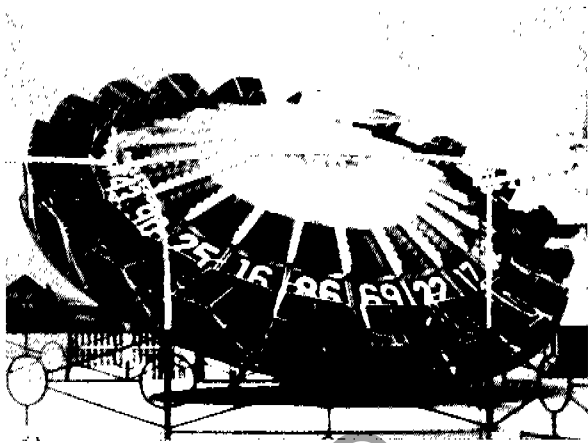


# SPECIFICATION

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

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



## SEATING

Number of seats .....  
Maximum number of passenger  
per seat .....  
Maximum passenger weight pe  
Maximum total number of  
passengers ..... 40 adults or 60 children  
Maximum total passenger weight ..... 6,800 lbs.  
Minimum passenger height ..... 42 inches  
(unaccompanied by adult)  
Loading ..... All seats simultaneously  
Maximum unbalance ..... 6 adults (1,020 lbs.)

**MFG: CHANCE RIDES, INC.**  
**NAME: TRABANT/CASINO**  
**TYPE: NON-KIDDIE**

## PERFORMANCE

Direction of travel  
Turret drive ..... Clockwise and counter-clockwise  
Rim drive ..... Clockwise and counter-clockwise  
(Never operate rim & turret in same direction)  
Ride speed  
Turret drive ..... 11 rpm  
Rim drive ..... 22 rpm  
Ride duration (maximum) ..... 2 1/2 min.  
Ride duration (recommended) ..... 2 min.  
Maximum angle of boom ..... 45°  
Maximum wind speed (operating) ..... 35 mph  
Maximum wind speed (static) ..... 80 mph

**MAXIMUM RIDE WEIGHT** (empty) ..... 22,000 lbs.

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

## POWER REQUIREMENTS

Total ..... 30 kW  
Pump drive motor (lift and rotation) ..... 12 kW  
Rim drive motor ..... 3 kW  
Lights ..... 15 kW  
Minimum/Maximum line voltage ..... 208/230

## DRIVE MOTORS

Type ..... 208 Y/460 volt, 3 phase, 60 Hz  
Horsepower rating (pump drive motor) ..... 15  
Horsepower rating (rim drive motor) ..... 3

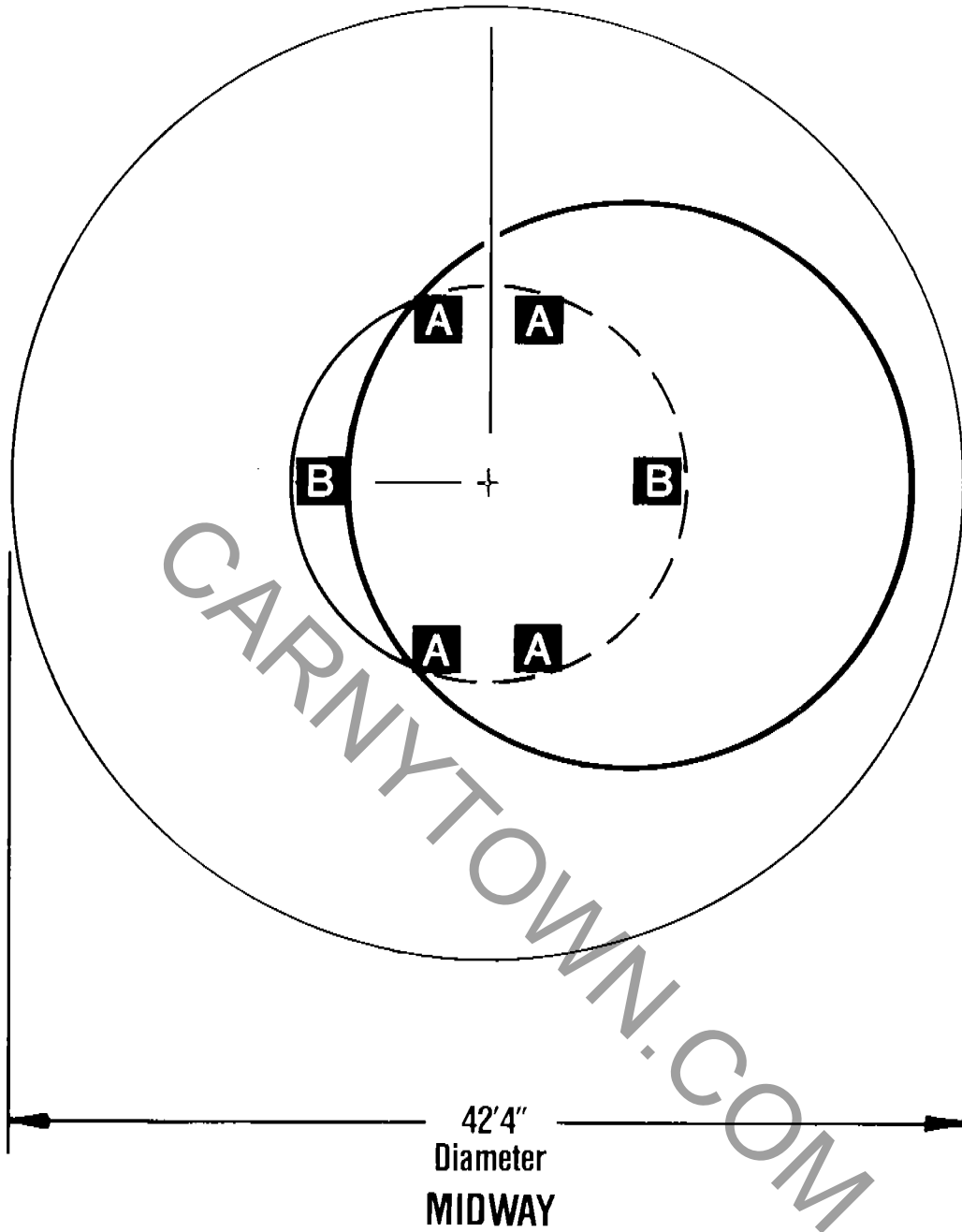
## LIGHTING

Casino ..... 110 volt incandescent  
Trabant ..... 110 volt incandescent and fluorescent

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

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**CASINO/TRABA**  
PARK MODEL



MAXIMUM INDIVIDUAL GROUND LOADS (POUNDS)  
REFER TO INSTALLATION DRAWINGS FOR SPECIFIC FOOTING LOCATION & LOADS.

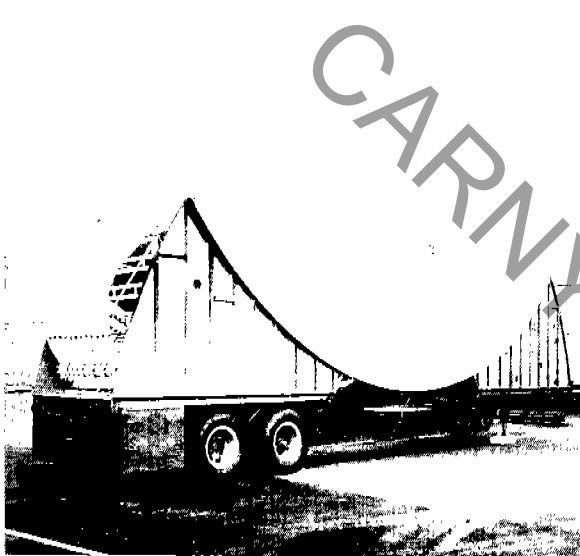
SYMBOL	DESCRIPTION	OPERATING NO. WIND 40 PASS	ADD FOR 80 MPH WIND
<b>A</b>	PIT MODEL PADS	6.000	± 3.300
<b>B</b>	PIT MODEL PADS	7.700	± 4.600

### RIDE CLEARANCE DIMENSIONS

Frontage width ..... 44 ft.  
 Depth ..... 54 ft.  
 Maximum height ..... 29 ft.

# SPECIFICATIONS

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



## TRAILERING

Height	13 ft. 6 in.
Width	8 ft.
Length	42 ft.
Total weight	39,000 lbs.
Rear axle weight	25,000 lbs.
Kingpin weight	14,000 lbs.
Tire size	10:00 x 20 (12-ply)

## SEATING

Number of seats	20
Maximum number of passengers	
per seat	2 adults or 3 children
Maximum passenger weight per car	340 lbs.
Maximum total number of passengers	40 adults or 60 children
Maximum total passenger weight	6,800 lbs.
Minimum passenger height	42 inches (unaccompanied by adult)
Loading	All seats simultaneously
Maximum unbalance	6 adults (1,020 lbs.)

## PERFORMANCE

Direction of travel	
Turret drive	Clockwise and counter-clockwise
Rim drive	Clockwise and counter-clockwise (Never operate rim & turret in same direction)
Ride speed	
Turret drive	11 rpm
Rim drive	22 rpm
Ride duration (maximum)	2½ min.
Ride duration (recommended)	2 min.
Maximum angle of boom	45°
Maximum wind speed (operating)	35 mph
Maximum wind speed (static)	80 mph

**MAXIMUM RIDE WEIGHT (empty)** ..... 39,000 lbs.

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

## POWER REQUIREMENTS

Total	30 kW
Pump drive motor (lift and rotation)	12 kW
Rim drive motor	3 kW
Lights	15 kW
Minimum/Maximum line voltage	208/230

## DRIVE MOTORS

Type	208 Y/460 volt, 3 phase, 60 Hz
Horsepower rating (pump drive motor)	15
Horsepower rating (rim drive motor)	3

## LIGHTING

Casino	110 volt incandescent
Trabant	110 volt incandescent and fluorescent

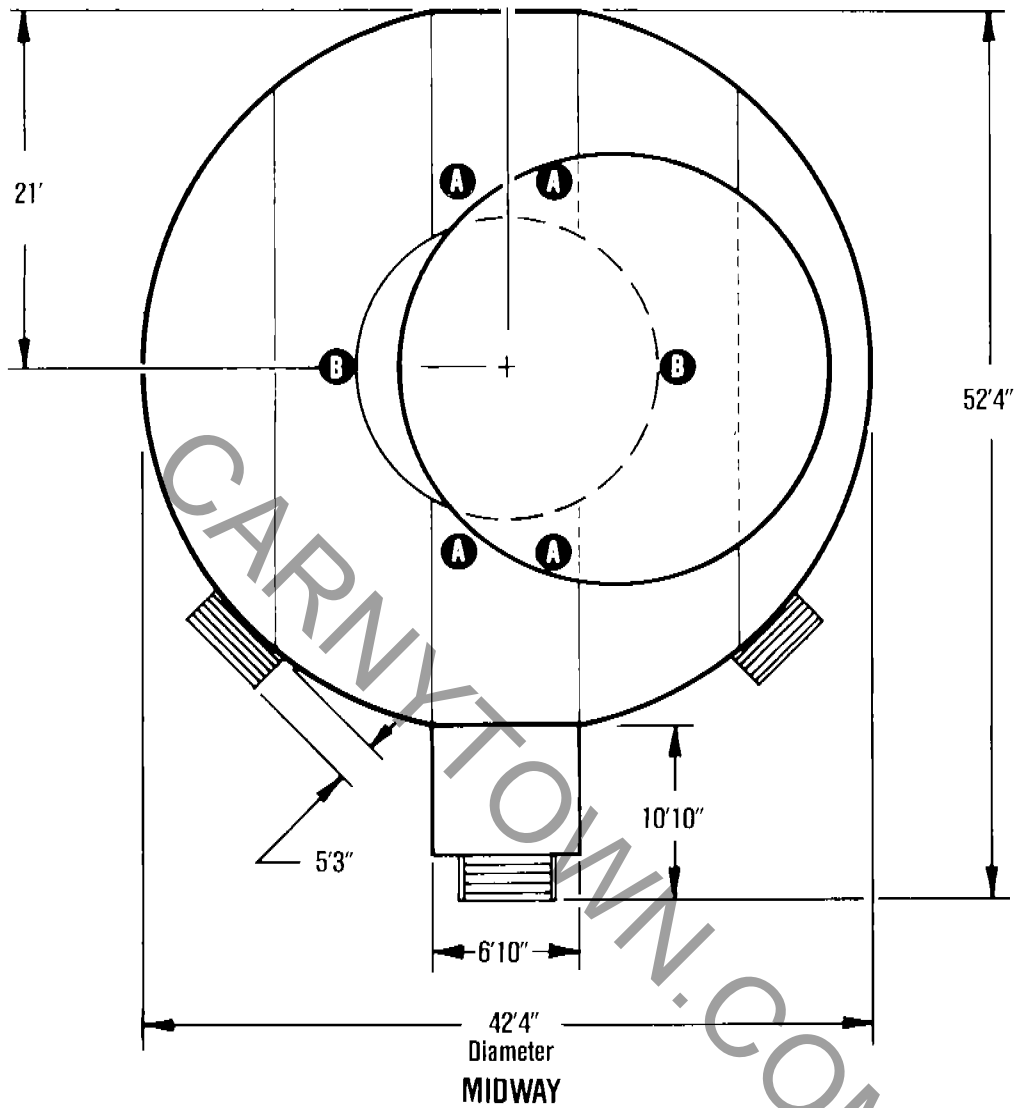
## STANDARD LEAD-IN CABLE

Size	4/4 type G
Length	50 ft.

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

# CASINO/TRABANT

PORTABLE MODEL



MAXIMUM INDIVIDUAL GROUND LOADS (POUNDS)  
REFER TO INSTALLATION DRAWINGS FOR SPECIFIC FOOTING LOCATION & LOADS.

SYMBOL	DESCRIPTION	OPERATING NO. WIND 40 PASS	ADD FOR 80 MPH WIND
<b>A</b>	TRAILER LEVELING JACKS	3,800	3,500
<b>B</b>	TRAILER OUTRIGGERS	6,400	4,000

**RIDE CLEARANCE DIMENSIONS**

Frontage width ..... 44 ft.  
 Depth ..... 54 ft.  
 Maximum height ..... 29 ft.

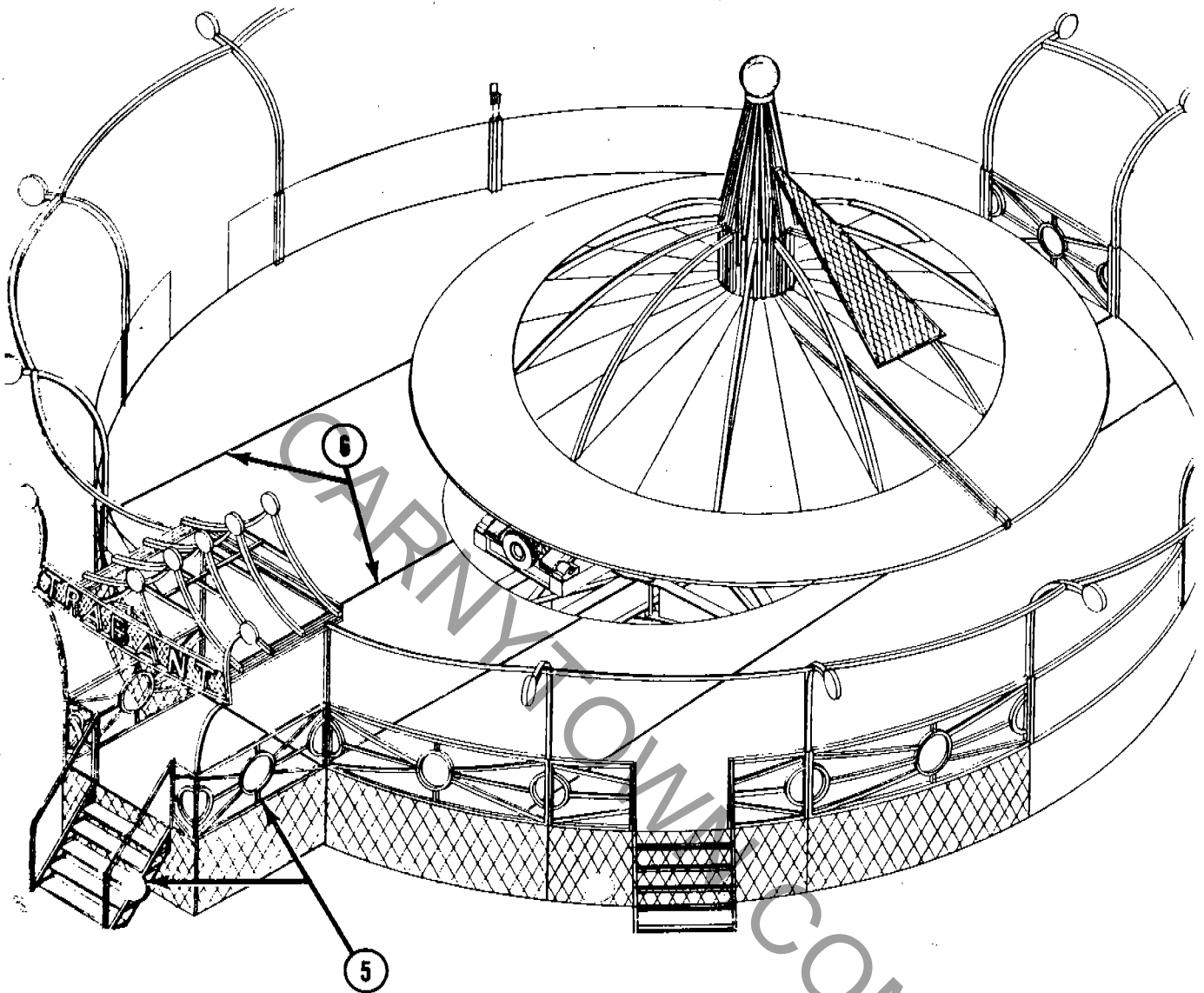
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CASINO / TRABANT

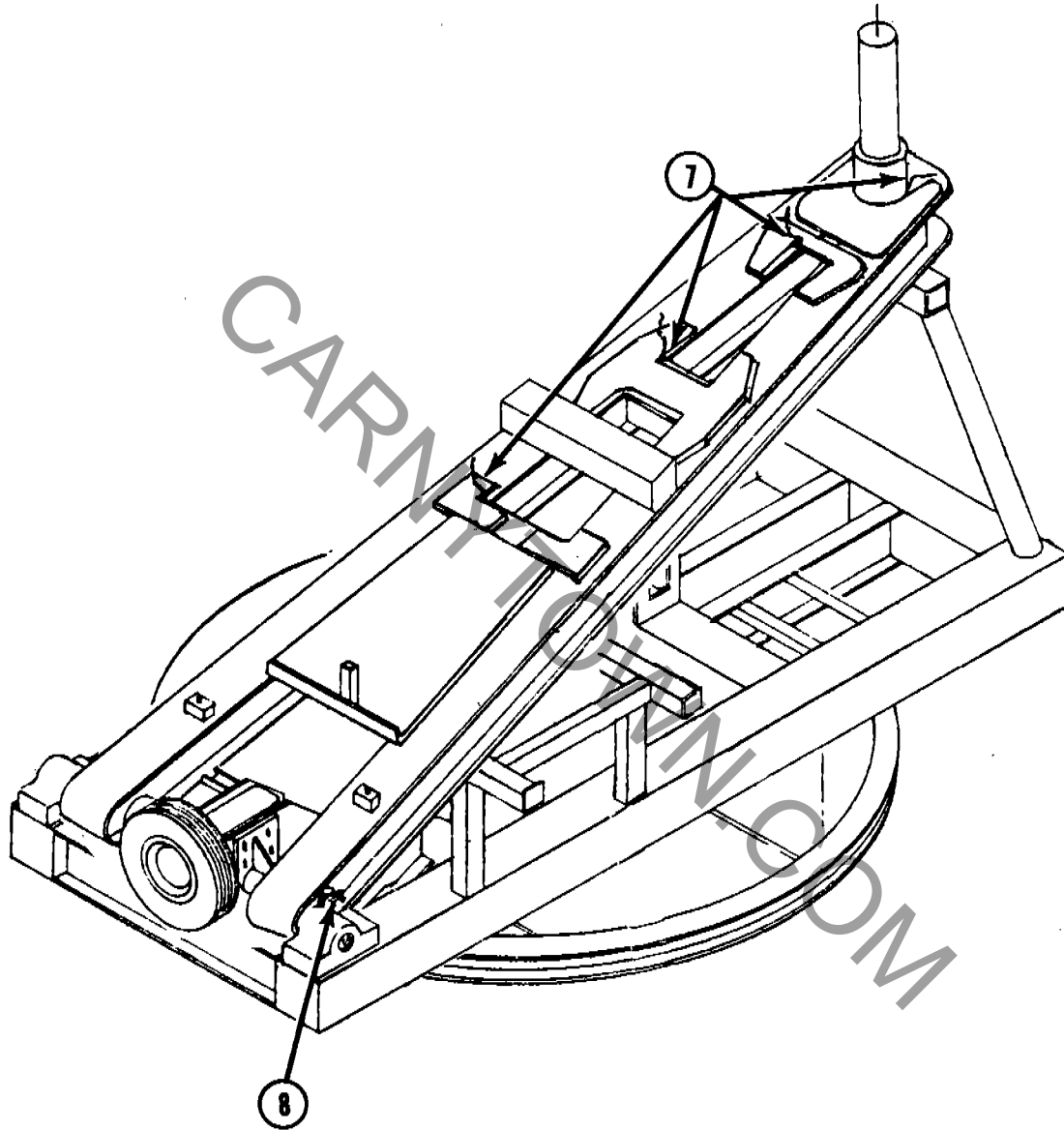
Ride Serial Number \_\_\_\_\_ Owner \_\_\_\_\_ Date \_\_\_\_\_

