CHAOS®

Field Inspection and Test Guide

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Contents

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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.

The information in this manual is published for the benefit of owners of amusement rides manufactured by CHANCE RIDES MANUFACTURING, INC. As a service to the industry, and in the interest of employee and public safety, CHANCE RIDES MANUFACTURING, INC. also publishes technical information for the benefit of owners of amusement ride equipment for which the manufacturer no longer exists, such as the Allan Herschell Company, Chance Manufacturing Co., Inc., Chance Rides, Inc., etc. In doing so, CHANCE RIDES MANUFACTURING, INC. does not assume liability for losses associated with amusement ride equipment built by other manufacturers.

Ride Description

The **Chaos** is mounted on either a single trailer (portable model) or a stationary base (park model). The ride is equipped with a variable frequency AC electric drive, with integral electro-mechanical (spring) brakes. An on-board hydraulic system provides lift for the boom. A set-up hydraulic system provides power for erection of the portable model.

Detailed operation and maintenance information is available in the *Chaos Service Manual*. For more information, or to order manuals, refer to the "Bibliography" at the back of this manual.

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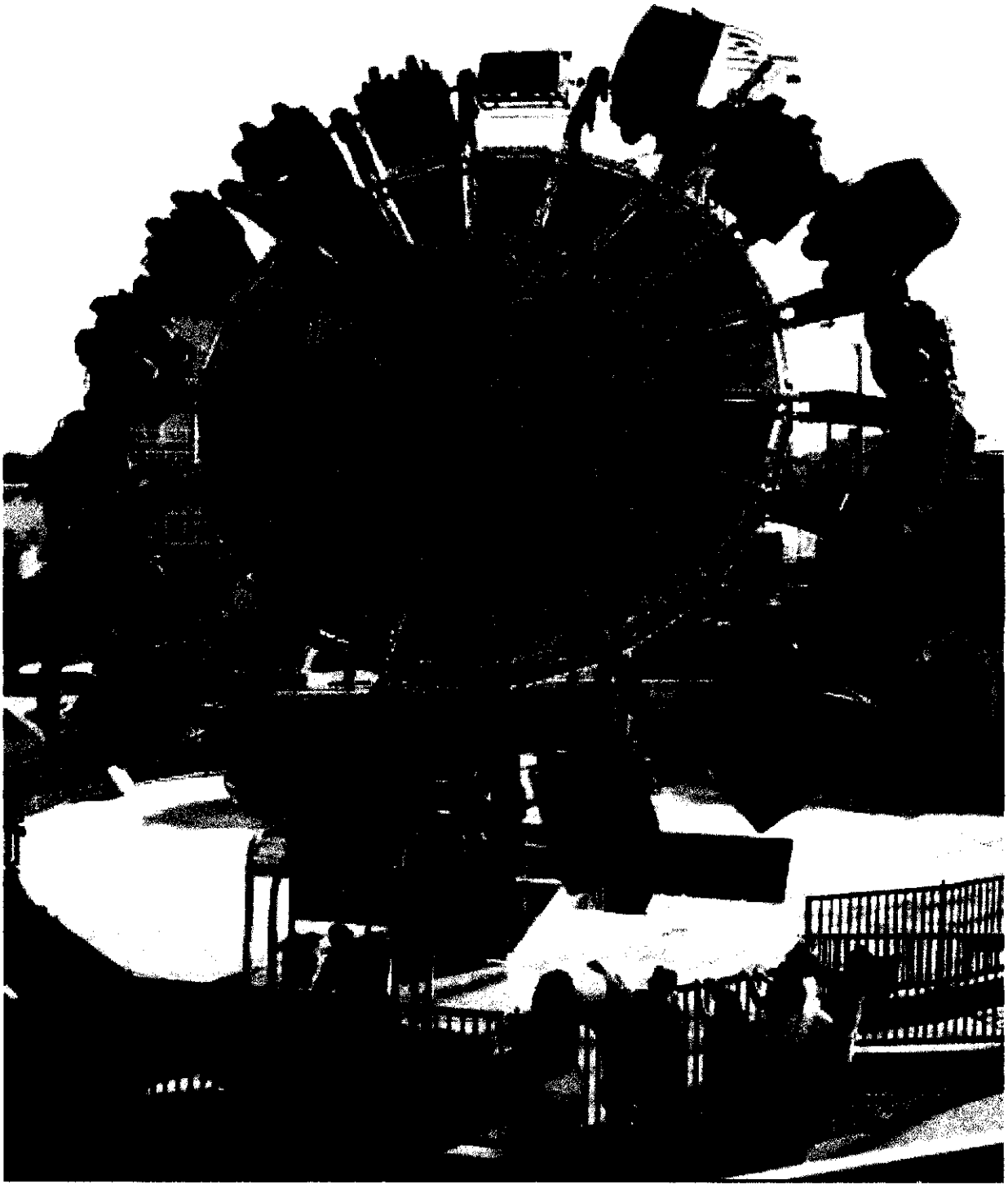

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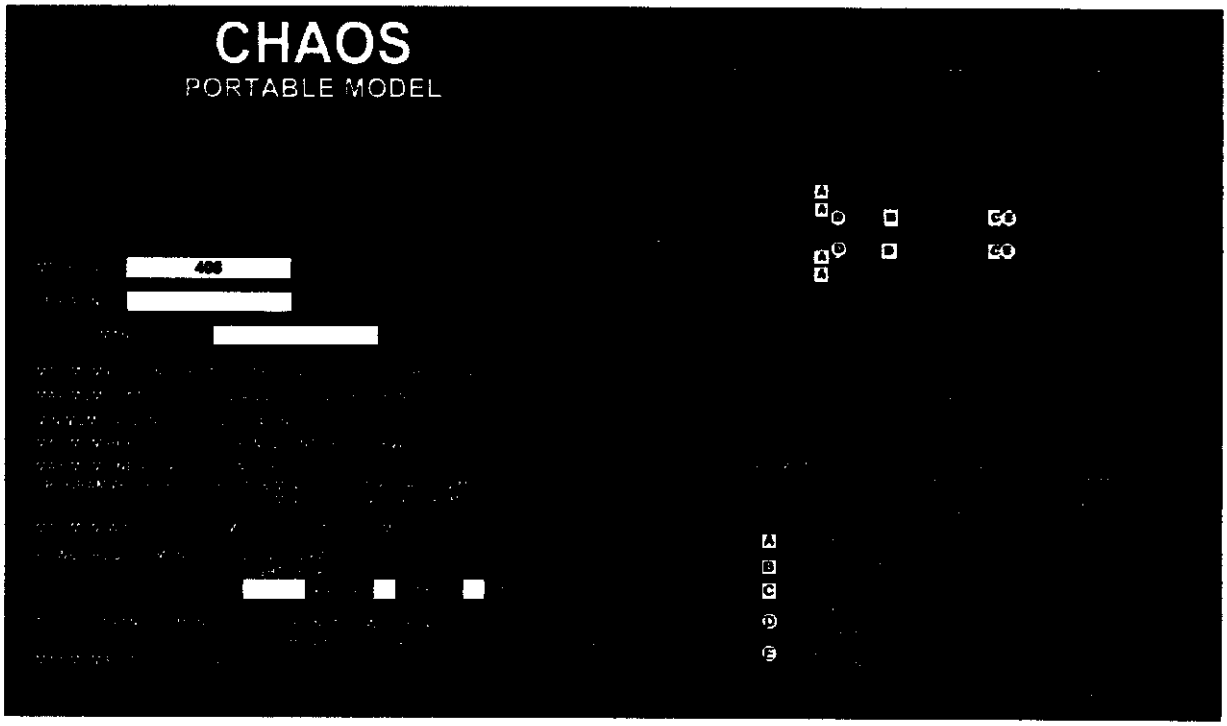
Ride Information Plaque

The ride information plaque is mounted to the main electrical cabinet at the rear of the ride. The plaque lists specifications, operating dimensions, ground loads, as well as model and serial number and date of manufacture.



The ride information plaque shown is for example only. Always refer to the information plaque mounted to the ride being inspected.

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Manufacturer's Specifications[5]

REFERENCE STANDARD:

ASTM - F24 Standards on Amusement Rides and Devices

1. F583 Maintenance Procedures for Amusement Rides and Devices
2. F893 Inspection of Amusement Rides and Devices
3. F1159 Design and Manufacture of Amusement Rides and Devices

Chance Rides Manufacturing, Inc., at the time of the initial design and prototype manufacture, determines by calculations and testing the appropriateness of the functional design criteria. The visual esthetics of the ride are also evaluated and together with the functional design criteria make up the manufacturer's design specifications. These design specifications are adhered to on all subsequently produced rides of the same style. Occasionally, through field experience, it becomes necessary to specify a modification to the original design specifications. Actual modification to meet the change in design specifications can only be performed by qualified personnel, following the directives of a Chance Rides Manufacturing, Inc. Service Bulletin, Service Kit, or a Chance Rides Manufacturing, Inc. representative, where applicable.

Any modification performed on a Chance Rides Manufacturing, Inc. product outside the recommended directives established by Chance Rides Manufacturing, Inc. as referenced above, constitutes an unauthorized modification. Chance Rides Manufacturing, Inc. specifically disclaims any liability for losses associated with any unauthorized alteration and/or modification to any of its products. Chance Rides Manufacturing, Inc. will not issue letters for the operation of rides which do not meet the manufacturing specifications; this includes cases where the non-conforming modification is of an aesthetic nature only.

It is the responsibility of the individual inspector to thoroughly inspect the ride as deemed necessary, based on his knowledge and field experience to determine that the ride meets the manufacturer's specifications and/or is safe for operation.

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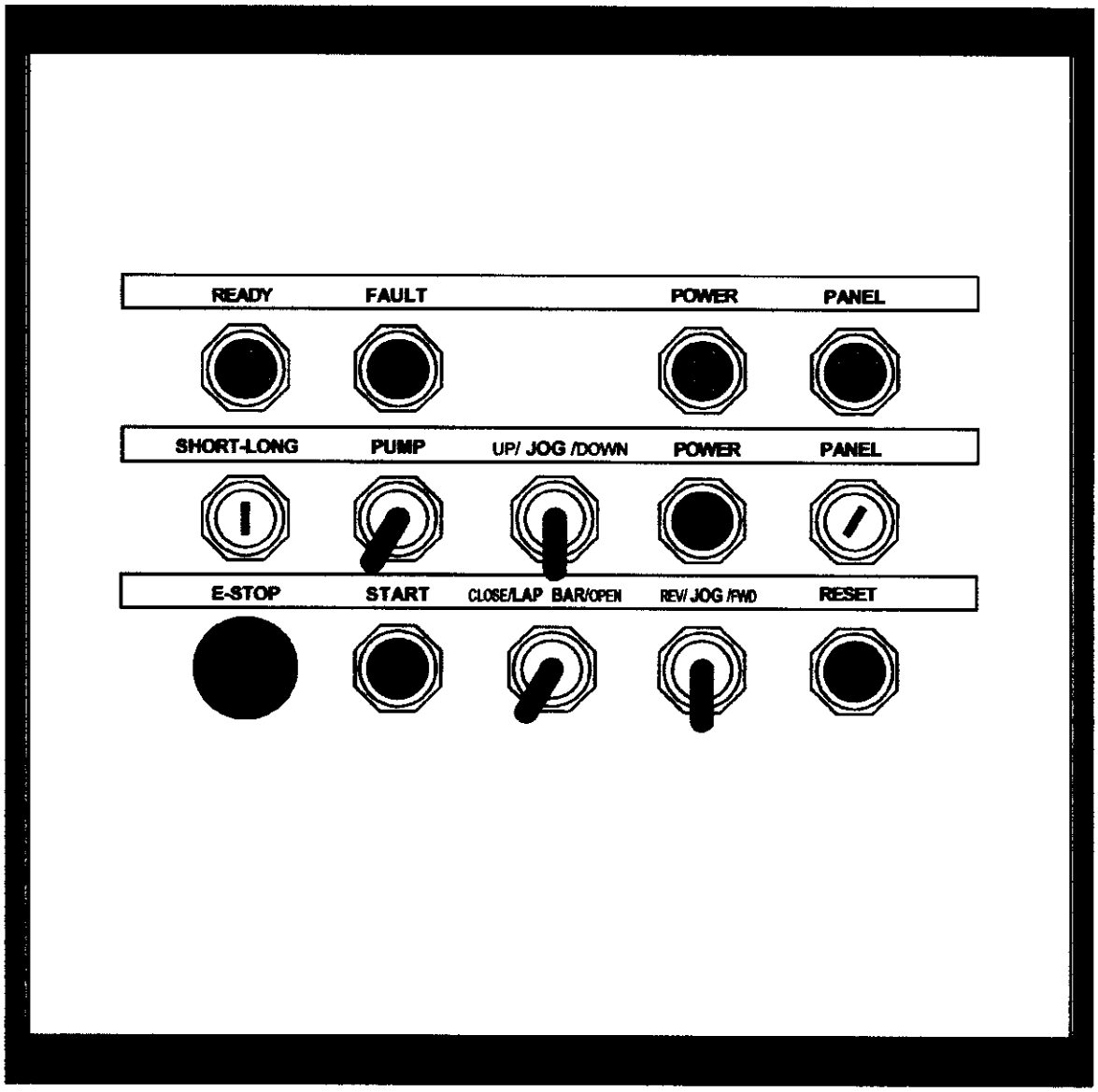
Operation



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IMPORTANT: *The three main power circuit breakers in the main electrical box must be on before operating any of the controls on the operator's console.*

1. **Ready light** - This green light will come on when all passenger restraint bars are locked in the down position and the OPERATOR PRESENCE SWITCH is depressed. The ride cannot be started unless this light is on.

2. **Fault indicator light** - This red light is normally off when the power indicator light is on. If the fault indicator light is on, a fault is indicated and the ride will not operate. Press the RESET SWITCH to clear the fault. If this is not successful, notify the appropriate maintenance personnel. The ride will not operate until the fault has been corrected.

3. **Main power indicator light** - This green light is on when the three main power circuit breakers in the main electrical box are in the "ON" position.

4. **Control panel power indicator light** - This green light indicates that power is being supplied to the control panel. It comes on when the CONTROL PANEL POWER SWITCH is turned on.

5. **Program switch** - Use this key-operated switch to select either the short or long programmed ride cycle. This switch is keyed the same as the control panel power switch.

   NOTE: *Do not change the position of the program switch after the ride is started. This will interrupt the drive program and stop the ride.*

7. **Pump switch** - This switch to turns the main hydraulic pump on or off.

8. **Boom Jog switch** - This switch controls the boom hydraulic cylinders when the ride is not in the programmed ride cycle. This switch is inoperable during the programmed ride cycle.

9. **Power switch** - Use this switch to turn off the main power circuit breakers in the main electrical box. The MAIN POWER INDICATOR LIGHT will go out when this switch is used.

10. **Control panel power switch** - Use this key-operated switch to turn on the power to the control panel. The CONTROL PANEL POWER INDICATOR LIGHT will come on. This switch is keyed the same as the program switch.

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11. **E-stop switch** - This switch interrupts the drive program. The ride will come to a normal, programmed stop, after which the BOOM JOG SWITCH must be used to lower the boom for unloading of passengers.

12. **Start switch** - Use this switch to start the programmed ride cycle. The following conditions must exist for the ride to operate:
    - MAIN POWER INDICATOR LIGHT must be on.
    - OPERATOR PRESENCE SWITCH must be engaged.
    - READY LIGHT must be on
    - CONTROL PANEL POWER INDICATOR LIGHT must be on.
    - FAULT INDICATOR LIGHT must be off.

13. **Lap bar switch** - Use this switch to lock or release the lap bars and secondary restraint bars. See "Safety Equipment" in this section for more detailed information.

    NOTE: *A white indicator light is located on the center of each vehicle near the passengers' feet. The indicator light is on when both lap bars and the secondary restraint bar on that vehicle are down and locked.*

    All passenger restraint bars must be down and locked before the READY LIGHT will come on.

14. **Rotation Jog switch** - Use this switch after the programmed ride cycle has ended to jog the ride either clockwise (REV) or counter-clockwise (FWD). This feature allows the operator to precisely locate a specific vehicle for loading and unloading of passengers. The jog feature operates only when the OPERATOR PRESENCE SWITCH is engaged. This switch is inoperable during the programmed ride cycle.

15. **Reset switch** - Push this switch if the FAULT INDICATOR LIGHT comes on. When the indicator light goes out, normal operation of the ride can be resumed.

    NOTE: *If faults require frequent use of the RESET SWITCH, or it the FAULT INDICATOR LIGHT is still on after using the RESET SWITCH, notify the appropriate maintenance personnel.*

IMPORTANT: *Do not use the RESET SWITCH during the programmed ride cycle. Damage to the inverter and/ or magnetic brake can occur.*

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16. **Operator Presence Switch (not shown)** - This foot-operated switch is located at the base of the control pedestal. The switch must be engaged to operate the START or JOG SWITCHES. If the switch is released, the drive program is interrupted and the ride will come to a normal, programmed stop, after which the BOOM JOG SWITCH must be used to lower the boom for unloading of passengers.

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Operating the Ride (Test Cycle)

The operating procedure is provided on a decal, mounted in the cover of the operator's control console. Make sure the decal is legible. Test the operation of all controls. Throughout the ride cycle, check for correct speed and boom angle, and proper operation of all limit switches.

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[1]

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, or 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").

1 B090R1002-0 May 14, 1986

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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 MANUFACTURING, 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.

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Non-Destructive Testing[2]

REFERENCE STANDARD *1. ASTM-F24 Standard On 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 MANUFACTURING, 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 MANUFACTURING, 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 MANUFACTURING, 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."

2 B090R1022-0 March 21, 1988

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Fasteners

Capscrews

Capscrews used by CHANCE RIDES MANUFACTURING, 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

- The 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[1]

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.

Capscrew Grades

CHANCE RIDES MANUFACTURING, 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.

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SIZE (DIAMETER) - Threads per Inch	Torque Range in foot -pounds (see notes 1, 2 and 4) with locknut and hardened washer	
	SAE J429 Grade 5 ASTM A325	SAE J429 Grade 8 ASTM A490
1/4 - 20 1/4 -28	5-6 6-7	7-8 8-10
5/16 - 18 5/16 - 24	11-13 12-15	15-18 17-21
3/8 - 16 3/8 - 24	19-24 22-27	27-33 31-38
7/16 - 14 7/16 - 20	30-35 35-40	45-55 50-60
1/2 - 13 1/2 - 20	30-35 35-40	45-55 50-60
5/8 - 11 5/8 - 18	95-115 105-130	130-160 150-180
3/4 - 10 3/4 - 16	165-200 185-225	235-285 260-320
7/8 - 9 7/8 - 14	270-325 295-360	380-460 415-505
1 - 8 1 - 12	400-490 440-535	565-690 620-755
1 1/8 - 7 1 1/8 - 12	495-600 555-675	800-975 900-1095
1 1/4 - 7 1 1/4 - 12	700-850 775-940	1135-1380 1255-1525
1 1/2 - 6 1 1/2 - 12	1215-1480 1370-1660	1975-2390 2220-2700

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.
4. Use these torque values unless otherwise specified.

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*

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CHANCE RIDES MANUFACTURING, 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.

Grade Markings for Functional Load Carrying Capscrews
Manufacturer's identification symbols must be present on all capscrews

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

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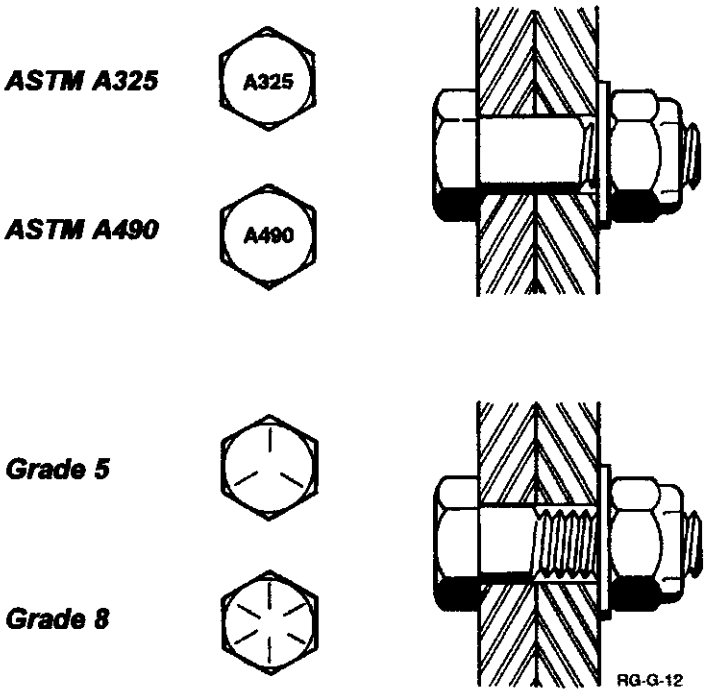
NEVER REPLACE CAPSCREWS OR NUTS WITH PARTS OF A LESSER GRADE, OR DIFFERENT LENGTHS THAN THOSE SHOWN IN THE CHANCE PARTS CATALOG



Capscrew Comparison
ASTM A325 and A490 capscrews have longer shanks and shorter threads then Grade 5 and Grade 8 capscrews of the same size.

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.

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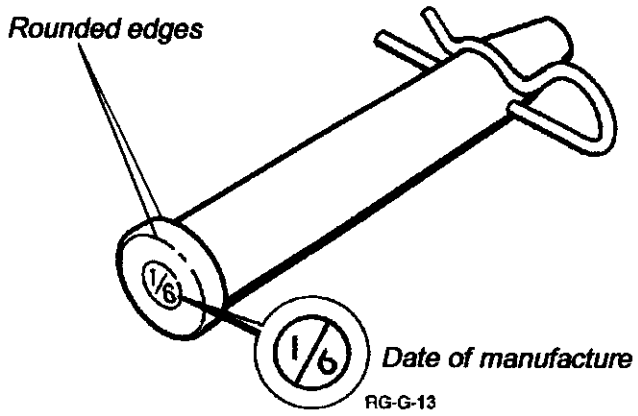
Pins[3]

Tapered pins used on amusement rides are subject to deterioration due to improper use and wear. CHANCE RIDES MANUFACTURING, 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 MANUFACTURING, INC. These pins are identified as shown in the following illustration. Always use the correct hairpin.

Pin Identification



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.

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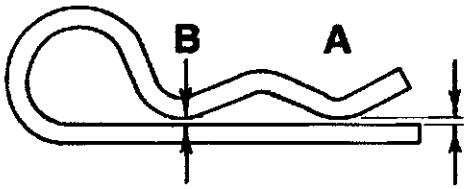
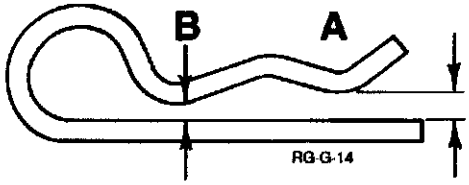


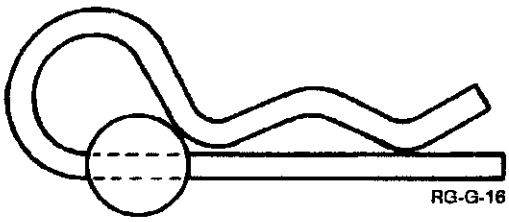
Acceptable Hair Pins
Dimension "A" equals dimension "B" in a relaxed position



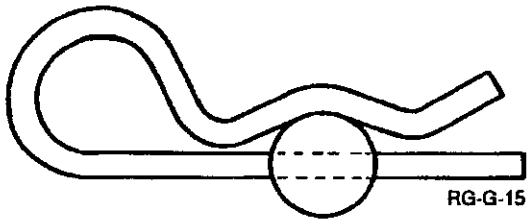
Unacceptable Hair Pins
Dimension "A" is greater than dimension "B" in a relaxed position

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.



Incorrect



Correct

CHANCE RIDES MANUFACTURING, 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.*

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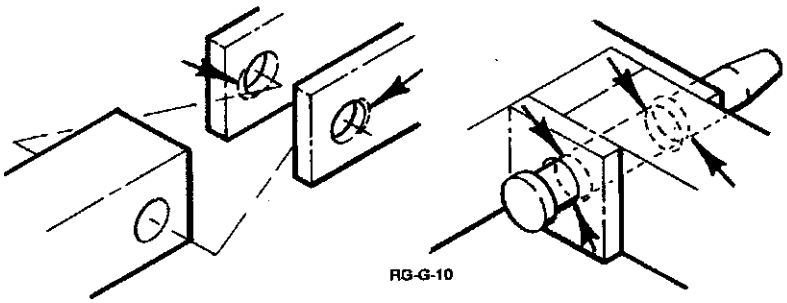
Inspection

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 MANUFACTURING, INC., and replace as required.

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



Stationary joint wear

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.

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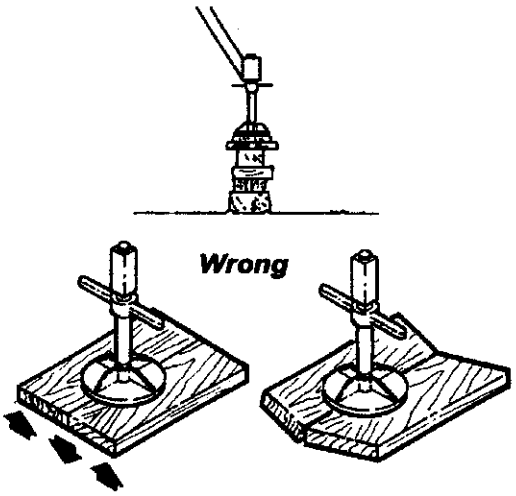
Leveling and Blocking (Portable Model Only)

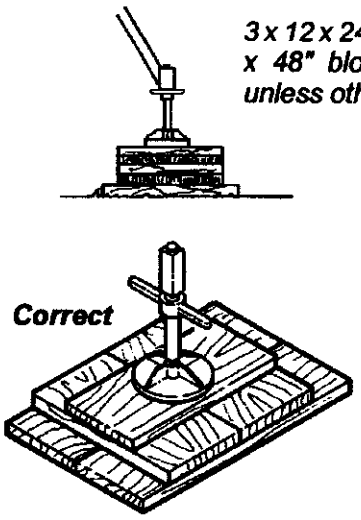
1. Inspect leveling and blocking at each set up and at the start of each day (rides erected in soft locations require more frequent inspection).

2. Inspect for proper cross blocking at each jack location. Cross blocking distributes weight evenly.

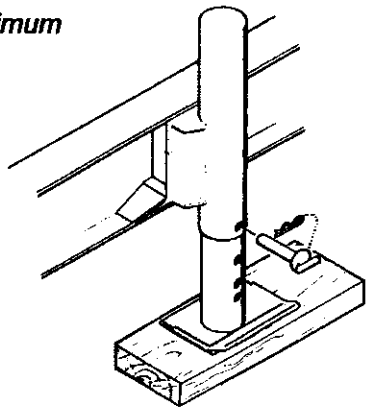


Always Cross Block
Cross blocking distributes weight evenly.

3 x 12 x 24", 3 x 12 x 36" and 3 x 12 x 48" blocking is recommended unless otherwise instructed.



Support leg blocking
- *One block 3 X 12 X 36" minimum*



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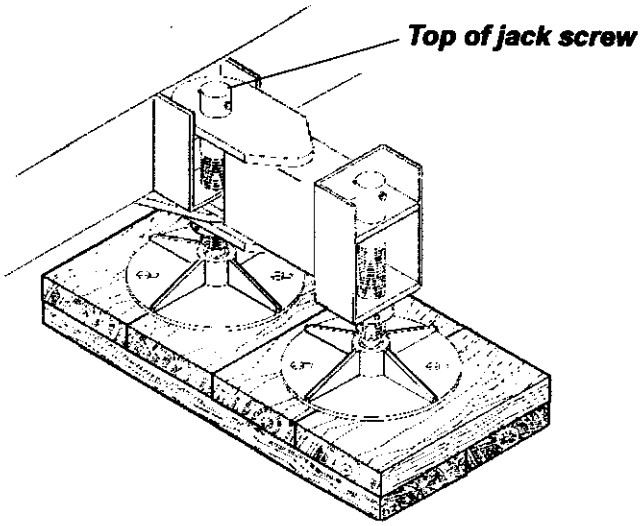
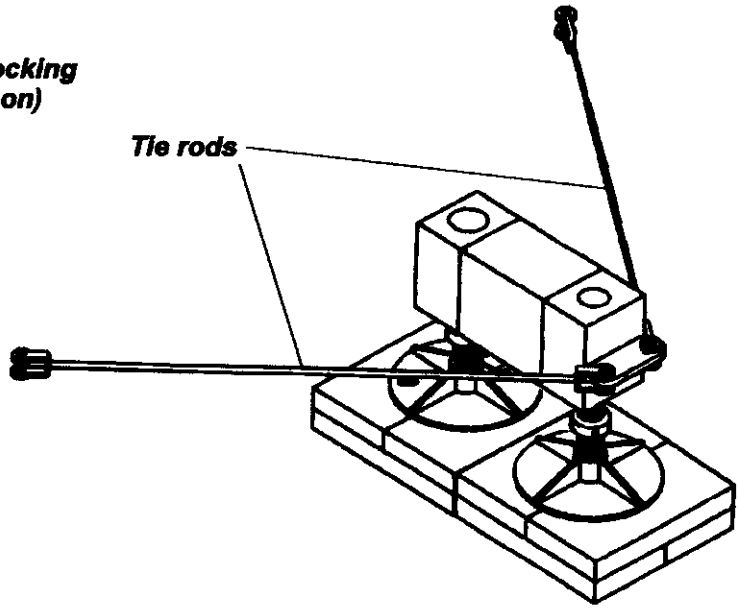
Front screw Jack and Outrigger Blocking (Ride serial numbers 408-96001 through 408-97019)

- *Minimum two blocks high*
- *3 X 12 X 48" and 3 X 12 X 24" with 18" aluminum jack pads*
- *Stagger blocks as shown under both front screw jack and outrigger jack*
- *Top of jack screw must protrude through ear as shown*



Front Screw Jack and Outrigger Blocking (Ride serial numbers 408-97020 and on)

- *Minimum two blocks high*
- *3 X 12 X 48" and 3 X 12 X 24" with 18" aluminum jack pads*
- *Stagger blocks as shown under both front screw jack and outrigger jack*
- *Tie rods must be installed with turnbuckles snug*



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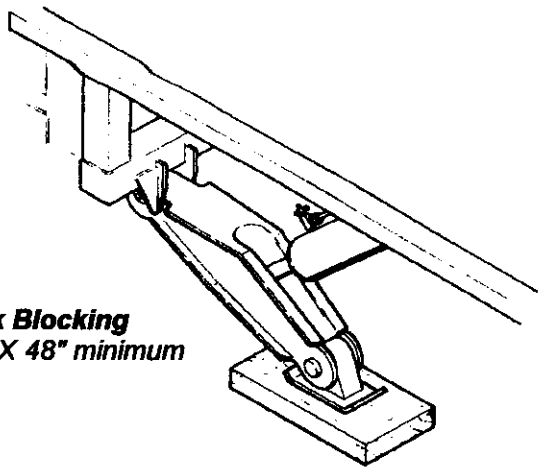
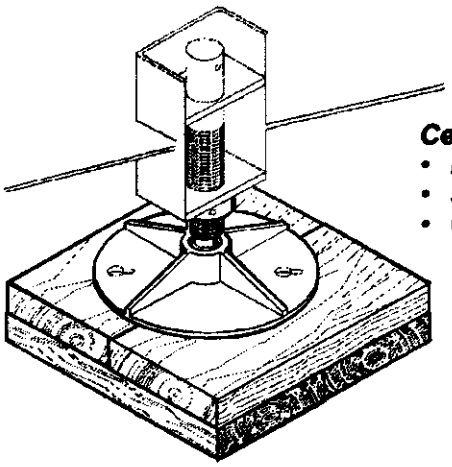
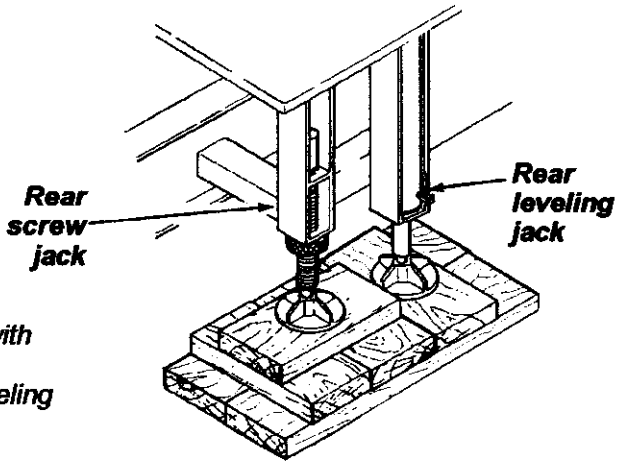


Front Leveling Jack Blocking
- *One block 3 X 12 X 48" minimum*



Center Screw Jack Blocking
- *Minimum two blocks high*
- *3 X 12 X 24" with 9" steel jack pads*
- *Cross block as shown*



Rear Leveling Jack and Screw Jack Blocking
- *Minimum three blocks high*
- *3 X 12 X 48" and 3 X 12 X 24" with 9" steel jack pads*
- *Stagger blocking under rear leveling jack and screw jack as shown*

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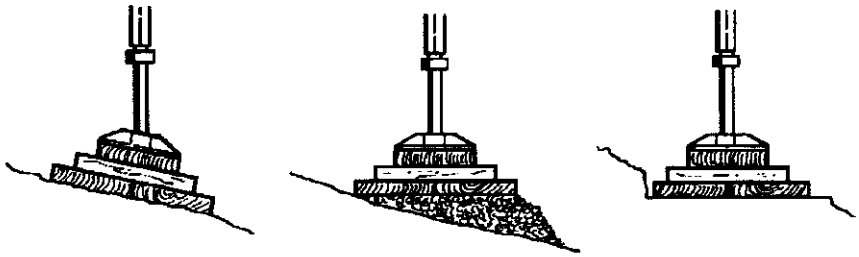
3. Inspect blocking for proper contact with ground.

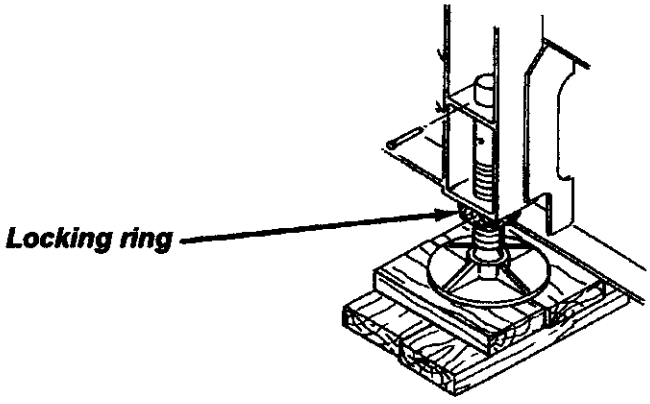
4. Level ground under blocking by digging where possible, instead of filling. Fill dirt will be soft and allow settling.

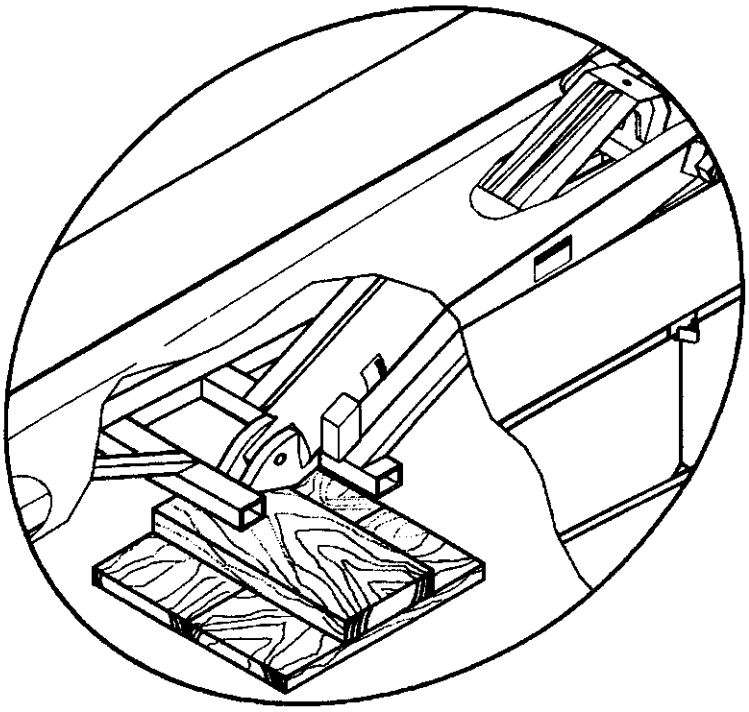
Blocking on a Slope
Level the ground beneath blocking by digging where possible. Don't fill; the fill dirt will be soft allowing the ride to tilt



5. Inspect hydraulic leveling jacks for leaks at every set-up. The hydraulic jacks are for leveling purposes only. Make sure that all four screw jacks are on solid blocking and the jack nuts are tightened. Retract the jacks completely and close the shut-off valves so the entire weight of the ride is on the screw jacks.

6. Check the locking rings on screw jacks for tightness.





Blocking Under Boom Lift Cylinder

- *Minimum two blocks high*
- *3 x 12 x 48" on bottom and 3 x 12 x 24" on top*
- *Cross block as shown*
- *Shim blocks as required to bring blocking within 1/8" to 1/4" of the boom lift cylinder mounting ears.*

7. Inspect for correct blocking under the boom lift cylinder on portable rides[14].

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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 used to insure they are in good condition. Use only OSHA approved safety items. 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 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. Maintain all guards in good operating condition.[27] 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.

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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.

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Vehicle Inspection

NOTE: *Each vehicle is equipped with an two stage passenger restraint system:*

- *An electrically operated locking over-the-shoulder lap bar*

  and

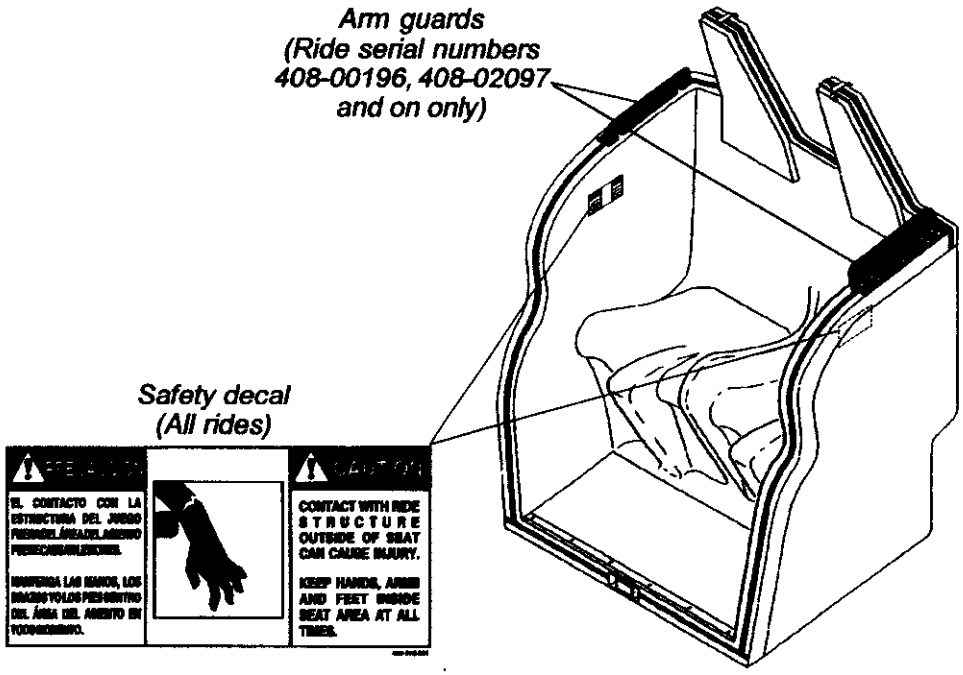
- *An electrically operated secondary restraint bar which closes over the lap bars.*

1. Check the operation and locking of every lap bar and secondary restraint bar daily.

2. Check the operation of the lap bar interlock system using the procedure described in the following topic, "Passenger Restraint and Interlock System Operational Check".

3. Check for installation of safety decals on all vehicles[12].

4. On ride serial numbers 408-00196 and 408-02097 and on, check for installation of arm guards on each vehicle[17].



12 B408R1202-0 October 1, 1998
17 B408R1209-0 March 18, 1999

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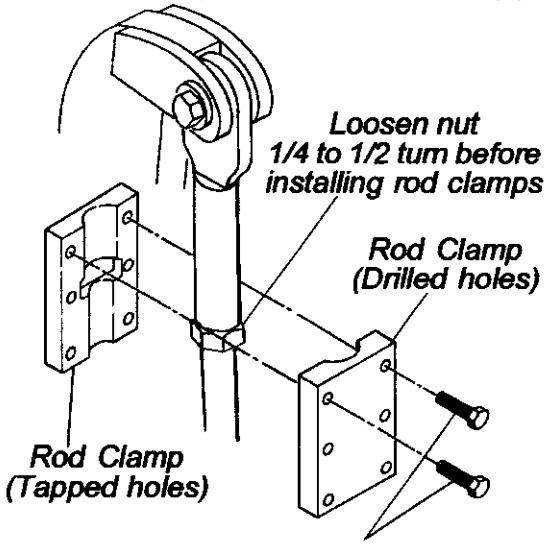
5. On ride serial numbers 408-00296 through 408-01997, inspect each vehicle for the following:

   a. Check for installation of latching rod clamps on ALL FOUR LATCHING RODS in the back of every vehicle[10].
   b. Check for wear on lap bar latch latching washers, top plate and block caused by contact with latching rods[22].
   c. Latching rods must be clean, smooth and free of corrosion for entire length[22].
   d. Check lap bar padding contact area for grooves matching contact area with secondary restraint bar[22].

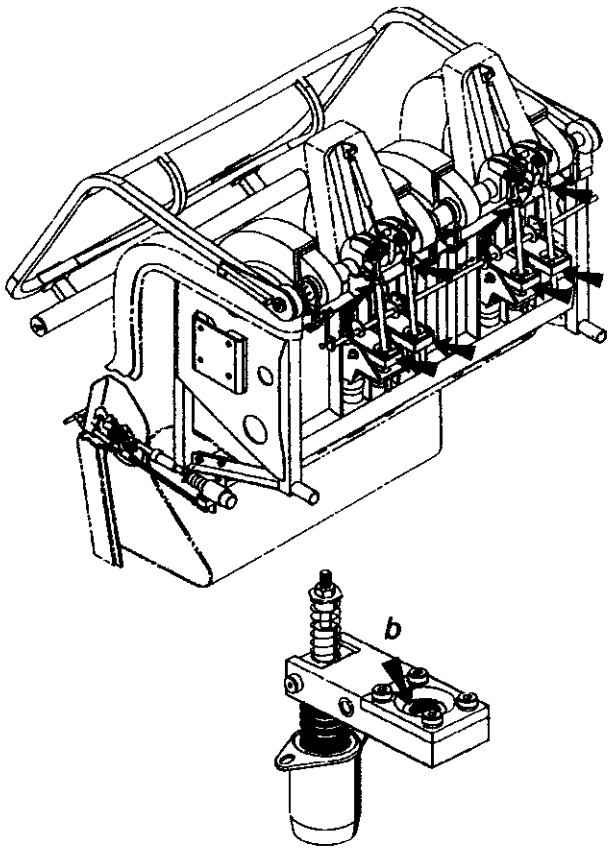
   Replace any parts that are worn or damaged.

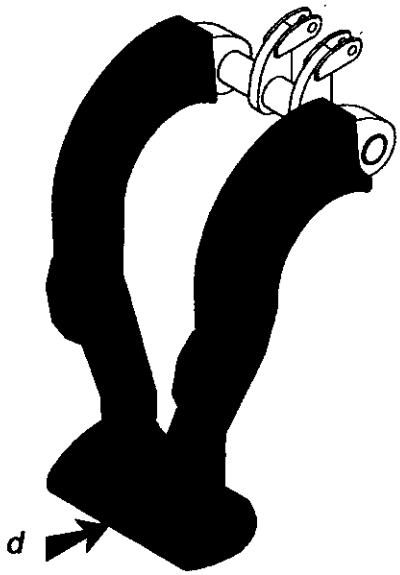
Ride serial numbers 408-96002 through 408-97019 only

ALL FOUR LATCHING RODS must have rod clamps installed as shown (a)



1/4-20 x 1-1/4" Capscrews
Apply Loctite® 271 (red) to threads.
Tighten to 7 ft-lbs





10 B408R1182-0 December 1, 1997
22 B408R1216-0 September 10, 1999

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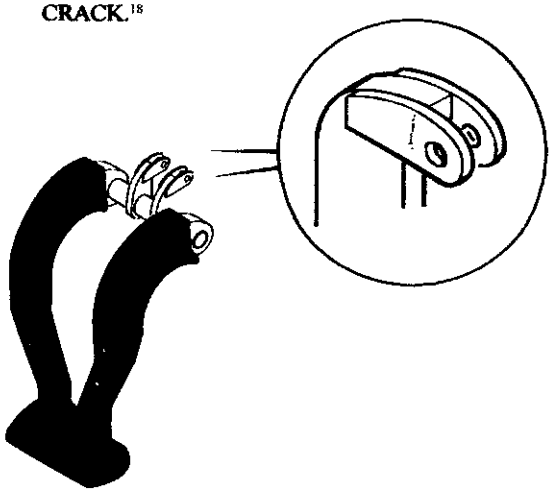
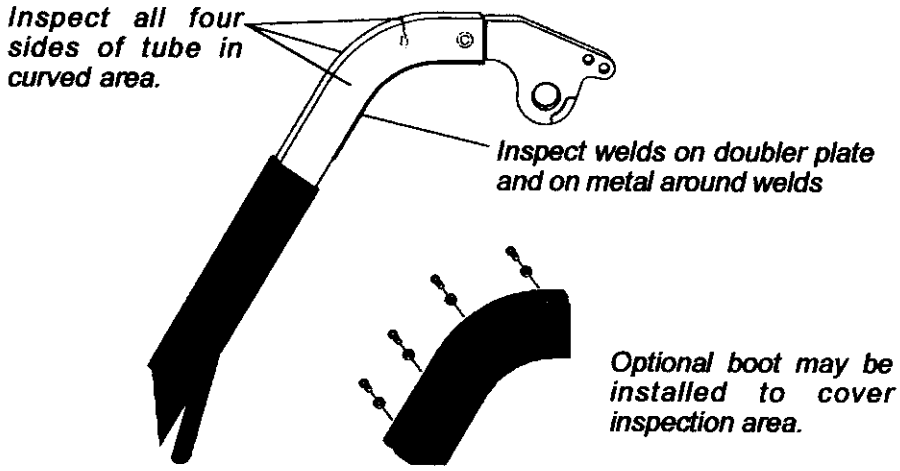
6. Visually inspect both primary restraint bars on all vehicles (36 total) as shown. If any cracks are found, contact the Chance Customer Service Department immediately. DO NOT ATTEMPT TO REPAIR THE CRACK.[18]



7. On rides with serial numbers 408-00196 and 408-0297 and on, visually inspect all four sides of the aluminum tube in the curved area, Also inspect the welds on the doubler plate and the metal surrounding the welds.[20]

   If any indications are noted, contact the Customer Service Department at Chance Rides Manufacturing, Inc. immediately. DO NOT LOAD PASSENGERS IN THAT VEHICLE UNTIL REPAIR OR REPLACEMENT IS MADE.



20 B408R1222-A September 1, 2000
18 B408R1212-0 July 7, 1999

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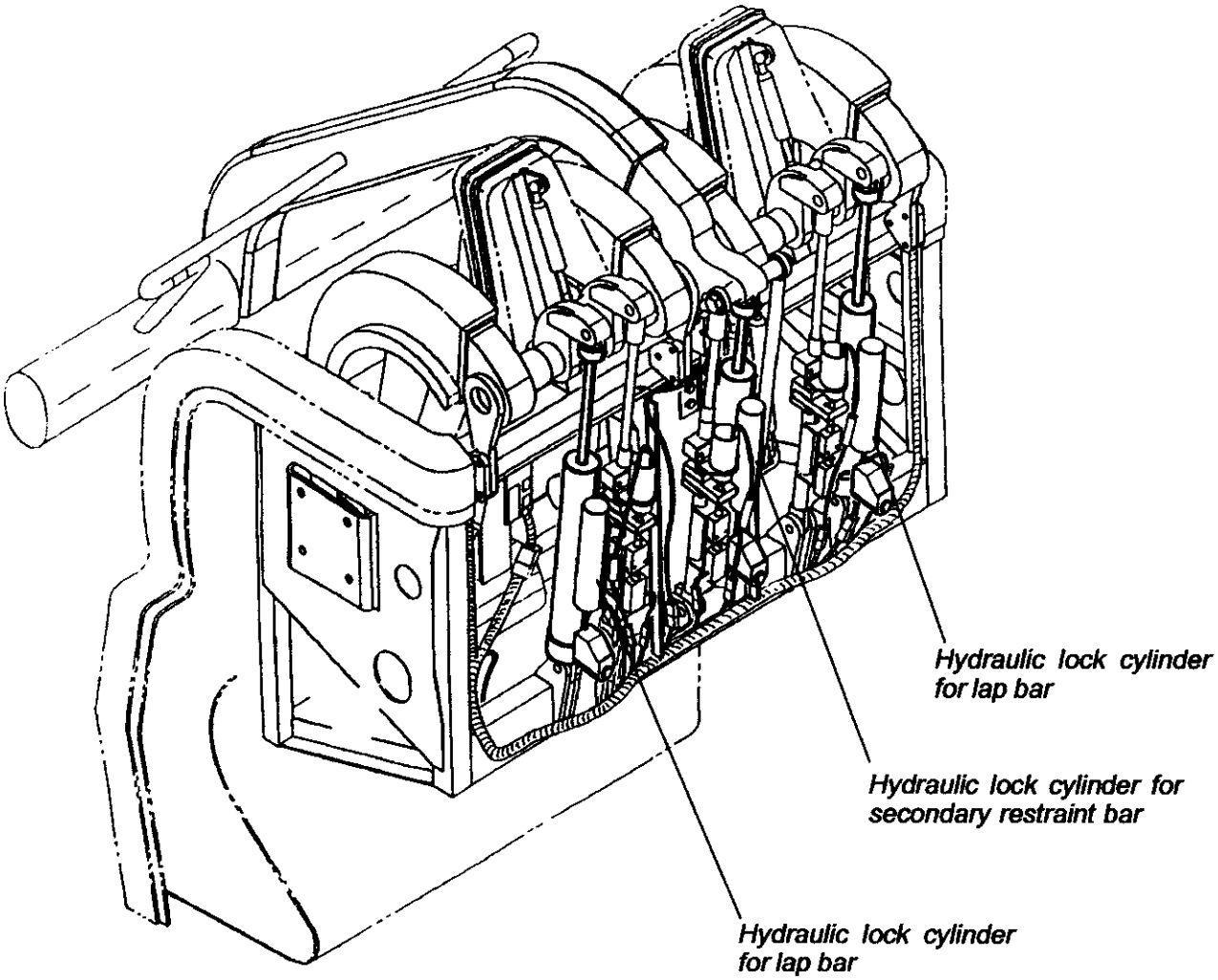
8. On rides with serial numbers 408-00196 and 408-02097 through 408-03998, inspect the three hydraulic lock cylinders on all vehicles (54 total).[21] Identify the cylinders based on the distinguishing characteristics detailed on the next page.

IMPORTANT: *Note the location at which each cylinder is installed. Pay particular attention to the cylinder for the secondary restraint bar.*



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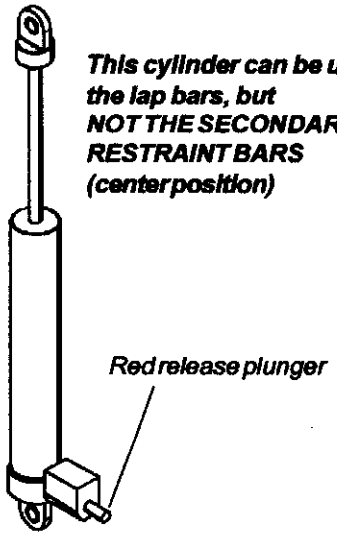
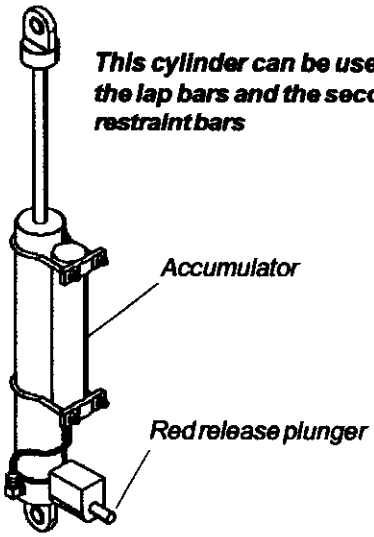
NOTE: *Use the cylinder illustrations on this page to identify the distinguishing characteristics and uses for each cylinder.*



This cylinder can be used on the lap bars, but NOT THE SECONDARY RESTRAINT BARS (center position)

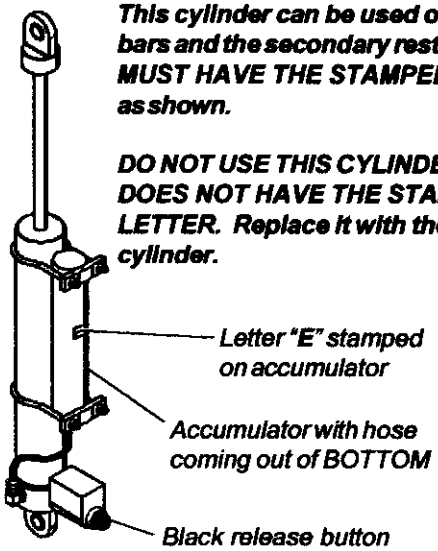
Red release plunger



This cylinder can be used on the lap bars and the secondary restraint bars

Accumulator

Red release plunger



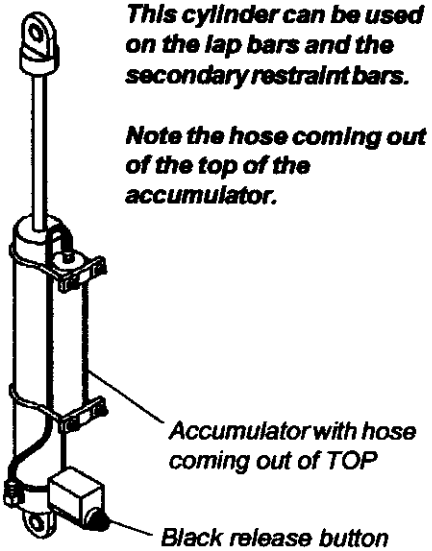
This cylinder can be used on the lap bars and the secondary restraint bars. It MUST HAVE THE STAMPED LETTER as shown.

DO NOT USE THIS CYLINDER IF IT DOES NOT HAVE THE STAMPED LETTER. Replace it with the correct cylinder.

Letter "E" stamped on accumulator

Accumulator with hose coming out of BOTTOM

Black release button



This cylinder can be used on the lap bars and the secondary restraint bars.

Note the hose coming out of the top of the accumulator.

Accumulator with hose coming out of TOP

Black release button

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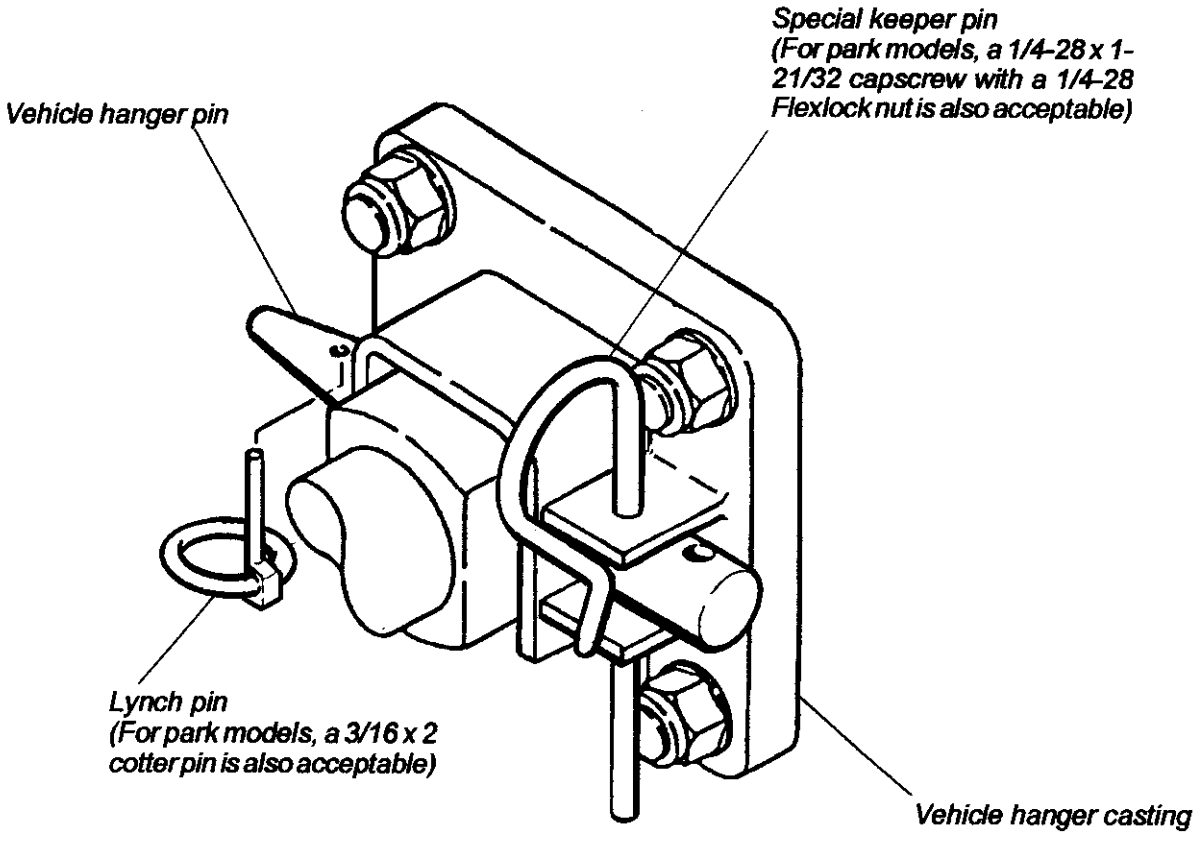
9. Check the overall condition of each vehicle. Inspection points include, but are not limited to, anti-slip material on the seat floors, lap bar padding and head rests. Anti-slip materials must be in good condition.

