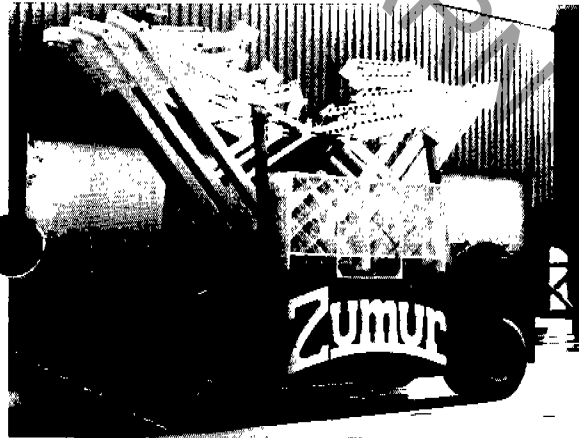
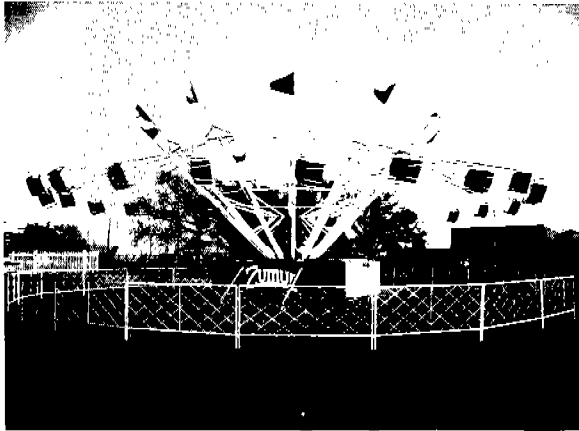


# SPECIFICATION

**MFG: CHANCE RIDES, INC.**  
**NAME: ZUMAR**  
**TYPE: NON-KIDDIE**

This ride conforms with all applicable ASTM amusement ride standards in effect on the date of man

**ZUMUR**



## SEATING

Number of seats ..... 24  
 Maximum number of passengers per seat ..... 1  
 Maximum passenger weight per seat ..... 170 lbs.  
 Maximum total number of passengers ..... 24  
 Maximum total passenger weight ..... 4,080 lbs.  
 Minimum passenger height ..... 42 inches  
 (unaccompanied by adult)  
 Loading ..... All seats simultaneously  
 Maximum unbalance ..... 6 adults (1,020 lbs.)

## PERFORMANCE

Direction of travel ..... Counter-clockwise  
 Ride speed (maximum) ..... 18 rpm  
 Ride duration (maximum) ..... 2½ min.  
 Ride duration (recommended, programmed) ..... 2 min.  
 Maximum wind speed (operating) ..... 20 mph  
 Maximum wind speed (static) ..... 80 mph

**MAXIMUM RIDE WEIGHT (empty) ..... 16,600 lbs.**

**DRIVE ..... Electro-Hydraulic**

## POWER REQUIREMENTS

Total ..... 20 kW  
 Motor ..... 15 kW  
 Lights ..... 5 kW  
 Minimum/Maximum line voltage ..... 208/230

