follow a diagnostic trouble code (DTC) procedure and a malfunctioning impact sensor is indicated, replace the impact sensor.</li> </ul>	Replace	Replace	Replace	Replace			
Impact Sensors Mounting Points and Hardware		Inspect	Inspect	Inspect	Inspect			



	Instrument Panel							
Component	Notes or Additional Instructions	Exceeds Minor Outer Body Panel Cosmetic Distortion without Airbag Deployment	Pretensioner Deployment	Seat Side Airbag Deployment	Frontal Airbag Deployment			
Instrument Panel Cross Car Beam		Inspect	Inspect	Inspect	Inspect			
Instrument Panel Knee Bolsters and Mounting Points		Inspect	Inspect	Inspect	Inspect			
Instrument Panel Mounting Points and Instrument Panel Brackets, Braces, etc.		Inspect	Inspect	Inspect	Inspect			
Instrument Panel Air Bag Mounting Points and Hardware		Inspect	Inspect	Inspect	Inspect			
Instrument Panel Airbag	Visually inspect the top trim cover of the airbag module for deformation, distortion, or indentations as a result of damage. Replace if deformation, distortion, or indentations are found.	Inspect	Inspect	Inspect	Replace			
Knee Airbag	Visually inspect the top trim cover of the airbag module for deformation, distortion, or indentations as a result of damage. Replace if deformation, distortion, or indentations are found.	Inspect	Inspect	Inspect	Replace			



Roof and Interior Trim							
Component	Notes or Additional Instructions	Exceeds Minor Outer Body Panel Cosmetic Distortion without Airbag Deployment	Pretensioner Deployment	Seat Side Airbag Deployment	Frontal Airbag Deployment		
Roof and Headliner Mounting Points		Inspect	Inspect	Inspect	Inspect		
Door trim assembly	On Side of Impact. Visually inspect door trim assembly for deformation or distortion as a result of damage. Replace if deformation or distortion is found.	Inspect	Inspect	Inspect			
Trim Mounting Points and Hardware	On Side of Impact		Inspect	Inspect			
Roof Rail Airbag Mounting Points and Hardware	On Side of Impact		Inspect	Inspect			
Roof Rail Airbag	On Side of Impact. If not deployed, visually inspect roof trim for deformation or distortion as a result of damage. Replace if found.	Inspect	Inspect	Replace			



Seats						
Component	Notes or Additional Instructions	Exceeds Minor Outer Body Panel Cosmetic Distortion without Airbag Deployment	Pretensioner Deployment	Seat Side Airbag Deployment	Frontal Airbag Deployment	
Seats and Seat Mounting Points		Inspect	Inspect	Inspect	Inspect	
Seat Back Cover	If Side Air Bag(s) Deployed. If not deployed, visually inspect seat back cover and top trim cover of the airbag modules for deformation or distortion as a result of damage. Replace if deformation or distortion is found.	Inspect	Inspect	Replace	Inspect	
Seat Side Air Bag	If Deployed			Replace	Replace	
Seat Side Air Bag Mounting Points and Hardware	If Side Air Bag(s) Deployed			Inspect	Inspect	
Seat Adjuster				Inspect	-	
Seat Back Frame				Inspect	-	
Seat Cushion Frame				Inspect	-	
Seat Cushion Side Covers and Switches	On Side of Impact			Inspect	-	
Seat Recliner and Cover	If Equipped			Inspect	1	

		Seat Belts			
Component	Notes or Additional Instructions	Exceeds Minor Outer Body Panel Cosmetic Distortion without Airbag Deployment	Pretensioner Deployment	Seat Side Airbag Deployment	Frontal Airbag Deployment
Seat Belt System	This applies to seat belt systems in use by people of adult size, seat belt systems used to secure child restraints, infant carriers, and booster seats, including LATCH system and top tether anchorages.  Do NOT replace single seat belt system components in vehicles that have been in a collision as described above. Always replace the entire seat belt system with the buckle, guide, and retractor assembly, which includes the latch and webbing material.  1. Replace any seat belt system that was in use during the collision serious enough to deploy any automatic restraint device such as air bags and seat belt pretensioners.  2. Replace any seat belt system that has torn, worn, or damaged components.  3. Replace any seat belt system if you observe the words "REPLACE" or "CAUTION", or if a yellow tag is visible. Do not replace a seat belt if only the child seat caution label is visible.  4. Replace any seat belt system if you are doubtful about its condition.	Inspect			
Seat Belt Anchor and/or Retractor Pretensioners		Inspect	Replace	Replace	Replace
Seat Belt Anchor and/or Retractor Pretensioners Mounting Points and Hardware	Visually verify the seat belt retractor units are securely attached and the seat belt anchor bolts are secure.	Inspect	Inspect	Inspect	Inspect





Sensing and Diagnostic Module (SDM)							
Component	Notes or Additional Instructions	Exceeds Minor Outer Body Panel Cosmetic Distortion without Airbag Deployment	Pretensioner Deployment	Seat Side Airbag Deployment	Frontal Airbag Deployment		
Inflatable Restraint Sensing and Diagnostic Module(SDM) or Restraints Control Module (RCM)	Replace only if module has set DTCB0052 (or other related SDM DTCs) or DTC B1A33 (or other related RCM DTCs) and will not clear.		Replace	Replace	Replace		
Inflatable Restraint Sensing and Diagnostic Module(SDM) or Restraints Control Module (RCM) Mounting Points and Hardware			Inspect	Inspect	Inspect		

Further details specifically available for each applicable vehicle model – please refer to GM Service Information Document ID # 5525750 – Collision Repair Position Statements.

Available online at: <a href="https://www.gmtradeparts.com.au">www.gmtradeparts.com.au</a> and <a href="https://gmtradeparts.com.au">gmtradeparts.com.au</a> and <a href="https://gmtradeparts.com.au">gmtradeparts.com.au</a>