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GENERAL INFORMATION

Coal Mine Fatal Accident 2004-29

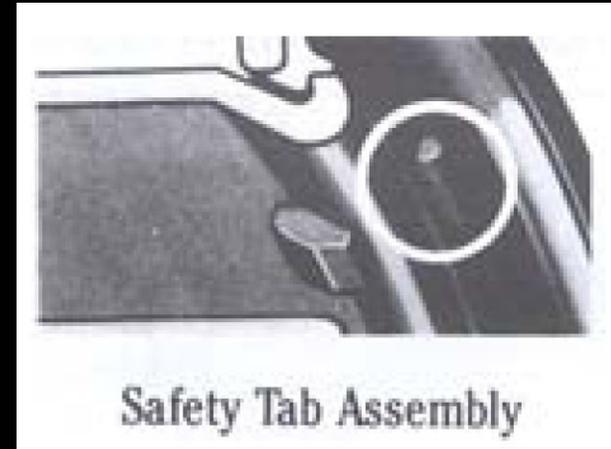
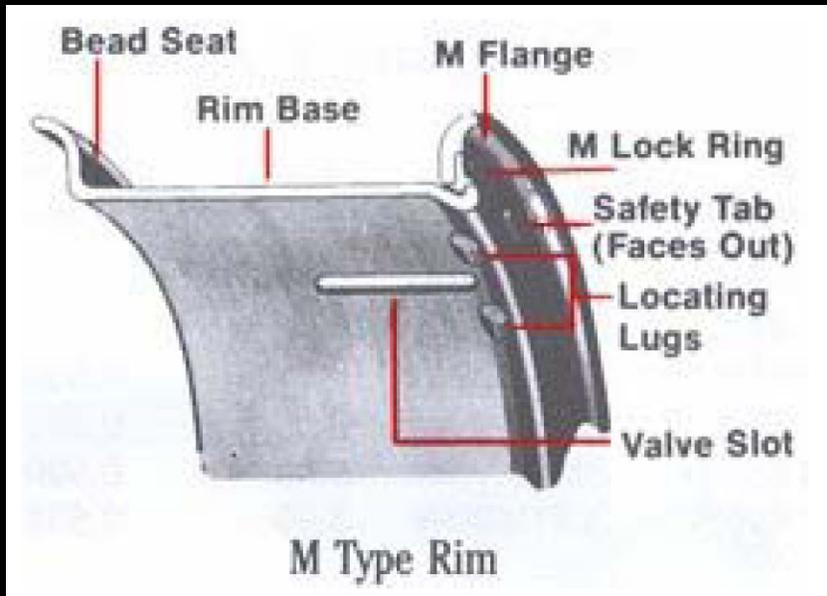


Operator:	Tennco Incorporated
Mine:	Valley Creek Mine No. 2
Accident Date:	December 21, 2004
Classification:	Machinery
Location:	District 7, Claiborne County, KY
Mine Type:	Underground
Employment:	28
Production	1100 Tons/Day

ACCIDENT DESCRIPTION



At 4:10 a.m. on Tuesday, December 21, 2004, a 62-year old maintenance/repairman with 33 years of mining experience was underground installing a previously assembled wheel and tire on a Joy 10SC shuttle car. The lock ring and flange separated from the wheel and struck the victim. He died on January 4, 2005, from the injuries sustained in the accident.



The components of the rim assembly consisted of a rim base, a split locking ring and a continuous side ring or flange. These parts are designed to allow the locking ring to fit into a gutter on the base rim, "locking" the flange in place on the rim when the tire is inflated.

ROOT CAUSE ANALYSIS

Causal Factor: The accepted tire servicing procedures were not followed during the assembly of the 1200-20 tire and wheel. Interviews with Blair Tire Company Inc. personnel revealed that training issues existed.

Corrective Actions: The mine operator eliminated the use of split rim air filled shuttle car tires and is now using foam filled tires which do not present the same hazards as air filled tires.

When using split rim air filled tires the size and type of both the tire and the rim wheel components should be checked for compatibility prior to assembly. Multi-piece wheel components should not be interchanged except as provided in the charts or in the applicable rim manual. Rim parts should be inspected for any damage and deformity, wear, free of any dirt, surface rust, corrosion and pitting prior to mounting and inflation. The tire side of the lock ring should be a distinctive identifying color, or some other distinctive means, so as to afford immediate identification of proper placement of the lock ring. OSHA Regulations covering the Servicing Multi-Piece and Single-Piece Rim Wheels, 29 CFR 1910.177 should be followed by Blair Tire Company Inc.

CONCLUSION

The accident occurred when the lock ring and flange separated from the rim assembly violently during the mounting of the 1200-20 air filled tire. The exact mechanism of the lock ring and flange separation could not be determined. The accident resulted from the cumulative effect of deficiencies that occurred during the assembly, handling, and mounting of the wheel and tire unit.

BEST PRACTICES

- Consult and follow the manufacturer's guidelines for wheel replacement and removal. Reference the following link to obtain various manufacturers' contact information for these guidelines: http://www.msha.gov/Accident_Prevention/Tips/rimwheel.htm.
- Clean all rust and dirt from mating surfaces before assembly.
- Don't mix components from different wheel manufacturers or models.
- NEVER beat on a pressurized multi-piece wheel/tire assembly.
- Provide comprehensive tire and rim safety training to maintenance personnel who service tires and rims.
- Never attempt to use broken or worn parts.