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SERVICE BULLETIN

Ride Manufacturer: Eli Bridge Company

Affected Production Dates: All

Affected Serial Nos: All

Ride Names: Scrambler®, Trailer-Mounted Scrambler (TMS), Retro-Fitted Scrambler® (RS)

Abstract of Issue: It has been brought to our attention that weld cracking has occurred on the bottom side of the stationary center base. The cracking has occurred at the weld connection of the center pole and the base. The weld is located between two very rigid structures, the base and the center pole. The out-of-balance forces on these structures can, over the years, allow cracking around the weld.

Another factor contributing to the cracking deals with the tapered roller bearings. The Scrambler® uses two of these bearings, per sweep, at the top and bottom of the stationary center pole. It is the nature of tapered roller bearings, when used in pairs, that the normal radial loads produce thrust loads that want to push the two bearings away from each other. Thrust is created by the top bearing against the plate bolted to the top of the stationary center pole. This produces a force acting to pull the stationary center pole out of the stationary base. The interference fit between the base and the center pole, along with the weld, resists this force. Thus, creating cracking in the weld. Separation between the two bearings shall occur if the center pole is uprooted from the base. This may be indicated by swaying of the center pole. Eventually, the swaying will allow the seats to strike the bottom sweeps while the ride is in motion if not corrected.

Reason For Release: This is not a new issue for Scramblers® and there was a previous letter about this many years ago. However, Eli has received an increasing number of phone calls regarding Scrambler bases and the median age of Scramblers in operation is approximately 35 years, so it was decided to distribute the information again in a Bulletin.

Action to be taken: The Scrambler® should be inspected at the arrival of this bulletin unless it has already been inspected to the following schedule. Furthermore, we believe that it would be reasonable to re-inspect the Scrambler® center pole and take action according to the following guidelines:

- A. If the ride has been inspected and no crack is found, then the ride should be re-inspected as follows: Portable models should be re-inspected every setup. Park model bases should be visually re-inspected at least every five years. During the interim, park model bases should be inspected to verify the distance between each of the bottom sweeps and the top of the catwalk is relatively equidistant, approximately 3.5", at least every five months or more if the operating season exceeds five months.
- B. If a crack is found and the crack extends no more than 1/3 of the way around, and it is then ground out and re-welded by a certified welder (call Eli for approved procedures), then it should be re-inspected in five years.
- C. If the center pole has been returned to the factory for repair, the next re-inspection should be within five years from the date of the repair, then according to "A" above thereafter.

Based on our experience with the Scrambler® we believe that these are conservative procedures. We have tried to keep the inspections as far apart as we believe prudent, while also keeping them close enough to give the ride the protection it needs to operate in a safe manner.

For additional information not found in this bulletin or consultation about your Scrambler®, please contact Eli Bridge Company at the phone number or email listed above.