

The Hidden Dangers of Counterfeit Airbags

DISCLAIMER NOTICE: The following is an accessible outline of the October 23, 2025 PowerPoint presentation by the Automotive Anti-Counterfeiting Council. To view a webcast recording of the presentation, visit the BAR Advisory Group page at www.bar.ca.gov/bar-advisory-group.

Slide 1: The Hidden Dangers of Counterfeit Airbags

- Presented by the Automotive Anti-Counterfeiting Council (A2C2)

Slide 2: Agenda

- 1 – Known counterfeit airbag cases
- 2 – The basics: Composition and performance of genuine airbags
- 3 – Lab analysis of counterfeit airbag deployments
- 4 – How to identify counterfeit airbags
- 5 – Resources and support

Slide 3: Agenda

- 1 – Known counterfeit airbag cases

Slide 4: Known counterfeit airbag cases

- Since 2023, at least eight known instances of crashes involving counterfeit airbags were reported to A2C2 members.
 - 5 fatalities, 3 serious injuries (trauma and burns)
 - All were repaired with counterfeit airbags after airbag deploying wrecks
 - At least 6 of the counterfeit driver airbag assemblies ruptured
 - NHTSA, law enforcement and/or testing determined all 6 to be counterfeit
 - 4 of the 8 vehicles were prior rental fleet vehicles
- We intend to provide resources and information to support the identification of counterfeit driver airbags during a crash investigation and/or reconstruction.

Slide 5: Agenda

- 2 – The basics: Composition and performance of genuine airbags

Slide 6: Genuine airbag assemblies & characteristics

- Image 1 – Photo of the separate parts of an airbag with parts labeled - steering wheel cover and emblem, cushion, cushion ring, housing, attachment bracket, inflator, nuts & bolts.
- Image 2 – Photo of a steering wheel airbag with the following description: Tear Seams - Genuine airbags deploy according to tear seams within the steering wheel cover, fully releasing the airbag cushion.
- Image 3 – Photo of a nylon airbag cushion with the following description: Port holes - Nylon airbag cushions have ported holes to allow for the release of propellant gases. Cushions remain intact without burns or tears.

Slide 7: Is this genuine?

- Image of a steering wheel airbag partially inflated with tears in the steering wheel cover.

Slide 8: Counterfeit!

- Airbag deployments that do not perform as expected require further investigation as they may be counterfeit.

Slide 9: Agenda

- 3 – Lab analysis of counterfeit airbag deployments

Slide 10

- Photo of a crash test dummy seated in a driver seat with hands on the steering wheel.

Slide 11: Lab analysis: counterfeit airbag deployment results – CF airbag 1

- Image 1 – Photo of a crash test dummy with hands on steering wheel with a partially deployed airbag protruding from the steering wheel cover. Description below: Under-inflated and partially deployed
- Image 2 – Photo of a crumpled nylon airbag. Description below: Under-inflated and partially deployed.
- Image 3 – Photo of a deployed airbag with burn marks and tears. Description below: Burn holes in the nylon airbag cushions and/or rip in cushions.

Slide 12

- Photo of a crash test dummy seated in a driver seat with hands on the steering wheel.

Slide 13: Lab analysis: Counterfeit airbag deployment results – CF airbag 2

- Image 1 – Photo of an airbag bursting and shrapnel exiting toward a crash test dummy. Description below: Cover sends shrapnel at driver as broken pieces become projectiles during deployment.
- Image 2 – Photo of an intact steering wheel cover next to a steering wheel cover broken into several pieces. Description below: Steering wheel cover completely disengaged.
- Image 3 – Photo of an airbag broken airbag housing. Description below: Housing broken and torn apart.

Slide 14

- Photo of a crash test dummy seated in a driver seat with an airbag actively deploying and emitting gases.

Slide 15: Lab analysis: Counterfeit inflators

- Image 1 – CT scan image of a non-genuine inflator
- Image 2 – CT scan image of a genuine inflator
- CT scan analysis of a non-genuine inflator shows only one chamber compared to a genuine dual-stage inflator.
- CT scan analysis shows insufficient welds, specifically tack welds, and a single-stage inflator located within a dual-stage base.

Slide 16

- Photo of a steering wheel cover mounted on a wooden frame.

Slide 17

- Image 1 – Photo of a crash test dummy in a vehicle with a steering wheel airbag fully deployed
- Image 2 – A crash test dummy with a steering wheel airbag partially deployed.

Slide 18

- Image of the National Highway Traffic Safety Administration (NHTSA) webpage: Consumer Alert: NHTSA Alerts Used Car Owners, Buyers of Dangerous, Substandard Replacement Air Bags.
- Image of NHTSA press release dated July 10, 2024 with the following highlighted:
 - “The National Highway Traffic Safety Administration urges used car buyers and owners to be aware of cheap, substandard replacement air bag inflators that can cause death or serious injury in a crash.”
 - “In all five cases, the vehicles had previously been involved in a crash, and their original equipment air bags were replaced with defective, substandard inflators, in most cases confirmed to have been manufactured overseas.”
 - “These suspect replacement parts are often manufactured by foreign companies with little to no reputation of quality manufacturing or experience, sold at prices far below the cost of quality genuine equipment, ordered online and shipped to the United States, and installed by those other than reputable repair shops or manufacturer dealerships.”

