# Firestone's Tire Recall

# INTRODUCTION

Harvey Firestone founded the Firestone Tire & Rubber Company in 1900 in Akron, Ohio. Firestone's long relationship with Ford Motor Company began 1906, when Henry Ford bought 2,000 sets of tires from Harvey Firestone. Since that initial transaction, both companies have grown and become major players in their industries. Firestone, now part of Bridgestone Americas, supplies tires for passenger vehicles, light trucks, commercial vehicles, off road vehicles, motorcycles, and agricultural vehicles. Ford is a global auto manufacturer and owns many well-known automotive brands including Ford, Mercury, Lincoln, and Volvo.

Firestone, despite growth over the past century, has faced more turbulence than Ford. In 1978, Firestone recalled 14.5 million tires—the largest tire recall in history— because the excess application of the adhesive that binds the rubber and steel had caused 500 tread separations and blowouts. Firestone paid a \$500,000 fine for concealing safety problems. This recall weakened the financial position of the company and resulted in the merger with Bridgestone USA, Inc., a subsidiary of Tokyo-based Bridgestone Corporation in 1990 for \$2.6 billion. Bridgestone successfully restored the struggling company back to profitability, but Firestone's tire recall problems were not over.

Recalls have been a major issue for the tire industry. In 1980, Uniroyal recalled almost 2 million tires because of tread separation. B.F. Goodrich recalled 1 million tires in 1974 because of improper inflation and installation. Kelly-Springfield faced a recall in 1976 when 300,000 tires were recalled because of tread separation. General Tire recalled 187,000 tires on in 1979 because of exposed belt wire. Cooper Tire & Rubber recalled more than 156,000 tires in 1988, because of bead flaw. In 1998 Kelly-Springfield recalled more than 500,000 tires because of sidewall cracking. The number of recalls indicates that tire failures have been an industry-wide problem for more than 25 years.

# **EARLY WARNING SIGNS**

In July 1998, Sam Boyden, an associate research administrator for State Farm Insurance, received a phone call from a claims handler asking him to investigate cases of Firestone tire tread failure. He discovered 20 cases dating back to 1992. A car fanatic, Boyden recognized this was more than a coincidence. He sent an email advising the National Highway Traffic Safety Administration (NHTSA) of his findings. NHTSA thanked Boyden but did not act on the information until early 2000.

In January 2000, Anna Werner, a reporter for KHOU-TV in Houston, and two colleagues researched accidents caused by tire tread separation in Texas after an attorney mentioned the issue. Based on the results of their investigation, the television station aired a nine-minute segment. Werner also reported her findings to Joan Claybrook, a former chief of the NHTSA. In the weeks that followed the airing of the story, KHOU was flooded with calls from citizens who wanted to relate their own stories of Firestone tire failures, most of them on Ford Explorer sport-utility vehicles (SUVs). KHOU eventually began directing the calls to NHTSA.

Despite the flow of information from Sam Boyden and KHOU, NHTSA was slow to take action. In early March, investigators Steve Beretzky and Rob Wahl found 22 complaints of tread separation that they marked for "initial evaluation." Between March and May, the number of complaints skyrocketed. On May 2, three senior NHTSA officials increased the status of the inquiry to "preliminary investigation." Within six days, NHTSA requested that Firestone supply production data and complaint files, which the company provided on July 27 and sent a copy to Ford the following day.

Sean Kane, a former employee of the Center for Auto Safety, also tried to alert the NHTSA of the problems. Kane, who founded Strategic Safety, a research group interested in product-liability issues, received an email in late July from a Venezuelan source who disclosed Ford's tirereplacement program there. Ford had recalled the tires, without Firestone's backing, because of problems with tread separation and mislabeled products dating back to 1998. Ford had discovered defect rates from the Valencia, Venezuela, plant that were 1,000 times higher than from the Decatur, Illinois, plant. On August 1, Strategic Safety, along with the political action group Public Citizen, issued a press release asking Ford for a vehicle recall.

