

ford fusion crash test

ford fusion crash test results have been a significant factor in evaluating the safety and reliability of this popular midsize sedan. Over the years, the Ford Fusion has undergone numerous rigorous crash tests conducted by prominent safety organizations such as the National Highway Traffic Safety Administration (NHTSA) and the Insurance Institute for Highway Safety (IIHS). These tests assess various aspects of vehicle safety, including frontal crash, side-impact, rollover resistance, and the effectiveness of safety features. Understanding the outcomes of these crash tests helps consumers make informed decisions when considering the Ford Fusion as a family or commuter vehicle. This article provides a comprehensive overview of the Ford Fusion crash test performance, safety ratings, and the specific safety technologies that contribute to its crashworthiness. Readers will also find detailed insights into how the Ford Fusion compares to competitors in crash safety and what improvements have been made over different model years.

- Overview of Ford Fusion Crash Test Ratings
- Frontal and Side Impact Crash Tests
- Rollover Resistance and Roof Strength
- Safety Features Enhancing Crash Performance
- Comparison with Competitors in Crash Safety

Overview of Ford Fusion Crash Test Ratings

The Ford Fusion has consistently received favorable crash test ratings from leading safety organizations. These ratings reflect the vehicle's structural integrity, restraint systems, and occupant protection capabilities during various collision scenarios. The NHTSA assigns a 5-star safety rating to many Ford Fusion model years, indicating excellent protection against crashes. Similarly, the IIHS has awarded the Fusion with top marks in several categories, including good ratings in moderate overlap front, side, roof strength, and head restraint tests. These ratings demonstrate the Fusion's robust design and commitment to occupant safety, factors that are crucial for buyers prioritizing crashworthiness in a midsize sedan.

National Highway Traffic Safety Administration (NHTSA) Ratings

The NHTSA evaluates vehicles based on frontal crash, side crash, and rollover resistance tests. The Ford Fusion models, especially those manufactured after 2013, typically achieve an overall 5-star rating, the highest possible from NHTSA. This includes 5 stars in frontal driver and passenger crash tests and side-impact evaluations. The rollover rating, which measures the likelihood of a vehicle rolling over during sharp maneuvers, generally ranges between 4 to 4.5 stars for the Fusion,

indicating solid stability and control.

Insurance Institute for Highway Safety (IIHS) Ratings

The IIHS conducts a series of rigorous tests such as moderate overlap front, small overlap front, side impact, roof strength, and head restraint evaluations. The Ford Fusion has earned "Good" ratings, the highest rating from IIHS, in most of these categories. Notably, some model years have received the IIHS Top Safety Pick award, highlighting exceptional crash protection and preventive safety features. The small overlap front test, a challenging evaluation simulating a collision with a narrow object like a tree or pole, has seen the Fusion perform well, reflecting the vehicle's strong front-end design.

Frontal and Side Impact Crash Tests

Frontal and side impact crash tests are critical in assessing how well a vehicle protects occupants in common accident scenarios. The Ford Fusion's structure and restraint systems have been engineered to absorb and redirect crash forces effectively, minimizing injury risks to passengers.

Frontal Impact Performance

During frontal crash tests, the Ford Fusion's crumple zones are designed to deform progressively, absorbing kinetic energy and reducing the force transmitted to the cabin. Airbags, including front, side, and knee airbags, deploy strategically to cushion occupants and prevent contact with hard surfaces. The seat belts equipped with pretensioners and load limiters further enhance occupant restraint. These features contribute to the Fusion's high frontal crash safety ratings from both the NHTSA and IIHS.

Side Impact Protection

Side impact tests evaluate the vehicle's ability to protect occupants from collisions occurring from the vehicle's side, a particularly dangerous type of crash due to limited space between occupants and the point of impact. The Ford Fusion employs reinforced door beams and side airbags to shield passengers. The side curtain airbags extend protection to rear-seat occupants as well, reducing the risk of head injuries. Results from IIHS side impact tests show that the Fusion provides excellent protection for both front and rear passengers in side collisions.

Rollover Resistance and Roof Strength

Rollover accidents, though less frequent than frontal collisions, often result in severe injuries. The Ford Fusion has been tested extensively to ensure it offers strong rollover resistance and roof integrity during such incidents.

Rollover Resistance Ratings

The NHTSA rollover resistance test measures the likelihood of rollover during sharp steering maneuvers or loss of control. The Ford Fusion typically scores between 4 and 4.5 stars out of 5, which indicates a relatively low risk of rollover compared to many other midsize sedans. This is attributed to the Fusion's balanced weight distribution and advanced suspension system, which improve vehicle stability.

Roof Strength Evaluation

Roof strength tests assess how well the vehicle's roof can withstand impact forces in a rollover scenario, protecting occupants from roof collapse. The IIHS rates the Fusion's roof strength as "Good," which means the roof can support a force at least four times the vehicle's weight. This high rating further assures passengers of excellent protection in rollover crashes.

Safety Features Enhancing Crash Performance

The Ford Fusion incorporates a suite of advanced safety technologies designed to prevent accidents and protect occupants during collisions. These features play a significant role in the vehicle's strong crash test performance.

- **Pre-Collision Assist with Automatic Emergency Braking:** Detects potential frontal collisions and automatically applies brakes to mitigate or avoid impact.
- **Blind Spot Information System (BLIS):** Alerts drivers to vehicles in their blind spots, reducing side collision risk.
- **Lane-Keeping System:** Helps prevent unintentional lane departures, enhancing driver control and safety.
- **Adaptive Cruise Control:** Maintains safe following distances, reducing rear-end collisions.
- **Rear View Camera and Parking Sensors:** Assist with safe maneuvering, reducing low-speed collision risks.