10. Check the mounting of each vehicle for the correct hardware. There must be a snapper pin behind the head of the taper pin, and a lynch pin through the taper pin as shown. Inspect the condition of all hardware daily.

Vehicle Hanger Fastener Inspection



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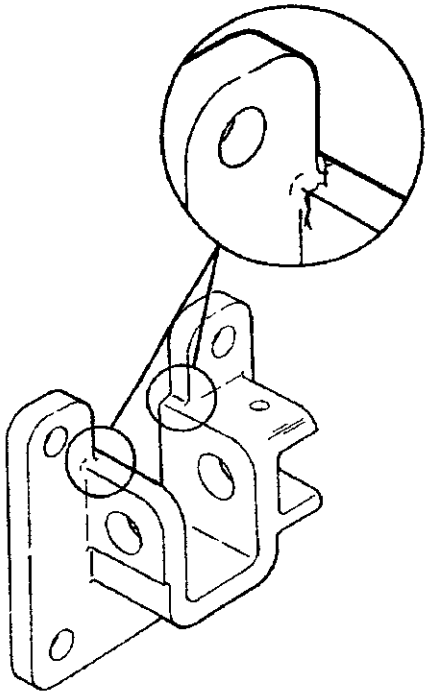
7. Visually inspect all vehicle hangers for cracks in the areas shown in the illustration below. If cracks are found, DO NOT OPERATE THE RIDE. This visual inspection must be done daily, prior to operation of the ride.

   Replace the seat hangers when the hole for the taper pin exceeds .860".

Vehicle Hanger Casting Inspection



WARNING: Inspect all vehicle hangers every day before operation of the ride. Never operate the ride unless ALL vehicle hangers are in good condition. Serious injury to passengers and/or bystanders can result from vehicle hangers which are broken, cracked or otherwise damaged.

8. Inspect the vehicle frame structures for cracks, bends and other damage.

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Passenger Restraint and Interlock System Operational Check

An interlock system prevents the ride from being started if any of the secondary restraint bars are not down and locked. The following check must be made daily to ensure the proper operation of the passenger restraint bar interlock system

WARNING: Never load passengers into a vehicle unless ALL passenger restraint bars on that vehicle are in good working condition, and the passenger restraint bar interlock system is operating correctly.

Do not tamper with or attempt to defeat the purpose of the passenger restraint bars or the passenger restraint bar interlock system. Serious injury to passengers can result.

1. Lower and lock all lap bars and secondary restraint bars. All white lap bar indicator lights must be on.

2. Start the ride. It should start and run normally. Stop the ride.

WARNING: When testing the passenger restraint bar interlock system, use only the JOG BUTTON. If the ride starts with the passenger restraint bar unlatched, STOP THE RIDE IMMEDIATELY to avoid serious injury to the passengers.

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3. With the ride stopped, manually release the secondary restraint bar on only one vehicle.

4. **On ride serial numbers 408-96002 through 408-97019**
   - Engage the right hand latch first, then the left hand latch. Listen for two audible "clicks" as the left hand latch engages in two positions. The white indicator light must not come on until the left hand latch reaches the second, fully engaged position.
   - Repeat this process, but close the left hand latch first, then observe the indicator light as the right hand latch is engaged.
   - If the indicator light comes on before EITHER secondary restraint bar latch is completely engaged, adjustment or repair of the passenger restraint bar interlock system is necessary.

   On ride serial numbers 408-96001, 408-97020 and on
   - Close the secondary restraint bar completely. The white indicator light must not come on until the secondary restraint bar is completely down and locked.
   - If the indicator light comes on before the secondary restraint bar is completely down and locked, adjustment or repair of the passenger restraint bar interlock system is necessary.

   DO NOT ALLOW ANYONE ON THAT VEHICLE UNTIL REPAIRS ARE MADE.

5. Proceed to the next vehicle and repeat Step 4 until all vehicles have been tested, ONE AT A TIME.

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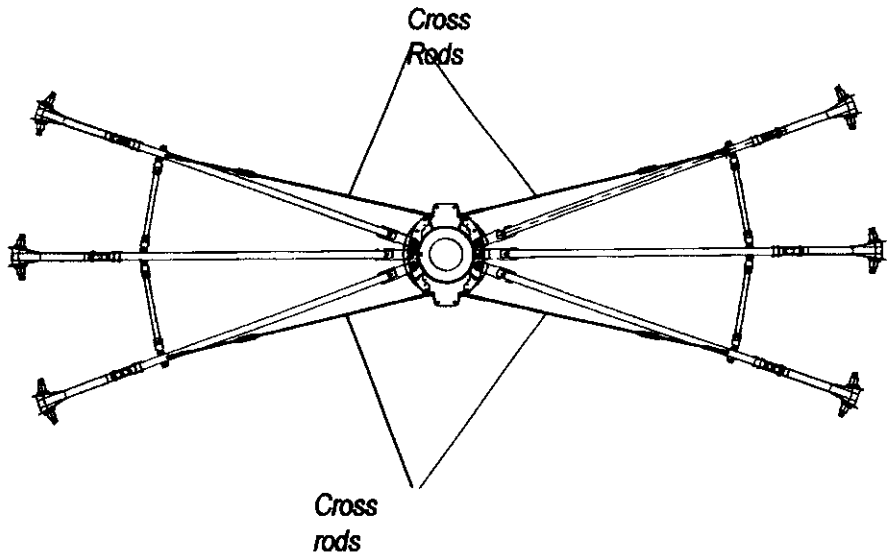
Hub, Sweep and Cross Rod Inspection

1. Check the installation of all spreader bars, pins and lynch pins.

2. Inspect the installation of two sets of cross rods between the sweeps and hub. Carefully inspect the overall condition of all four cross rods.[31] Look for cracks, bends, wear or other damage. Pay particular attention to the welded joints detailed on the next page. If any damage or indications are found, do not operate the ride until repairs have been made.

   Also, check the adjustment of the cross rods. Loosen the jam nuts on each turnbuckle and tighten it until snug. Turnbuckles must be tightened so the cross rod is in TENSION, NOT COMPRESSION.

Cross Rod Installation



31 B408CRM111-0 November 6, 2002

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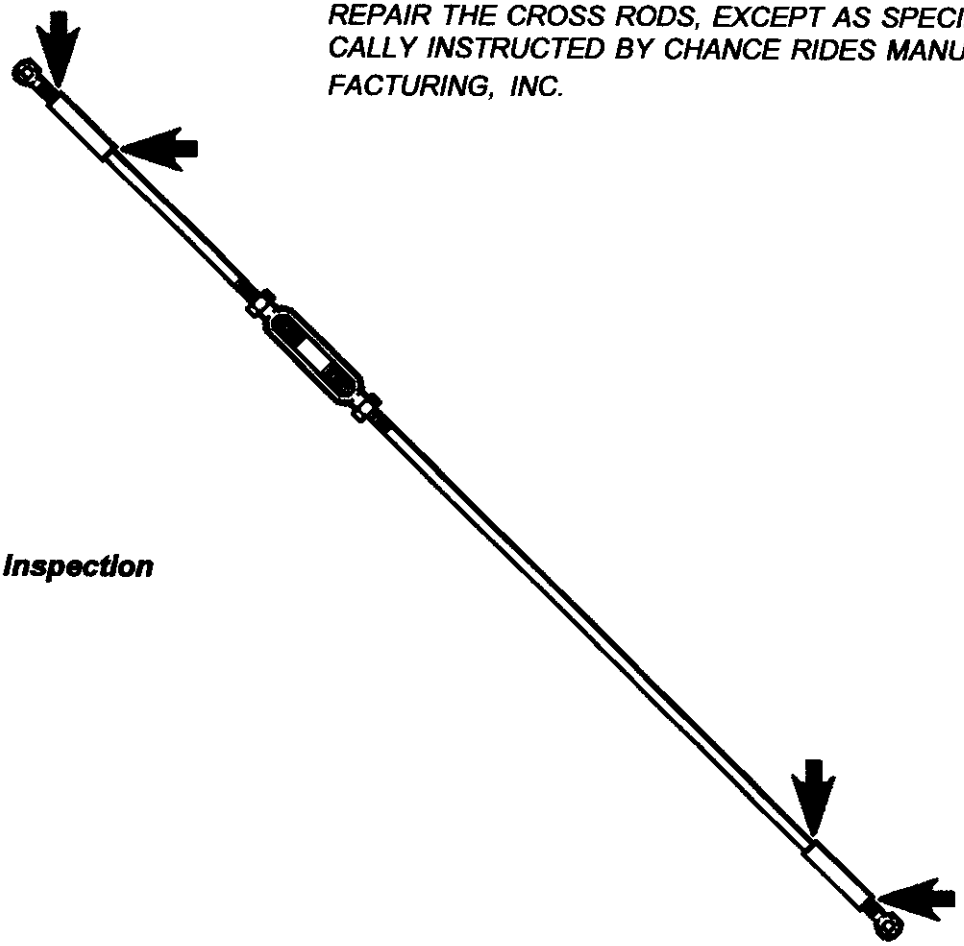
Inspect these welded joints in the areas indicated by arrows. Look for indications in the weld and the parent metal.

DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE CROSS RODS, EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.



Cross Rod Inspection

3. Check the shoulder bolts which attach the sweeps to the hub. These are special heat-treated fasteners, tightened to 350 ft-lbs. torque.

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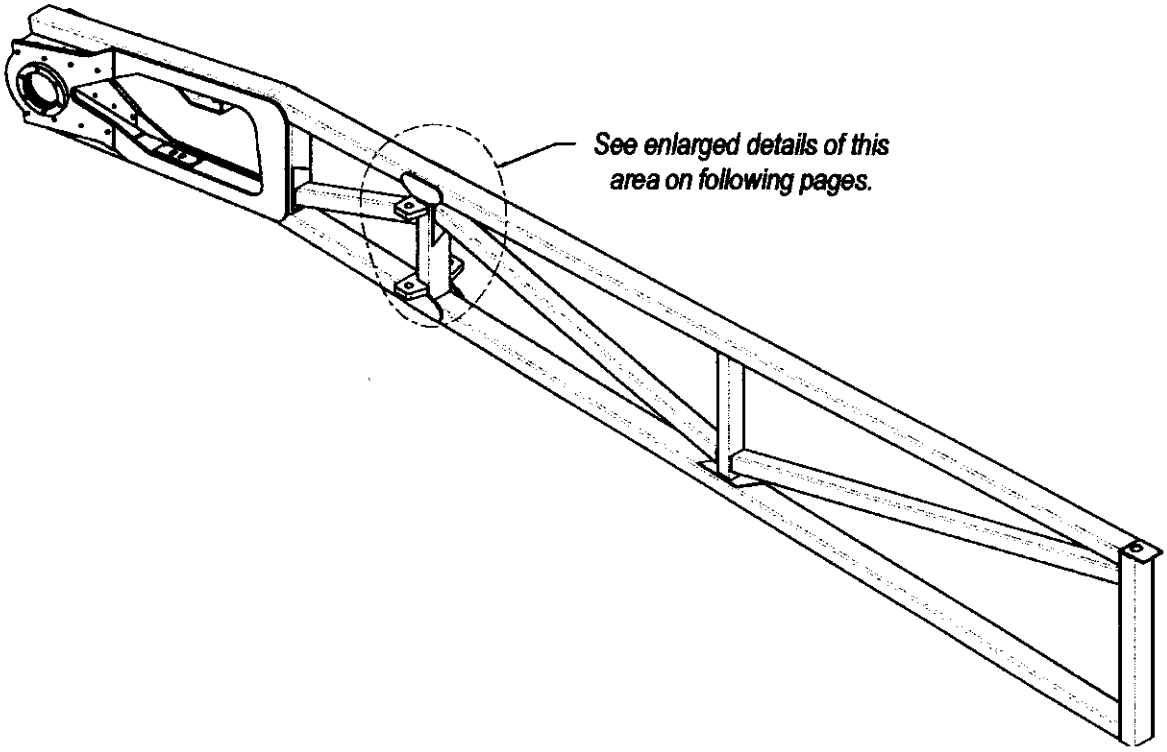
4. Inspect all sweeps for damage, cracks or other indications. Look at the welds and parent metal at all joints. If any indications are found, contact the Chance Customer Service Department immediately. **DO NOT CONTINUE OPERATION OF THE RIDE.**

5. Inspect for installation of sweep rework kit[30], as identified by the doubler plates shown in the following illustrations. Check welds for correct locations and size.

Sweep Rework Kit Installation



30 B408CRM110-0 November 6, 2002

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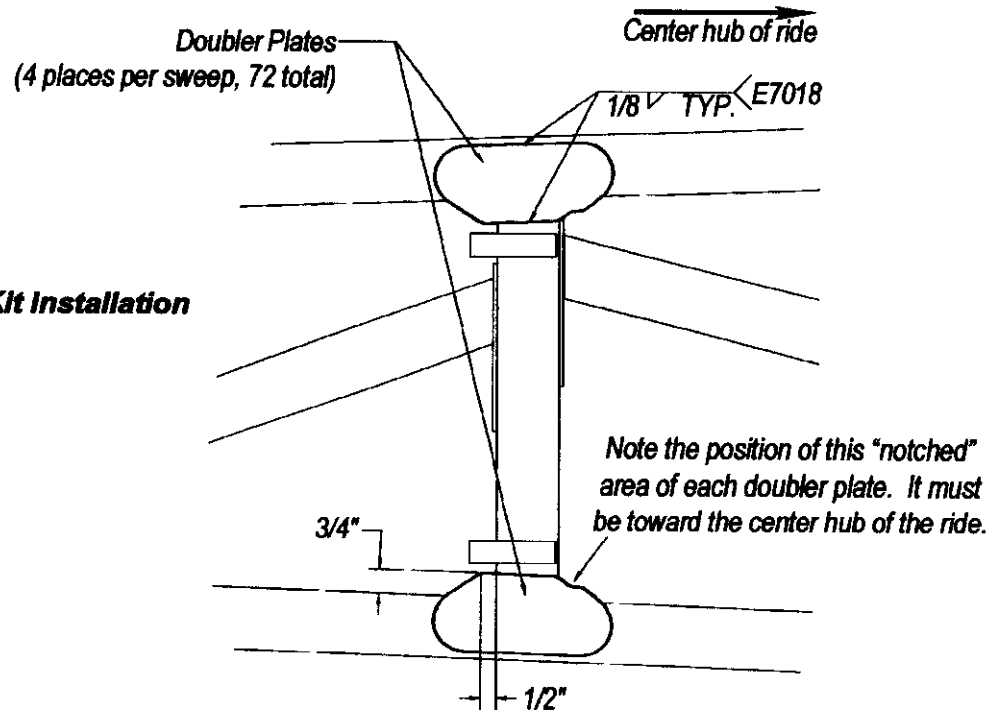
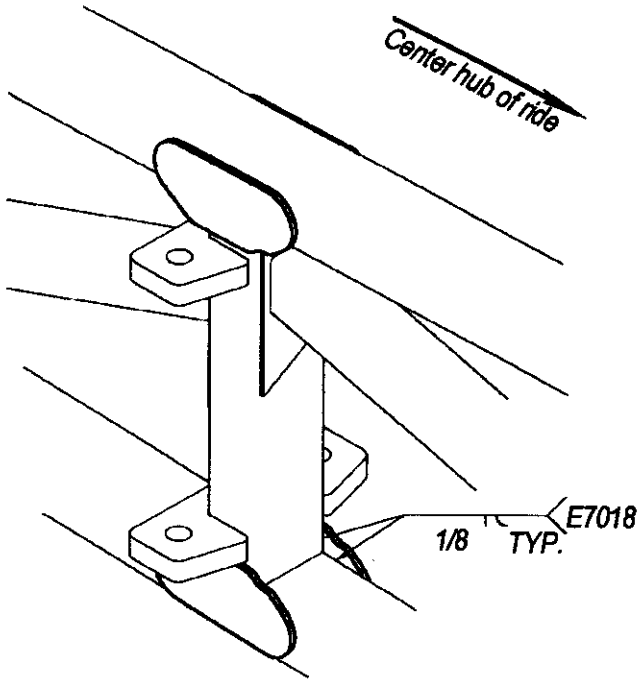
Sweep Rework Kit Installation





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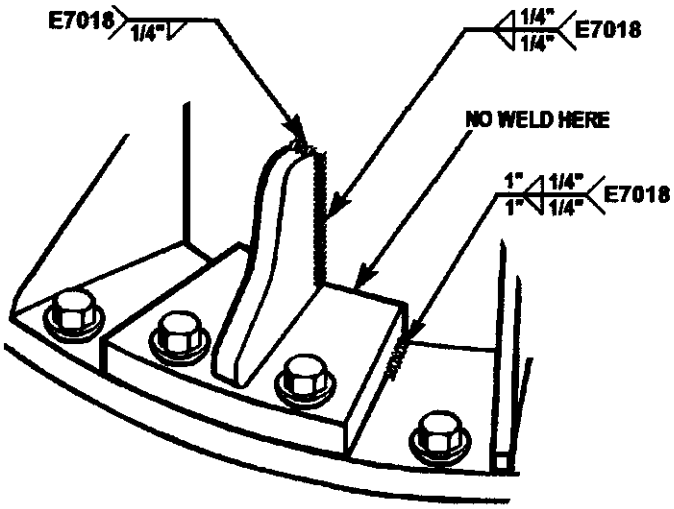
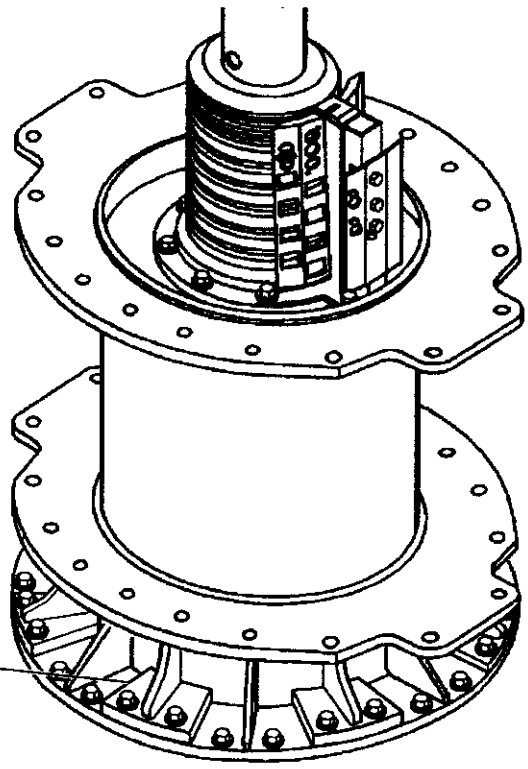
6. Inspect for installation of hub gusset kit[13] (ride serial numbers 408-00196 through 408-02097 and 408-02297 through 408-03998 only). Check welds for correct locations and size.





Hub gussets (7 places)

13 B408R1203-A December 8, 1999

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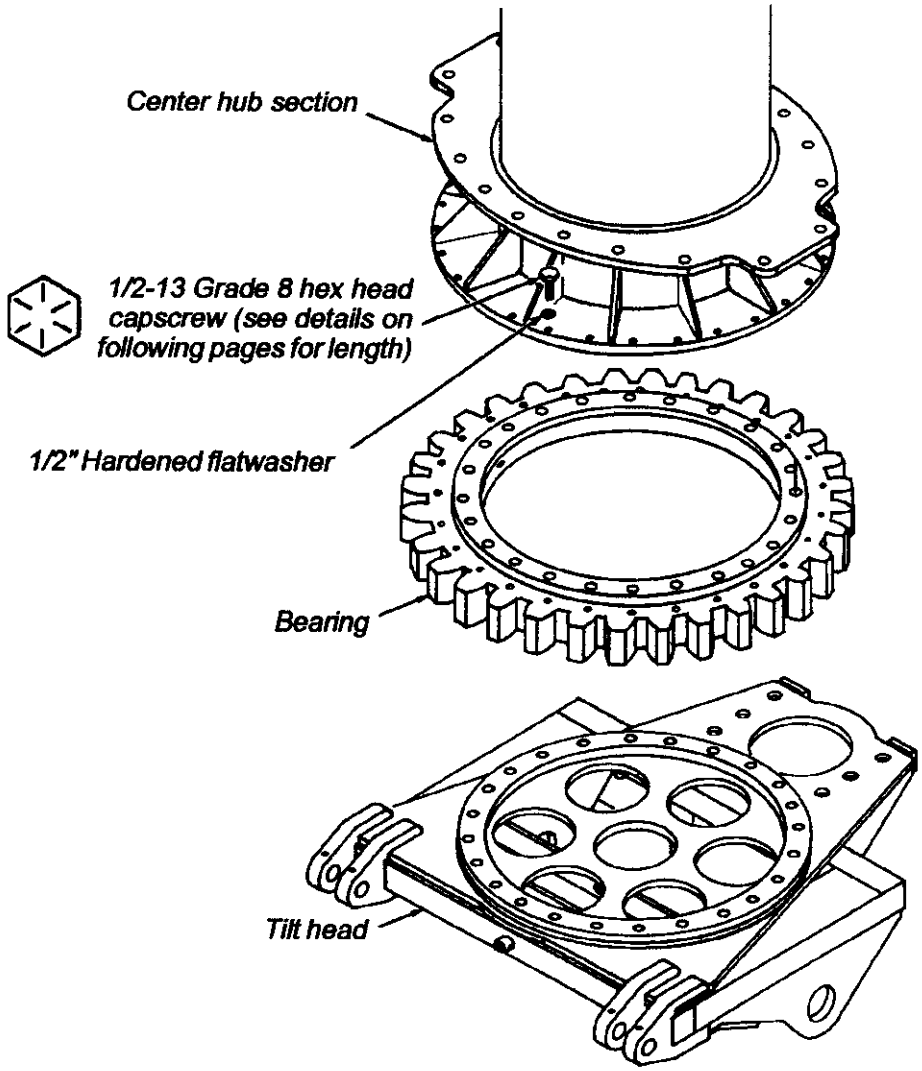
7. Check capscrews that attach the center hub to the bearing on the tilt head.[9] These are Grade 8 hex head capscrews with hardened flatwashers under the heads (28 places). The correct length of the capscrews varies with the serial number of the ride and with the bearing installed on that specific ride. It is essential for the care of the equipment and the safety of the passengers that the correct length capscrews are installed and the correct torque is maintained on these capscrews.



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Two factors determine the correct length of capscrews securing the center hub section to the bearing:

- **The ride serial number** - ride serial numbers 408-00196 through 408-02097 and 408-02297 through 408-03998 were retrofitted with the Hub Gusset Kit (refer to Chance Rides, Inc. Service Bulletin B408R1203-A). In the locations of the hub gussets on these rides, a different length capscrew is required.

- **The tapped holes in the bearing** - the bearing manufacturer has changed the tapped holes from a "blind hole" to a "through hole". Different length capscrews are required for each type of tapped hole.

Using the illustrations on the following pages, inspect the hub and bearing to determine the correct fasteners for that specific ride.

Using a torque wrench, check for proper torque of all 28 capscrews. The torque value for checking these capscrews must be 80 ft-lbs. This is a monthly check.

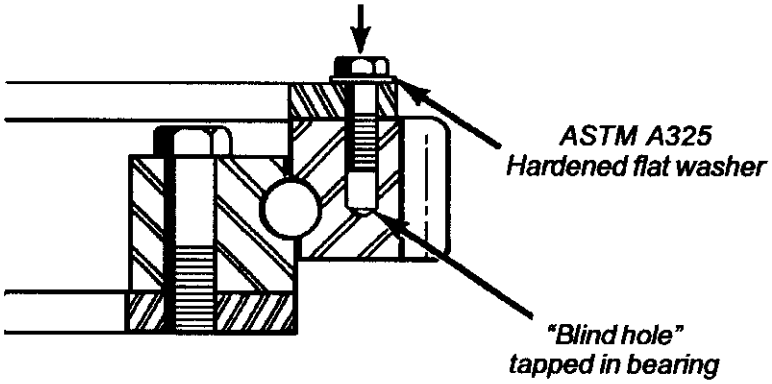
IMPORTANT: *ALL 28 CAPSCREWS MUST BE TIGHTENED AND MAINTAINED AS DESCRIBED TO OPERATE THE RIDE. If damage in the tapped holes prevents one or more capscrews from meeting these specifications, the bearing must be replaced. Contact the Chance Customer Service Department for all necessary parts and instructions on this procedure.*

If any capscrew is found to be loose, remove it and replace it with a new capscrew. Clean the threads on the new capscrew and in the bearing, then apply Loctite® 271 (red). Tighten the new capscrew to 90 ft-lbs.

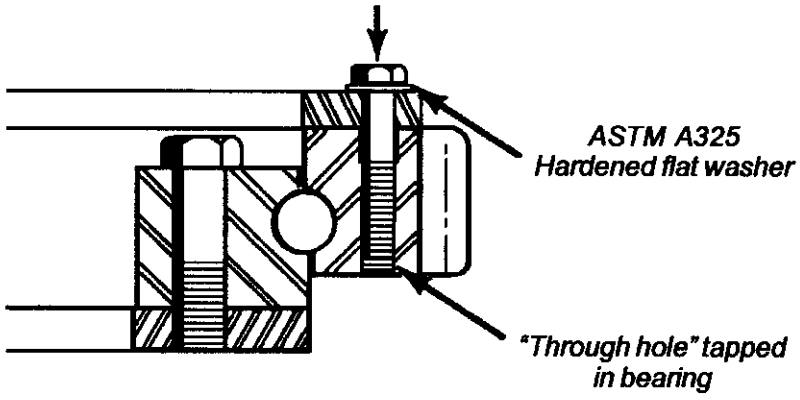
If a broken capscrew is found, contact Chance Rides Manufacturing, Inc. immediately for further instructions.

IMPORTANT: *These details illustrate the correct length capscrews for all rides. Inspect the tapped holes in the bearing as shown to determine the correct length of capscrew. On rides with the Hub Gusset Kit installed (Chance Rides, Inc. Service Bulletin B408R1203-A), refer also to the following page for capscrew lengths in the hub gusset locations.*

1/2-13 x 1-3/4" long Grade 8 Hex Head Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



1/2-13 x 2-3/4" long Grade 8 Hex Head Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



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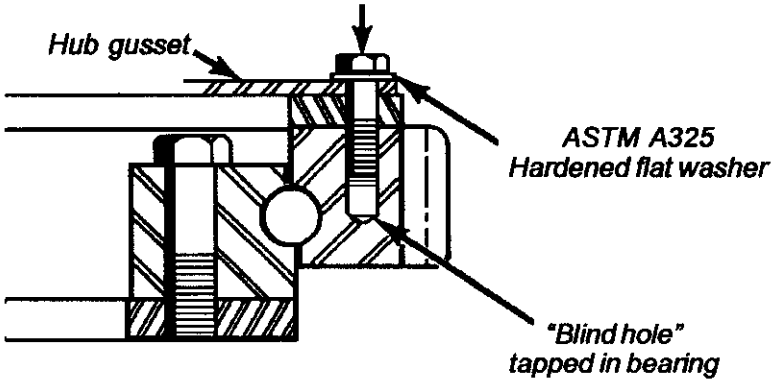
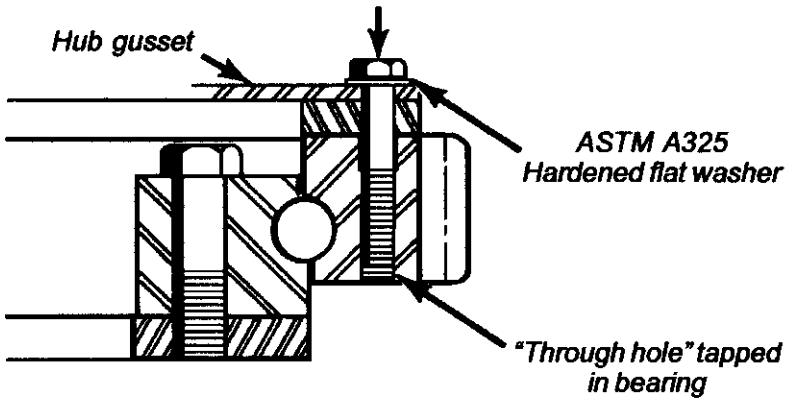
IMPORTANT: *These details illustrate the correct length capscrews at the gusset locations on rides with the Hub Gusset Kit installed (Chance Rides, Inc. Service Bulletin B408R1203-A). Inspect the tapped holes in the bearing as shown to determine the correct length of capscrew.*

1/2-13 x 2-1/4" long Grade 8 Hex Head Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



1/2-13 x 3-1/4" long Grade 8 Hex Head Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



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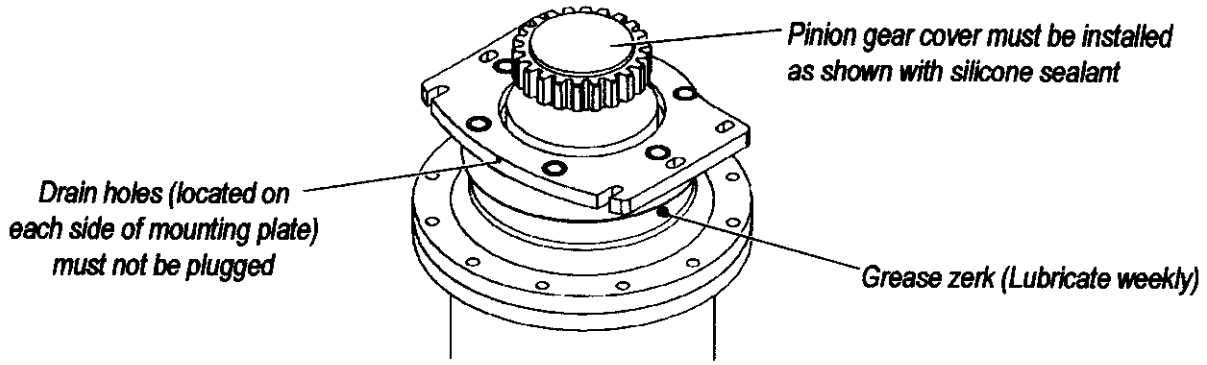
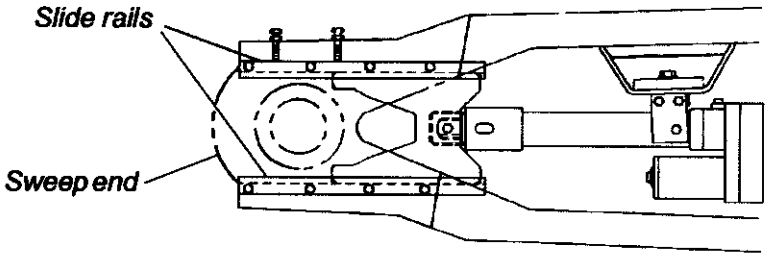
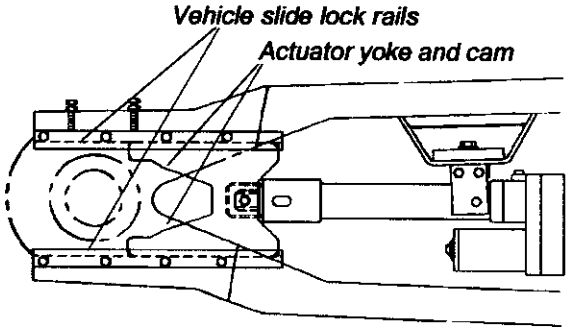
8. Make sure the pinion gear cover is installed and sealed with silicone sealant. Drain holes, if present, must be clear. Drive pinion housing must be lubricated weekly with NLGI No. 2 lithium based grease.[29]



9. On units with serial numbers **408-96001 through 408-3999,** check vehicle lock slide rails for installation of vehicle lock slide rail rework kit.[15] This kit replaced brass slide rails with steel ones.



10. Check for evidence of specified lubricant on slide rails and actuator yoke and cam.[16] These parts should be lubricated with Loctite® Anti-Seize Lubricant or equivalent.



15 P408R1207-0 March 18, 1999
16 B408R1208-0 March 18, 1999
29 B408CRM101-0 July 30, 2002

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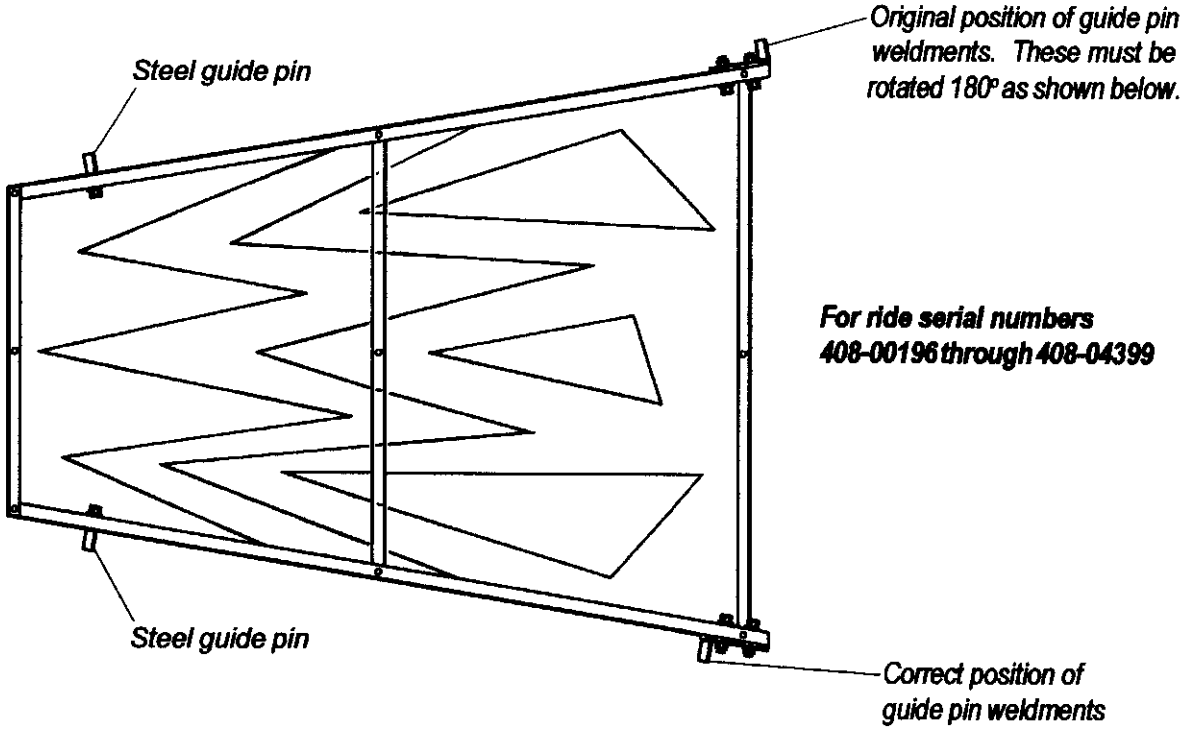
Sweep Insert Panel Inspection

1. Inspect the steel guide pins on the sweep insert panels.

   NOTE: *On ride serial numbers 408-00196 through 408-04399, check for installation of Sweep Insert Panel Rework Kit[23]. This kit requires removal of welded aluminum guide pins from the frame and installation of steel bolt-on guide pins. All capscrews must be installed from the inside, pointing out as shown.*

   Make sure the outer guide pin weldments are installed in the correct position. The guide pin weldments must be relocated from their original position as shown, in conjunction with the Sweep Rework Kit[30] (Service Bulletin B408CRM110-0).



23 B408R1214-0 September 10, 1999
30 B408CRM110-0 September 6, 2002

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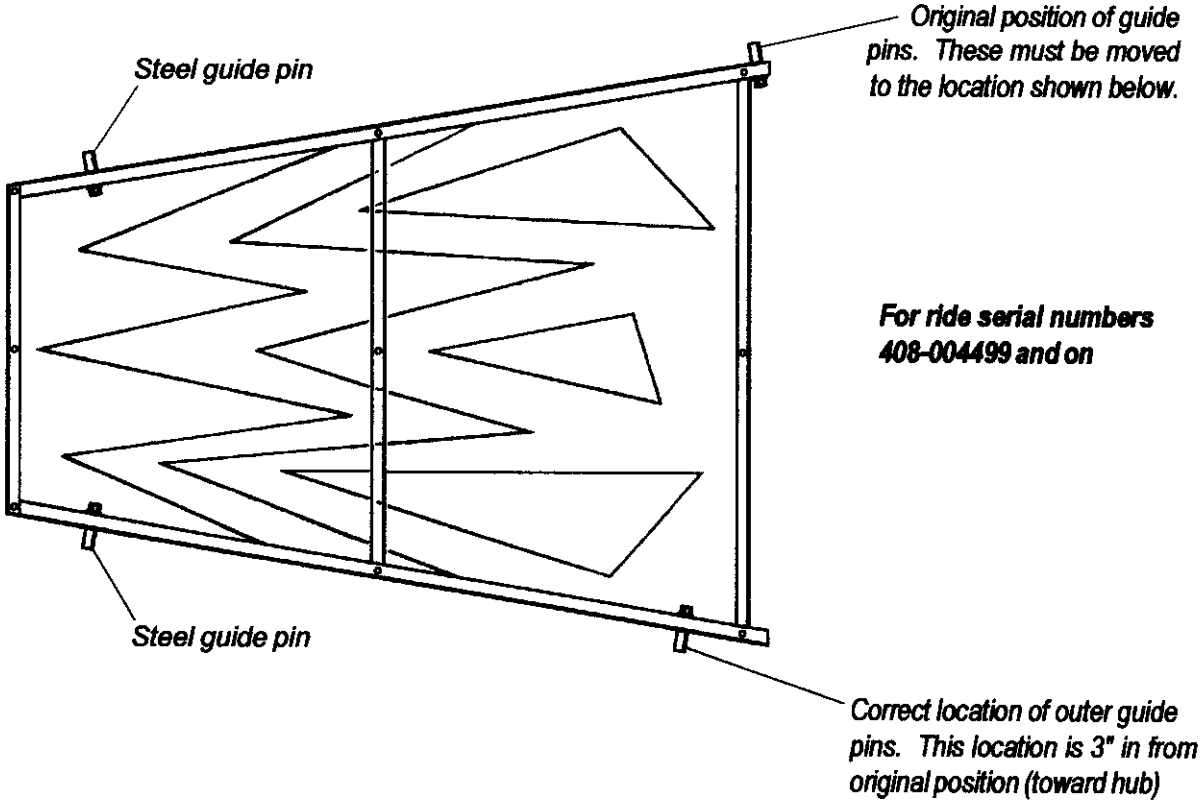
NOTE: *On ride serial numbers 408-04499 and on, make sure the outer pins are installed in the correct position. The guide pins must be relocated from their original position as shown, in conjunction with the Sweep Rework Kit[30] (Service Bulletin B408CRM110-0).*



2. Inspect all other components of the sweep insert panels, including the aluminum frame, the molded Lexan® panel, and the rivets which secure them to the frames.

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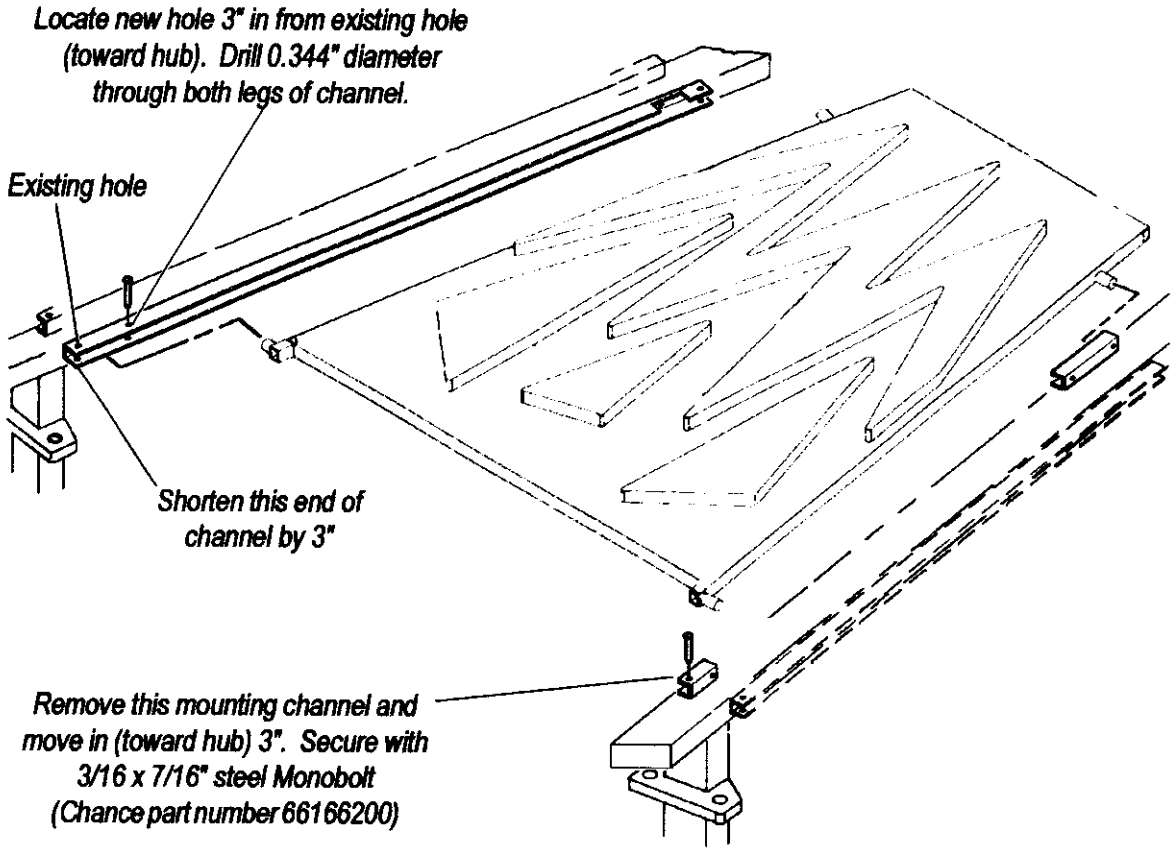
3. **Inspect the condition of the mounting channels for the sweep insert panels.[26] Look for excessive wear on the channels as well as loose or missing fasteners. Make sure the mounting channels have been modified as shown in conjunction with the Sweep Rework Kit[30]** (Service Bulletin B408CRM110-0).



26 P408R1232-0 November 10, 1999
30 B408CRM110-0 November 6, 2002

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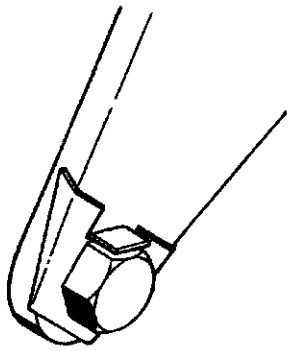
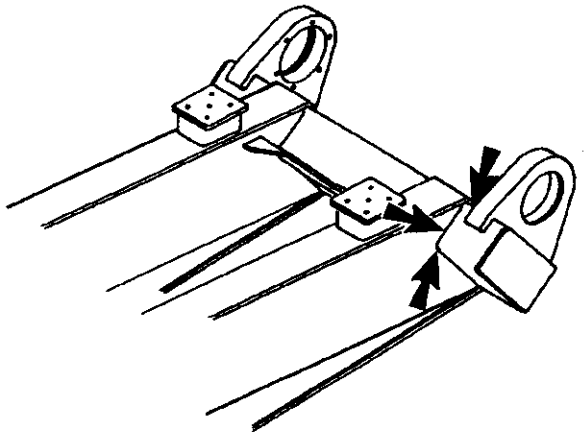
Boom and Tilt Head Inspection

1. Check the tower head pivot pins for installation of locking hex head capscrews and capscrew retainers. The tabs on the retainer must be bent over the pin and the capscrew to prevent the capscrew from becoming loose.



2. Check the operation of the manual boom release valve, located on the roadside of the manifold block mounted immediately in front of the hydraulic pallet. The check valve on the boom lift cylinder port block must be opened before using the manual boom release valve. Check for installation of the safety decal for this valve, which is applied to the diagonal brace near the base of the boom lift cylinder.

3. Inspect the boom and tilt head structures for visible cracks or damage in the areas shown.[19] If any indications are found, contact the Chance Customer Service Department immediately.



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Electrical and Lighting Inspection

1. Check the boom and tilt head limit switches, located as follows
   - One boom "UP" limit switch, located on the boom lift cylinder
   - Two boom "DOWN" limit switches, located at the boom pivot on each side of the trailer or park base.
   - One tilt head limit switch, located on the boom beneath the tilt head.

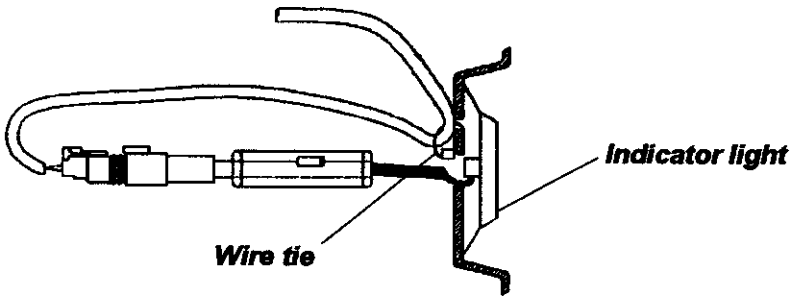
   The boom "UP" limit switches are actuated when the boom is raised approximately 68°. The boom "DOWN" limit switches are actuated when the boom is fully lowered. The tilt head limit switch is actuated when the head is fully tilted. These switches must be adjusted properly, and MUST NOT BE BY-PASSED.

2. Check cable leads, electrical connections and grounding per local code.

3. Test the operator controls, including emergency stop switch, operator presence switch and power switch.

4. Check the electrical jumpers at each vehicle.

5. Inspect for installation of wire tie securing the lap bar indicator light wiring[8].



6. Inspect all quartz flood lights for installation of special clear tape on outside of lens[6].

6 B090R1133-0 August 6, 1993
8 B408R1180-0 June 20, 1997

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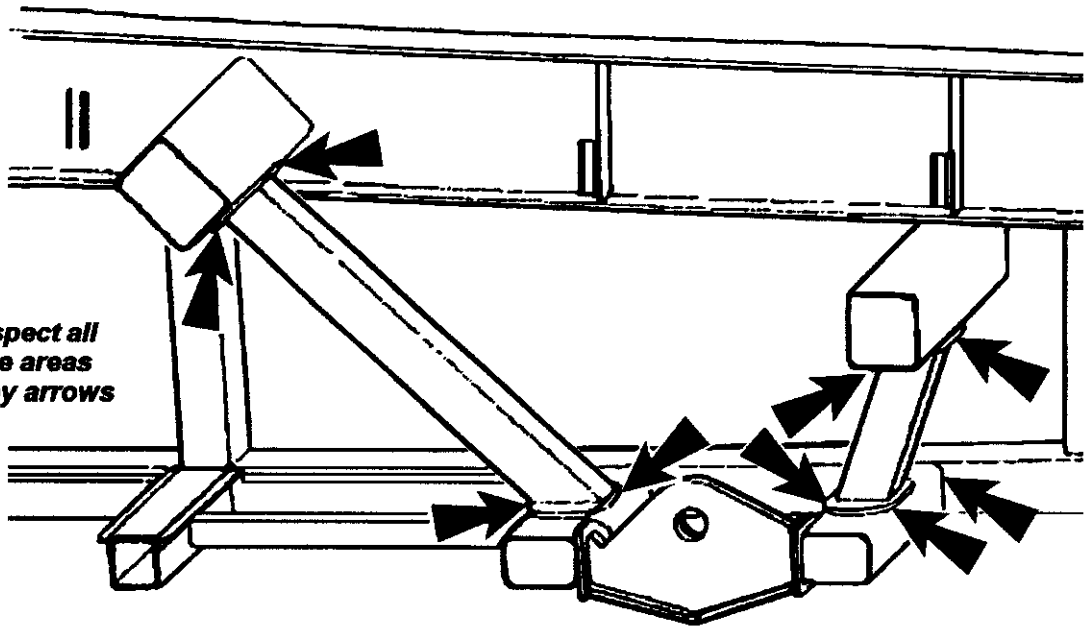
Trailer or Park Base Inspection

1. Check the trailer for installation at proper 5° angle.
2. Inspect the trailer or park base structures for visible cracks or damage.
3. Visually inspect the welds on the boom lift hydraulic cylinder support frame[11] in the areas shown, on both portable and park model rides.



Visually inspect all welds in the areas indicated by arrows

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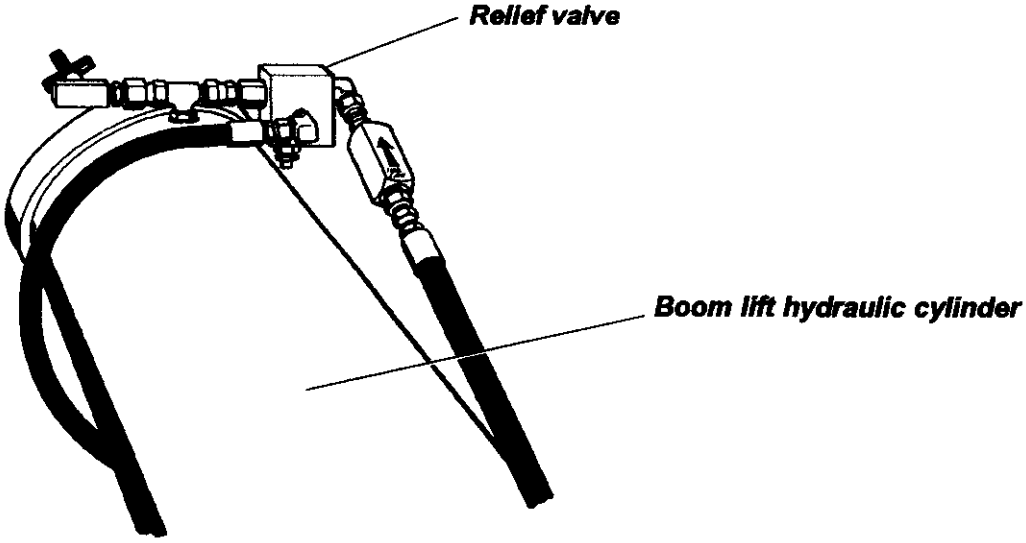
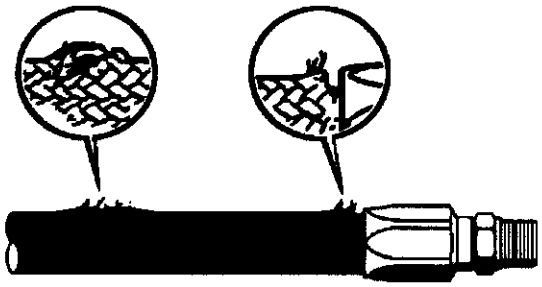
Hydraulic System Inspection

The CHAOS has two separate hydraulic systems, one for trailer leveling and material handling, the other for the drive system. Both systems share a common reservoir.

1. Inspect port at the rod end of the boom lift hydraulic cylinder for installation of the relief valve[7] as shown.



2. Inspect each hydraulic system, including hoses, tubes, fittings and other components for:[24]
   a. **Pressure rating**
   Hoses must never be subjected to pressure greater than the rated working pressure. Premature failure or "blow offs" at fitting can result.



7 B408R1178-0 June 6, 1997
24 B408R1229-0 November 1, 1999

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Hydraulic systems often experience momentary increases in pressure (surges and shocks) which can cause failure in a hose or at a fitting. When excessive pressure surges are anticipated, a hose with a higher pressure rating must be selected.

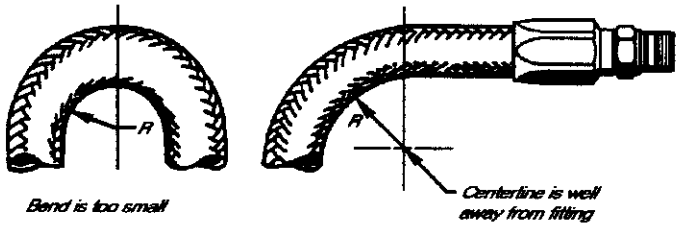
b. **Temperature rating**
Hoses which are continuously subjected to temperature extremes, both internal and external, will result in accelerated deterioration. Premature failure can result. In such cases, the hose must be rerouted or shielded from the source of the extreme temperature.

c. **Fluid Compatibility**
The performance characteristics of the hose material must be compatible with the fluid it will contact in service. Incompatible fluids will affect the hose liner and cause leakage in the hose or blow-offs at fittings. Particles from deteriorating hoses can clog valves and filters.

d. **Size**
If the inner diameter of the hose is too small to handle the flow demanded by the system, the restricted flow can result in friction, heat in both the hose and fluid and reduced hose life.

e. **Length**
Pressure changes can cause a hose to lengthen or shorten by 2% to 4%. Therefore, the hose have some slack or it will tend to pull away from the end fitting.

f. **Exceeding bend radius**
A bend that is too tight will cause kinking in the inner radius of the bend, causing restriction in the flow. Reroute hose to correct a too-tight bend.



g. **Hose/Fitting mismatch**
If the hose wall thickness is too large for the fitting, the fitting will not seat completely onto the hose, resulting in leakage or blow-off.

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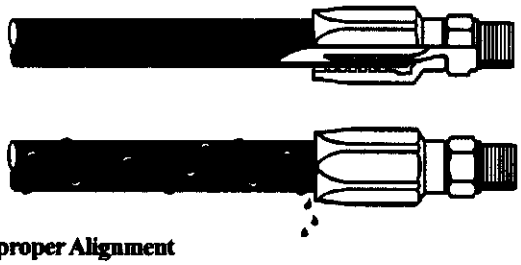
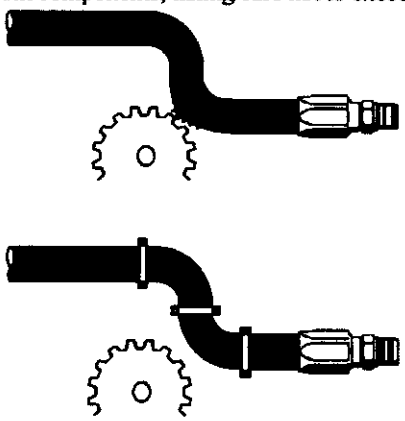
When a low-pressure hose is installed on a high-pressure fitting, the hose wall is too thin to grip adequately, resulting in either blow-off, leakage or bubbling of the hose cover.



h. **Improper Alignment**
Twisted hose under pressure tend to un-twist, causing a loose connection.

A "lay line" printed on the exterior of the hose is intended as a reference line to detect a twist in the hose.

i. **Abrasion**
Route hoses to avoid rubbing or abrasion between hoses or between hoses and other components. Use clamps to keep hoses away from components, taking care not to exceed bend radius.



j. **Improper Use**
Improper handling or installation will shorten service life of hydraulic hoses. Keep heavy objects object from resting on hoses. Do not use excessive force when installing or removing hydraulic hoses.

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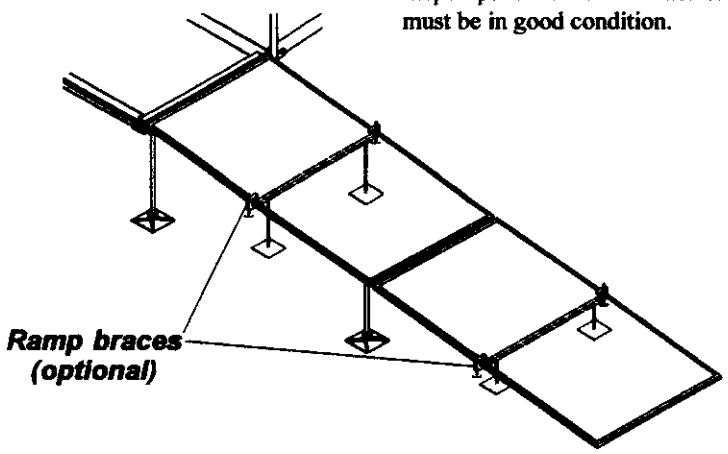
Platform and Fence Inspection

1. Inspect hand rails, ramps, steps and walkways.
2. Inspect all gates and queue line chains. Self-closing gates must operate properly.
3. Inspect all entrance and exit signs.
4. Inspect all safety signs and placards.
5. Inspect floors and jackstands for proper installation and leveling.
6. Inspect installation of the ramp braces (if equipped).[28]
7. Inspect platforms for condition of anti-slip coating.[25] Anti-slip materials must be in good condition.



Material Handling Equipment Inspection (Portable Model Only)

1. Inspect the general condition of all chains, cables, winches, straps, etc. Look for broken, worn or missing parts.
2. Check for proper operation of the vehicle handling boom and winch.

25 B408R1230-0 November 1, 1999
28 P408R1219-0 September 1, 2000

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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. Bulletins issued after publication of this guide should be considered updates to this guide.

