

Inspection required: procedure for 88U55x, 88U56x and 88U57x mounting or disc area cracks

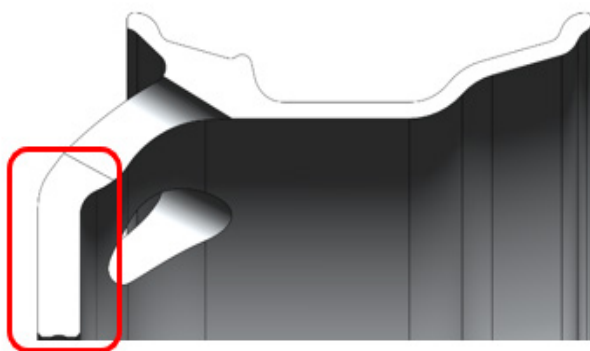
Inspection of wheels corresponding with these part numbers has identified that in some instances visible cracks or depressions (often initially appearing as a distinct 360° line) can appear on the mounting or disc area on both the open and closed ends of the wheel. Although this issue has only been observed in electric buses, all vehicles using this part number should be inspected as soon as reasonably possible as a precautionary measure. It is also essential to regularly inspect for this condition as it can develop over several months.

PART NUMBERS

88U55x, 88U56x and 88U57x

INSPECTION AREA

Inspect to identify any cracks on the mounting or disc area on both the open and closed ends of the wheel.



Mounting or Disc Area

**Crack in Mounting
or Disc Area**



Closed End

Open End

WHEN

Inspect:

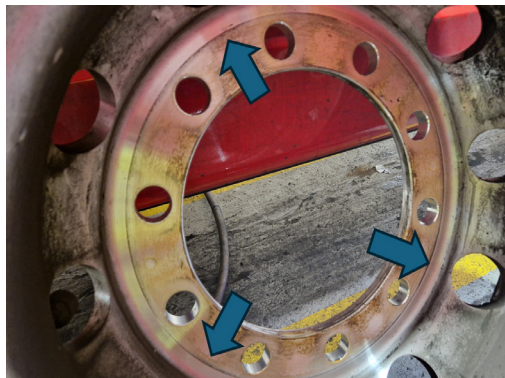
- the open and closed end disc area as soon as reasonably possible;
- the wheels on the drive axle in the outer dual position, as mounted, during daily or weekly checks;
- at least every 50,000 km or 6 months (whichever occurs first); and
- when: (1) reviewing the steer and drive axle / wheel end components during standard inspections; (2) investigating vibration or ride disturbances; and/or (3) changing or repairing tyres.

HOW TO INSPECT

- 1 Remove steering axle and drive axle wheels from vehicle.
- 2 Clean the mating face of the wheel (disc area full 360°) of both open and closed end removing dirt, oxidation and any paint (Service Manual for Alcoa® Wheels, Section 10, Page 42 to 46).

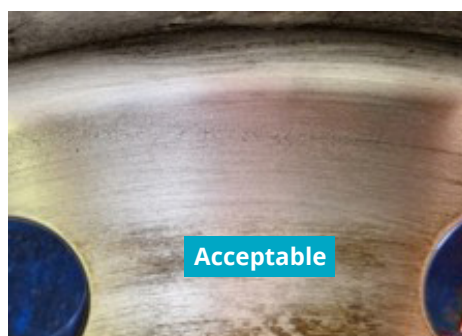


- 3 Inspect full 360° of open and closed end disc area for any visible cracks or depressions.



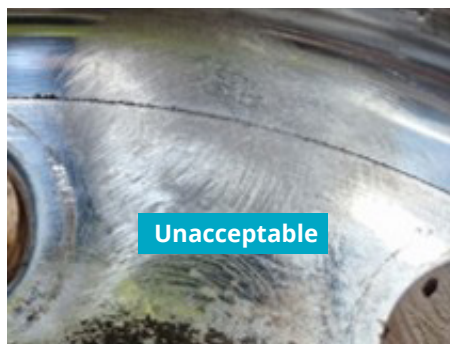
- 4 If a distinct 360° line is observed proceed to clean this area with sandpaper (flapper wheel) with grit size between 80 and 150.

- 5 Inspect area and if the distinct line is no longer observed the wheel is acceptable to return to field use.



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If a distinct line or a crack can still be observed this is an unacceptable condition. Remove the wheel from service.



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Wheels mounted on non-circular hubs or interchanged between different hub designs are subject to higher stresses, which can result in cracks.



Non-circular star shaped hub



Cracks on a Non-circular hub mounted wheel

For further details and information about servicing wheels, consult the Service Manual for Alcoa® Wheels, section 13. Wheels in service:
<https://www.alcoawheels.com/alcoawheels/europe/en/pdf/Service-manual-for-Alcoa-Wheels-EN.pdf>



WHEELS IN SERVICE

As set out in section 13.h. of the Service Manual, cracked or damaged wheels may fail and come off the vehicle. Wheels that fail or come off the vehicle while it is moving can cause serious injury or death.

Immediately and permanently remove cracked or damaged wheels from service.

Additionally, as also stated in the Service Manual, overloading, the use of star shape hubs, unapproved aftermarket components, painted hubs, and poor maintenance practices reduce the life expectancy of an Alcoa® Wheel. **Howmet does not recommend use of star shape hubs with any Alcoa® Wheels part number.**

Wheels that are in service need to be inspected at regular intervals to assure proper and safe performance. It is not always possible to predict the useful life of a wheel.

Safe operation requires thorough examination of wheels and attaching hardware, at frequent intervals, both on and off the vehicle. Examine all exposed areas frequently. Clean wheels, inspect valves and look for cracks, corrosion, wear, or other damage. Also check the inner dualled wheel when the outer wheel is removed. During tyre changes, thoroughly examine the entire wheel. Pay particular attention to the rim contour, the surfaces of the rim, the mounting flanges, and mounting holes.

Warning! Wheels overloaded beyond applicable maximum loads or cracked due to using star shape hubs will not be considered for warranty replacement.

Warning! As set out in section 13.h.i of the Service Manual:

- due to the limited contact area of star shape hubs, proper maintenance and cleaning of the hub, wheel and mounting hardware is important.
- as recommended by the Association of European Wheel Manufacturers (EUWA) wheels used on star shape hubs (see picture 13-46 in the Service Manual) must be checked for cracks on the inner and outer attachment face each 50,000 km.
- in case cracks are detected wheels are to be removed from service immediately and permanently.

Warning! Failure to inspect wheels and hardware thoroughly and frequently may cause wheels to fail unexpectedly. Unobserved wear, corrosion or cracks may result in a wheel or hardware failure or wheel loss causing serious injury or death. Inspect wheels and hardware periodically for a safe operation of the vehicle.

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HOWMET WHEEL SYSTEMS

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