SERVICE BULLETIN

Ride Manufacturer: Great Coasters Int., Inc.
Ride Name: Varies
Model Number: Varies

Affected Production Dates: ALL
Affected Serial Nos.: N/A

Abstract of Issue:
Great Coasters is mandating the addition of Chain Retainer Angle to the upper chain trough to prevent chain slippage in the event of a chain failure. If your ride already has Chain Retainers installed, please continue to read this entire bulletin as it contains an update to the chain wear section of the manual.

Reason for Release:
Excessive wear of the lift chain can potentially result in a breakage of the chain. Depending on the location of the break and the train’s position on the lift, the chain may slip downwards in the upper chain trough, creating a hazardous situation.

Action to Be Taken:
GCII requires:

a) Chain Retainer Angle (SP07060442) to be installed in accordance with the included drawing (SP09030479). This modification must be completed by May 1, 2019.

b) Inspection of the chain must be added to your 125-day checklist and preformed according to updated chain wear section of this bulletin.

Detail of Issue:
The installation of Chain Retainer Angle is intended to prevent the chain from sliding down the entire lift in the case of a break. To accomplish this, short sections of angle are welded to the trough at specified intervals, with one leg of the angle hanging over the chain, as shown below. For complete specifications and installation measurements, please refer to the full drawing.
For your convenience, the Ride Manual section on chain wear is reproduced below with adjustments. Please add this page to your manual to replace your current chain wear section. Following these criteria properly will minimize the risk of the chain breaking.

Chain Wear:

After a while, the chain will wear and require replacement. When the wear (stretch) is between 1% and 2%, it should be replaced. To determine the chain wear:

1. Take approximately 10 feet [3 m] of existing chain and place in tension to get an accurate measurement.

2. Count the whole pitches in the roughly 10-foot section. There should be approximately 29-30 whole pitches in the section of chain.

3. Determine the original chain length by multiplying the number of pitches by the nominal chain pitch (4.063" [103.2 mm]). For example, 29 pitches multiplied by 4.063" equals 117.83" [2,992.8 mm].

4. Measure the length of the same number of whole pitches in the section of chain being tested. The more accurate, the better. For example, the actual length of the 29 pitches may be 120" [3,048.0 mm].
5. Subtract the nominal length of the original chain from the length of the existing chain. For example, 120-117.83 = 2.17” [55.1 mm].

6. Divide the difference by the nominal length of the original chain. For example, 2.17/117.83 = 0.018 or 1.8%.

7. This value is the chain wear. In this example, there is 1.8% wear, which is between 1% and 2%. The chain should be replaced.

The above calculation is only a guideline in determining chain wear. If there is any doubt or if confirmation is needed, the manufacturer strongly recommends returning a sample of chain to the factory for analysis and evaluation.

Per manufacturer's instructions, chain wear must never exceed 2%. If chain wear exceeds 2%, the ride cannot operate until the chain is replaced.