CHAOS Service Manual
Ride serial numbers 408-96002 through 408-97019
24329800
December, 1996 (Revised March, 1997)
The *CHAOS Service Manual* includes the Set-up Manual, Operation Manual (#24329801), Maintenance Manual and Parts Catalog

CHAOS Service Manual
Ride serial numbers 408-96001, 408-97020 and on
24329803
June, 1997
The *CHAOS Service Manual* includes the Set-up Manual, Operation Manual (#24329804), Maintenance Manual and Parts Catalog

1. *Field Performance Testing Of Amusement Rides*
   B090R1002-0
   May 14, 1986

2. *Non-Destructive Testing*
   B090R1022-0
   March 21, 1988

3. *General Safety - Tapered Pins*
   B090R1056-0
   February 9, 1990

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4. *Replacement And Torque Requirements For Functional Load Carrying Capscrews*
   B090R1075-0
   May 25, 1990

5. *Manufacturer's Specifications*
   B090R1126-0
   March 12, 1993

6. *Flood Light Safety*
   B090R1133-0
   August 6, 1993

7. *Hydraulic System Rework*
   B408R1178-0
   June 6, 1997

8. *Lap Bar Indicator Light Wiring Rework*
   B408R1180-0
   June 20, 1997

9. *Hub Capscrew Torque Check*
   B408R1181-B
   August 3, 2001

10. *Latching Rod Rework*
    B408R1182-0
    December 1, 1997

11. *Inspection of Cylinder Support Frames*
    B408R1184-0
    September 12, 1997

12. *Passenger Restraints*
    B408R1202-0
    October 1, 1998

13. *Hub Gusset Kit*
    B408R1203-A
    December 8, 1999

14. *Boom Lift Cylinder Blocking*
    B408R1204-0
    November 30, 1998

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15. *Vehicle Lock Slide Rail Rework*
P408R1207-0
March 18, 1999

16. *Vehicle Lock Slide Rail Lubrication*
B408R1208-0
March 18, 1999

17. *Arm Guard Kit*
B408R1209-0
March 18, 1999

18. *Inspection of Primary Restraint Bars*
B408R1212-0
July 7, 1999

19. *Boom Inspection*
B408R1217-0
July 7, 1999

20. *Inspection of Secondary Restraint Bars*
B408R1222-A
September 1, 2000

21. *Inspection, Replacement and Operation of Hydraulic Lock Cylinders*
B408CRM104-0
November 6, 2002

22. *Lap Bar Inspection, Repair and Maintenance*
B408R1216-0
September 10, 1999

23. *Sweep Insert Panel Rework*
B408R1214-0
September 10, 1999

24. *Hydraulic Hose Installation, Inspection and Maintenance*
B408R1229-0
November 1, 1999

25. *Anti-Slip Surfaces*
B090R1230-0
November 1, 1999

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26. *Sweep Insert Panel Mounting Channels*
P090R1232-0
November 10, 1999

27. *Inspection and Maintenance of Guards*
B090R1233-0
November 1, 1999

28. *Ramp Support Brace Kit*
P408R1219-0
August 1, 2000

29. *Drive Pinion Bearing Housing Lubrication*
B408CRM101-0
July 30, 2002

30. *Sweep Rework Kit*
B408CRM110-0
November 6, 2002

31. *Cross Rod Inspection*
B408CRM111-0
November 6,02002

The following Product Improvement Notice is not referenced in the preceding text. The product improvement is not mandatory and may be incorporated at the owner's discretion.

Rust Stain Remover
P090R1179-0
September 22, 1997

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Inspection Checklists

Click on the link below for inspection checklists for the Chaos. The pages can be printed, copied and filled out as a permanent record for each inspection.

IMPORTANT: *These items are a minimum checklist. Other items which may be considered as standard check points in the industry must also be inspected. Refer to the appropriate portions of this service manual for specific procedures. Check applicable service bulletins for additions or changes to this checklist.*

Click on this box for Chaos Inspection Checklist

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Ride Serial Number: _____ Date: _____ Location: _____

Performed by: _____

IMPORTANT: *The following items are a minimum checklist. Other items which may be considered as standard check points in the industry must also be inspected. Refer to the appropriate service manual for specific procedures. Check applicable service bulletins for additions or changes to this checklist.*

Daily

	Satisfactory	Needs Attention	Corrective Action Completed
General			
Check for proper installation of pins and hairpins in the sweep insert panels	☐	☐	☐
Check for proper installation of pins and hairpins in the center spinner panels	☐	☐	☐
Check for proper installation of all fasteners in the sweep end covers	☐	☐	☐
Inspect blocking under all load-bearing jacks (portable model only)	☐	☐	☐
Inspect blocking under the boom lift cylinder (portable model only)	☐	☐	☐
Check to ensure ride is level (portable model only)	☐	☐	☐
Inspect all panels, fences, gates, ramps, steps and walkways for proper installation, damage or obstructions	☐	☐	☐
Inspect the condition of the anti-slip coating on all ramps and platforms	☐	☐	☐
Check that all safety signs and decals are properly installed and legible	☐	☐	☐
Hydraulic System			
Check for proper oil level in the hydraulic reservoir	☐	☐	☐
Check all hoses, fittings and components for leaks and/or damage	☐	☐	☐
Vehicle			
Check the overall condition of each seat, including, but not limited to, anti-slip material on the seat floors and headrests (18 places)	☐	☐	☐
Inspect all vehicle hangers for cracks, wear or other damage as described in the service manual. Check for correct installation of fasteners (36 places)	☐	☐	☐

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Ride Serial Number: _____ Date: _____ Location: _____

Performed by: _____

Daily (continued)

	Satisfactory	Needs Attention	Corrective Action Completed
Passenger Restraint System			
Visually inspect the entire passenger restraint system for loose, damaged or missing parts	❑	❑	❑
Check the lap bar padding for wear or damage	❑	❑	❑
Check the secondary restraint bar padding for wear or damage (Ride serial numbers 408-00196 and 408-02097 and on)	❑	❑	❑
Inspect the lap bar padding for grooves where it contacts the secondary restraint bar (Ride serial numbers 408-00296 through 408-01997 only)	❑	❑	❑
Test the operation of the passenger restraint interlock system	❑	❑	❑
Ride Operation			
Run the ride through at least three (3) complete ride cycles to observe the overall performance of the ride in relation to past performance of the ride	❑	❑	❑
Check all controls and indicators for proper operation	❑	❑	❑

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Ride Serial Number: _____ Date: _____ Location: _____

Performed by: _____

Weekly

	Satisfactory	Needs Attention	Corrective Action Completed
General			
All "Daily" checklist items completed	❑	❑	❑
Check for lubrication of boom cylinder rod end and base end (2 places)	❑	❑	❑
Check for lubrication of slave cylinder rod end and base end (2 places)	❑	❑	❑
Check for lubrication of tilt head pivot bearings (2 places)	❑	❑	❑
Check for lubrication of tilt cylinder rod end and base end (2 places each cylinder)	❑	❑	❑
Check for lubrication of hydraulic swivel coupling on boom lift cylinder (2 places)	❑	❑	❑
Check for lubrication of main bearing (2 places)	❑	❑	❑
Check for lubrication of drive pinion bearing housing. Make sure pinion gear cover is installed with silicone sealant	❑	❑	❑
Check for lubrication of the drive gear	❑	❑	❑
Check for lubrication of vehicle lock actuator slides, tracks and lock cams	❑	❑	❑
Passenger Restraint System			
Visually check to operation of the lap bar latches and latching rods (Ride serial numbers 408-00296 through 408-01997 only)	❑	❑	❑

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Ride Serial Number: _____ Date: _____ Location: _____

Performed by: _____

Monthly

	Satisfactory	Needs Attention	Corrective Action Completed
General			
All "Weekly" checklist items completed	☐	☐	☐
Check for lubrication of sweep end pivot pins (2 places on each sweep)	☐	☐	☐
Check for lubrication of hub collector ring shaft bearing (2 places)	☐	☐	☐
Passenger Restraint System			
Visually inspect the lap bar latches and latching rods for wear, corrosion or damage (Ride serial numbers 408-00296 through 408-01997 only)	☐	☐	☐
Visually inspect the entire lap bar and secondary restraint bar for loose, missing, worn or damaged components or mounting fasteners	☐	☐	☐
Inspect all three lap bar lock cylinders on each vehicle (Ride serial numbers 408-00196 and 408-02097 and on)			
Inspect for visible signs of leakage, external damage or loose fasteners	☐	☐	☐
Check the condition of the piston rod and spherical bearing in the rod end	☐	☐	☐
Inspect the solenoid valves for damage	☐	☐	☐
Activate the shoulder bar lock cylinder solenoids and check for smooth movement of the piston rod in extension and compression	☐	☐	☐
Inspect the accumulator hose and hose fittings for leakage	☐	☐	☐
Inspect the accumulator clamp nuts to ensure they are tight	☐	☐	☐
Drive System			
Check the capscrews that attach the center hub to the bearing turntable on the tilt head (28 places). Use a torque wrench to verify torque of 80 ft-lbs	☐	☐	☐

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Ride Serial Number: _____ Date: _____ Location: _____

Performed by: _____

Every 6 Months

	Satisfactory	*Needs Attention*	*Corrective Action Completed*
General			
All "Monthly" checklist items completed	☐	☐	☐
Check for lubrication of boom pivot bearings (2 places)	☐	☐	☐
Hydraulic System			
Replace the hydraulic oil filter	☐	☐	☐
Drive System			
Check for lubrication of main drive gearbox	☐	☐	☐

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Ride Serial Number: _____ Date: _____ Location: _____

Performed by: _____

Annually

	Satisfactory	*Needs Attention*	*Corrective Action Completed*
General			
All "Every 6 Months" checklist items completed	❑	❑	❑
Inspect the boom and tilt head structures for visible cracks or damage	❑	❑	❑
Visually inspect the welds on the boom lift hydraulic cylinder support frame	❑	❑	❑
Visually check the actuator yoke-to-sweep mounting capscrews for signs of loosening (1 place per sweep)	❑	❑	❑
Visually check the actuator-to-yoke mounting capscrews for signs of loosening (2 places per sweep)	❑	❑	❑
Visually check the actuator-to-cam shoulder bolts and lock nuts for signs of loosening (1 place per sweep)	❑	❑	❑
Visually check the slide rail capscrews for signs of loosening (8 places per sweep)	❑	❑	❑
Check for proper installation of vehicle spindle bearing housing capscrews (12 places per sweep). Use a torque wrench to verify torque of 19-24 ft-lbs	❑	❑	❑
Inspect condition of sweep end collector rings and brushes	❑	❑	❑
Inspect condition of hub collector rings and brushes	❑	❑	❑
Vehicles			
Check for lubrication of vehicle spindle bearings (36 places)	❑	❑	❑
Passenger Restraint System			
Visually inspect the lap bar for cracks in the ears where the locking mechanism attach (36 places)	❑	❑	❑
Inspect the secondary restraint bar for cracks in the curved of the aluminum tubing (Ride serial numbers 408-00196 and 408-02097 and on)	❑	❑	❑
Hydraulic System			
Drain the hydraulic reservoir and refill with new oil	❑	❑	❑

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Ride Serial Number: _____ Date: _____ Location: _____

Performed by: _____

	Satisfactory	Needs Attention	Corrective Action Completed
Every 3 Years			
General			
All "Annual" checklist items completed	❑	❑	❑
Drive System			
Check drive gearbox for overhaul	❑	❑	❑
Every 5 Years			
General			
All "Every 3 Years" checklist items completed	❑	❑	❑
Passenger Restraint System			
Check for replacement of lock plates on the mechanical locks (3 places on each vehicle) on or before the expiration date (Ride serial numbers 408-00296 through 408-01997 only)	❑	❑	❑

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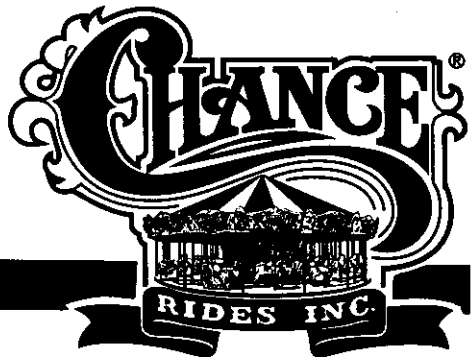
CHAOS

Operation manual

Manual number 24329801



OPERATION

General information

Safe operation is a combined responsibility and effort of the ride manufacturer and the owner/operator. This manual provides detailed information on the operation of the ride and provides the operator with important safety information.

All operators must be thoroughly familiar with the contents of this section before attempting to operate the ride. This information must be immediately available to all operators of the ride.

Contents

Operator selection and instruction

1. Select competent, mature operators, capable of understanding the function, use and control of amusement rides.

2. Instruct each operator fully in the proper use and function of the ride he/she is to supervise, including:
   a. Controls and procedures for normal and emergency operation.
   b. Manufacturer's recommended maximum speed and load.
   c. Manufacturer's recommended length of ride time and frequency of repeat rides.
   d. Any foreseeable misuse of the ride as determined by the manufacturer or owner, or by special conditions such as weather, location or crowds.
   e. Each operator must have immediate availability of the manufacturer's operation manual for the ride he supervises.

3. Require the operator to inspect the ride he/she supervises before each day of operation.
   a. Determine that no portion of the ride is damaged, missing or worn in such a manner that it is unsafe, or that can develop into an unsafe condition.
   b. Report any irregularities to superintendent or owner.
   c. If any irregularities are found, do not operate the ride until such condition is corrected.

4. Instruct operators to allow no passenger to ride who is visibly ill, or under the influence of drugs or alcohol. Pregnant women and persons with physical impairments should view the ride for potential risks before riding.

5. Instruct operators and attendants on the proper methods of seating passengers in the ride. Do not allow a passenger on the ride that cannot be properly seated due to passenger size. Stop the ride immediately if any passenger is observed tampering with any restraining device or behaving dangerously, such as standing up or placing hands and/or arms outside the vehicle.

6. Advise the operator against starting the ride while any person (passenger, spectator or employee) is in a dangerous or unsafe position on the ride, or within the ride area.

7. Insist that each operator remain in full control of the operating controls during operation of the ride. The operator's full attention must be given to the ride and its passengers.

8. Instruct the operator to allow no other person, except for another trained operator, to operate the controls of the ride (excepting portions of the ride that are designed to be controlled by the passenger).

9. Instruct the operator and attendants fully as to the proper method of assembly and disassembly of portable rides. Always supply adequate personnel and equipment to do it safely.

10. Instruct the operator to inspect and correct damaged, lost or worn parts that are unsafe or that can develop into unsafe parts, during assembly or disassembly.

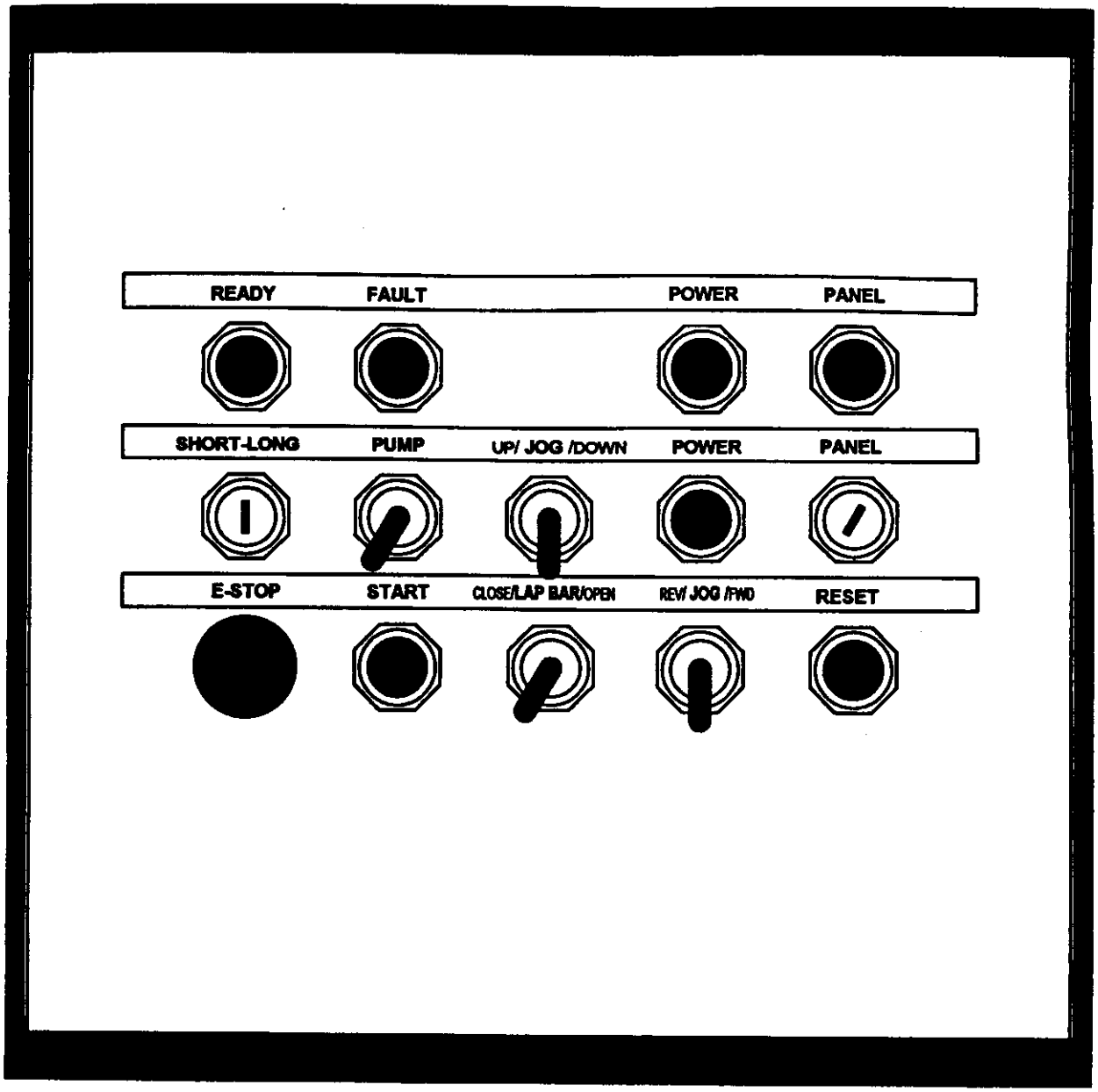
11. Advise the operator that factory-installed safety devices must not be tampered with or removed.

12. Instruct operator of owner's or supervisor's procedure for assisting ill or injured passengers.

13. Instruct operators and attendants that patrons are required to secure all articles, such as keys, change, eye glasses, etc., which may become loose while riding.

14. Instruct operators to always test run the ride before each day of operation, using the instructions in this manual. Run the ride through at least three (3) complete ride cycles to observe the overall performance of the ride in relation to past performance of the ride and for proper function of all controls and indicators on the operator's control panel.

Operator's control console



IMPORTANT: *The three main power circuit breakers in the main electrical box must be on before operating any of the controls on the operator's console.*

1. **Ready light** - This green light will come on when all passenger restraint bars are locked in the down position and the OPERATOR PRESENCE SWITCH is depressed. The ride cannot be started unless this light is on.

2. **Fault indicator light** - This red light is normally off when the power indicator light is on. If the fault indicator light is on, a fault is indicated and the ride will not operate. Press the RESET SWITCH to clear the fault. If this is not successful, notify the appropriate maintenance personnel. The ride will not operate until the fault has been corrected.

3. **Main power indicator light** - This green light is on when the three main power circuit breakers in the main electrical box are in the "ON" position.

4. **Control panel power indicator light** - This green light indicates that power is being supplied to the control panel. It comes on when the CONTROL PANEL POWER SWITCH is turned on.

5. **Program switch** - Use this key-operated switch to select either the short or long programmed ride cycle. This switch is keyed the same as the control panel power switch.

   NOTE: *Do not change the position of the program switch after the ride is started. This will interrupt the drive program and stop the ride.*

7. **Pump switch** - This switch to turns the main hydraulic pump on or off.

8. **Boom Jog switch** - This switch controls the boom hydraulic cylinders when the ride is not in the programmed ride cycle. This switch is inoperable during the programmed ride cycle.

9. **Power switch** - Use this switch to turn off the main power circuit breakers in the main electrical box. The MAIN POWER INDICATOR LIGHT will go out when this switch is used.

10. **Control panel power switch** - Use this key-operated switch to turn on the power to the control panel. The CONTROL PANEL POWER INDICATOR LIGHT will come on. This switch is keyed the same as the program switch.

11. **E-stop switch** - This switch interrupts the drive program. The ride will come to a normal, programmed stop, after which the BOOM JOG SWITCH must be used to lower the boom for unloading of passengers.

12. **Start switch** - Use this switch to start the programmed ride cycle. The following conditions must exist for the ride to operate:
    - MAIN POWER INDICATOR LIGHT must be on.
    - OPERATOR PRESENCE SWITCH must be engaged.
    - READY LIGHT must be on
    - CONTROL PANEL POWER INDICATOR LIGHT must be on.
    - FAULT INDICATOR LIGHT must be off.

13. **Lap bar switch** - Use this switch to lock or release the lap bars and secondary restraint bars. See "Safety Equipment" in this section for more detailed information.

    NOTE: *A white indicator light is located on the center of each vehicle near the passengers' feet. The indicator light is on when both lap bars and the secondary restraint bar on that vehicle are down and locked.*

    All passenger restraint bars must be down and locked before the READY LIGHT will come on.

14. **Rotation Jog switch** - Use this switch after the programmed ride cycle has ended to jog the ride either clockwise (REV) or counter-clockwise (FWD). This feature allows the operator to precisely locate a specific vehicle for loading and unloading of passengers. The jog feature operates only when the OPERATOR PRESENCE SWITCH is engaged. This switch is inoperable during the programmed ride cycle.

15. **Reset switch** - Push this switch if the FAULT INDICATOR LIGHT comes on. When the indicator light goes out, normal operation of the ride can be resumed.

    NOTE: *If faults require frequent use of the RESET SWITCH, or if the FAULT INDICATOR LIGHT is still on after using the RESET SWITCH, notify the appropriate maintenance personnel.*

IMPORTANT: *Do not use the RESET SWITCH during the programmed ride cycle. Damage to the inverter and/or magnetic brake can occur.*

16. **Operator Presence Switch (not shown)** - This foot-operated switch is located at the base of the control pedestal. The switch must be engaged to operate the START or JOG SWITCHES. If the switch is released, the drive program is interrupted and the ride will come to a normal, programmed stop, after which the BOOM JOG SWITCH must be used to lower the boom for unloading of passengers.

Individual vehicle controls

These controls are located in a switch panel on the back of each vehicle.

1. VEHICLE SELECTOR SWITCH - Move the switch to the right ("ON") to activate the passenger restraint system on that vehicle. The lap bars and secondary restraint bar are controlled from the operator's control console. When the switch is moved left to the "OFF" position, the control circuit is disabled and lap bars can only be opened manually.

   Use the vehicle selector switches to temporarily disable selected vehicles when operating the ride at less than full capacity. This will help prevent passengers from boarding those vehicles, and maintain a balanced load. For example, if operating at half capacity use the switches to disable every other vehicle.

2. HALOGEN LIGHTS SWITCH - Move the switch to the right to turn on the four halogen vehicle lights. Turn the lights off by moving the switch to the left.

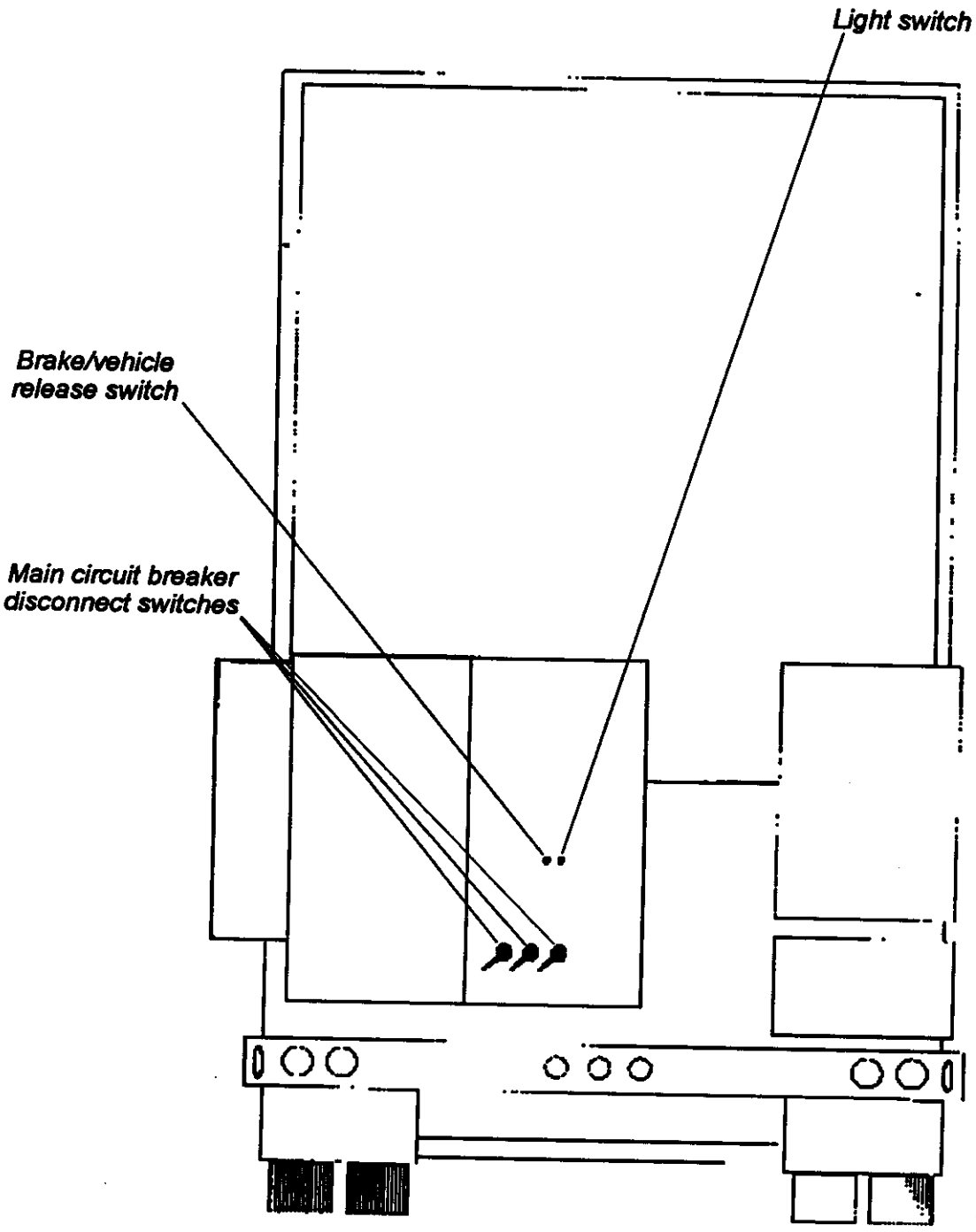
3. VEHICLE POWER CIRCUIT BREAKER - If an electrical overload occurs in the vehicle, this circuit breaker will "trip", preventing the ride from operating. Push the breaker to reset. If the overload remains, the breaker will "trip" again. Investigate and correct the cause of the overload. NEVER SUBSTITUTE A CIRCUIT BREAKER WITH A HIGHER AMPERAGE RATING. This can cause an electrical overload and result in damage to the ride.

   To disable a specific vehicle for any other reason, pull the circuit breaker out, thereby preventing passengers from boarding that vehicle.

WARNING: Do not load passengers in a disabled vehicle. Never operate the ride with passengers in a vehicle that the safety interlock system is not operating properly, or has been disabled. Serious injury to passengers could result.

Always make sure the circuit breaker is on before loading passengers.

Main electrical box controls



Main circuit breaker disconnect switches - These three-switches turn on the main circuit breakers for the drive system, the hydraulic system, and the lighting/control system. Turn all three handles to the "ON" position for all normal set-up, maintenance and operation of the ride. The MAIN POWER INDICATOR LIGHT will come on when all three circuit breakers are turned on.

The three main power circuit breakers can be turned off using the handles on the main electrical box, or by using the POWER SWITCH in the operator's control console. The MAIN POWER INDICATOR LIGHT will go out when the breakers are turned off.

Brake/vehicle release switch - This key switch has three positions:

- "BRAKE RELEASE" - This position releases the brake on the drive motor to permit turning the ride by hand during set-up and maintenance operations.
- "VEHICLE RELEASE" - Move the switch to this position to retract the vehicle pivot lock mechanism on all seats.
- "RUN" - Return the switch to this center position before resuming normal operation of the ride.

IMPORTANT: *The BRAKE/VEHICLE RELEASE SWITCH is intended for use during set-up and maintenance only. DO NOT OPERATE THE RIDE WITH THE SWITCH IN ANY POSITION OTHER THAN "RUN".*

Light switch - Move this three-position switch to one of the following positions:

- "ALL LIGHTS", to turn on all decorative lighting and flood lights
- "FLOOD LIGHTS", to turn only the flood lights on.
- "OFF", the center position to turn off all lighting.

NOTE: *When the switch is in the "ALL LIGHTS" position, the flood lights go off during the programmed ride cycle. When the ride cycle is completed and the vehicle stops for unloading, the lights automatically come on.*

Safety Equipment - Lap bars

The ride is equipped with a passenger restraint system which consists of two types of locking restraint bars on each vehicle.

- Two over-the-shoulder locking lap bars, one over each seat
- A secondary restraint bar for each pair of seats, which incorporates a foot restraint bar

The lap bars and the secondary restraint bars are electrically released. A safety interlock system prevents the ride from being started if any bar is not down and locked. A manually operated latch secures the secondary restraint bar in the raised position.

Inspect and test all lap bars and secondary restraint bars and the interlock system before each day of operation (refer to the *Chaos Maintenance Manual*). Any loose, broken or missing parts must be replaced immediately.

A switch is provided on the operator's control console to release or lock the lap bars and secondary restraint bars. A latch which secures the secondary restraint bar in its raised position must be manually released.

NOTE: *A vehicle selector switch controls the function of the passenger restraint system on each vehicle. The switch allows the operator to activate or disable the full function of the lap bars. See "Vehicle Selector Switch" in this section for complete description of this control.*

WARNING: Never operate the ride unless all passenger restraint bars are in good working condition, and the restraint bar interlock system is operating correctly.

Do not tamper with or attempt to defeat the purpose of the passenger restraint bars or the safety interlock system. Serious injury to passengers can result.

To release the passenger restraint bars:

When the ride is completely stopped, move the LAP BAR SWITCH on the operator's console to the right to release the lap bars and secondary restraint bars from their closed position. The secondary restraint bar will raise automatically and latch in the raised position. Once the secondary restraint bar is raised, the passengers can raise the lap bars. The lap bars will remain in the raised position.

A white indicator light is located on the center of each vehicle near the passengers' feet. The indicator light is on when both lap bars and the secondary restraint bar on that vehicle are down and locked. All passenger restraint bar indicator lights will go out when the secondary restraint bars are released and raised.

To lower the passenger restraint bars:

The LAP BAR SWITCH in the operator's console must be in the "OPEN" position. After passengers are seated, the lap bars can be manually lowered by the passengers or the operator. The lap bars do not lock in the down position at this point

Manually unlatch each secondary restraint bar from its raised position, lower it over the lap bars, and lock it in the closed position, making sure it locks on both sides of the vehicle. Once the secondary restraint bar is lowered and locked, the lap bars will also lock in the down position. Check that each lap bar is snug against the passenger in that seat.

NOTE: *To release the lap bars in a particular vehicle (i.e., to adjust the lap bar position, or to load a second passenger), pull the manual release T-handle for the secondary restraint bar. This will unlock the lap bars in that vehicle. Lower and lock the secondary restraint bar to lock the lap bars in the down position.*

WARNING: All passengers must be properly seated and secured in the seats or serious personal injury can result.

Make sure each passenger is sitting upright, with hands and feet inside the vehicle. After closing the secondary restraint bar, push on the lap bars to be sure they are snug against the passengers' bodies

As the restraint bars are lowered and locked, the white indicator lights will come on. If any restraint bar is not down and locked, its corresponding indicator light will be off.

IMPORTANT: *The READY LIGHT will not come on and the ride will not start if any passenger restraint bar is not down and locked.*

Loading

CAUTION: Do not operate the ride unless all parts of the vehicle are in good condition, including the passenger restraint bars. All safety items, such as non-slip surfaces and safety placards must be in good condition.

Any broken or missing parts must be repaired or replaced immediately.

CAUTION: Do not allow any passenger on the ride who cannot be properly secured because of passenger size or condition. Do not allow a person less than 48 inches in height to ride.

Never allow a passenger on the ride who is visibly ill or under the influence of drugs or alcohol.

Pregnant women or persons who have physical impairments should view the ride for potential risks before riding.

WARNING: Instruct the passengers that, to avoid serious personal injury, they must keep their hands and feet inside and sit with their feet on the floor.

CAUTION: Never allow the vehicle to become overloaded. Maximum capacity of each seat is two adults or two children, with a maximum weight of 340 pounds.

If the ride is being operated at less than its full capacity, direct passengers to seats on each side of the vehicle to balance the load. Maximum imbalance is two vehicles (680 pounds).

IMPORTANT: *All gates open outward, away from the ride. All gates must be installed so they close automatically. Do not operate the ride if the gates do not function properly. Repair or replace broken or missing parts immediately.*

The ride is loaded through the entrance gates. All seats can be loaded simultaneously. If the ride is being operated at less than its full capacity, direct passengers to vehicles on each side of the ride to balance the load, or use the VEHICLE SELECTOR SWITCH to disable selected vehicles to prevent passengers from boarding those seats.

IMPORTANT: *Never operate the ride with an imbalance of more than two full vehicles (680 pounds).*

Use the LAP BAR SWITCH on the operator's console to release the lap bars and secondary restraint bars before allowing passengers to board. The secondary restraint bars will raise automatically and latch in the raised position. **DO NOT ALLOW PASSENGERS TO OPERATE THE MANUAL LATCH FOR THE SECONDARY RESTRAINT BAR.** If the lap bars are down, raise them for the passengers.

Walk around the ride and check that every passenger is properly seated and secured. Make sure that all loose articles (eyeglasses, purses, keys, etc.) are secured.

Manually unlatch each secondary restraint bar from its raised position, lower it over the lap bars, and lock it in the closed position, making sure it locks on both sides of the vehicle. Once the secondary restraint bar is lowered and locked, the lap bars will also lock in the down position. Check that each lap bar is snug against the passenger in that seat.

NOTE: *To release the lap bars in a particular vehicle (i.e., to adjust the lap bar position, or to load a second passenger), pull the manual release T-handle for the secondary restraint bar. This will unlock the lap bars in that vehicle. Lower and lock the secondary restraint bar to lock the lap bars in the down position.*

WARNING: All passengers must be properly seated and secured in the seats or serious personal injury can result.

Make sure each passenger is sitting upright, with hands and feet inside the vehicle. After closing the secondary restraint bar, push on the lap bars to be sure they are snug against the passengers' bodies

Instruct passengers to hold onto the lap bar handles or the secondary restraint bar with both hands during the ride cycle.

Return to the control console and move the LAP BAR SWITCH to the left to engage the lap bar locks.

Operator's and attendant's positions

CAUTION: The operator must remain in full control of the operating controls at all times during the operation of the ride. The ride and its passengers must be given the full attention of the operator at all times.

Never leave the operating controls while the ride is in operation.

The operator at the control console is responsible for the safety of the passengers as they ride. The operator must know and fully understand all operation and emergency procedures for this ride, and must be at the control console at all times. The ride must have the operator's complete attention at all times.

When determining the required number and location of attendants, crowd size and other factors must be taken into consideration.

When the ride is in motion, the attendants must not stand on any portion of the loading or unloading platforms.

Attendants are responsible for the safety of the passengers as they wait in line to board the vehicle, as well as during loading and unloading. Attendants should do the following:

1. Control access to the ride through the entrance gates.

2. Make sure all passengers remain behind the yellow line as they wait to board the ride. Persons waiting in line must not be allowed to hang over the fences or sit on the fences.

3. Make sure the passengers are properly seated and the passenger restraint bars are lowered and locked before the operator starts the ride.

4. Make sure that only passengers meeting height and other ride restrictions are allowed to ride.

5. Give safety announcements including, but not limited to:
   - Watch your step when entering or exiting the ride.
   - Remain seated at all times.
   - Keep hands and feet inside the vehicle at all times
   - Hold onto the lap bar handles or the secondary restraint bar with both hands during the ride cycle.
   - Passenger restraint bars are released by the operator. Keep hands clear while raising the secondary restraint bars.
   - Passengers must secure all loose articles before boarding the ride. This includes, but is not limited to eyeglasses, purses, keys, etc.

6. Make sure that passengers do not tamper with any part of the ride, including, but not limited to:
   - Vehicle selector switches
   - Latch mechanisms for which secure the secondary restraint bar in the raised position
   - Any other part of the passenger restraint system

Operating the ride

1. Turn on the three main power circuit breakers in the main electrical box.
2. Take your place behind the operator's control console.
3. Turn on the PUMP SWITCH.
4. Check the control console for the MAIN POWER INDICATOR and CONTROL PANEL POWER INDICATOR LIGHTS. Check to be sure the FAULT INDICATOR LIGHT is off. Refer to "Operator's Control Console" in this section.
5. Use the LAP BAR SWITCH to release the lap bars from their closed position. The secondary restraint bars will raise automatically and latch in the raised position. If the lap bars are down, raise them for the passengers.
6. Load the passengers as described in the "Loading" procedure in this manual.
7. Walk around the ride and make sure every passenger is properly seated and secured. Manually unlatch each secondary restraint bar from its raised position, lower it over the lap bars, and lock it in the closed position, making sure it locks on both sides of the vehicle. Once the secondary restraint bar is lowered and locked, the lap bars will also lock in the down position. Check that each lap bar is snug against the passenger in that seat.

NOTE: *To release the lap bars in a particular vehicle (i.e., to adjust the lap bar position, or to load a second passenger), pull the manual release T-handle for the secondary restraint bar. This will unlock the lap bars in that vehicle. Lower and lock the secondary restraint bar to lock the lap bars in the down position.*

WARNING: All passengers must be properly seated and secured in the seats or serious personal injury can result.

Make sure each passenger is sitting upright, with hands and feet inside the vehicle. After closing the secondary restraint bar, push on the lap bars to be sure they are snug against the passengers' bodies.

8. The white LAP BAR INDICATOR LIGHT on each seat must be on.

IMPORTANT: *If any LAP BAR INDICATOR LIGHT does not come on, check that both lap bars are down and locked and the secondary restraint bar is latched. If the light still does not come on, notify the appropriate maintenance personnel and correct the problem immediately. DO NOT OPERATE THE RIDE.*

9. Return to the control console and move the LAP BAR SWITCH to the left to engage the lap bar locks.

10. Engage the OPERATOR PRESENCE SWITCH. At this time, the green READY LIGHT will come on.

11. Press the START SWITCH to start the ride.

WARNING: Never operate the ride while anyone is standing on the ride platform inside the fence area.

Before starting the ride, make sure there is no one around the ride structure, close to any exposed electrical components, or any other areas where there is a possibility of serious personal injury.

CAUTION: The operator must remain in full control of the operating controls at all times during the operation of the ride. The ride and its passengers must be given the full attention of the operator at all times.

Never leave the operating controls while the ride is in operation.

12. The ride cycle is programmed and will stop automatically when the cycle is completed. Keep the OPERATOR PRESENCE SWITCH engaged to complete the normal programmed ride cycle.

NOTE: *The length of the ride is selected with the PROGRAM SWITCH.*

13. When the ride is completely stopped, the OPERATOR PRESENCE SWITCH can be released. Use the LAP BAR SWITCH on the operator's console to release the lap bars. The secondary restraint bars will raise automatically and latch in the raised position. Passengers can now manually raise the lap bars.

Emergency procedures

If one or more vehicles lock in any position other than upright
Use the following procedure in the event of any vehicle stopping in any position other than upright at the end of the ride cycle:

1. Wait until the ride is completely stopped.
2. Locate the vehicle release switch. This black push button switch is located on the sweep end, directly to the left of the vehicle.
3. STAND CLEAR OF THE VEHICLE and push the vehicle release switch until the vehicle swings free.
4. Release the switch; the vehicle will lock in the upright position.

Emergency stop during ride operation
Use the following procedure in the event of any unsafe condition:

1. Release the OPERATOR PRESENCE SWITCH or depress the E-STOP SWITCH.
2. The ride will come to a normal, programmed stop. If the boom is up when the ride program is interrupted, the ride will stop rotating with the boom up.
3. Use the BOOM JOG SWITCH to lower the boom completely.
4. When the boom is fully lowered, the vehicle locking mechanisms will operate automatically, locking the vehicles in their upright position.
5. Use the LAP BAR SWITCH on the operator's control console to release the lap bars, then unload the passengers.

Loss of all electrical power to the ride
The ride will coast to a stop. If the boom is up when electrical power is interrupted, the ride will stop rotating with the boom still up.

If power is not restored, passengers can be unloaded using the following procedure. THIS PROCEDURE REQUIRES AT LEAST TWO HELPERS TO HOLD THE VEHICLE STEADY WHILE PASSENGERS ARE UNLOADED.

1. The boom must be lowered by manually opening the boom cylinder check valve and operating the manual boom release valve. Use the following procedure:
   a. Locate the check valve on the bottom of the boom cylinder port block (valve is painted red).

b. Loosen the lock nut and use an Allen wrench to turn the screw completely in to open the check valve. DO NOT TAMPER WITH THE TWO VALVES ON TOP OF THE PORT BLOCK.
c. Locate the manual boom release valve (also painted red), on the roadside end of the manifold block immediately forward of the main hydraulic pallet.
d. Carefully open the valve to lower the boom.

WARNING: Stay clear of the boom and all moving parts when operating the manual boom release valve. Contact with moving parts can result in serious personal injury.

2. Manually release the secondary restraint bar by pulling on the T-handle
3. Using the manual release handle located just behind the vehicle pivot., pull the handle toward you.
4. While at least two attendants hold the vehicle steady, raise the lap bars and help the passengers step out of the vehicle, one at a time.

IMPORTANT: After unloading passengers, continue to hold the vehicle steady and close the lap bars and secondary restraint bar. When the restraint bars are open, the vehicle is out-of-balance and will tip backward.

WARNING: The vehicle locking mechanism is not operational when electrical power is interrupted, and the vehicle can swing freely. Serious injury to passengers can result from uncontrolled movement of the vehicle.

Always get help from at least two attendants to hold the vehicle steady during emergency unloading.

5. Repeat the process for the remaining vehicles until all passengers have been unloaded.

6. Close the manual boom release valve. Close the boom cylinder check valve by turning the screw completely out and tightening the lock nut.

Loss of hydraulic power to tilt cylinders
Press the E-STOP SWITCH or release the OPERATOR PRESENCE SWITCH. The ride will come to normal programmed stop. If the boom is up when hydraulic power is lost, the ride will stop rotating with the boom still up

If the head has already fully tilted (sweeps vertical), follow the procedure described earlier under "Emergency Stop". If the head has not fully tilted, use the following procedure to lower the tilt head.

1. The tilt head must be lowered by manually opening the tilt cylinder check valves and operating the manual tilt release valve. Use the following procedure:
   a. Locate the check valves (one on the each tilt cylinder). .Loosen the lock nut and use an Allen wrench to turn the screw completely in to open the check valve.
   b. Locate the manual tilt release valve, near the hydraulic manifold block on the trailer frame (portable model), or the base frame (park model). Carefully open the manual tilt release valve to lower the tilt head.

WARNING: Stay clear of the sweeps and all moving parts when operating the manual tilt release valve. Contact with moving parts can result in serious personal injury.

2. Once the tilt head is fully lowered, follow the procedure described earlier under "Emergency Stop" to lower the boom and unload all passengers.

10. Close the manual tilt release valve. Close the tilt cylinder check valves by turning the screws completely out and tightening the lock nuts.

Farrow Amusement

4624

CHAOS

Service manual

Manual number 24329800

CHAOS

Introduction

Contents

* Additional table of contents are provided in these sections

Manual number 24329800
(Issued January,1997)

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

Phone: (316) 942-7411
Fax: (316) 942-2012

To the owner

This manual is your guide to safe, productive operation. Read it carefully. It will help reduce trial and error learning and minimize downtime caused by improper maintenance.

For additional information, contact the CHANCE RIDES CUSTOMER SERVICE DEPARTMENT.

NOTE: *Because we try to improve every CHANCE product, specifications and product design are subject to change without notice.*

Intended uses

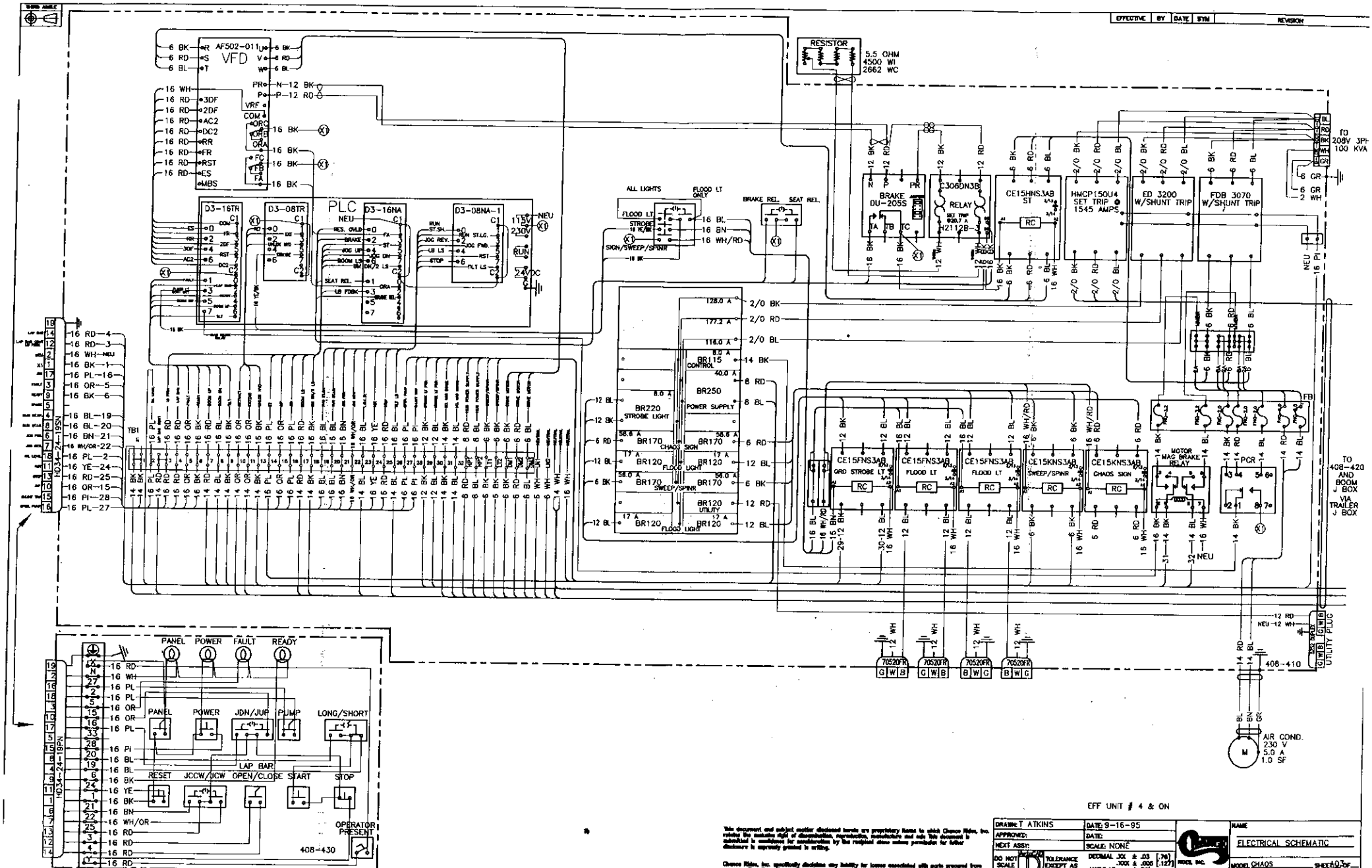
The equipment described herein is intended to be used by a commercial operator to provide a service to the buyer's customers. As a commercial operator, the buyer agrees to operate and maintain the equipment for its intended use in a professional and competent manner as per CHANCE RIDES' recommendation and instructions, ASTM standards on amusement rides and devices, applicable governmental standards, and good commercial practices using professional and competent mechanics and operators. If at any time, and for any reason, the equipment cannot be adequately and safely operated for its intended use, buyer agrees not to operate the equipment until proper repairs or corrections are made.

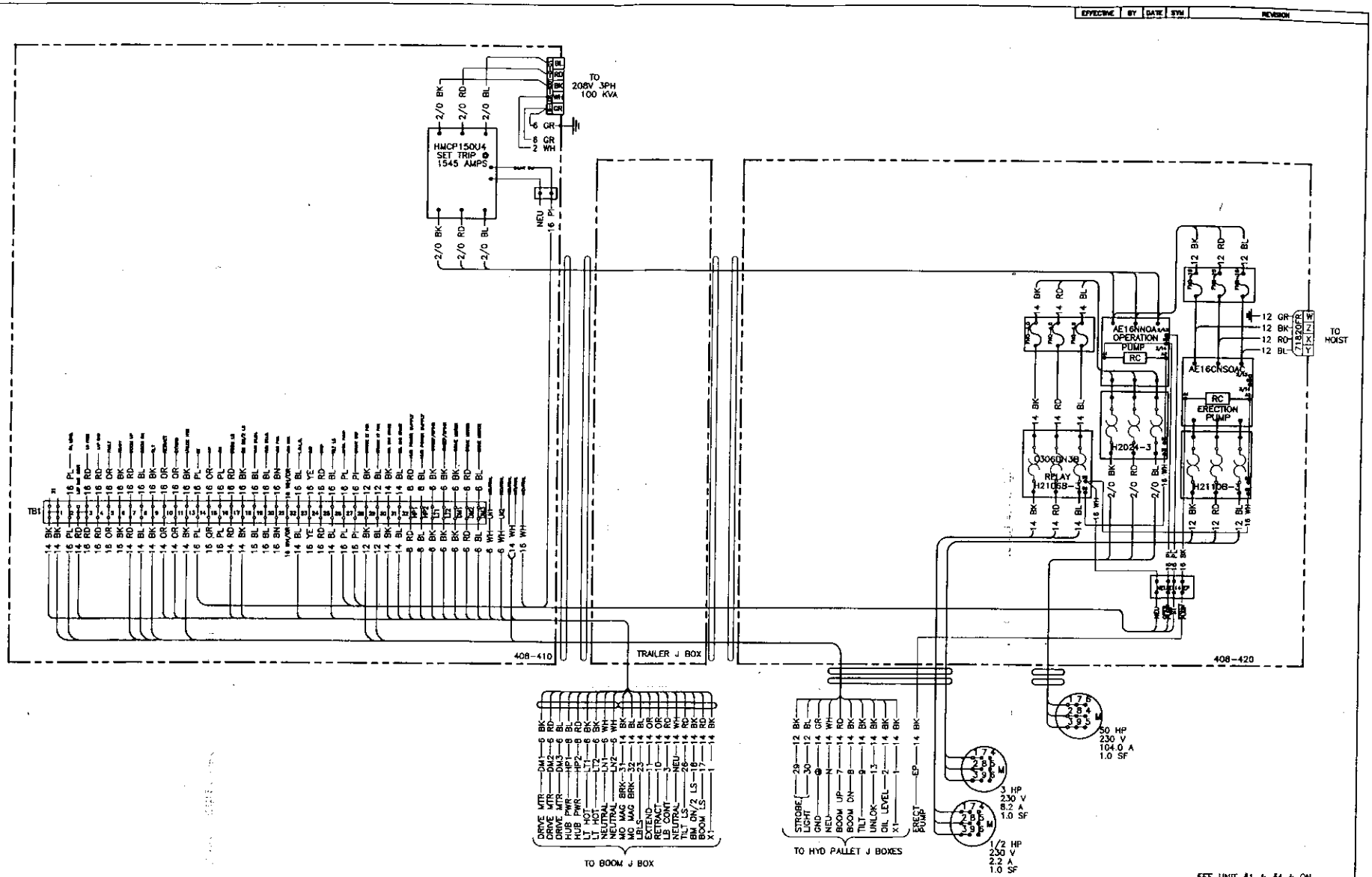
Ride information plaque

The ride information plaque is mounted to the main electrical control box on the rear of the ride. The plaque lists ride specifications, operating dimensions, ground loads, as well as model and serial number and date of manufacture.

When ordering parts or requesting information from the CHANCE CUSTOMER SERVICE DEPARTMENT, always specify the model and serial number of your ride. Record this information in this manual for future reference.