After Ford received Firestone's report, the company immediately began analyzing the data. Of the 2,498 complaints logged on tire failure, 81 percent involved the 15-inch P235/75R15 models. When tread separation was considered, 84 percent of some 1,699 complaints involved Ford's Explorer, Bronco, Ranger, or F-150 SUVs and trucks. Ford relayed the results to Firestone, and representatives from the two companies met in Dearborn, Michigan, to discuss the issue on August 5. By this time, NHTSA was investigating 21 deaths that were possibly related to tread separation on Firestone tires. One of the deaths was civil-rights leader Earl Shinhoster, who was killed while riding in a Ford Explorer which crashed on June 11, 2000, while part of a motorcade accompanying the first lady of Nigeria, Jewel Howard-Taylor. Within days, the investigation had grown to include 46 possible deaths, and Ford and Bridgestone/Firestone met with NHTSA officials to discuss a plan of action.

### THE RECALL

On August 9, 2000, Firestone and Ford issued a recall of 6.5 million tires. The recall included 3.8 million P235/75R15 radial ATX and ATXII tires and 2.7 million Wilderness AT tires, all manufactured in Firestone's Illinois plant. Firestone organized the official recall by state, giving priority to Arizona, California, Florida, and Texas, where the greatest percentage of casualties had occurred. Based on NHTSA data, Florida and Texas each accounted for 22 percent of the complaints, followed by California with 20 percent and Arizona with 5 percent. This first phase of the recall was expected to be complete by October 2000. The second phase, involving Alabama, Georgia, Louisiana, Mississippi, Nevada, Oklahoma, and Tennessee, was expected to be concluded by the end of 2000. Firestone announced that the recall in all remaining states would be complete by the end of 2001. The recall was 90 percent complete in late December 2000.

Firestone issued letters to all affected customers detailing the procedure for replacement. Customers affected by the recall could take their tires to Firestone retailers, Ford dealerships, or other tire retail outlets and expect a similar Firestone tire or equivalent competitor's model. In addition to the tire cost, the replacement included mounting and balancing fees. If replacements had been purchased before the official recall, customers who provided a receipt would be issued a reimbursement up to \$100 per tire. Ford also began testing other brands on the Explorer and identified 34 acceptable replacements.

Both companies ran advertisements and public information announcements to inform consumers how to determine whether their tires were included in the recall. Consumers could call a toll-free number if they had questions about tire models or eligibility. Despite Firestone's gradual plan, Ford encouraged all concerned motorists included in the recall, regardless of their location, to replace questionable tires immediately and, if necessary, to save the receipts for later reimbursement. Consumers not directly included in the recall could purchase new Firestone tires based on a credit system determined by the age and wear of their current tires.

After continued investigations, NHTSA encouraged Firestone to expand the recall to other sizes and models of tires, but Firestone declined. On September 1, NHTSA issued a consumer advisory to warn of potential problems with other Firestone tires, including ATXP205/75R15 tires on Chevy Blazers and ATX 31X10.50R15LT tires on 1991 through 1994 Nissan pickups, as well as other sizes of ATX, Firehawk ATX, ATX23 Degree, Widetrack Radial Baja, and Wilderness AT tires—mostly those originating from the Illinois factory. Because these tires were not included in the official recall, replacements were not free. NHTSA suggested that consumers save receipts in the event that Firestone increased the depth of the recall. Included in this advisory was a list of precautionary measures for consumers to help avoid tire failure.

#### FIRESTONE'S RESPONSE TO THE CRISIS

Firestone worked hard to meet the needs of their customers during the recall. Firestone began receiving tires from its parent company's plant in Japan on August 23 and expected between 325,000 and 350,000 to arrive by September 1. Bridgestone planned to send at least one shipment per day until the recall was complete. Firestone's U.S. factories doubled the number of tire molds in use and increased production by 7,000 tires per day. The company also successfully negotiated with union officials to avoid a potentially disruptive strike by the United Steelworkers of America that would have affected production at nine of eleven U.S. plants.

