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## **472.** HSE information note: Crazy Frog type rides

This note follows a recent incident involving a Jump and Smile (Crazy Frog or Grasshopper type) ride. It sets out actions that inspection bodies should take with regard to Crazy Frog and generic rides.

The incident involved a carriage arm lift cylinder becoming detached, causing the arm to drop. The connection between the arm and lift cylinder comprises a clevis mounted on a male thread at the end of the cylinder rod, with a corresponding female threaded hole in the clevis. The clevis is pinned to the carriage arm. Initial inspection of the affected ride identified that several of the connections between the clevis and cylinder rod were loose.



Threaded 'male' end of lift cylinder



Threaded 'female' clevis attached to ride arm

Committee Members: Mr. D Dadswell (Chairman), Mr. A Mellor (Secretary), Mr. P Smith, Mr. J Green, Mr. D Cox, Mr. I Davies, Mr. J Shilling, Mr. D Inman & Mr. R Hiscoe

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Inspection bodies, on inspecting such rides, should ensure that the connections between the arms and lift cylinders of these rides are secure and that there is no movement or play in the connection.

Controllers should advise all operators that:

• Prior to further use all operators of Crazy Frog type rides should make an inspection of all lift cylinder rod/clevis connections. This can be undertaken by applying hand force to the clevis to check for any looseness, rocking or evidence of unwinding. This action should be undertaken with the clevis free of the arm.

• When using hand force there should be NO movement or play in the connection.

• Where play is discovered then this is an indication that the issue is already well developed. In this case the machine should have all of its cylinder/clevis connections inspected by a competent person prior to any further use.

• Following inspection it is expected that the operator will act upon advice of the competent person before next use of the ride.

• The above check should be undertaken frequently, at least weekly or arrival at new location and build-up of the ride.

• The completion of these checks should be recorded, preferably within the operator manual, for referral to by Inspection Body or Regulator if required in the future.

This enhanced frequency of connection checking should be maintained until such time as the cause of the failure is established and further advice issued; or cylinder rods are dismantled from the clevis, an inspection of threads made and the connection re-tightened to the manufacturer's recommended tightening torque.

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