FIELD INSPECTION POINTS

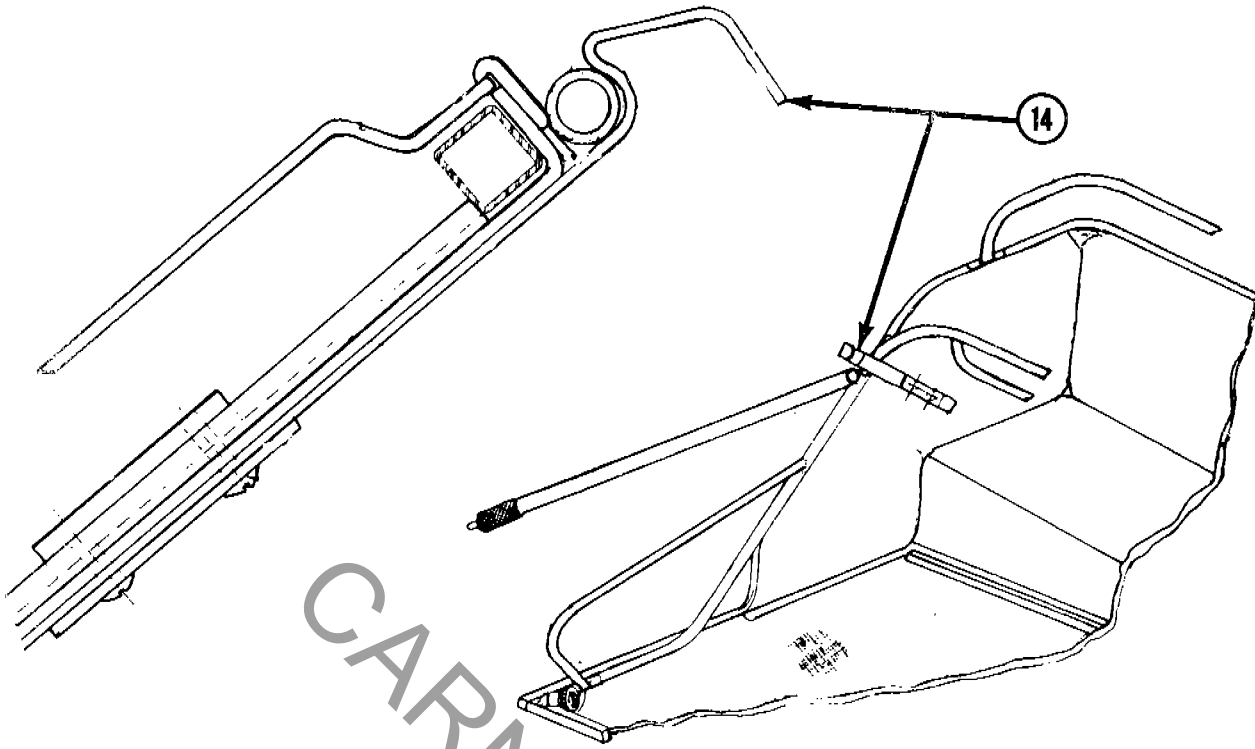
1. ( ) Inspect blocking and leveling.
2. ( ) Inspect lock nuts on leveling jacks.
3. ( ) Inspect hydraulic valves for leveling jacks.
4. ( ) Inspect cable leads, electrical connections and grounding per local code.
5. ( ) Inspect fences and platforms for proper installation and leveling. Check all jack stands.
6. ( ) Inspect floor hinges and clevis on floor lift (Bulletins 60 and B02-0178-00).
7. ( ) Inspect boom for cracks (Bulletin 92).
8. ( ) Inspect the boom travel limit switch.
9. ( ) Inspect sweep attach points.
10. ( ) Inspect drive rim joint attachments.
11. ( ) Inspect seat tie-down clamps.
12. ( ) Check the condition of the fiberglass on all seats.
13. ( ) Inspect seat safety bars for lap bars.
14. ( ) Inspect lap bar spring latches and pivot bolts. Check expiration date on spring latches (Bulletin B02-0256-00).
15. ( ) Inspect for hydraulic cylinder pin wear (Bulletin 73).
16. ( ) Inspect to see that drives will not run simultaneously in the same direction.
17. ( ) Check table drive speed in both directions - Maximum 11 rpm.
18. ( ) Check seat rotor drive speed in both directions - Maximum 22 rpm.
19. ( ) Check ride operation for proper braking.
20. ( ) Inspect jack stands.
21. ( ) Check ride for excessive vibration.
22. ( ) Inspect the structure for cracks, bad welds, etc.
23. ( ) Inspect electrical wiring for short circuits, bad wires, etc.
24. ( ) Inspect for hydraulic leaks.
25. ( ) Inspect overall appearance of ride for cleanliness and general overall upkeep.
26. ( ) Inspect all operating controls, including foot switch if, equipped.



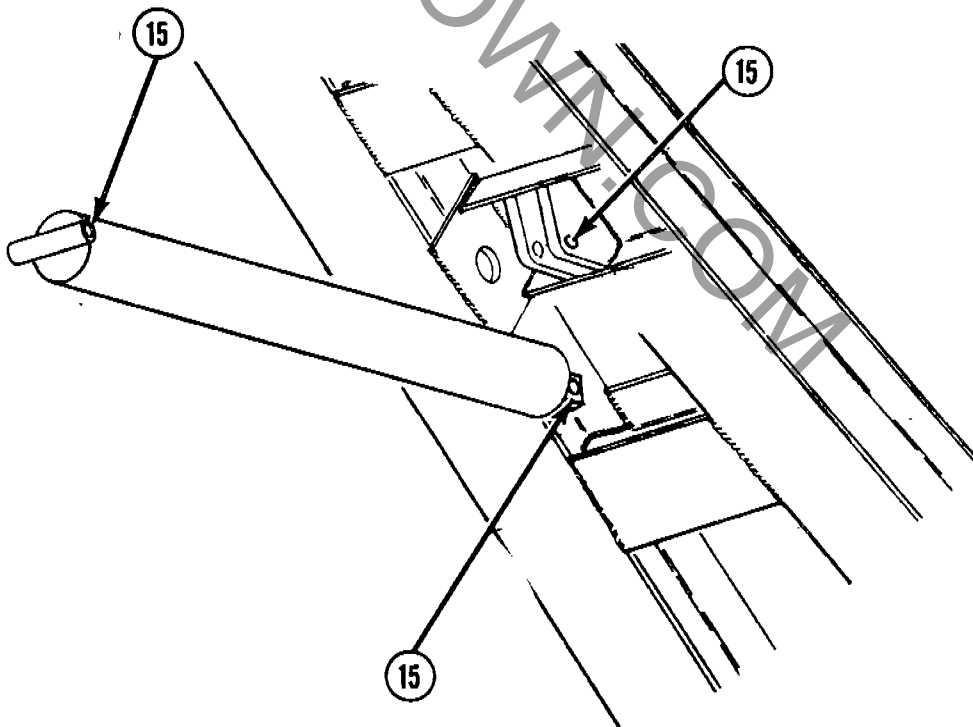
5. ( ) Inspect fences and platforms for proper installation and leveling. Check all jack stands.
6. ( ) Inspect floor hinges and clevis on floor lift (Bulletins 60 and B02-0178-00).
17. ( ) Check table drive speed in both directions - Maximum 11 rpm.
18. ( ) Check seat rotor drive speed in both directions - Maximum 22 rpm.
19. ( ) Check ride operation for proper braking.
20. ( ) Inspect jack stands.
22. ( ) Inspect the structure for cracks, bad welds, etc.



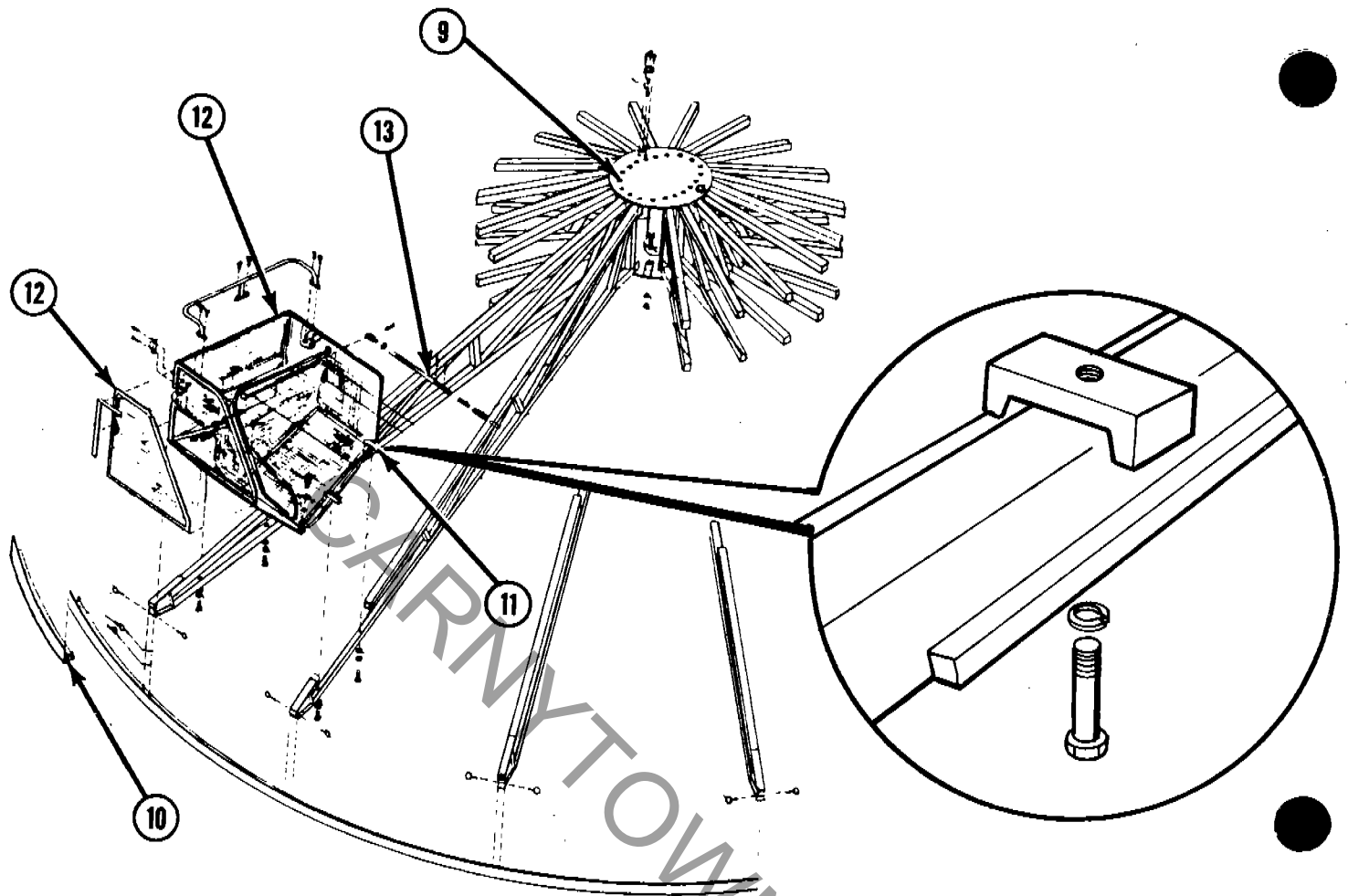
- 7. ( ) Inspect boom for cracks (Bulletin 92).
- 8. ( ) Inspect the boom travel limit switch.



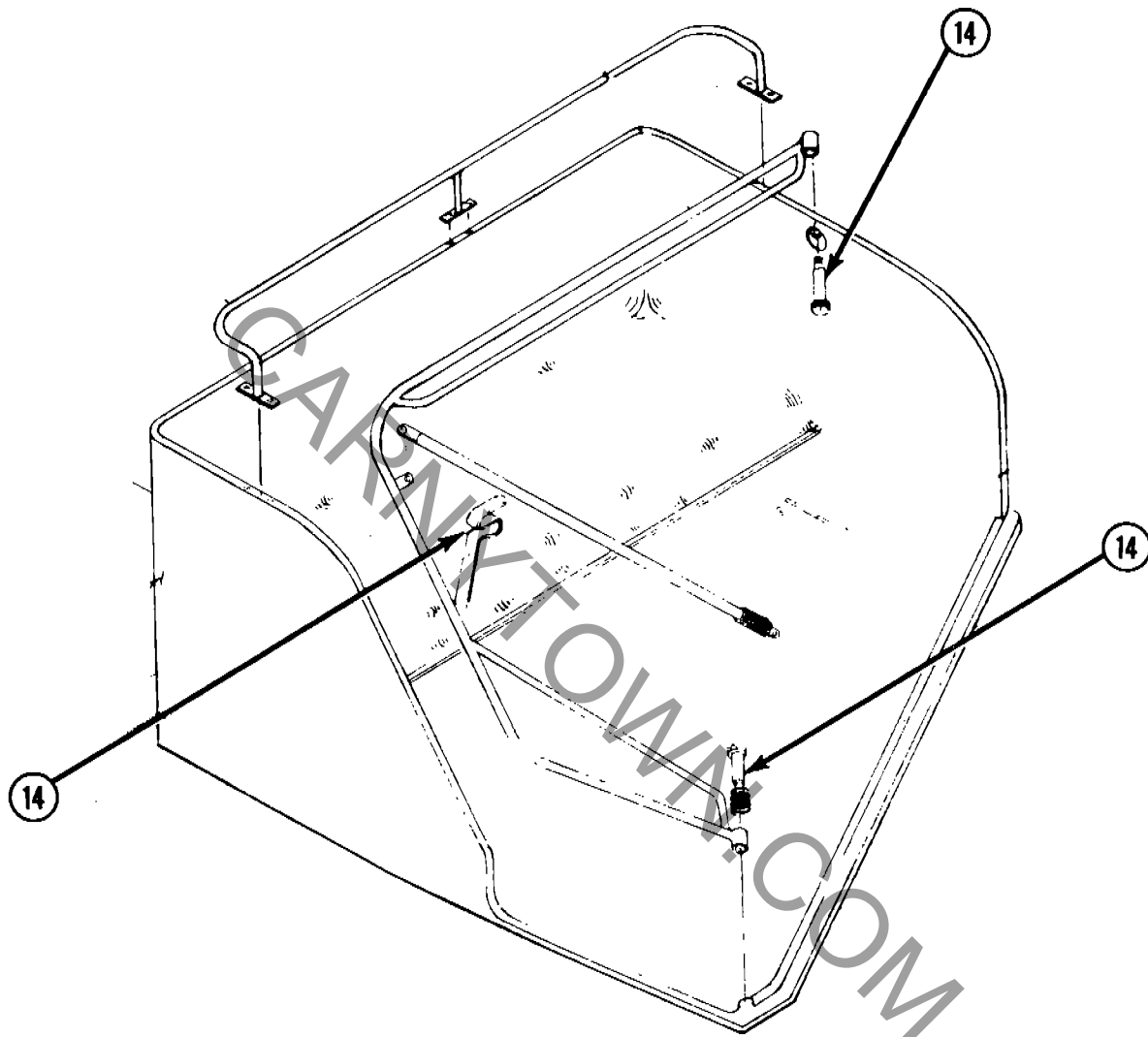
14. ( ) Inspect lap bar spring latches and pivot bolts. Check expiration date on spring latches (Bulletin B02-0256-00).



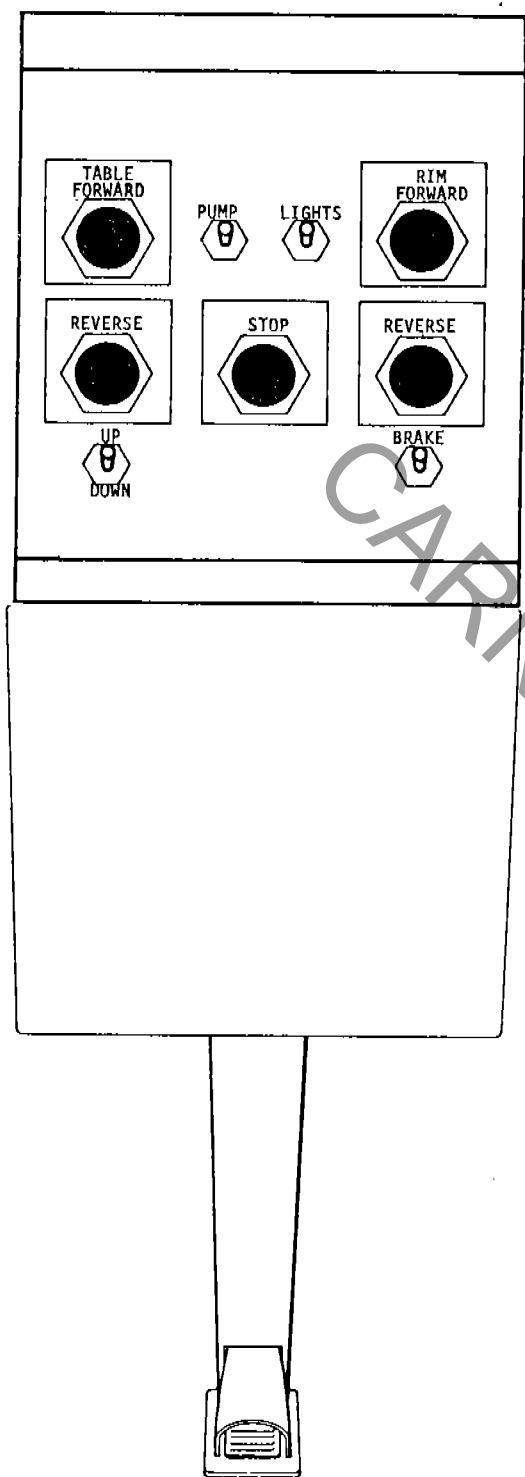
15. ( ) Inspect for hydraulic cylinder pin wear (Bulletin 73).



