

Number: B392R1004-A

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Supersedes: A392R1004-0
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SERVICE BULLETIN

Effective Serial Nos .: All Units Which Have Been Reworked To Comply
With Service Bulletin B392R1027-0.

Ride: THUNDERBOLT

Subject: Installation, Inspection And
Adjustment Of Spreader Bars

Safety Alert Bulletin Number A392R1004-0 is superseded by this Service Bulletin. It is no longer in effect and should be destroyed.

CHANCE RIDES, INC. wishes to emphasize the importance of the spreader bars on THUNDERBOLT amusement rides. Worn, damaged or improperly adjusted spreader bars can cause damage to the sweeps, spreader bars and center hub, and cause rough operation, which can result in injury to passengers.

READ THESE INSTRUCTIONS THOROUGHLY AND BECOME FAMILIAR WITH THE ENTIRE PROCEDURE. All work must be performed by competent, qualified mechanics, capable of understanding the function of the parts and their proper installation.

Complete the spreader bar inspection, installation and adjustment procedure using the instructions on the following pages of this bulletin. If you have any questions regarding the instructions or this procedure, contact the CHANCE CUSTOMER SERVICE DEPARTMENT.

INSPECTION OF SPREADER BARS AND ATTACHING EARS

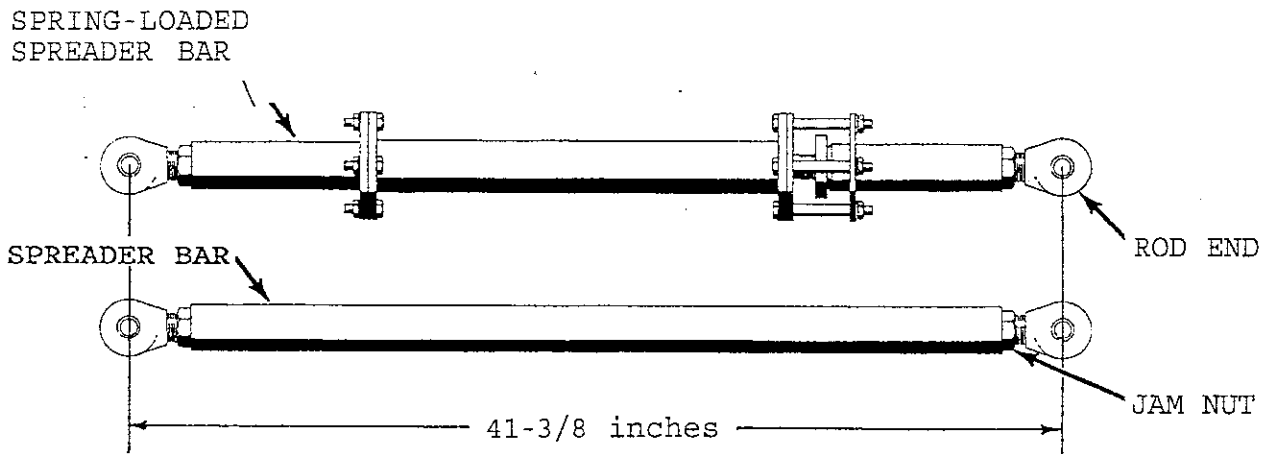
Before adjusting the spreader bars, inspect all spreader bars and their attaching ears for cracks or bends. Inspect the spreader bar rod ends and the bushings in the attaching ears for wear or damage, and replace if necessary. Check the condition of all pins and hairpins.

DO NOT OPERATE THE RIDE WITH QUESTIONABLE SPREADER BARS.

IMPORTANT: Do not attempt to repair spreader bars in the field. Any spreader bar which has been welded, drilled, or otherwise repaired must be discarded and replaced with a new part.

SPREADER BAR INSTALLATION AND ADJUSTMENT PROCEDURE

1. With all spreader bars removed from the ride, including the spring loaded spreader bar, loosen all jam nuts (two on each spreader bar).