## MOTOR

Type ..... 208 Y/460 volt, 3 phase, 60 Hz  
 Horsepower rating ..... 20

**LIGHTING ..... 110 volt incandescent and fluorescent**

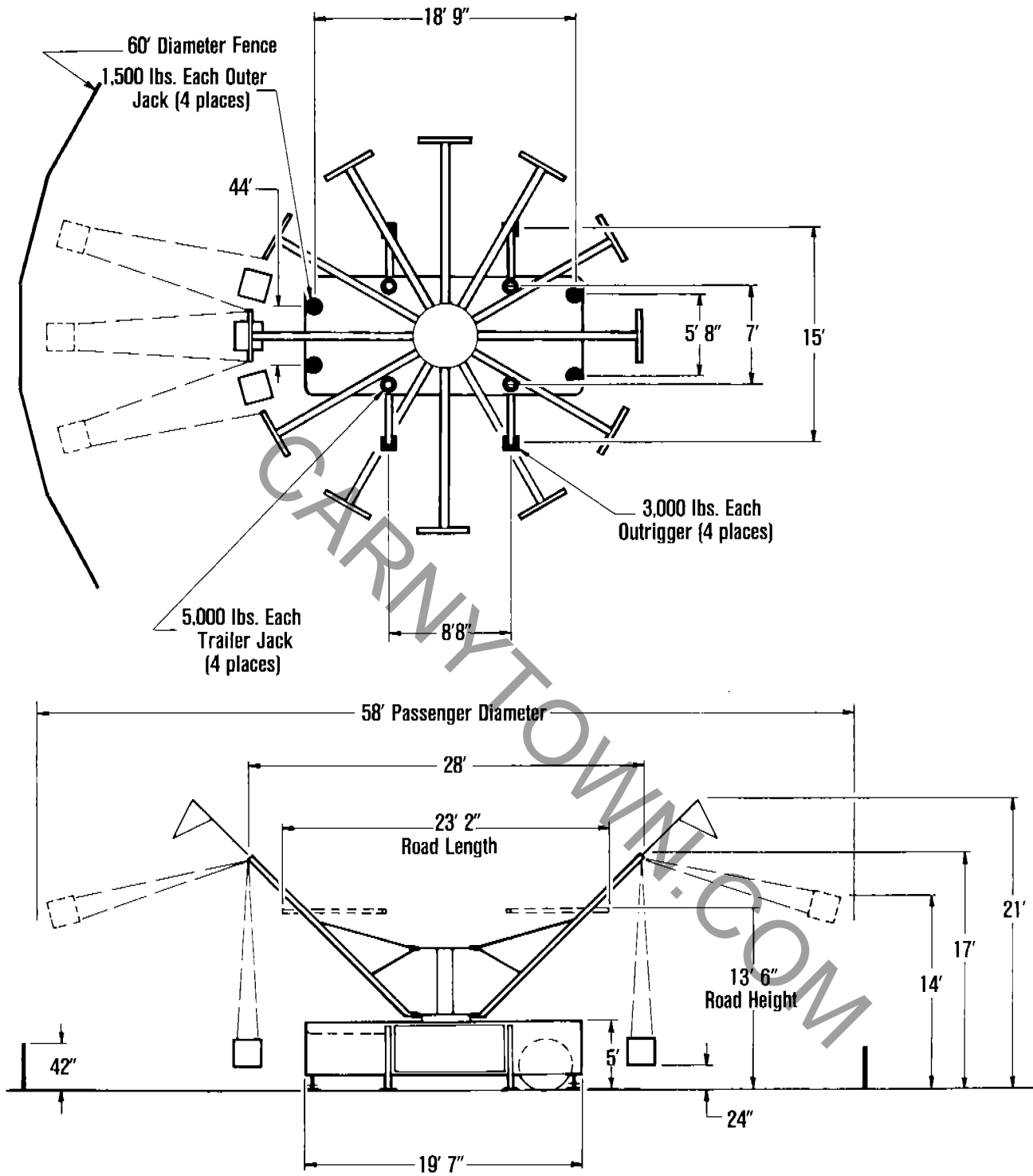
## STANDARD LEAD-IN CABLE

Size ..... 4/4 type G  
 Length ..... 50 ft.

## TRAILERING

Height ..... 13 ft. 6 in.  
 Width ..... 8 ft.  
 Length ..... 23 ft. 2 in.  
 Total weight ..... 16,600 lbs.  
 Rear axle weight ..... 10,300 lbs.  
 Kingpin weight ..... 6,300 lbs.  
 Tire size ..... 10:00 x 20 (12-Ply)

Specifications are effective as of publication date. Because we try to improve every Chance Rides product, these specifications are subject to change without notice.



**RIDE CLEARANCE DIMENSIONS**

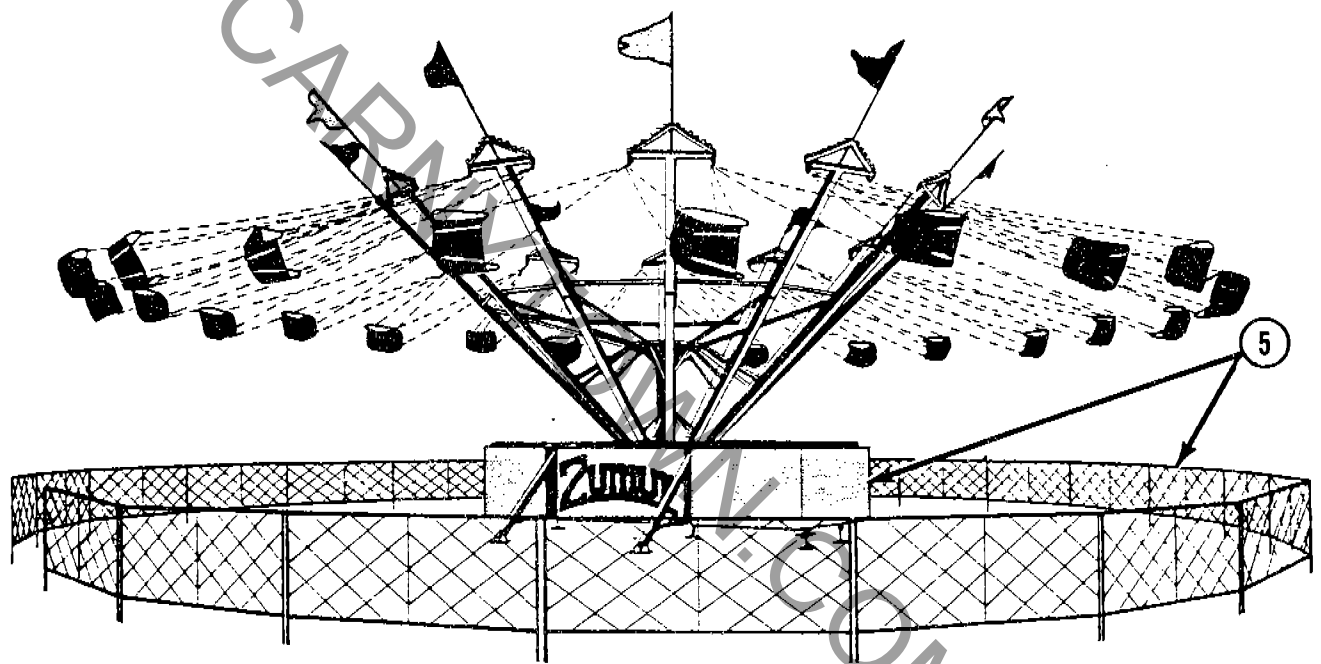
Ground Diameter ..... 62 ft. frontage  
 Height ..... 23 ft.