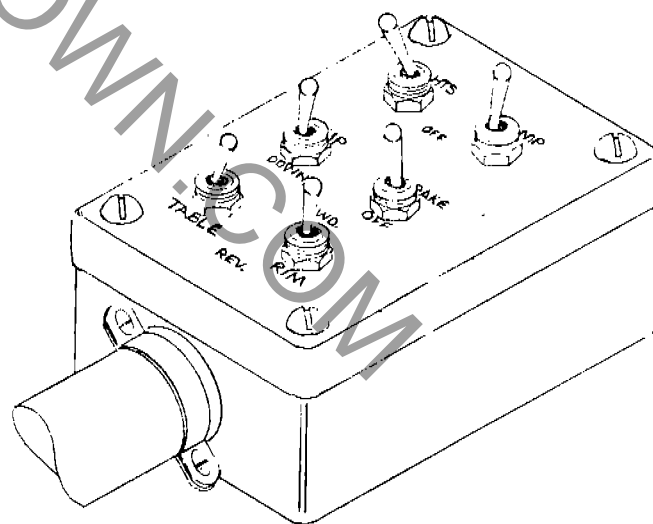
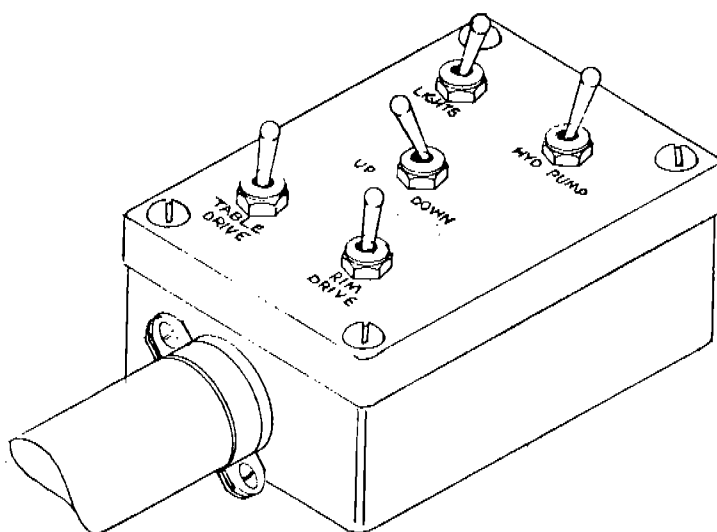
- 9. ( ) Inspect sweep attach points.
- 10. ( ) Inspect drive rim joint attachments.
- 11. ( ) Inspect seat tie-down clamps.
- 12. ( ) Check the condition of the fiberglass on all seats.
- 13. ( ) Inspect seat safety bars for lap bars.



14. ( ) Inspect lap bar spring latches and pivot bolts. Check expiration date on spring latches (Bulletin B02-0256-00).



CONSOLE MOUNTED CONTROLS



HAND-HELD CONTROLS

26. ( ) Inspect all operating controls, including foot switch, if equipped.



NUMBER: B103R1093-0

DATE: MAR. 1, 1991

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

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# SERVICE BULLETIN

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Effective Serial Number: All Units - Chance Rides, Inc.

All Units - Chance Manufacturing Co., Inc.

Chance Rides, Inc. SPECIFICALLY DISCLAIMS ANY LIABILITY for losses associated with rides produced by Chance Manufacturing Company, Inc.

Ride: TRABANT/CASINO

Subject: Lap Bar/Safety Decals

Chance Rides, Inc. has become aware that it is possible for a person to get their hand pinched between the lap bar and the edge of the seat on the TRABANT/CASINO amusement ride. This may occur if the lap bar closes suddenly or if the patron tries to close and lock or unlock the lap bars themselves. When this occurs, it may result in injury to the passenger. ALL OPERATORS MUST VERBALLY CAUTION PERSONS TO WAIT FOR THE OPERATOR TO CLOSE, LOCK AND/OR UNLOCK THE LAP BARS AND TO WARN THEM OF THE POSSIBLE PINCH POINT.

Chance Rides, Inc. has developed four items to help guard against possible injury to persons who are in the seat compartments.

1. A safety decal to be positioned along the inside edge of each seat to warn passengers of the potential pinch point at the lap bars.
2. A safety decal to be positioned on the inside wall of each seat to warn persons to keep their hands and feet inside at all times.
3. A safety decal to be positioned on the back of each seat to inform of proper passenger seating position.
4. A spring to be added to the bottom of the lap bar, at the pivot point, to help counterbalance the weight of the lap bar.

Chance Rides, Inc. requires all owner/operators of TRABANT/CASINO rides to order and install the following items. Return the attached Certificate Of Compliance within fifteen (15) days from receipt of parts. Installation of the items must be done in accordance with the instructions supplied with this bulletin.

PARTS LIST

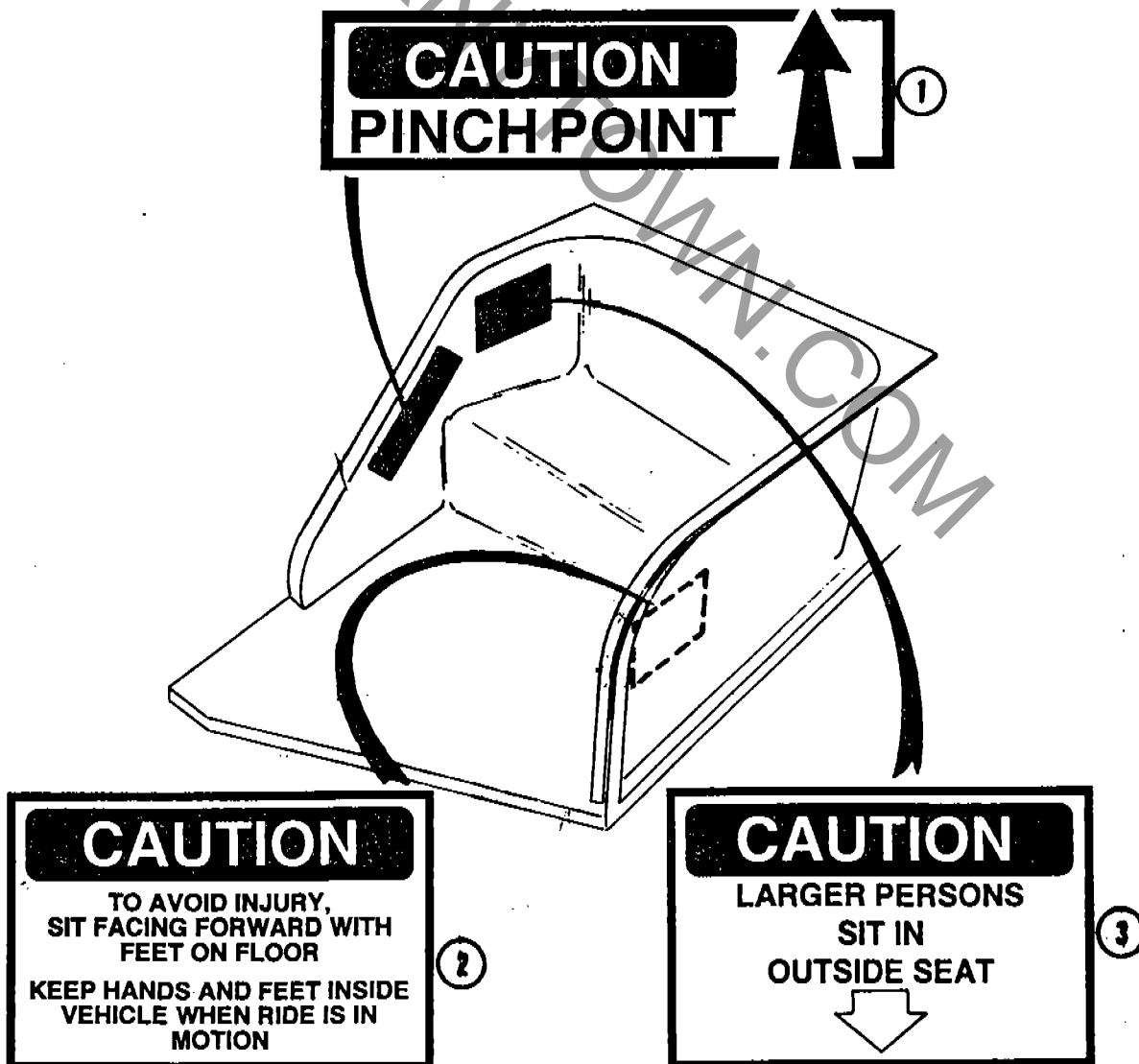
ITEM	PART NUMBER	DESCRIPTION	QTY
1	22198516	Decal-PINCH POINT	20
2	22198502	Decal-KEEP HANDS AND FEET INSIDE	20
3	22198504	Decal-LARGER PERSONS SIT IN OUTSIDE SEAT	20
4	27222600	Spring	20
5	61218700	Stripper Bolt	20
6	37025800	Spacer	40

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

NOTICE

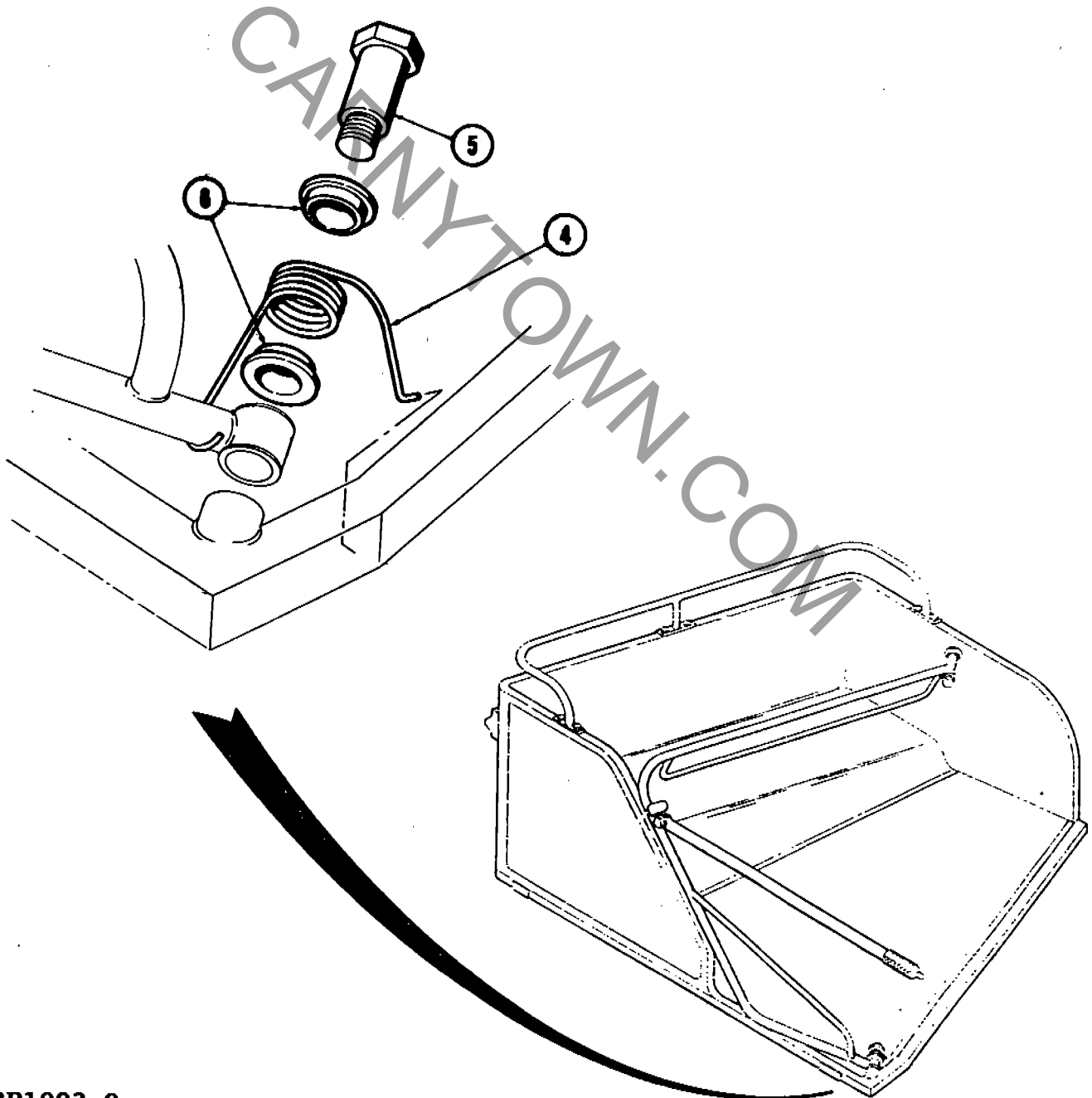
Use only those components authorized, specified or provided by Chance Rides, Inc.

Chance Rides, Inc. SPECIFICALLY DISCLAIMS ANY LIABILITY for losses associated with any unauthorized alterations and/or modifications or additions and installations of unauthorized components.



### INSTALLATION OF SPRING

1. Remove old stripper bolt and discard.
2. Place a spacer (item 6) into each end of the spring (item 4).
3. Slip spring and spacers onto new stripper bolt (item 5). Apply anti-seize material to the threads of the bolt.
4. Slip stripper bolt back through lap bar and attach spring to lap bar and to bottom of seat frame.
5. Secure stripper bolt to seat frame with 45 to 54 foot pounds of torque. The spring must not be in a bind when the bolt has been secured.



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NUMBER: B103R1152-0

DATE: JULY 1, 1994

SUPERSEDES: B02-0256-00

America's Largest Manufacturer of Amusement Rides

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# SERVICE BULLETIN

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Effective Serial Number: ~~All Units - Chance Rides, Inc.~~  
All Units - Chance Manufacturing Co., Inc.

Chance Rides, Inc. SPECIFICALLY DISCLAIMS ANY LIABILITY for losses associated with rides produced by Chance Manufacturing Company, Inc.

Ride: TRABANT/CASINO Subject: Replacement of Spring Latches

Chance Manufacturing Co. Inc., Service Bulletin Number B02-0256-00 has been superseded by this Service Bulletin and is no longer in effect. All copies of Service Bulletin B02-0256-00 should be destroyed.

Chance Rides, Inc., through testing and design change, has developed a new spring latch assembly for the lap bar on the seat of the above noted TRABANT/CASINO amusement rides. This new spring latch assembly makes use of a new style backing plate, a new leaf spring, and a spring latch. This design extends the life of the spring latch.

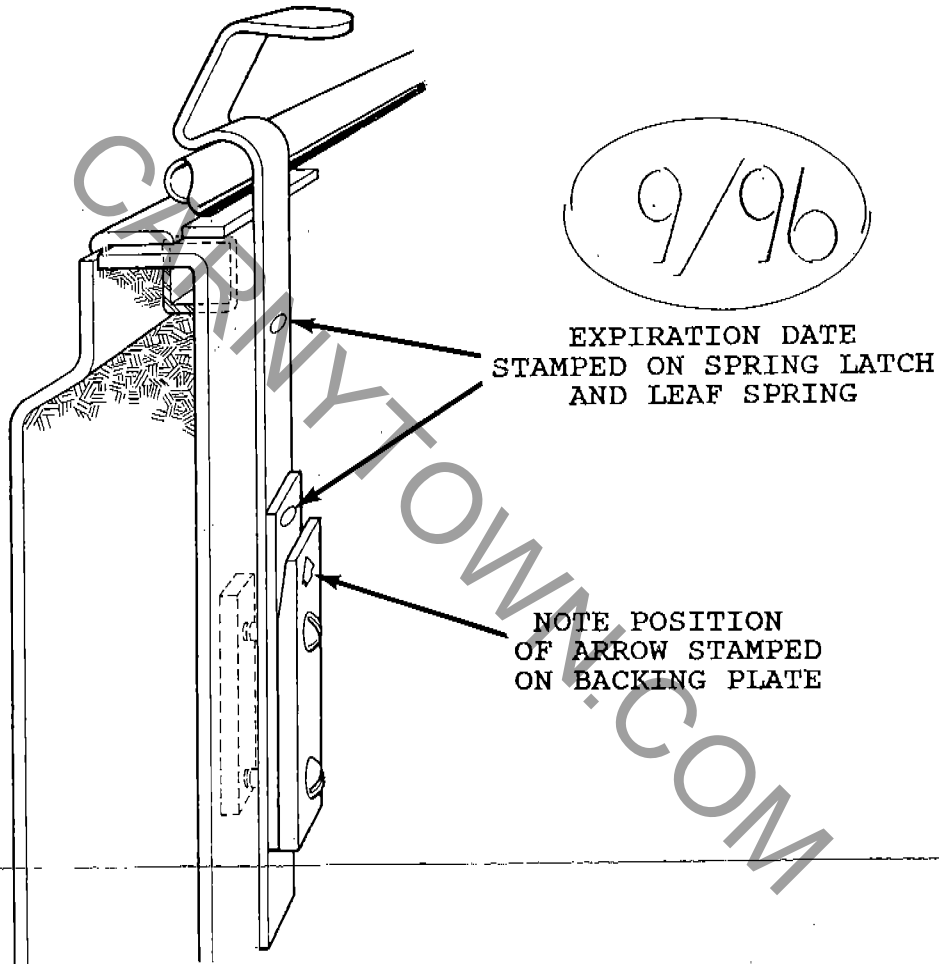
Both the spring latch and leaf spring are dated items. They are stamped with an expiration date and must be replaced on or before that date. The spring latch and the leaf spring are good for up to a maximum of a two (2) year period, and are dated for the last month of the preceding quarter in which they are shipped. Dated items ordered in January, February and March will be dated "12" for the last month (December) of the preceding quarter; those ordered in April, May and June will be dated "3" for the last month (March) of the preceding quarter; those ordered in July, August and September will be dated "6" for the last month (June) of the preceding quarter; those ordered in October, November and December will be dated "9" for the last month (September) of the preceding quarter.

If the expiration date has been altered, painted over, or is illegible, the spring latch or leaf spring must be replaced.

Replacement parts: (parts must be used in combination with each other)

<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
33964900	Spring Latch	20
37204000	Leaf Spring	20
34940800	Backing Plate	20

**IMPORTANT:** The spring latches, leaf springs and backing plates must be installed exactly as shown in this bulletin.



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

#### NOTICE

Use only those components authorized, specified or provided by Chance Rides, Inc.

Chance Rides, Inc. SPECIFICALLY DISCLAIMS ANY LIABILITY for losses associated with any unauthorized alterations and/or modifications or additions and installations of unauthorized components.



Number: B02-0256-00

Date: June 20, 1984

Supersedes:

*America's Largest Manufacturer of Amusement Rides*

## SERVICE BULLETIN

Effective Serial Numbers: All Units

Ride: TRABANT

Subject: Replacement of Spring Latches

CHANCE MANUFACTURING CO., INC. wishes to emphasize the importance of yearly replacement of the spring latches on all lap bars.

An expiration date is electrically etched into each spring latch in the location shown below.



8840099

The expiration date is one year from the date the spring latch is shipped from CHANCE MANUFACTURING CO., INC. ALL SPRING LATCHES MUST BE REPLACED ON OR BEFORE THE EXPIRATION DATE. DO NOT OPERATE THE RIDE UNTIL ALL SPRING LATCHES HAVE BEEN REPLACED. Destroy the old spring latches immediately after removal.

**IMPORTANT:** If the expiration date has been altered, painted over, or is illegible, the spring latch must be replaced.

Order new spring latches each year as follows:

<u>Quantity Req'd. Per Ride</u>	<u>D.P. Number</u>	<u>Description</u>
20	390-39649	Spring Latch (CSN-25C17-2)

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

CARNYTOWN.COM



Number: 802-0179-00

Date: 1-15-79

Supersedes:

*America's Largest Manufacturer of Amusement Rides*

## SERVICE BULLETIN

Effective Serial Numbers: SEE TEXT

Ride: TRABANT

Subject: TURRET BEARING BASE  
PLATE INSPECTION

If you no longer own this ride please notify Chance Manufacturing Co. of new owners name and address.

Chance Manufacturing has been informed of a possible structural problem with the turret bearing seat assembly and connecting reinforcement gussets used on Trabants, serial nos. 4152007, 4152017, 4152027, 4152037, 70-15146, 70-15149, 70-15151 and on.

There is a possibility that cracks may form laterally on the bearing base plate in the positions indicated in VIEW A below or along seams where gussets are welded to the trailer frame or bottom of the bearing base plate as shown in VIEW B.

Please have your unit carefully inspected. Any inspection must be performed by a competent, qualified mechanic capable of understanding the function of items inspected.