IMPORTANT: *Always refer to the ride information plaque on your ride for specifications. The ride information plaque is located on the main electrical control box on the rear of the ride.*





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APPROVED:	DATE:		
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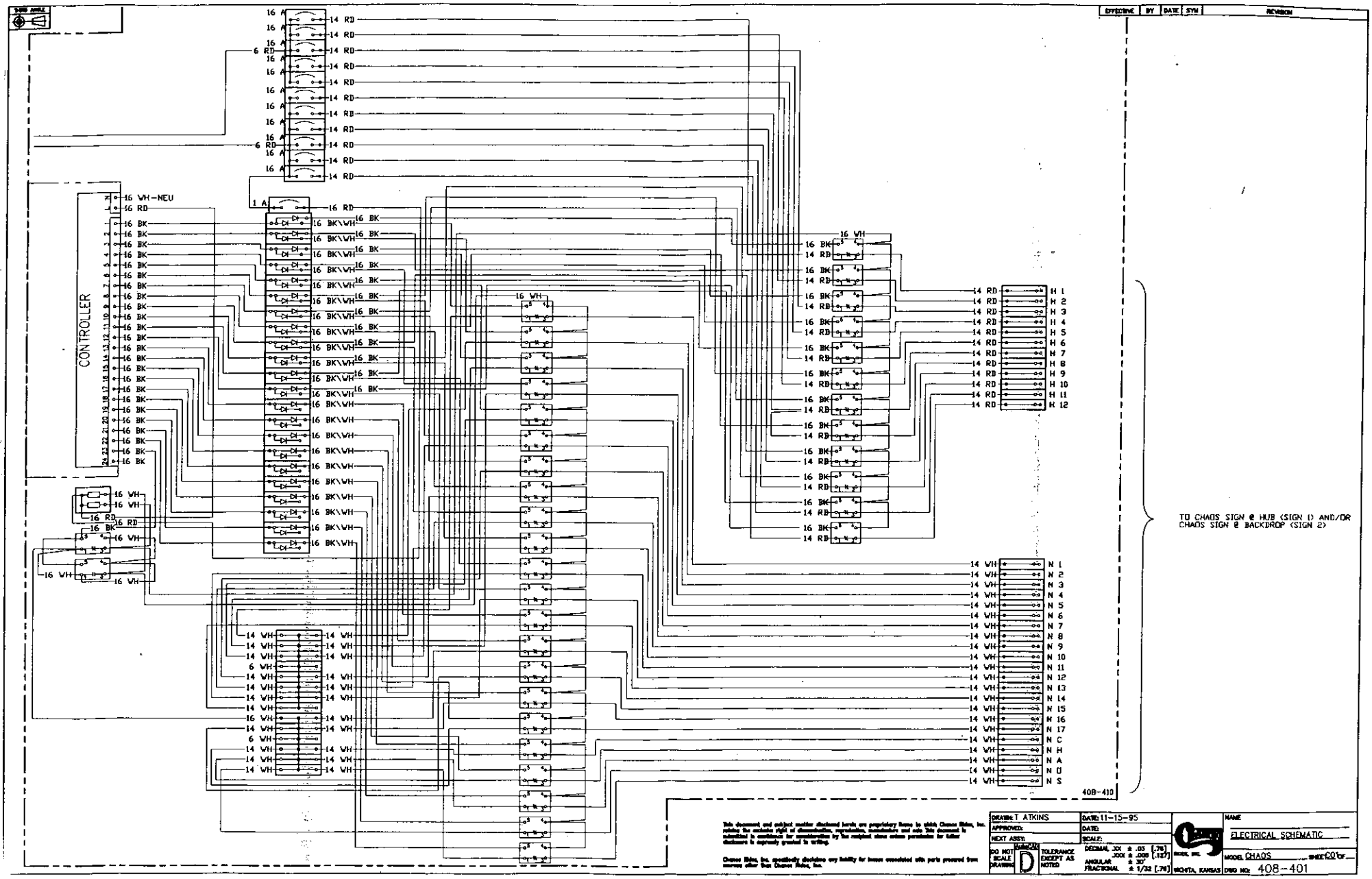
DO NOT SCALE DRAWING	SIZE D	DWG NO. 408-401	

TOLERANCE EXCEPT AS NOTED: DECIMAL .XX ± .03 [.76], .XXX ± .005 [.127]; ANGULAR ± 30'; FRACTIONAL ± 1/32 [.79]

WICHITA, KANSAS



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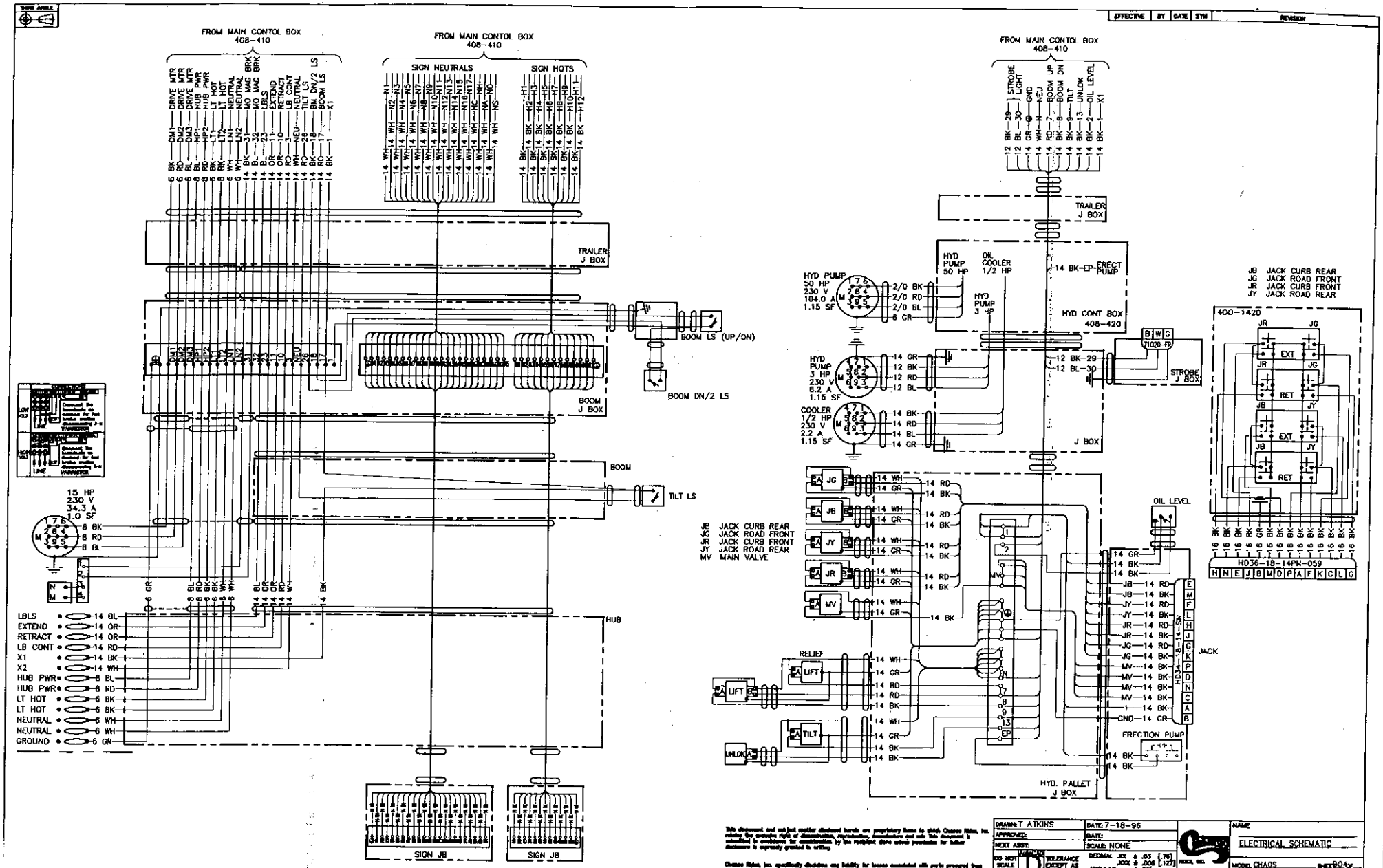
DO NOT SCALE DRAWING	TOLERANCE EXCEPT AS NOTED	DECIMAL .XX ± .05 [.76] .XXX ± .005 [.127] ANGULAR ± 30' FRACTIONAL ± 1/32 [.79]	DWG NO: 408-401



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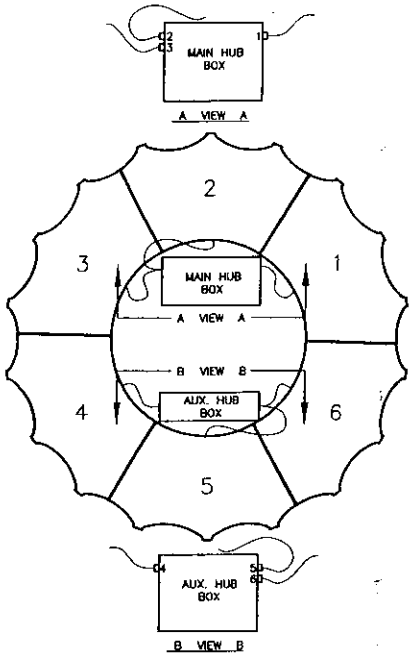
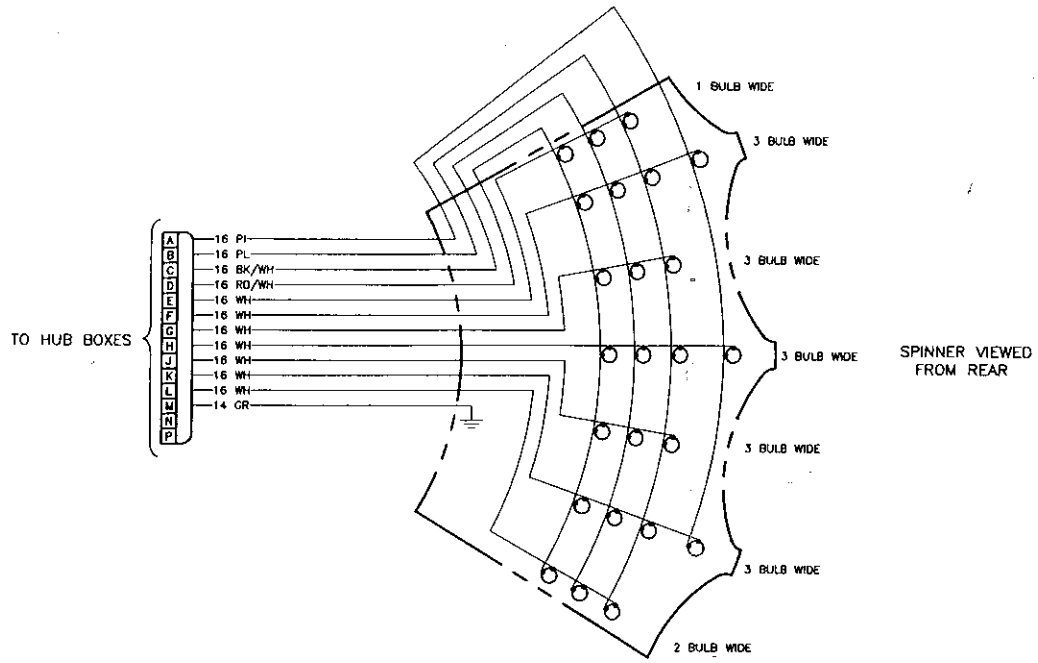
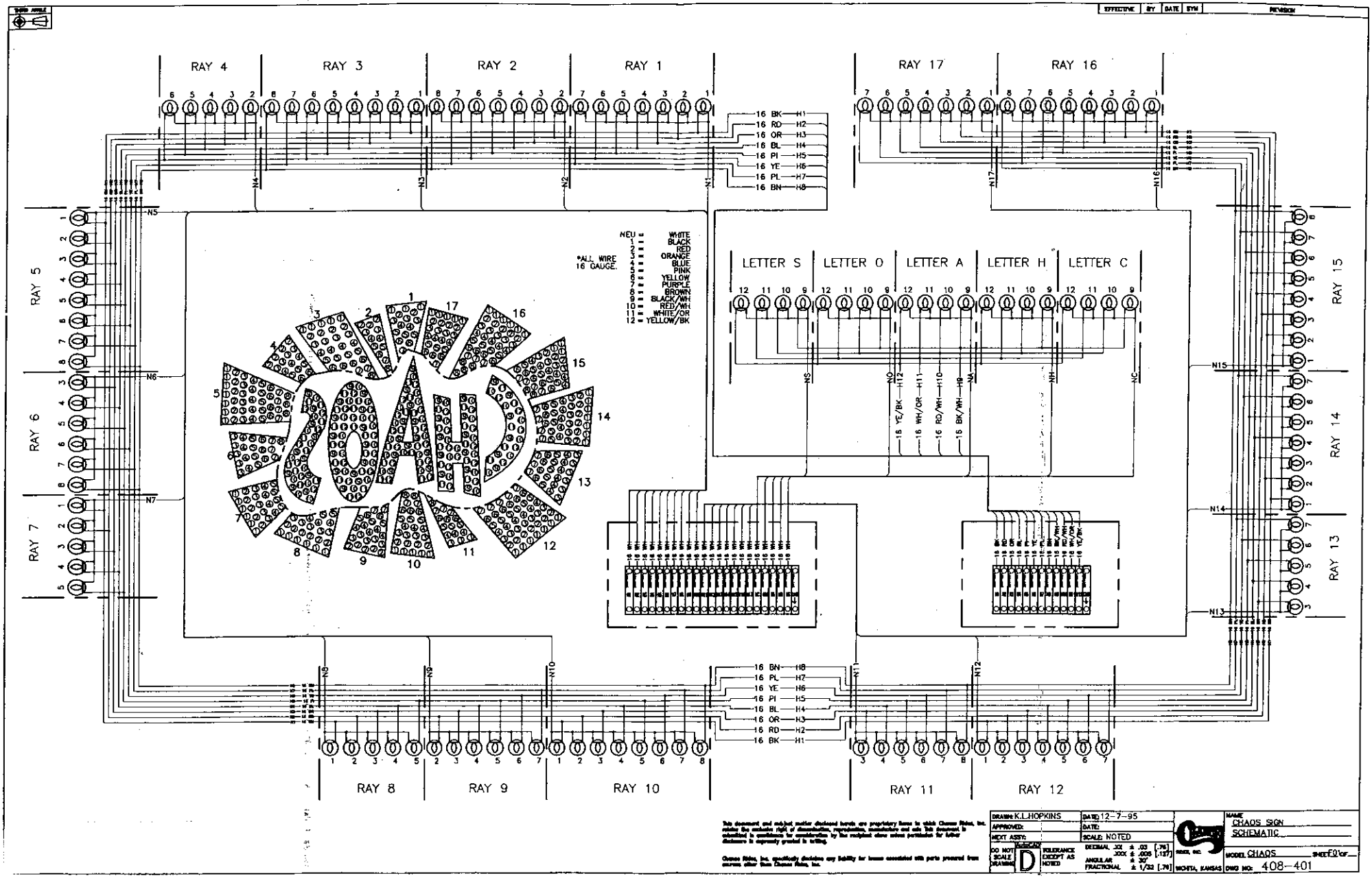
NAME: ELECTRICAL SCHEMATIC
MODEL: CHAOS — SHEET 004 OF ...
DWG NO. 408-401





SPINNER VIEWED FROM REAR

DRAWN: K.L.HOPKINS	DATE: 3-15-96	NAME: ELECTRICAL SCHEMATIC SPINNER SECTION	
APPROVED:	DATE:		
NEXT ASSY:	SCALE: NOTED		
DO NOT SCALE DRAWING	SIZE: D	TOLERANCE EXCEPT AS NOTED: DECIMAL .XX ± .03 [.76], .XXX ± .005 [.127]; ANGULAR ± 30'; FRACTIONAL ± 1/32 [.76]	CHANCE RIDES, INC. WICHITA, KANSAS
		MODEL: CHAOS	SHEET 20 OF ...
		DWG NO: 408-401	



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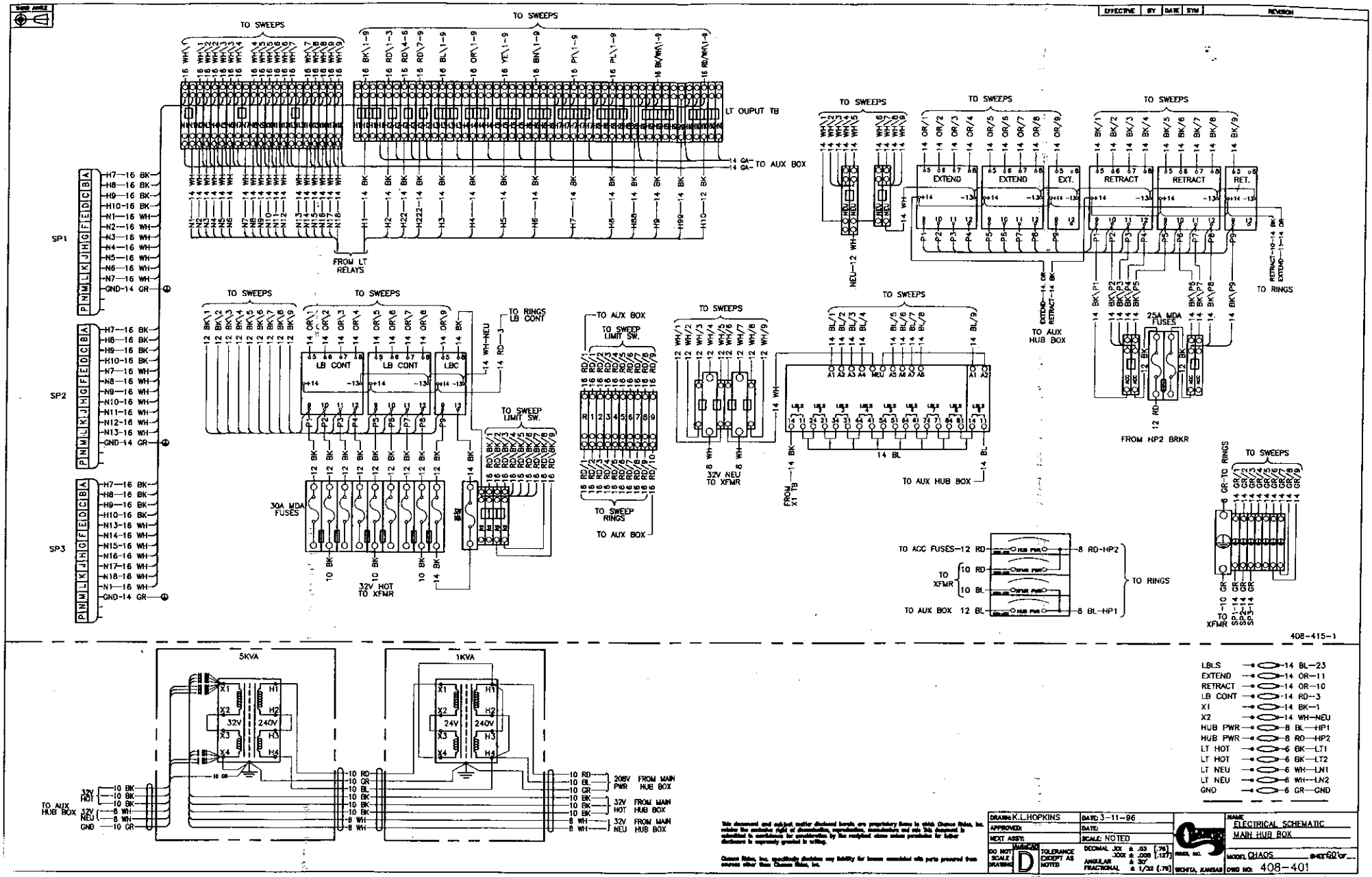
TOLERANCE EXCEPT AS NOTED	DECIMAL .XX ± .03 [.76]; .XXX ± .005 [.127]; ANGULAR ± 30'; FRACTIONAL ± 1/32 [.76]	CHANCE RIDES, INC. WICHITA, KANSAS	DWG NO: 408-401

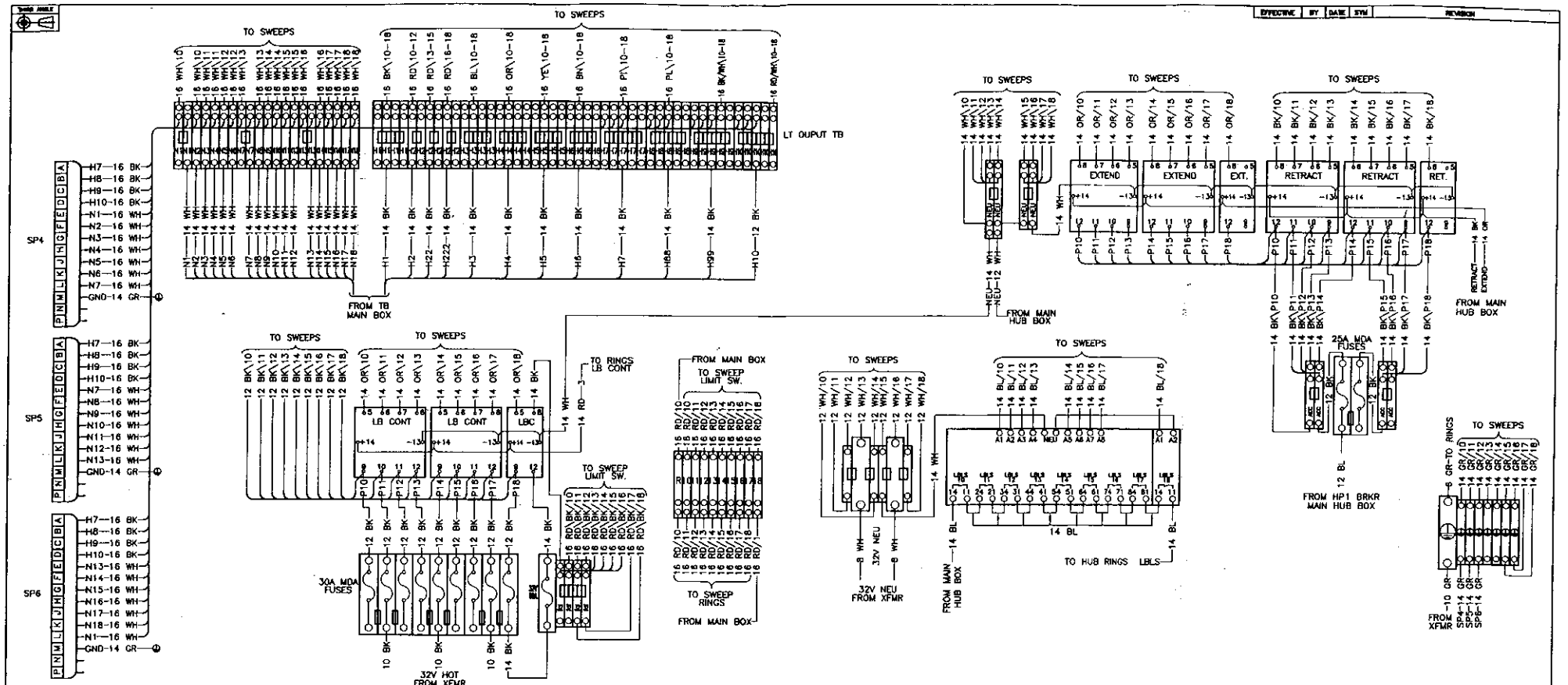


LBLS — 14 BL—23
EXTEND — 14 OR—11
RETRACT — 14 OR—10
LB CONT — 14 RD—3
X1 — 14 BK—1
X2 — 14 WH—NEU
HUB PWR — 8 BL—HP1
HUB PWR — 8 RD—HP2
LT HOT — 6 BK—LT1
LT HOT — 6 BK—LT2
LT NEU — 6 WH—LN1
LT NEU — 6 WH—LN2
GND — 6 GR—GND

DRAWN: K.L.HOPKINS — DATE: 3-11-96
APPROVED: — DATE:
NEXT ASSY: — SCALE: NOTED
DO NOT SCALE DRAWING — SIZE D
TOLERANCE EXCEPT AS NOTED: DECIMAL .XX ± .03 [.76], .XXX ± .005 [.127]; ANGULAR ± 30'; FRACTIONAL ± 1/32 [.79]

CHANCE RIDES, INC. WICHITA, KANSAS

NAME: ELECTRICAL SCHEMATIC MAIN HUB BOX
MODEL: CHAOS — SHEET 60 OF —
DWG NO: 408-401



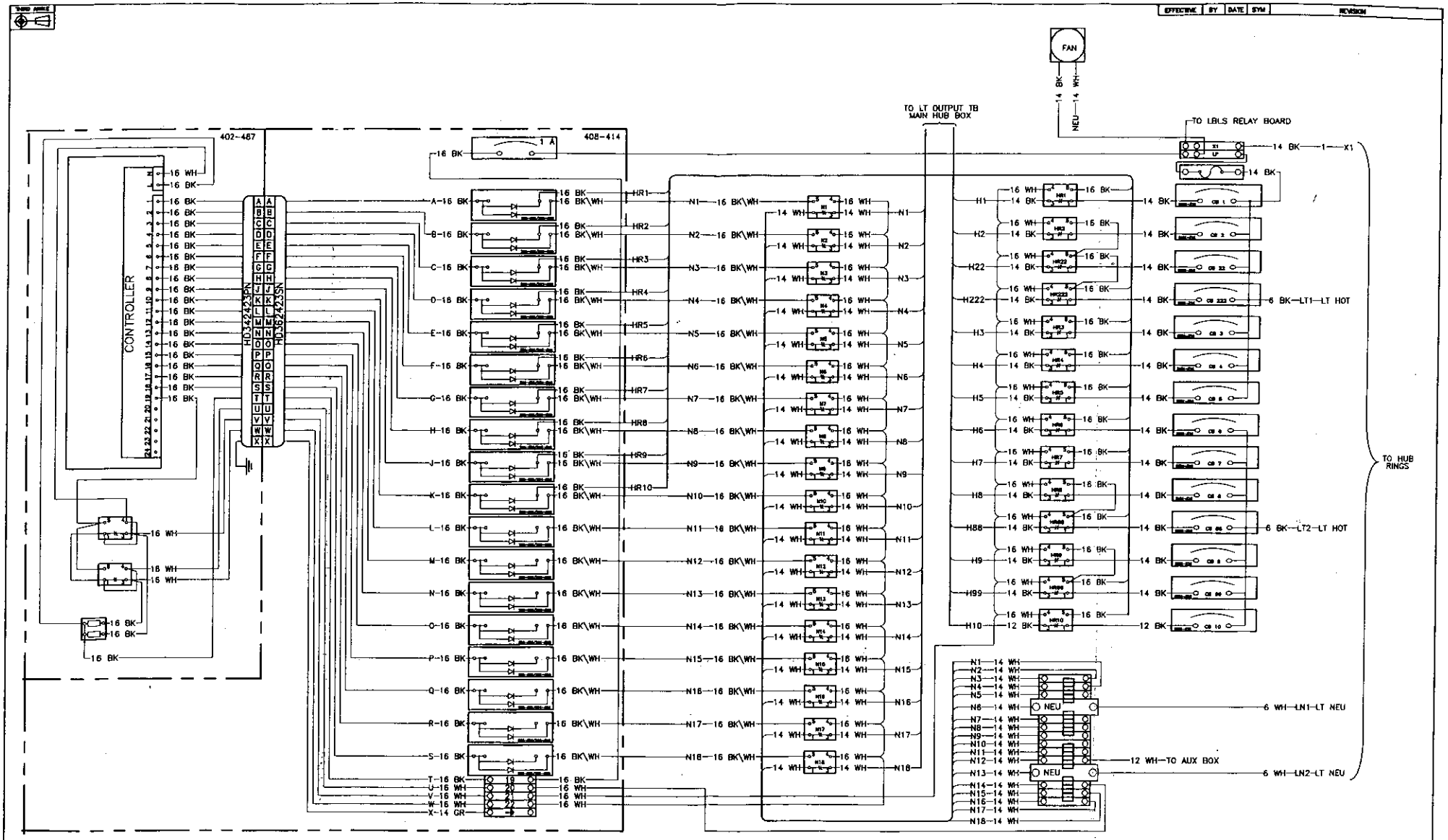
408-415-2

LBLS	14 BL—23
EXTEND	14 OR—11
RETRACT	14 OR—10
LB CONT	14 RD—3
X1	14 BK—1
X2	14 WH—NEU
HUB PWR	8 BL—HP1
HUB PWR	8 RD—HP2
LT HOT	6 BK—LT1
LT HOT	6 BK—LT2
LT NEU	6 WH—LN1
LT NEU	6 WH—LN2
GND	6 GR—GND

DRAWN: K.L.HOPKINS	DATE: 3-11-96		NAME: ELECTRICAL SHCEMATIC AUX. HUB BOX
APPROVED:	DATE:		
NEXT ASSY:	SCALE: NOTED		MODEL: CHAOS next HO'or...
DO NOT SCALE DRAWING	SIZE: D	TOLERANCE EXCEPT AS NOTED	DWG NO. 408-401

DECIMAL .XX ± .03 [.76] .XXX ± .005 [.127]
ANGULAR ± 30'
FRACTIONAL ± 1/32 [.793]

CHANCE RIDES, INC. WICHITA, KANSAS



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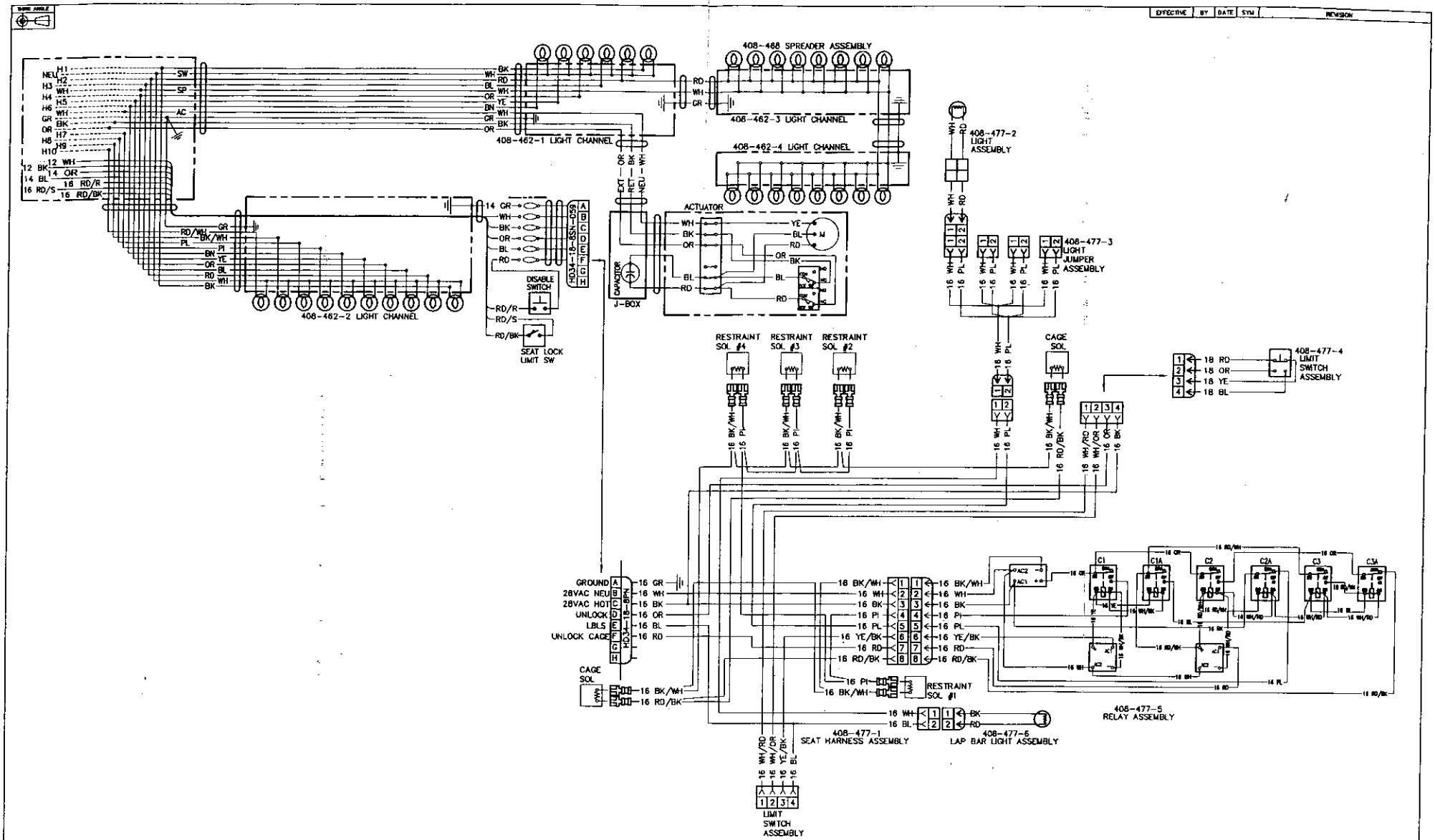
APPROVED:	DATE:		
NEXT ASSY:	SCALE: NOTED		MODEL: CHAOS SHEET 1 OF 1
DO NOT SCALE DRAWING	SIZE D	TOLERANCE EXCEPT AS NOTED: DECIMAL .XX ± .03 [.76], .XXX ± .005 [.127], ANGULAR ± 30', FRACTIONAL ± 1/32 [.76]	DWG NO: 408-401



EFFECTIVE	BY	DATE	SYM	REVISION

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APPROVED:	DATE:	
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DO NOT SCALE DRAWING	TOLERANCE EXCEPT AS NOTED: DECIMAL .XX ± .03 [.76], .XXX ± .005 [.127]; ANGULAR ± 30'; FRACTIONAL ± 1/32 [.76]	MODEL: CHAOS SHEET: 1 OF 1
SIZE: D	WICHITA, KANSAS	DWG NO: 408-401

THIRD ANGLE

EFFECTIVE	BY	DATE	SYM	REVISION

DRIVE PROG.FUNCT.OVERVIEW

FUNT. NUMBER	FUNT.	RANGE	FACT. SET'G	CUST. SET'G
00	AUX. HZ. SET'G	.5–400 HZ.	10	10
01	SET'G METHOD	0:KEYPAD 1:EXT.SIG. 2:BIN. SIG. 3:BCD SIG.	0	0
02	METER DISPLAY	0:HZ. 1:AMPS 2:SPEED 3:MO.SPEED	0	0
03	BAR GRAPH DISPLAY	0:HZ% 1:OV.CUR.%	0	1
04	OPERATION COMAND	0:KEYPAD 1:EXT.DEVICE	0	1
05	V/H PATTERN	1–28	2	2
06	VOLT BOOST PATTERN	0:AUTO BOOST 1–25:MAN. BOOST	5	0
07	MO. ELECT. THERM.OV.LD.	25–100%	100	100
08	#1 ACCEL.	.1–9999 SEC/ 50 HZ.	5	12.5
09	#1 DECEL.	.1–9999 SEC/ 50 HZ.	5	24
10	#2 ACCEL.	.1–9999 SEC/ 50 HZ.	10	10
11	#2 DECEL.	.1–9999 SEC/ 50 HZ.	10	10
12	#2 PRESET HZ.	.5–400 HZ.	20	60
13	#3 PRESET HZ.	.5–400 HZ.	30	47
14	#4 PRESET HZ.	.5–400 HZ.	40	44
15	JOG HZ.	.5–400 HZ.	5	5
16	STARTING HZ.	.5–50 HZ.	.5	.5
17	MAX. HZ. LIMIT	.5–400 HZ.	60	100
18	MIN. HZ. LIMIT	0–400 HZ.	0	0

DRIVE PROG.FUNCT.OVERVIEW

FUNT. NUMBER	FUNT.	RANGE	FACT. SET'G	CUST. SET'G
19	HZ. BIAS	0–400 HZ	0	0
20	#1 HZ. AVOIDANCE	0–400 HZ	0	0
21	#2 HZ. AVOIDANCE	0–400 HZ	0	0
22	#3 HZ. AVOIDANCE	0–400 HZ	0	0
23	#4 HZ. AVOIDANCE	0–400 HZ	0	0
24	#5 HZ. AVOIDANCE	0–400 HZ	0	0
25	DC INJECT.BRK VOLT SET'G	0:NO INJECT. BRK'G 1–7:BRK'G RATE	0	0
26	DC INJECT.BRK BRK'G TIME	1–60 SEC.	1	1
27	MAX., HZ. LIMIT	0:NO LIMIT 1:LIMIT 120 HZ	1	1
28	CKUR LIMIT A:ACCEL. FUNCTIONAL @ 150% CUR B:RUN'G FUNCTIONAL @ 100%	0:NO LIMIT 1:SLOW 2:MODEERATE 3:QUICK	0	
29	ANTI. STALL	0:DUR'G ACC. 1:DUR'G RUN 2:BOTH	0	2
30	COWT'G MO RESTART	0:NORMAL 1:RESTART	0	0
31	CAL.EXT.HZ. METER	0:NORMAL 1:CAL.	0	0
32	MO.RESTART AFTER TRIP	0:NO RESTART 1:AUTO RESTART	0	0
33	ALARM ON PWR FAILURE	0:NO SIG 1:W/SIG	0	0
34	ACCEL/DECEL	0:W/SIG	0	0
35	REMOTE DIGI KEYPAD CONTINUOUS OP	0:REMOTE 1:FACEPLATE	1	1
36	RESET TO FACTORY SET'G	0:NO RESET 1:RESET	0	0

DRIVE PROG.FUNCT.OVERVIEW

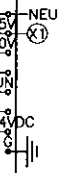
FUNT. NUMBER	FUNT.	RANGE	FACT. SET'G	CUST. SET'G
37	MO.OV.LD. SELECTION	0:STD 1:INVERTER	1	1
38	DYNAMIC BRK'G SELECTION	0:STD 1:EXT.RESISTOR	0 1	1
39	MO.ROTATION	0:FWD/REV 1:FWD ONLY 2:REV ONLY	0	0
40	KEYPAD LOCKOUT	0:STD 1:LOCKOUT	0	1
41	KEYPAD STOP	0:NO KEYPAD STOP 1:KEYPAD STOP AVAILABLE	1	1
42	HZ GAIN	20–200%	100	100
43	MO.RESTART AFTER PWR OUTAGE	0:NO AUKTO 1:COST'G 2:ZERO HZ.	0	0
44	SPEED DISPLAY	.01–500	1	1
45	BIAS POLARITY	0:POS. 1:NEG.	0	0
46 47 48 49	4TH FLT OCCUR 3RD FLT OCCUR 2ND FLT OCCUR 1ST FLT OCCUR	CAUSE OF FLT OCPA OCS OH OCPd OU OLE OCPn OL LU bUOH Fb	none	
50	CLEAR FLT DATA	1:CLEAR DATA		
51	ASARM SIG ON FLT TRIP	0:NO SIG 1:W/SIG	0	
52	SPEED SET'G METHOD FEEDBK SIGNAL	0:NO FEEDBK 1:FROM KEYPAD 2:EXT. SIG	0	
53	SPEED SET'G	0–3600 RPM	0	
54	FEEDBK GAIN	0–9999	100	
55	OFFSET CONSTANT	0–9999	250	
57	RELAY BOARD HZ SET'G	.5–400		

D3–16TR	D3–08TR	D3–16NA	D3–08NA–1
0∘∘4 0∘∘4	0∘ ∘4	0∘∘4 0∘∘4	0∘ +4
1∘∘5 1∘∘5	1∘ ∘5	1∘∘5 1∘∘5	1∘ ∘5
2∘∘6 2∘∘6	2∘ ∘6	2+∘6 2∘∘6	2∘ +6
3∘∘7 3∘∘7	3∘ ∘7	3++7 3∘∘7	3∘ ∘7

TO OBTAIN A READY LIGHT THE INPUTS MARKED + NEED TO BE ON AND THE ONES MARKED ∘ NEED TO BE OFF.

PLC

305–05T		305–01T		305–25N		305–20N	
COM	C1 0	X1	C19	NEU	C19	NEU	C19
ES	0 0	RST	0 0	RES. OVLD	0 0	RUN ST.SH.	0 0
FR	1 0	EXT	1 0	FA	1 0	RUN ST.LG.	1 0
RR	2 0		2 0	BRAKE	2 0	JOG FWD	2 0
20F	3 0	UNLK MD	3 0	ST	3 0	JOG REV.	3 0
30F	4 0		4 0	JOG UP	4 0	LB LS	4 0
RST	5 0	STROKE	5 0	JOG DN	5 0	RST	5 0
ACZ	6 0		6 0	BOOM LS	6 0	STOP	6 0
DC2	7 0		7 0	BM DN/Z LS	7 0	TILT LS	7 0
X1	C2 0		C29		C29		C29
LAP BAR	0 0			ORA	0 0		
FAULT	1 0			SEAT REL	1 0		
READY	2 0			BRAKE REL	2 0		
RUN LI GRK RT	3 0			LB FDBK	3 0		
BOOM UP	4 0				4 0		
BOOM DN	5 0				5 0		
TILT	6 0				6 0		
MC BRAKE RELAY	7 0				7 0		



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APPROVED:	DATE:
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DO NOT SCALE DRAWING | AutoCAD | C | TOLERANCE EXCEPT AS NOTED

DECIMAL .XX ± .03 [.76]
.XXX ± .005 [.127]
ANGULAR ± 30'
FRACTIONAL ± 1/32 [.76]

CHANCE RIDES, INC. WICHITA, KANSAS

NAME DRIVE PROGRAM FUNCTION OVERVIEW SUMITOMO

MODEL CHAOS SHEET 1 OF 1

DWG NO. 408–401

CHAOS

Set-up manual

SET-UP

Section 1

General information

This manual provides detailed instructions for setting up and tearing down the portable ride. The general sequence is given for carrying out each procedure, and should be followed. If the size of the set-up crew permits, some steps can be performed simultaneously. Extra caution must be taken, however, to keep those workers clear of any potential hazards.

WARNING: When setting up or tearing down the ride, never allow bystanders and/or other workers in the area. Always know the whereabouts of all workers during the entire set-up or tear-down procedure. Unauthorized personnel on the set-up site can cause and/or receive serious personal injury.

All set-up and material handling devices are self-contained on the portable ride. Only an external electrical power supply is required.

WARNING: Precautions for personal safety must be observed at all times when setting up or tearing down the ride. Be aware of elevated areas, pinch points, suspended loads, moving equipment, etc. Keep a safe distance from these hazards to avoid serious personal injury.

Contents

Hydraulic system controls

Ride set-up is accomplished with the aid of an on-board hydraulic system powered by an electric motor. Electrically operated valves direct oil to the four hydraulic cylinders in the trailer leveling jacks

NOTE: *The hydraulic system for set-up is independent of the main hydraulic system. The main power circuit breakers on the main electrical box must be on to operate the pump for the set-up hydraulic system.*

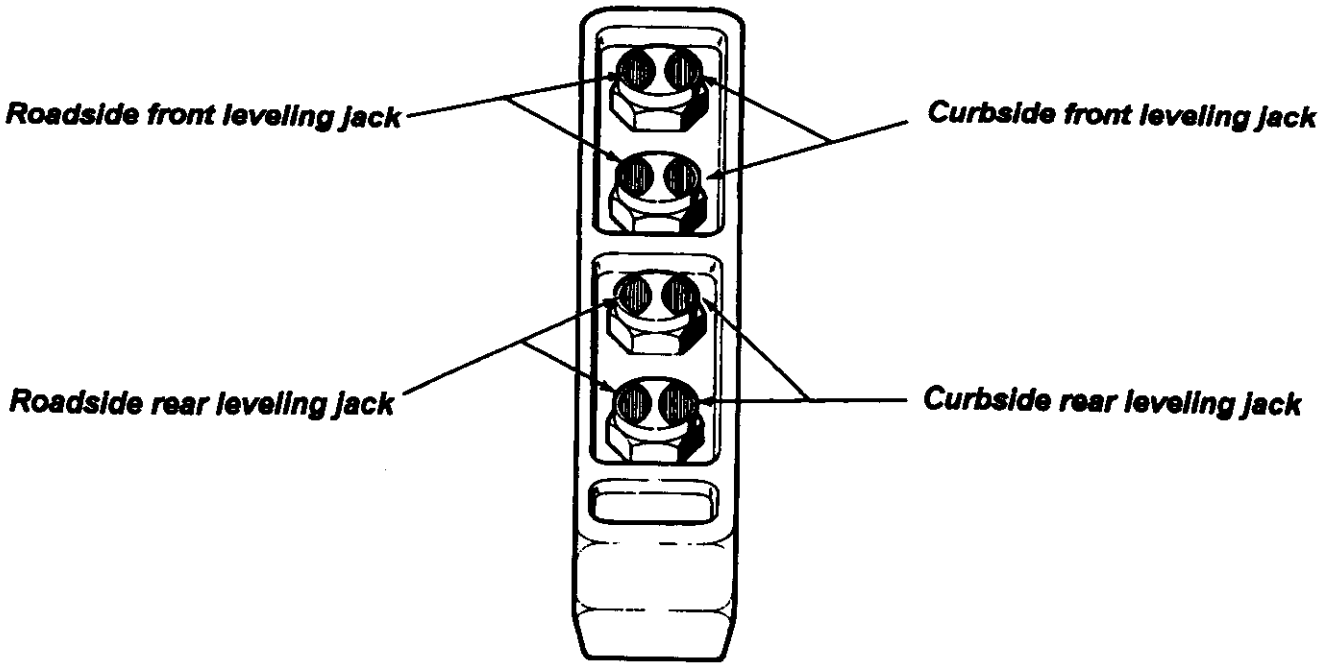
Hand Control Box

The hand-held control box installs into the receptacle labeled "Jacks", next the the switch for the set-up pump. The receptacle and switch are located on the roadside trailer frame rail, above the hydraulic pallet.

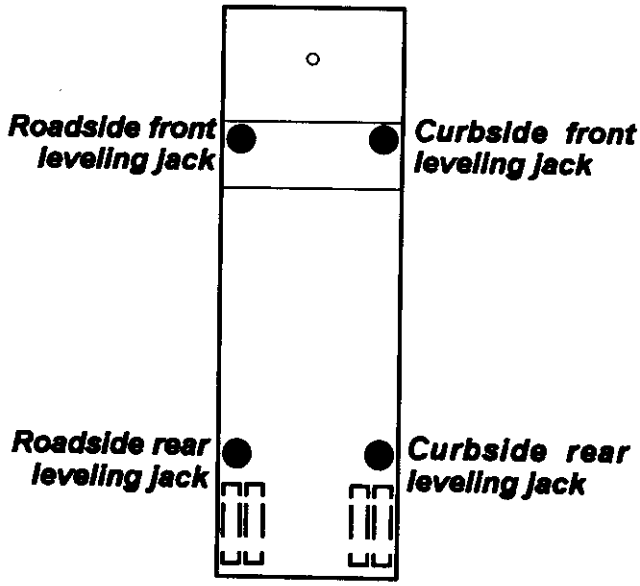
IMPORTANT: *Always turn off the set-up pump switch before connecting the hand control box to the receptacle.*

Extend or retract the four leveling jacks as required to level the trailer. Each leveling jack can be operated individually, using the corresponding buttons on the hand control box.

NOTE: *In addition to the hydraulic cylinders, a mechanical winch is used to lift the backdrop into position as the ride is set up.*



NOTE: *Hold the hand control box so that the positions of the buttons correspond to the positions of the jacks on the trailer.*



Before starting to set up the ride, electrical power must be connected as follows:

1. Check the three main circuit breakers located on the main electrical control box. Make sure they are all in the "OFF" position. The main electrical control box is located at the rear of the trailer.
2. Check the switch for the set-up hydraulic pump. Make sure it is in the "OFF" position.
3. Ground the ride per local code.
4. Connect the electrical power supply to the ride. Check the electrical schematics for the power requirements of the ride, noting the color coding of the power cable.
   - Ground - Green wire
   - Neutral - White wire
   - 3-phase - Black, red and blue wires
5. If the operator's control console or any other controls have been connected, make sure all switches are "OFF".
6. Turn the main power circuit breakers on.
7. Turn the set-up hydraulic pump on. The switch is located on the roadside trailer frame rail, above the hydraulic pallet

   NOTE: *A phase-protection feature prevents operation if the correct phase rotation is not observed.*

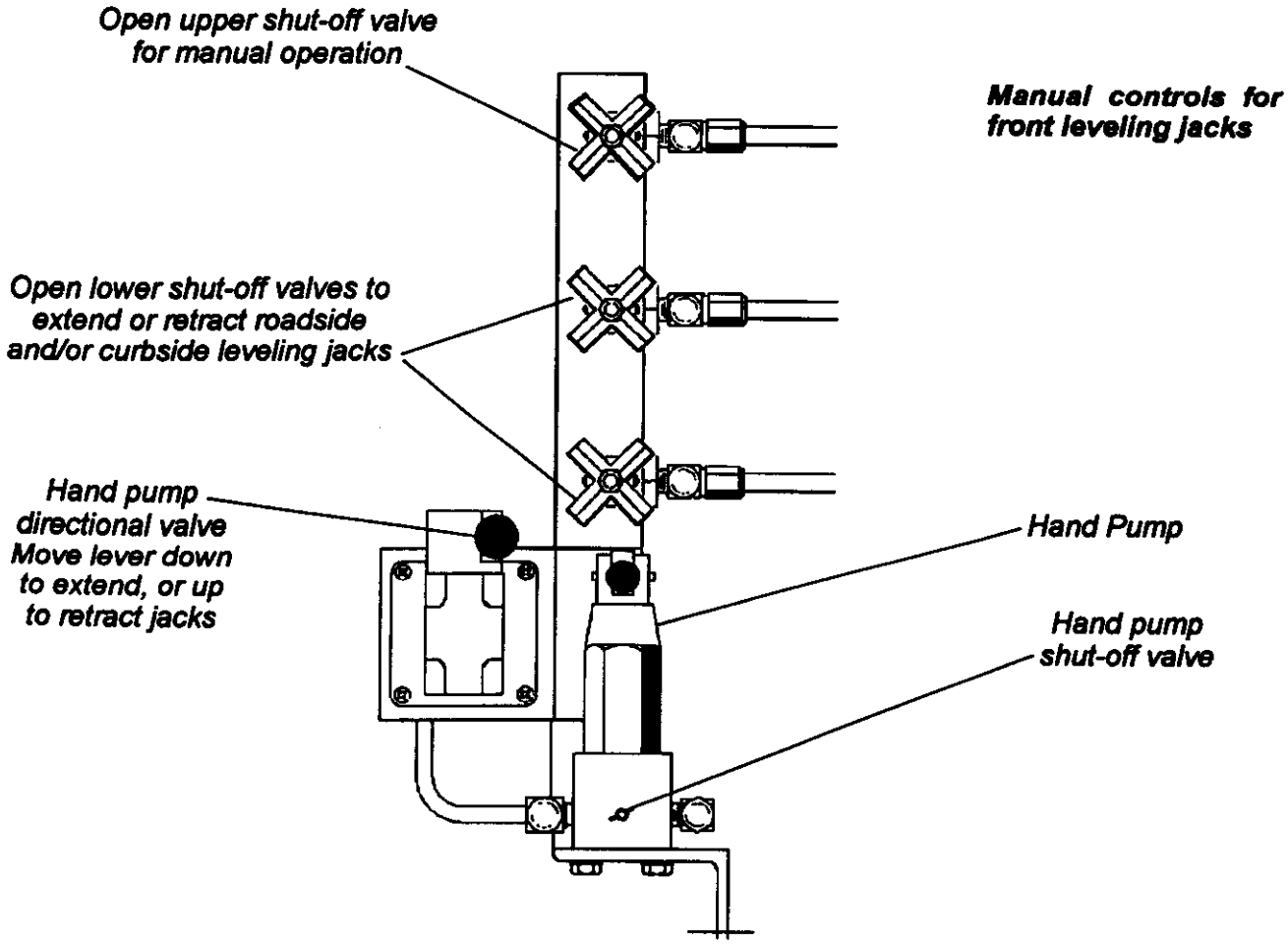
8. Check the manual valves as described under "Manual Control" before operating the leveling jack controls.
9. Connect the hand control box to the "JACKS" receptacle, loccated next to the set-up pump switch.
10. Use the buttons on the hand cotrol box to extend or retract each jack as required to level the trailer.

Manual control

When electrical power is not available, a hand pump is provided to operate the front leveling jacks.

Check the following chart before manually operating the hydraulic system:

Valve on hand pump	Closed
Shut-off valves on front leveling jacks (2 places)	Open 1/4 turn
Shut-off valves on rear leveling jacks (2 places)	Closed
Shut-off valves above hand pump (3 places)	Open 1/4 turn



Hand pump directional valve

The hand pump directional valve is located directly to the left of the hand pump. Raise the lever on the directional valve and operate the hand pump to retract the front leveling jacks. Push the lever down and operate the pump to extend the jacks.

There are three shut-off valves directly above the hand pump. Open the top valve when operating the hydraulic system manually.

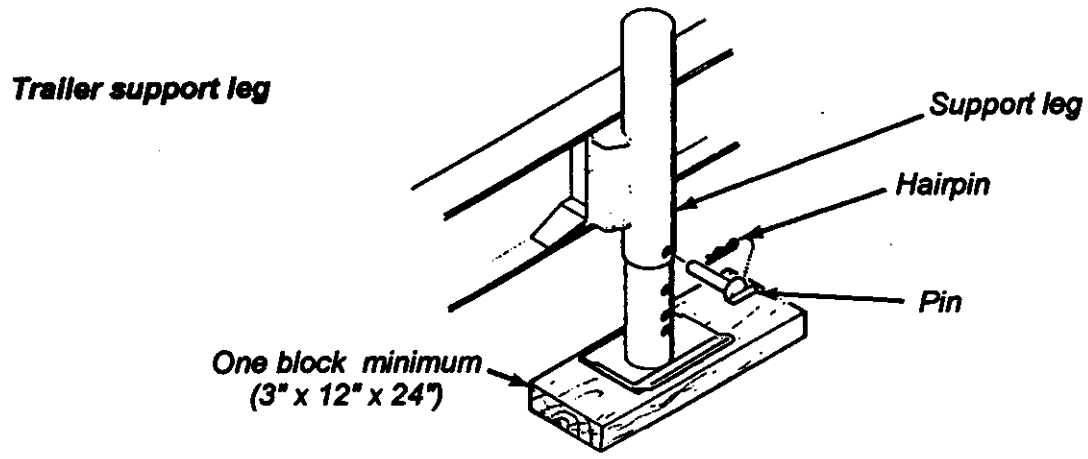
- To extend or retract both front leveling jacks simultaneously, open the two lower shut-off valves.
- To extend or retract either the roadside or curbside jack individually, open only one of the lower shut-off valves.

Set-up procedure - Trailer leveling

Use the following procedure to set-up the trailer:

1. Refer to the operation dimensions on the ride information plaque. Locate the ride trailer in position.

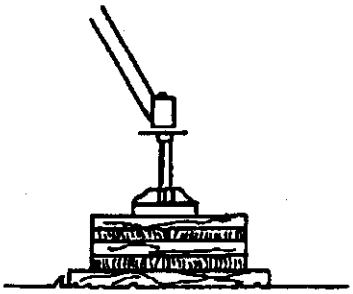
2. The trailer is equipped with two support legs which are used to remove the tractor from the trailer. Lower the support legs as close to the ground as possible onto blocking as shown. Install the pin and hairpin. Disconnect the air and electrical lines from the tractor and uncouple the fifth wheel. Carefully drive the tractor forward and the trailer will drop down onto the support legs.



NOTE: *The support legs are to be used during normal roading operations when hooking and unhooking the trailer.*

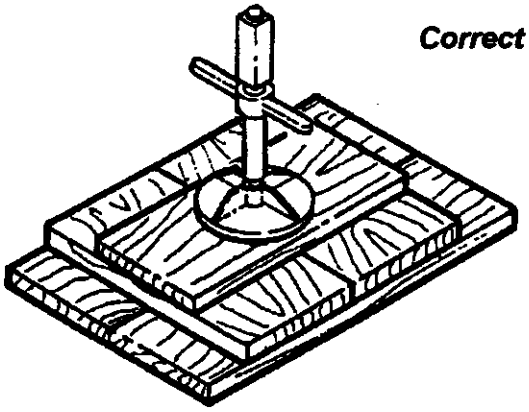
3. Connect the hand control box to the "JACKS" receptacle.

4. Place good solid blocking, preferably wooden 3 x 12's, under each hydraulic jack and screw jack point. Detailed blocking instructions for individual jack points are given in the following text.

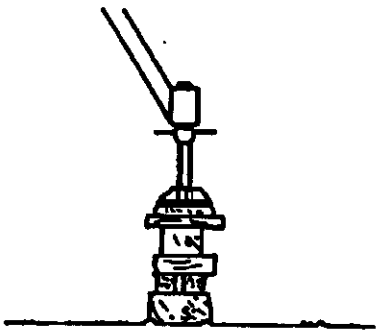


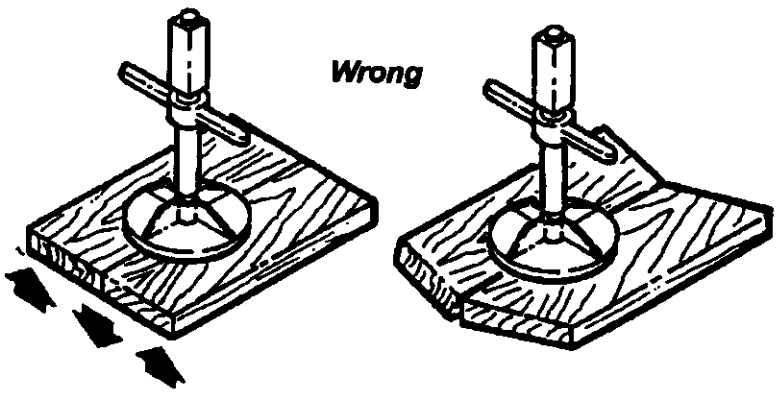
Always cross block
Cross blocking distributes weight evenly.

3 x 12" wooden blocking is preferred



Correct

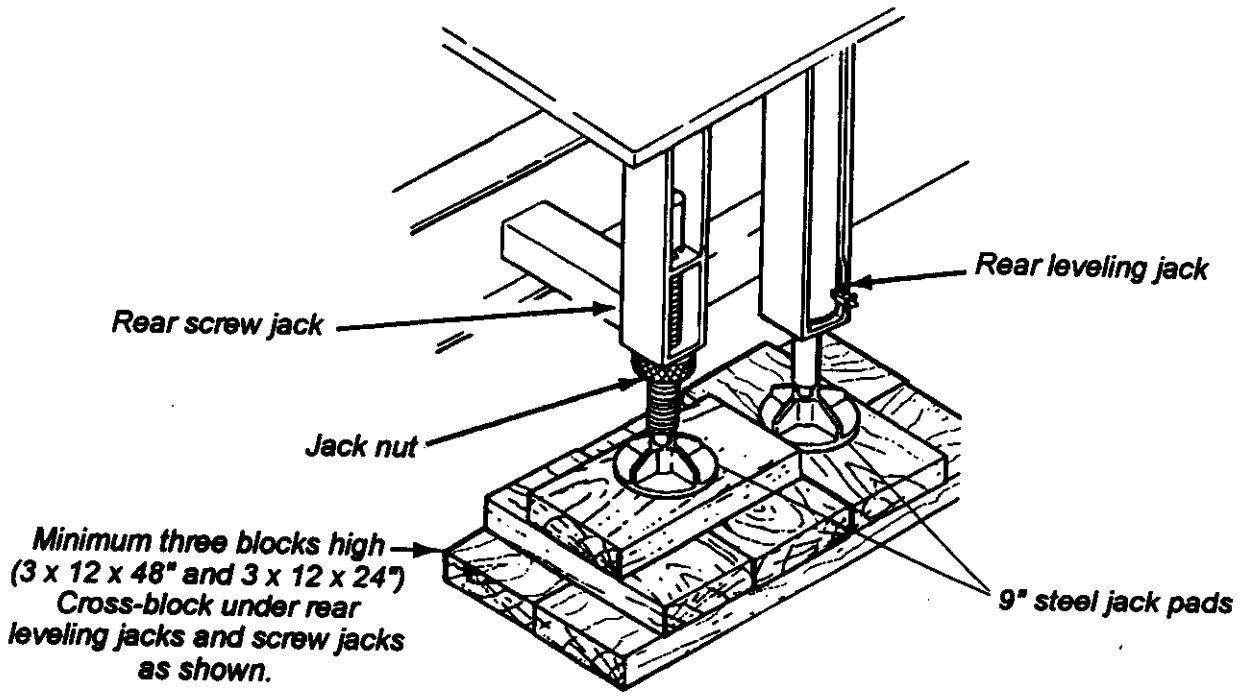




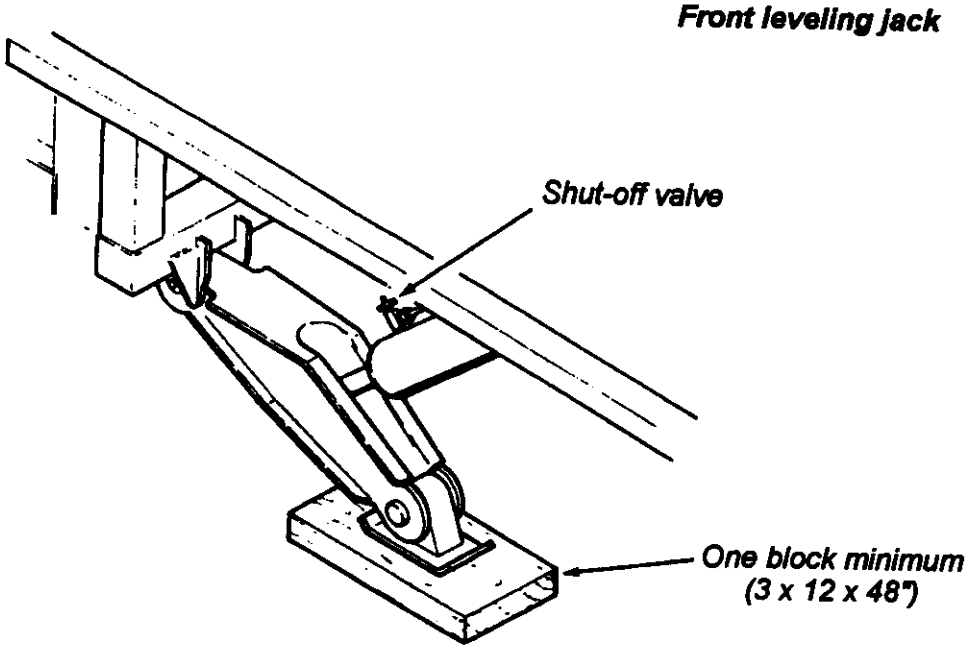
Wrong

5. Set up blocking under the rear leveling jacks and screw jacks as shown. Use the rear leveling jacks to raise the trailer to a nominal height of 62", from the ground to the deck of the trailer, measured at rear leveling jacks. Also check the rear of the trailer for level side-to-side, using a bubble level on the trailer deck.

