

Tivoli Mfg. Ltd.

Howfield Lane, Chartham, Canterbury, Kent, England
Tel: (1227) 731136 Fax: (1227) 731137

Safety Bulletin

Bulletin No: SOSA014

Ride Type: Spin Out

(aka. The Claw, The Maestrom, El Nino)

Date: December 16, 2004

Page: 1 of 2

Rides Included: All Rides

Pages: 2

Parts supplied: N/A

Purpose: Installation of safety retaining key in removable sweep pins.

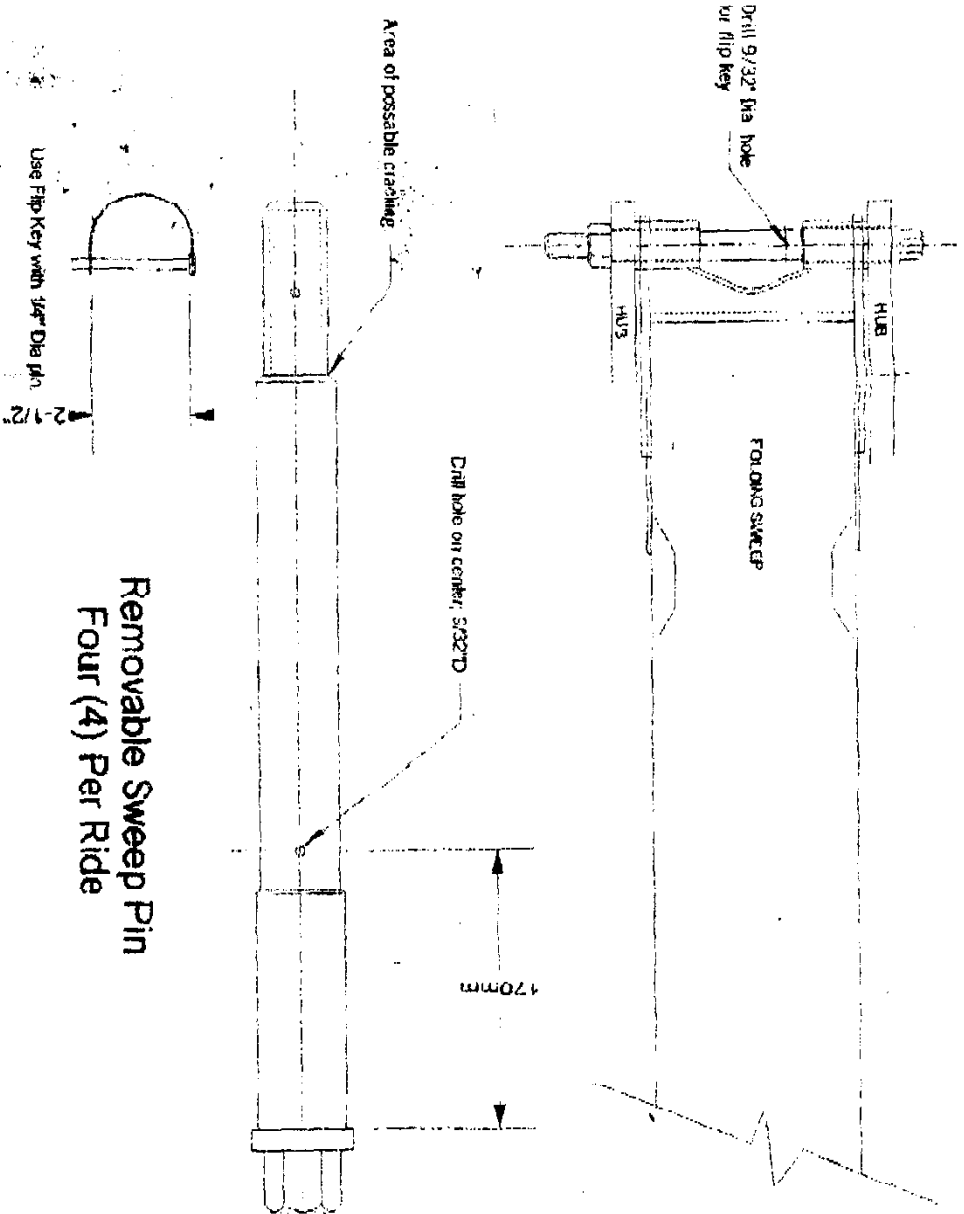
It has come to the attention of Tivoli Mfg. Ltd. that severe sweep pin bushing wear or abuse of removable sweep pins can cause these pins to crack or possibly break at the point where the threaded portion of the pin meets the shaft (see attached drawing SOSA014A for location). Even though there is a annual NDT requirement on these pins (Safety Bulletin SOSA009) Tivoli now requires the addition of a safety key to insure this pin remains in place in the remote case of pin breakage.

As illustrated on the attached drawing a 9/32" hole is to be drilled in the center of the 4 removable pins, 170mm from the under side of the head of the pin. The hole is to be deburred to remove any sharp edges.

During ride operation a 1/4" x 2- 1/2" Flip Key, as described in accompanied drawing, must be inserted through the hole and clipped in place. The key presently being inserted in the threaded area of the pin is still required.

If there are any questions please contact Tivoli MFG. Ltd. or AmTech / Amusement Technologies Intl. Inc. (817-641-5045)

Tivoli Mfg. Ltd.



**Removable Sweep Pin
Four (4) Per Ride**

Use Flip Key with 1/4" Dia pin

Tivoli Mfg. Ltd.	Description Spin Out Sweep Arm Pin	Part Safety pin installation	Drawing SOSA014A	Date 12-10-04
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