However, investigations revealed that the company knew the risks associated with the tires and ignored the information and even tried to hide the problems. During Senate hearings about the growing number of complaints and accidents, evidence surfaced that the company had known about potential tread separation problems dating back to 1994. The company admitted it had increased production during this time in order to dilute the failure rate. Additionally, company officials stated that they did not investigate further because failure rates as determined by warranty claims had not demonstrated significant patterns. Federal investigators were also unable to find Firestone's 1996 tire testing data.

Bridgestone/Firestone officials accepted full responsibility and admitted the company had made "bad tires." Masatoshi Ono stepped down as CEO, and was replaced by former Executive Vice President John Lampe.

### FORD'S RESPONSE TO THE CRISIS

Ford created a 500-person crisis-management team to devise creative tactics to speed the recall procedure. The company also increased the staff monitoring its help line from 300 to 800 employees and kept it open 24 hours a day.

Ford closed new car production plants for three weeks so that all available tires could replace recalled tires. The company continued to pay the 6,000 workers from the three closed plants,

putting many of them to work distributing replacement tires to dispersal outlets. Ford also approached other tire manufacturers to request that they increase production of replacement tires and purchased tire molds of Firestone competitors to enable the entire industry to produce a greater quantity of replacement tires.

Additionally, the company redesigned the 2002 Ford Explorer and included many adjustments that made the vehicle less likely to roll over or place too much pressure on the tires.

## WHICH COMPANY WAS RESPONSIBLE?

The matter of fault was a much debated issue in this recall. When Ford analyzed Firestone's data, the auto maker noticed ten times more complaints stemming from tires originating in Firestone's Decatur factory, specifically tires made in 1994 and 1995. In particular, questions have arisen about the skill of replacement workers who filled in at the Decatur factory during a two-year strike. Some have suggested that quality inspections were compromised as tires piled up on the factory floor and that old, dried rubber was used in production when employees returned from the strike.

One factor under consideration was the quality of the Decatur facility itself. Constructed in 1942, the building was used to store telecommunications equipment for the United States Armed Forces for 19 years before being purchased by Firestone. The Decatur plant was insufficiently airconditioned and therefore may have had a high humidity level, which decreases the adhesive properties required to bind rubber to steel. This effect became apparent when tires produced during the low-humidity winters were of higher quality than those produced during the more humid summer months.

Another contributing issue may have been the age and condition of the equipment used to mix raw materials and press steel together. In addition, the plant's vulcanization process, which uses heat and pressure to unite the rubber fragments into one product, was suspected of having had temperature-control problems, which can result in poor tire quality.

It appeared that Firestone was aware of the problem; in 1998, the company changed the design of their SUV tires, addressing the exact problem with the recalled tires. However, the company says the changes were part of a continuous improvement process and not intended to specifically fix the tread problem.

Although many people were quick to point a blaming finger at Firestone, others believed that Ford should share responsibility for the tire separations and rollover accidents. Ford initially recommended a low tire pressure of 26 psi for two reasons. First, lower tire pressure compensates for the stiff suspension and thus produces a softer ride. Second, the Explorer was designed with a high center of gravity and short wheelbase—traits associated with high rollover frequency— and flatter tires help the vehicle grip the road. Underinflated tires are problematic, however, because they have greater surface area in contact with the road, which creates more wear and more flexible sidewalls, ultimately leading to overheated tires. Moreover, low tire pressure results in diminished steering and responsiveness, which increased the likelihood that an Explorer driver could roll over because of overcorrecting or making sudden maneuvers.

Additionally, Ford was aware of the increased risks associated with the tires. During product development, a consumer group tested the Ford Explorer, and Ford's engineers found that the vehicle did worse with P235 tires than with P225 tires, but the company chose the P235 despite the additional risk.