Rear leveling jack and screw jack



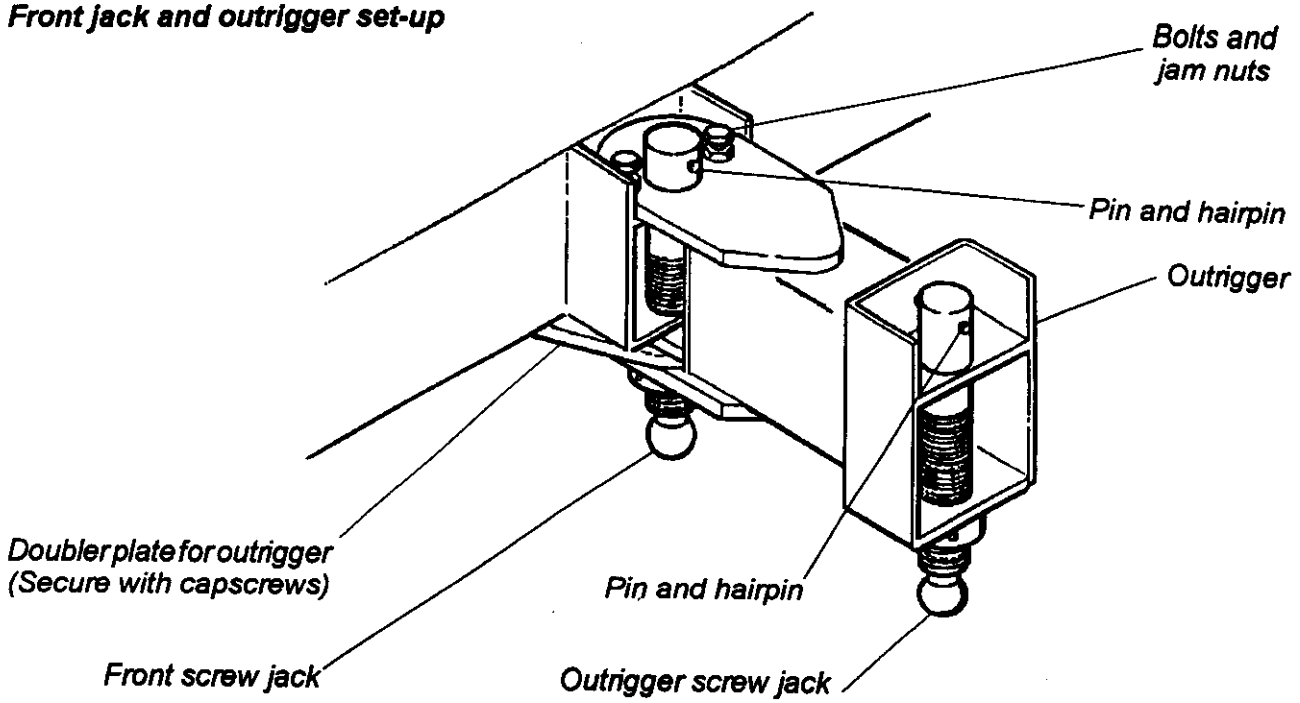
6. Use the front hydraulic leveling jacks to level the trailer end-to-end. Also, check the level of the trailer from side-to-side.



NOTE: *The main trailer rails will be at a 5° incline when the trailer is correctly leveled. DO NOT SET THE TRAILER AT THE 5° INCLINE AT THIS POINT.*

7. Install the doubler plates for the outriggers at the two front jacks. The plates install from the bottom and are secured with two capscews.

Front jack and outrigger set-up

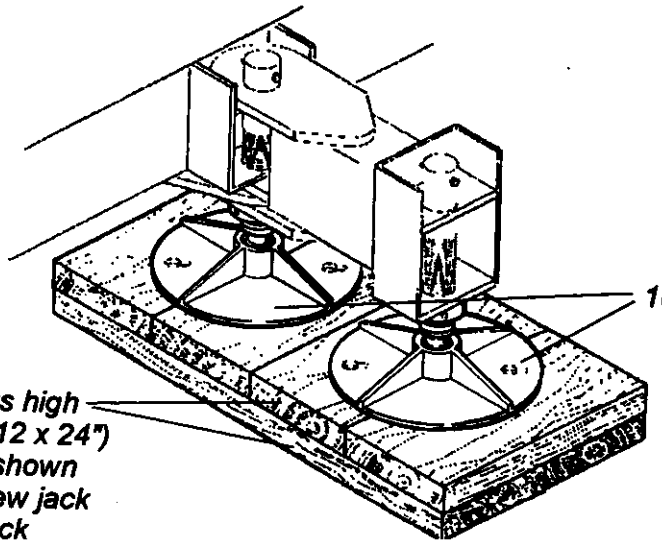


8. Install the two outriggers into the front jack housings. Install jack screws with jack nuts through the jack housing to secure the outriggers. Install pins and hairpins through the jack screws to secure them in place. Tighten the two bolts on each outrigger and lock in place with the jam nuts. These bolts remove clearance from between the outriggers and the jack housings.

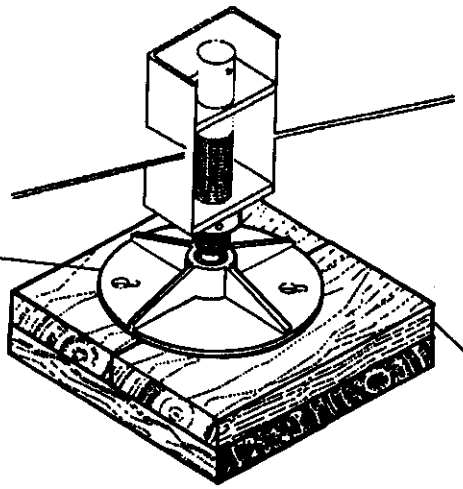
9. Install jack screws with jack nuts through the outrigger jack housing with pins and hairpins through the jack screws to secure them in place.

NOTE: *The front screw jacks and outrigger screw jacks are held in this raised position during the next phase of the set-up procedure. The pins will be removed in a later step to lower the jacks.*

10. Set up blocking under the front jacks and outrigger jacks as shown, but do not lower the screw jacks at this point.

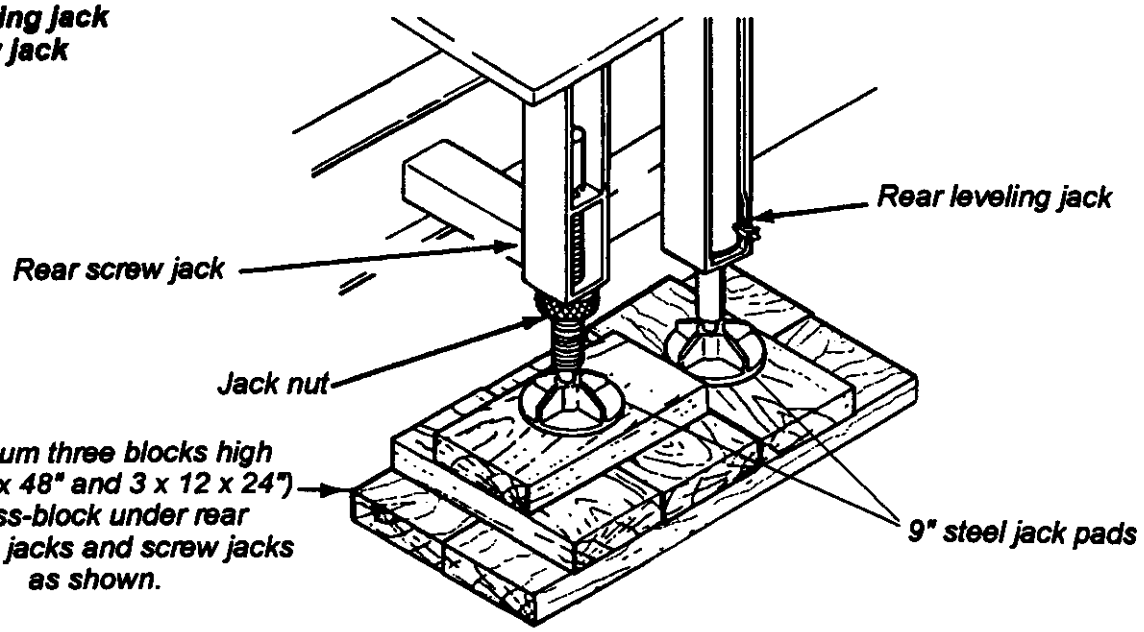


11. Set up blocking under the center screw jacks as shown, but do not lower the screw jacks at this point.



12. Check the blocking under the rear leveling jacks and screw jacks, which was installed during an earlier step. Make sure the blocking is still in the correct position as shown.

Rear leveling jack and screw jack



13. Use the front leveling jacks to lower the trailer to a nominal height of 24", as measured from the ground to the front trailer deck. Check the front of the trailer for level side-to-side, using a bubble level across the flat area of the boom.

14. Use the rear leveling jacks to level the trailer end-to-end, using a five-foot bubble level. Also check the rear of the trailer for level side-to-side.

    NOTE: *The main trailer rails will be at a 5° incline when the trailer is correctly leveled. A 5° wedge is provided to use in conjunction with the bubble level.*

15. Check the height at the front of the trailer. Raise or lower the front of the trailer as required to maintain the 24" nominal height set earlier. Check for level side-to-side on the boom.

16. Lower the front screw jacks onto blocking. Tighten the jack nuts by hand. Lower the outrigger screw jacks onto blocking, but do not tighten the jack nuts at this point.

    NOTE: *The jacks are held in the raised position by a pin and hairpin. Remove the pins to lower the jacks.*

17. Lower the rear screw jacks onto blocking. Tighten the jack nuts by hand.

18. Retract the front and rear hydraulic jacks completely. The weight of the ride is now on the front and rear screw jacks.

WARNING: RETRACT THE HYDRAULIC LEVELING JACKS AND CLOSE SHUT-OFF VALVES FOR THE JACKS DURING NORMAL RIDE OPERATION.

Pressure from hydraulic oil expanding due to heat can cause one or more of the jacks to extended, making the ride unstable. Injuries to passengers and/or bystanders can result.

IMPORTANT: *The hydraulic leveling jacks are for leveling only and cannot be expected to maintain their position during operation of the ride. Be sure that all four screw jacks are on solid blocking and the jack nuts are tightened. Retract the hydraulic jacks and close the shut-off valves so the entire weight of the ride is on the screw jacks.*

Shut-off valves are provided for each leveling jack. These are to be closed to help prevent leak-down of the leveling jacks if there is a delay during set-up. Normally, the valves are open for set-up and operation.

NOTE: *During the tear-down procedure, raise the ride slightly with the leveling jacks. This takes the weight off the screw jacks to allow loosening the jack nuts.*

IMPORTANT: *When the front and rear screw jacks have all been tightened, check the trailer again for proper leveling.*

19. Lower the center screw jacks onto blocking and tighten the jack nuts by hand.

20. Tighten the jack nuts on the outrigger screw jacks by hand.

Set-up procedure - Floors and fences

IMPORTANT: *Some floor components are racked under the backdrop and must be installed in conjunction with the set-up of the backdrop. Refer to the following topic, "Set-Up Procedure - Backdrop" for additional information.*

1. Assemble the floor sweeps and spreaders with pins and hairpins. As the floor structure is assembled, install the floor support stands under the sweeps. Disassemble the floor sweep racks and remove from the ride.

2. When all floor sweeps and spreaders are assembled, adust the floor support stands to level the floor structure on one side of the ride. Start with the floor sweep in the center which is perpendicular to the trailer. Use the bubble level and the 5° wedge to check the floor structure for the following:
   - Level from side-to-side
   - At a 5° angle, front-to-back

   Repeat the procedure on the other side of the ride.

3. Assemble the floor structure at the front of the trailer. Hold the front light poles securely until sufficient floor structure is in place to support them. Be sure all joints are secured with pins and hairpins.

4. Adjust the floor support stands under the front floor structure. The structure must be level from side-to-side, and aligned with the 5° angle of the trailer.

5. Install the floor panels into place. Check that the floor sections lay flat and level with each other. If necessary, make minor adjustments to the support stands.

6. Lay out the electrical cables for the flood lights and the operator's control console. Route the cables under the floor, inside the floor support stands.

7. Install the fences, starting at the rear of the ride next to the backdrop. The rear light poles must be installed at the appropriate location, between fence sections.

8. Assemble the operator's enclosure and control console. Connect the control console to the electrical cable.

9. Install the front ramps and adjust the ramp support stands.

10. Install the gates so they open out, away from the ride.

11. Install the backdrop extensions, securing the panels to the rear light poles and the tops of the fences.

12. Install the bally cloth and inner panels.

13. Using a ladder, assemble the flood lights to both the front and rear light poles.

IMPORTANT: *Mount the front flood lights so the mounting bars are at right angles to the trailer, parallel to the ramps.*

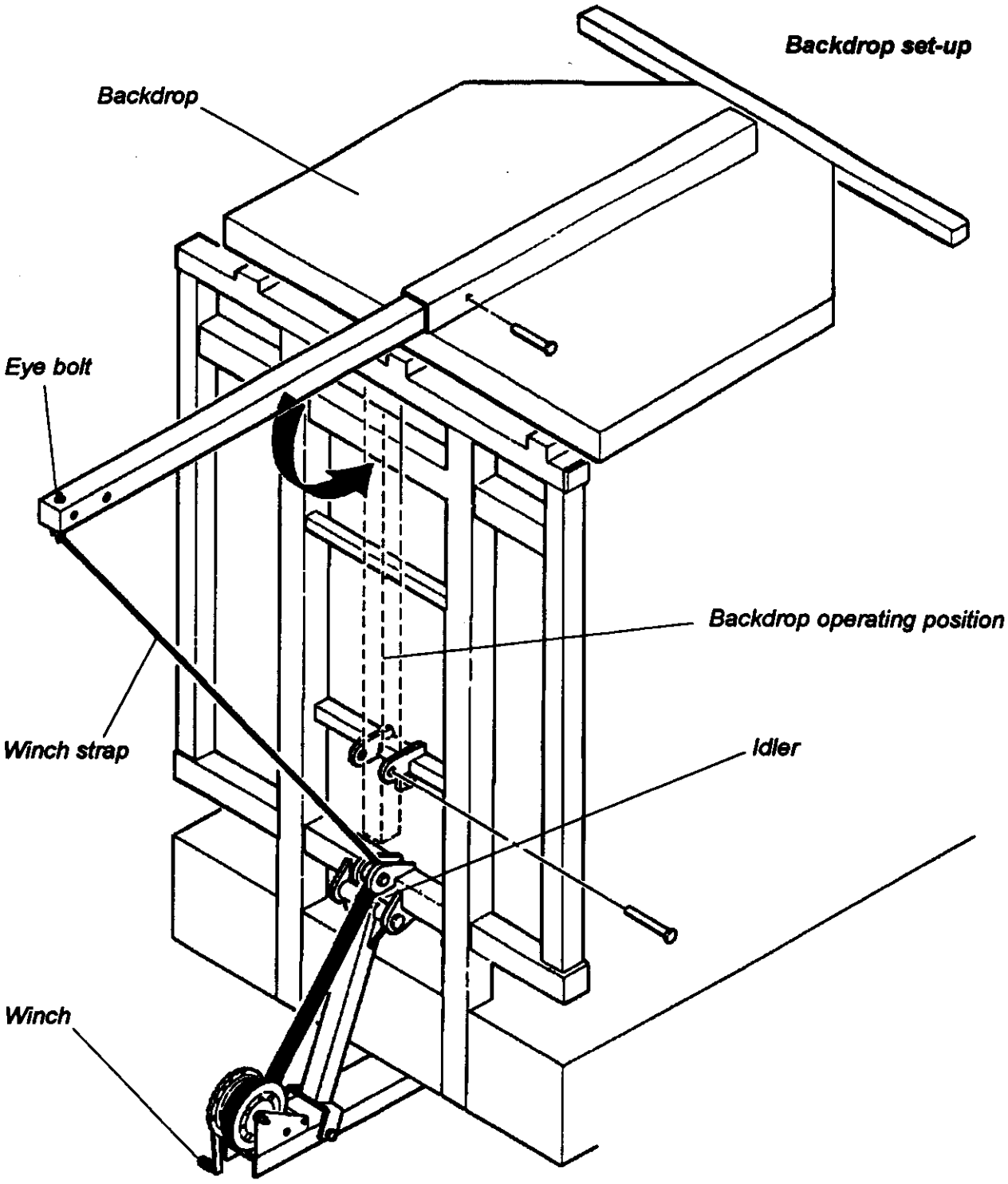
Set-up procedure - Backdrop installation

IMPORTANT: *Some floor components are racked under the backdrop and must be installed in conjunction with the set-up of the backdrop. Refer to the preceding topic "Set-Up Procedure - Floors and Fences" for additional information.*

1. Set up the backdrop winch as shown.
2. Remove the pin from the backdrop support tube. Install the eye bolt in the support tube and tighten the nut.
3. Route the winch strap through the idler and attach it to the eye bolt. Leave slack in the winch strap to allow the support tube to be extended.
4. Extend the tube to the rear until the pin and hairpin can be reinstalled.
5. Use the winch to raise the backdrop just enough to remove the weight from the vertical racking supports. While a helper holds the supports, remove the pins from the top and bottom and remove from the ride.
6. Carefully raise the backdrop to its operating position and secure with pins and hairpins in three places.
7. Remove the pin from the backdrop sign lock and rotate the sign to its operating position. Secure the sign in place with the sign lock and install the pin and hairpin.
8. Swing the backdrop side wings out from the center section, unfold the side wing lower panels and pin in place.

   NOTE: *If the backdrop side wings are racked separately, attach them the to the backdrop and secure with pins and hairpins.*

9. Install the outer backdrop panels and pin in place.


Backdrop set-up
Backdrop
Eye bolt
Backdrop operating position
Winch strap
Idler
Winch

Set-up procedure - Sweeps and spreaders

NOTE: If the size of the set-up crew permits, workers can spread the sweeps on both sides of the ride simultaneously. DO NOT SPREAD THE FRONT SWEEPS WHILE OTHER WORKERS SPREAD THE REAR SWEEPS. Leave all straps and tie-downs in place on the rear sweeps to securely attach them to each other until the front sweeps are completely spread.

CAUTION: The sweeps are heavy and, due to the tilt angle of the trailer, can swing forward out of control. While spreading the outer sweeps, make sure the remainder of the sweeps at the rear of the ride are secured to prevent uncontrolled movement. Serious personal injury can result.

1. Remove all straps and tie-downs from the sweeps on the front of the ride.
2. Spread the two outer sweeps from the front sweep package and swing the spreaders into the operating position. Secure the spreaders with pins and lynch pins.
3. Repeat the preceding step until all front sweeps are completely spread.
4. Carefully remove the straps and tie-downs from the sweeps on the rear of the ride.
5. Spread the two outer sweeps from the rear sweep package and swing forward to the front sweeps. Secure the spreaders with pins and lynch pins.
6. Repeat the preceding step until all sweeps are completely spread. Use a pry bar to spread the sweeps slightly to install the last spreader.

NOTE: *On ride serial number 408-96001, use the following procedure to install the last spreader.*

- *Install the special eye bolts in the top sweep extension holes on the last two sweeps.*
- *Rig the winch between the two eye bolts.*
- *Tighten the winch until the pin holes on the spreader and sweep are aligned.*
- *Remove the special eye bolts and install the 3/4-10 capscews and hardware as previously described.*

During the tear-down procedure, use the same winch set-up to pull these sweeps together slightly. This will permit the pins to be removed from the spreader. THE EYE BOLTS MUST BE INSTALLED IN THE SWEEPS AT THE FRONT OF THE RIDE BEFORE BEGINNING TEAR-DOWN.

7. Note the position of each sweep end. Some sweep ends are already in operating position and are secured with capscrews; others are raised or lowered to allow close racking during transport. An arrow on these sweeps indicate their operating position.

8. Raise or lower each sweep end to its operating position. While a helper holds the sweep end, remove the lynch pin and pin, raise or lower it to its operating position, and secure it with the pin and lynch pin.

9. Install two capscrews into each sweep end and secure with, flat washers, lockwashers and nuts installed exactly as follows: The capscrews are 3/4-10, Grade 5 with a flat washer under the head of the capscrew, and a split-lock washer under the hex nut. Tighten the nut to 165 ft-lbs, while holding the capscrew with a wrench.

10. Install the cross rods between the sweeps and the center hub, with the turnbuckles closest to the hub. Secure with pins and hairpins. Adjust the turnbuckles so there is no tension or compression on the cross rod.

IMPORTANT: *DO NOT TIGHTEN THE TURNBUCKLES UNTIL ALL VEHICLES ARE INSTALLED.*

11. Rotate the hub sign to its operating position. Remove the pin and hairpin from the sign lock. Pull the lock pin out to allow the sign to turn 90°. Push the lock pin in and secure with the pin and hairpin.

12. Install the six center spinner sections and secure with hairpins. Connect the electrical cables at the hub electrical boxes.

13. Install the decorative panels between sweeps. Secure with pins and hairpins.

Set-up procedure - Vehicle installation

1. The main power circuit breakers must be on. Connect the remote brake release control box to the same cable as is used for the operator's control console. When the switch button is pressed, the brake on the drive motor is released, allowing the ride to be turned by hand. Release the button to engage the brake.

   NOTE: *The brake can also be manually released using the bail ring at the bottom of the drive motor. Swing the bail ring down to disengage the brake. ALWAYS ENGAGE THE BRAKE BEFORE THE RIDE IS PUT INTO OPERATION.*

2. Set up the jib crane over the vehicle rack. Connect the electric winch power cable to the "WINCH" receptacle on the curbside of the electrical box at the rear of the trailer.

3. Remove the cross bracing from the rear of the vehicle rack structure. LEAVE THE FRONT CROSS BRACING IN PLACE.

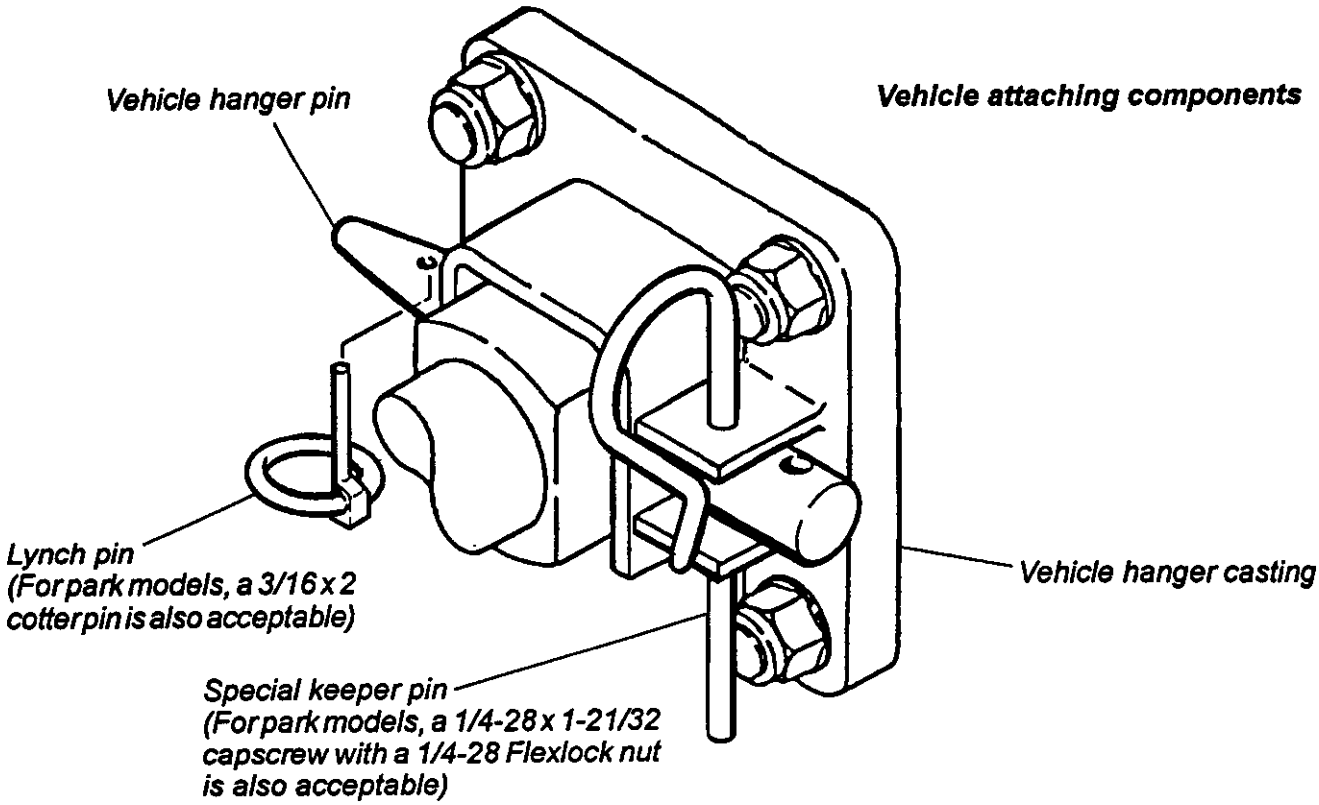
4 Remove the racking braces from the sides of the vehicle tracks to allow the vehicles to roll toward the ride.

5. Attach the lifting adapter to the top vehicle on one side of the rack and secure with pins and hairpins.

6. Swing the jib crane into position over the rack. Attach the winch hook to the lifting adapter.

7. With some of the vehicle's weight supported by the winch, roll the vehicle back and lift out of the rack.

   NOTE: *The brake on the drive motor must be engaged while installing each vehicle to prevent the ride from turning. Release the brake to position the sweeps for installation of the next vehicle.*



8. Carefully maneuver the vehicle into position between the sweeps.

9. Secure the vehicle to the spindles with vehicle hanger pins, special keeper pins and lynch pins, installed exactly as shown. Install the vehicle hanger pins and secure as follows:
   - Install special keeper pins through each vehicle hanger, through the hole in the head of each vehicle hanger pin.
   - Install lynch pins through the hole in the other end of each vehicle hanger pin.

10. Repeat the process to install the remaining vehicles.

IMPORTANT: *While installing vehicles, never allow the ride to become out-of-balance by more than three vehicles. Install vehicles on both sides of the ride to maintain a balanced ride. Vehicles must be racked in a specific sequence to help avoid an out-of-balance condition.*

11. Connect the seat electrical cables to all vehicles. Make sure the cable is positioned close to the side of the vehicle to prevent contact with the sweep as it turns.

12. Disconnect the remote brake release control box and remove it from the ride.

13. Disconnect the power cable from the winch and remove the winch from the crane boom.

14. Disassemble the jib crane and remove all crane components from the ride.

15. Disassemble the vehicle rack and remove all rack components from the ride.

Set-up procedure - Final

1. The cross rods were installed and left loose in an earlier step. At this point, tighten all four turnbuckles AT THE SAME TIME. Tighten just enough to remove all slack.

2. When all cross rods are snug, tighten each turnbuckle an additional one-quarter turn. DO NOT OVER-TIGHTEN.

3. Tighten the jam nuts to secure the turnbuckles.

4. Connect the operator's control console.

5. Check the following before operating the ride:
   - Inspect the entire floor for obstructions. Remove all racks, tools, components and other objects from the path of the ride.
   - Inspect all vehicles. Remove all tools, components and other loose items from the ride.

6. Perform all daily maintenance and inspections.

7. Test run the ride, using the instructions in the "Chaos Operation Manual". Run the ride through at least three (3) complete ride cycles to check for proper function of all controls and indicators on the operator's control panel.

   Throughout the ride cycles, check 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.

Tear-down procedure

The tear-down procedure is basically a reverse of the set-up procedure. Pay particular attention to the following points:

Vehicles and lap bars

The following points must be noted during tear-down:

1. When removing vehicles, never allow the ride to become out-of-balance by more than three vehicles. Remove vehicles from both sides of the ride to maintain a balanced ride. Vehicles must be racked in a specific sequence to help avoid an out-of-balance condition. Decals affixed to the racks give the specific racked location for each vehicle.

2. As vehicles are removed, secure the electrical cable connectors in the racked position to prevent damage to the cables.

3. Install spacer bars between vehicles in the rack. Do not allow vehicles to contact each other in the rack. When the last vehicle in each track is racked, install the "Z-bracket" clamp over the both wheels to secure the vehicle in the rack.

4. All secondary restraint bars must be closed and locked when the vehicles are in the rack.

Trailer

The following points must be noted during tear-down:

1. Raise the leveling jacks slightly to take the load off the screw jacks. This allows the jack nuts to be loosened.

2. Completely raise the front and rear leveling jacks and close the shut-off valves.

3. Make sure the trailer support legs are in their fully raised position, with pins and hair pins installed.

Sweeps and spreader bars

1. Before removing the spreader bars and stacking the sweeps, make sure the hub is rotated to correctly align the sweeps with the boom. The "master sweep" (sweep #13) can be identified by stop blocks which prevent it from pivoting on the hub. The master sweep must be pointed toward the front of the trailer.

   NOTE: *Opposite the master sweep is sweep #5, which has limited travel. It must be pointed toward the rear of the trailer.*

2. Once all sweeps are in their roading position, secure the sweeps to each other and to the trailer with the sweep racking supports provided. Tighten the turnbuckles until they are snug. DO NOT OVER-TIGHTEN.

3. If the drive motor brake is manually released, engage the brake after the hub is turned to the correct roading position. DO NOT LEAVE THE BRAKE RELEASED DURING TRANSPORTATION OF THE RIDE.

4. On ride serial number 408-96001, use the following procedure to remove the first spreader bar:
   - Install the special eye bolt in the top sweep extension holes.
   - Rig the winch between the eye bolts.
   - Tighten the winch until the pins can be removed.
   - Remove the eye bolts and raise or lower the sweep extensions to their racked position.

Racking instructions

Refer to the following illustration for racking locations for specific components.

Possum Belly #1
Outriggers and jackstand pads, vehicle hoist, power cable, skirting

Possum Belly #2
Outer circle floors (stack the floors until the rack is full. The balance of these floors rack in Possum Belly #4)

Possum Belly #3
Inner circle floors (stack the floors until the rack is full. The balance of these floors rack in Possum Belly #4)

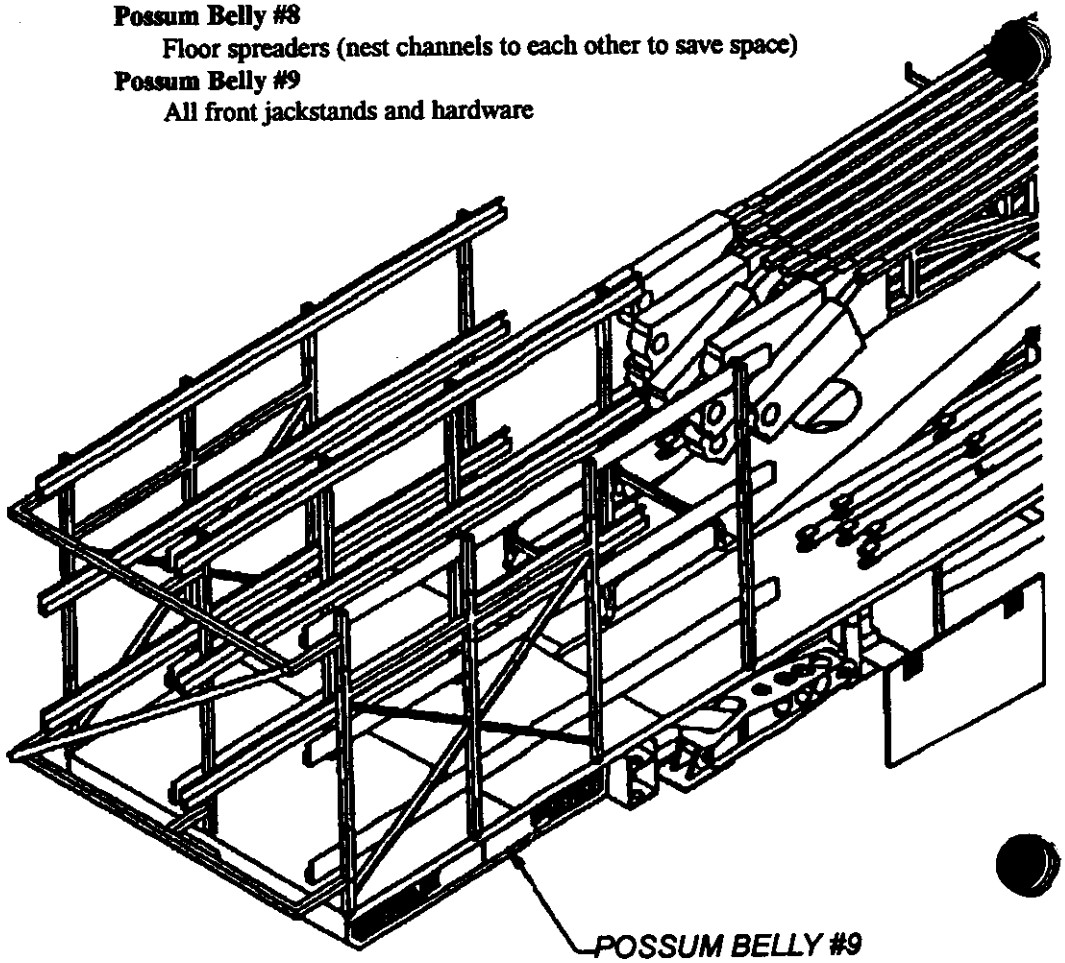
Possum Belly #4
Balance of inner and outer circle floors, flood lights

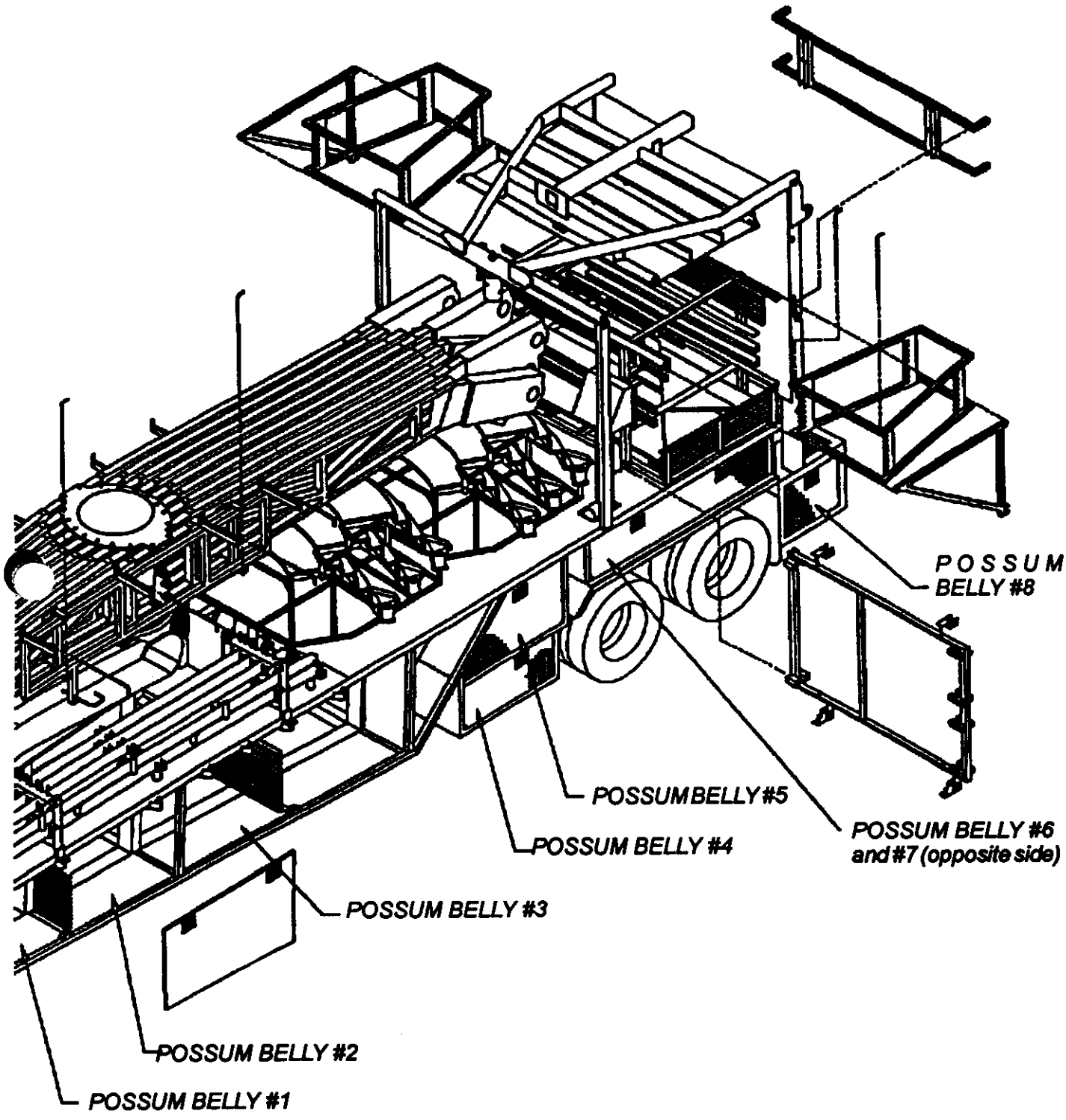
Possum Belly #5
Wedge section floors (next to trailer), pin box and spare parts

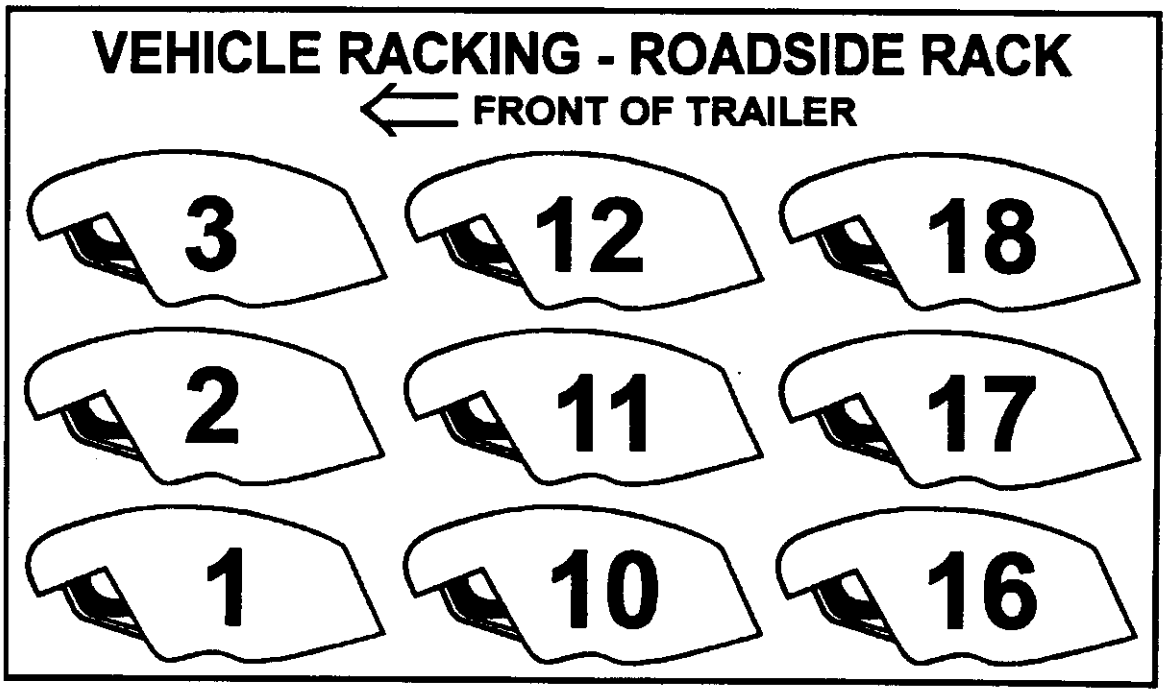
Possum Belly #6 and #7
Blocking, small jackstand pads

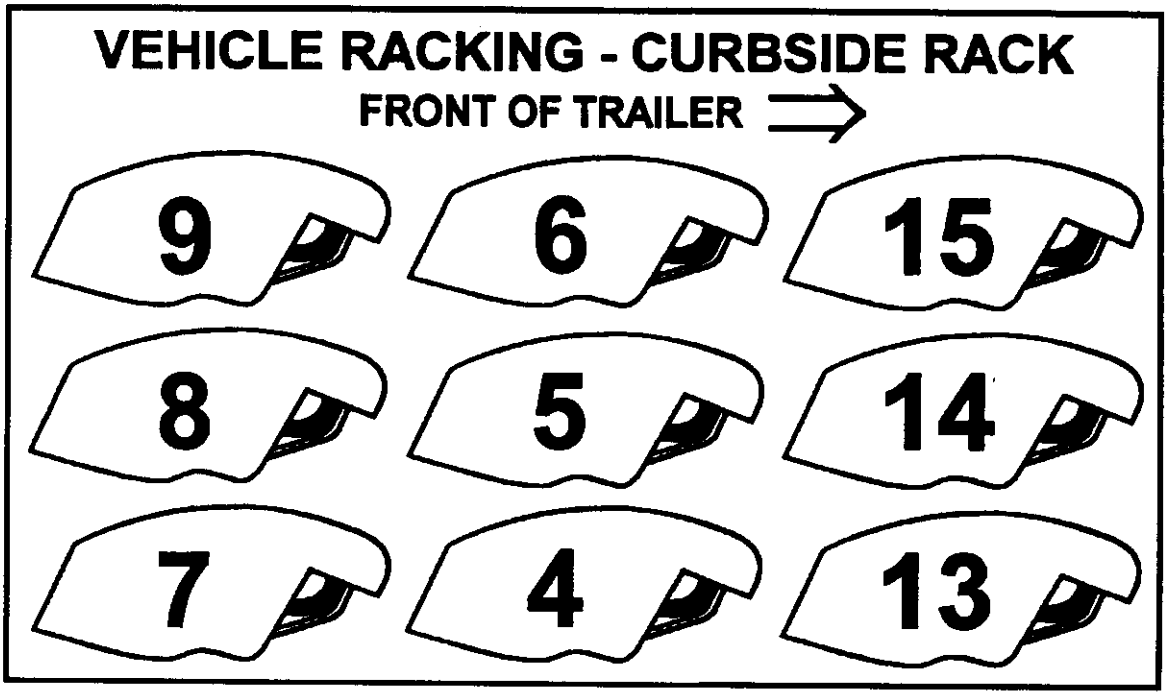
Possum Belly #8
Floor spreaders (nest channels to each other to save space)

Possum Belly #9
All front jackstands and hardware




POSSUM BELLY #8
POSSUM BELLY #5
POSSUM BELLY #6 and #7 (opposite side)
POSSUM BELLY #4
POSSUM BELLY #3
POSSUM BELLY #2
POSSUM BELLY #1


VEHICLE RACKING - ROADSIDE RACK
FRONT OF TRAILER
3
12
18
2
11
17
1
10
16


VEHICLE RACKING - CURBSIDE RACK
FRONT OF TRAILER
9
6
15
8
5
14
7
4
13

CHANCE RIDES MANUFACTURING, INC.
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Bulletin No: P408CRM133-0
Release Date: October 15, 2004
Effective Date: October 15, 2004
Supersedes: N / A
Completion Date: N/A

NOTIFICATION

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02097 through 408-03998

Model No.: 408

Abstract of Issue:
New Lap Bar and T-Bar Ratchet Lock System

Reason For Release:
The original passenger restraint system on the above noted CHAOS amusement rides incorporates three hydraulic lock cylinders on each vehicle - one for each lap bar and one for the secondary restraint bar (T-bar). In the even a hydraulic lock cylinder fails, a redundant mechanical lock prevents the restraint bar from opening.

The hydraulic lock cylinders have performed satisfactorily and provided acceptable service life when properly maintained. The cylinders have, however, been subject to damage from weather, improper storage and physical damage. When a hydraulic lock cylinder fails, the only option has been to replace it with a new or re-manufactured part, since they are not serviceable in the field.

Chance Rides Manufacturing, Inc. has developed a mechanical ratchet lock system to replace the hydraulic lock cylinders. The new ratchet locks are manually operated and will require less maintenance. The new ratchet locks completely replace the hydraulic lock cylinders and eliminate electric operation of the solenoids.

The new ratchet lock design functions similarly to the original, except that manual release of the restraint bars is required. This is accomplished with a single lever on each vehicle, which releases both lap bars and the T-bar with one motion.

Action to be Taken:
All owners of the above noted amusement rides can, at their option, replace the hydraulic lock cylinders with the new ratchet lock system. Either design is acceptable and safe to operate if properly maintained, but all vehicles on a specific ride must be equipped with the same restraint bar locking system. INSTALLATION OF THIS KIT IS NOT MANDATORY AND IS INTENDED ONLY TO REDUCE MAINTENANCE COSTS. Replacement parts for the original system will continue to be available.

Order the Ratchet Lock Kit, part number K408CRM133-1, which includes all parts necessary to convert one ride to the new design. Detailed installation instructions are included with the kit.

A credit for the return of rebuildable hydraulic locking cylinders will be applied to the purchase price of the ratchet lock kit.

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Page:	2 of 3

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS Affected Serial Nos.: 408-00196 and 408-02097 through 408-03998

Model No.: 408

Detail of Issue (continued):

Overview of new ratchet lock system features:
(Refer to the photo on the following page)

1. Ratchet locks replace existing hydraulic lock cylinders (3 places on each vehicle). These units are all stainless steel construction for longer service life.

2. The new components mount to the vehicle with capscrews - no welding is required.

3. Manual lever releases both lap bars and T-bar simultaneously with one motion to eliminate electrical operation of the solenoids.

4. Lower pivot shaft releases all three ratchet locks.

5. Upper pivot shaft releases all three existing mechanical secondary locks. The solenoids are disabled.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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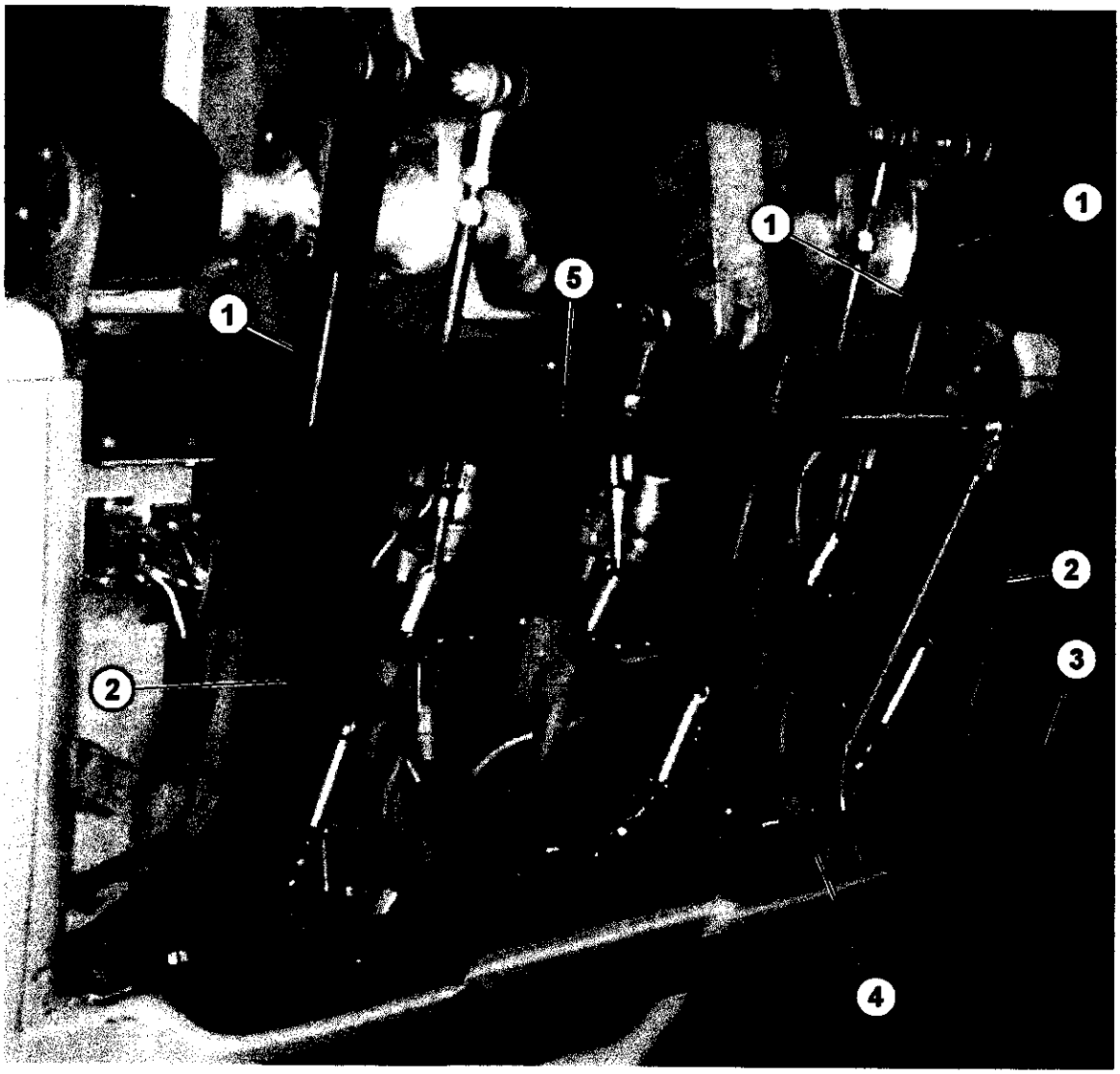
Model No.: 408

Detail of Issue (continued):



CHANCE RIDES MANUFACTURING, INC.
4200 Walker
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Phone: 1-316-942-7411 • FAX: 1-316-942-2012
Website: www.rides.com
E-mail: rides@rides.com

Bulletin No: B408CRM129-0
Release Date: July 30, 2004
Effective Date: July 30, 2004
Supersedes: N / A
Completion Date: See Text

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: November, 1997 and on

Ride Name: CHAOS
(Park Model Rides
with one-piece sweeps only)
Affected Serial Nos.: 408-03398 and on

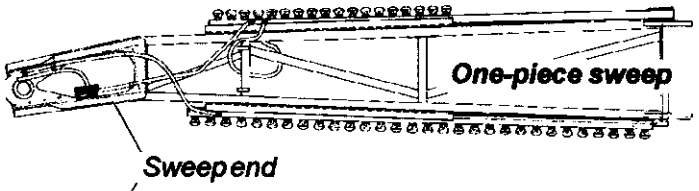
Model No.: 408

Abstract of Issue:
Sweep Inspection

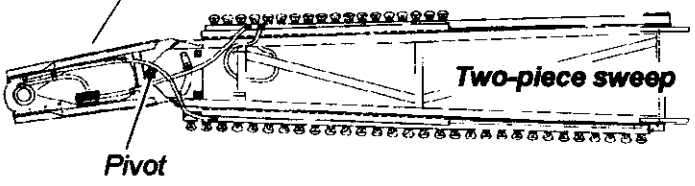
Reason For Release:

This service bulletin applies only to park model rides with one-piece sweeps (ride serial number 408-03398 and on). PORTABLE MODEL RIDES AND PARK MODEL RIDES WITH EARLIER SERIAL NUMBERS ARE NOT AFFECTED.

***One-piece sweep** has sweep end integrated into sweep weldment. This bulletin applies to these sweeps.*



***Two-piece sweep** has separate sweep end which can be pivoted up or down. These sweeps are not affected by this bulletin.*



Chance Rides Manufacturing, Inc. has become aware that cracks can develop in the sweeps of the above noted CHAOS amusement rides, even after installation of the Sweep Reinforcement Kit K408CRM115-0 (Refer to Chance Rides Manfacturing, Inc. service bulletin B408CRM124-0).

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Bulletin No:	B408CRM129-0
Release Date:	July 30, 2004
Effective Date:	July 30, 2004
Supersedes:	N / A
Completion Date:	See Text
Page:	2 of 3

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: November, 1997 and on

Ride Name: CHAOS
(Park Model Rides
with one-piece sweeps only)

Affected Serial Nos.: 408-03398 and on

Model No.: 408

Action to be Taken:

Chance Rides Manufacturing, Inc. requires all owner/operators of the above noted CHAOS amusement rides to inspect all sweeps as described in this bulletin. The inspection must be completed immediately upon receipt of this bulletin and weekly thereafter.

Sweep Inspection Procedure

Visually inspect every sweep for cracks as shown in the illustration on the next page, paying particular attention to the areas indicated by arrows. Look for indications in the steel tubes, and check the welded joints for indications in the welds and the parent metal.

IF NO INDICATIONS ARE FOUND, operation of the ride can continue. The sweeps must be inspected weekly as described in this bulletin.

IF ANY INDICATIONS ARE FOUND, do not operate the ride. Contact the Customer Service Department at Chance Rides Manufacturing, Inc. immediately for instructions on the necessary repair procedure. DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE SWEEPS EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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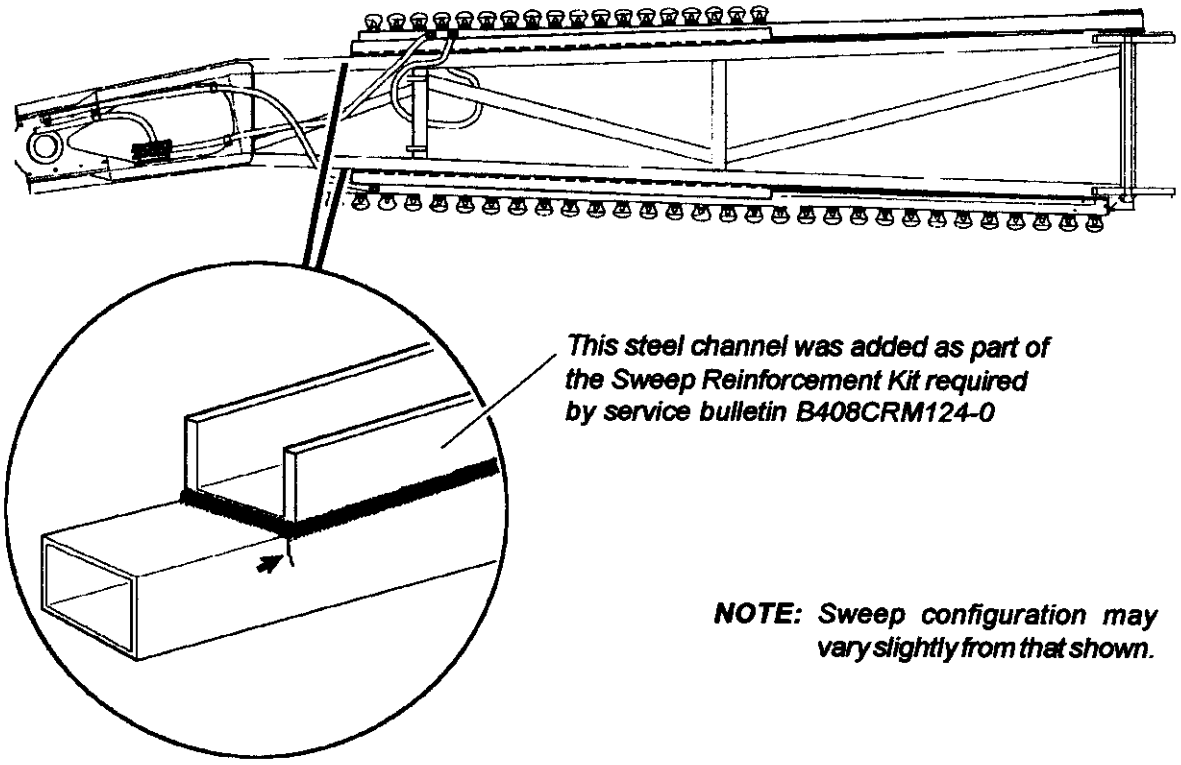
Bulletin No: B408CRM129-0
Release Date: July 30, 2004
Effective Date: July 30, 2004
Supersedes: N / A
Completion Date: See Text

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: November, 1997 and on

Ride Name: CHAOS
(Park Model Rides
with one-piece sweeps only)
Affected Serial Nos.: 408-03398 and on

Model No.: 408

Detail of Issue (continued):



This steel channel was added as part of the Sweep Reinforcement Kit required by service bulletin B408CRM124-0

***NOTE:** Sweep configuration may vary slightly from that shown.*

Pay particular attention to this area on both the top and bottom tubes of each sweep.

Perform this inspection IMMEDIATELY upon receipt of this bulletin and WEEKLY thereafter.

Florida Department of Agriculture & Consumer Services
CHARLES H. BRONSON, Commissioner
Division of Standards, Bureau of Fair Ride Inspections

BUREAU OF FAIR RIDE INSPECTIONS
ADMINISTRATION BUILDING, SUITE
3125 CONNER BOULEVARD, STE. N
TALLAHASSEE, FL 32399-1650
Phone (850) 488-9790

December 4, 2003

RE: CRM Service Bulletin B408CRM124-0

Dear Sir:

Attached you will find Chance Rides Manufacturing, Inc.'s SERVICE BULLETIN B408CRM124-0, dated December 1, 2003, which affects your Chaos Ride, (USAID 04624). This bulletin, enclosed, requires all owner/operators of the noted rides to inspect and rework all sweeps as described in the bulletin and that the rework must be completed within 90 days of the date in the bulletin or by February 28, 2004.