CARNYTOWN.COM

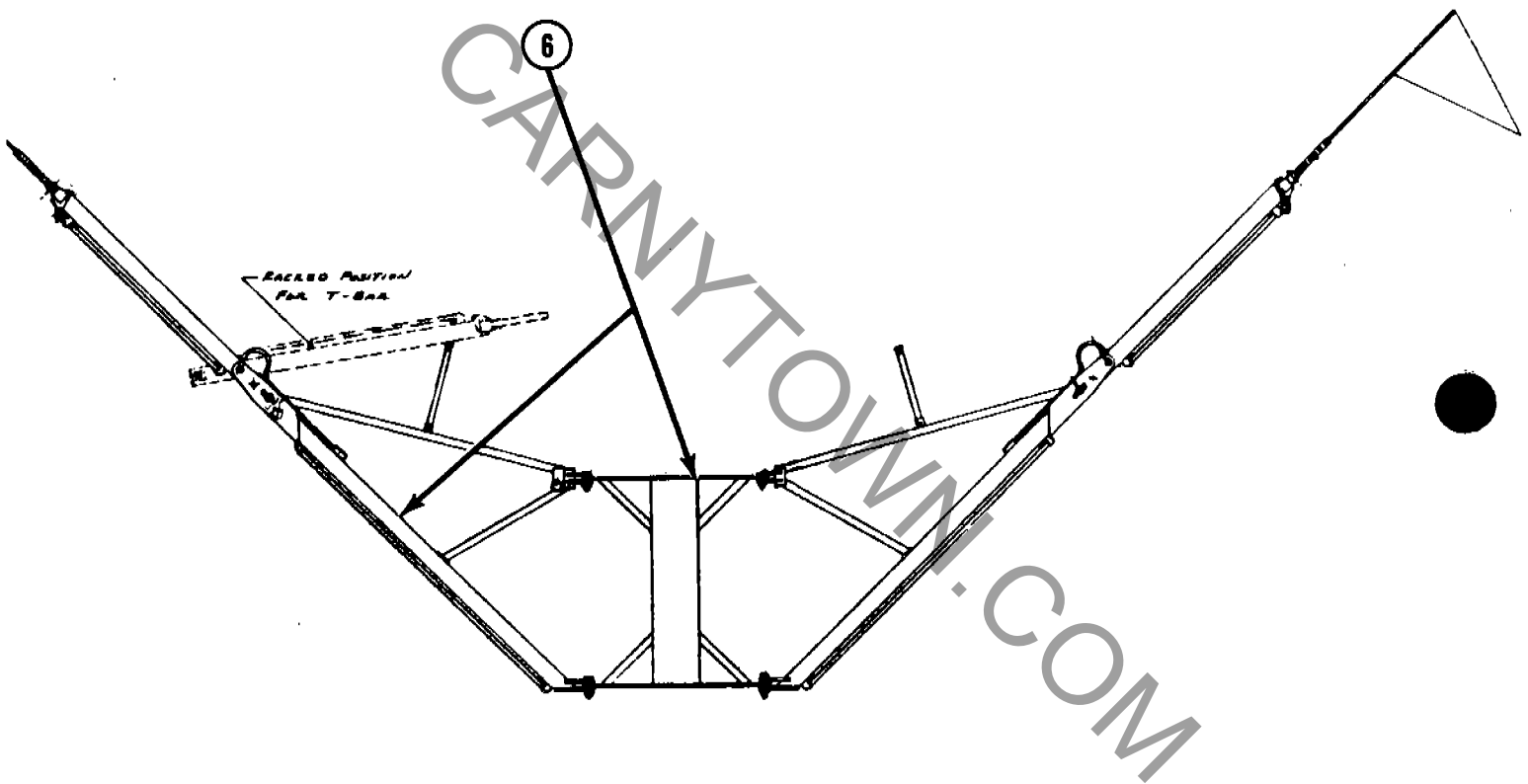
Ride Serial Number \_\_\_\_\_ Owner \_\_\_\_\_ Date \_\_\_\_\_