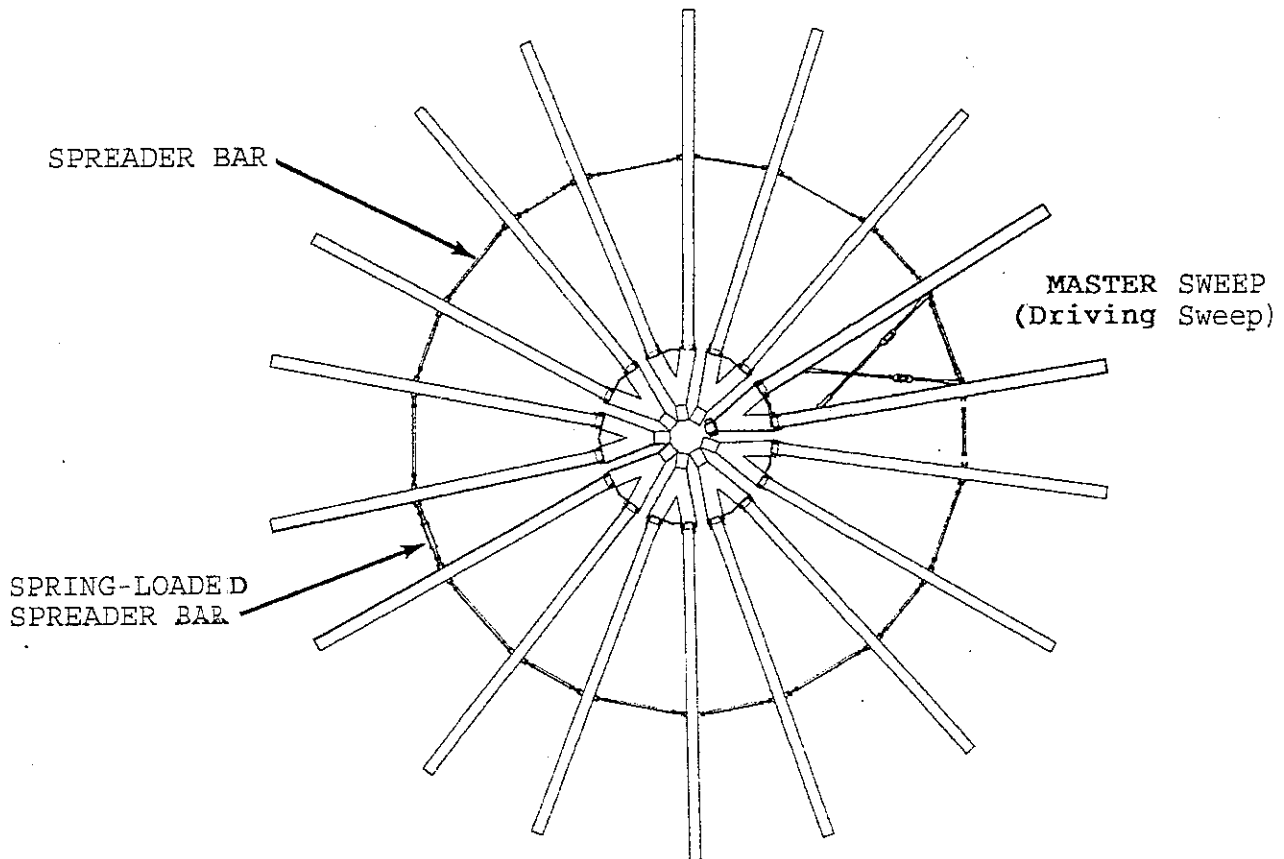


2. Measure the length between the rod ends, center-to-center, on all spreader bars, including the spring-loaded spreader bar. This measurement must be 41-3/8 inches. Adjust the rod ends, but do not tighten the jam nuts at this point. THIS LENGTH IS USED AS A "BASE-LINE" MEASUREMENT ONLY, AND MUST BE ADJUSTED AS REQUIRED IN THE FOLLOWING STEPS.