We are providing you a copy of the bulletin and notice that this rework will be required on all affected Chaos ride operating in Florida after February 28, 2004, otherwise the ride will be red-tagged until the work is completed and a fee for red-tag removal will be charged.

If you have any questions regarding this matter please do not hesitate to call or write me.

Sincerely,

Michael W. Rinehart
(850) 922-2330

Enclosure

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Bulletin No: B408CRM124-0
Release Date: December 1, 2003
Effective Date: Immediately
Supersedes: B408CRM115-0
Completion Date: March 1, 2004

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Sweep Rework

Reason For Release:

Service bulletin B408CRM115-0 is superseded by this bulletin and is no longer in effect.

Chance Rides Manufacturing, Inc. has become aware that cracks can develop in the sweeps of the CHAOS amusement ride. A kit has been developed to reinforce the sweeps.

Action to be Taken:

Chance Rides Manufacturing, Inc. requires all owner/operators of the above noted CHAOS amusement rides to inspect and rework all sweeps as described in this bulletin. The rework must be completed within 90 days of the release date of this bulletin.

Order and install the Sweep Reinforcement Kit (number K408CRM115-0). The kit includes all necessary parts to rework one complete ride. Complete installation instructions are provided with the kit. The ride can be operated until the Sweep Reinforcement Kit is installed. During this time, the sweeps must be inspected weekly as described in this bulletin.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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Bulletin No:	B408CRM124-0
Release Date:	December 1, 2003
Effective Date:	Immediately
Supersedes:	B408CRM115-0
Completion Date:	March 1, 2004
Page:	2 of 4

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Sweep Inspection Procedure

Visually inspect every sweep for cracks as shown in the illustration on the next page, paying particular attention to the areas indicated by arrows. Look for indications in the steel tubes, and check the welded joints for indications in the welds and the parent metal.

NOTE: Some rides have been reworked per Service Bulletin B408CRM110-0. The inspection described in this bulletin applies to ALL RIDES, whether they have been reworked or not.

IF NO INDICATIONS ARE FOUND, order and install the Sweep Reinforcement Kit (number K408CRM115-0). The ride can be operated until the Sweep Reinforcement Kit is installed. During this time, the sweeps must be inspected weekly as described in this bulletin.

IF ANY INDICATIONS ARE FOUND, do not operate the ride. Contact the Customer Service Department at Chance Rides Manufacturing, Inc. immediately for instructions on the necessary repair procedure. The repair will require specific instructions for repairing cracks prior to installation of the Sweep Reinforcement Kit (number K408CRM115-0).

DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE SWEEPS EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.

After the Sweep Reinforcement Kit is installed, the sweeps must be inspected annually as described in this bulletin.

NOTE: The installation of the Sweep Reinforcement Kit can be visually verified as shown in the illustration on page 4 of this bulletin.

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Bulletin No: B408CRM124-0
Release Date: December 1, 2003
Effective Date: Immediately
Supersedes: B408CRM115-0
Completion Date: March 1, 2004

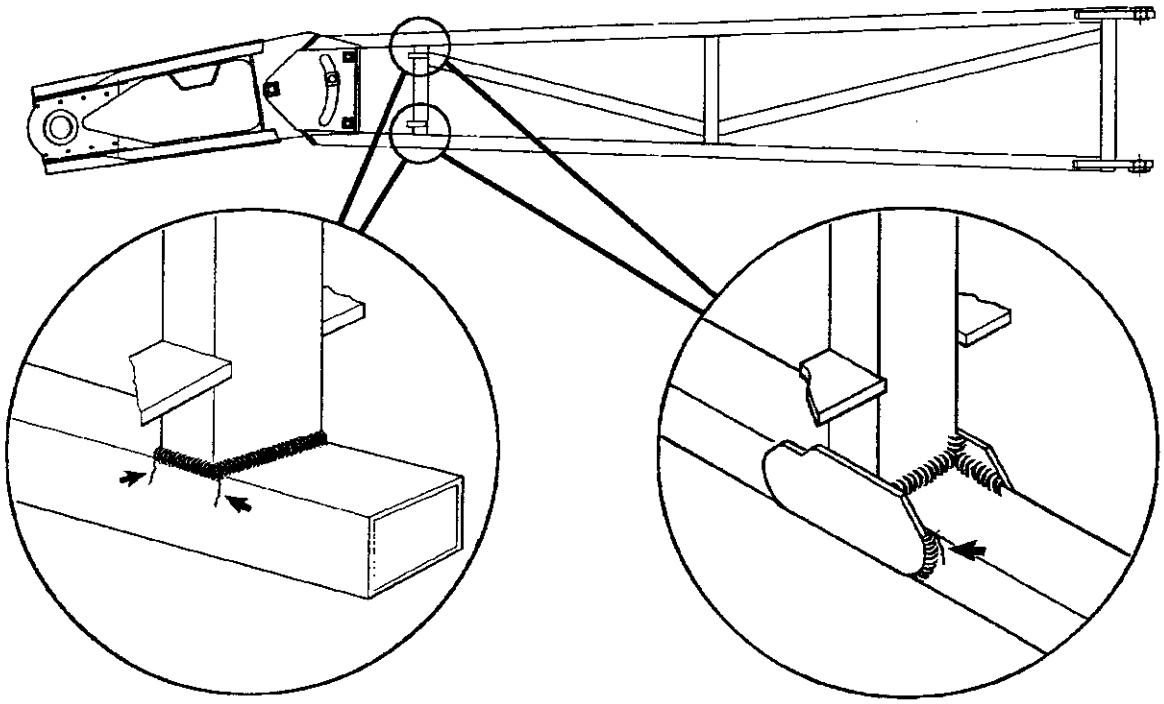
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

NOTE: *Sweep configuration may vary slightly from that shown.*



Rides that have NOT been reworked per Service Bulletin B408CRM110-0

Rides that HAVE been reworked per Service Bulletin B408CRM110-0

Pay particular attention to this area on both the top and bottom tubes of each sweep.

Perform this inspection WEEKLY until the Sweep Reinforcement Kit is installed, then ANNUALLY thereafter.

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Bulletin No:	B408CRM124-0
Release Date:	December 1, 2003
Effective Date:	Immediately
Supersedes:	B408CRM115-0
Completion Date:	March 1, 2004
Page:	4 of 4

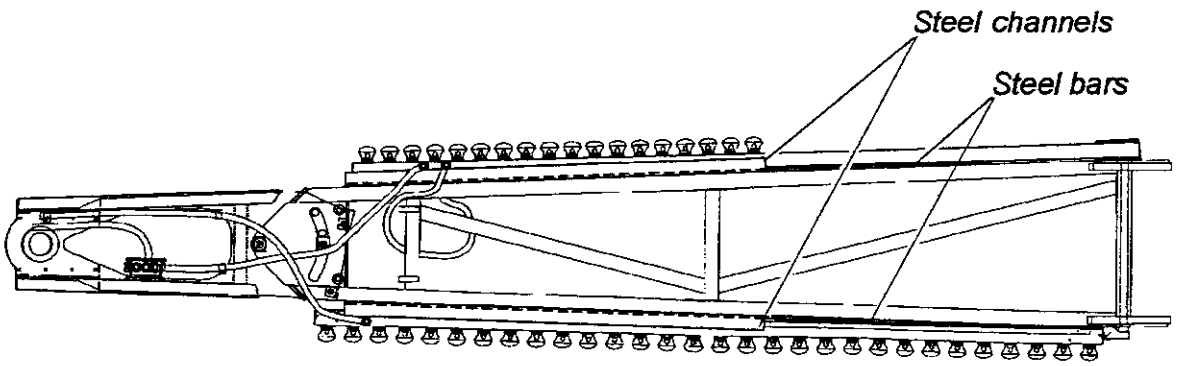
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Installation of the Sweep Reinforcement Kit (number K408CRM115-0) can be visually verified by the channels and bars welded to the upper and lower tubes of every sweep as shown.



On rides with the Sweep Reinforcement Kit installed, perform the inspection described in this bulletin ANNUALLY.

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Bulletin No:	B408CRM125-0
Release Date:	December 1, 2003
Effective Date:	Immediately
Supersedes:	N / A
Completion Date:	N / A
Page:	1 of 1

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS (Portable Model Only) Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:

Floor Replacement

Reason For Release:

Due to cost and availability, Chance Rides Manufacturing, Inc. is no longer able to supply replacement floor sections for the above noted CHAOS amusement rides. Replacement floors can be fabricated from locally procured materials, using the specifications provided in this bulletin.

Action to be Taken:

In the event that one or more floor sections require replacement, use materials meeting these specifications:

- Flooring - 1" thick plywood, smooth on one side for the top surface. Marine grade plywood is preferred for durability, but not required. DO NOT USE 3/4" THICK PLYWOOD. To ensure a proper fit, use the floor section being replaced as a template.

- Coating - Duraback™ Non-Slip Coating (manufactured by The Durabak Company, Aurora, CO.), applied per the manufacturer's instructions. A minimum of two coats is required on all sides to seal the plywood against moisture.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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Bulletin No:	B408CRM129-0
Release Date:	July 30, 2004
Effective Date:	July 30, 2004
Supersedes:	N / A
Completion Date:	See Text
Page:	1 of 3

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: November, 1997 and on

Ride Name: CHAOS
(Park Model Rides
with one-piece sweeps only)

Affected Serial Nos.: 408-03398 and on

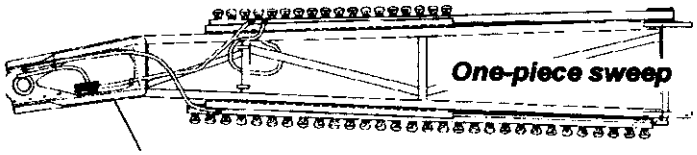
Model No.: 408

Abstract of Issue:
Sweep Inspection

Reason For Release:

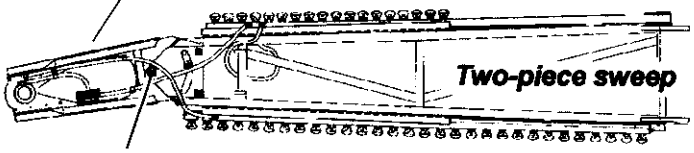
This service bulletin applies only to park model rides with one-piece sweeps (ride serial number 408-03398 and on). PORTABLE MODEL RIDES AND PARK MODEL RIDES WITH EARLIER SERIAL NUMBERS ARE NOT AFFECTED.

***One-piece sweep** has sweep end integrated into sweep weldment. This bulletin applies to these sweeps.*



Sweep end

***Two-piece sweep** has separate sweep end which can be pivoted up or down. These sweeps are not affected by this bulletin.*



Pivot

Chance Rides Manufacturing, Inc. has become aware that cracks can develop in the sweeps of the above noted CHAOS amusement rides, even after installation of the Sweep Reinforcement Kit K408CRM115-0 (Refer to Chance Rides Manfacturing, Inc. service bulletin B408CRM124-0).

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Bulletin No:	B408CRM129-0
Release Date:	July 30, 2004
Effective Date:	July 30, 2004
Supersedes:	N / A
Completion Date:	See Text
Page:	2 of 3

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: November, 1997 and on

Ride Name: CHAOS
(Park Model Rides
with one-piece sweeps only)

Affected Serial Nos.: 408-03398 and on

Model No.: 408

Action to be Taken:

Chance Rides Manufacturing, Inc. requires all owner/operators of the above noted CHAOS amusement rides to inspect all sweeps as described in this bulletin. The inspection must be completed immediately upon receipt of this bulletin and weekly thereafter.

Sweep Inspection Procedure

Visually inspect every sweep for cracks as shown in the illustration on the next page, paying particular attention to the areas indicated by arrows. Look for indications in the steel tubes, and check the welded joints for indications in the welds and the parent metal.

IF NO INDICATIONS ARE FOUND, operation of the ride can continue. The sweeps must be inspected weekly as described in this bulletin.

IF ANY INDICATIONS ARE FOUND, do not operate the ride. Contact the Customer Service Department at Chance Rides Manufacturing, Inc. immediately for instructions on the necessary repair procedure. DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE SWEEPS EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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Bulletin No:	B408CRM129-0
Release Date:	July 30, 2004
Effective Date:	July 30, 2004
Supersedes:	N / A
Completion Date:	See Text
Page:	3 of 3

Ride Manufacturer: CHANCE RIDES, INC.

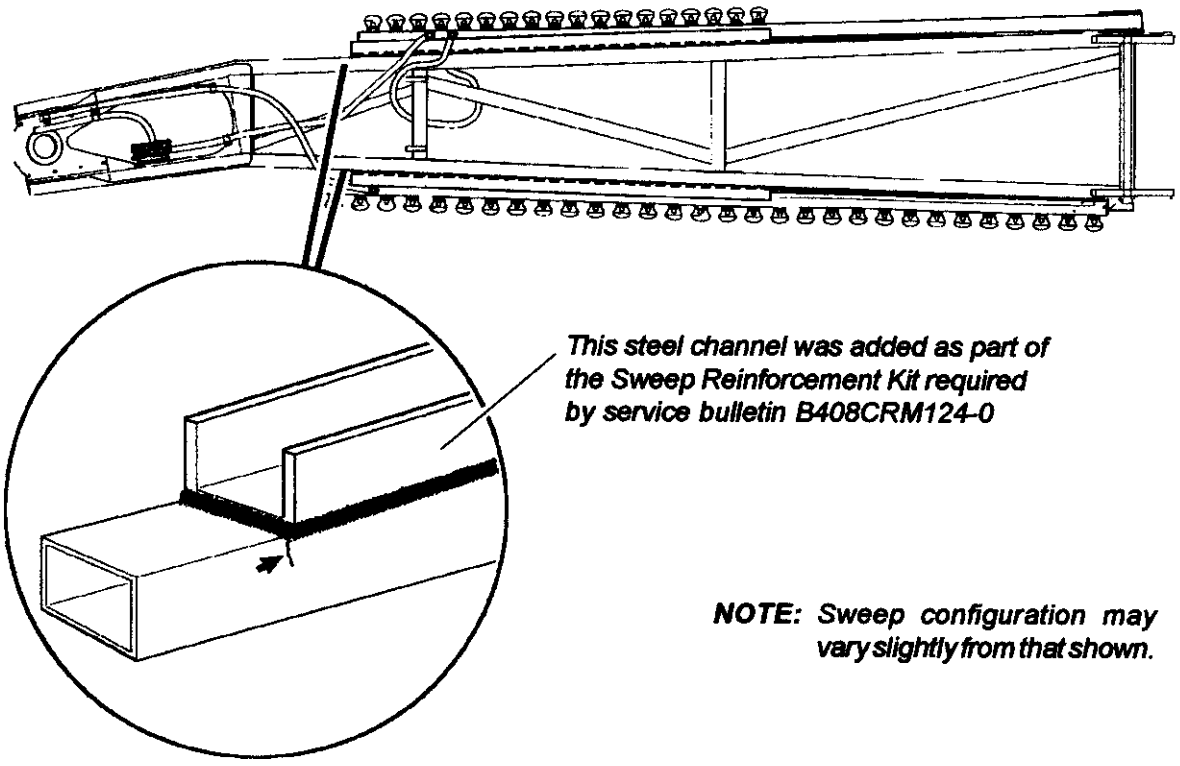
Affected Production Dates: November, 1997 and on

Ride Name: CHAOS
(Park Model Rides
with one-piece sweeps only)

Affected Serial Nos.: 408-03398 and on

Model No.: 408

Detail of Issue (continued):



This steel channel was added as part of the Sweep Reinforcement Kit required by service bulletin B408CRM124-0

***NOTE:** Sweep configuration may vary slightly from that shown.*

Pay particular attention to this area on both the top and bottom tubes of each sweep.

Perform this inspection IMMEDIATELY upon receipt of this bulletin and WEEKLY thereafter.

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Bulletin No:	B408CRM125-A
Release Date:	March 4, 2004
Effective Date:	Immediately
Supersedes:	B408CRM125-0
Completion Date:	N / A
Page:	1 of 5

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS (Portable Model Only) Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Floor Replacement

Reason For Release:

Service bulletin B408CRM125-0 is superseded by this bulletin and is no longer in effect.

Due to cost and availability, Chance Rides Manufacturing, Inc. is no longer able to supply replacement composite floor sections for the above noted CHAOS amusement rides. Replacement floors can be fabricated from locally procured materials, using the specifications provided in this bulletin. These floors require additional supports to be installed, as specified in this bulletin.

Action to be Taken:
In the event that one or more floor sections require replacement, use materials meeting these specifications:

- Flooring - 1" thick plywood, smooth on one side for the top surface. Marine grade plywood is preferred for durability, but not required. DO NOT USE 3/4" THICK PLYWOOD. To ensure a proper fit, use the floor section being replaced as a template.

- Coating - Durabak™ Non-Slip Coating (manufactured by The Durabak Company, Aurora, CO.), applied per the manufacturer's instructions. A minimum of two coats is required on all sides to seal the plywood against moisture.

- Supports - Additional floor support components are specified on the following pages of this bulletin. The supports are required under any plywood floor section. They can also be used under the original composite floor sections to provide extended life, at the owner's option.

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Bulletin No:	B408CRM125-A
Release Date:	March 4, 2004
Effective Date:	Immediately
Supersedes:	B408CRM125-0
Completion Date:	N / A
Page:	2 of 5

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS (Portable Model Only) Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue

Installation Instructions

1. Refer to the illustration on the following page to determine the specific location for each floor section being replaced.

2. Using the chart on page 4 of this bulletin, order the proper quantities for those specific floor sections. Pay attention to the following:
   - The T-supports are different lengths for each floor section. Be sure to order the correct length.
   - The support brackets must be located 1/4" below the surface on which the floors will rest, with the bottom flush with the bottom of the spreader bar or existing floor frame rail. To facilitate installation in this position, there are two different support brackets. Be sure to order the correct part.

3. Locate the support brackets as shown in the detail on page 5. Observe the distance from the support bracket to the end of the spreader bar or existing floor frame rail, as specified in the chart. Clamp the support brackets in place.

4. Using a 7/32" diameter bit, drill the spreader bar or floor frame rail to match the four holes in the support brackets. Secure the brackets with four 3/16" x 7/16" Monobolts.

   NOTE: The support brackets can be welded in place if desired. All welding must be performed by a certified welder. Clean areas to be welded with a clean stainless steel brush. Use ER5356 welding electrode and weld along both sides of each bracket.

5. Install the T-supports in the slot of the support bracket slot and install the floors sections.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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Bulletin No: B408CRM125-A
Release Date: March 4, 2004
Effective Date: Immediately
Supersedes: B408CRM125-0
Completion Date: N / A

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS (Portable Model Only) Affected Serial Nos.: All Units

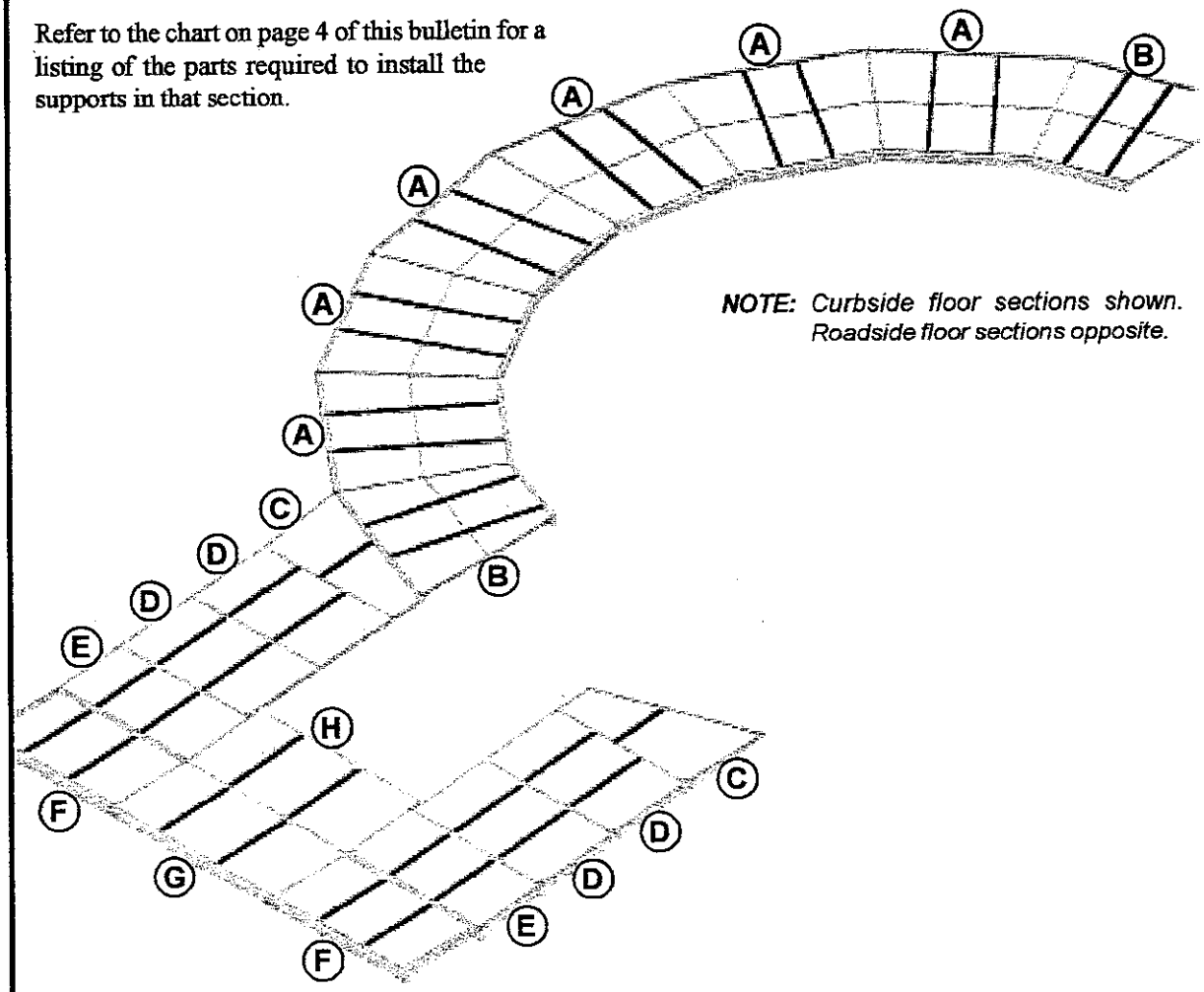
Model No.: 408

Detail of Issue (continued):

Floor Section Identification

Determine the location of each floor section being replaced using the illustration below. Additional floor supports are indicated by heavy lines.

Refer to the chart on page 4 of this bulletin for a listing of the parts required to install the supports in that section.



NOTE: Curbside floor sections shown. Roadside floor sections opposite.

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Bulletin No: B408CRM125-A
Release Date: March 4, 2004
Effective Date: Immediately
Supersedes: B408CRM125-0
Completion Date: N / A

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS (Portable Model Only) Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

CHAOS Floor Support Installation (for use with plywood replacement floors)

Floor Location (refer to drawing)	Support Components Required For Each Section	Location of Floor Support Brackets (Distance from each end of spreader bar or existing floor frame rail. Measurements are plus/minus 1/4")
A (12 places)	408-829-013 T-Support - 70-1/4" long(2 required) 408-829-011 Floor Support Bracket (4 required) 66166200 Monobolt - 3/16" x 7/16" (16 required)	26-3/8" from each end of long spreader bar 13-3/8" from each end of short spreader bar
B (4 places)	408-829-013 T-Support - 70-1/4" long(2 required) 408-829-011 Floor Support Bracket (4 required) 66166200 Monobolt - 3/16" x 7/16" (16 required)	23-7/8" from each end of long spreader bar 2-1/4" from the trailer end of short spreader bar 11" from the outer end of short spreader bar
C (2 places)	408-829-014 Support - 27-1/4" long(1required) 408-829-011 Floor Support Bracket (1 required) 408-829-012 Floor Support Bracket (1 required) 66166200 Monobolt - 3/16" x 7/16" (8 required)	41-3/8" from the outer end of the long spreader bar Centered on the floor frame rail
D (4 places)	408-829-015 T-Support - 39-3/4" long(2 required) 408-829-012 Floor Support Bracket (4 required) 66166200 Monobolt - 3/16" x 7/16" (16 required)	21-7/8" from each end of floor frame rail (centered)
E (2 places)	408-829-016 T-Support - 34-1/4" long (2 required) 408-829-012 Floor Support Bracket (4 required) 66166200 Monobolt - 3/16" x 7/16" (16 required)	21-7/8" from each end of floor frame rail
F (2 places)	408-829-017 Support - 40" long(2 required) 408-829-011 Floor Support Bracket (2 required) 408-829-012 Floor Support Bracket (2 required) 66166200 Monobolt - 3/16" x 7/16" (16 required)	21-3/4" from each end of floor frame rail
G (1 place)	408-829-017 Support - 40-5/16" long(2 required) 408-829-011 Floor Support Bracket (2 required) 408-829-012 Floor Support Bracket (2 required) 66166200 Monobolt - 3/16" x 7/16" (16 required)	28" from each end of floor frame rail
H (1 place)	408-829-016 T-Support - 34-1/4" long(2 required) 408-829-012 Floor Support Bracket (4 required) 66166200 Monobolt - 3/16" x 7/16" (16 required)	28" from each end of floor frame rail

CHANCE RIDES MANUFACTURING, INC.
4200 Walker
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Phone: 1-316-942-7411 • FAX: 1-316-942-2012
Website: www.rides.com
E-mail: rides@rides.com

Bulletin No:	B408CRM125-A
Release Date:	March 4, 2004
Effective Date:	Immediately
Supersedes:	B408CRM125-0
Completion Date:	N / A
Page:	5 of 5

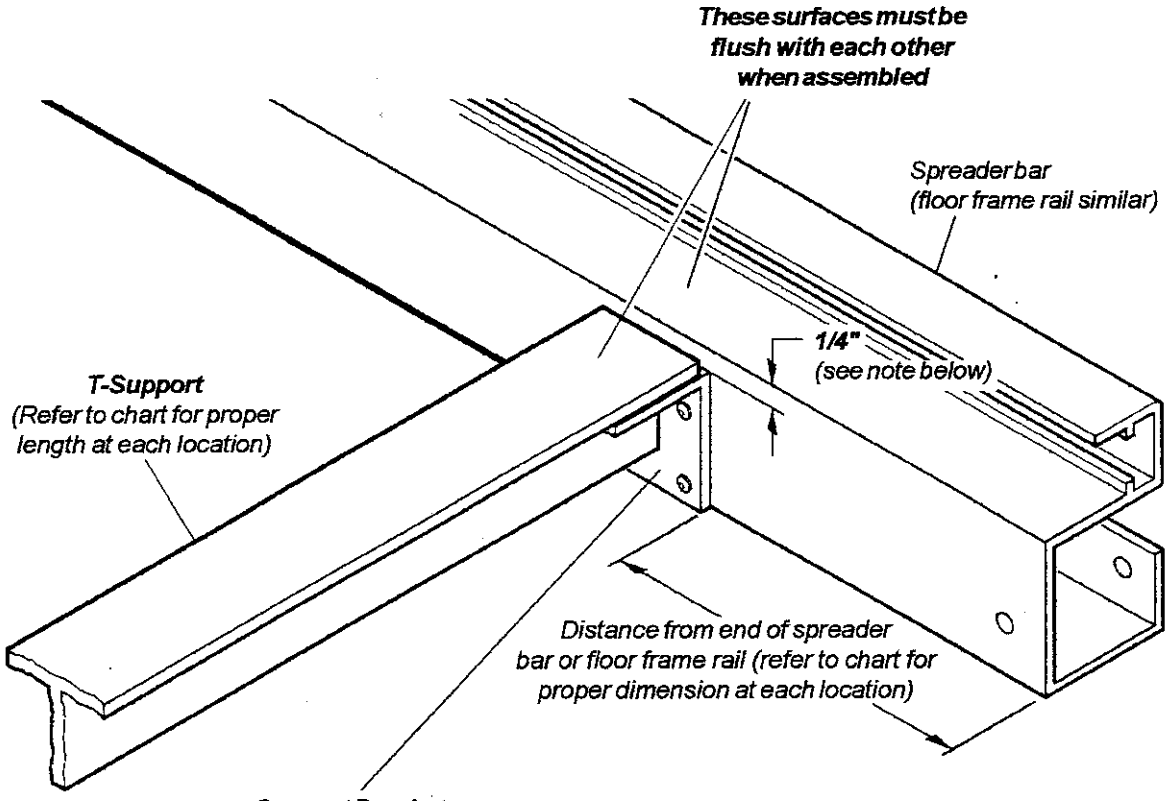
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS (Portable Model Only) Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Detail of Floor Support Installation



NOTE: *Locate support brackets 1/4" below the surface on which the floor will rest. The bottom of the support bracket will be flush with the bottom of the spreader bar or floor frame rail*

Florida Department of Agriculture & Consumer Services
CHARLES H. BRONSON, Commissioner
Division of Standards, Bureau of Fair Ride Inspections

BUREAU OF FAIR RIDE INSPECTIONS
ADMINISTRATION BUILDING, SUITE
3125 CONNER BOULEVARD, STE. N
TALLAHASSEE, FL 32399-1650
Phone (850) 488-9790

December 4, 2003

RE: CRM Service Bulletin B408CRM124-0

Dear Sir:

Attached you will find Chance Rides Manufacturing, Inc.'s SERVICE BULLETIN B408CRM124-0, dated December 1, 2003, which affects your Chaos Ride, (USAID 04624). This bulletin, enclosed, requires all owner/operators of the noted rides to inspect and rework all sweeps as described in the bulletin and that the rework must be completed within 90 days of the date in the bulletin or by February 28, 2004.

We are providing you a copy of the bulletin and notice that this rework will be required on all affected Chaos ride operating in Florida after February 28, 2004, otherwise the ride will be red-tagged until the work is completed and a fee for red-tag removal will be charged.

If you have any questions regarding this matter please do not hesitate to call or write me.

Sincerely,

Michael W. Rinehart
(850) 922-2330

Enclosure

CHANCE RIDES MANUFACTURING, INC.
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Website: www.rides.com
E-mail: rides@rides.com

Bulletin No: B408CRM124-0
Release Date: December 1, 2003
Effective Date: Immediately
Supersedes: B408CRM115-0
Completion Date: March 1, 2004

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Sweep Rework

Reason For Release:

Service bulletin B408CRM115-0 is superseded by this bulletin and is no longer in effect.

Chance Rides Manufacturing, Inc. has become aware that cracks can develop in the sweeps of the CHAOS amusement ride. A kit has been developed to reinforce the sweeps.

Action to be Taken:

Chance Rides Manufacturing, Inc. requires all owner/operators of the above noted CHAOS amusement rides to inspect and rework all sweeps as described in this bulletin. The rework must be completed within 90 days of the release date of this bulletin.

Order and install the Sweep Reinforcement Kit (number K408CRM115-0). The kit includes all necessary parts to rework one complete ride. Complete installation instructions are provided with the kit. The ride can be operated until the Sweep Reinforcement Kit is installed. During this time, the sweeps must be inspected weekly as described in this bulletin.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

CHANCE RIDES MANUFACTURING, INC.
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E-mail: rides@rides.com

Bulletin No:	B408CRM124-0
Release Date:	December 1, 2003
Effective Date:	Immediately
Supersedes:	B408CRM115-0
Completion Date:	March 1, 2004
Page:	2 of 4

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Sweep Inspection Procedure

Visually inspect every sweep for cracks as shown in the illustration on the next page, paying particular attention to the areas indicated by arrows. Look for indications in the steel tubes, and check the welded joints for indications in the welds and the parent metal.

NOTE: Some rides have been reworked per Service Bulletin B408CRM110-0. The inspection described in this bulletin applies to ALL RIDES, whether they have been reworked or not.

IF NO INDICATIONS ARE FOUND, order and install the Sweep Reinforcement Kit (number K408CRM115-0). The ride can be operated until the Sweep Reinforcement Kit is installed. During this time, the sweeps must be inspected weekly as described in this bulletin.

IF ANY INDICATIONS ARE FOUND, do not operate the ride. Contact the Customer Service Department at Chance Rides Manufacturing, Inc. immediately for instructions on the necessary repair procedure. The repair will require specific instructions for repairing cracks prior to installation of the Sweep Reinforcement Kit (number K408CRM115-0).

DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE SWEEPS EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.

After the Sweep Reinforcement Kit is installed, the sweeps must be inspected annually as described in this bulletin.

NOTE: The installation of the Sweep Reinforcement Kit can be visually verified as shown in the illustration on page 4 of this bulletin.

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Bulletin No: B408CRM124-0
Release Date: December 1, 2003
Effective Date: Immediately
Supersedes: B408CRM115-0
Completion Date: March 1, 2004

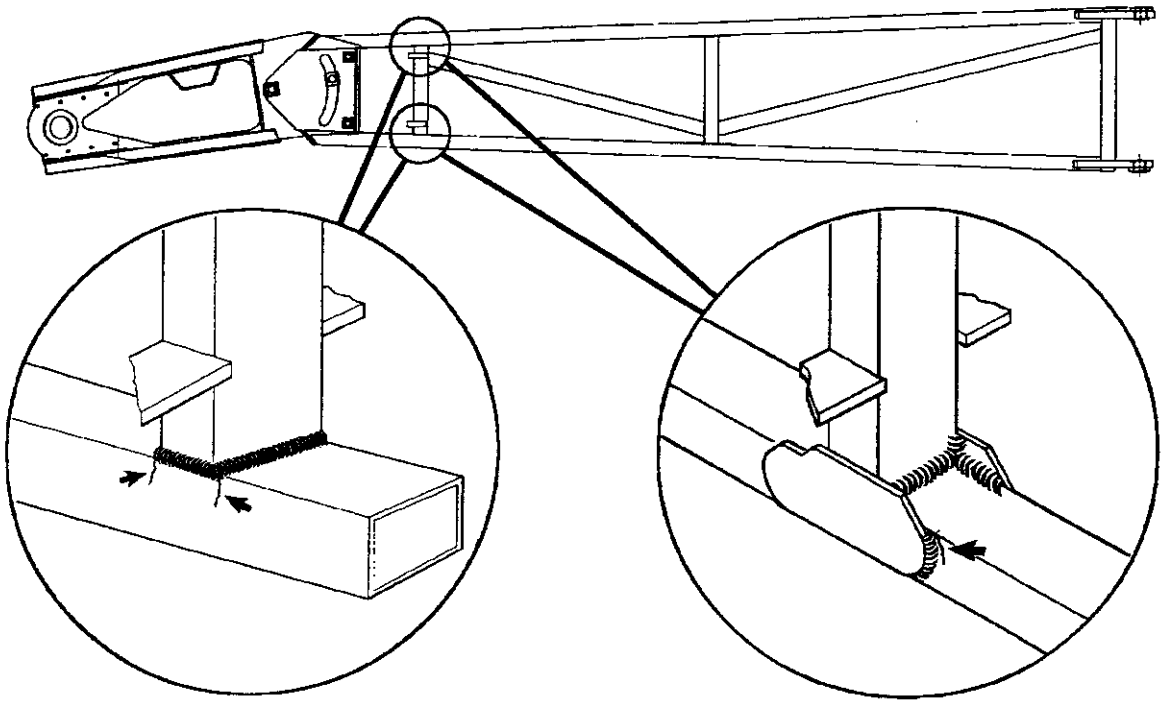
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

NOTE: *Sweep configuration may vary slightly from that shown.*



Rides that have NOT been reworked per Service Bulletin B408CRM110-0

Rides that HAVE been reworked per Service Bulletin B408CRM110-0

Pay particular attention to this area on both the top and bottom tubes of each sweep.

Perform this inspection WEEKLY until the Sweep Reinforcement Kit is installed, then ANNUALLY thereafter.

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Bulletin No:	B408CRM124-0
Release Date:	December 1, 2003
Effective Date:	Immediately
Supersedes:	B408CRM115-0
Completion Date:	March 1, 2004
Page:	4 of 4

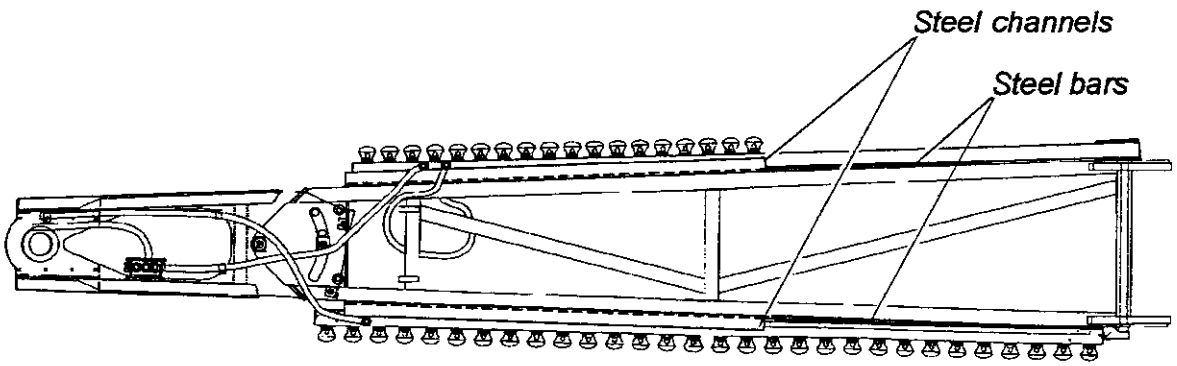
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Installation of the Sweep Reinforcement Kit (number K408CRM115-0) can be visually verified by the channels and bars welded to the upper and lower tubes of every sweep as shown.



On rides with the Sweep Reinforcement Kit installed, perform the inspection described in this bulletin ANNUALLY.

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E-mail: rides@rides.com

Bulletin No:	B408CRM125-0
Release Date:	December 1, 2003
Effective Date:	Immediately
Supersedes:	N / A
Completion Date:	N / A
Page:	1 of 1

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS (Portable Model Only) Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:

Floor Replacement

Reason For Release:

Due to cost and availability, Chance Rides Manufacturing, Inc. is no longer able to supply replacement floor sections for the above noted CHAOS amusement rides. Replacement floors can be fabricated from locally procured materials, using the specifications provided in this bulletin.

Action to be Taken:

In the event that one or more floor sections require replacement, use materials meeting these specifications:

- Flooring - 1" thick plywood, smooth on one side for the top surface. Marine grade plywood is preferred for durability, but not required. DO NOT USE 3/4" THICK PLYWOOD. To ensure a proper fit, use the floor section being replaced as a template.

- Coating - Duraback™ Non-Slip Coating (manufactured by The Durabak Company, Aurora, CO.), applied per the manufacturer's instructions. A minimum of two coats is required on all sides to seal the plywood against moisture.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

Harrison, Allan

From: Rinehart, Michael

Sent: Thursday, May 08, 2003 1:07 PM

To: Timothy Simpson; Allan Harrison; Carlos Corvo; Cliff Groscurth; Hunter Lyles; Jerry Callahan; Jerry Winters; Keith Garner; Kevin Waters; Larry Cook; Mark (BFI) Gonzalez; Randy Fleck; Roland Guay; Brooks, Ronald; Mosher, Bradford

Subject: 03-13 Chance Chaos B408CRM115-0

PLEASE HIT REPLY/SEND TO ACKNOWLEDGE RECEIPT OF THIS BULLETIN.

Attached is another 4 page Chaos bulletin in Word.doc regarding sweep inspections and cracks found thereon. Please save to your bulletin file or disk.

MWRinehart

03-17

CRM

CHANCE RIDES MANUFACTURING, INC.
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E-mail: rides@rides.com

Bulletin No: B408CRM115-0
Release Date: May 9, 2003
Effective Date: Immediately
Supersedes: B408CRM110-0
Completion Date: N/A

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Sweep Inspection

Reason For Release:

Service bulletin B408CRM110-0 is superseded by this bulletin and is no longer in effect.

Chance Rides Manufacturing, Inc. has become aware of cracks in the sweeps of at least one CHAOS amusement ride. A kit has been developed to repair and reinforce the sweeps in the event that cracks develop. The kit is not required unless indications are found on one or more sweeps.

Action to be Taken:

Chance Rides Manufacturing, Inc. requires all owner/operators of the above noted CHAOS amusement rides to immediately inspect all sweeps as described in this bulletin. The inspection must be performed weekly.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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Bulletin No:	B408CRM115-0
Release Date:	May 9, 2003
Effective Date:	Immediately
Supersedes:	B408CRM110-0
Completion Date:	N/A
Page:	2 of 4

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Sweep Inspection Procedure

Visually inspect every sweep for cracks as shown in the illustration on the next page, paying particular attention to the areas indicated by arrows. Look for indications in the steel tubes, and check the welded joints for indications in the welds and the parent metal.

NOTE: Some rides have been reworked per Service Bulletin B408CRM110-0. The inspection described in this bulletin applies to ALL RIDES, whether they have been reworked or not.

IF NO INDICATIONS ARE FOUND, the ride can be operated normally. The sweeps must be inspected weekly as described in this bulletin.

IF ANY INDICATIONS ARE FOUND, do not operate the ride. Contact the Customer Service Department at Chance Rides Manufacturing, Inc. immediately for instructions on the necessary repair procedure. The repair will include the installation of the Sweep Reinforcement Kit (number K408CRM115-0), as well as specific instructions for repairing cracks.

DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE SWEEPS EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.

After the Sweep Reinforcement Kit is installed, the sweeps must be inspected annually as described in this bulletin.

NOTE: The installation of the Sweep Reinforcement Kit can be visually identified as shown in the illustration on page 4 of this bulletin.

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Bulletin No:	B408CRM115-0
Release Date:	May 9, 2003
Effective Date:	Immediately
Supersedes:	B408CRM110-0
Completion Date:	N/A
Page:	3 of 4

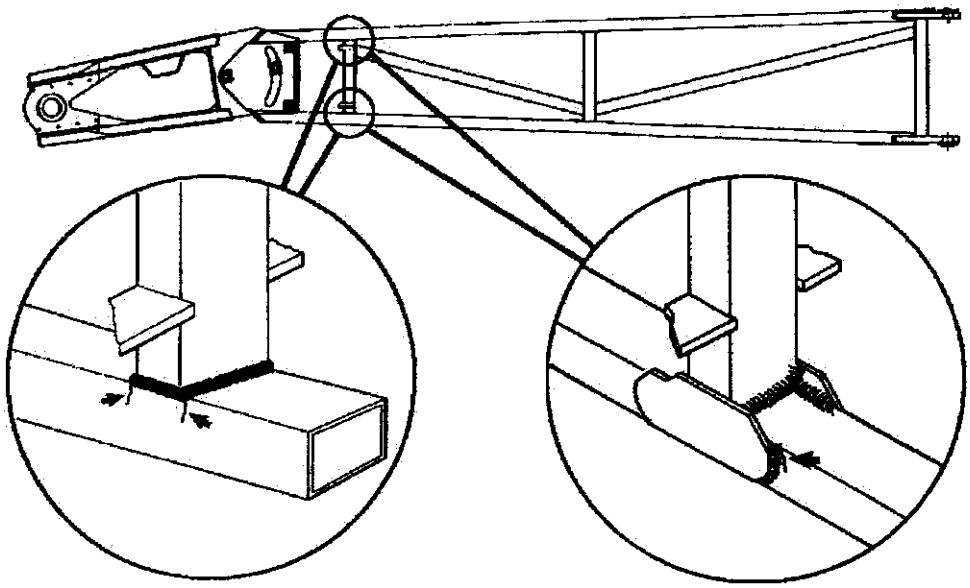
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

NOTE: Sweep configuration may vary slightly from that shown.



Rides that have NOT been reworked per Service Bulletin B408CRM110-0

Rides that HAVE been reworked per Service Bulletin B408CRM110-0

Pay particular attention to this area on both the top and bottom tubes of each sweep.

Perform this inspection WEEKLY.

CHANCE RIDES MANUFACTURING, INC.
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Bulletin No:	B408CRM115-0
Release Date:	May 9, 2003
Effective Date:	Immediately
Supersedes:	B408CRM110-0
Completion Date:	N/A
Page:	4 of 4

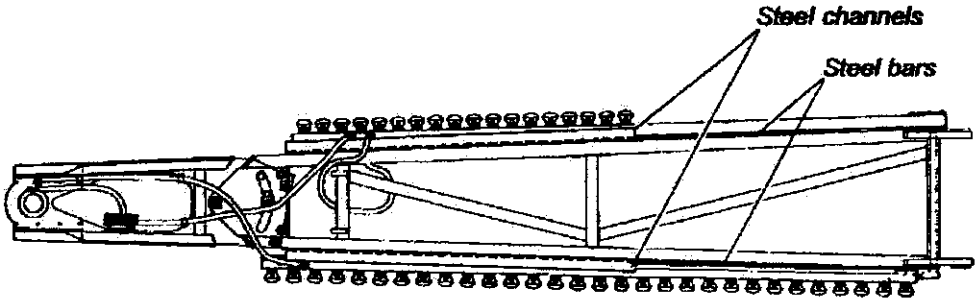
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Installation of the Sweep Reinforcement Kit (K408CRM115-0) can be visually verified by the channels and bars welded to the upper and lower tubes of every sweep as shown.



On rides with the Sweep Reinforcement Kit installed, perform the inspection described in this bulletin ANNUALLY.

4200 W. Walker
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Faxes: 316-945-3498
Web: www.rides.com

CRM
CHANCE RIDES MANUFACTURING, INC.

Fax

To: Gene Chaffee
Amusements of Buffalo

From: Steven Laycock QA/Product Safety Mang.

Fax: 800-859-8365 **Pages:** 1

Phone: **Date:** February 14, 2003

Re: CHAOS s/n 408-00996 **CC:**

Repair procedure of the stationary sweep for the indication as found today is as follows:

1. Grind out indication, making sure entire indication has been removed.
2. Using E7018 electrode a welder certified in SMAW for the position required shall follow D1.1 standards to weld the area which was ground.
3. Continue to inspect repaired area on a regular basis.

If you have any questions regarding this information, please feel free to contact me.

RECEIVED
FEB 20 2003
BUREAU OF
FAIR RIDES INSPECTION

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CRM
CHANCE RIDES MANUFACTURING, INC.

Fax

To: Bobby Gill
Farrow Shows

From: Steven Laycock

Fax: 601-371-0982

Pages: 3

Phone:

Date: February 10, 2003

Re: CHAOS s/n 407-00798

CC:

Chance Rides Manufacturing, Inc. is in the process of reviewing the sweep gusset kit, number K40BCRM110-0, for the above noted amusement ride. Until final evaluation of this kit can be completed, CRM is granting an extension for the completion date as was originally stated in CRM Service Bulletin number B40BCRM110-0. We expect to have the evaluation completed by the end of February and will issue supplemental information as soon as it is available.

Operation of the above noted amusement ride can continue without the installation of the above noted kit as long as inspection of the sweeps per CRM Service Bulletin number B40BCRM106-0 (included with this fax) is continued.

If you have any questions regarding this matter, please feel free to contact me.

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CRM
CHANCE RIDES MANUFACTURING, INC.

Fax

To: Kevin
Murphy Brothers

From: Steven Laycock

Fax:

Pages: 1

Phone:

Date: January 23, 2003

Re: CHAOS s/n 408-03998

CC: State of Florida 850-488-9023

Per our phone conversation of today and the description of the suspected indication found on the cross rod of the above noted amusement ride when the ride was inspected in accordance with CRM Service Bulletin number B408CRM111-0, please find following, action items to be taken at this particular time.

1. Grind out the weld where the suspected indication was found. Take care as to not gouge the rod.
2. Test to determine that the indication has been removed.
3. Preheat the rod 50 degrees above the ambient temperature.
4. A welder certified in accordance with AWS in SMAW shall weld the tube to the rod using E7018 an electrode.
5. Sand all stop and starts to contour weld as to eliminate craters, sharp profiles, or excessive reinforcement.
6. All work must be done in accordance with AWS D1.1.

If you have any questions regarding this information, please feel free to contact me.

Subject: [Fwd: CHAOS Service Bulletins B408CRM104-0, B408CRM110-0 and B408CRM111-0John C. Morse]
Date: Wed, 13 Nov 2002 07:10:49 -0500
From: "Michael W Rinehart" <rineham@doacs.state.fl.us> Internal
To: Ron Brooks <brooksr@doacs.state.fl.us> , Randy Fleck <fleckr@doacs.state.fl.us> , Jerry Callahan <callahj@doacs.state.fl.us> , Cliff Groscurth <groscuc@doacs.state.fl.us> , Brad Mosher <mosherb@doacs.state.fl.us> , Allan Harrison <harrisa@doacs.state.fl.us> , Timothy Simpson <simpsoti@doacs.state.fl.us> , Carlos Corvo <corvoc@doacs.state.fl.us> , Hunter Lyles <lylesh@doacs.state.fl.us> , Jerry Winters <winterj@doacs.state.fl.us> , Charlie Stegall <stegalc@doacs.state.fl.us> , Larry Cook <cookl@doacs.state.fl.us> , Keith Garner <garnerk@doacs.state.fl.us> , Roland Guay <guayr@doacs.state.fl.us> , Kevin Waters <waters.k@worldnet.att.net>

Here's three new Chaos bulletins. If you can't open or print them out let me know I'll re send them as Word.doc.
Mike

Subject: CHAOS Service Bulletins B408CRM104-0, B408CRM110-0 and B408CRM111-0John C. Morse
Date: Tue, 12 Nov 2002 16:03:43 -0600
From: "Stu Demuth" <stu.demuth@rides.com>
To: <Inspectors@rides.com>

Attached are three service bulletins being issued today. Please read immediately.
.
These service bulletins can also be found on our website, www.rides.com.
.
If you have any questions or you are not able to open the attachments, please call the Chance Customer Service Department.
.

104.PDF	**Name:** 104.PDF **Type:** Acrobat (application/pdf) **Encoding:** base64
110.PDF	**Name:** 110.PDF **Type:** Acrobat (application/pdf) **Encoding:** base64
111.PDF	**Name:** 111.PDF **Type:** Acrobat (application/pdf) **Encoding:** base64

CHANCE RIDES MANUFACTURING, INC.
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E-mail: rides@rides.com

Bulletin No: B408CRM104-0
Release Date: November 6, 2002
Effective Date: November 6, 2002
Supersedes: B408R1210-0
Completion Date: N/A

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Inspection, Replacement and Operation of Hydraulic Lock Cylinders

Reason For Release:
Chance Rides, Inc. service bulletin B408R1210-0 is superseded by this bulletin and is no longer in effect.

The passenger restraint system on the above noted CHAOS amusement rides incorporates three hydraulic lock cylinders on each vehicle - one for each lap bar and one for the secondary restraint bar. In the event a hydraulic lock cylinder fails, a redundant mechanical lock prevents the restraint bar from opening.

The manufacturer of the hydraulic lock cylinder has made design changes over the years to provide better performance and longer service life. With one exception, all versions of this component are acceptable for use on the ride in the locations described on the following pages of this bulletin. A manufacturing defect was discovered in one version. Chance Rides, Inc. service bulletin B408R1210-0 required these cylinders to be removed from service no later than September 18, 1999.

This bulletin provides detailed identification of all versions of the hydraulic locking cylinder and the location where each version can be used.

Action to be Taken:
All owners of the above noted amusement rides are required to inspect all hydraulic lock cylinders and the locations where they are installed per the instructions on the following pages of this bulletin. Order and install part number 22162104 in the appropriate quantity to replace any cylinder which does not meet the specifications provided.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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Bulletin No:	B408CRM104-0
Release Date:	November 6, 2002
Effective Date:	November 6, 2002
Supersedes:	B408R1210-0
Completion Date:	N/A
Page:	2 of 6

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

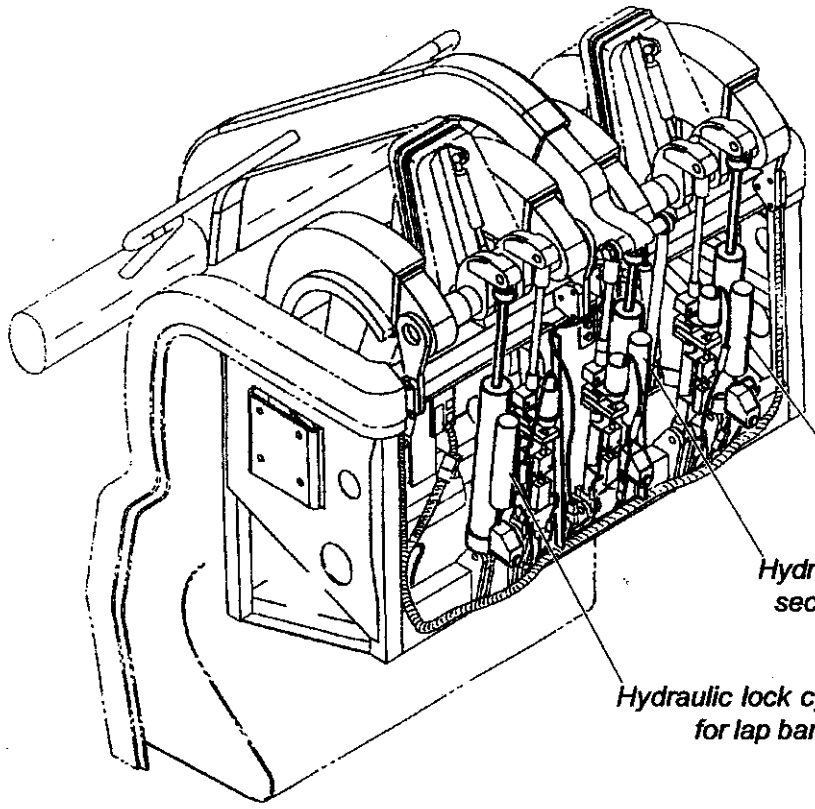
Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Inspection Procedure

Inspect the three hydraulic lock cylinders on all vehicles (54 total). Identify the cylinders based on the distinguishing characteristics detailed on the next page.



IMPORTANT:
Note the location at which each cylinder is installed. Pay particular attention to the cylinder for the secondary restraint bar (center position).

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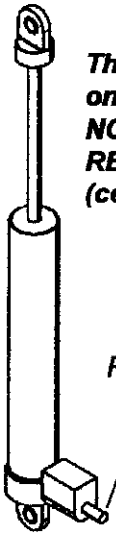
Bulletin No: B408CRM104-0
Release Date: November 6, 2002
Effective Date: November 6, 2002
Supersedes: B408R1210-0
Completion Date: N/A

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

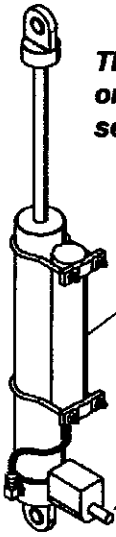
Model No.: 408

Detail of Issue (continued):



This cylinder can be used on the lap bars, but NOT THE SECONDARY RESTRAINT BARS (center position)

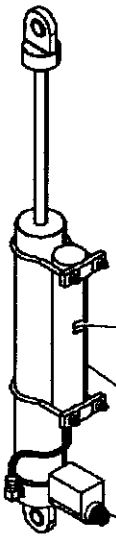
Red release plunger



This cylinder can be used on the lap bars and the secondary restraint bars

Accumulator

Red release plunger



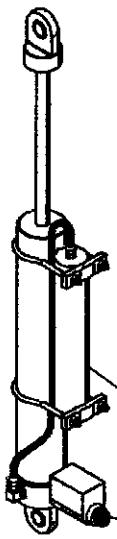
This cylinder can be used on the lap bars and the secondary restraint bars. It MUST HAVE THE STAMPED LETTER as shown.

DO NOT USE THIS CYLINDER IF IT DOES NOT HAVE THE STAMPED LETTER. Replace it with the correct cylinder.

Letter "E" stamped on accumulator

Accumulator with hose coming out of BOTTOM

Black release button



This cylinder can be used on the lap bars and the secondary restraint bars.

Note the hose coming out of the top of the accumulator.

Accumulator with hose coming out of TOP

Black release button

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Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

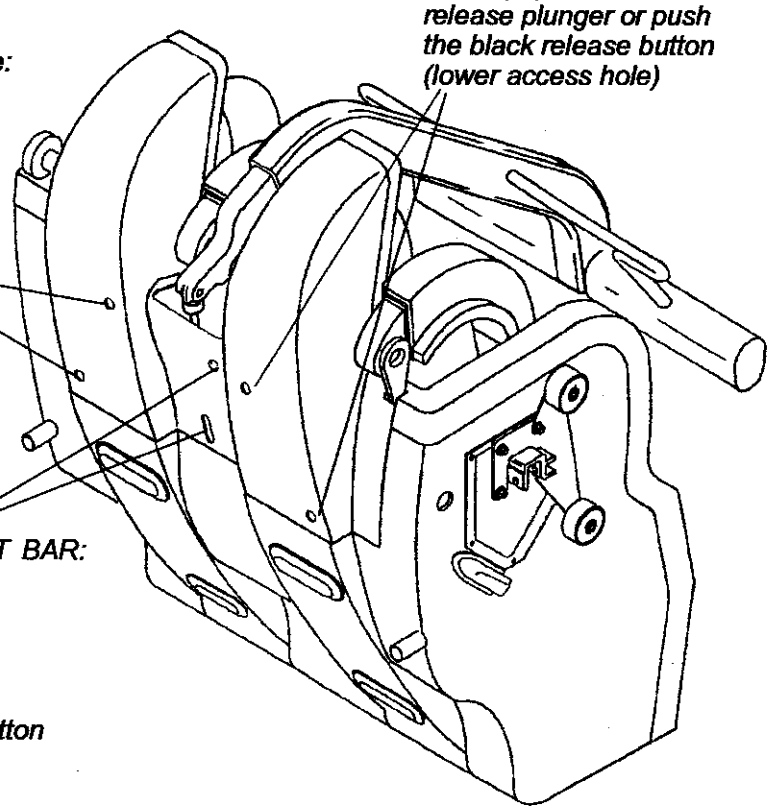
Model No.: 408

Detail of Issue (continued):

Operation - Manually Releasing Passenger Restraints

Use the following information in conjunction with the procedure in the *CHAOS Operation Manual.*

To manually release the LAP BAR on this side of the vehicle:
- *Raise the release lever (top access hole).*
- *While holding the release lever up, pull the red release plunger or push the black release button (lower access hole)*



To manually release the LAP BAR on this side of the vehicle:
- *Raise the release lever (top access hole).*
- *While holding the release lever up, pull the red release plunger or push the black release button (lower access hole)*

To manually release the SECONDARY RESTRAINT BAR:
- *Raise the release lever (top access hole).*
- *While holding the release lever up, pull the red release plunger or push the black release button (lower access hole)*

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Bulletin No:	B408CRM104-0
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Supersedes:	B408R1210-0
Completion Date:	N/A
Page:	5 of 6

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Monthly Inspection of Hydraulic Lock Cylinders

The passenger restraint system on each vehicle incorporates three hydraulic lock cylinders - one for each lap bar and one for the secondary restraint bar. Remove the back cover from the vehicle to gain access to the lock cylinders.