After the tire tread separation issue came to light, Ford requested that Firestone complete tests to determine whether there was a problem in the specific combination of Ford Explorers and Firestone tires. These tests, completed in Arizona in late February and early March, involved 243 heavily worn tires from 63 Explorers. No problems were discovered at that time, and both companies dropped the issue.

Firestone and Ford end their business relationship in 2001 because of the disagreement over the recall. John T. Lampe, chairman and CEO of Firestone, sent Jacques Nasser, CEO of Ford, a letter that read, "We believe you are attempting to divert scrutiny of your vehicle by casting doubt on the quality of Firestone tires." In response, Ford recalled another 13 million Firestone tires not covered in the recall, citing concerns over quality.

In 2002, the National Highway Traffic Safety Administration found that Firestone was responsible for the tire separation. In 2005, Firestone paid \$240 million to Ford to settle the dispute.

### LEGAL AND FINANCIAL IMPLICATIONS FOR FORD AND FIRESTONE

For Bridgestone/Firestone, the financial implications of the recall have been devastating. Although the company attempted to isolate perception of the problem as involving only certain tires made in one Illinois plant, it encountered difficulty maintaining an image of overall quality for its products. A Harris poll that asked, "How likely is it that this tire recall would influence your decision to purchase a Firestone product?" found that 67 percent of 814 people responded "extremely to very likely." An additional 18 percent responded "somewhat likely." After the recall announcement, the company's stock price dropped 47 percent in just one month, and sales decreased almost 30 percent from the previous year. Firestone reported a \$750 million loss in 2000.

Although Ford suffered less than Firestone, its image and stock price were harmed. Although Ford was not directly liable for the recall costs, it is subject to private lawsuits and criminal charges for the thousands of complaints, 700 injuries, and 271 deaths in the United States. In addition, the Venezuelan government and its consumer protection agency pursued Ford concerning 46 deaths in Venezuela that involved Explorers. In the same poll mentioned above, 25 percent of respondents said the tire recall was "extremely or very likely" to influence their decision to purchase a Ford product, while 22 percent said the recall was "somewhat likely" to influence their decision. Ford attempted to focus the problem on Firestone by insisting that it was a "tire issue" not a "vehicle issue." Nonetheless, Ford's stock price dropped 18 percent in the month after the recall announcement, partially as a result of decreased consumer confidence. Ford spent over \$3 billion on replacing 13 million tires that Firestone did not include in the recall and suspending production in 2001. That year, Ford announced its first loss in nine years and cut over 35,000 jobs as part of a restructuring plan.

Both companies faced an estimated 300 lawsuits stemming from the deaths and injuries resulting from tread-separation incidents, including one related to the death of civil-rights leader Shinhoster. Firestone settled the first of these suits out of court for \$7.85 million in 2001. Ford, which also was named in that suit, settled for \$6 million. Most of the other suits were also settled out of court with confidential agreements. On November 8, 2001, Bridgestone/Firestone settled lawsuits brought by 53 U.S. states and territories, agreeing to pay \$500,000 to each plus \$10 million in attorneys' fees and \$5 million to fund a consumer education campaign. As part of the settlement, the company also agreed to review previously denied claims for reimbursement for replacement tires from competitors. Although the company said it strongly disagreed with many of the states' claims and did not admit to any wrongdoing, CEO John Lampe said, "we believe that significant portions of the

settlement, such as those related to consumer education, are very much in line with the company's own initiatives."

### THE IMPACT

Many other firms were affected by the recall, including tire distributors nationwide. Many large retailers took a proactive stance and removed Firestone brands from their sales floors. Sears made the decision to remove Firestone tires even before the recall was officially announced. Sears, National Tire and Battery, and other retailers fully refunded customers who had purchased recalled tires and included the mounting and balancing costs if replacements were purchased. Many small retail operations that focused exclusively on Firestone tires changed their names and expanded or altered their product lines to avoid going bankrupt.

