

ODI has monitored its VOQ database since the closing of PE00–040. This review has shown that over time, the monthly rate of Steeltex VOQs received by ODI has continually declined since the initial three-month peak that led to the opening of PE00–040. We note that the Petitioners have consistently overstated the contents of the ODI database by applying over-broad search criteria and then failing to properly identify relevant VOQs.

In order to obtain more relevant data, ODI contacted Firestone for its claims data, which it provided irrespective of whether the claim was paid. Firestone also provided warranty, personal injury, and lawsuit data through the end of 2002. ODI's analysis of this data is described in the Firestone Data section of this report.

Third Allegation: All Steeltex Tires Are Defective

The Petitioners allege that all of the subject Steeltex tires contain a safety-related defect. As evidence of this they have cited expert examination of some failed tires, information from an anonymous source regarding a Firestone cost reduction program, and alleged similarities between the Steeltex tires and the Wilderness AT tires, some of which were previously recalled by Firestone.

One of the Petitioners' consultants examined failed tires from a model year 1999 Class C motorhome belonging to the lead plaintiff in the class action lawsuit. This vehicle experienced tread separations on four of its six original tires over a one-year period. All were Steeltex R4S LT225/75R16 E tires manufactured at Firestone's Decatur, Illinois plant in 1998. The consultant identified the presence of brassy cords in the steel belts of the failed tires as evidence that they were improperly manufactured. The Petitioners provided a dissected exemplar tire from the same vehicle for ODI's examination, citing evidence of brassy cords and belt edge separation.

ODI did observe some evidence of brassy cords and localized belt edge separation in the tire presented by the Petitioners. However, ODI notes that some degree of brassy cords is not necessarily evidence of a rubber-wire adhesion defect. Moreover, the presence of moderate belt edge separation is not unusual in a steel belted radial tire that has been removed from service, and must be evaluated in the context of the tire use conditions and remaining tread. It is noteworthy that ODI's extensive investigation of the Firestone ATX and Wilderness AT tires did not find any evidence of a rubber-wire adhesion

defect in those tires. The failure mechanism in the ATX and Wilderness AT tires was a cohesive failure (fatigue crack growth) through the rubber between the steel belts.⁴

In a letter dated April 26, 2003, the Petitioners submitted a copy of an anonymous letter to ODI with documents attached relating to a Firestone cost reduction initiative known as C95 that was launched in 1994 or 1995. The letter states that the intent of C95 was to obtain cost reductions without sacrificing performance and quality but that over time a negative effect on quality became evident in the warranty data. According to the letter, warranty rates of 0.5% or higher in individual tires (by factory and product code) should be cause for serious concern.

ODI has reviewed the anonymous letter and attached C95 documents submitted by the Petitioners. The second attachment is a 17-page document listing a number of changes to consider for corporate-wide implementation. The document does not relate specifically to the Steeltex tires. Firestone has stated that most of the items on the list were never implemented. While the changes that were considered include some items that could affect tire durability, the document is not in and of itself proof of a tire defect. The effect of the changes that were implemented in the Steeltex tires can ultimately be measured only by failure-related data. To that extent, ODI agrees with the author of the anonymous letter that such an analysis must be done separately on specific products and assembly plants. The only data that allow that type of analysis are the Firestone adjustments and claims.

ODI's analysis of Firestone's tread separation warranty adjustment data found that collectively the Steeltex tire tread separation adjustment rate is 0.04%. ODI also analyzed over 250 different combinations of individual tire product codes, plants, and production years and identified only one population of tires with a tread separation adjustment rate greater than 0.5%—the level of concern advanced in the anonymous letter.⁵ The adjustment rate for this tire was 0.56% for tires produced in 1993, fell to 0.09% in 1994, and remained below 0.1% through 2002 production. The majority of subject

Steeltex tires analyzed by ODI have tread separation adjustment rates that are less than 0.1%. Only a few tires have rates that are above 0.25%—half of the 0.5% figure mentioned above.

The Petitioners have alleged to ODI that the subject Steeltex tires are similar in construction and failure mechanism to the Wilderness AT tires investigated by ODI in EA00–023. The Petitioners have not identified any specific aspects of the designs that are similar. Moreover, the Wilderness AT tires are passenger tires designed for light-duty passenger car/truck operation, whereas the subject Steeltex light truck radial tires are designed for the greater rigors of use on heavier pickup trucks, SUVs, and vans. As noted above, there was no evidence of rubber-wire adhesion failures in the Wilderness AT tires that were recalled. Furthermore, ODI notes that belt-leaving belt tread separations may occur in any steel-belted radial tire and that the available data indicate that the risk of such failures is greater in light truck radial tires than in passenger tires.

Firestone Data

ODI reviewed thousands of Firestone property damage claims and found that between the closing of PE00–040 and the present, the subject tire tread separation claim rate grew from 28 to 31 claims per million tires produced (ppm).⁶ Steeltex LRE claim rates for tread separation grew from 38 to 40 ppm. The four largest LRE tire sizes are associated with the majority of the property damage claims and 85% (28/33) of crashes involving injuries or deaths where the tire size could be identified.

With one exception, all crashes involving an injury fall within the 1997–1999 production years of this group of LRE tires.⁷ Three tire populations within this group are associated with all fatal crashes occurring in the last five years: The R4S II LT245/75R16 E manufactured in Cuernavaca, Mexico and the A/T LT265/75R16 E and A/T LT265/75R16 D, both manufactured in Joliette, Quebec. However, a close examination of the frequencies and trends of the adjustment and claims data for these populations do not show evidence of

⁶ This figure is based on paid claims. Firestone furnished records of both paid and unpaid claims to ODI. Claims are not paid if the tire cannot be identified, was repaired improperly, shows obvious signs of abuse (e.g. run underinflated, impact breaks), or were found to be misapplied.

⁷ A Decatur Steeltex Radial R4S LT235/85R16 E tire manufactured in 1993 was involved in a March 1996 fatal rollover of a large passenger van. Closer examination of this tire population showed no sign of a defect trend.

⁴ More specifics concerning the tread separations examined in that investigation may be found in the EA00–023 Initial Determination Report.

⁵ Tires with annual production volumes less than 10,000 tires were not included in this analysis because of the lack of statistical significance in the data and the absence of any injury crashes involving such tires.