Perform the following inspection on the lock cylinders monthly or at every set-up, whichever occurs first. Check all three lock cylinders on EVERY VEHICLE.

1. Visually inspect each lock cylinder for oil leakage around the seals.
2. Inspect for any signs of external damage, including the spherical bearings in the rod end.
3. Activate the solenoid and check for smooth movement of the piston rod in extension and compression.
4. Inspect the piston rod for any evidence of damage. DO NOT PUT CLAMP PRESSURE ON THE PISTON ROD.
5. Inspect the accumulator hose and hose fittings for leakage.
6. Inspect the solenoid valve for damage.
7. Inspect the accumulator clamp nuts to ensure the nuts are tight and have not loosened.

If any sign of damage, leakage or other malfunction is noted, REPLACE THE LOCK CYLINDER.

IMPORTANT: *Passenger restraint lock cylinders are not repairable in the field. If a damaged or malfunctioning lock cylinder is found, replace it with a new or re-manufactured part, available from CHANCE RIDES MANUFACTURING, INC. DO NOT ATTEMPT TO REPAIR THE CYLINDER.*

WARNING: The passenger restraint lock cylinder is under high pressure. DO NOT ATTEMPT TO DISASSEMBLE the cylinder or serious personal injury can result. Replace the cylinder with a new or re-manufactured part.

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Supersedes: B408R1210-0
Completion Date: N/A

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Storage of Hydraulic Lock Cylinders

To obtain maximum service life from the hydraulic lock cylinders, always close the lap bars and secondary restraint bars during long periods of inactivity, such as during off-season storage of the ride.

The accumulator (if equipped) has a breather at the end opposite the hose. Do not allow precipitation to enter the breather. This will cause the unit to malfunction or become damaged. The breather should be covered during long periods of inactivity, such as during winter storage. If precipitation should enter into the breather, turn the lock cylinder over and allow the moisture to drain out. DO NOT ALLOW MOISTURE TO FREEZE INSIDE THE ACCUMULATOR, or permanent damage to the lock cylinder can result.

Similarly, if hydraulic lock cylinders are stored separate from the ride (e.g., as spare parts), always fully extend the cylinder before storing. Cover the breather on the accumulator (if equipped) to prevent moisture from entering.

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Bulletin No: B408CRM110-0
Release Date: November 6, 2002
Effective Date: Immediately
Supersedes: B408CRM106-0
Completion Date: February 6, 2003

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Sweep Rework Kit

Reason For Release:

Service bulletin B408CRM106-0 is superseded by this bulletin and is no longer in effect.

Chance Rides Manufacturing, Inc. has become aware of cracks in the sweeps of at least one CHAOS amusement ride. Failure of a sweep could result in serious injury to passengers and/or bystanders. A kit has been developed to reinforce the sweeps.

Action to be Taken:

Chance Rides Manufacturing, Inc. requires all owner/operators of the above noted CHAOS rides to order and install the Sweep Rework Kit, part number K408CRM110-0, within 90 days of the release date of this bulletin. The kit includes all necessary parts to rework one complete ride. Rework instructions are provided in this bulletin. The kit will be offered at a reduced price if ordered within this 90 day period.

After the Sweep Rework Kit is installed, the sweeps must be inspected annually as described in this bulletin.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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E-mail: rides@rides.com

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

SWEEP INSPECTION PRIOR TO REWORK

Carefully inspect all sweeps for cracks or other indications. Look at the welds and parent metal at all joints, paying particular attention to the areas where the gussets will be installed.

DO NOT INSTALL THE REWORK KIT IF THERE ARE CRACKS IN THE SWEEP UNTIL REPAIRS SPECIFIED BY CHANCE RIDES MANUFACTURING, INC. ARE MADE.

- **If any indications are found, DO NOT CONTINUE OPERATION OF THE RIDE.** Contact the Chance Customer Service Department immediately for instructions on further action to be taken.

  DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE SWEEPS, EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.

- **If no indications are found,** order and install the Sweep Rework Kit, part number K408CRM110-0 using the instructions on the following pages of this bulletin.

ANNUAL INSPECTION OF SWEEPS

After Sweep Rework Kit is installed, visually inspect the sweeps **annually** for damage, cracks, or other indications. Look at the welds and parent metal at all joints. If any indications are found, contact the Chance Customer Service Department immediately. **DO NOT CONTINUE OPERATION OF THE RIDE.**

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Bulletin No: B408CRM110-0
Release Date: November 6, 2002
Effective Date: Immediately
Supersedes: B408CRM106-0
Completion Date: February 6, 2003

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

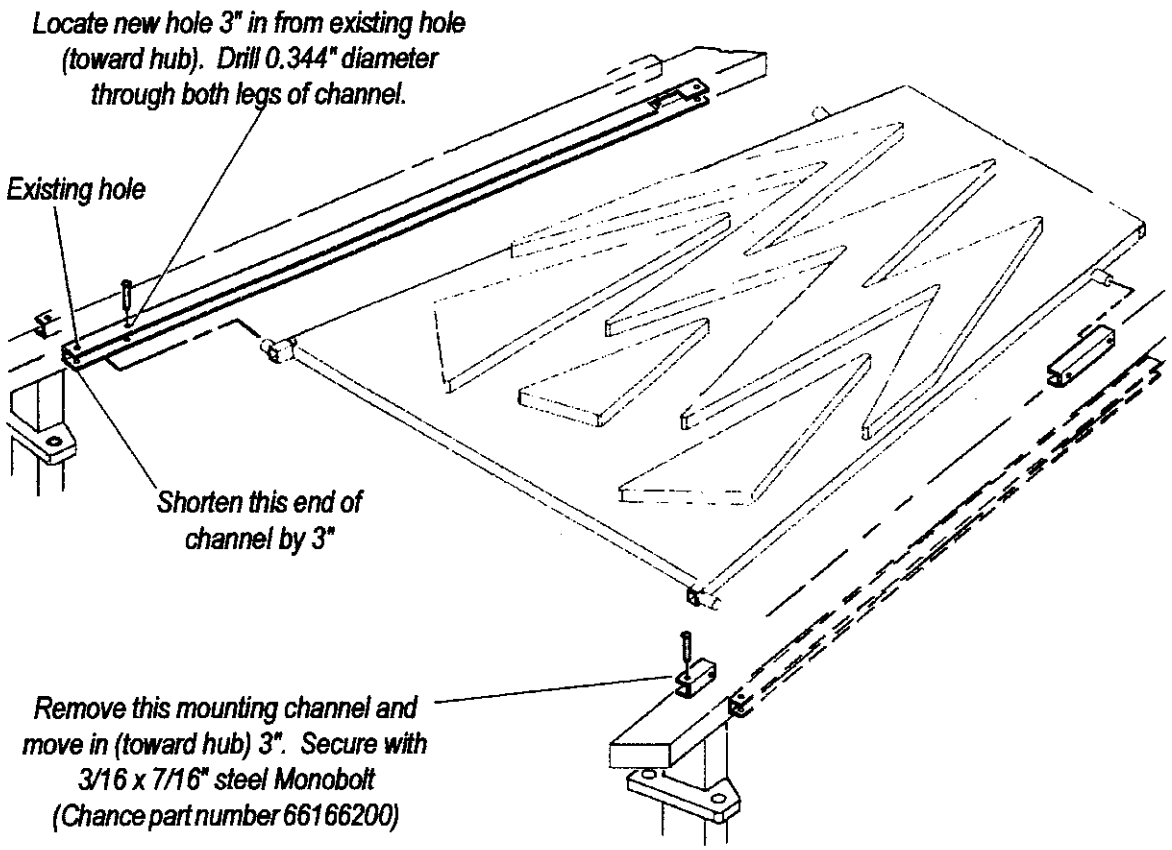
Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

PREPARATION OF SWEEPS FOR REWORK

Modify all mounting channels for the sweep insert panels as shown. This is necessary to provide clearance for the upper doubler plates. Also, modify all sweep insert panels as shown on the next page.



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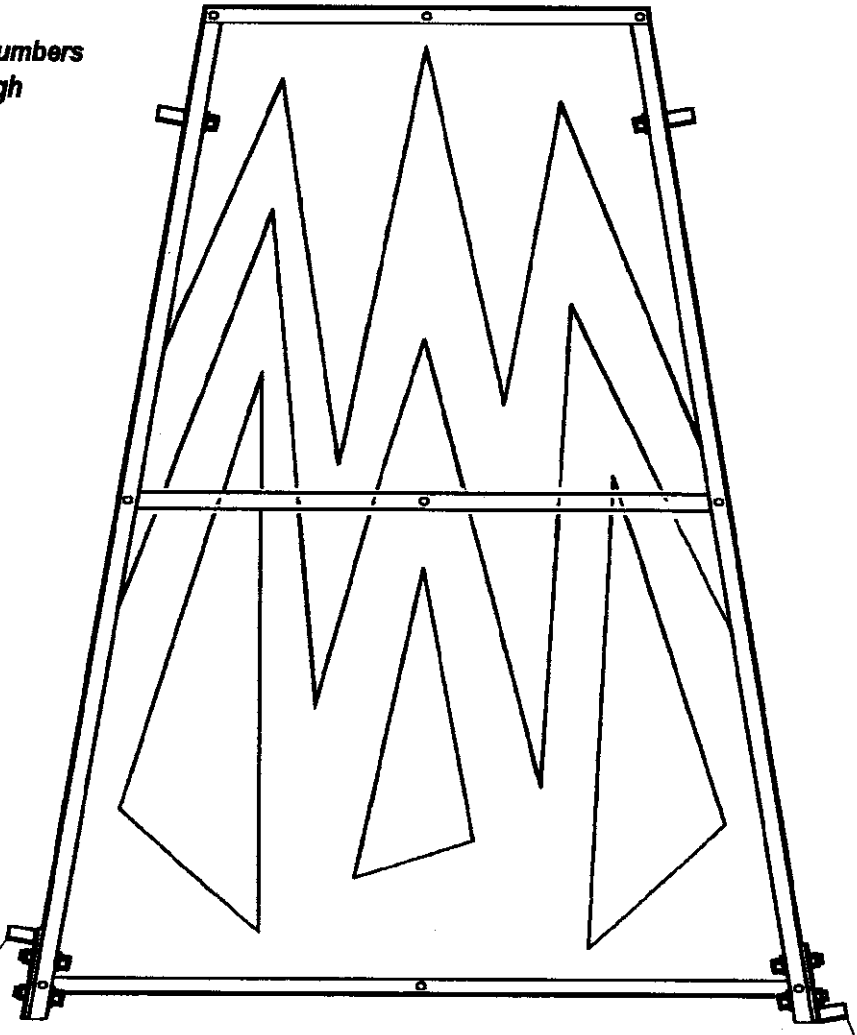
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

For ride serial numbers 408-00196 through 408-04399



Remove guide pin weldments from both sides of sweep insert panel. Turn 180° as shown and mount with existing fasteners.

Original position of guide pin weldments

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Completion Date: February 6, 2003

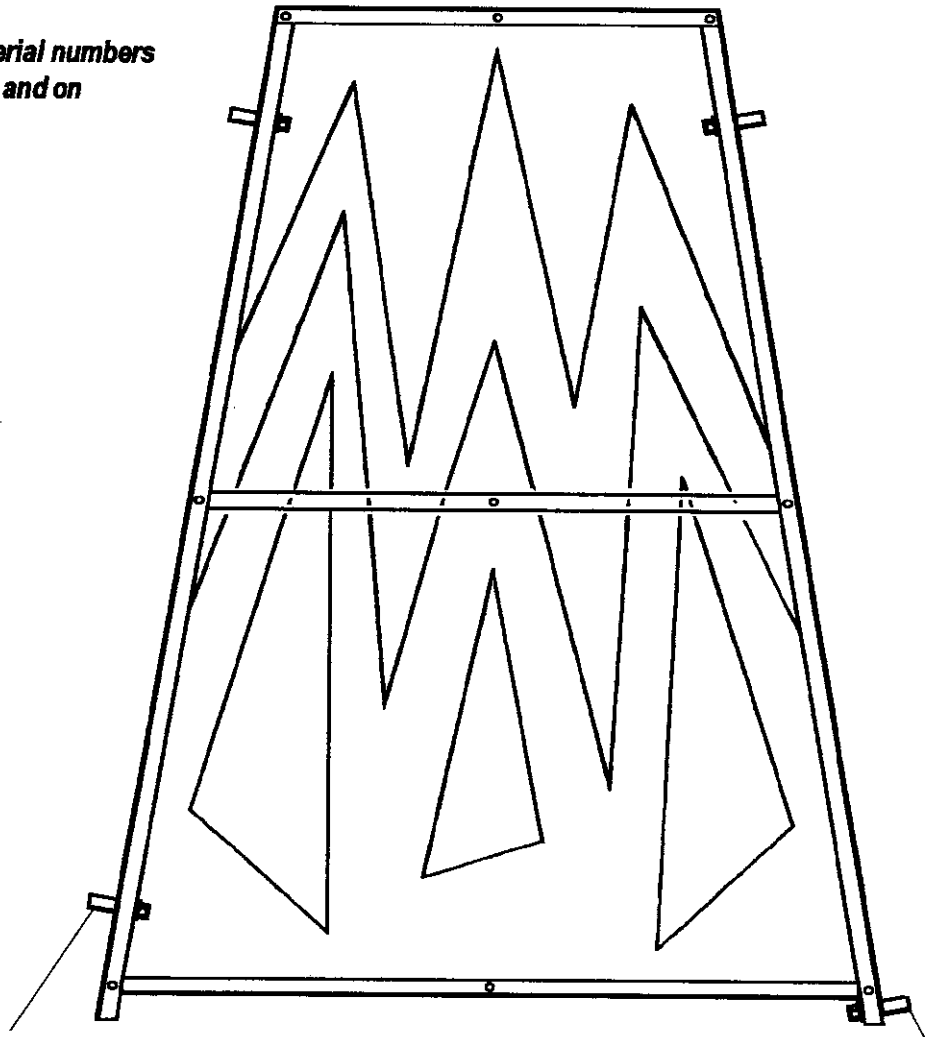
Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

For ride serial numbers 408-04499 and on



Remove guide pins from both sides of sweep insert panel. Locate new holes 3" in from existing holes (toward hub). Drill 0.28" diameter holes through both sides of tube and install guide pins with existing fasteners.

Original position of guide pins

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Page:	6 of 8

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

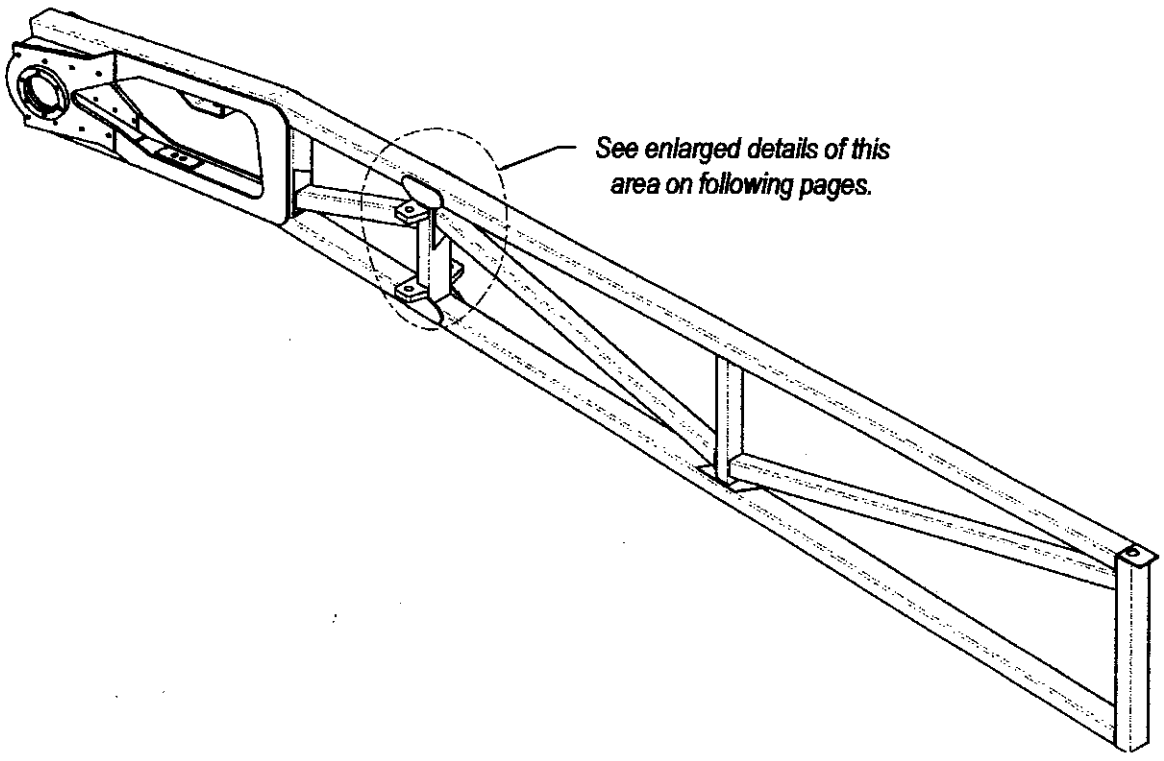
Model No.: 408

Detail of Issue (continued):

SWEEP REWORK PROCEDURE

After inspecting all sweeps to verify that no indications exist, locate and weld the doubler plates on all sweeps as shown in the following illustrations (four places on each sweep). Note the position of the "notched" area of each doubler plate, which is located toward the center hub of the ride. If necessary, grind the existing welds to allow the doubler plates to lay flat against the sweeps.

IMPORTANT: *All welding must be performed in accordance with American Welding Society (AWS) D1.1.*



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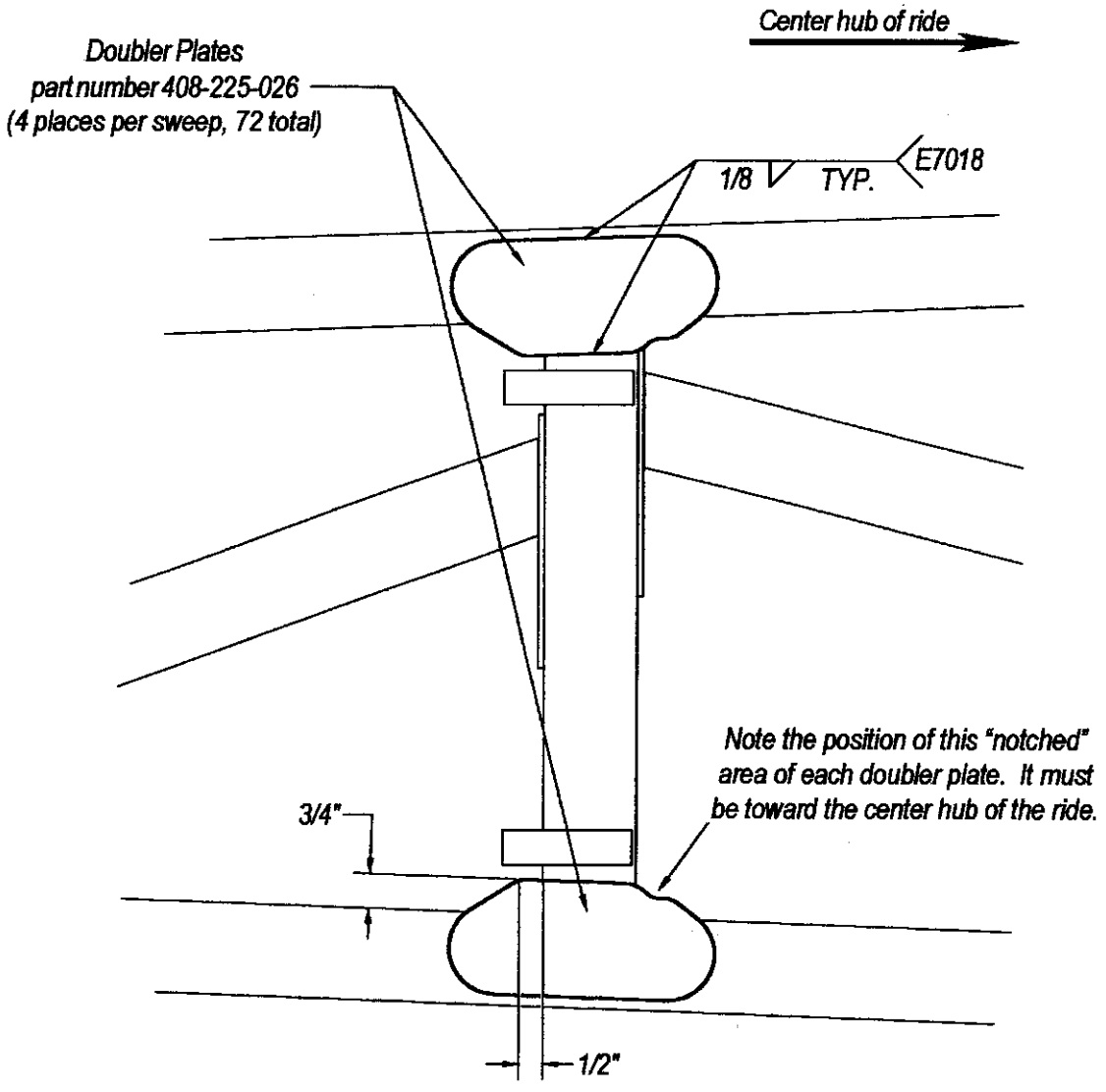
Page:	7 of 8

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):



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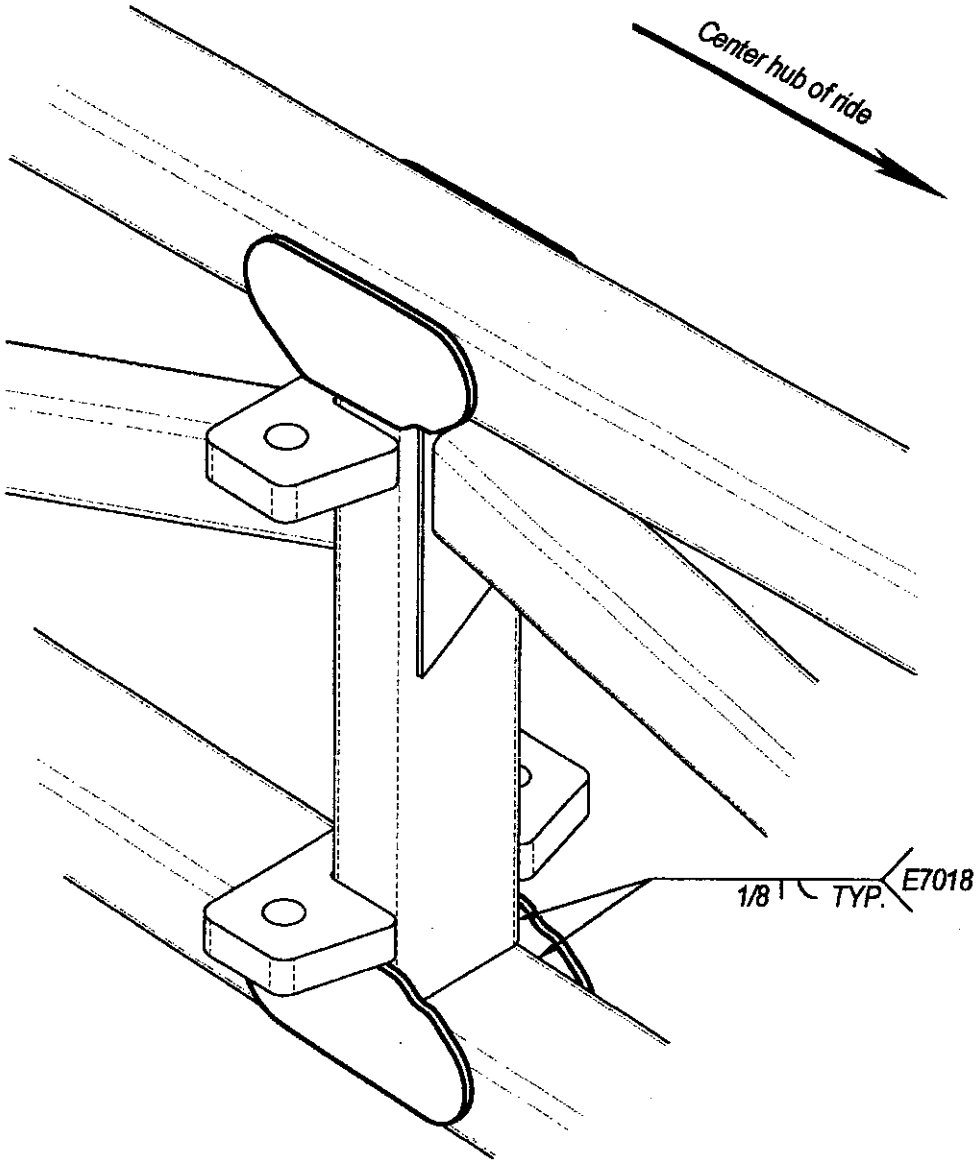
Page:	8 of 8

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):



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Release Date: November 6, 2002
Effective Date: Immediately
Supersedes: N/A
Completion Date: N/A

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Cross Rod Inspection

Reason For Release:
Chance Rides Manufacturing, Inc. has become aware of a cross rod failure on at least one CHAOS amusement ride. Failure of one or more cross rods can result in serious injury to passengers and damage to sweeps and other ride components. This bulletin provides specific inspection information for the cross rods to ensure that they are in good operating condition.

Action to be Taken:
Chance Rides Manufacturing, Inc. requires all owner/operators of the above noted CHAOS rides to inspect all four cross rods at every set-up or monthly, whichever occurs first. The inspection procedure is provided on the following pages of this bulletin.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

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Page:	2 of 3

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

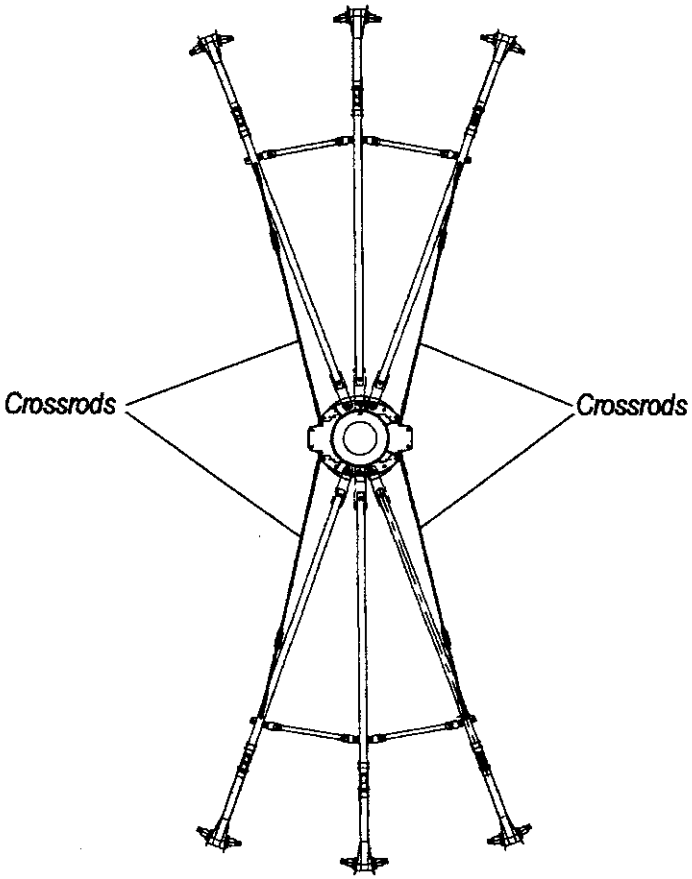
Model No.: 408

Detail of Issue (continued):

CROSS ROD INSPECTION

Carefully inspect the overall condition of all four cross rods. Look for cracks, bends, wear or other damage. Pay particular attention to the welded joints detailed on the next page. If any damage or indications are found, do not operate the ride until repairs have been made.

Also, check the adjustment of the cross rods. Loosen the jam nuts on each turnbuckle and tighten it until snug. Turnbuckles must be tightened so the cross rod is in TENSION, NOT COMPRESSION.



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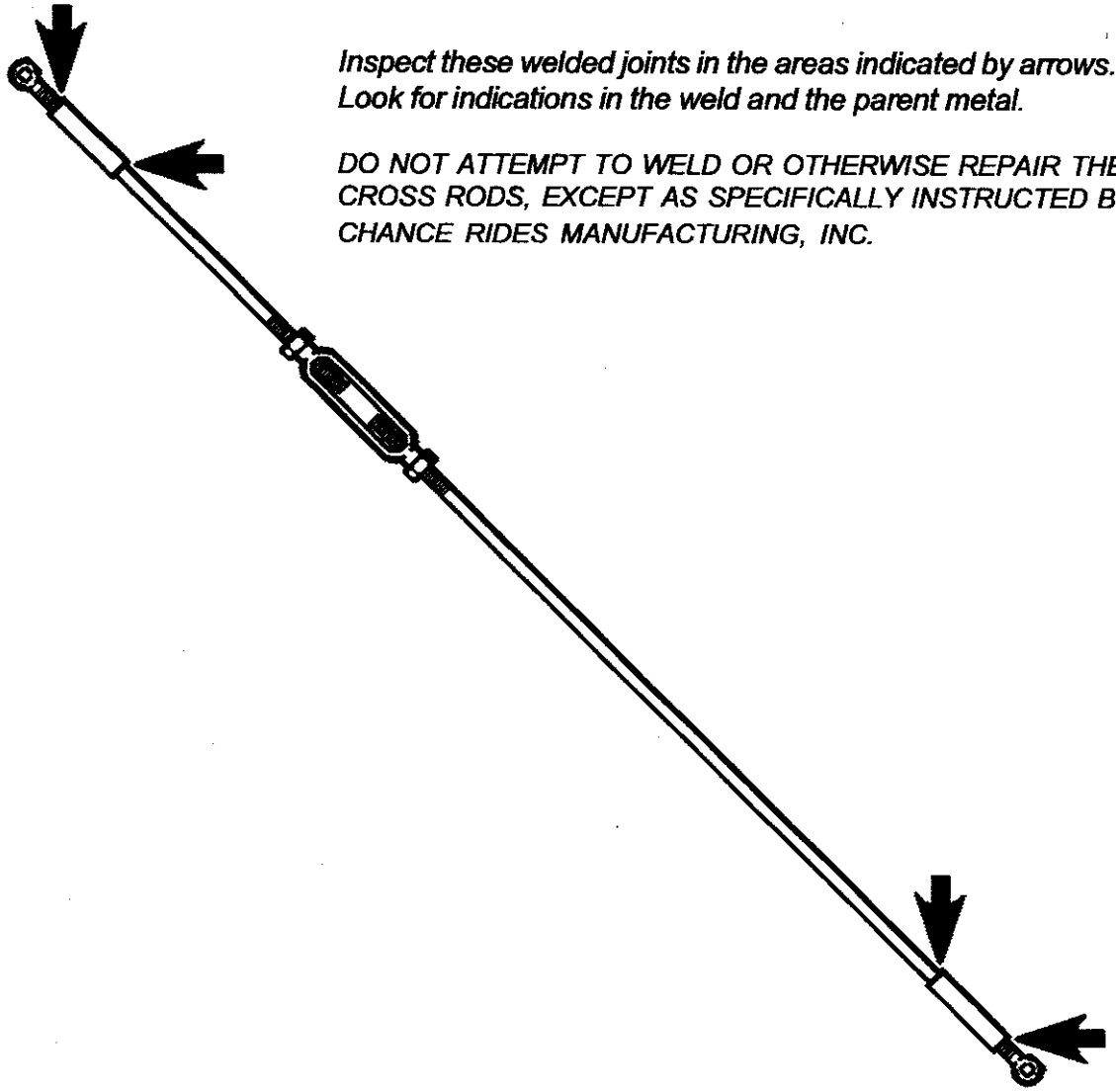
Page:	3 of 3

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):



Inspect these welded joints in the areas indicated by arrows. Look for indications in the weld and the parent metal.

DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE CROSS RODS, EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.

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CRM
CHANCE RIDES MANUFACTURING INC.

Fax

To: Richard Dewberry
Murphy Bothers

From: Steven Laycock

Fax: 352-589-9990 **Pages:** 1

Phone: **Date:** November 8, 2002

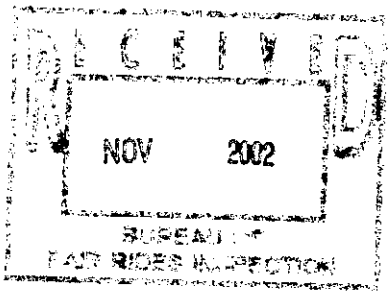
Re: CHAOS s/n 408-03998 **CC:**

The above noted amusement ride was designed with 18 cars. Likewise, the ride was designed for all of the cars and passenger restraint systems to function as intended. Any operation of the ride outside of these design parameters must be done with extreme care.

If a restraint system on a particular seat is not functioning properly, it may be possible to lock out that particular car in an appropriate manner to allow continued operation of the ride. If a particular car is locked out, it must be done in such a manner as to prevent an individual from accidentally entering the car. If such a program is in existence and the malfunctioning passenger restraint system is contained to a particular car, not affecting the safety systems of the other cars, the ride can continue to operate.

Any operation of the ride outside the original design parameters should be considered as temporary. If such problems exist, they should be corrected as soon as possible. Continued operation of the ride beyond a two week time period in such a condition is not recommended.

If you have any questions regarding this information, please feel free to contact me.



Subject: 02-16 Chance Chaos Bulletin M106
Date: Mon, 05 Aug 2002 12:33:40 -0400
From: "Michael W Rinehart" <rineham@doacs.state.fl.us> Internal
To: Ron Brooks <brooksr@doacs.state.fl.us> , Randy Fleck <fleckr@doacs.state.fl.us> , Jerry Callahan <callahj@doacs.state.fl.us> , Cliff Groscurth <groscuc@doacs.state.fl.us> , Brad Mosher <mosherb@doacs.state.fl.us> , Allan Harrison <harrisa@doacs.state.fl.us> , Timothy Simpson <simpsoti@doacs.state.fl.us> , Carlos Corvo <corvoc@doacs.state.fl.us> , Hunter Lyles <lylesh@doacs.state.fl.us> , Jerry Winters <winterj@doacs.state.fl.us> , Charlie Stegall <stegalc@doacs.state.fl.us> , Larry Cook <cookl@doacs.state.fl.us> , Keith Garner <garnerk@doacs.state.fl.us> , Roland Guay <guayr@doacs.state.fl.us> , Kevin Waters <waters.k@worldnet.att.net>

Please hit REPLY/SEND to acknowledge receipt of this bulletin BFI number 02-16 (Chance Bulletin M106) for Sweep Inspections issued by Chance on 7/30/02.

Thanks,
Mike

02-16 Chnc Chaos M106.doc	**Name:** 02-16 Chnc Chaos M106.doc **Type:** WINWORD File (application/msword) **Encoding:** base64

Subject: 02-16 Again...
Date: Mon, 05 Aug 2002 15:27:52 -0400
From: "Michael W Rinehart" <rineham@doacs.state.fl.us> Internal
To: Ron Brooks <brooksr@doacs.state.fl.us> , Randy Fleck <fleckr@doacs.state.fl.us> , Jerry Callahan <callahj@doacs.state.fl.us> , Cliff Groscurth <groscuc@doacs.state.fl.us> , Brad Mosher <mosherb@doacs.state.fl.us> , Allan Harrison <harrisa@doacs.state.fl.us> , Timothy Simpson <simpsoti@doacs.state.fl.us> , Carlos Corvo <corvoc@doacs.state.fl.us> , Hunter Lyles <lylesh@doacs.state.fl.us> , Jerry Winters <winterj@doacs.state.fl.us> , Charlie Stegall <stegalc@doacs.state.fl.us> , Larry Cook <cookl@doacs.state.fl.us> , Keith Garner <garnerk@doacs.state.fl.us> , Roland Guay <guayr@doacs.state.fl.us> , Kevin Waters <waters.k@worldnet.att.net>

Here it is again WITH the second page. Sorry bout that.

MWr

02-16 Chnc Chaos M106.doc	**Name:** 02-16 Chnc Chaos M106.doc **Type:** WINWORD File (application/msword) **Encoding:** base64

CHANCE RIDES MANUFACTURING, INC.
4200 Walker
Wichita, KS 67277-2328
U.S.A.
Phone: 1-316-942-7411 • FAX: 1-316-942-2012
Website: www.rides.com
E-mail: rides@rides.com

Bulletin No:	B408CRM106-0
Release Date:	July 30, 2002
Effective Date:	Immediately
Supersedes:	N/A
Completion Date:	October 30, 2002
Page:	1 of 2

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Sweep Inspection

Reason For Release:
Chance Rides Manufacturing, Inc. has become aware of cracks in the sweeps of at least one CHAOS amusement ride. Failure of a sweep could result in serious injury to passengers and/or bystanders.

Action to be Taken:
Chance Rides Manufacturing, Inc. requires all owner/operators of the above noted CHAOS rides to cease operation of the ride until the inspection described in this bulletin is performed. If any indications are found, contact the Customer Service Department at Chance Rides Manufacturing, Inc. immediately for instructions on further action to be taken.

DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE SWEEPS EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES MANUFACTURING, INC.

If no indications are found, operation of the ride can resume. However, all sweeps must be inspected as described MONTHLY.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

CHANCE RIDES MANUFACTURING, INC.
4200 Walker
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Bulletin No:	B408CRM106-0
Release Date:	July 30, 2002
Effective Date:	Immediately
Supersedes:	N/A
Completion Date:	October 30, 2002
Page:	2 of 2

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

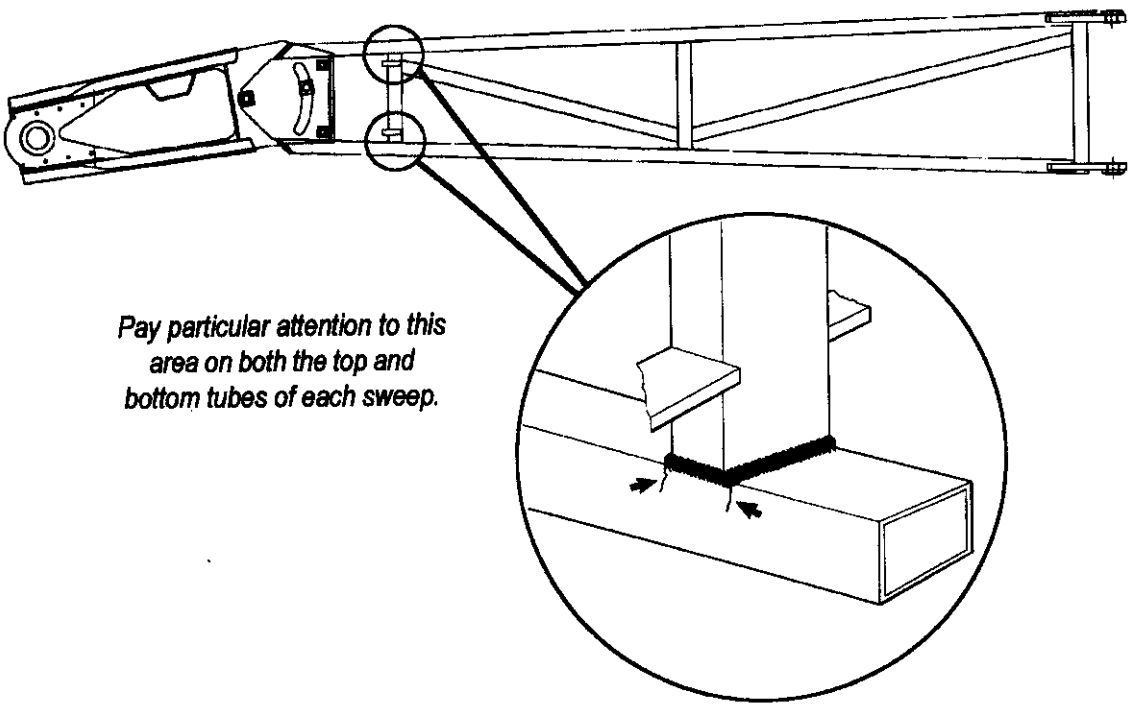
Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Detail of Issue (continued):

Sweep Inspection Procedure

Visually inspect every sweep, paying particular attention to the areas indicated in the following illustration. Look for indications in the steel tubes, and check the welded joints for indications in the welds and the parent metal. If any indication is found, DO NOT OPERATE THE RIDE. Contact the Customer Service Department at Chance Rides Manufacturing, Inc. for specific instructions on further action to be taken.



Pay particular attention to this area on both the top and bottom tubes of each sweep.

Subject: 02-15 Chance Chaos Bulletin M101
Date: Mon, 05 Aug 2002 12:27:50 -0400
From: "Michael W Rinehart" <rineham@doacs.state.fl.us> Internal
To: Ron Brooks <brooksr@doacs.state.fl.us> , Randy Fleck <fleckr@doacs.state.fl.us> , Jerry Callahan <callahj@doacs.state.fl.us> , Cliff Groscurth <groscuc@doacs.state.fl.us> , Brad Mosher <mosherb@doacs.state.fl.us> , Allan Harrison <harrisa@doacs.state.fl.us> , Timothy Simpson <simpsoti@doacs.state.fl.us> , Carlos Corvo <corvoc@doacs.state.fl.us> , Hunter Lyles <lylesh@doacs.state.fl.us> , Jerry Winters <winterj@doacs.state.fl.us> , Charlie Stegall <stegalc@doacs.state.fl.us> , Larry Cook <cookl@doacs.state.fl.us> , Keith Garner <garnerk@doacs.state.fl.us> , Roland Guay <guayr@doacs.state.fl.us> , Kevin Waters <waters.k@worldnet.att.net>

Please hit REPLY/SEND to acknowledge receipt of this.

Attached is Chance Rides Bulletin re: the Chaos drive pinion bearing lubrication issued 7/30/02.

02-15 Chnc Chaos M101.doc	**Name:** 02-15 Chnc Chaos M101.doc **Type:** WINWORD File (application/msword) **Encoding:** base64

02-15

CHANCE RIDES MANUFACTURING, INC.
4200 Walker
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Phone: 1-316-942-7411 • FAX: 1-316-942-2912
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E-mail: rides@rides.com

Bulletin No: B408CRM101-0
Release Date: July 30, 2002
Effective Date: July 30, 2002
Supersedes: N/A
Completion Date: August 30, 2002

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All Units

Model No.: 408

Abstract of Issue:
Drive Pinion Bearing Housing Lubrication

Reason For Release:
Chance Rides Manufacturing, Inc. has become aware of failure of certain drive components on the CHAOS amusement ride due to two factors:

- Operation of the ride without adequate lubrication of the drive pinion bearing housing. Weekly lubrication with the correct lubricant is required, as specified in the *CHAOS Service Manual*.
- Operation of the ride with the drive pinion cover missing or improperly installed. This can allow water to enter the pinion bearing housing, main drive gearbox and motor.

If either of these conditions exist, failure of expensive drive components can result.

Action to be Taken:
To ensure satisfactory service life of the drive components, all owner/operators of CHAOS amusement rides are required to do the following (refer to the illustration on page 2 of this bulletin):

- Comply with the lubrication instructions in the *CHAOS Service Manual*, including the drive pinion bearing housing lubrication. Apply NLGI No. 2 lithium based grease weekly at the zerk shown.
- Check to make sure the pinion gear cover is installed and sealed with silicone sealant. If the cover is missing, order a new part and install it as shown.
- Make sure the drain holes in both sides of the mounting plate are not plugged.

02-16 pc

CHANCE RIDES MANUFACTURING, INC.
4260 Weller
Wichita, KS 67277-2328
U.S.A.
Phone: 1-316-942-7411 • FAX: 1-316-942-2812
Website: www.rides.com
E-mail: rides@rides.com

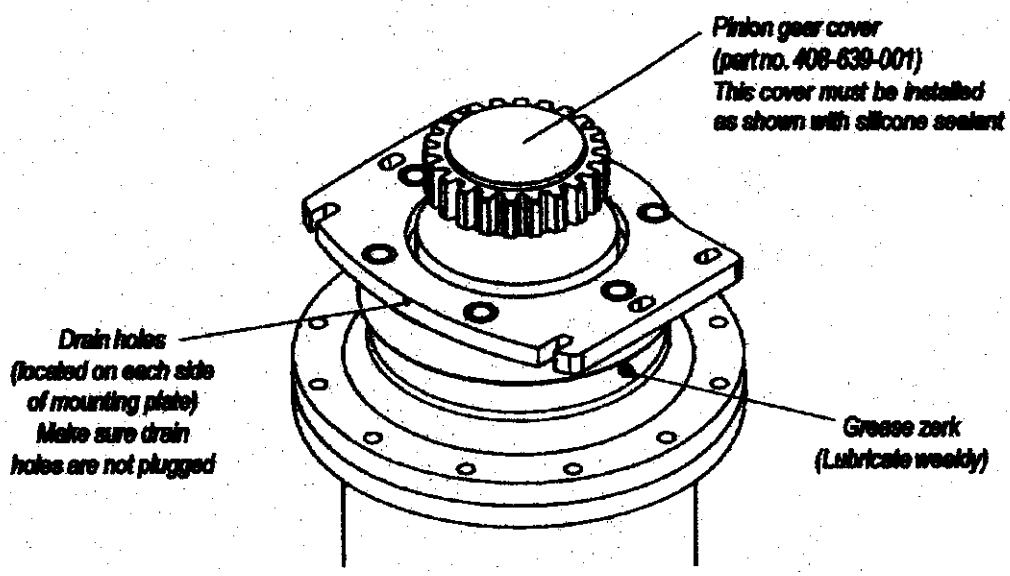
Bulletin No:	B408CRM101-0
Release Date:	July 30, 2002
Effective Date:	July 30, 2002
Supersedes:	N/A
Completion Date:	August 30, 2002
Page:	2 of 2

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Units

Model No.: 408

Details of Issue (continued):



All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. Use only those components authorized, specified or provided by Chance Rides Manufacturing, Inc. All applicable OSHA safety standards and safe industry practices must be observed.

Observe all safety information contained in the manufacturer's manuals. Make available this bulletin and all related technical information to personnel using the equipment.

Subject: 01-06 Chance Chaos reissue of 1181-A
Date: Thu, 09 Aug 2001 14:13:57 -0400
From: Michael Rinehart <rineham@doacs.state.fl.us>
To: Ron Brooks <brooksr@doacs.state.fl.us>, Randy Fleck <fleckr@doacs.state.fl.us>, Jerry Callahan <callahj@doacs.state.fl.us>, Cliff Groscurth <groscuc@doacs.state.fl.us>, Brad Mosher <mosherb@doacs.state.fl.us>, Allan Harrison <harrisa@doacs.state.fl.us>, Timothy Simpson <simpsot@doacs.state.fl.us>, Carlos Corvo <corvoc@doacs.state.fl.us>, Gary Fisher <fisherg@doacs.state.fl.us>, Hunter Lyles <lylesh@doacs.state.fl.us>, Jerry Winters <winterj@doacs.state.fl.us>, Charlie Stegall <stegalc@doacs.state.fl.us>, Larry Cook <cookl@doacs.state.fl.us>, Keith Garner <garnerk@doacs.state.fl.us>, Roland Guay <guayr@doacs.state.fl.us>

Attached bulletin from Chance relating to the complete hub failure in Michigan on July 30, 2001. If you are unable to download this then go to www.rides.com and you can view/print a copy from there. This bulletin emphasizes and supplements the information contained in B408R1181-A (Dec. 1999)
Please acknowledge receipt by hitting "reply then send." Thanks,
Mike Rinehart

0106ChacChaos1181-B.pdf	**Name:** 0106ChacChaos1181-B.pdf **Type:** Acrobat (application/pdf) **Encoding:** base64

01-06

CHANCE RIDES, INC.
4219 Irving
Wichita, KS 67277-2328
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Phone: 1-800-242-6231 • FAX: 1-316-942-7416
Website: www.rides.com

Bulletin No: B408R1181-B
Release Date: August 3, 2001
Effective Date: August 3, 2001
Supersedes: B408R1181-A
Completion Date: Immediately

SERVICE BULLETIN 01-06

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All units

Model No.: 408

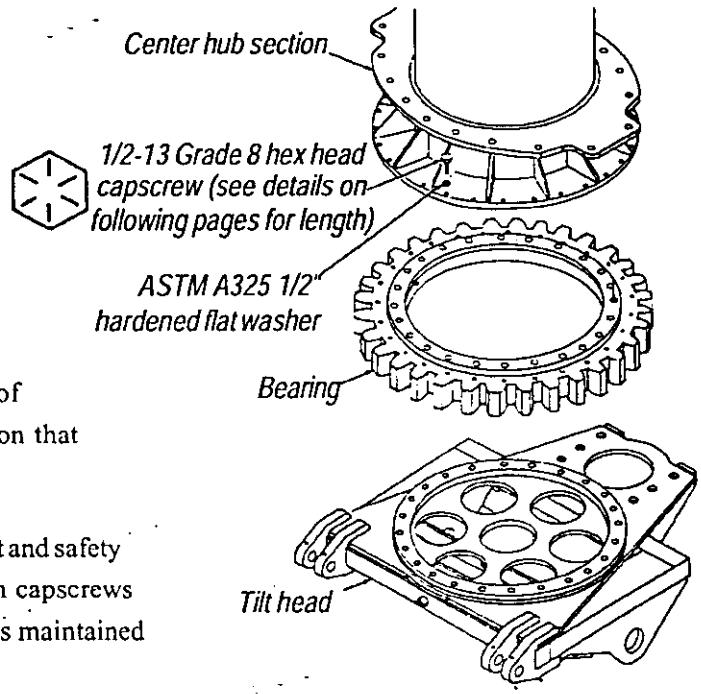
Abstract of Issue:
Hub Capscrew Torque Check 01-06

Reason For Release:

This bulletin supersedes Service Bulletin B408R1181-A. It is being released to emphasize and supplement the information contained in B408R1181-A.

The center hub section on the CHAOS amusement ride is secured to the bearing with 28 Grade 8 hex head capscrews. The correct length of the capscrews varies with the serial number of the ride and with the bearing installed on that specific ride.

It is essential for the care of the equipment and safety of the passengers that the correct length capscrews are installed and that the correct torque is maintained on these capscrews.



Action to be Taken:

Chance Rides, Inc. requires all owner/operators of the above noted amusement rides to immediately perform the inspection described in the bulletin to verify the condition of the tapped holes in the bearing, and to install the correct length of capscrews for that specific ride. Thereafter, the capscrews must be checked for correct torque at least once per month during the operating season.

As with any ride, perform a daily visual check for signs of loose, broken or missing parts.

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Bulletin No:	B408R1181-B
Release Date:	August 3, 2001
Effective Date:	August 3, 2001
Supersedes:	B408R1181-A
Completion Date:	Immediately
Page:	2 of 7

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All units

Model No.: 408

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation. All applicable OSHA safety standards and safe industry practices must be observed.

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.

Detail of Issue:

Capscrew Length

Two factors determine the correct length of capscrews securing the center hub section to the bearing:

1. The ride serial number - ride serial numbers 408-00196 through 408-02097 and 408-02297 through 408-03998 were retrofitted with the Hub Gusset Kit (refer to Chance Rides Service Bulletin B408R1203-A). In the locations of the hub gussets on these rides, a different length capscrew is required.

2. The tapped holes in the bearing - the bearing manufacturer has changed the tapped holes from a "blind hole" to a "through hole". Different length capscrews are required for each type of tapped hole.

Using the illustrations on the following pages of this bulletin, inspect the hub and bearing to determine the correct fasteners for that specific ride.

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Bulletin No: B408R1181-B
Release Date: August 3, 2001
Effective Date: August 3, 2001
Supersedes: B408R1181-A
Completion Date: Immediately

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

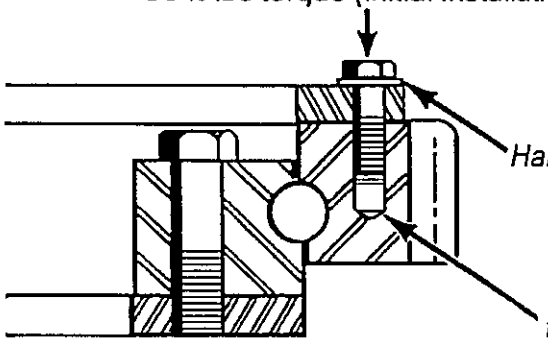
Ride Name: CHAOS Affected Serial Nos.: All units

Model No.: 408

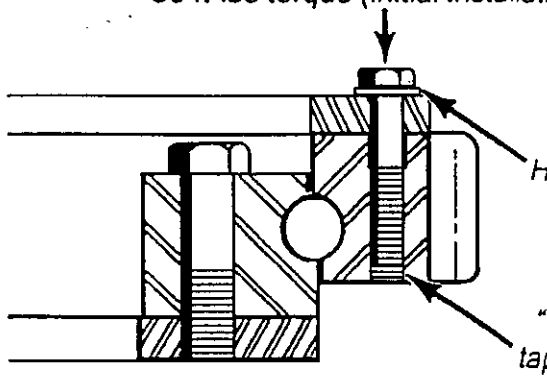
Detail of Issue (continued):

IMPORTANT: *These details illustrate the correct length capscrews for all rides. Inspect the tapped holes in the bearing as shown to determine the correct length of capscrew. On rides with the* ***Hub Gusset Kit*** *installed (Service Bulletin B408R1203-A), refer also to the following page for capscrew lengths in the hub gusset locations.*

1/2-13 x 1-3/4" long Grade 8 Hex Head Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



1/2-13 x 2-3/4" long Grade 8 Hex Head Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



CHANCE RIDES, INC.
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Bulletin No: B408R1181-B
Release Date: August 3, 2001
Effective Date: August 3, 2001
Supersedes: B408R1181-A
Completion Date: Immediately

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

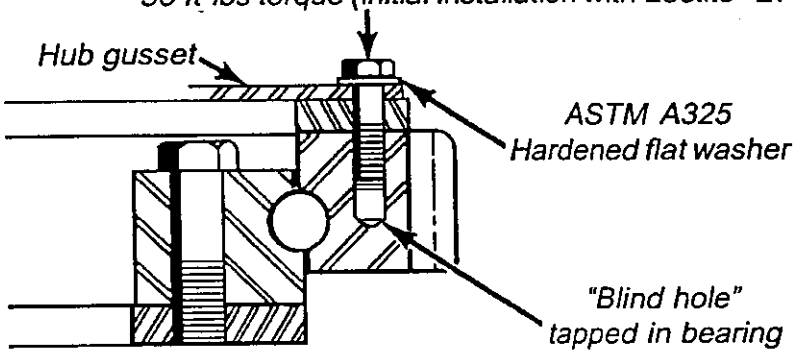
Ride Name: CHAOS Affected Serial Nos.: All units

Model No.: 408

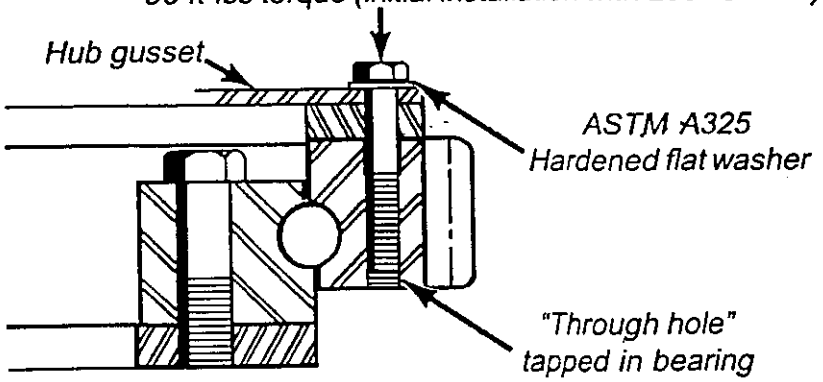
Detail of Issue (continued):

IMPORTANT: *These details illustrate the correct length capscrews at the gusset locations on rides with the* ***Hub Gusset Kit*** *installed (Service Bulletin B408R1203-A). Inspect the tapped holes in the bearing as shown to determine the correct length of capscrew.*

1/2-13 x 2-1/4" long Grade 8 Hex Head Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



1/2-13 x 3-1/4" long Grade 8 Hex Head Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



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Website: www.rides.com

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All units

Model No.: 408

Detail of Issue (continued):

Preparation of Tapped Holes in Bearing

Once the correct capscrew length for each location is determined, clean and prepare the tapped holes in the bearing as follows:

IMPORTANT: This procedure requires that all capscrews be removed, one at a time. The existing capscrews and hardened flat washers must all be discarded and replaced with new parts of the correct size.

