



Number: A392R1004-0

Date: June 30, 1986

Supersedes:

America's Largest Manufacturer of Amusement Rides

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# SAFETY ALERT

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Effective Serial Numbers: All Units

Ride: THUNDERBOLT

Subject: Inspection and Adjustment  
Of Spreader Bars



**WARNING: FAILURE TO COMPLY WITH THIS SAFETY ALERT BULLETIN  
CAN RESULT IN INJURY TO PASSENGERS.**

CHANCE RIDES, INC. has determined, by observation in the field, that the spreader bars on several rides are not correctly adjusted. The proper operation of the spreader bars is essential 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.

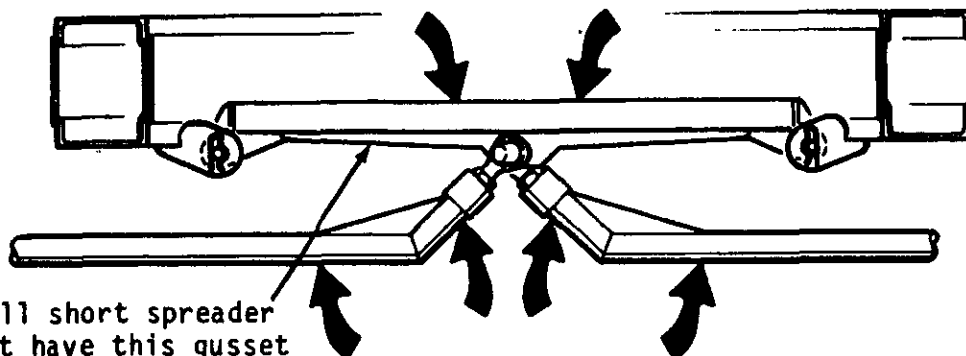
Complete the spreader bar inspection and adjustment procedure using the instructions provided on the following pages of this bulletin. Fill out and return the attached Certification of Compliance for the procedure within fifteen (15) days from receipt of this bulletin.

## INSPECTION OF SPREADER BARS

Before adjusting the spreader bars, inspect all spreader bars for cracks or bends as described in the Thunderbolt Operation Manual (part no. 276-43268). For convenience, the inspection points are described below

Inspect for cracks in the areas indicated by arrows in the following illustration. Also check the spreader bar mounting points for worn bushings or pins. If wear or damage is found in any of these areas, contact the CHANCE CUSTOMER SERVICE DEPARTMENT immediately.

DO NOT OPERATE THE RIDE WITH QUESTIONABLE SPREADER BARS.

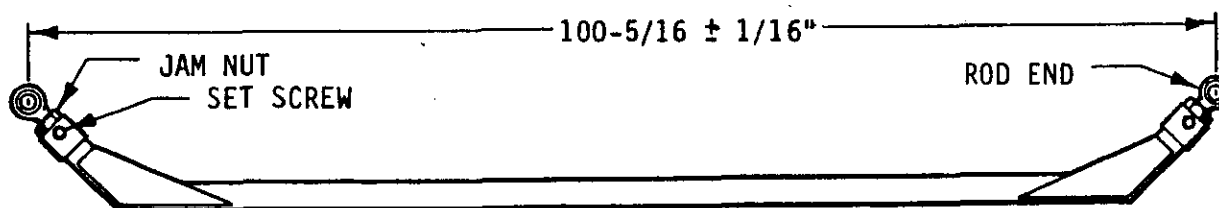


NOTE: All short spreader bars must have this gusset

**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 ADJUSTMENT PROCEDURE

1. Remove all long spreader bars.
2. Loosen ALL jam nuts and set screws.



3. Measure the length between the rod ends, center to center, on all long spreader bars. This measurement must be  $100-5/16 \pm 1/16$  inches. Adjust the length by turning the rod ends.