The recall affected competing tire manufacturers as well. Goodyear, Michelin, and other firms helped ease the recall effort by increasing their own production to reduce the tire shortage caused by so many consumers seeking replacements. However, many consumers speculate on possible gains made by competitors because of the crisis. Goodyear, which spent an extra \$1 million on television and radio promotions, full-page newspaper ads, and banner ads on Yahoo! and AOL, stated that its promotion increases were "in specific response to the recall, but done with good taste." Michelin continued its normal advertising plans, which happened to coincide with the recall news. Before the crisis, each tire company had a brand image it hoped to promote: Goodyear produced reliable tires; Michelin produced safe tires; and Firestone made high-performance tires. Those perceptions help customers associate desired benefits with the companies that provide them.

In addition to the financial and legal implications for Ford and Firestone, the problems and subsequent recall continue affect the government, regulatory agencies, and other businesses. Many suggestions have been raised at the organizational, industry, and national levels. These include implementing a nylon layer, or cap, to brace the tire and reduce the risks of separation and creating stricter quality-inspection procedures and requirements within the individual companies. On an industry level, it has been suggested that tires pass more rigorous testing by nonbiased parties. Currently, consumers can research all aspects of car quality except tires. Creating consumer reports on tire durability, traction, strength, and other important traits has been suggested.

In 2000 the Senate passed a bill that would hold executives criminally liable for withholding information on foreign recalls or defective products that result in death. The charge would be second-degree murder with a punishment up to 15 years in prison for selling unsafe merchandise. Additionally, the Tread Act was proposed on September 14, 2000, to improve consumer protection and increase communication between the government, tire manufacturers, and motor vehicle companies.

# LEARNING FROM PAST MISTAKES

In 2006, Firestone voluntarily reissued the recall out of concern that spare tires and other forgotten tires were not traded in during the original recall. Many recent accidents in older Fold Explorers occurred because of tread issues on the spare tires. Experts estimated that over 200,000 tires remained unreturned even though 6.3 million tires were replaced. The spares were of special concern because they are located underneath the cars where owners would have to make an effort to read the tire information.

Bridgestone/Firestone also sponsors tiresafety.com, a website with information about how to maintain tires, replace tires, and increase driver safety.

The National Highway Traffic Safety Administration now says 101 people died in crashes involving tread separation on Firestone tires between 1992 and 1999. In addition, there were more than 400 injuries and 2,226 complaints.

#### QUESTIONS

- 1. To what extent do companies need to make a proactive effort to collect and analyze data concerning possible safety issues?
- 2. What mistakes did Ford, Firestone, and the NHTSA each make in early attempts to handle the crisis?
- 3. What possible ethical implications are involved in accepting responsibility versus blaming others?
- 4. Suggest measures that Firestone could take to improve tire quality in the future.

Sources for 2011 Update:

"Congress Grills Ford, Firestone Over Tire Tests," ABC News, September 21, 2000, http://abcnews.go.com/US/story?id=95685&page=1 (accessed January 19, 2011).

John Greenwald, Inside the Ford/Firestone Fight, Time, May 29 2001,

http://www.time.com/time/business/article/0,8599,128198,00.html (accessed January 19, 2011).

Drew Griffin and James Polk, "Firestone tires recall linked to recent deaths," CNN, July 21, 2006,

http://www.cnn.com/2006/AUTOS/07/21/firestone\_recall/index.html (accessed January 19, 2011).

Ashley Terry, "Racalls and rebounds," Global Regina, August 9, 2010,

http://www.globalregina.com/Recalls+rebounds/2542105/story.html (accessed January 19, 2011).

"Text of Letter to Ford From Bridgestone," New York Times, May 22, 2001,

http://query.nytimes.com/gst/fullpage.html?res=9B05EEDE153DF931A15756C0A9679C8B63&n=Top/Reference/Times%20Topics/Subjects/L/Liability%20For%20Products (accessed January 19, 2011).