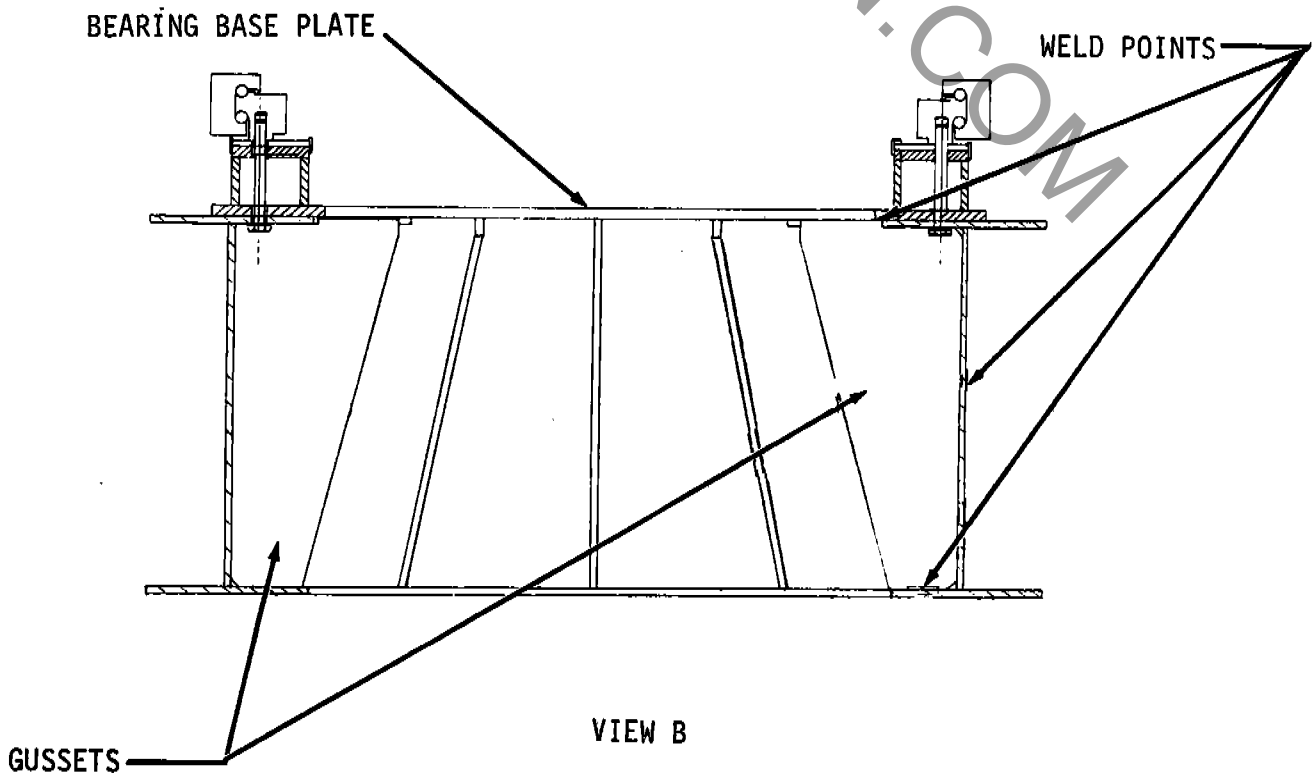
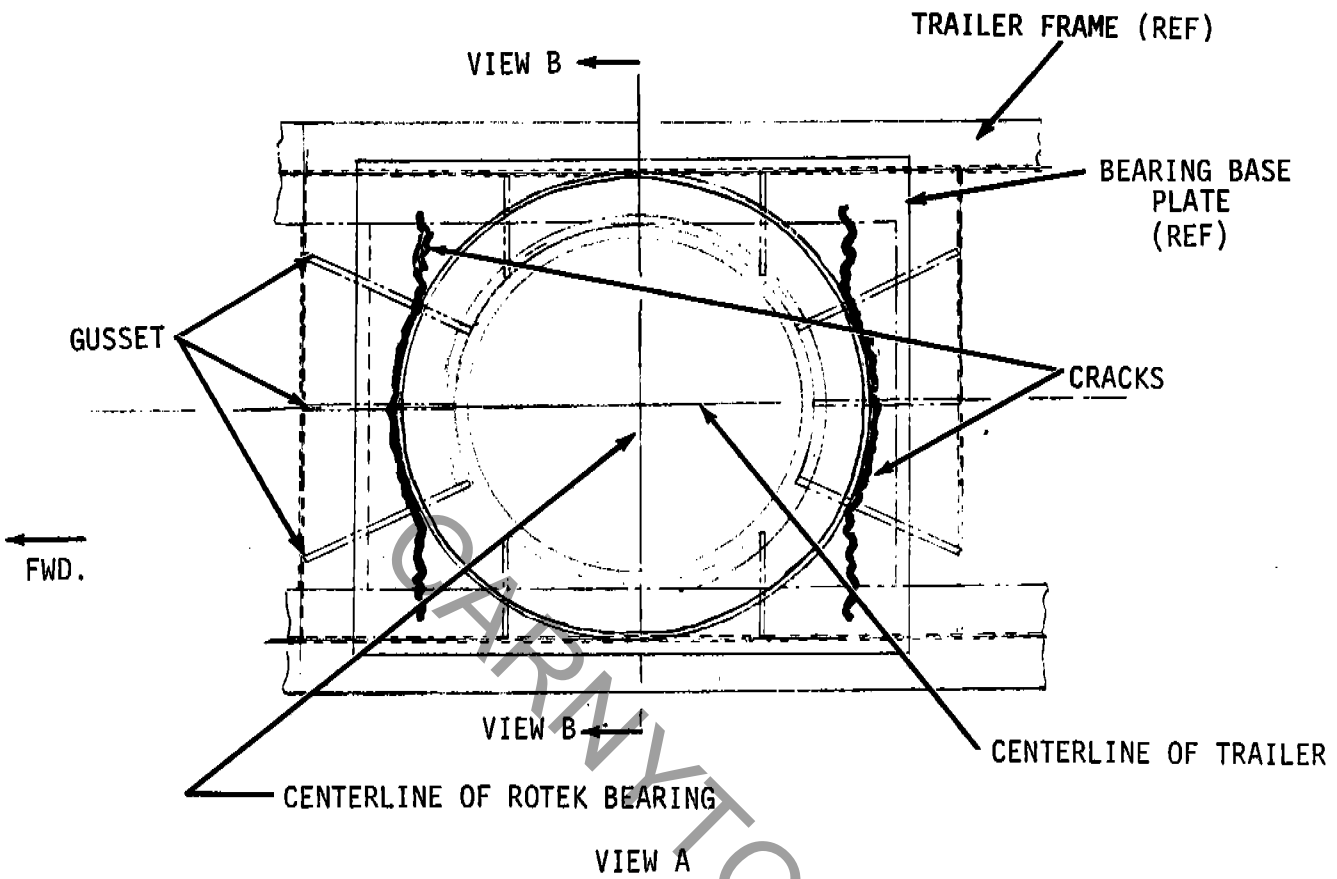
NOTE: To facilitate finding lateral cracks in the bearing base plate, rock the upper wheel assembly parallel to the center line of the trailer while observing the areas indicated in VIEWS A AND B. If cracks exist, they will be accentuated by the rocking motion.

Early units have six reinforcement gussets and later units have ten reinforcement gussets.

The attached Certification of Compliance must be completed and returned to Chance Manufacturing Co., Inc. within seven (7) days of receipt of this bulletin.

If you have any questions concerning this bulletin, please contact Chance Manufacturing for assistance.

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





Number: B02-0178-00

Date: 1-15-79

Supersedes:

*America's Largest Manufacturer of Amusement Rides*

## SERVICE BULLETIN

Effective Serial Numbers: 68-15105 thru 78-15221 Excluding Pit Models

Ride: TRABANT

Subject: FLOOR LIFT CYLINDERS ATTACHMENT

If you no longer own this ride please notify Chance Manufacturing Co. of new owners name and address.

Chance Manufacturing has designed a modification kit for the Trabant to help prevent possible misuse of the floor lift cylinders which could result in dropping of the floor during erection.

Trabant owners should order the kits from our parts department and install them on their rides immediately. Chance Manufacturing is offering these kits at the bare manufacturing cost.

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

Before installing this kit, read the instructions completely and familiarize yourself with the parts listed. Make certain all parts have been received. If any parts are missing, notify Chance Manufacturing Co. immediately. Do not substitute an inferior grade of material or part. Remove and discard all parts replaced by this kit.

All welding must be performed by a welder that is certified under the American Welding Society Structural Welding Code D1.1-75 or the equivalent.

The attached Certification of Compliance must be completed and returned to Chance Manufacturing Co., Inc. within seven (7) days of receipt of this bulletin.

If you have any questions concerning this installation bulletin, please contact Chance Manufacturing for assistance.

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

QUANTITY	PART DESCRIPTION	PART NUMBER
-	COMPLETE KIT	K02-0178-00
1	SERVICE BULLETIN	B02-0178-00
1	UPPER PLATE	D02-0178-02
1	LOWER PLATE	D02-0178-05
2	END CAP	D02-0178-04
1	SWIVEL	302-76881
1	SWIVEL	302-76882
2	BOLT, GRADE 8, 5/8-11x4	686-09328
4	WASHER, WROUGHT, 5/8"	696-85324
2	LOCKNUT, ESNA, 5/8-11	691-47832
2	TAPER PIN	390-52305
2	HAIR PIN	694-51904
2	CYLINDER MOUNT	1030600-3
2	TAPER PIN	390-51975
2	HAIR PIN	694-51900
2	STOP	1030600-4
1	CERTIFICATION OF COMPLIANCE	-

#### UPPER END

With the ride set up remove the floor lift cylinders from the clevises. Replace the bolts in the clevises and lay a square at each end of the crossmember, tight against the bolts. Measure the distance between the two squares to find the centerline as shown in FIGURE A. Clearly mark the centerline on the side of the crossmember. Remove and discard the clevises, nuts and bearings. Cut the crossmember as shown in FIGURE B and grind the cuts smooth. Do not remove the lower wall of the crossmember.

Use the centerline mark to center the D02-0178-05 lower plate in the crossmember. Mark the taper pin holes on the crossmember and remove the lower plate. Cut the crossmember and the I-beams for pin clearance as shown in FIGURE C. Grind cuts smooth.

Install the D02-0178-02 upper plate with reinforcing plates on top, D02-0178-05 lower plate, 302-76881 and 302-76882 swivels, 390-52305 taper pins, and D02-0178-04 end caps. Use the centerline on the crossmember to center the parts as shown in FIGURE D. Tack weld the upper plate, lower plate and end caps in place. Remove the taper pins and swivels and complete the welding as shown in FIGURE E. Install the swivels as shown in FIGURE D using the 390-52305 taper pins and 694-51900 hair pins. Install the floor lift cylinders in the swivels using the 686-09328 GRADE 8 bolts, 696-85324 wrought washers and 691-47832 locknuts.

#### LOWER END

Cut the old lower floor lift cylinder brackets off of the boom (See FIGURE F) and grind the area smooth. Retract the cylinder rods and secure the 1030600-3 cylinder mounts to the cylinders using the 390-51975 taper pins and 694-51900 hair pins. Position the cylinder mounts and the 1030600-4 stops as shown in FIGURE G and tack weld them to the boom. Remove the floor lift cylinders from the cylinder mounts and weld the clamp brackets and the stops to the boom as shown in FIGURE G. Secure the floor lift cylinders in the cylinder mounts using the bolts and nuts.

The attached CERTIFICATION OF COMPLIANCE must be completed and returned to Chance Manufacturing Co. within seven (7) days of receipt of kit.

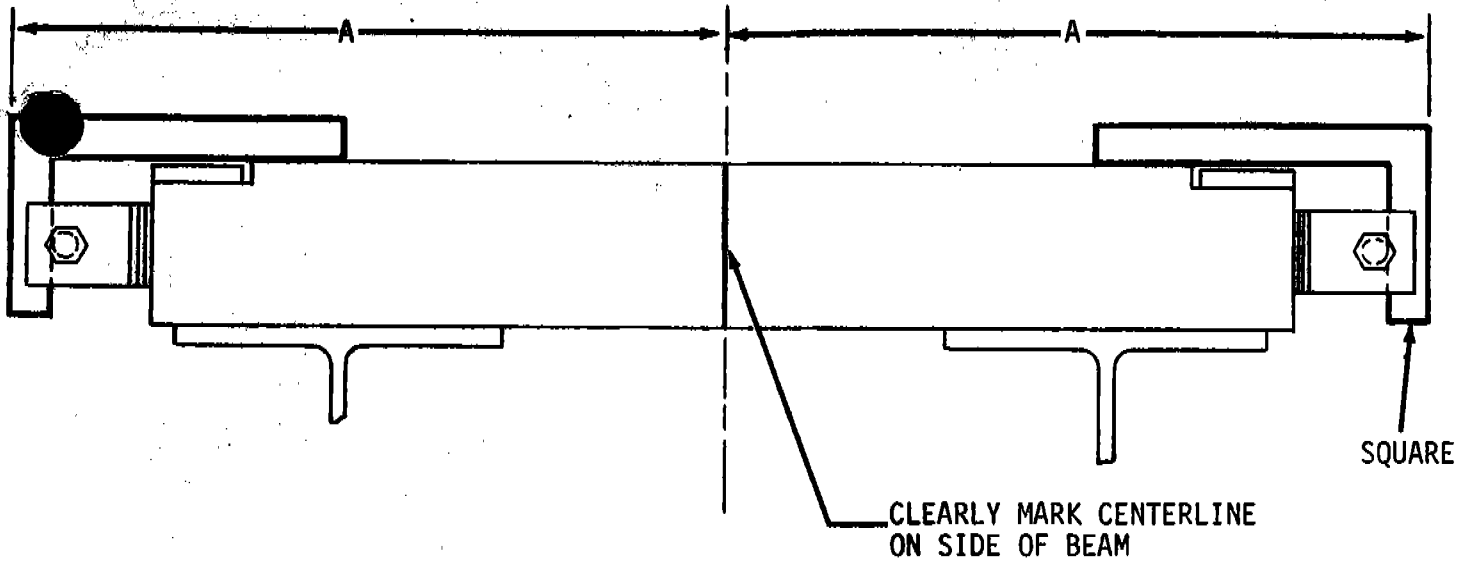


FIGURE A

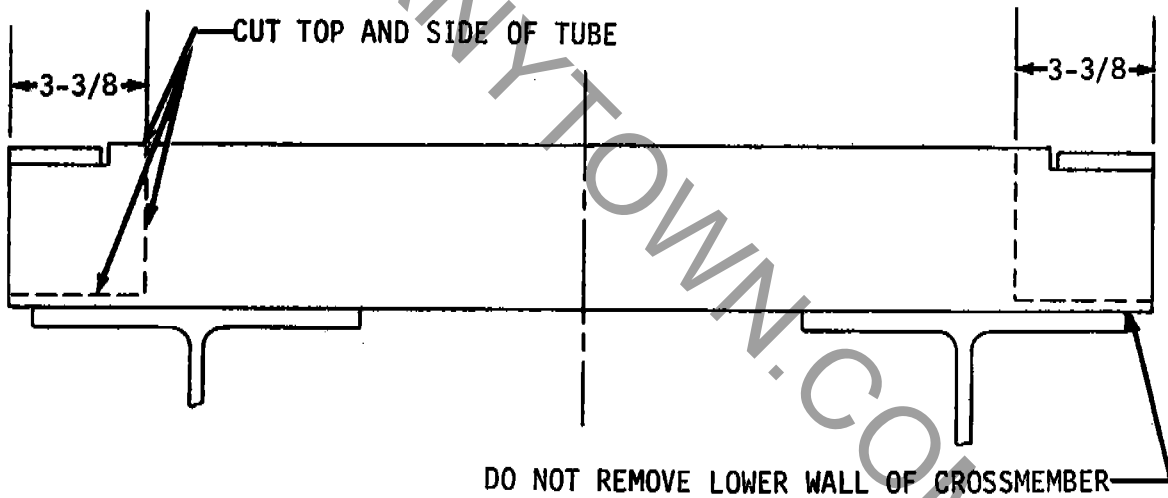
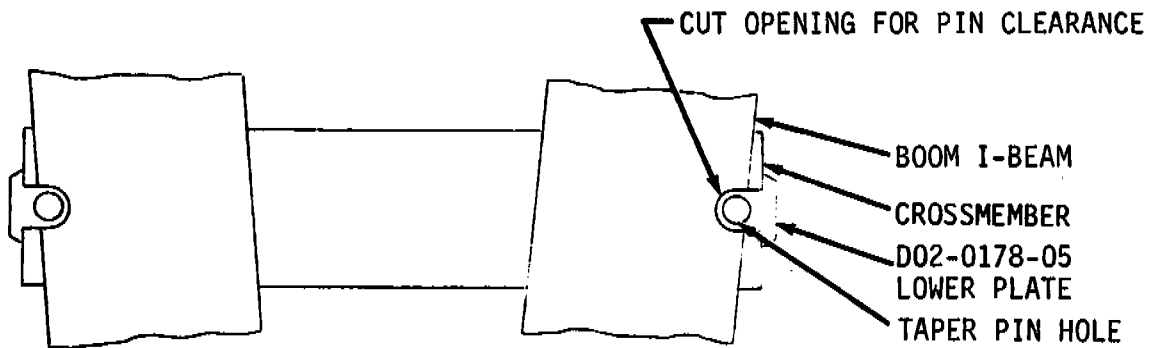