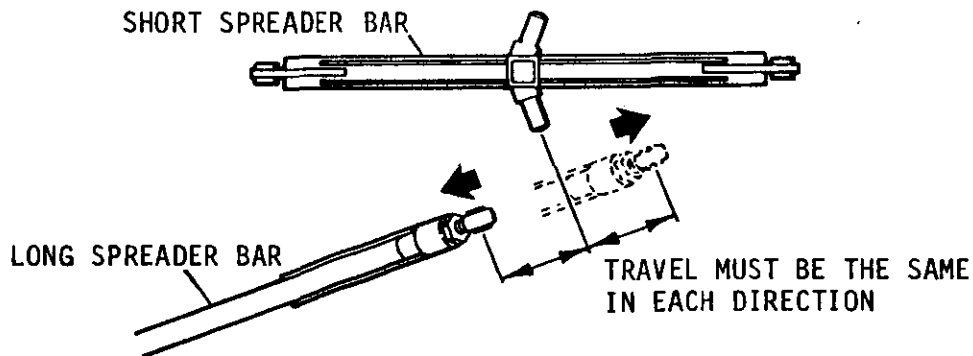
**IMPORTANT:** Both rod ends must be threaded into the sockets an equal number of turns. Always adjust both rod ends equally, within one-half turn.

4. Install the long spreader bars on the ride. Install all cars.

5. Remove one end of the long spreader bar which is 180° from the master sweep (driving sweep).
6. Rotate the ride counterclockwise 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, measure the distance the disconnected rod end travels in relation to the pin on the short spreader bar. This distance of travel must be the same each direction from the pin.



7. If the travel is equal in both directions, install the spreader bar and tighten all jam nuts and set screws.

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

Repeat STEPS 6 and 7 until the travel is equal.

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

9. Check spreader bar adjustment every time the ride is set up.

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## Certification of Compliance

SERVICE BULLETIN A392R1004-0

(6-30-86)

We hereby certify the procedure outlined in the above-mentioned service bulletin has been performed on the THUNDERBOLT

Serial No(s) \_\_\_\_\_, in accordance with the instructions and specifications supplied by Chance Rides, Inc.

Date Bulletin Received \_\_\_\_\_

Date Procedure Performed \_\_\_\_\_

Name and Address of Person performing Procedure:

\_\_\_\_\_  
\_\_\_\_\_

**Attested:**

Owner \_\_\_\_\_

Maintenance Supervisor \_\_\_\_\_

Address \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Results: \_\_\_\_\_  
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This certification must be completed and returned to Chance Rides, Inc. within fifteen (15) days of receipt of the bulletin.

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COMPLIANCE  
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{ MUSIC FEST  
Arco Shows  
Reithoffer  
Thunderbolt }

Number A37-0288-00

Date 9-15-86

Supersedes:

America's Largest Manufacturer of Amusement Rides

## SAFETY ALERT

Effective Serial Numbers: See Text

Ride: THUNDERBOLT / MUSIC FEST

Subject: Spreader Bar Rework Kit



**WARNING: FAILURE TO COMPLY WITH THIS SAFETY ALERT BULLETIN CAN RESULT IN INJURY TO PASSENGERS.**

The long spreader bars on the following THUNDERBOLT and MUSIC FEST amusement rides incorporate a solid steel rod through the center:

THUNDERBOLT Serial Nos. 85-53001 through 85-53007  
MUSIC FEST Serial No. 85-27066 only

If a spreader bar breaks because of wear, damage or improper adjustment, this rod provides support to the spreader bar until the ride can be brought to a complete stop.

CHANCE MANUFACTURING CO., INC. has become aware of at least one incident in which a support rod broke and came out of the spreader bar, causing damage to the ride.

CHANCE has developed an improvement to this feature by replacing the steel rods with flexible steel cables. Owners of the above noted rides are required to install the modification kit on all the long spreader bars.

Read the following 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 installation using the instructions provided on the following page of this bulletin. Fill out and return the attached Certification of Compliance within (15) days from the receipt of the kit.

