

Light Vehicle Rim Cracking

Mine Type: All Surface Mines

Incident: While towing a trailer with a four wheel drive vehicle, the driver noticed a change to the steering. A check revealed one of the wheel rims had split. An investigation at the mine then discovered many light vehicle rims were also cracked, but to a lesser extent.



Equipment: Drop centre 16x7 SUNRAYSIA style wheel rims for use on four wheel drive vehicles.

Hazard: Rim failure can cause loss of control of the vehicle, which may result in collision or rollover, with a high potential for impact injury to the occupants

Cause: Fatigue cracking, initiating on the internally facing side of the rim, around the base of the spokes.

Comments: There are a number of manufacturers and styles of this type of rim collectively known as SUNRAYSIA. Some of these may not be designed for the duty required at a mine site.

Recommendations:

- Identify vehicles with SUNRAYSIA style rims; remove and inspect the internal rim face for cracking.
- Check with Original Equipment Manufacturers on the style of rim suitable for the required duty.
- Replace all cracked or suspect rims with only that style of rim identified above.

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Please ensure all relevant people in your organisation receive a copy of this Safety alert. Any such advice supplied to site should reach those who require it, and it should also be placed on the mine notice boards.

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