**FIELD INSPECTION POINTS**

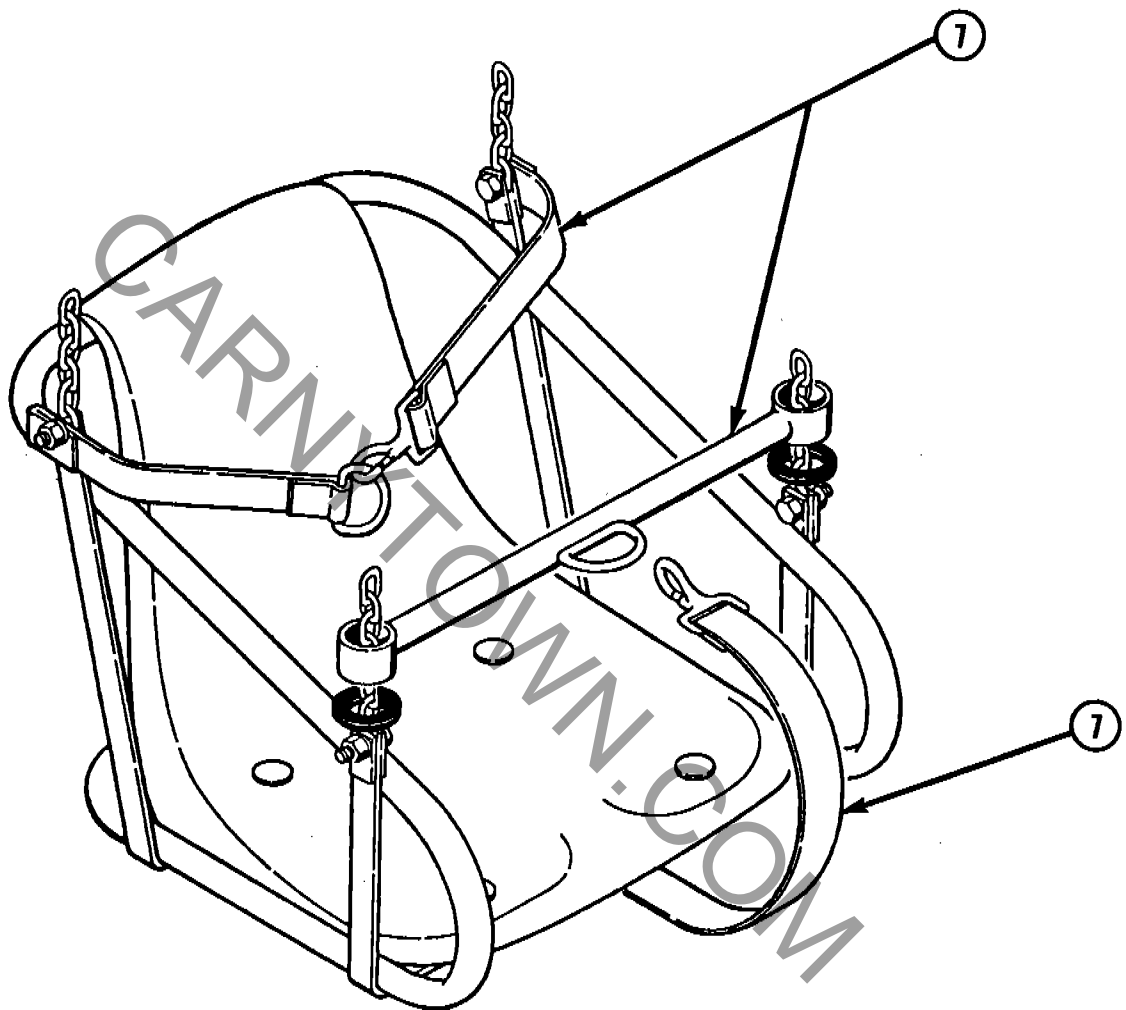
- 1. ( ) Inspect blocking and leveling
- 2. ( ) Inspect lock nuts on leveling jacks.
- 3. ( ) Inspect hydraulic valves for leveling jacks.
- 4. ( ) Inspect cable leads, electrical connections and grounding per local code.
- 5. ( ) Inspect fences and panels for proper installation.
- 6. ( ) Inspect sweeps and sweep hub for structural cracks.
- 7. ( ) Inspect condition of seat belts, crotch straps and lap bars (Bulletins A65-0264-00 and B65-0266-0A).
- 8. ( ) Inspect condition of seat hangers, chains, shackles and bolts (Bulletins B65-0266-0A and B65-0285-00).
- 9. ( ) Inspect for double X-brace installation.
- 10. ( ) Inspect for 24" ground clearance of seats.
- 11. ( ) Check for smooth timer operation - 2 minute cycle.
- 12. ( ) Inspect for smooth braking action.
- 13. ( ) Check speed of ride - 18 rpm maximum.
- 14. ( ) Check ride for excessive vibration.
- 15. ( ) Inspect structure for cracks, bad welds, etc.
- 16. ( ) Inspect electrical circuit for short circuits, bad wires, etc.
- 17. ( ) Inspect for hydraulic leaks.
- 18. ( ) Inspect overall appearance of ride for cleanliness and general overall upkeep.
- 19. ( ) Inspect operating controls.



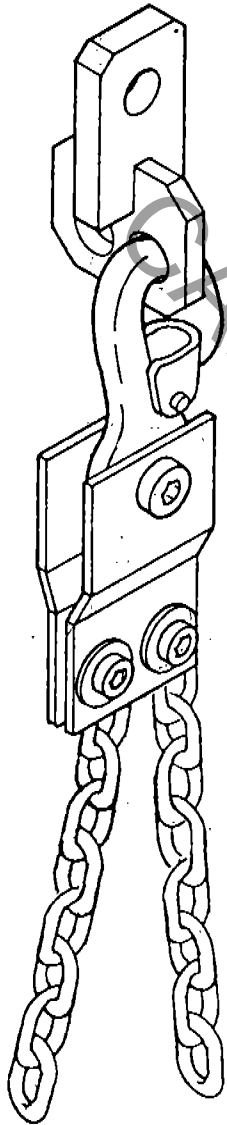
1. ( ) Inspect blocking and leveling
10. ( ) Inspect for 24" ground clearance of seats.
11. ( ) Check for smooth timer operation - 2 minute cycle.
12. ( ) Inspect for smooth braking action.
13. ( ) Check speed of ride - 18 rpm maximum.
14. ( ) Check ride for excessive vibration.