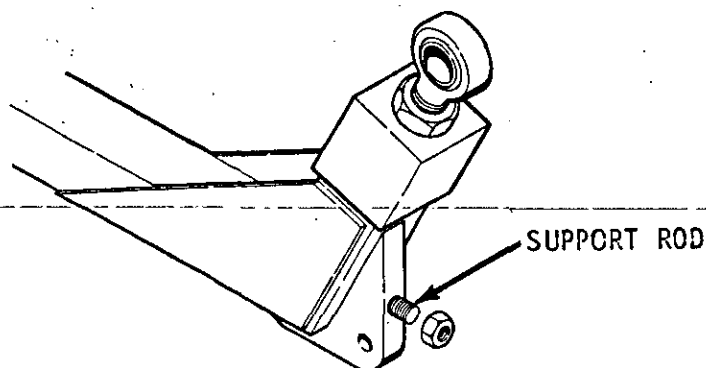
### PARTS LIST - Kit K37-0288-00 (Part No. 337-38755)

<u>Ref. No.</u>	<u>Description</u>	<u>Qty. Reqd.</u>
	"Safety Alert" Bulletin A37-0288-00 .....	1
1.	Installation Tube (Dwg. No. K37-0288-01)...	1
2.	Cable (Dwg. No. K37-0288-02).....	9
3.	Cable Clamp (Part No. 290-16108).....	18

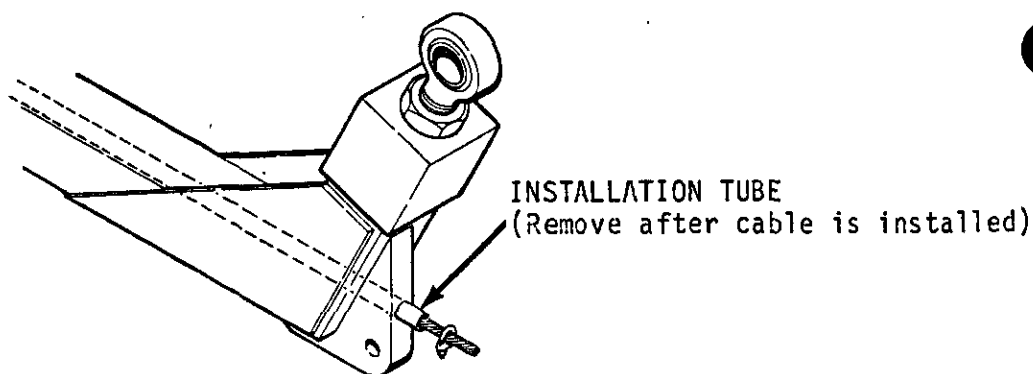
Factory and Sales Office: 4219 Irving • P.O. Box 12328 • Wichita, Kansas 67277 • (316) 942-7411

# Installation Instructions

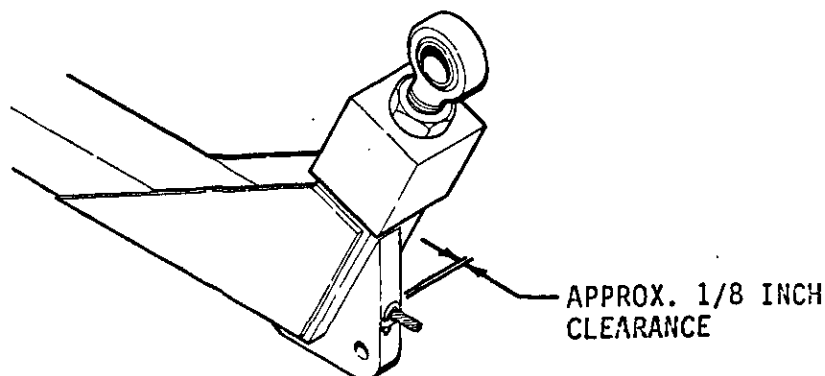
1. Remove one long spreader bar.
2. Remove the nut from one end of the support rod. Remove and discard the rod.



3. Insert the installation tube provided through the holes in the spreader bar. Insert the cable through the installation tube. Attach a cable clamp approximately 1 to 1-1/2 inch from one end of the cable. Tighten the nuts securely.



4. Remove the installation tube. Pull the cable tight by hand and install a cable clamp to allow approximately 1/8 inch clearance to the spreader bar.



5. Install the reworked spreader bar. Repeat the procedure for all remaining long spreader bars.



## Certification of Compliance

SERVICE BULLETIN A37-0288-00

We hereby certify the procedure outlined in the above-mentioned service bulletin has been performed on the THUNDERBOLT / MUSIC FEST

Serial No(s) \_\_\_\_\_, in accordance with the instructions and specifications supplied by Chance Manufacturing Company, Inc.

