

# Safety and compliance alert SCA-2015-1 - Issued 28/09/2015

## Subject

Risk of failure to WABCO Type 12/16 rear brake actuators fitted to Hyundai AT220 buses.

### Issue

The National Heavy Vehicle Regulator (NHVR) has received reports that cracks have been identified with several WABCO Type 12/16 brake actuators fitted to the rear of Hyundai AT220 buses. This may result in brake failure with no prior indication to the driver, nor any warning signs which would be likely to be detected during routine maintenance.

To date cracks have been located along the threaded section (refer to **figure 2**) of the mounting tube which may be obscured by the locking nut (refer to **figure 1**). It appears that these cracks develop over time.

The majority of affected vehicles have travelled greater than 90,000 kilometres, however cracks have been identified on a vehicle which had travelled 64,000 kilometres.

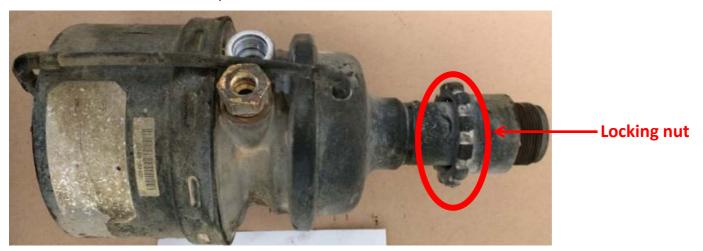


Figure 1 - Affected brake actuator

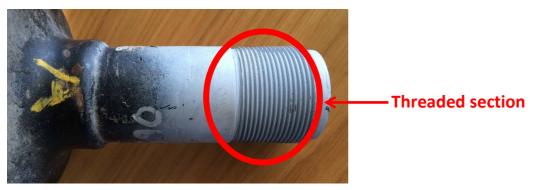


Figure 2 – Area of concern

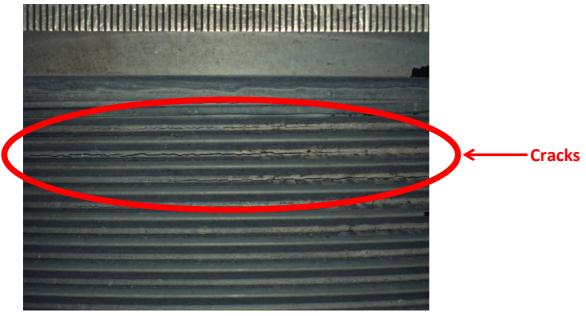


Figure 3 - Cracking at thread root

## Recommendation

The NHVR strongly recommends thorough inspection of these actuators to determine if vehicles are affected and that a regime of periodic reinspection be implemented.

It may not be possible to detect initial cracking by visual inspection. Additional non-destructive examination may be required such as dye penetrant and magnaflux inspection. It will be necessary to remove the actuator(s) from the vehicle to perform the inspection.

Cracked actuators should be immediately removed from service as there is no indication at what point the component might fail. Where possible please tag and retain the affected brake actuator(s) as it may be required as part of an investigation into the component by the Commonwealth Department for Infrastructure and Regional Development (DIRD).

Operators who identify cracked brake actuators are asked to email the following details to Greg Swann, Manager – Vehicle Standards, NHVR at <a href="VehicleStandards@nhvr.gov.au">VehicleStandards@nhvr.gov.au</a>. Please provide: vehicle registration number and state of registration, Vehicle Identification Number (VIN), vehicle date of manufacture, actuator part number and vehicle odometer reading. If possible, include high resolution photographs of the cracked brake actuator(s).

The NHVR is working closely with the DIRD who are undertaking an investigation of these actuators. Additional information and updates regarding this safety and compliance alert may be provided in the future.

# This advice is effective immediately

#### **Daniel Elkins**

Director Safety
National Heavy Vehicle Regulator

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Please note: While every attempt has been made to ensure the accuracy of the content of this safety and compliance alert, it should not be relied upon as legal advice.



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