FIGURE B



VIEW FROM UNDER BOOM  
FIGURE C

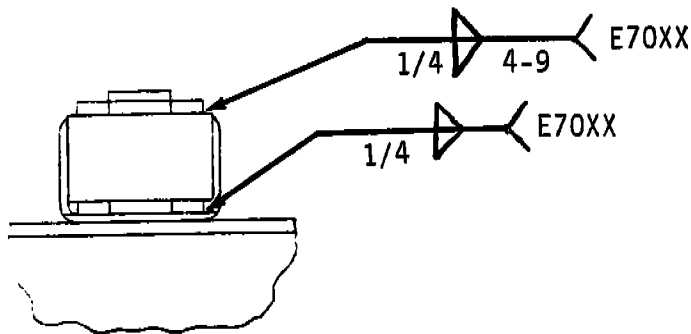
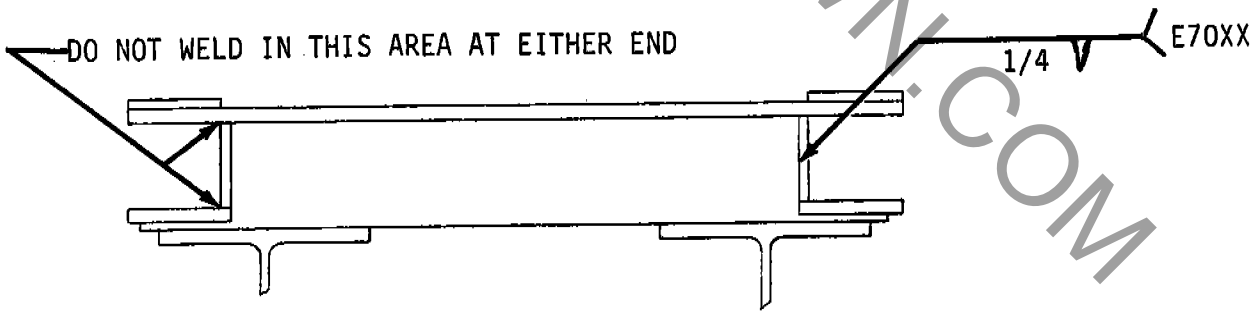
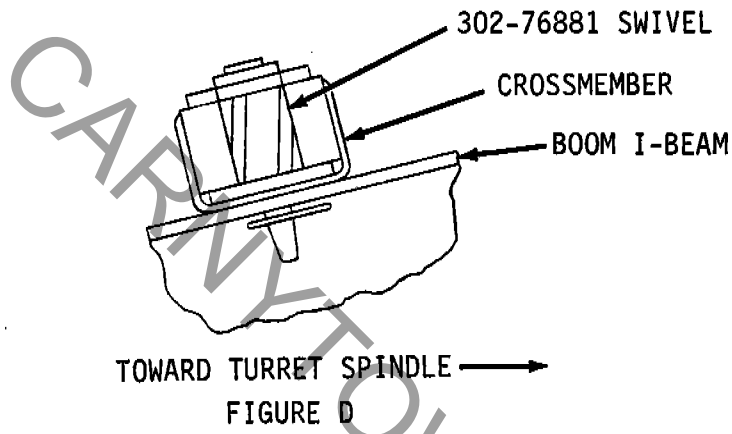
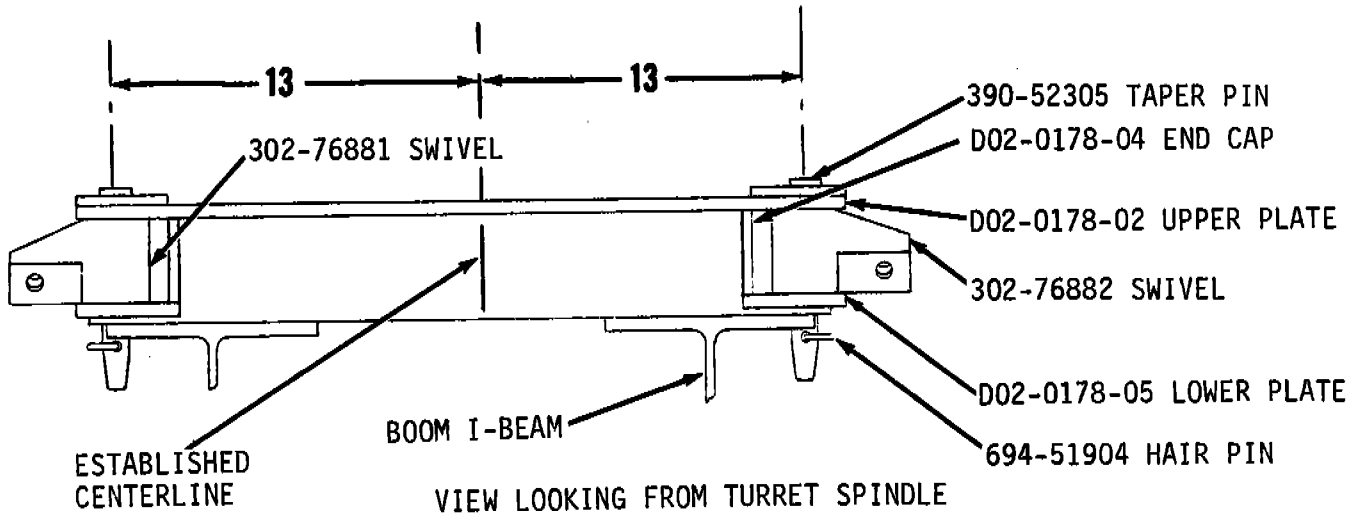
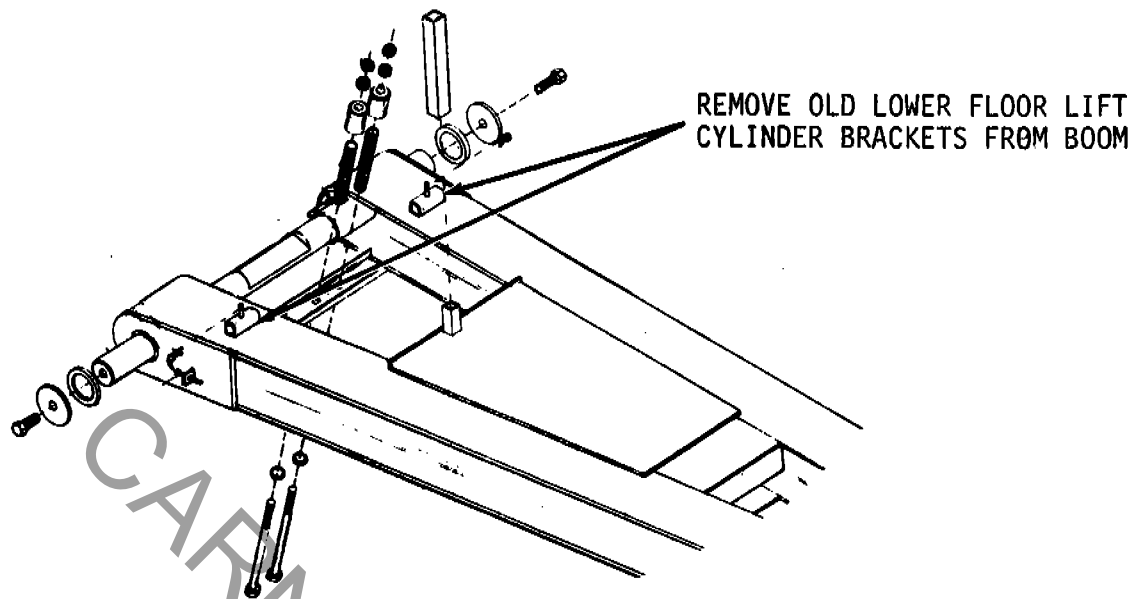
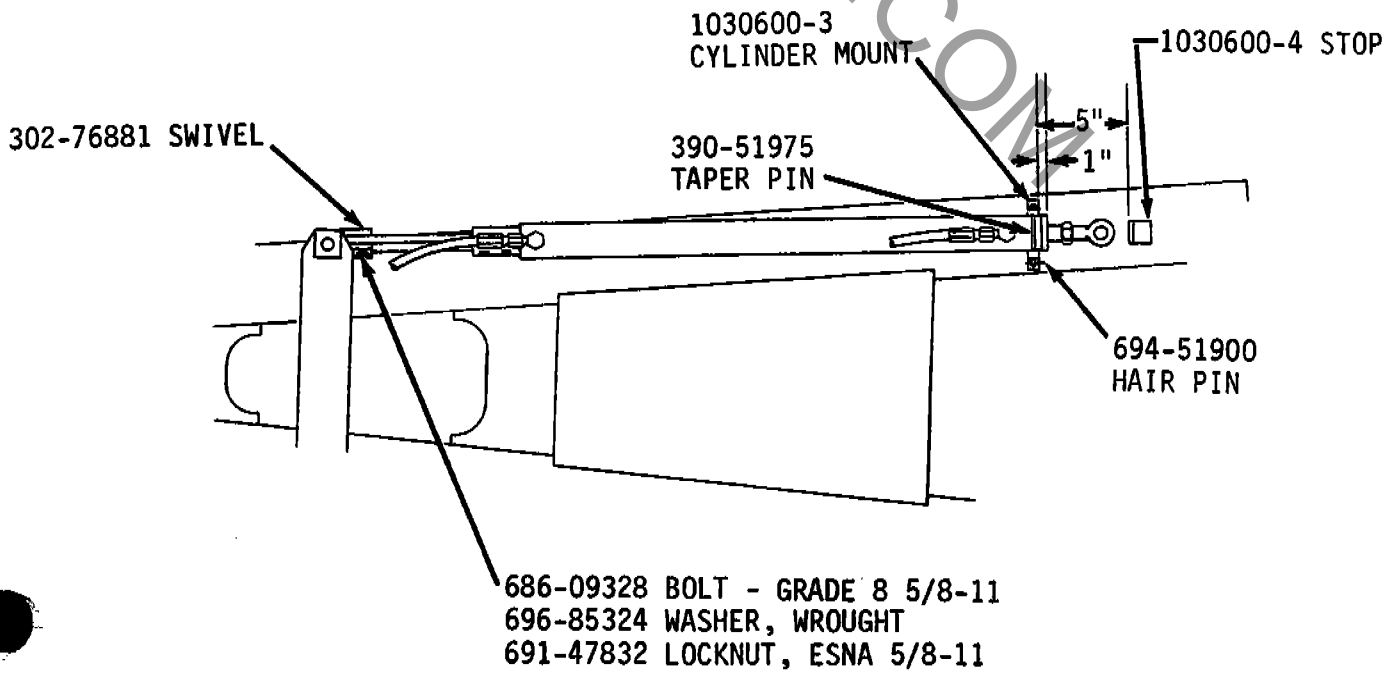


FIGURE E



REMOVE OLD LOWER FLOOR LIFT  
CYLINDER BRACKETS FROM BOOM

FIGURE F



1030600-3  
CYLINDER MOUNT

1030600-4 STOP

302-76881 SWIVEL

390-51975  
TAPER PIN

694-51900  
HAIR PIN

686-09328 BOLT - GRADE 8 5/8-11  
696-85324 WASHER, WROUGHT  
691-47832 LOCKNUT, ESNA 5/8-11

FIGURE G

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Number: 92

Date: 12-5-74

Supersedes:

*America's Largest Manufacturer of Amusement Rides*

## CHANCE BULLETIN

Effective Serial Numbers:

Ride: TRABANT

Subject: CHECKING BOOM FOR CRACKS

One of the early TRABANTS has reportedly developed a crack in the boom. This could be attributed to any one of several possible causes, and cannot be pinpointed without further field reports.

The problem is not expected to be a reoccurring one, nor will it occur on all rides. However, as a safety precaution, all rides should be checked immediately in the areas described.

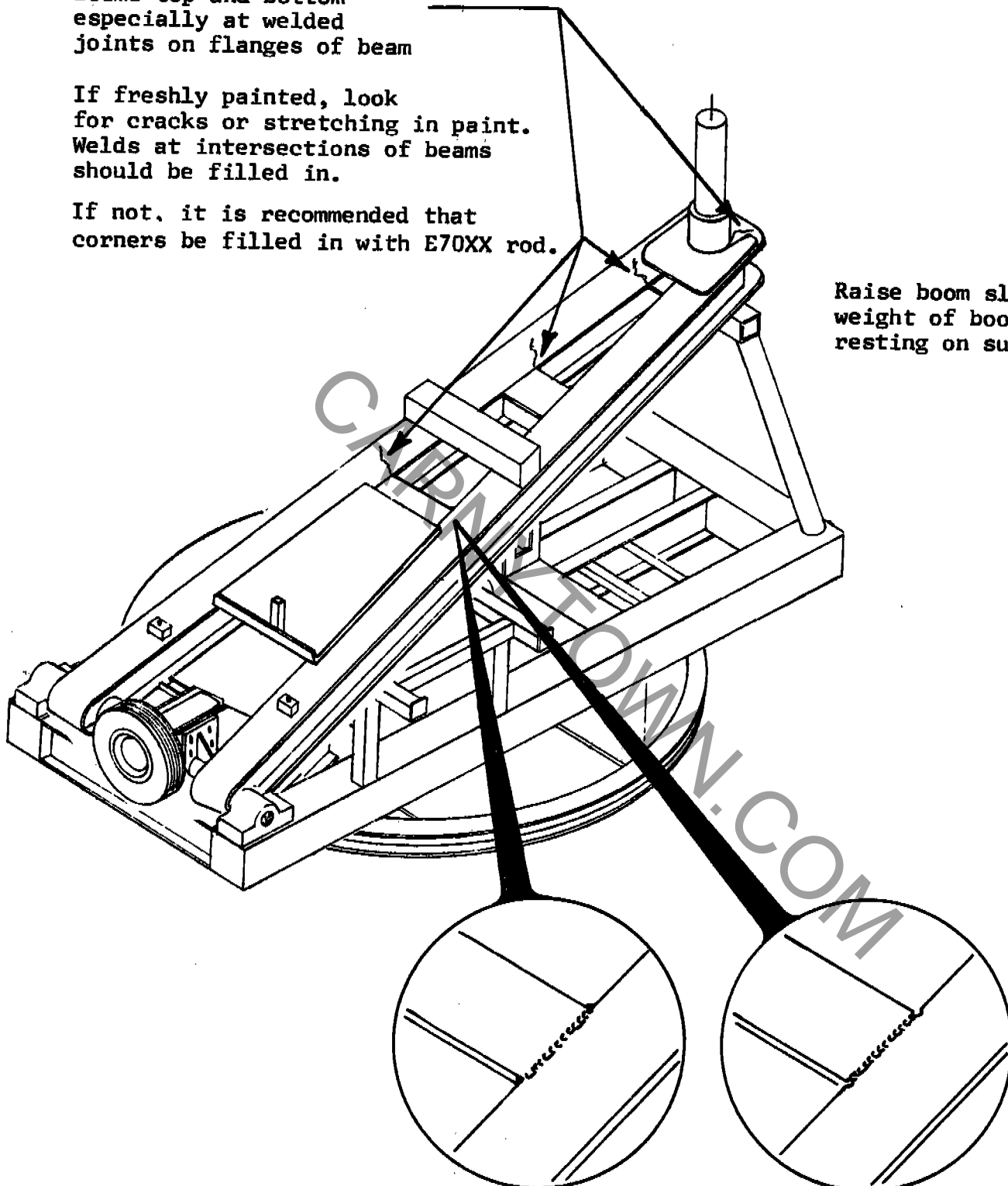
If any cracks are found or suspected, report such condition to Chance Manufacturing Company immediately. At that time we will advise corrective action.

Inspect for cracks along beams top and bottom especially at welded joints on flanges of beam

If freshly painted, look for cracks or stretching in paint. Welds at intersections of beams should be filled in.

If not, it is recommended that corners be filled in with E70XX rod.

Raise boom slightly so weight of boom is not resting on support.



Desired weld joint

Undesirable weld joint

Report any existing cracks immediately.

Follow up inspections should be performed at least monthly.



Number: 73

Date: 6-3-74

Supersedes:

America's Largest Manufacturer of Amusement Rides

## SERVICE BULLETIN

Effective Serial Numbers: 68-15105 thru 73-15192

Ride: TRABANT

Subject: CYLINDER EAR REPLACEMENT

We are now offering a kit to rebuild the ears on the boom where the main lift cylinder attaches. On some rides that have experienced heavy usage or lack of maintenance, these ears and the cylinder pin have become worn or galled to the point where they should be replaced.

All TRABANTS included in the above serial numbers should be inspected according to the following procedure.

### INSPECTION

Ride must be erected to a point where the underside of the boom is readily accessible.

With the boom resting on the stand and the hydraulic system running, tap the Up-Down switch for the boom and observe the cylinder rod end.

The cylinder rod end should not move in or out more than 1/8 inch before it moves the boom.

Any movement of the cylinder rod end without movement of the boom indicates some play or wear in the ears on the boom, or on the cylinder pin. Looseness under 1/8 inch can be considered tolerable, but the pin should be inspected weekly if any signs of wearing are found.

If pin or ears are worn beyond 1/8 inch limits or if marginal, replace the pin and ears per instructions.

### PARTS INCLUDED IN KIT #302-38760

Quantity	Item
1	1032405-3 Cutting Template
1	1032406-1 Pin
1	1/4 x 3 Cotter Pin
1	1032405-1 Hanger Weldment
1	1032405-2 Hanger Weldment
1	1032405-4 Bar

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

## REPLACEMENT OF CYLINDER PIN & EARS

### CAUTION

Disconnect electrical power coming to ride as the following procedure requires personnel to be close to electrical slip rings and brushes.

The following procedure can be performed with the boom resting on the stand. This is the safest and the recommended manner in which the following should be performed.

The boom, however, can be raised for easier access, at customer's option. If boom is raised, make sure it is braced adequately so it cannot fall down. This method is not recommended for safety reasons, and is at owner's risk.

Figure 1

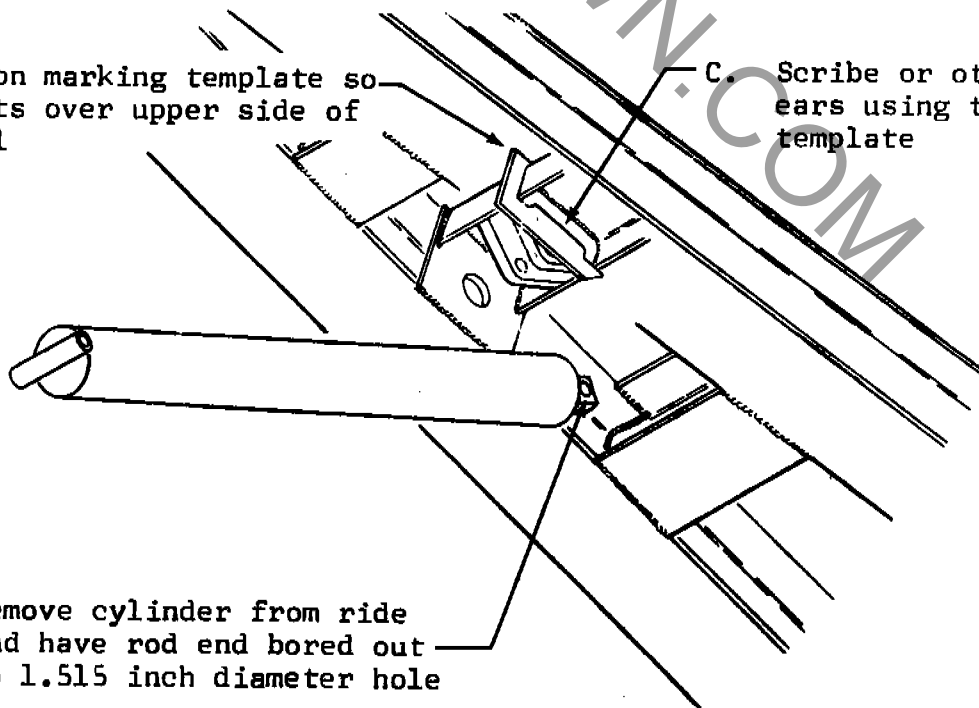
1. Disconnect hydraulic lines from cylinder. Plug the ports in the cylinder and plug the hydraulic lines to prevent dirt from entering.
2. Remove pins from upper and lower end of cylinder and remove cylinder from ride.
3. Have a local machine shop bore out the hole in the rod end of the cylinder to 1.515 inch.
4. Clean the ears and general area so they are free of grease and dirt. If solvent is used, it should be non-flammable type.

Position cutting template so the small ear fits over the upper side of the channel.

Scribe or use a magic marker or soap stone, etc., to mark a line along each ear following the inside edge of the cutting template.

B. Position marking template so ear fits over upper side of channel

C. Scribe or otherwise mark ears using this edge of template

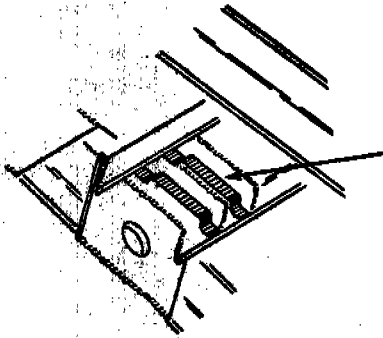


A. Remove cylinder from ride and have rod end bored out to 1.515 inch diameter hole

Figure 1

Figure 2

5. With a cutting torch, cut off each ear as close as possible to the line that you have marked on them.



Torch old ears off along line, should look approximately like this when complete

Figure 2

Figure 3

6. Place each new ear assembly up against the old ear and channel to see that each one fits flat against the inside of the channel and flat against remaining portion of old ear.

If new ear assemblies do not fit, torch or grind a small amount off the old ears.

7. Pin bottom end of lift cylinder.
8. Insert new pin through cylinder rod end and new ears.
9. Hold or block cylinder so new ears are in proper position and tack weld ears in place.

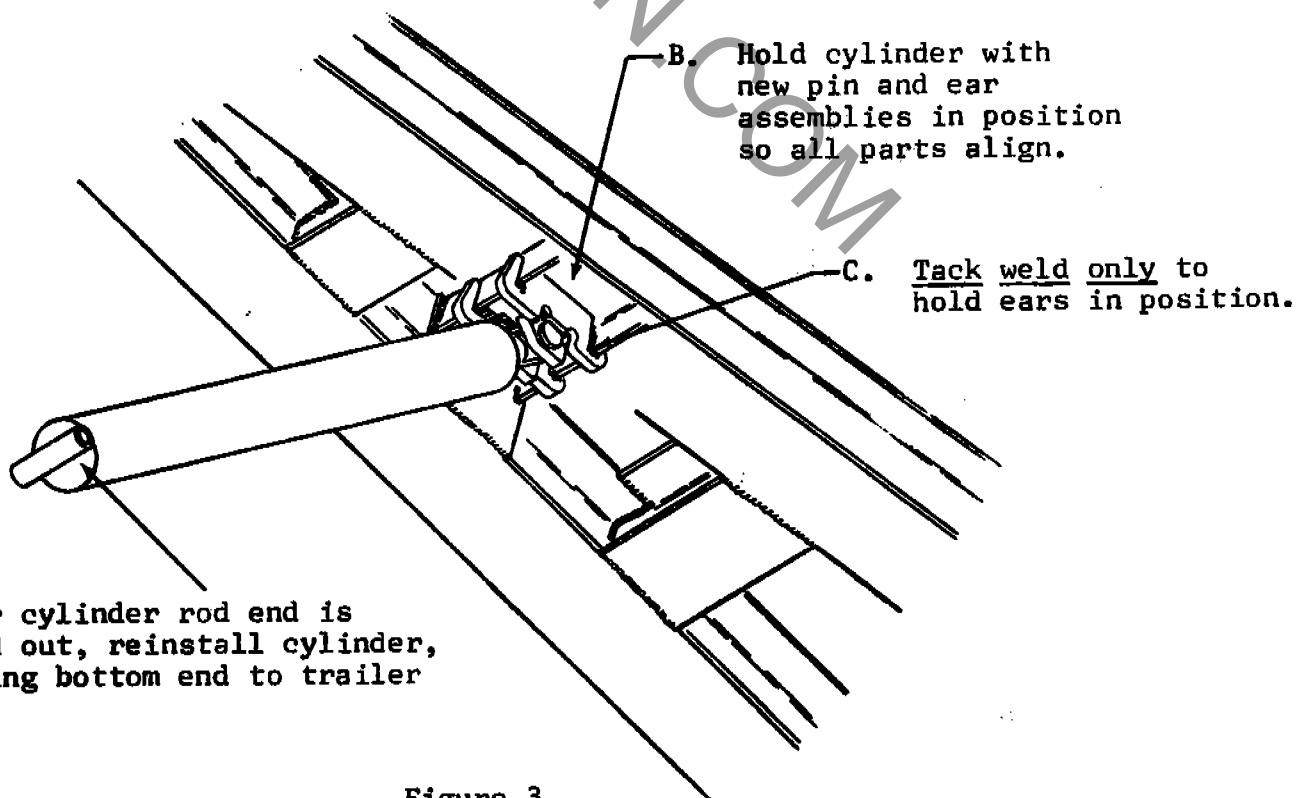


Figure 3

Figure 4

10. Remove pin and let cylinder drop down so it is not in the way.
11. Weld ear assemblies in place as shown in Figure 4.
12. Secure cylinder with new pin and cotter pin.