Date Bulletin Received \_\_\_\_\_

Date Procedure Performed \_\_\_\_\_

Name and Address of Person performing Procedure:

\_\_\_\_\_  
\_\_\_\_\_

**Attested:**

Owner \_\_\_\_\_

Maintenance Supervisor \_\_\_\_\_

Address \_\_\_\_\_

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City \_\_\_\_\_ State \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

By: \_\_\_\_\_

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LEITWOLTER  
THUNDERBOLT.

Number: A392R1005-0

Date: 9-15-86

Supersedes:

America's Largest Manufacturer of Amusement Rides

## SAFETY ALERT

Effective Serial Numbers: 86-53008, 392-009-86 & 392-010-86

Ride: THUNDERBOLT

Subject: Spreader Bar Rework Kit



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CAN RESULT IN INJURY TO PASSENGERS.

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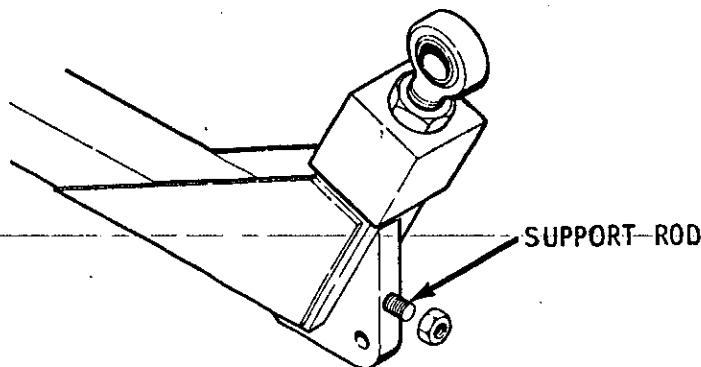
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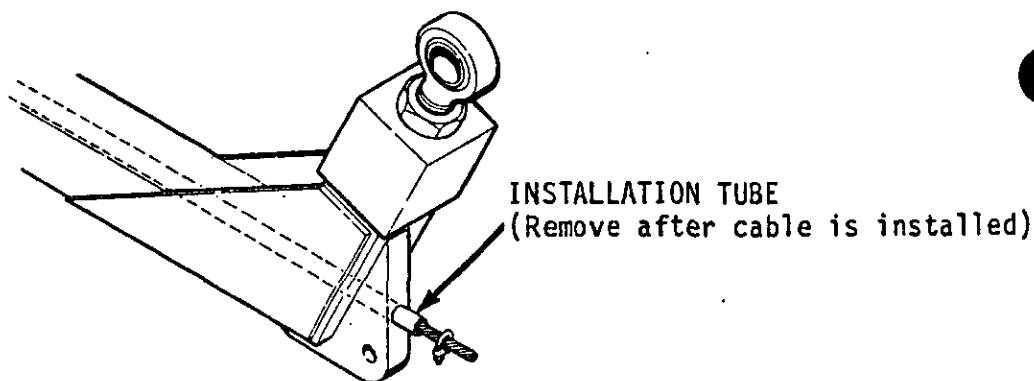


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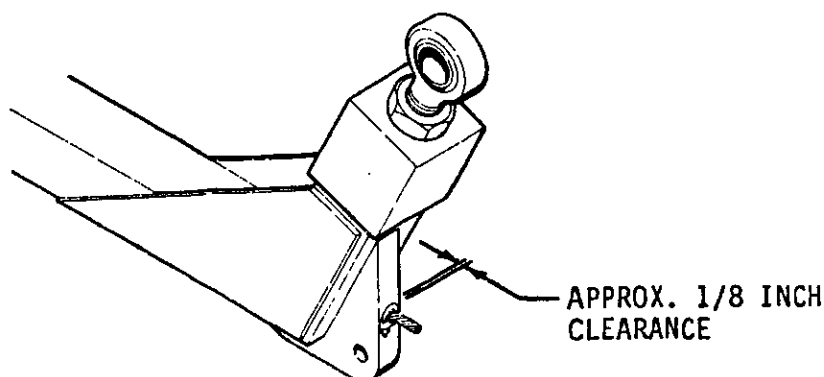
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