

## TECHNICAL BULLETIN - This bulletin contains technical information

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**FAO : IB's & Controllers**

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### **ADIPS Executive Summary : Jackson Waltzers – Cracking on Car Cast Pin Housing**

A recent NDT inspection of two separate Jackson Waltzers showed significant cracking on 50% of the car casting pin housings. Anecdotally, a number of controllers have also reported experiencing similar defects previously on multiple occasions which would indicate that this is potentially a common/recurring defect.

The Jackson Waltzer was produced by the UK Ride manufacturer H.P. Jackson between 1949 and 1992.

According to ADIPS records, at the time of this bulletin, there are 29 of these devices operating in the UK (i.e. with a valid ADIPS DOC).

Propagation of cracks within the car cast pin housing as highlighted in this bulletin could result in the catastrophic failure of the assembly and possible ejection of the car and/or its passengers.

On this basis, these housings should be treated as safety critical parts and should be included on the device NDT schedule.

END

### **Originating Author text**

## **525 Jackson Waltzer Cracking**

NAFLIC has been informed by a member IB of significant defects found on a Jackson Waltzer following an MPI inspection. Since first reporting this issue, the IB in question also informs us that similar defects have been found on another identical ride.

During the inspection, cracking was found on the car cast pin housing (see photographs below) and following discussions with several controllers it was confirmed that such defects have been discovered in this area on such rides on a number of previous occasions. There are different types of this housing and some do not rely on the casting for structural integrity, but in its original without modification, cracks in this component could contribute to a complete failure. In total, 5 of the 10 castings inspected contained cracks.

Regarding the defects found on the identical ride, as mentioned, this had NDT carried out again in this area and half the castings were cracked, indicating that other such devices may well have a problem.





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END

**ADIPS Peer Review By :** Scott Ingram/Marcus Brian (Universal Verification Ltd) **Date :** 09 July 2024

Given the safety critical nature of this defect, controllers who operate these devices and IB's who undertake inspections of them are recommended to perform the following measures:

- Review the applicable NDT schedules to ensure these components are included.
- If the components are not included, update the NDT schedule accordingly. Industry good practice is to test these components annually.
- Ensure the correct NDT technique is used to test the components (if in doubt, consult PCN level 3 for clarification).
- Ensure any repairs made are completed by competent personnel in accordance with IB requirements.
- Ensure a copy of this Bulletin is retained with the ride documentation.
- Update ADIPS of any further failures found.