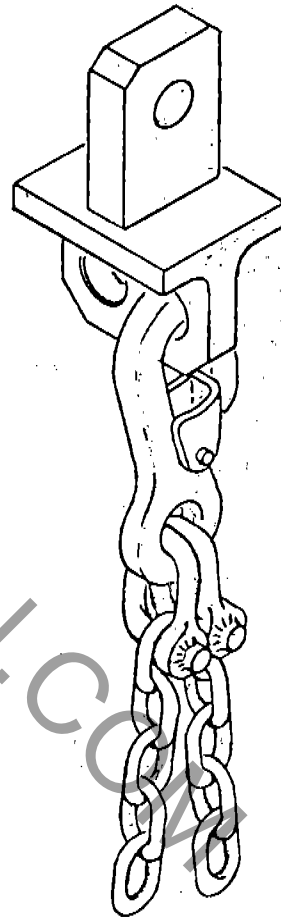
- 6. ( ) Inspect sweeps and sweep hub for structural cracks.
- 9. ( ) Inspect for double X-brace installation.



7. ( ) Inspect condition of seat belts, crotch straps and lap bars (Bulletins A65-0264-00 and B65-0266-0A).

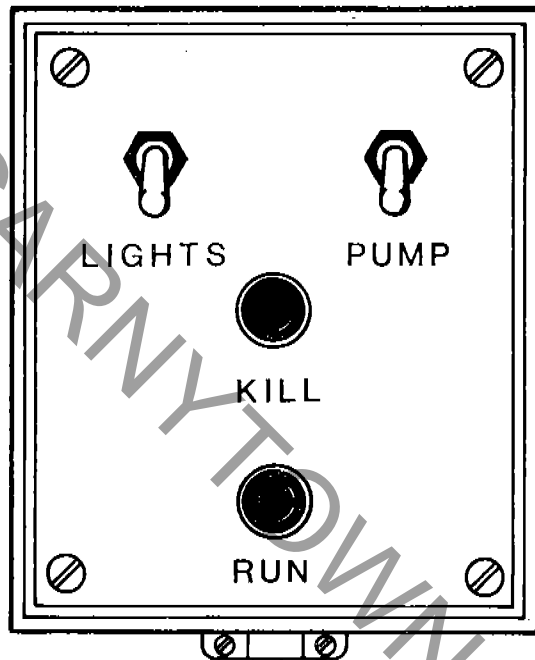


**NEW STYLE**



**OLD STYLE**

8. ( ) Inspect condition of seat hangers, chains, shackles and bolts (Bulletins B65-0266-0A and B65-0285-00).



11. ( ) Inspect operating controls.



Number B65-0285-00

Date 5/25/86

Supersedes:

