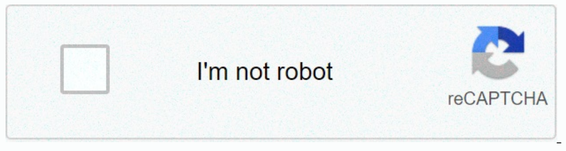

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Every carrier who uses the procedures contained herein must first satisfy itself thoroughly that neither the safety of its employees or agents nor the safety or usefulness of any products will be jeopardized by any method selected. The following procedures are not intended nor should they be construed as an endorsement of any particular person, organization or product. For information on obtaining additional copies of this guide, contact The Maintenance Council 2200 Mill Road Alexandria, VA 22314 (703) 838-1763 Or Call American Trucking Associations Customer Service (800) ATA-LINE Order Item # T0121 (TMC/ATA Members) or T0126 (Non-members) II Page 4 We would like to thank the following companies who participated in the development of this guide by donating their expertise and photographs American Retreaders Association Bandag, Inc. Acknowledgment Bridgestone/Firestone, Inc. Cooper Tire and Rubber Co. General Tire, Inc. Goodyear Tire & Rubber Co. Hankook Tire America Corp. Hawkinson Companies Hercules Tire and Rubber Co. KLLM, Inc. Kumho USA, Inc. Michelin Tire Corp. Rema Tip Top/North America, Inc. Roadway Tire Co. Sumitomo Tire Tech International Toyo Tire (U.S.A.) Corp. Truflex/Pang Rubber Co. III Page 5 Table Of Contents Introduction VIII Glossary XIII I. New Tire (Original Tread) and Casing Conditions 1 A. Bead Area 3 Torn Beads 4 Kinked/Distorted Beads 5 Bead Deformation 6 Burned Beads 7 Reinforce/Chafer Separation 8 Petro/Lubricant Damage 9 Bead Damage From Curbing 10 Bead Area Flow Crack 11 B. Sidewall Area 13 Spread/Damaged Cord 14 Cuts and Snags 15 Sidewall Separation 16 Chain Damage 17 Vehicle/Equipment Damage 18 Damage Induced Sidewall Separation 19 Sidewall Abrasion/Scuff Damage 20 Weathering 21 Impact Break 22 Branding Damage 23 Diagonal Cracking 24 Petroleum Product Damage 25 Forklift Damage 26 Circumferential Fatigue Rupture (Zipper) 27 Open Sidewall Splice 28 Sidewall Bumps (Blisters) 29 Sidewall Penetration 30 Radial Split 31 C. 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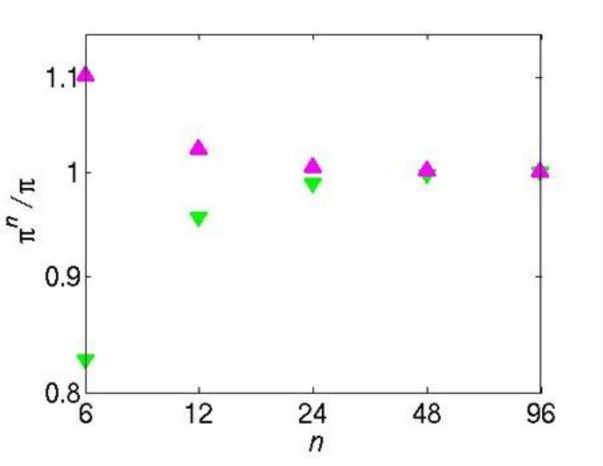
To protect your investment in tires, it is necessary to know what caused each tire's demise. This publication will lead to cost savings through providing guidance and help in the following areas: 1. Eliminating causes of failures if possible. 2. Retreading and repairing tires and placing them back into service.
3. Presenting tires for warranty credit when applicable. 4. Improving tire maintenance and tire selection if necessary. Tire grading should be done prior to the tire being placed in a “scrap pile.” After a tire has been dismounted from the rim and before it is rolled out the tire shop door, the tire should be inspected with the following questions in mind: 1. Is the tire serviceable? 2. Is it repairable or retreadable? 3. Could it be used in a limited service operation? 4. Should the tire be presented to the original manufacturer or retreader for warranty? 5. If none of the above apply, is it strictly junk? These questions must be answered before the tire is placed in the scrap pile since the tire may lose its usefulness to rust while waiting in the pile to be graded. Any usable tire should be stored in a dry covered area. Once it is determined that a tire should be scrapped, the scrap pile itself should be organized. Instead of piling tires randomly, arrange them in lines, leaning one against the other.



One line should be designated for originals, one for 1st caps, one for 2nd caps, etc. Bias tires should be separated from radials. An organized scrap pile will allow you to make generalized conclusions at a glance in regards to failed tires; i.e., 1. If a large percentage of tires fail due to a certain operational condition, it may be that the tire is not suitable for the service application. 2. If a large percentage of failed tires are of one brand when several makes of tires are used, it may be that you have a problem with that manufacturer's tires. While some deductions can be made simply by looking at an organized scrap pile, more exact conclu- sions can be derived regarding tire performance when tire records are maintained. Accurate and simple records which include causes of failure, cap numbers, tread depths, etc. are extremely impor- tant and helpful when purchasing decisions must be made.
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