TireSafety.com, sponsored by Bridgestone and Firestone, http://www.tiresafety.com (accessed January 19, 2011).

Sources for Previous Editions:

Timothy Aeppel, "Firestone Milestone Brings on Dilemma," Wall Street Journal, Aug. 18, 2000, p. B8.

Bridgestone/Firstone, http://www.firestone.com (accessed Aug. 30, 2001 and Apr. 16, 2003).

"Bridgestone-Firestone and Ford on Trial," CBS News, Jan. 6, 2003,

http://www.cbsnews.com/stories/2003/01/07/national/main535494.shtml (accessed Apr. 16, 2003).

Lauren Comander, "Firestone Tires Shipped from Japan to Boost Supply," Chicago Tribune, Aug. 23, 2000, pp. 1, 2.

"Consumer Advisory: Potentially Dangerous Tires," Fox Market Wire, Sep. 1, 2000, http://www.foxmarketwire.com/090100/tiredeaths\_list.sml.

Claudia H. Deutsch, "Where Rubber Meets the Road.

Recall of Firestone Tires Is Aimed at Damage Control," New York Times, Aug. 10, 2000, http://archives.nytimes.com.

"Firestone Reaches Agreement with State Attorneys General," Bridgestone/Firestone, press release, Nov. 8, 2001,

http://www.bridgestone-firestone.com/news/mediacenter/news/011108a.html.

"Ford, Firestone Settle Rollover Suit," CBS News, July 16, 2002,

http://www.cbsnews.com/stories/2002/07/16/national/main515326.shtml.

Melita Marie Garza, Lauren Comander, and Patrick Cole, "Problems at Tire Plant Alleged," Chicago Tribune, Aug. 20, 2000, pp. 1, 10.

Milo Geyelin and Timoty Aeppel, "For Firestone, Tire Trial Is Mixed Victory," Wall Street Journal, Aug. 27, 2001, pp. A3, A4.

Lori Grant, "More Retailers Pull 3 Firestone Tires from Stock," USA Today, Aug. 7, 2000, p. 1B.

James R. Healey, "What You Don't Know About Your Tires," USA Today, Aug. 11, 2000, p. B1.

David Kiley, "Bridgestone Exec Will Speak to Congress," Fort Collins Coloradoan, Aug. 30, 2000, p. D7.

Kathryn Kranhold and Erin White, "The Perils and Potential Rewards of Crisis Management for Firestone," Wall Street Journal, Sep. 8, 2000, pp. B1, B4.

Robert Guy Matthews, "How the Rubber Meets the Road," Wall Street Journal, Sep. 8, 2000, pp. B1, B4.

Stephen Power, "Update Needed for Tire Rules, Activists Argue," Wall Street Journal, Sep. 8, 20000, pp. B1, B4.

Stephen Power and Clare Ansberry, "Bridgestone/Firestone Says It Made 'Bad Tires'," Wall Street Journal, Sep. 13, 2000, pp. A3, A6.

Robert L. Simison, "For Ford CEO Nasser, Damage Control Is the New 'Job One'," Wall Street Journal, Sep. 11, 2000, pp. A1, A8.

Calvin Sims, "A Takeover with Problems for Japanese Tire Maker," *New York Times,* Aug. 10, 2000, http://archives.nytimes.com. Devon Spurgeon, "State Farm Researcher's Sleuthing Helped Prompt Firestone Recall," *Wall Street Journal,* Sep. 1, 2000, pp. B1, B6. Jason Szip, "Firestone's Japanese Parent Hit Again," *Fox Market Wire,* Sep. 1, 2000,

http://foxmarketwire.com/090100/tirestrike\_side2.sml.

Lawrence Viele, "Ford, Bridgestone Testimony Sought," *Beacon Journal*, Feb. 27, 2003, http://www.ohio.com/mld/ohio/5274001.htm. Bill Vlasic, "Anatomy of a Crisis," *Fort Collins Coloradoan*, Sep. 4, 2000, pp. C1, C2.