America's Largest Manufacturer of Amusement Rides

## SERVICE BULLETIN

Effective Serial Numbers: ALL UNITS

Ride: ZUMUR

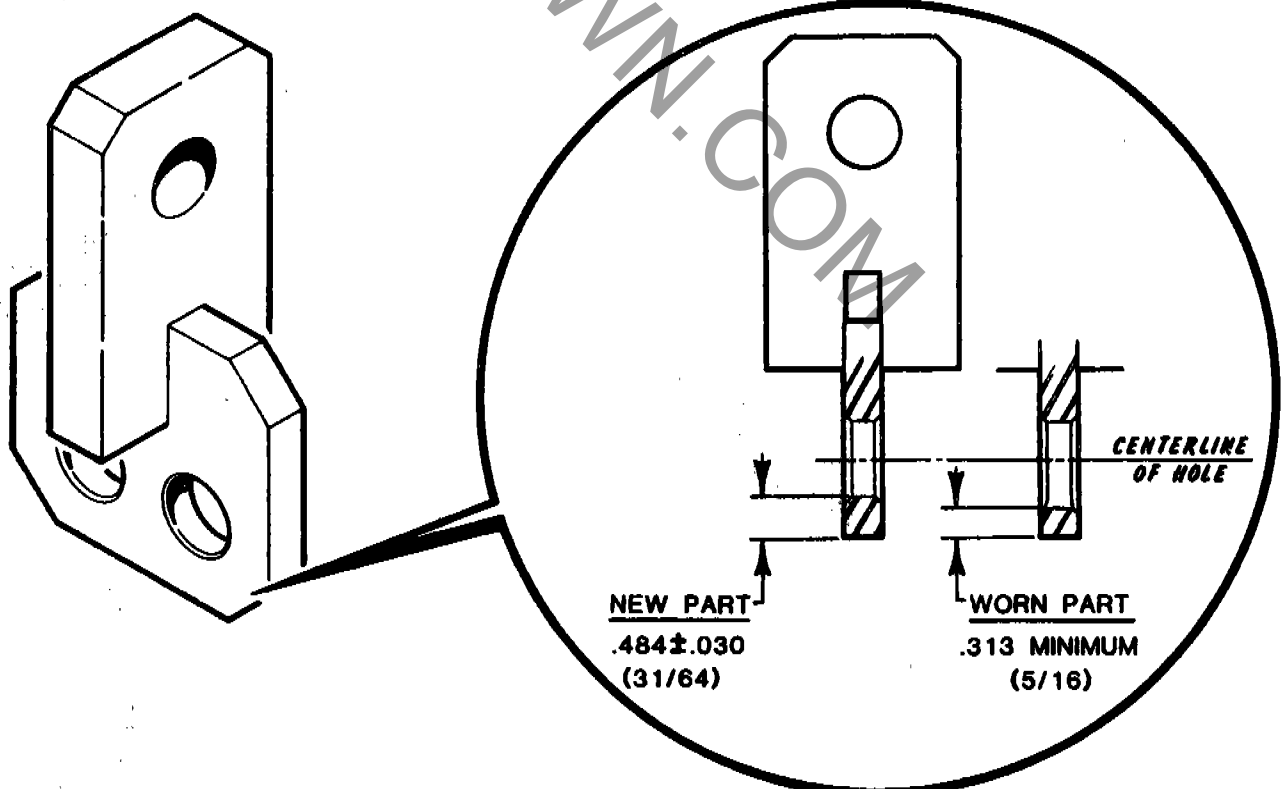
Subject: Chair Hanger Wear Limits

As a safety precaution, CHANCE MANUFACTURING COMPANY, INC. recommends that the following inspection be performed on all ZUMUR amusement rides at every set-up or weekly, whichever occurs first.

The inspection must be performed by competent personnel, capable of understanding the function of the parts and their proper installation.

Measure the edge distance on all chair hangers as shown. If the dimension is less than .313 (5/16"), do not operate the ride until the chair hanger is replaced.

New chair hangers are available from CHANCE MANUFACTURING COMPANY, INC. Order part number 361-32706.



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



Number: B65-0266-0A

Date: 4-15-86

Supersedes: B65-0266-00  
(2-20-85)

*America's Largest Manufacturer of Amusement Rides*

## SERVICE BULLETIN

Effective Serial Numbers: All Units

Ride: ZUMUR

Subject: Chain and Seat Inspection

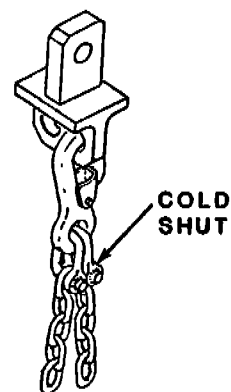
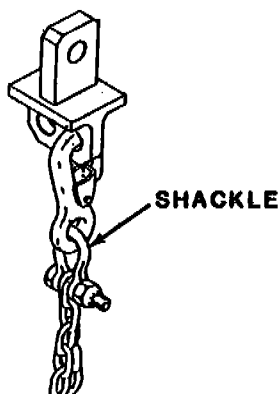
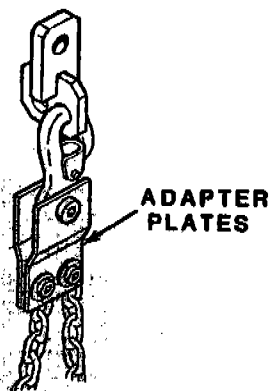
As a safety precaution, CHANCE MANUFACTURING CO., INC. recommends that the following inspection be performed on all ZUMUR amusement rides at every set-up or weekly, whichever occurs first.

The inspection must be performed by competent personnel, capable of understanding the function of the parts and their proper installation. A parts list is included for identification of parts and as a convenience for ordering any necessary parts.

### Inspection Points

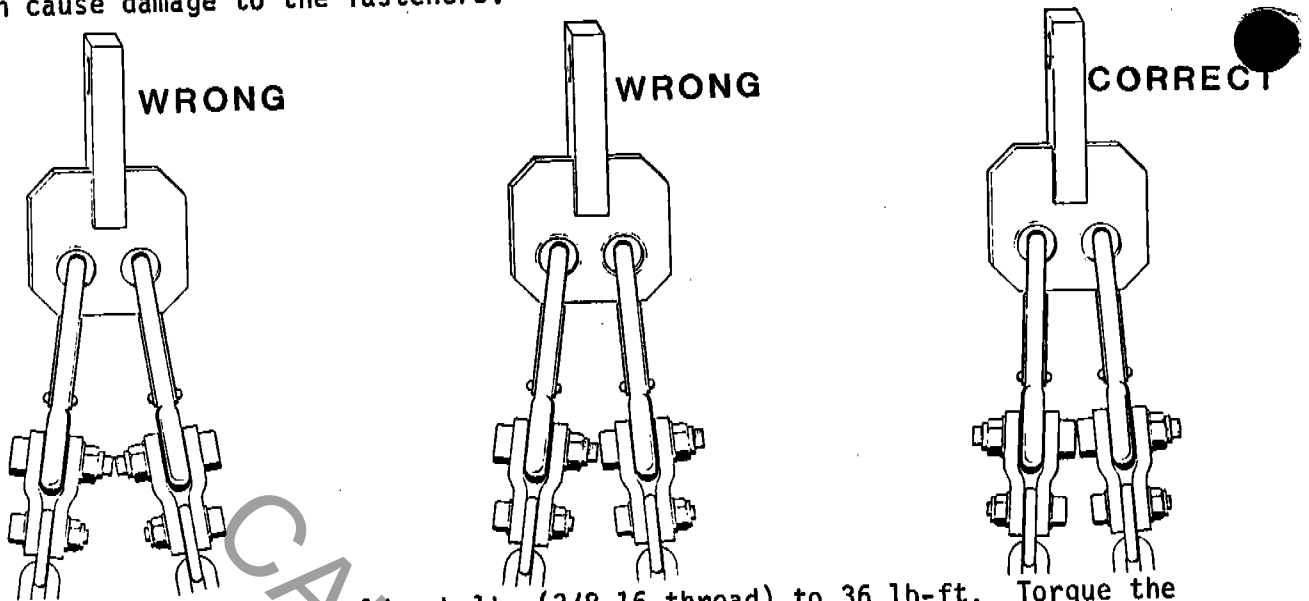
1. CHAIR HANGER - Inspect for damage or wear in the holes for the snap hook.
2. SNAP HOOK - Check the inside of the hook for damage or wear. The spring catch must operate freely and close the hook completely.
3. ADAPTER PLATES AND ATTACHING HARDWARE -