These technologies complement the structural safety of the Fusion, contributing to superior crash test outcomes and overall safety ratings.

Comparison with Competitors in Crash Safety

When compared to other midsize sedans in its class, the Ford Fusion ranks highly in crash safety thanks to its strong structural design and comprehensive safety features. Competitors such as the Toyota Camry, Honda Accord, and Hyundai Sonata also perform well in crash tests, but the Fusion's

consistent 5-star NHTSA ratings and multiple IIHS Top Safety Pick awards make it a standout choice for safety-conscious buyers.

Strengths Relative to Competitors

The Ford Fusion's strong suit lies in its balanced combination of high crash test scores and availability of advanced driver-assistance technologies across various trim levels. Its roof strength and side-impact protection ratings are among the top in the segment, providing an edge in rollover and side collision safety.

Areas for Consideration

While the Fusion generally excels, some competitors offer newer or more comprehensive active safety packs as standard equipment in base models, which could influence buyer preferences. Nonetheless, the Fusion's overall crash test results remain competitive and reassuring.

Frequently Asked Questions

What are the overall safety ratings of the Ford Fusion in crash tests?

The Ford Fusion has generally received good overall safety ratings in crash tests conducted by the IIHS and NHTSA, often earning top marks for front, side, and rollover protection.

How does the Ford Fusion perform in frontal crash tests?

In frontal crash tests, the Ford Fusion typically performs well, with strong occupant protection and well-designed crumple zones that absorb impact energy effectively.

Are there any common safety concerns highlighted in Ford Fusion crash tests?

While the Ford Fusion generally scores well, some model years have shown concerns with rear crash protection or lower ratings for head restraints and seats in certain tests.

Has the Ford Fusion received any awards for crash safety?

Yes, several Ford Fusion model years have received Top Safety Pick awards from the Insurance Institute for Highway Safety (IIHS) due to their excellent crashworthiness and advanced safety features.

What safety features contribute to the Ford Fusion's crash test

performance?

Safety features such as multiple airbags, electronic stability control, anti-lock brakes, and available advanced driver assistance systems like automatic emergency braking contribute to the Ford Fusion's strong crash test performance.

How do newer Ford Fusion models compare to older ones in crash tests?

Newer Ford Fusion models tend to have improved crash test results due to advancements in vehicle structure, safety technology, and incorporation of active safety features compared to older models.

Additional Resources

1. *Ford Fusion Crash Test Analysis: Safety Features and Impact*

This book provides an in-depth examination of the Ford Fusion's crash test results, focusing on the vehicle's safety features and how they perform under various impact scenarios. It explores the engineering behind the car's design to protect occupants, including airbags, crumple zones, and structural integrity. The analysis is supported by data from official crash test organizations and real-world accident case studies.

2. *Understanding Vehicle Safety: The Ford Fusion Case Study*

A comprehensive guide to vehicle safety principles, this book uses the Ford Fusion as a primary example to explain crash dynamics and occupant protection. It covers the methodologies used in crash testing, interpreting safety ratings, and the evolution of safety technology in mid-sized sedans. Readers gain insights into how crash tests influence automotive design and consumer safety standards.

3. *Crash Test Engineering: Innovations in the Ford Fusion*

This title delves into the engineering breakthroughs that have enhanced the Ford Fusion's crashworthiness. It highlights innovations such as advanced material use, sensor integration, and computer simulations that improve crash outcomes. The book is ideal for automotive engineers and safety enthusiasts interested in the technical aspects of crash test development.

4. *Ford Fusion Safety Ratings: What You Need to Know*

Focusing on the safety ratings assigned to the Ford Fusion by agencies like IIHS and NHTSA, this book explains the criteria behind each rating category. It discusses how these ratings are determined through various crash tests, including frontal, side, and rollover tests. The book also provides guidance for consumers on interpreting these ratings when choosing a vehicle.

5. *Impact of Crash Tests on Ford Fusion Design Evolution*

This book traces the history of the Ford Fusion's design changes driven by crash test feedback and evolving safety regulations. It examines how each generation of the Fusion has improved occupant protection and crash survivability. The narrative includes interviews with Ford designers and engineers who contributed to the vehicle's safety evolution.

6. *Real-World Crashes and the Ford Fusion: Lessons Learned*

Exploring real-world accident data, this book compares crash test results with actual crash outcomes involving the Ford Fusion. It identifies patterns and lessons that have helped improve

vehicle safety and emergency response protocols. The book also discusses the limitations of crash tests and the importance of ongoing data collection.

7. Automotive Crash Testing: Techniques and Ford Fusion Insights

This technical guide covers the various crash testing techniques used in the automotive industry, with detailed examples from the Ford Fusion tests. It explains test setups, instrumentation, data collection, and analysis methods. The book is designed for students and professionals seeking a thorough understanding of crash testing procedures.

8. Consumer Guide to Ford Fusion Safety and Crash Test Performance

A user-friendly guide aimed at car buyers, this book summarizes the Ford Fusion's crash test performance and safety features in clear, accessible language. It offers tips on what to look for in a safe vehicle and how to use crash test reports to make informed decisions. The guide also compares the Fusion with competitors in the same class.

9. Future Trends in Vehicle Safety: Insights from Ford Fusion Crash Tests

Looking ahead, this book discusses emerging trends in vehicle safety technology inspired by findings from Ford Fusion crash tests. Topics include autonomous emergency braking, advanced driver assistance systems, and materials science innovations. The author speculates on how these advancements will shape the future of automotive safety standards.

Ford Fusion Crash Test

Ford Fusion Crash Test

Related Articles

- [ford transit 2015 fuse box diagram](#)
- [ford focus 2012 manual](#)
- [ford focus 2014 fuse box diagram](#)

[Back to Home](#)