Slide 19

- Image of letter from the U.S. Department of Transportation, Pipeline and Hazardous materials Safety Administration (PHMSA) titled Safety Advisory Notice 2024-16 with the following excerpt highlighted: PHMSA is issuing the safety advisory notice to inform the public, repair professionals, and used car buyers and owners of the increased circulation of counterfeit and substandard safety devices – e.g., air bag inflators, air bag modules, seatbelt pretensioners, pyromechanical devices, and other supplemental restraint system (SRS) components.

Slide 20

- Image of CARFAX webpage with the following highlighted: CARFAX: Millions of US Vehicles at Risk of Getting Counterfeit Airbags.
<https://www.carfax.com/press/counterfeit-airbags-jul-2024>.
- Image of CARFAX webpage with the following highlighted: Ten states have more than 40,000 vehicles back on the road after an airbag deployment.
- Texas, 206,000; Florida, 106,000; North Carolina, 100,000; Michigan, 81,000; Georgia, 74,000; Ohio, 59,000; California, 56,000; Tennessee, 47,000; Illinois, 43,000; Virginia, 41,000.

Slide 21

- Collage of webpages:
 - Homeland Security Investigations – Automotive Safety Awareness Campaign Warns Consumers About Counterfeit Airbags
<https://www.dhs.gov/hsi/news/2024/09/23/automotive-safety-awareness-campaign-warns-consumers-about-counterfeit-airbags>
 - WXYZ News – “It’s not just one brand impacted.” What to know about the rising threat of counterfeit airbags. <https://www.wxyz.com/news/its-not-just-one-brand-impacted-what-to-know-about-the-rising-threat-of-counterfeit-airbags>
 - The Wall Street Journal – Deadly Counterfeit Air Bags Are Making Their Way Into Vehicles. <https://www.wsj.com/business/autos/counterfeit-car-airbags-deaths-8e0d9d65>

- KSL TV– Authorities seizing more dangerous fake car parts.
<https://ksltv.com/687859/authorities-seizing-more-dangerous-fake-car-parts/>

Slide 22: Agenda

- 4 – Causes of death and injury

Slide 23

- Close-up photo of a ruptured inflator.

Slide 24

- Photo of a ruptured steering wheel inflator.

Slide 25

- Close-up photo of a ruptured inflator and pieces of a broken airbag cover.

Slide 26

- Close-up photo of a DTN inflator.

Slide 27

- Photo of deployed airbag debris on the floor of a vehicle.

Slide 28

- Photo of shrapnel damage to a vehicle headliner.

Slide 29: Counterfeit airbags and component parts

- Beware of counterfeit airbag modules. They may contain reused, refurbished, scrapped, or non-OEM components that compromise safety.
- Original Equipment Manufacturer (OEM) – Only genuine OEM replacements ensure safety. Authentic modules provide the correct fit, function, and protection - critical in crash situations.
- No legitimate aftermarket airbag parts. Parts like inflators, cushions, brackets, and covers are not produced or sold individually outside of OEM channels.
- Counterfeit parts are often sold online. These can be found across eCommerce sites, social media, and direct-to-consumer platforms.

Slide 30

- Photo collage of commerce websites selling auto parts and social media postings.

Slide 31

- Agenda 5 – Resources & Support

Slide 32

- Avoid a criminal case, Tennessee code section 55-9-108
- Website image of the Tennessee Code of Motor Vehicle Regulations, section 55-9-108, Airbags.

Slide 33: State Legislation

- State counterfeit airbag laws – image of a US map showing all but 11 states with counterfeit airbag laws.
- Model legislation – A person shall not knowingly and intentionally manufacture, import, install, reinstall, distribute, sell, or offer for sale any device intended to replace a

supplemental restraint system component in any motor vehicle if the device is a counterfeit supplemental restraint system component or a nonfunctioning airbag, or does not meet federal safety requirements as provided in Section 571.208 of Title 49 of the Code of Federal Regulations.

A person shall not knowingly and intentionally sell, install, or reinstall in a vehicle, any device that causes the vehicle's diagnostic systems to fail to warn when the vehicle is equipped with a counterfeit supplemental restraint system component or nonfunctioning airbag, or when no airbag is installed.

Slide 34: Every Type of Part is Counterfeited

- A2C2 – Automotive Anti-Counterfeiting Council, www.A2C2.com/awareness
- Our mission: Collaboration among automakers and their partners that strives to eliminate counterfeit automotive components that could harm US consumers.
- Diagram detailing the following common counterfeit parts on a vehicle: Glass, airbags, body and structural, keys, suspension systems, wheels, engine and drivetrain, brakes, grills, and headlights and taillights.

Slide 35

- Partners: Ford, GM, Honda, Hyundai, Kia, Mercedes, Nissan, Stellantis, Subaru, Toyota, and Volkswagen.
- <https://www.a2c2.com> for more information and resources.

Slide 36

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Slide 37

Q & A