NOTE: Early production rides were equipped with either shackles or cold shuts to attach the chains to the snap hooks. Inspect these for damage or wear, and refer to Service Bulletin No. 94. If your ride is equipped with either shackles or cold shuts, go to Step 4.



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

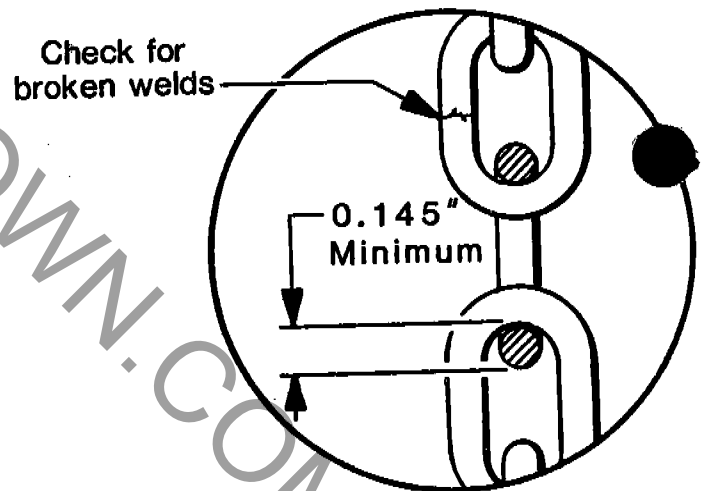
Check the position of the hardware which secures the chains and snap hooks to the adapter plates. The heads of the shoulder bolts must be to the inside of each chair hanger as shown. Contact of the threaded ends of the shoulder bolts can cause damage to the fasteners.



Torque the 1/2-inch shoulder bolts (3/8-16 thread) to 36 lb-ft. Torque the 3/8-inch shoulder bolts (5/16-18 thread) to 17 lb-ft. DO NOT SUBSTITUTE HARDWARE.

4. CHAINS - Carefully inspect all chains for wear, damage or broken welds on links. Measure chain wear on links near the seat as shown. The minimum acceptable dimension is 0.145 inch. If replacement is required, use only 3/16-inch proof coil chain. DO NOT SUBSTITUTE CHAINS. DO NOT SPLICE OR OTHERWISE ATTEMPT TO REPAIR CHAINS.

If end links are worn, up to three links can be removed to shorten all four chains by the same amount. ALL FOUR CHAINS FOR EACH SEAT MUST BE THE SAME LENGTH (12 ft. 1-3/8 in. minimum).



5. SEAT ATTACHMENT HARDWARE - Make sure that all bolts point out from seat. Torque the nuts to 13 lb-ft. DO NOT SUBSTITUTE HARDWARE.
6. SEAT AND SEAT FRAME - Check for cracks in the plastic seat. Inspect the seat frame for damage or wear in the area where the lap bar rests.
7. CHEST STRAP, CROTCH STRAP AND LAP BAR - All seats must be equipped with the complete passenger restraint system as shown. Replace any worn, damaged or missing parts.
8. OVERALL INSTALLATION OF CHAINS AND SEATS - All seats must be facing in the same direction - forward in relation to ride rotation. Each seat must be suspended from two chair hangers. DO NOT ATTACH BOTH SNAP HOOKS FOR A SINGLE SEAT TO THE SAME CHAIR HANGER. Snap hooks must be installed in the chair hangers toward the center of the ride as shown. Make sure the chains are not twisted.

If you have any questions or need replacement parts, contact the CHANCE CUSTOMER SERVICE DEPARTMENT.