REMOVE CYLINDER AND PIN

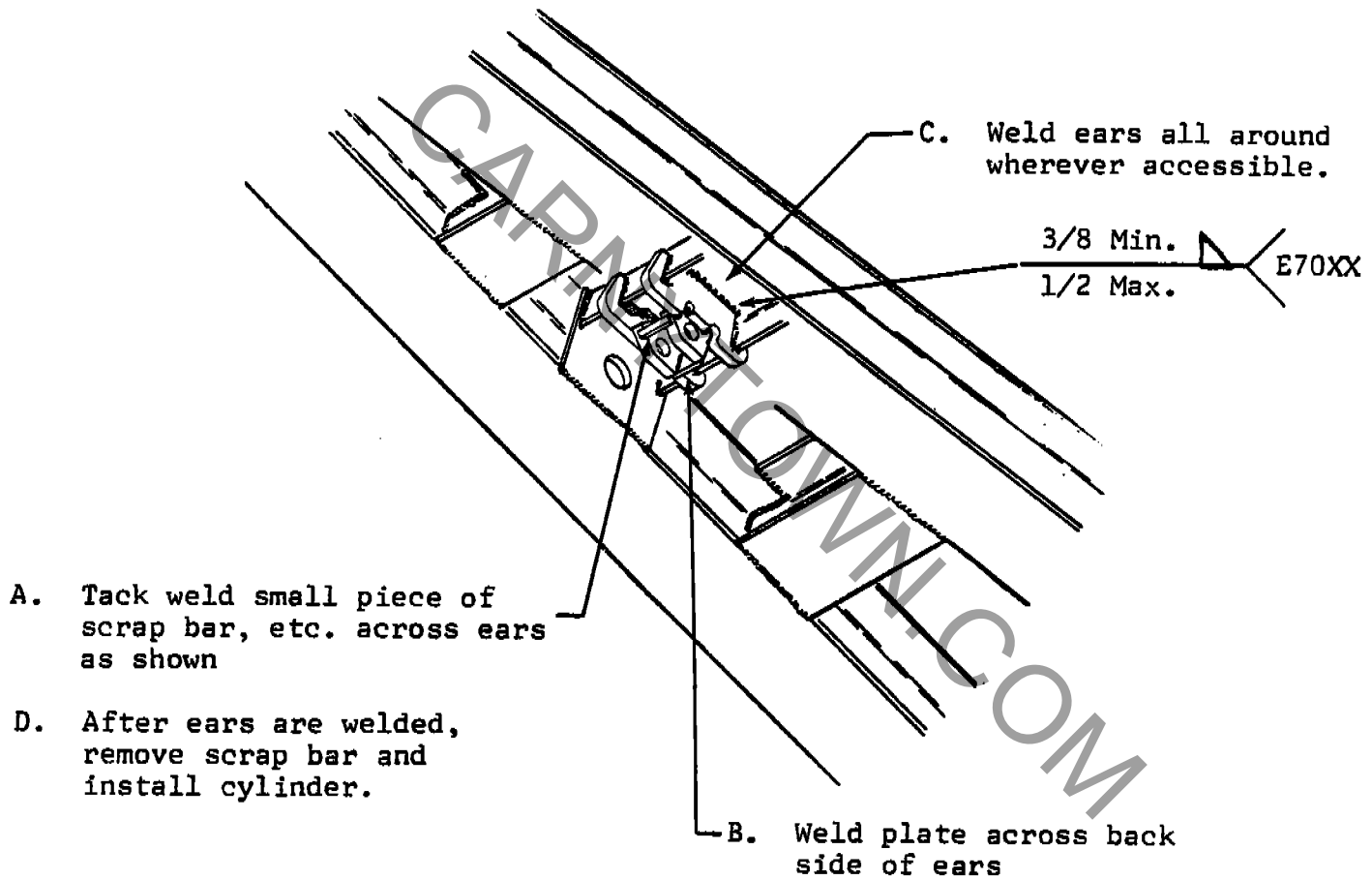


Figure 4



Number: 60  
Date: 9-13-73

Supersedes:

*America's Largest Manufacturer of Amusement Rides*

## SERVICE BULLETIN

Effective Serial Numbers: 68-15105 thru 73-15190

Ride: TRABANT

Subject: REPLACEMENT OF FLOOR CLEVIS  
FOR LIFT CYLINDERS

During recent inspections of rides returning to the factory, a condition was brought to our attention that is unsafe. The clevises attached to the floors for the lift cylinders are fatiguing where they are bent around the pin. This condition is probably a result of improper heat treating which has caused the metal to crystalize or become brittle in the bent area.

All clevises should be checked immediately for any visual signs of deterioration. These include cracking of exterior paint which could indicate a stretching action, and small cracks starting at edges. Rust and normal wear should also be taken into account.

If clevis shows any abnormal signs, it must be replaced immediately. Do not attempt to strengthen clevis by welding to it in any manner.

**INSPECT CLEVISES BEFORE EVERY SET-UP OR TEAR DOWN**

### WARNING

Should a clevis fail, the floors will drop very suddenly. Always use ropes to pull out on the outer floor sections during set-up or tear down procedures. This eliminates having any personnel in an area where they could be injured if a floor section fell.

## CLEVIS REPLACEMENT

Replacement of the clevis is not a simple task and will require the services of a competent welder equipped with an "Arc Air".

In addition, a pop rivet gun, electric drill and #9 drill bit and acetylene torch are required.

Remove the tread plate on each side of the clevis by drilling out the rivets. Use a #9 drill bit.

After removing the tread plate, the ends of the pin and the socket for the floor support stand will be visible.

Using the "Arc Air", blow the welds loose on the floor support socket and on the ends of the clevis pin.

Knock the pin loose and install new pin and clevis, securing pin with 1/8 x 1" long cotter pin on both ends.

### NOTE

In order to obtain enough clearance for the new clevis, it may be necessary to bend the plate which is welded to the support tubes. To accomplish this, heat the plate with an acetylene torch and strike it several blows with a hammer.

Relocate socket as shown in drawing.

Complete procedure by pop riveting tread plate to structure.

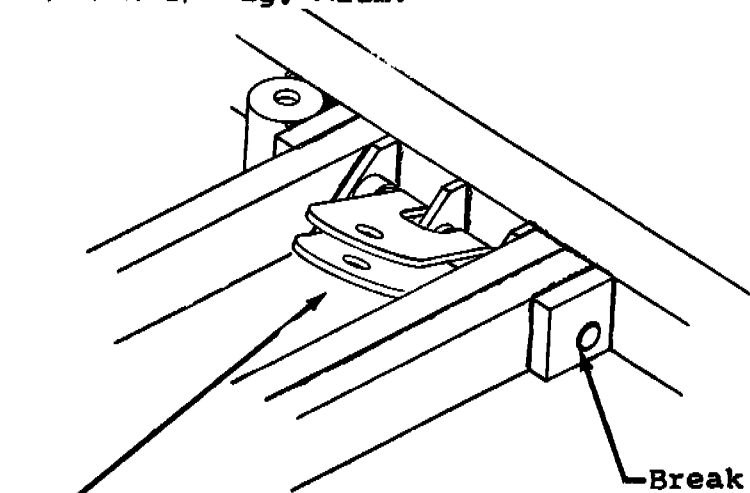
NEW CLEVIS P/N 1030200-42

NEW PIN P/N 1030200-43

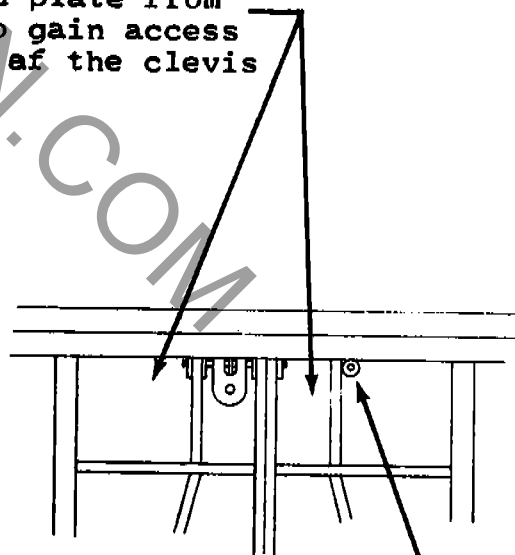
COTTER PIN  
1/8 X 1" Lg.

POP RIVETS  
3/16 X 1/2 Lg. Alum.

Remove tread plate from this area to gain access to the ends of the clevis pin



Break welds loose on both ends of pin



Relocate Floor Stand Support Socket to this location.

Heat plate and bend if necessary to gain clearance for new clevis

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# CASINO/TRABANT

Field inspection and test guide

Manual number 24329308



CARNYTOWN.COM

# CASINO/TRABANT

## Field inspection and test guide

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## Introduction

Proper maintenance is essential to the safe operation of this ride. The tests and inspection points outlined in this field guide are not intended to replace the recommended maintenance schedule. This guide does not contain maintenance and repair procedures and should only be used as a ride inspection and test guide.

When repairs are necessary, use only those components authorized, specified or provided by the manufacturer. If any alterations, modifications and/or additions, installations of unauthorized components are made to the original design without the manufacturer's explicit written consent or without direct supervision by a manufacturer's representative, Chance Rides, Inc. makes no claims as to the integrity of the altered or modified ride (product).

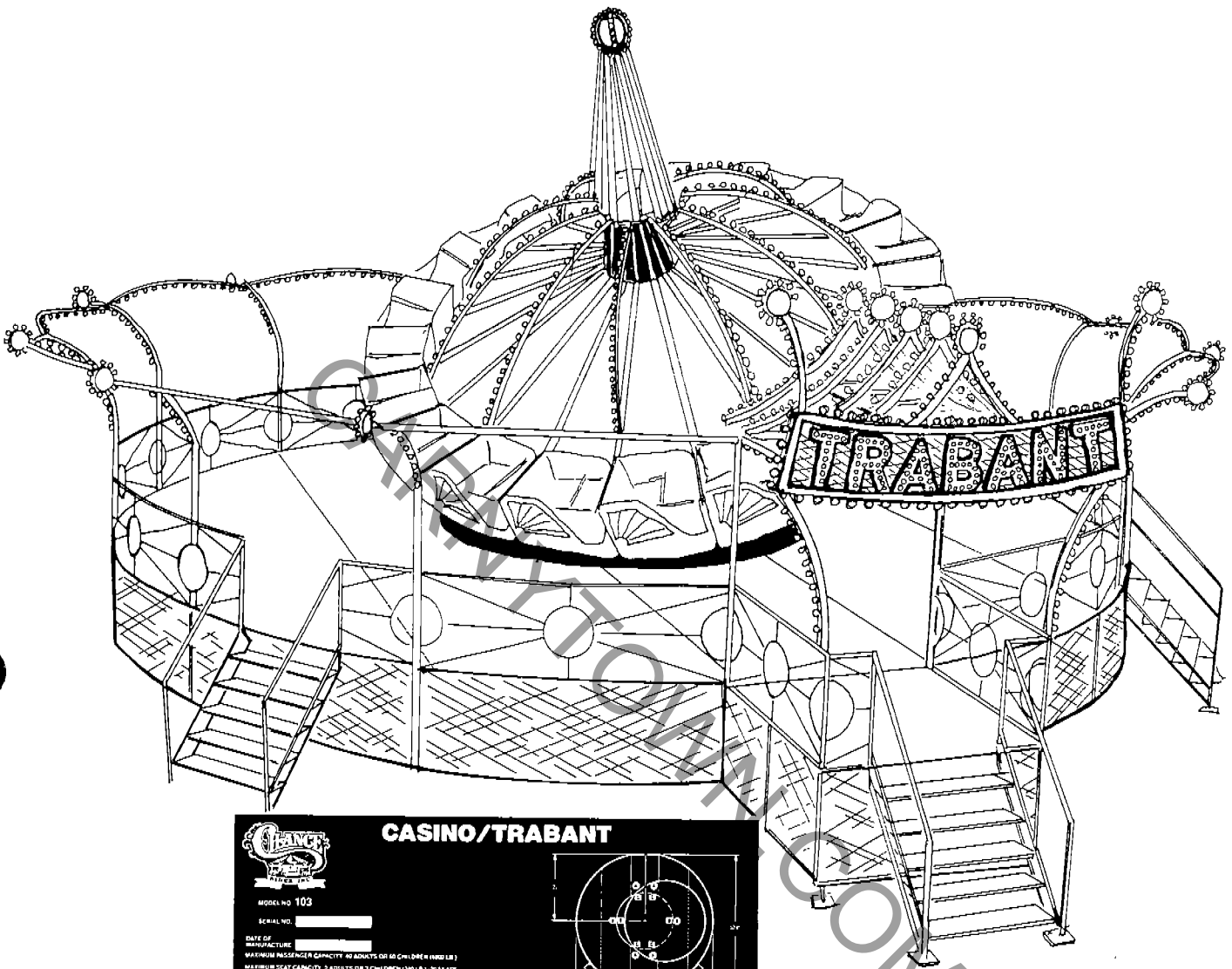
Information in this field inspection and testing guide applies only to products manufactured by CHANCE RIDES INC. built after January 1, 1986 (**Casino/Trabant** serial number 103-23986 and on).

CHANCE RIDES INC., reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to such changes.

### Ride description

The **Casino/Trabant** is mounted on a trailer (portable model) or a stationary base, anchored to the ground (park or "pit" model). The ride has an electro-hydraulic drive system. Braking is provided hydraulically for the rim drive and mechanically for the table drive.

The ride information plaque is mounted to the boom support stand. It lists specifications, operating dimensions, ground loads, as well as model and serial number and date of manufacture.



**CHANCE RIDES**  
**CASINO/TRABANT**

MODEL NO. 103  
 SERIAL NO. \_\_\_\_\_

DATE OF MANUFACTURE \_\_\_\_\_

MAXIMUM PASSENGER CAPACITY 40 ADULTS OR 60 CHILDREN (100 LB.)  
 MAXIMUM SEAT CAPACITY 2 ADULTS OR 2 CHILDREN (100 LB.) 20 SEATS  
 MAXIMUM PASSENGER HEIGHT 42 INCHES - UNACCOMPANIED BY ADULT  
 MAXIMUM BOOM SPEED  
 TIPPING 22 DEGREE CLOCKWISE ON  
 BUSHING PIVOTS 15 DEGREE COUNTERCLOCKWISE OR COUNTERCLOCKWISE  
 NEVER OPERATE WITH A TURNET AT SAME DIRECTION

MAXIMUM BOOM ANGLE 65  
 MAXIMUM UNBALANCE 9 ADULTS (100 LB.)

RISE CYCLE 3 - MINUTES MAXIMUM - 3 MINUTES 6 RECOMMENDED

MAXIMUM WIND SPEED 30 MPH OPERATING - 40 MPH STATIC

POWER REQUIREMENTS 240V 15 AMP 60 HZ 3 PHASE 3 WIRE  
 RIDE CLEARANCE DIMENSIONS HEIGHT 20 FT. WIDTH 18 FT. 6 IN. CYCLE  
 LENGTH 100 FT. 0 IN. SHAFT

MAXIMUM WIND WEIGHT EMPTY 20,000 LB. (WITH TRALLED)  
 25,000 LB. (WITH PUMP ON)

MANUFACTURED IN THE U.S.A. BY CHANCE RIDES, INC. WICHITA, KANSAS

ITEM	DESCRIPTION	QTY	UNIT PRICE	TOTAL PRICE
1	SEAT	20	1.00	20.00
2	BOOM	20	1.00	20.00
3	TRAILER	1	1.00	1.00
4	SHAFT	1	1.00	1.00
5	TRAILER	1	1.00	1.00
6	SHAFT	1	1.00	1.00
7	TRAILER	1	1.00	1.00
8	SHAFT	1	1.00	1.00
9	TRAILER	1	1.00	1.00
10	SHAFT	1	1.00	1.00
11	TRAILER	1	1.00	1.00
12	SHAFT	1	1.00	1.00
13	TRAILER	1	1.00	1.00
14	SHAFT	1	1.00	1.00
15	TRAILER	1	1.00	1.00
16	SHAFT	1	1.00	1.00
17	TRAILER	1	1.00	1.00
18	SHAFT	1	1.00	1.00
19	TRAILER	1	1.00	1.00
20	SHAFT	1	1.00	1.00

The ride information plaque is mounted to the boom support stand.

Detailed operation and maintenance information is available in the *Casino/Trabant Operation And Maintenance Manual* (manual number 24328500). For more information, or to order manuals, contact CHANCE RIDES, INC.

## Operation

### Operating controls

**1. Table forward and reverse switches** - Push either switch to start the table rotation.

*NOTE: An electrical interlock circuit prevents the table and rim drives from operating in the same direction simultaneously.*

**2. Rim forward and reverse switches** - Push either switch to start the rim rotation.

*NOTE: An electrical interlock circuit prevents the table and rim drives from operating in the same direction simultaneously.*

**3. Stop switch** - Push this switch to stop the table and rim drives. The ride will brake to a stop.

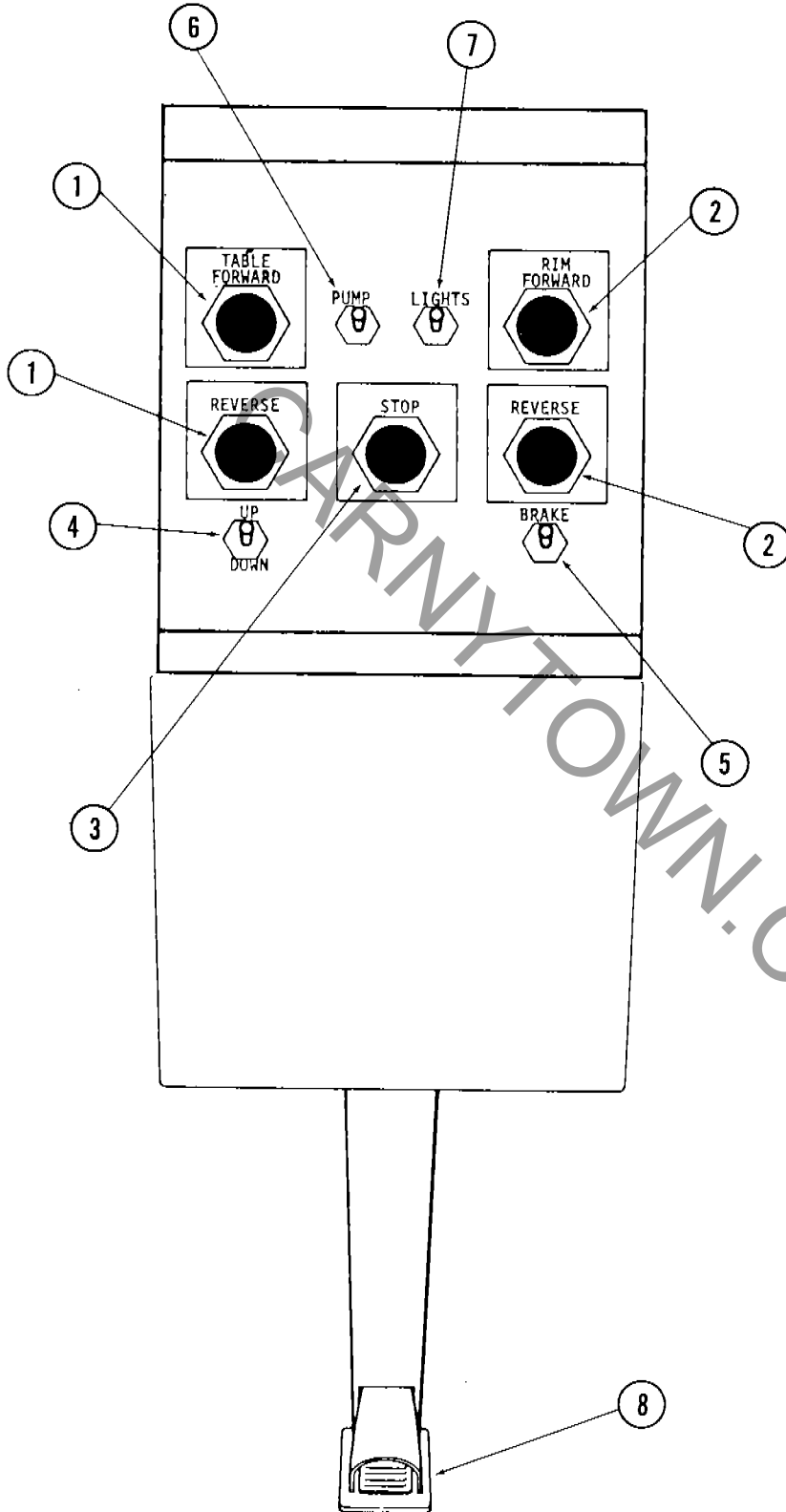
**4. Boom up / down switch** - Use this switch to raise or lower the boom. A limit switch stops boom travel in the full up position.