IMPORTANT: Both rod ends must be threaded into the spreader bars an equal number of turns. Always adjust both rod ends equally, within one-half turn.

3. Install the spreader bars on the ride, using the correct pins and hairpins.

NOTE: The spring-loaded spreader bar must be installed 180° from the master sweep (driving sweep).



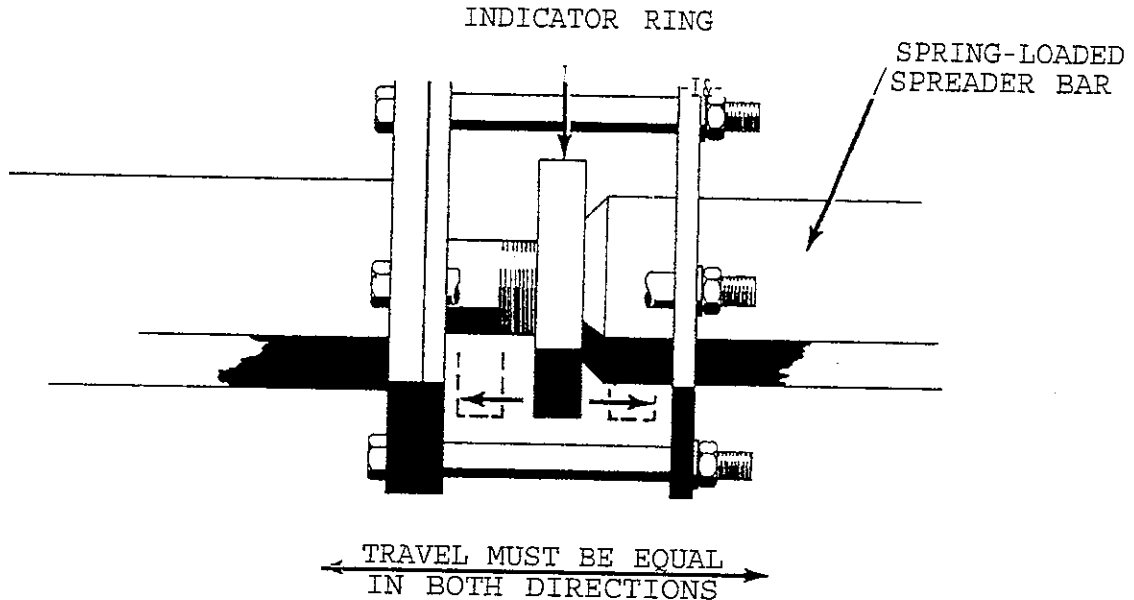
4. The vehicles must be installed to properly adjust the spreader bars. If the vehicles are not on the ride, install them at this time.

5. Rotate the ride counter-clockwise at least one complete revolution by hand, using two or three men.

NOTE: Open the hand valve on the hydraulic motor for ease of turning.

As the ride turns, watch the indicator ring on the spring-loaded spreader bar, as the spreader bar extends and retracts. The indicator ring must travel the same distance from "neutral" in both directions.

NEUTRAL POSITION



6. If the travel is equal in both directions, tighten the jam nuts on all spreader bars.

If the travel is not equal in both directions, adjust the length of each spreader bar (either longer or shorter) by turning the rod ends. ALL SPREADER BARS, INCLUDING THE SPRING-LOADED SPREADER BAR, MUST BE THE SAME LENGTH. If one spreader bar is adjusted to a longer length, ALL spreader bars must be lengthened by the same amount.

Repeat Steps 5 and 6 until the travel is equal.

7. As a final check, get into the vehicle closest to the spring-loaded spreader bar. Observe the action of the spring-loaded spreader bar during normal ride operation, at both low and high speeds. If the indicator ring travel is equal in both directions, the adjustment is satisfactory.

8. Permanently mark all sweeps so that they can be installed in the same location every time the ride is set up.

9. Check the spreader bar adjustment monthly, or at every set-up, using the observation procedure in Step 7.