## Parts List

Ref. No.	Part No.	Description	24 Seats Per Ride Qty. Reqd. Per Seat
1	361-32706	*Chair Hanger (376-209-001) .....	1
2	290-69296	Snap Hook .....	2
3	361-53843	**Adapter Plate (376-118-001) .....	4
4	690-12267	Shoulder Bolt - Socket Head (1/2 x 1, 3/8-16 Thd) ..	2
5	696-85310	Washer - Flat (3/8) .....	2
6	691-48046	Nut - Flexlock (3/8-16) .....	2
7	686-12232	Shoulder Bolt - Socket Head (3/8 x 1, 5/16-18 Thd) .	2
8	696-85304	Washer - Wrought (5/16) .....	2
9	691-48044	Nut - Flexlock (5/16-18) .....	2
10	265-15233	Chain (3/16 Proof Coil x 12 ft. 4 in. long) .....	4
11	361-15290	Chain Bag (376-914-001) .....	1
12	361-04043	Lap Bar Weldment (376-111-001) .....	1
13	361-29215	Seat Frame (376-110-001) .....	1
14	361-64993	Seat (376-113-001) Specify Color: Black, Red, Navy Blue or Sand .....	1
15	686-12219	Carriage Bolt (1/4-20 x 1-1/4) .....	4
16	691-47808	Lock Nut - Full Nylon Insert (1/4-20) .....	4
17	261-05443	Chest Strap (376-114-002) .....	1
18	261-05442	Chest Strap (376-114-001) .....	1
19	261-05443	Crotch Strap (376-114-002) .....	1
20	686-12232	Shoulder Bolt-Socket Head (3/8 x 1, 5/16-18 Thd) ...	2
21	686-12233	Shoulder Bolt-Socket Head (3/8 x 1-1/4, 5/16-18 Thd).	2
22	696-85308	Washer - Wrought (3/8) .....	8
23	691-48044	Nut - Flexlock (5/16-18) .....	4
24	686-07004	Bolt - Hex Head Capscrew (1/4-20 x 1) .....	1
25	696-85300	Washer - Wrought (1/4) .....	1
26	691-47808	Lock Nut - Full Nylon Insert (1/4-20) .....	1
27	365-04068	Tee Bar With Lights (380-1211-001) .....	12/ride
28	686-09526	Bolt - Hex Head Capscrew (3/4-10 x 3-1/4 Grade 5) ..	24/ride
29	691-47836	Lock Nut - Full Nylon Insert (3/4-10) .....	24/ride
30	261-85602	Cushion Ring .....	2/seat

\* The chair hanger shown is interchangeable with the chair hangers originally equipped on early production rides.

\*\* Early production rides were equipped with either shackles or cold shuts, which are no longer provided for this application. When replacing these parts, order items 3 through 9 in the quantities specified.



Number: A65-0264-00

Date: February 20, 1985

Supersedes:

America's Largest Manufacturer of Amusement Rides

# SAFETY ALERT

Effective Serial Numbers: All Units

Ride: ZUMUR

Subject: Lap Bar Kit

CHANCE MANUFACTURING CO., INC. has become aware of at least one accident involving the ZUMUR amusement ride. The passenger apparently was pulled by another passenger and/or slid forward under the lap bar and out of the seat while the ride was in motion.

CHANCE MANUFACTURING has developed a new lap bar which increases passenger safety. The new lap bar design incorporates a crotch strap, which secures the lap bar in the lowered position. The existing chest strap must be used in conjunction with the new lap bar to complete the passenger restraint system.

ALL OWNERS OF ZUMUR RIDES ARE REQUIRED TO REPLACE THE EXISTING LAP BARS WITH THE NEW LAP BAR SYSTEM.

Order kit number K65-0264-00, which includes the new style lap bars, crotch straps and all necessary hardware for one complete ride (24 seats). Install the kit using the instructions on the reverse side of this bulletin. Fill out and return the attached Certification of Compliance for installation of the kit within seven (7) days from receipt of the kit.

## PARTS LIST

Components of Kit No. K65-0264-00

<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>
361-04043	Lap Bar .....	24
261-05443	Crotch Strap .....	24
686-07004	Bolt - Hex Head Capscrew (1/4-20 x 1) .....	24
696-85300	Washer - Wrought (1/4) .....	24
691-47808	Lock Nut - Full Nylon Insert (1/4-20) .....	24
686-12232	Shoulder Bolt - Socket Head (3/8 x 1) .....	48
691-48044	Flex Lock Nut (5/16-18) .....	48
696-85308	Washer - Wrought (3/8) .....	96
261-85602	Cushion Ring .....	48

## Installation Instructions

All work must be performed by competent mechanics, capable of understanding the function of the parts and their proper installation.

Read these instructions thoroughly and make sure you understand them before installing the kit. Identify all parts by checking them against the parts list. If any parts are missing, contact CHANCE MANUFACTURING immediately. Do not substitute an inferior grade of material or part.

1. With the ride stopped and the master circuit breaker in the "OFF" position, remove the two front chains from any seat. Remove the lap bar.
2. Inspect all four chains for wear per Service Bulletin B61-0265-00.
3. Install a cushion ring over each front upright on the seat frame.
4. Install the new lap bar on the chains with the D-ring toward the front of the seat. Install the new hardware with the bolts pointing out from the seat as shown. Torque the nuts to 13 lb-ft.
5. Drill a 1/4-inch hole through the bottom bar on the seat frame, on the centerline of the seat as shown. Be careful not to drill into the plastic seat.
6. Install the crotch strap and hardware as shown. Torque the nut to 72 lb-in.
7. Repeat Steps 1 through 5 on all remaining seats.