**5. Table brake switch** - This switch selects either automatic braking of the table when the drive is stopped, or manual braking to allow operation of the rim drive only.

**6. Pump switch** - This switch controls the hydraulic pump. Turn the switch off before leaving the control console. Do not stop the ride by turning off the pump.

**7. Lights switch** - This switch controls the decorative lighting on the ride.

**8. Operator presence switch** - The switch must be depressed to operate the table or rim drive switches. If the switch is released, the ride will brake to a stop.



**Operator's control panel**

- 1. Table forward and reverse switches
- 2. Rim forward and reverse switches
- 3. Stop switch
- 4. Boom up / down switch
- 5. Table brake switch
- 6. Pump switch
- 7. Lights switch
- 8. Operator's presence switch

**Operating the ride (Test cycle)**

The operating procedure is provided in the *Casino/Trabant Operation Manual and Parts Catalog*. Make sure that a copy of the manual is readily available. Test the operation of all controls, including the operator presence switch, the stop switch and the brake switch. Test the operation of the table and rim drive interlock circuit. As the ride runs through the cycle, check the ride for correct speed and boom angle, and proper brake operation.

Check the overall performance of the ride based on previous operating performances of the individual ride..

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## General inspection and testing

### Testing

#### Field performance testing of amusement rides<sup>1</sup>

The following specifications conform with ASTM F846 standard guide for *Testing Performance Of Amusement Rides And Devices*, in effect on date of ride manufacture.

#### Erection or installation testing

Each erection or installation of a ride shall be given an inspection prior to carrying passengers that shall include but not be limited to the following:

- a. Determine that ride has been erected according to the set-up procedures in the operations manual.
- b. Inspect field inspection points listed in the *Field Inspection Guide*.
- c. Visual check of all passenger carrying devices including restraint devices and latches, and the pins and capscrews securing them.
- d. Visual inspection of entrances, exits, stairways and ramps and devices securing them.
- e. Test of all communications equipment necessary for operation of the ride or device.
- f. Operate the ride to determine that direction of travel conforms to the information plate, ride manual field inspection guide of specification sheet.
- g. Operate the ride for a minimum of three ride cycles to determine that the ride speed does not exceed the speed specified in the information plate, ride manual field inspection guide of specification sheet.

#### Daily pre-opening inspection

This inspection shall include a daily inspection of all items as specified in the previous item (erection or installation testing).

**Documented field performance and operational testing**

Documentation and certification shall be performed by a person who by demonstrated education and field experience is knowledgeable with construction, erection, operation, maintenance and repair of amusement rides.

**Operational load testing**

Any operational test including load testing performed on a ride shall be completely non-destructive in nature. Overload testing exceeding the rated limits listed on the information plate, operation manual, field inspection guide or specification sheet shall be deemed inappropriate. Where maximum total passenger weight is not readily available, passenger capacity multiplied by 170 pounds per adult and/or 90 pounds per child may be used.

Non destructive testing with inert loads can be accomplished only with special care as to placement of the load so that it is centered both vertically and horizontally as would be the load of the passenger it replaces. Extra seat reinforcement must be used to offset any load concentration created. Such tests shall be documented and certified as non-destructive by the person making the test and the agency requiring it. Results of all load tests shall be communicated to the factory upon completion by the certifying agency.

Conducting a non-destructive operational load test assures the testing agency only that it will carry a given load in a given way at a given moment and in no way assures future safety of the ride.

Conducting a destructive load or overload test also assures the testing agency that it will carry a given load in a given way at a given moment and in no way assures future safety of the ride. However, it also introduces the probability of inflicting serious irreparable damage to the ride that may or may not be apparent at the time of the test.

CHANCE RIDES, INC. considers inert load testing of any nature appropriate only for situations requiring experimental development of stress-strain testing during prototype development. A certificate of load test on the prototype and certification that each production ride met the design criteria when it was manufactured is available from the factory upon request.

**Non-destructive testing<sup>2</sup>**

- REFERENCE** 1. ASTM-F24 Standard On  
**STANDARD** Amusement Rides And Devices
- a. F846-86 Testing Performance Of Amusement Rides
  - b. F853-86 Maintenance Procedures For Amusement Rides And Devices
  - c. F893-87 Inspection Of Amusement Rides And Devices

CHANCE RIDES, INC., at the time of design and manufacture, determines by calculations and testing of a prototype amusement ride the appropriateness for use, of not only the parts, but the entire system of a newly designed ride. These calculations and tests are utilized to, as feasibly as possible, determine the requirements for expected design life of major components. Based on this design criteria, CHANCE RIDES, INC. does not identify critical components on amusement rides to be singled out for non-destructive testing.

If through field experience, there is an indication that a structural or mechanical problem may develop on rides currently operating, CHANCE RIDES, INC. will notify owners by bulletin of the recommended procedures to inspect and correct the possible problem. Any possible defect which could affect the continued safe or proper operation of the ride should be reported immediately to the manufacturer by the owner/operator. This information is necessary so that a determination can be made for either the repair or replacement of the possible defective parts.

Field repairs should not be undertaken without the approval and proper instructions from the manufacturer and should be performed by qualified personnel. These persons should have a complete understanding of both the component's function and the manufacturer's instructions.

It is the responsibility of the individual inspector to thoroughly inspect the ride as he deems necessary based on his knowledge and field experience and manufacturer's recommendations. If the inspector finds an area or component that could be a problem, structural or otherwise, the factory should then be notified. It is then the responsibility of the inspector to ensure that the manufacturer's recommendations for repair.

replacement or otherwise have been completed and are in compliance with the required specifications.

Load testing is a destructive form of testing and is not recommended by the manufacturer, as per previous topic "Field performance testing of amusement rides."

## Fasteners

### Capscrews

Capscrews used by CHANCE RIDES, INC. are classified as functional load-carrying capscrews if:

- They are used as tension members in the erection or operation of the ride

**and/or**

- They are required to resist shear through friction-type connections in the erection or operation of a ride.

Capscrews are selected with consideration to grade, size and quantity, using joint capacities based on tightness torques of 60% rated yield and group joint efficiencies of 62.5%

### Torque requirements<sup>4</sup>

Capscrews must be tightened to the torque values listed in the torque chart. These values were selected to produce a tightening torque range of 60% to 70% of proof load, when tightened with a hardened washer under the nut or capscrew head (whichever is accessible for tightening). When the capscrew is tightened from the head end, apply anti-seize lubricant to the shank end of the capscrew. When the threads are lubricated, use 10% less torque to tighten the capscrew.

**DO NOT TIGHTEN CAPSCREWS OVER THE RECOMMENDED TORQUE.** This can damage the capscrew, due to variances in coefficients of friction and torque wrench accuracy.

Always use a torque wrench. It is impossible to accurately measure the tightness of a capscrew by other methods. Torque wrenches must be checked for accuracy twice each operating season.

Size Diameter - Threads/inch	Foot pound torque range (see notes 1 and 2) with locknut and hardened washer	
	SAE J429 Grade 5 ASTM A325	SAE J429 Grade 8 ASTM A490
1/4 - 20	5-6	7-8
1/4 - 28	6-7	8-10
5/16 - 18	11-13	15-18
5/16 - 24	12-15	17-21
3/8 - 16	19-24	27-33
3/8 - 24	22-27	31-38
7/16 - 14	30-35	45-55
7/16 - 20	35-40	50-60
1/2 - 13	50-60	65-80
1/2 - 20	55-65	75-90
5/8 - 11	95-115	130-160
5/8 - 18	105-130	150-180
3/4 - 10	165-200	235-285
3/4 - 16	185-225	260-320
7/8 - 9	270-325	380-460
7/8 - 14	295-360	415-505
1 - 8	400-490	565-690
1 - 12	440-535	620-755
1 1/8 - 7	495-600	800-975
1 1/8 - 12	555-675	900-1095
1 1/4 - 7	700-850	1135-1380
1 1/4 - 12	775-940	1255-1525
1 1/2 - 6	1215-1480	1975-2395
1 1/2 - 12	1370-1660	2220-2700

**Torque chart**

Torques for functional load carrying cold finished hex head capscrews with dry rolled threads, used with locknuts (see note 3), and tightened with an ASTM A325 hardened washer under the capscrew or locknut head (whichever is accessible for tightening).

This torque range will develop 60% to 70% of proof load.

Refer to **Replacement of capscrews and locknuts** for conditions requiring replacement

**NOTES**

1. Use anti-seize lubricant on capscrew shank when tightened from head end.
2. Use 10% less torque when anti-seize or other lubricant is used on threads.
3. Use same torque range for holes tapped in steel.

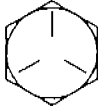
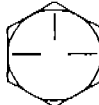
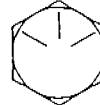
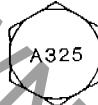
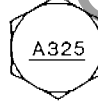

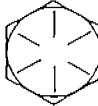



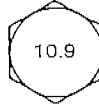

**Capscrew grades**

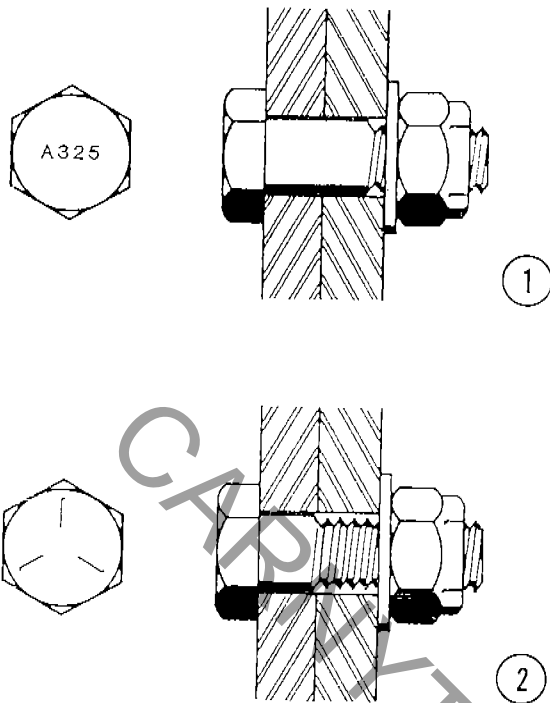
CHANCE RIDES, INC. uses only grade 5 or better capscrews and grade 8 locknuts, with A325 hardened washers for functional loads. The *Grade markings chart* shows the capscrew markings to be found on CHANCE rides. The manufacturer's identification symbols must be present on all functional load carrying capscrews.

CHANCE RIDES, INC. requires the use of cold-formed hex head capscrews with rolled threads. Hex bolts and hot formed hex head capscrews are not recommended because they may have machined threads and can have die seams along the shank.

NEVER REPLACE CAPSCREWS OR NUTS WITH PARTS OF A LESSER GRADE, OR DIFFERENT LENGTHS THAN THOSE SHOWN IN THE CHANCE PARTS CATALOG.

**Grade markings for functional load carrying capscrews**  
 Manufacturer's identification symbols must be present on all capscrews

Correct markings	Examples of unacceptable markings	
<p><b>SAE J429</b> Grade 5 Medium carbon 81,000 yield</p> 	<p><b>Grade 5.1</b> Low carbon</p> 	<p><b>Grade 5.2</b> Low carbon martensitic</p> 
<p><b>ASTM A325 Type 1</b> Medium carbon Longer shank and shorter thread length than Grade 5 81,000 yield</p>  <p><b>ASTM A325 Type 3</b> Corrosion resisting Longer shank and shorter thread length than Grade 5 81,000 yield</p> 	<p><b>ASTM A325 Type 2</b> Low carbon martensitic</p> 	
<p><b>SAE J429</b> Grade 8 Medium carbon 130,00 yield</p> 	<p><b>ISO R898</b> Class 8.8 Medium carbon 92,000 yield</p> 	<p><b>ISO R898</b> Class 8.8 Medium carbon 92,000 yield</p> 
<p><b>ASTM A490</b> Alloy steel Longer shank and shorter thread length than Grade 8 130,00 yield</p> 	<p><b>ISO R898</b> Class 10.9 Alloy steel 130,000 yield</p> 	<p><b>ISO R898</b> Class 10.9 Alloy steel 130,000 yield</p> 



**Capscrew comparison**  
 1. ASTM A325 Capscrew  
 Longer shank  
 shorter threads  
 2. Grade 5 capscrew  
 Shorter shank  
 longer threads

**Replacement of capscrews and locknuts**

When permanently installed capscrews and locknuts are disassembled for repair or adjustment, they must be replaced if they have been in service over five (5) years, or corrosion, or other damage requires over-torquing for removal. If a torque wrench is not used to measure excessive removal torques, the capscrews and locknuts must be replaced.

Capscrews and locknuts which are frequently disassembled for portability must be replaced each operating season. If the capscrews and locknuts become damaged, corroded or require excessive torque for removal, they must be replaced. If a torque wrench is not used to measure excessive removal torques, the capscrews and locknuts must be replaced.

**Pins<sup>3</sup>**

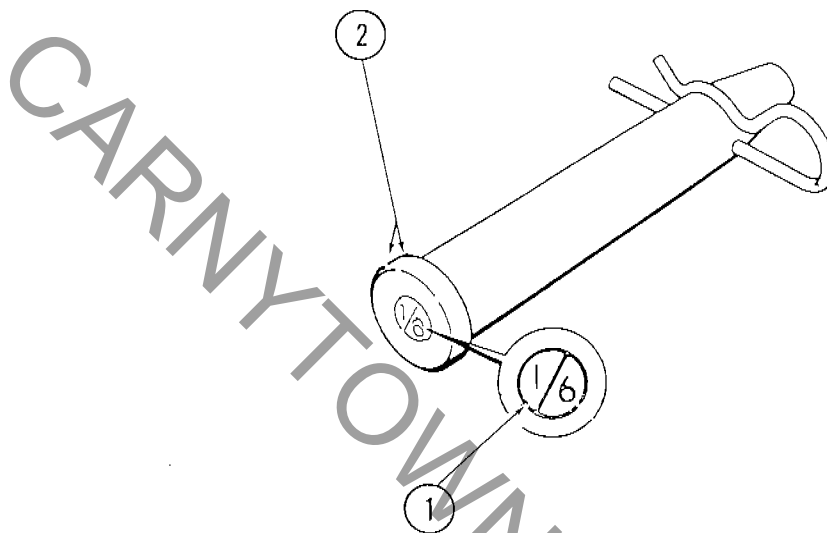
Tapered pins used on amusement rides are subject to deterioration due to improper use and wear. CHANCE RIDES, INC. specifies certain pins for certain applications on

amusement rides. These pins have been developed over a period of years, taking into account size, design, material and hardness characteristics.

Use only the pins specified by CHANCE RIDES, INC. These pins are identified as shown in the following illustration. Always use the correct hairpin.

**Pin identification**

1. Date of manufacture
2. Rounded edges

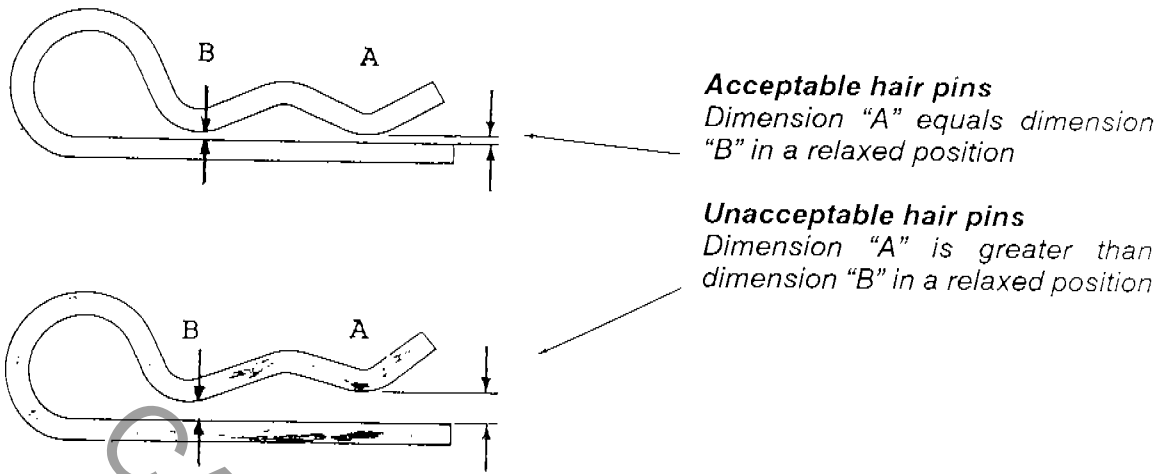


Use care when installing and removing tapered pins. Since these pins are hardened (as are hammers and punches) care must be taken to strike the pin straight on. Striking a pin at an angle can cause the pin to chip, resulting in personal injury. For this reason APPROVED SAFETY GLASSES OR GOGGLES MUST BE WORN AT ALL TIMES when tapered pins are being installed or removed. If a tapered pin is chipped, bent, or "mushroomed" on either end, discard it and replace it with a new pin.

**Pin keepers**

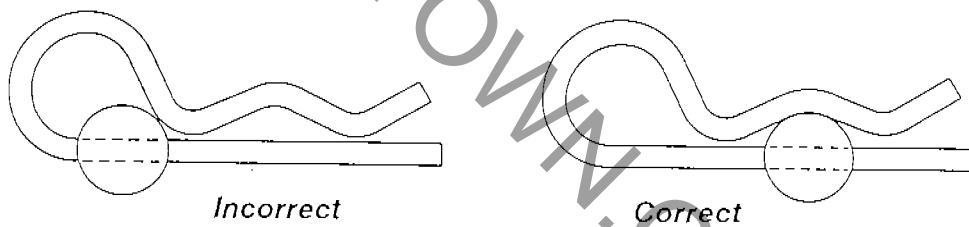
All keepers (R-keys, hair pins, lynch pins, etc.) must be inspected for wear. If a keeper is bent out of shape or "sprung", it must be replaced.

Hairpins are expendable parts. After repeated use, they become worn and "sprung" as shown.



NEVER ATTEMPT TO BEND A HAIR PIN BACK INTO SHAPE.  
REPLACE IT WITH A NEW PART.

The correct installation of a hairpin is shown. Incorrectly installed hairpins are more likely to fail, and will distort after only a few uses.



CHANCE RIDES, INC. recognizes and recommends the safety procedures specified in *ASTM Standards F770 Operation Procedures for Amusement Rides and Devices* and *F853 Maintenance Procedures for Amusement Rides and Devices*.

## Inspection

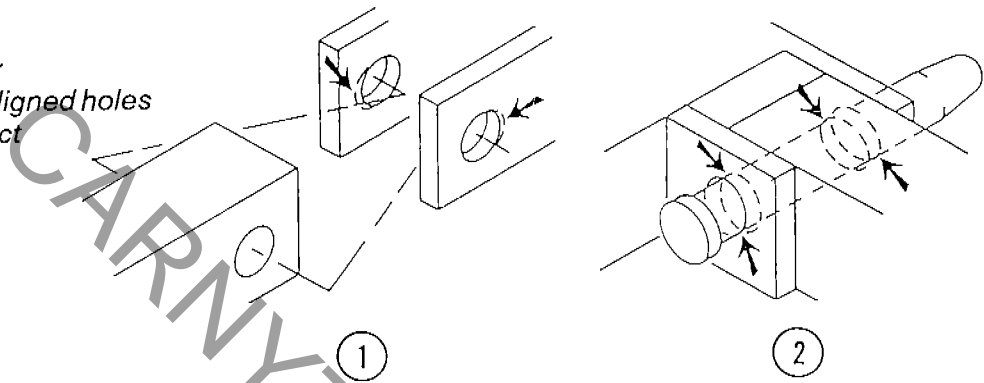
### Joint inspection

Some joints will appear to wear rapidly on new rides. This is usually a result of the holes not aligning in the mating parts. When this condition occurs it results in "point contact". A joint with this condition will generally wear rapidly until the load is distributed evenly over the fastener and the parts.

If in doubt about the condition of a bolt, pin or hole on a new ride consult CHANCE RIDES, INC., and replace as required.

1. Inspect stationary joints for "egg-shaped" wear and loose pins.

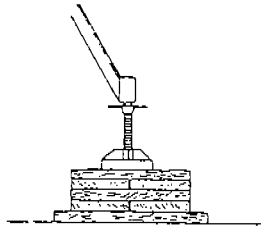
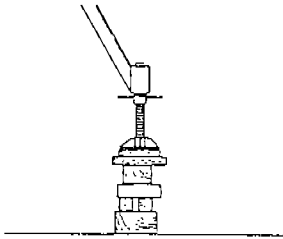
1. Stationary joint wear
2. Stationary joint-misaligned holes resulting in point contact



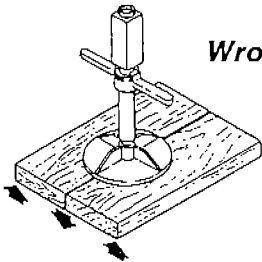
2. Inspect moving joints for wear and lubrication.
3. Inspect welded structural joints for cracking or fatiguing.
4. Inspect bolted structural joints for cracking, fatiguing and proper bolt tightness.
5. Inspect pins and keepers on all pin joints for wear and proper installation.
6. Inspect all pins for proper CHANCE identification marks.

**Leveling and blocking (portable models)**

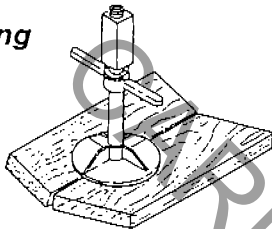
1. Inspect leveling and blocking at each set up and at the start of each day (rides erected in soft locations require more frequent inspection).
2. Inspect for proper cross blocking or crib blocking. Cross blocking distributes weight evenly.



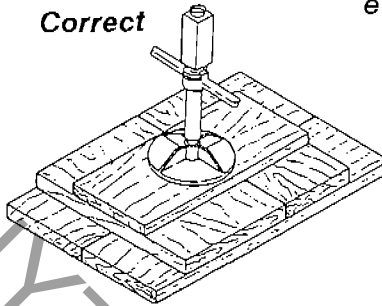
**Always cross block**  
Cross blocking distributes weight evenly.



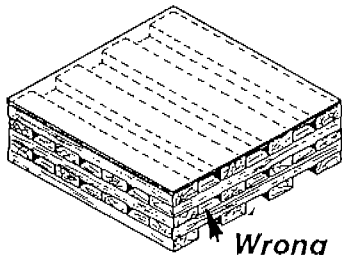
**Wrong**



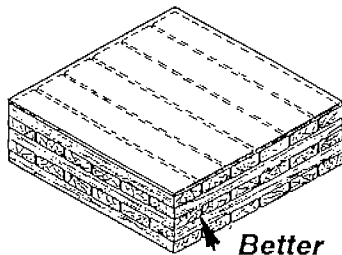
**Correct**



To avoid crushing under load "crib" blocking should be spaced no more than 1/4" for drainage.



**Wrong**



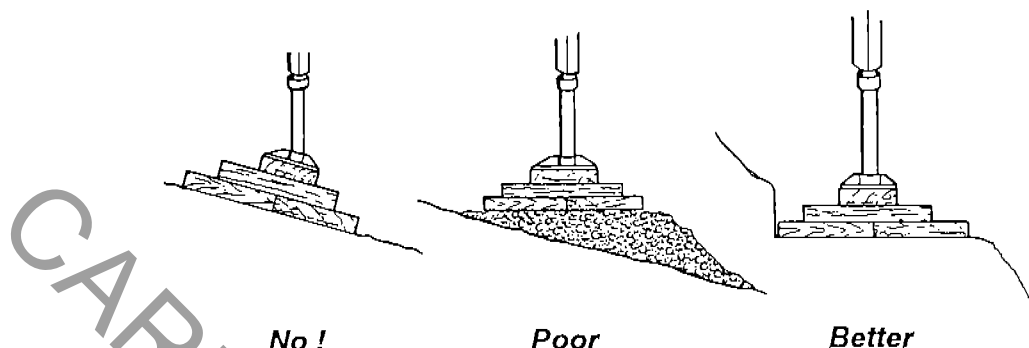
**Better**

**"Crib" blocking**  
Large voids can let blocking crush under load. 1/4" spaces allow adequate drainage.

3. Inspect blocking for proper contact with ground.
4. Level ground under blocking, by digging where possible, instead of filling. Fill dirt will be soft and allow settling.

**Blocking on a slope**

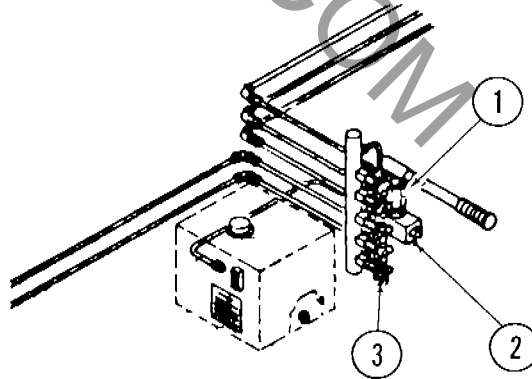
Level the ground beneath blocking by digging where possible. Don't fill, the fill dirt will be soft allowing the ride to tilt



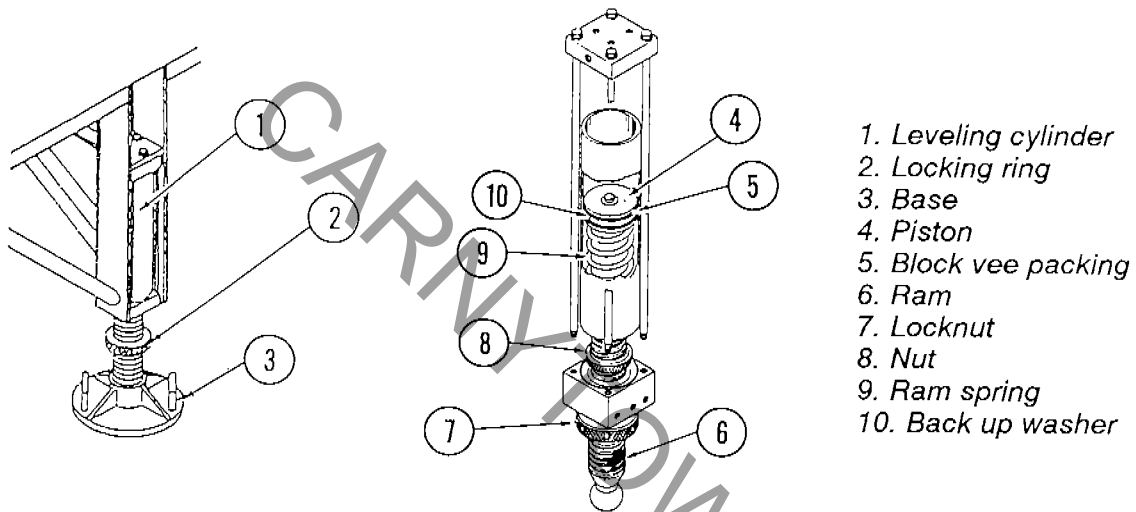
5. Inspect hydraulic leveling jacks for leaks at every set-up. The hydraulic jacks are for leveling purposes only. After the ride is leveled and all lock rings have been tightened, open the needle valves and the hand pump valve to relieve hydraulic pressure on the leveling jacks.

Open the shut off valve to release pressure.

1. Hand pump
2. Hand pump valve
3. Needle valve



6. Check the lock rings on all screw jacks for tightness.



1. Leveling cylinder
2. Locking ring
3. Base
4. Piston
5. Block vee packing
6. Ram
7. Locknut
8. Nut
9. Ram spring
10. Back up washer

### **General safety guidelines**

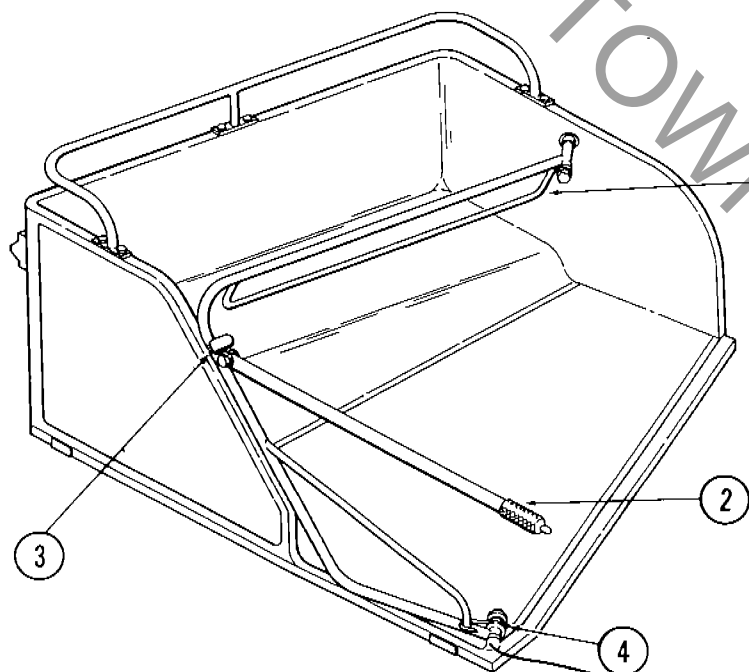
The following is a list of general safety rules to which everyone should adhere.

1. All work must be performed by competent, qualified mechanics, capable of understanding the function of the parts and their proper installation.
2. Inspect the ride before each day of operation to determine that no portion of the ride is damaged, missing or worn in such a manner that unsafe conditions can develop.
3. Perform the manufacturer's recommended maintenance procedures at the intervals and in the manner specified in the operation and maintenance manual.
4. Study each job carefully to determine all hazards so that necessary safety precautions can be taken.
5. Examine safety devices (tools, ladders, etc.) before they are used to make sure they are in good condition. Ladders must be clean and unpainted.
6. Use the proper tool or equipment for each job. All hand electric power tools must be properly grounded.
7. Wear close fitting, comfortable clothing when working on or near moving parts or live electrical circuits. Avoid finger rings, jewelry or other articles which can be caught in moving parts or come in contact with electrical circuits.
8. Protect your eyes by wearing approved safety glasses or goggles.
9. Wear a hard hat at all times. When working in elevated areas, use a safety belt.
10. Where work performed is hazardous, never work alone.
11. If guards are removed from equipment, make sure they are replaced before leaving the job.
12. Clean up after each job, disposing of surplus materials.
13. Keep a record of parts replaced and the date of replacement. Inform the manufacturer of any replacement requirements which are frequent or cause unsafe conditions.

14. Make modifications and additions only as outlined in manufacturer's service and safety bulletins.

**Vehicle inspection**

1. Check the operation of the lap bars, lap bar locks and spring latches.



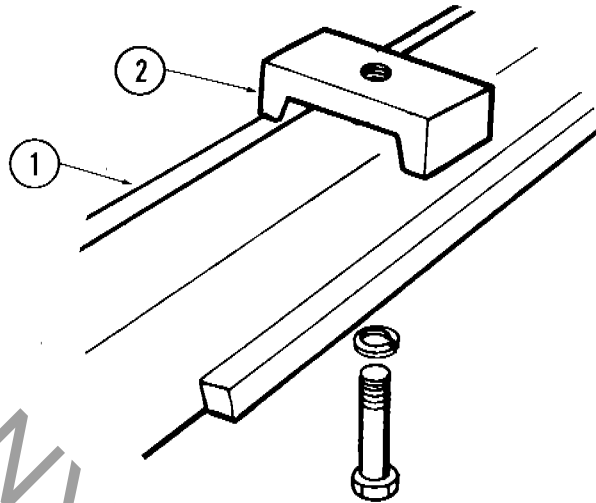
- 1. Lap bar
- 2. Lap bar lock
- 3. Spring latch
- 4. Lap bar spring

*BULLETIN TO FOLLOW*

2. Inspect the spring latches for bends, wear or damage. Check the expiration date on each spring latch. The spring latches must be replaced before the expiration date, or if the date has been altered, painted over or it otherwise illegible.

3. Inspect the seat tie-down clamps.

- 1. Vehicle frame
- 2. Tie-down clamp



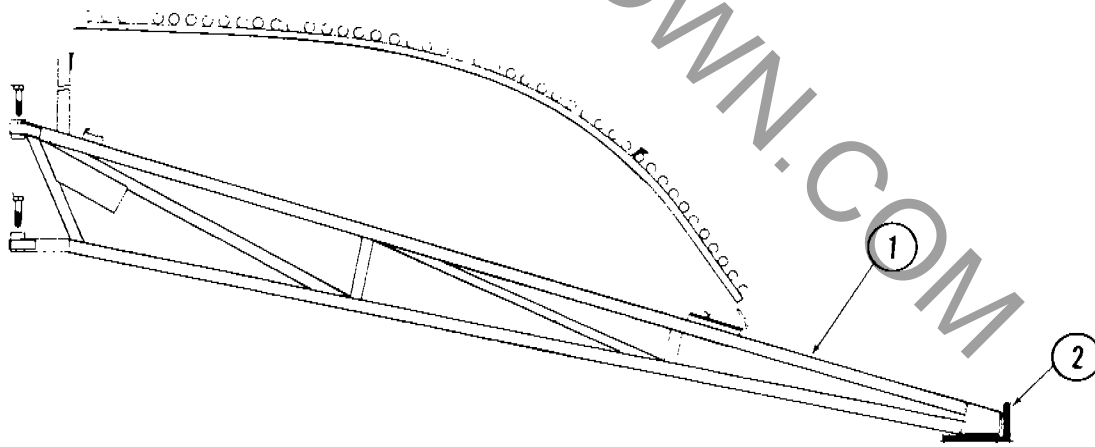
4. Inspect the overall condition of the vehicle seats and flooring.

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**Sweep and  
drive rim inspection**

1. Inspect the sweep attach points.
2. Inspect all drive rim joints and attachment to the sweeps.

1. Sweep
2. Drive rim

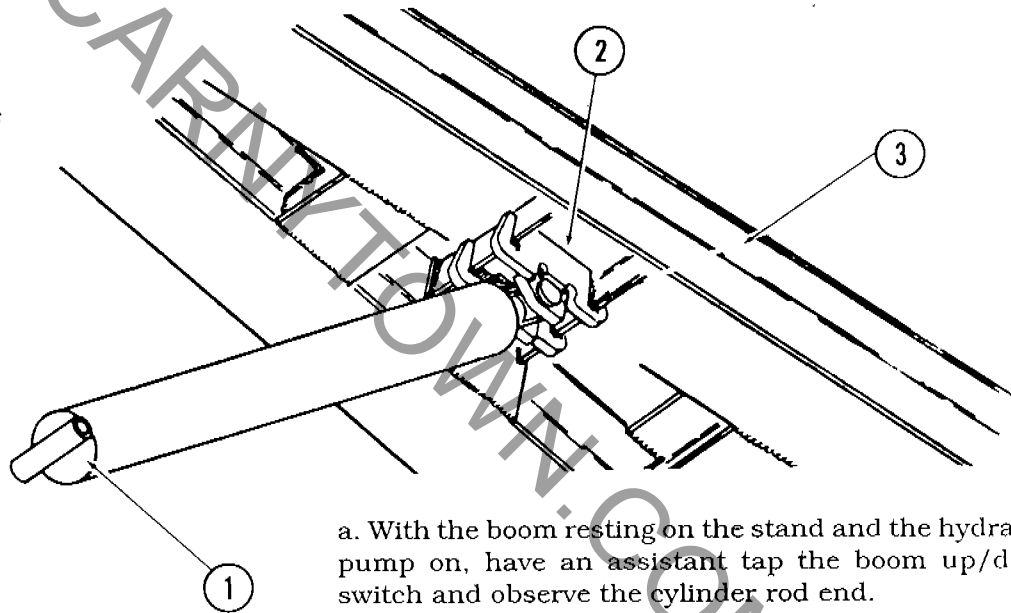


3. Inspect sweeps and drive rim for visible cracks or damage.

## Table and boom inspection

1. Inspect the boom lift cylinder ears using the following procedure. The ride must be erected with the underside of the boom readily accessible.

- 1. Lift cylinder
- 2. Lift cylinder ears
- 3. Boom



- a. With the boom resting on the stand and the hydraulic pump on, have an assistant tap the boom up/down switch and observe the cylinder rod end.
- b. The cylinder rod end must move no more than 1/8 inch before it moves the boom. Excessive movement indicates wear in the cylinder mounting ears or the cylinder pin. Inspect these parts and replace as required.
- c. Any looseness or play in the area requires weekly inspection of the cylinder pin if any sign of wear is present.

2. Inspect the boom lift cylinder for leakage.

3. Inspect the boom structure for visible cracks or damage.

4. Inspect the table drive structure for visible cracks or damage.

[REDACTED]

## Electrical and lighting inspection

1. Inspect cable leads, electrical connections and grounding per local code.
2. Test the operator controls, including the operator presence switch, the stop switch and the brake switch.
3. Test the operation of the table and rim drive interlock circuit.

[REDACTED]

## Trailer and base inspection

1. Inspect mounting locations on park model rides at regular service intervals.
2. Inspect the trailer or park base structures for visible cracks or damage.



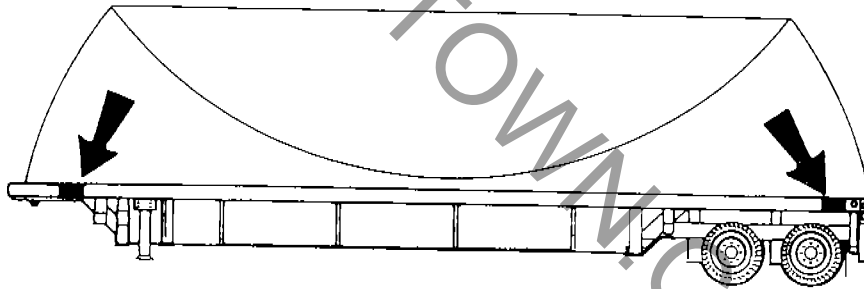
## Drive inspection

1. Inspect the drive tires for wear, proper inflation and lug bolt tightness.
2. Inspect the entire hydraulic system including hoses, tubes, fittings and other components for leaks.

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## Floor, platform and fence inspection

1. Inspect the floor hinges for wear, rust or other damage.
2. Inspect the floor lift clevis for cracks, wear or other damage.
3. Inspect floor lift cylinders and mounting ears for wear or damage.
4. Check for installation of safety decal on floors<sup>5</sup>



5. Inspect fences for proper installation.
6. Inspect all steps, gates and/ or chains.
7. Inspect floors and jackstands for proper installation and leveling.

## Bibliography

The following service bulletins and manuals are referenced in the preceding text. Service bulletins issued after publication of this guide are located at the back of each section. Any future bulletin releases affecting a ride will be provided by CHANCE RIDES, INC. Bulletins received after receipt of this guide should be considered updates to this guide.

**CHANCE RIDES, INC.**  
4219 Irving  
P.O. Box 12328  
Wichita, KS 67277-2328

- Casino/Trabant Operation And Maintenance Manual*  
24328500  
September, 1979
1. *Field Performance Testing Of Amusement Rides*  
B090R1002-0  
May 14, 1986
  2. *Non-destructive Testing*  
B090R1022-0  
March 21, 1988
  3. *General Safety - Taper Pins*  
B090R1056-0  
February 9, 1990
  4. *Replacement And Torque Requirements  
For Functional Load Carrying Capscrews*  
B090R1075-0  
May 25, 1990
  5. *Safety Decal*  
B090R1083-0  
August 17, 1990