1. Remove the existing capscrew and hardened flat washer and discard.
2. Using a 1/2-13 UNC bottoming tap, chase the entire length of the threads in the bearing to restore and clean the threads.
3. Using appropriate eye protection, clear chips and other debris from the tapped hole with compressed air.
4. Install the new capscrew with new hardened flat washer under the head, using Loctite® 271 (red).
5. Tighten the capscrew to 90 ft-lbs.
6. Continue the process until all 28 capscrews have been replaced.

Monthly Check of Capscrew Torque

Using a torque wrench, check for proper torque of all 28 capscrews. Torque value for checking these capscrews must be 80 ft-lbs.

IMPORTANT: ALL 28 CAPSCREWS MUST BE TIGHTENED AND MAINTAINED AS DESCRIBED TO OPERATE THE RIDE. If damage in the tapped holes prevents one or more capscrews from meeting these specifications, the bearing must be replaced. Contact the Chance Rides Customer Service Department for all necessary parts and instructions on this procedure.

If any capscrew is found to be loose, remove it and replace it with a new capscrew. Clean the threads on the new capscrew and in the bearing, then apply Loctite® 271 (red). Tighten the new capscrew to 90 ft-lbs. If a broken capscrew is found, contact Chance Rides, Inc. immediately for further instructions.

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Bulletin No: B408R1181-B
Release Date: August 3, 2001
Effective Date: August 3, 2001
Supersedes: B408R1181-A
Completion Date: Immediately

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All units

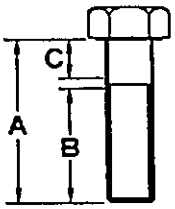
Model No.: 408

Detail of Issue (continued):

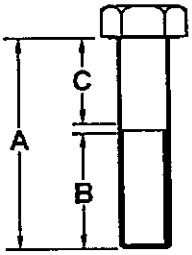
Hex Head Capscrew Specifications

NOTE: *Capscrews and hardened flat washers can be procured from sources other than Chance Rides, provided they meet these specifications.*

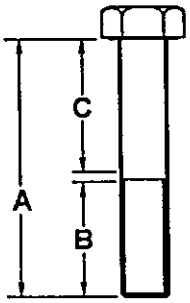
1/2-13 UNC x 1-3/4 Grade 8



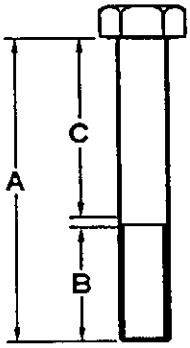
1/2-13 UNC x 2-1/4 Grade 8



1/2-13 UNC x 2-3/4 Grade 8



1/2-13 UNC x 3-1/4 Grade 8



Coating *- Yellow chromate zinc electroplating*

	"A" Nominal Length	"B" Thread Length	"C" Shank Length (minimum)
1/2-13 UNC x 1-3/4 Grade 8	1.75	1.25	0.115
1/2-13 UNC x 2-1/4 Grade 8	2.25	1.25	0.615
1/2-13 UNC x 2-3/4 Grade 8	2.75	1.25	1.115
1/2-13 UNC x 3-1/4 Grade 8	3.25	1.25	1.615

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Bulletin No:	B408R1181-B
Release Date:	August 3, 2001
Effective Date:	August 3, 2001
Supersedes:	B408R1181-A
Completion Date:	Immediately
Page:	7 of 7

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All units

Model No.: 408

Detail of Issue (continued):

For ride serial numbers 408-00196 through 408-02097 and 408-02297 through 408-03998 (with Hub Gusset Kit) with "blind holes" in bearing, order Kit number K408R1181-1, which contains the following:

Part Number	Component	Quantity
60849400	HEX HEAD CAPSCREW (1/2-13 x 1-3/4 Grade 8)	14
60849700	HEX HEAD CAPSCREW (1/2-13 x 2-1/4 Grade 8)	14
68553000	HARDENED FLAT WASHER (1/2" ASTM A325)	28

For ride serial numbers 408-00196 through 408-02097 and 408-02297 through 408-03998 (with Hub Gusset Kit) with "through holes" in bearing, order Kit number K408R1181-2, which contains the following:

Part Number	Component	Quantity
60850200	HEX HEAD CAPSCREW (1/2-13 x 2-3/4 Grade 8)	14
60850600	HEX HEAD CAPSCREW (1/2-13 x 3-1/4 Grade 8)	14
68553000	HARDENED FLAT WASHER (1/2" ASTM A325)	28

For ride serial numbers 408-02197 and 408-04098 and on with "blind holes" in bearing, order Kit number K408R1181-3, which contains the following:

Part Number	Component	Quantity
60849400	HEX HEAD CAPSCREW (1/2-13 x 1-3/4 Grade 8)	28
68553000	HARDENED FLAT WASHER (1/2" ASTM A325)	28

For ride serial numbers 408-02197 and 408-04098 and on with "through holes" in bearing, order Kit number K408R1181-4, which contains the following:

Part Number	Component	Quantity
60850200	HEX HEAD CAPSCREW (1/2-13 x 2-3/4 Grade 8)	28
68553000	HARDENED FLAT WASHER (1/2" ASTM A325)	28

Fax

To: Jerry Murphy Jr. **From:** Steven Laycock

800-242-6231 ext. 2293

Fax: **Pages:**

Phone: **Date:** 02/07/01

Re: CHAOS s/n 408-3998 **CC:**

This is to verify that the gusset kit K408R1203-2 for the above noted amusement ride has been placed on order. It will be shipped as soon as possible. Until it is received, operation of the ride can continue as long as daily inspection of the hub area as specified in the Chance Rides, Inc. bulletin number B408R1203-0 reveals no indications. If any indications are found operations of the ride must be discontinued.

The gusset kit should be installed within 10 days after it has been received. If you have any questions regarding this information, please feel free to contact me.

CHANCE RIDES, INC.
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Website: www.rides.com

Bulletin No:	P408R1219-0
Release Date:	August 1, 2000
Effective Date:	August 1, 2000
Supersedes:	N/A
Completion Date:	N/A
Page:	1 of 3

NOTIFICATION

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS (Portable models only) Affected Serial Nos.: All units

Model No.: 408

Abstract of Issue:

Ramp Support Brace Kit

Reason For Release:

The normal flexing of the entrance/exit ramps on the CHAOS amusement ride can, after an extended time, result in weakening of the ramp. To extend the service life of the ramps, CHANCE RIDES, Inc. has developed a kit which, when properly installed, provides additional support to the ramps.

Action to be Taken:

All owner/operators of the above noted portable model CHAOS amusement rides can, at their option, order and install the ramp support kit as described in this bulletin at each set-up in order to support the entrance and exit ramps.

Order the Ramp Support Kit, part number K408R1219-0, which provides all parts necessary for one complete ride. The kit will be provided at a reduced price if ordered within 30 days of the release date of this bulletin.

Kit number K408R1219-0 contains the following:

Part Number	Component	Quantity
408-865-001	RAMP BRACE ASSEMBLY - Short	2
408-865-002	RAMP BRACE ASSEMBLY - Long	2

Installation instructions are provided on the following pages of this bulletin, as well as replacement parts ordering information.

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

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Bulletin No:	P408R1219-0
Release Date:	August 1, 2000
Effective Date:	August 1, 2000
Supersedes:	N/A
Completion Date:	N/A
Page:	2 of 3

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

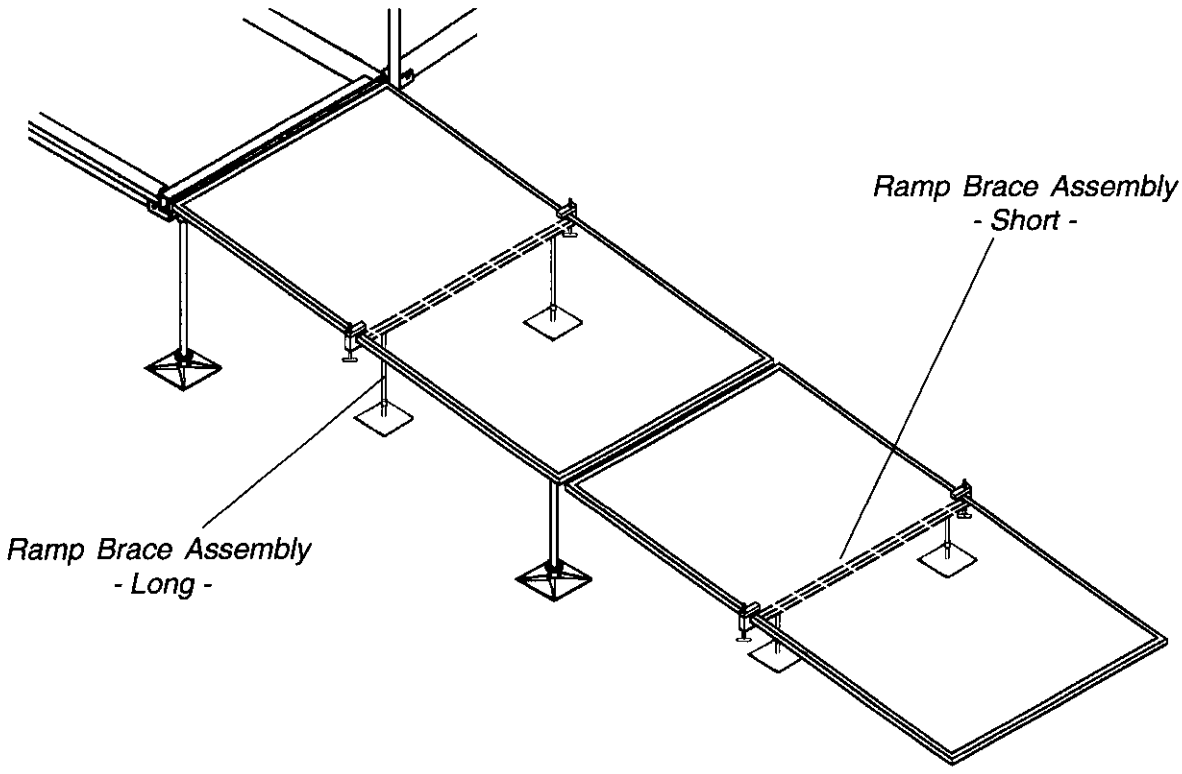
Ride Name: CHAOS (Portable models only) Affected Serial Nos.: All units

Model No.: 408

Detail of Issue (continued):

Installation Instructions - Ramp Brace Kit K408R1219-0

Install the ramp braces at every set-up using the following procedure.



1. Install the ramp braces under the entrance and exit ramps as shown. Locate the ramp braces in the center of each ramp section.
2. Extend or retract the screw jacks as required to support the ramps.
3. Tighten the clamps to secure the braces to the ramps.

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Effective Date:	August 1, 2000
Supersedes:	N/A
Completion Date:	N/A
Page:	3 of 3

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

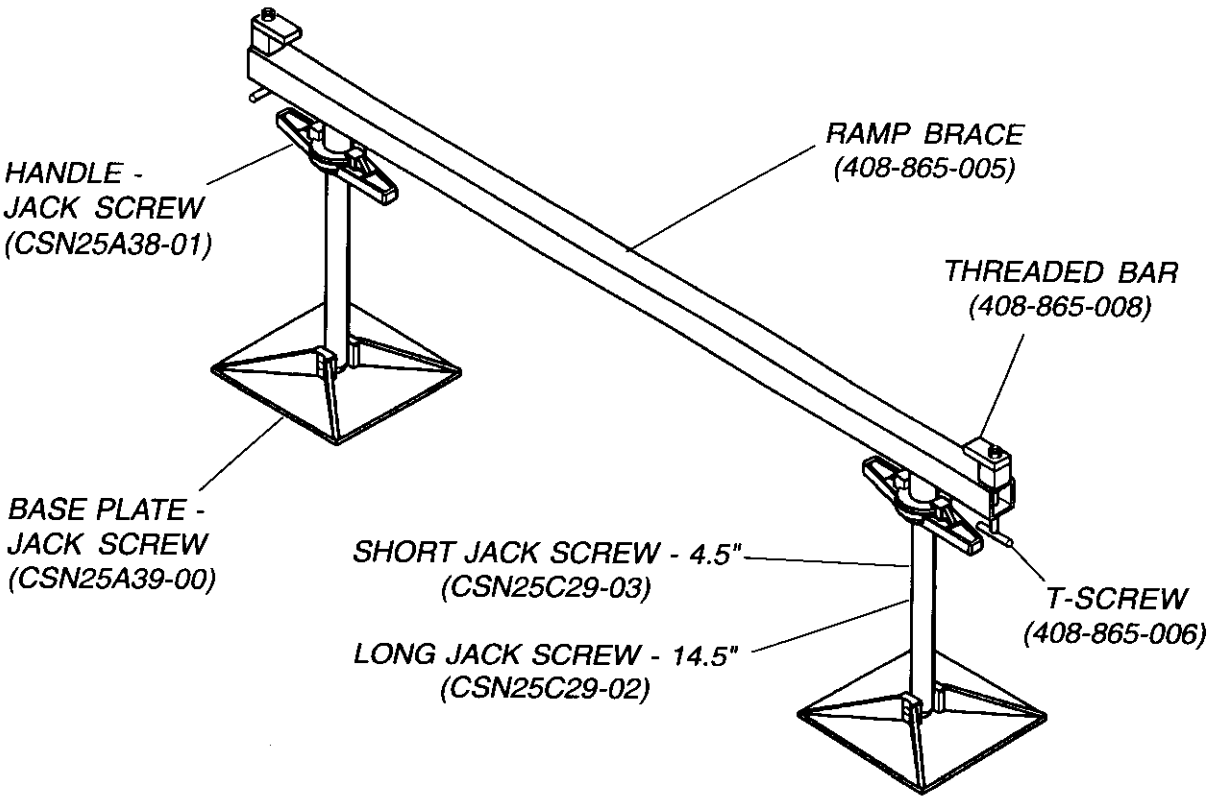
Ride Name: CHAOS (Portable models only) Affected Serial Nos.: All units

Model No.: 408

Detail of Issue (continued):

Parts List - Ramp Brace Kit

Use the following information if replacement of individual parts is required.



NOTICE

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Bulletin No: B408R1222-A
Release Date: August 1, 2000
Effective Date: August 1, 2000
Supersedes: B408R1222-A
Completion Date: September 1, 2000

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 and on

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02097 and on

Model No.: 408

Abstract of Issue:
Inspection of Secondary Restraint Bars

Reason For Release:

Chance Rides, Inc. has become aware of a single occurrence where a crack developed in the curved area of the secondary restraint bars of the CHAOS amusement ride. A break in the secondary restraint bar can possibly result in personal injury to the operator, passengers, and/or bystanders.

This bulletin revision is being issued to provide information on the inspection boot, which can be installed at the owner/operator's option. This removable boot facilitates the required annual inspection of the secondary restraint bars.

Action to be Taken:

All owners of the above noted amusement rides are required to perform the inspection described in this bulletin annually. If desired, a boot is available to cover the inspection area. Subsequent annual inspection requires the removal of the boot.

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

NOTICE

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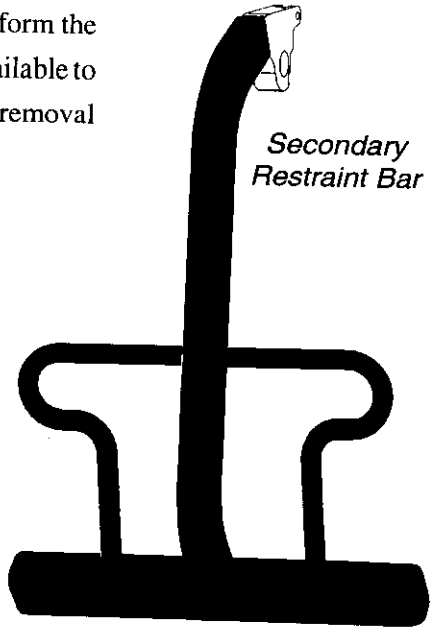

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Release Date: August 1, 2000
Effective Date: August 1, 2000
Supersedes: B408R1222-A
Completion Date: September 1, 2000

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 and on

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and
408-02097 and on

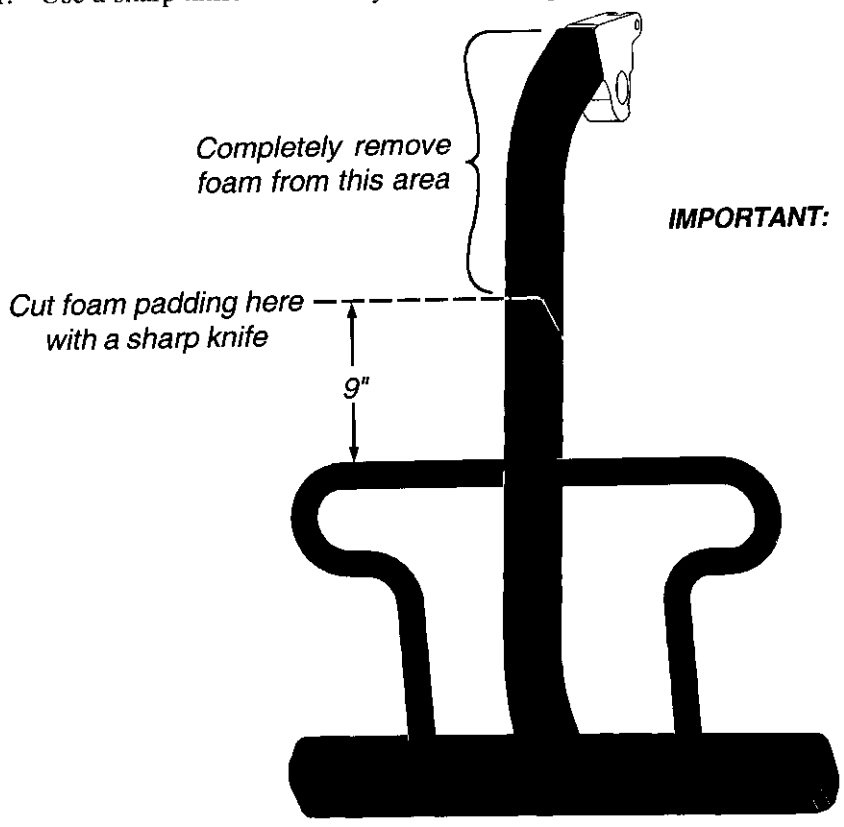
Model No.: 408

Detail of Issue (continued):

Annual Inspection Procedure

NOTE: *Steps 1 and 2 are only necessary prior to the first inspection. An optional removable boot is available for subsequent annual inspections.*

1. Use a sharp knife to carefully cut the foam padding as shown on all 18 secondary restraint bars.



IMPORTANT: *When cutting the foam, be careful not to score the aluminum tube inside the foam. This will severely weaken the tube.*

2. Remove the foam above the cut as shown. This will expose the entire curved area of the frame and the full length of the welds on the doubler plate.

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Release Date:	August 1, 2000
Effective Date:	August 1, 2000
Supersedes:	B408R1222-A
Completion Date:	September 1, 2000
Page:	3 of 4

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: 1/31/96 and on

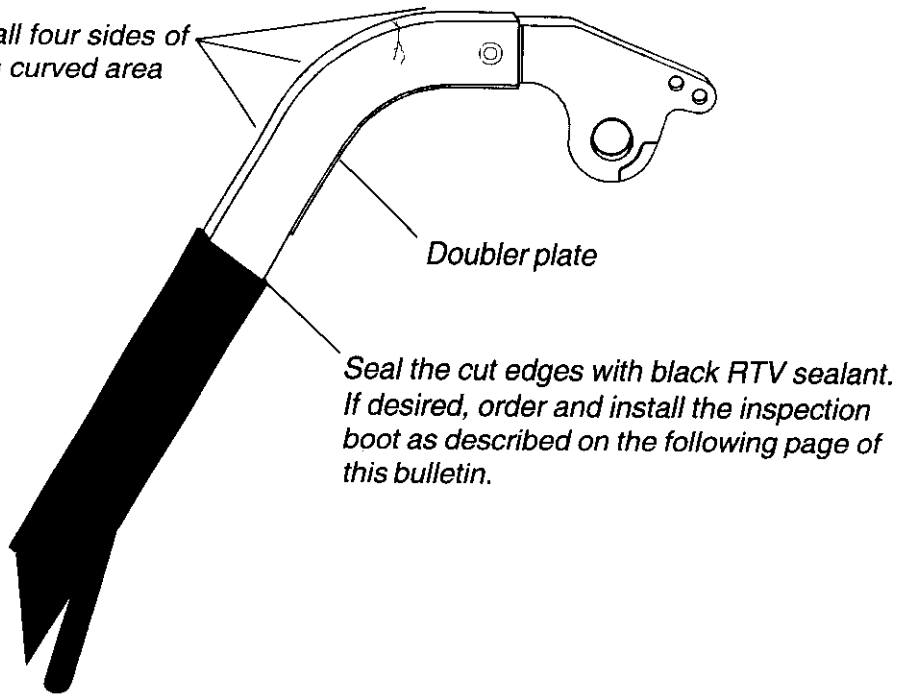
Ride Name: CHAOS

Affected Serial Nos.: 408-00196 and
408-02097 and on

Model No.: 408

Detail of Issue (continued):

3. Visually inspect all four sides of the aluminum tube in the curved area. Also, inspect the welds on the doubler plate and the metal surrounding the welds.



4. If any indications are noted, contact the Chance Rides Customer Service Department immediately. DO NOT LOAD PASSENGERS IN THAT VEHICLE UNTIL REPAIR OR REPLACEMENT IS MADE.

5. If no indications are found, seal the cut edges of the foam with a generous fillet of black RTV sealant.

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Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 and on

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02097 and on

Model No.: 408

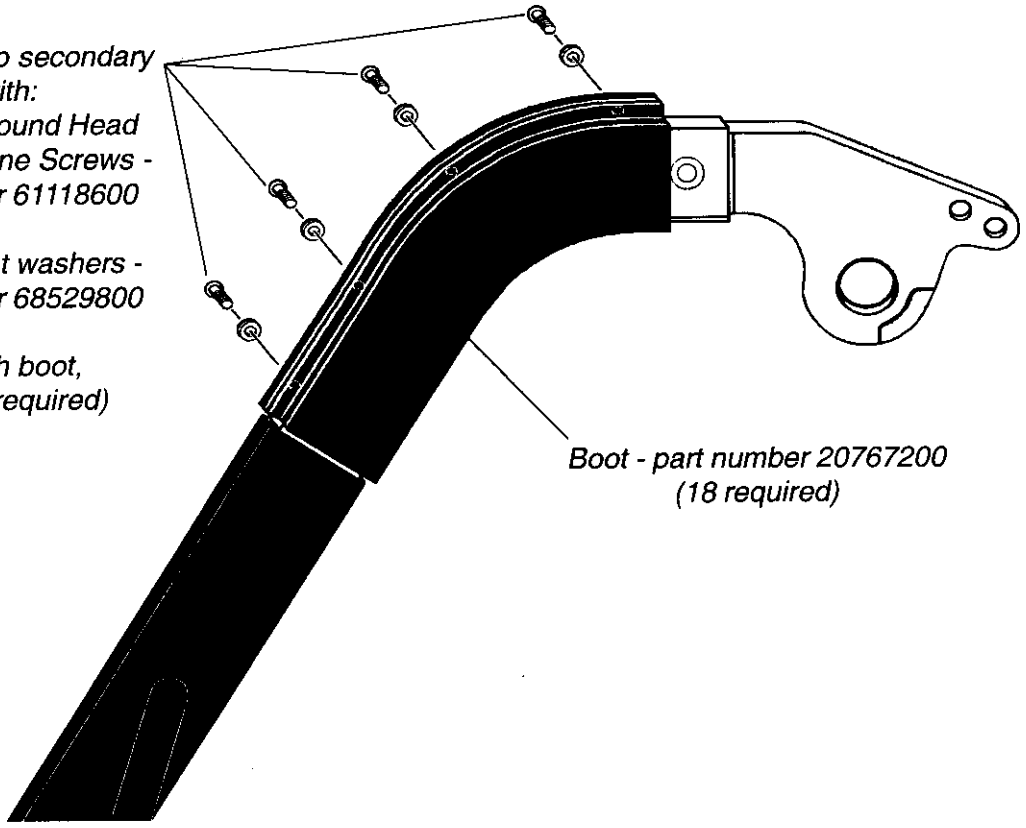
Detail of Issue (continued):

6. If desired, order and install the boots as shown. The following parts will be provided at no charge if or ordered within 30 days of the release of this bulletin.

Part Number	Component	Quantity
20767200	BOOT - Inspection	18
61118600	SCREW - Phillips Head Machine (#10-32 x 1")	72
68529800	WASHER - SAE Flat (3/16)	72

Secure boot to secondary restraint bar with:
#10-32 x 1" Round Head Phillips Machine Screws - part number 61118600
- and -
3/16" SAE Flat washers - part number 68529800

(4 places each boot, total 72 each required)



Boot - part number 20767200 (18 required)

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Bulletin No: B408R1181-A
Release Date: December 8, 1999
Effective Date: December 8, 1999
Supersedes: B408R1181-0
Completion Date: January 8, 2000

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All units

Model No.: 408

Abstract of Issue:
Hub Capscrew Torque Check

Reason For Release:
The center hub section on the CHAOS amusement ride is secured to the bearing turntable with 28 Grade 8 hex head capscrews. It is essential for the care of the equipment and safety of the passengers to maintain the correct torque on these capscrews.

Action to be Taken:
Chance Rides, Inc. requires all owner/operators of the above noted amusement rides to perform the following check immediately and at least once per month thereafter during the operating season.

Detail of Issue:

1. Verify that the 28 hardened washers under the capscrews securing the center hub section to the bearing turntable on the tilt head fit flush to the hub.
2. Using a torque wrench, check for proper torque of all 28 capscrews. Torque value for checking these capscrews must be 80 ft-lbs.

   If any capscrew is found to be loose, remove it and replace it with a new capscrew. Clean the threads on the new capscrew and in the bearing, then apply Loctite® 271 (red). Tighten the new capscrew to 90 ft-lbs.

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.

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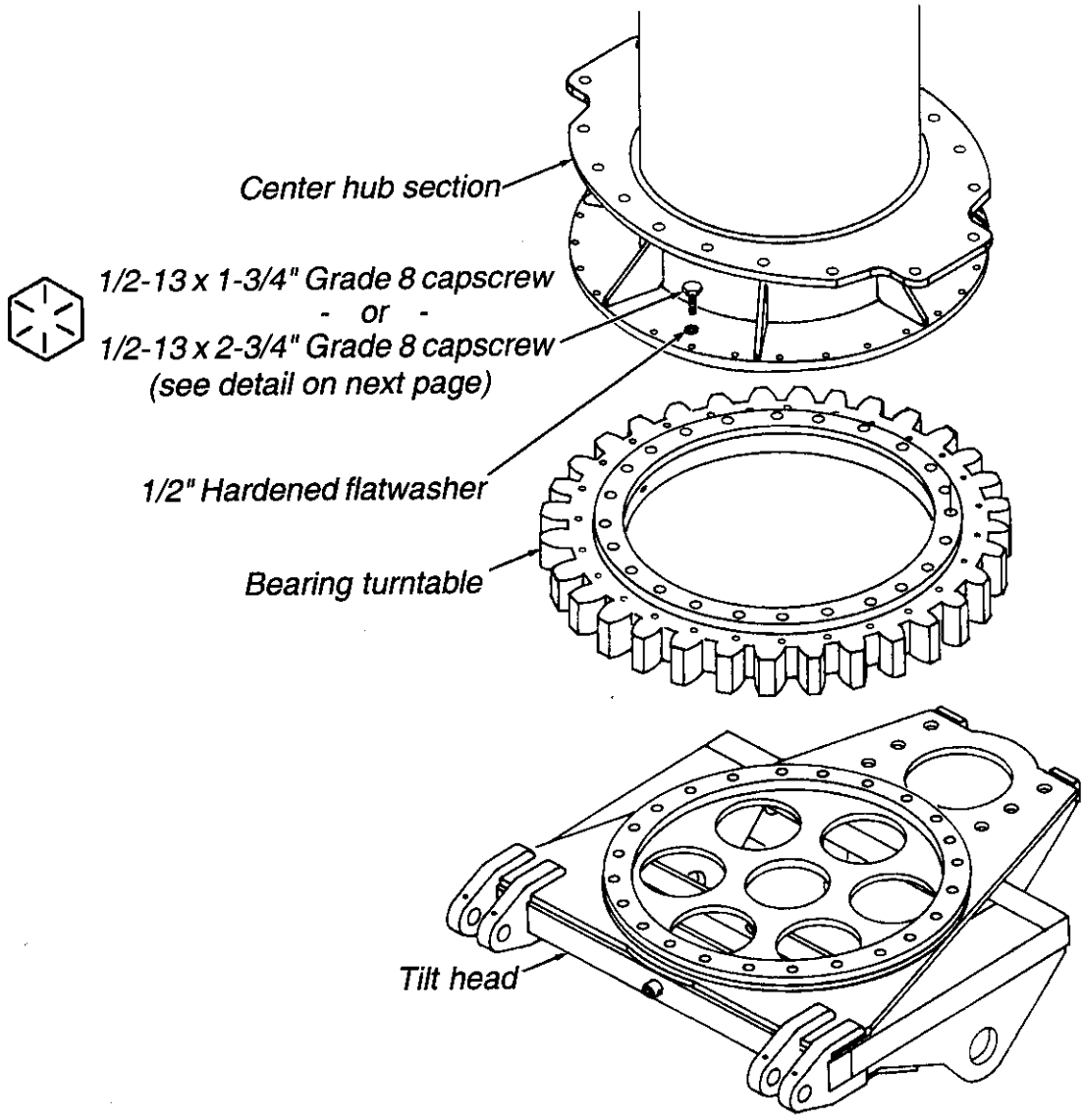
Completion Date: January 8, 2000

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All units

Model No.: 408

Detail of Issue (continued):



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Release Date: December 8, 1999
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Completion Date: January 8, 2000

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

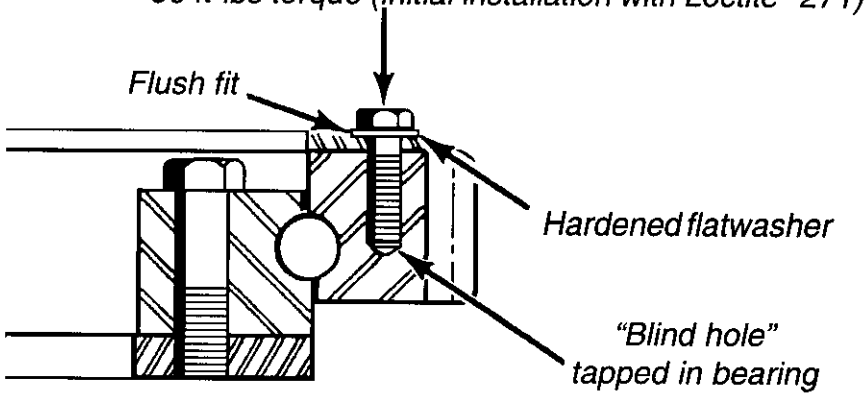
Ride Name: CHAOS Affected Serial Nos.: All units

Model No.: 408

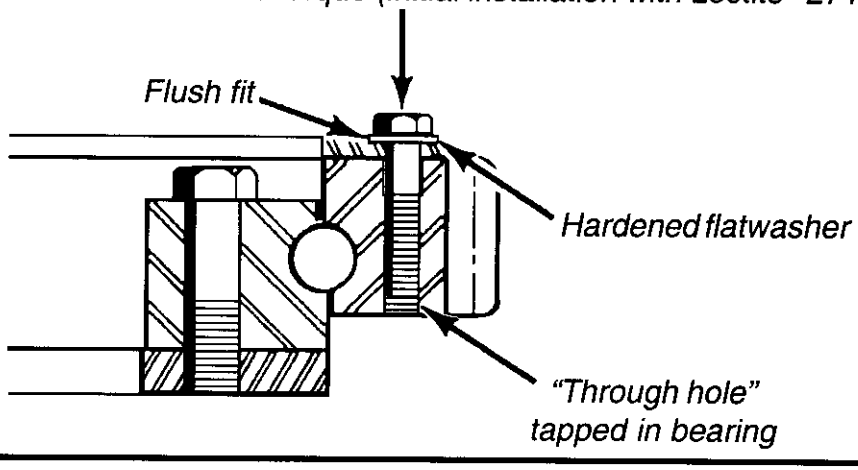
Detail of Issue (continued):

IMPORTANT: *Inspect the tapped holes in the bearing as shown to determine the correct length of capscrew.*

1/2-13 x 1-3/4" long Grade 8 Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



1/2-13 x 2-3/4" long Grade 8 Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



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The World's Ride Company

Bulletin No: B408R1203-A
Release Date: December 8, 1999
Effective Date: December 8, 1999
Supersedes: B408R1203-0
Completion Date: January 8, 2000

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS

Affected Serial Nos.: 408-00196 through 408-02097 and 408-02297 through 408-03998

Model No.: 408

Abstract of Issue:
Hub Gusset Kit

Reason For Release:
Chance Rides, Inc. has become aware that cracks can form in and around the gussets on the hub of the above noted CHAOS amusement rides.

Action to be Taken:
Chance Rides, Inc. requires all owner/operators to perform the following inspection and to order and install kit number K408R1203-0. This kit includes all of the parts needed to rework one ride. Kit K408R1203-0. is offered at no charge if ordered within 60 days of the issue date of this bulletin.

Kit number K408R1203-0 contains the following:

Part Number	Component	Quantity
K408R1203-2	GUSSET WELDMENT	7
60849700	HEX HEAD CAPSCREW (1/2-13 x 2-1/4" Grade 8)	14

NOTE: *If the main bearing has been replaced, 1/2-13 x 3-1/4" Grade 8 capscrews (part number 60850600) may be required. See details in this bulletin.*

Detail of Issue:
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.

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Release Date: December 8, 1999
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Supersedes: B408R1203-0
Completion Date: January 8, 2000

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-02097 and 408-02297 through 408-03998

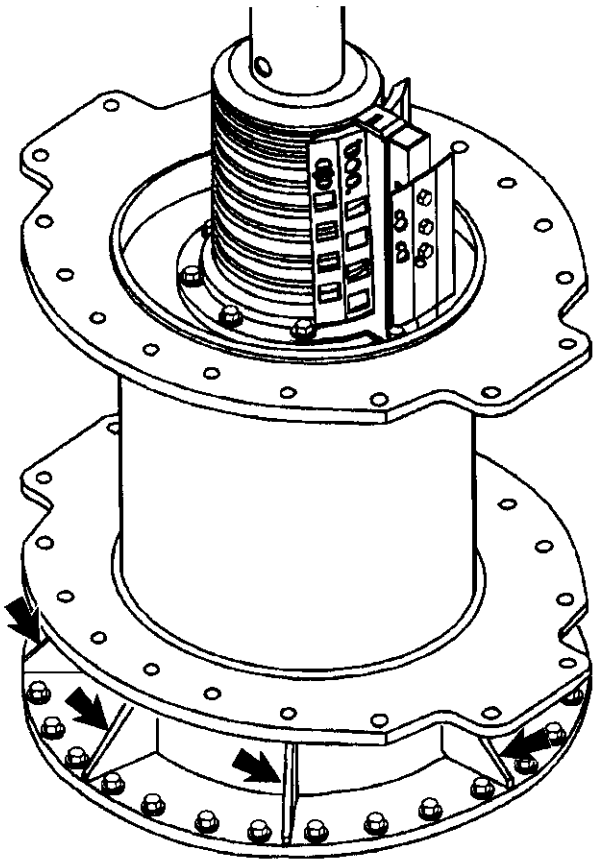
Model No.: 408

Detail of Issue (continued):

INSPECTION PROCEDURE

1. Visually inspect the seven existing gussets and the weld area around each gusset as shown.

2. If any cracks are found, contact Chance Rides, Inc. Customer Service Department for a repair procedure. If no cracks are found, install Kit number K408R1203-0.



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Bulletin No: B408R1203-A
Release Date: December 8, 1999
Effective Date: December 8, 1999
Supersedes: B408R1203-0
Completion Date: January 8, 2000

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-02097 and 408-02297 through 408-03998

Model No.: 408

Detail of Issue (continued):

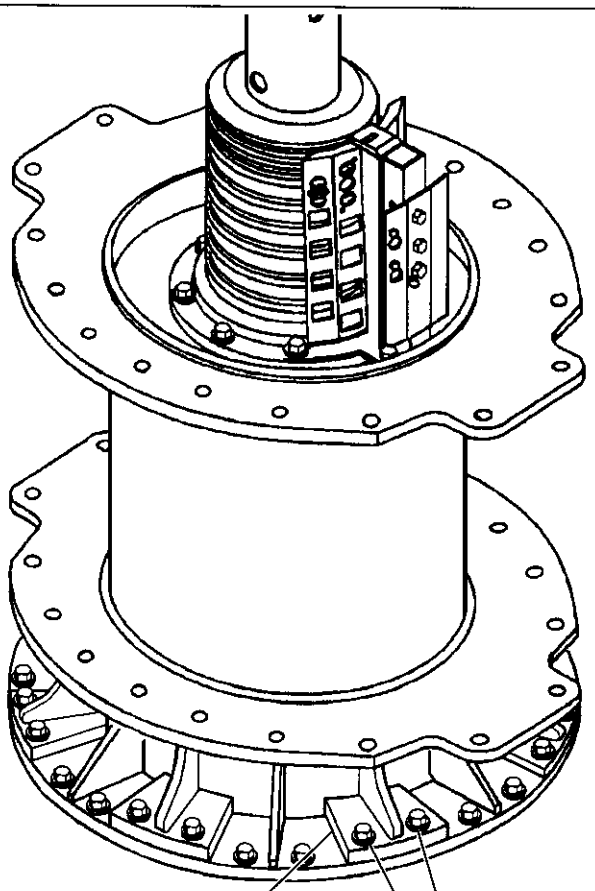
INSTALLATION INSTRUCTIONS -
Kit Number K408R1203-1

1. Remove and discard the two center hex head capscrew between two of the existing gussets. Retain the existing hardened washers which will be reused during installation of the new gusset weldments.

2. Clean the threaded holes of the bearing where the capscrews were removed.

3. Position one of the new gusset weldments in place. Using the existing hardened washers and the new 1/2-13 x 2-1/4" hex head capscrews, secure the gusset weldment in place. Apply Loctite® 271 (red) to the capscrew threads before installation. Using a torque wrench, tighten these capscrews to 90 ft-lbs.

4. Repeat Steps 1 and 2 above until all gusset weldments have been installed.



Gusset Weldment

1/2-13 x 2-1/4" hex head capscrews
- or -
1/2-13 x 3-1/4" hex head capscrews
(see detail on following page)
Use existing hardened washers.
Apply Loctite® 271 (red) and tighten to 90 ft-lbs.

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Completion Date: January 8, 2000

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

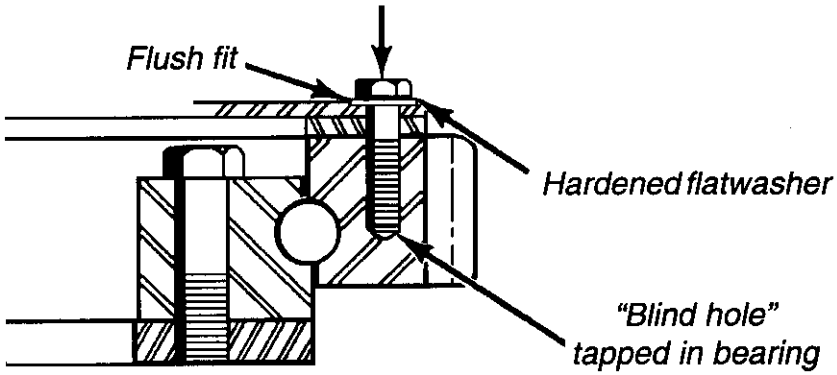
Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-02097 and 408-02297 through 408-03998

Model No.: 408

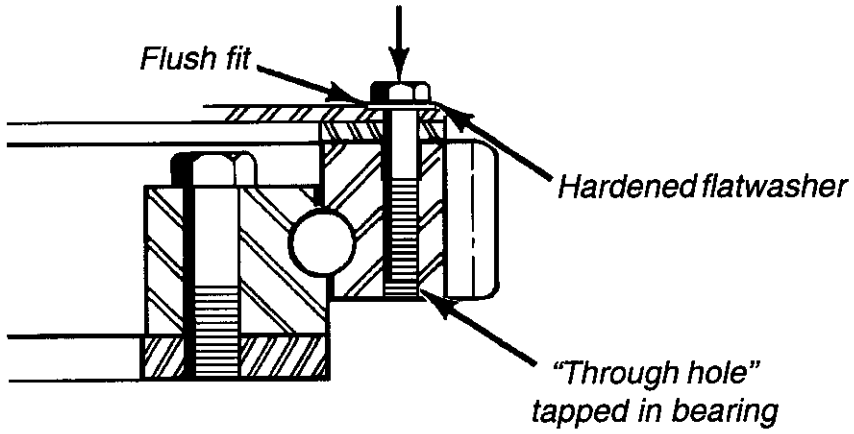
Detail of Issue (continued):

IMPORTANT: *Inspect the tapped holes in the bearing as shown to determine the correct length of capscrew.*

1/2-13 x 2-1/4" long Grade 8 Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



1/2-13 x 3-1/4"" long Grade 8 Capscrew
80 ft-lbs torque (monthly check).
90 ft-lbs torque (initial installation with Loctite® 271)



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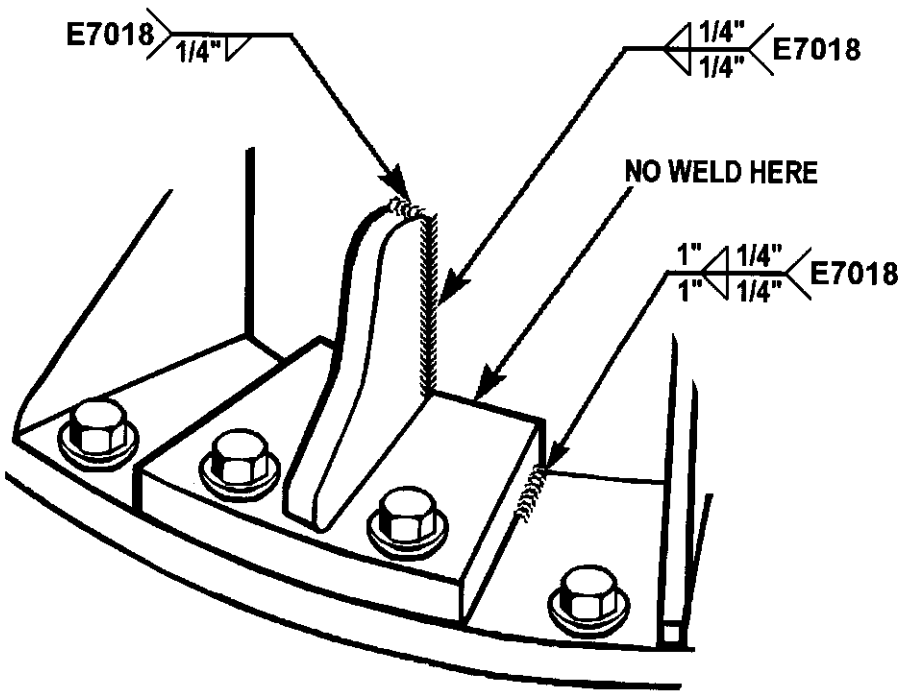
Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-02097 and 408-02297 through 408-03998

Model No.: 408

Detail of Issue (continued):

5. Weld the gussets in place using E-7018 welding rod. Weld only in the areas shown below.



6. Material surface to be welded must be above 70° F before welding. To avoid heat distortion of the hub, welds must be performed in the sequence shown on the following page.

NOTE: *All welding must be done by a certified welder, following the sequence and procedure as outlined in this bulletin.*

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Completion Date: January 8, 2000

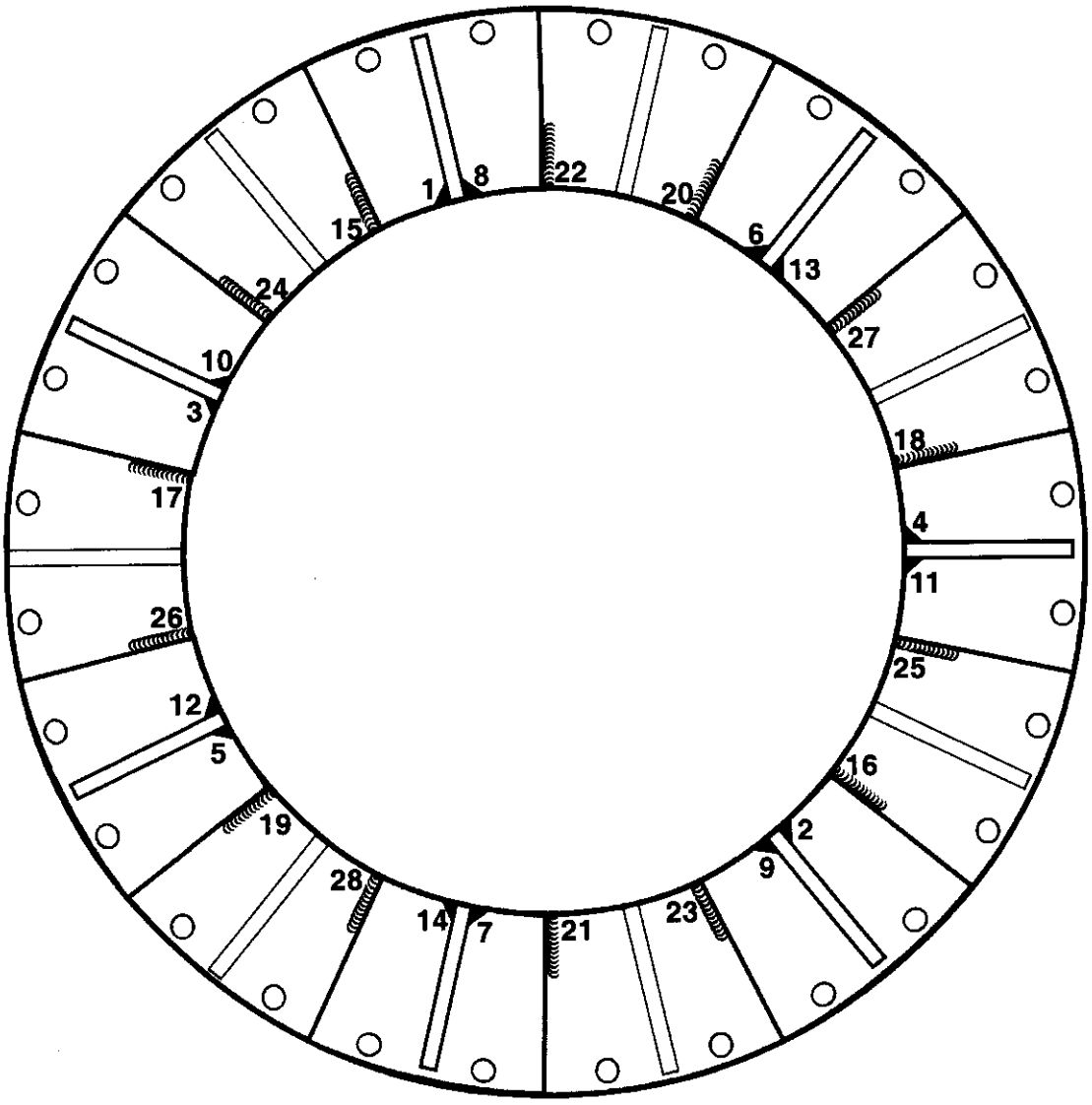
Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-02097 and 408-02297 through 408-03998

Model No.: 408

Detail of Issue (continued):

Weld Sequence



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Bulletin No: P408R1232-0
Release Date: November 10, 1999
Effective Date: November 10, 1999
Supersedes: N/A
Completion Date: N/A

NOTIFICATION

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 4/1/99

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-04399

Model No.: 408

Abstract of Issue:
Sweep Insert Panel Mounting Channels

Reason For Release:

Chance Rides, Inc. has become aware that the sweep insert panel mounting channels on the CHAOS amusement ride can wear after years of operation. If the wear becomes severe, the panel can separate from the ride, causing possible damage to the ride or injury to the passengers and/or bystanders. The mounting channels can be replaced if wear is found during regular inspections of the ride.

Action to be Taken:

Chance Rides, Inc. has re-designed the sweep insert mounting channels. The new design is made of stainless steel, to provide longer service life and reduced maintenance costs.

Owner/operators of the above noted amusement rides can make this product improvement at their option. Order Kit number K408R1232-0, which contains all parts necessary to rework one complete ride. Install the kit using the instructions provided in this bulletin.

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

NOTICE

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Bulletin No: P408R1232-0
Release Date: November 10, 1999
Effective Date: November 10, 1999
Supersedes: N/A
Completion Date: N/A

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 11/1/99

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-04799

Model No.: 408

Detail of Issue

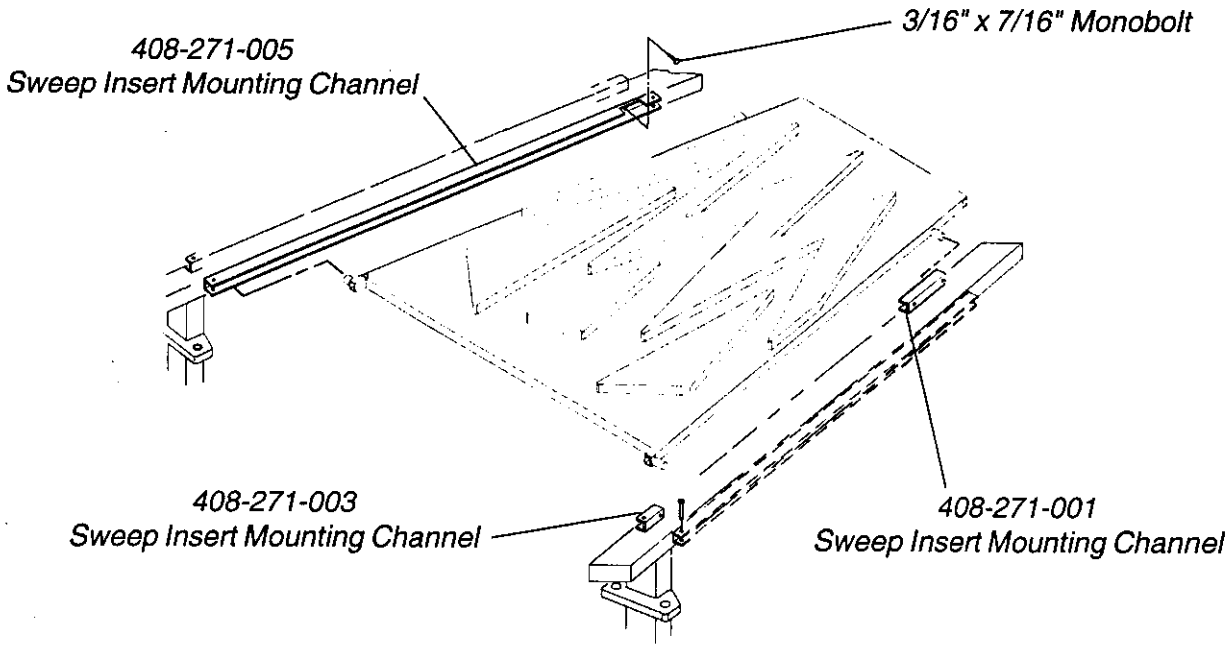
Kit number K408R1232-0 contains the following:

Part Number	Component	Quantity
408-271-001	SWEEP INSERT MOUNTING CHANNEL	18
408-271-003	SWEEP INSERT MOUNTING CHANNEL	18
408-271-005	SWEEP INSERT MOUNTING CHANNEL	18
66166200	MONOBOLT (3/16 x 7/16 Steel)	180

NOTE: *The above parts can also be ordered individually as replacement parts. The old design parts are no longer available.*

INSTALLATION INSTRUCTIONS

1. Drill out the existing rivets to remove the old mounting channels. Discard the channels.
2. Locate the new channels as shown in the same positions as the channels which were removed.
3. Attach the new channels with the fasteners provided with the kit.



Central
4:34 EST

A 13 Buffalo

Chance Rides, Inc.®

RECEIVED
OCT 28 1999
BUREAU OF
FAIR RIDES INSPECTION

Fax

To:	Mike Rhinehart State of Florida	**From:**	Steven Laycock
Fax:	850-488-9023	**Pages:**	
Phone:		**Date:**	10/28/99
Re:	CHAOS s/n 408-0096	**CC:**	

For the above noted amusement ride, all passenger restraints for any given seat must function as specified by the manufacturer in order for that particular seat to be utilized by the public. If any part of the restrain system of any particular seat does not function as specified by the manufacturer, that particular seat must be closed to the public. If the owner can guarantee that no one can intentionally or unintentionally enter the seat area and if the seat is tagged with a state out order tag, the ride can still be operated.

If you have any questions regarding this information, please contact me.

Sandy - Did you read this to Allan?
Mike

CHANCE RIDES, INC.
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Website: www.rides.com

Bulletin No: B408R1216-0
Release Date: September 10, 1999
Effective Date: September 10, 1999
Supersedes: N/A
Completion Date: October 10, 1999

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 6/28/96 through 1/28/97

Ride Name: CHAOS
Affected Serial Nos.: 408-00296 through 408-01997

Model No.: 408

Abstract of Issue:

Lap Bar Lock Inspection, Repair and Maintenance

Reason For Release:

The lap bars on the CHAOS amusement ride each incorporate two latch mechanisms. In addition to the redundant latches, the secondary restraint bar further secures the lap bars.

Chance Rides, Inc. has become aware that the lap bar latches and related components can wear after extended use. If the wear becomes severe, the lap bar cannot be securely locked. This can result in serious personal injury to the passenger.

DO NOT OPERATE THE RIDE UNLESS ALL LAP BAR LOCKING DEVICES ARE IN GOOD OPERATING CONDITION. This includes both latches on each lap bar, the lap bar padding, and all components of the secondary restraint bar.

Action to be Taken:

All owners of the above noted amusement rides are required to inspect and maintain all lap bars as instructed in this bulletin. Any worn, damaged or missing parts must be repaired or replaced immediately.

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.

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Affected Production Dates: 6/28/96 through 1/28/97

Ride Name: CHAOS
Affected Serial Nos.: 408-00296 through 408-01997

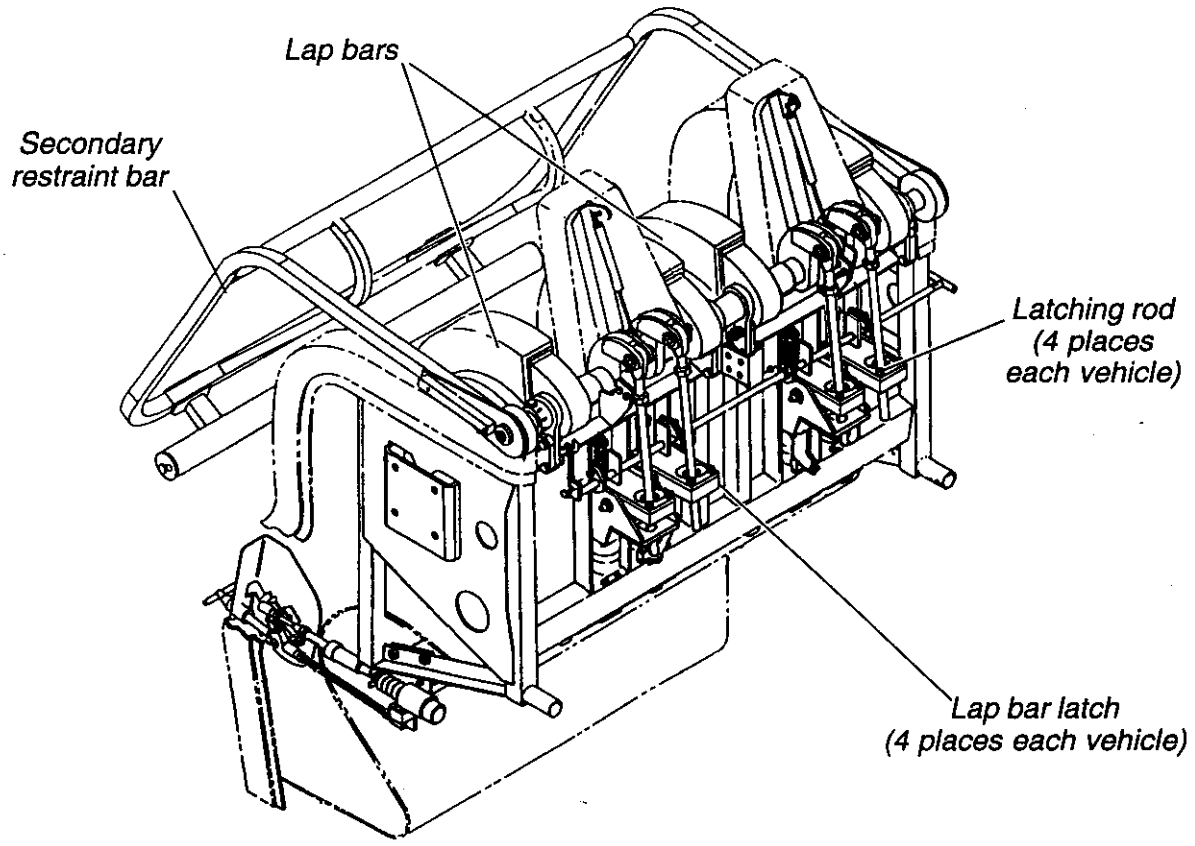
Model No.: 408

Detail of Issue (continued):

INSPECTION PROCEDURE

Inspect the lap bar lock components as described on the following pages of this bulletin. Replace any components that are worn or damaged.

The components are identified in the illustration below.



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Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 6/28/96 through 1/28/97

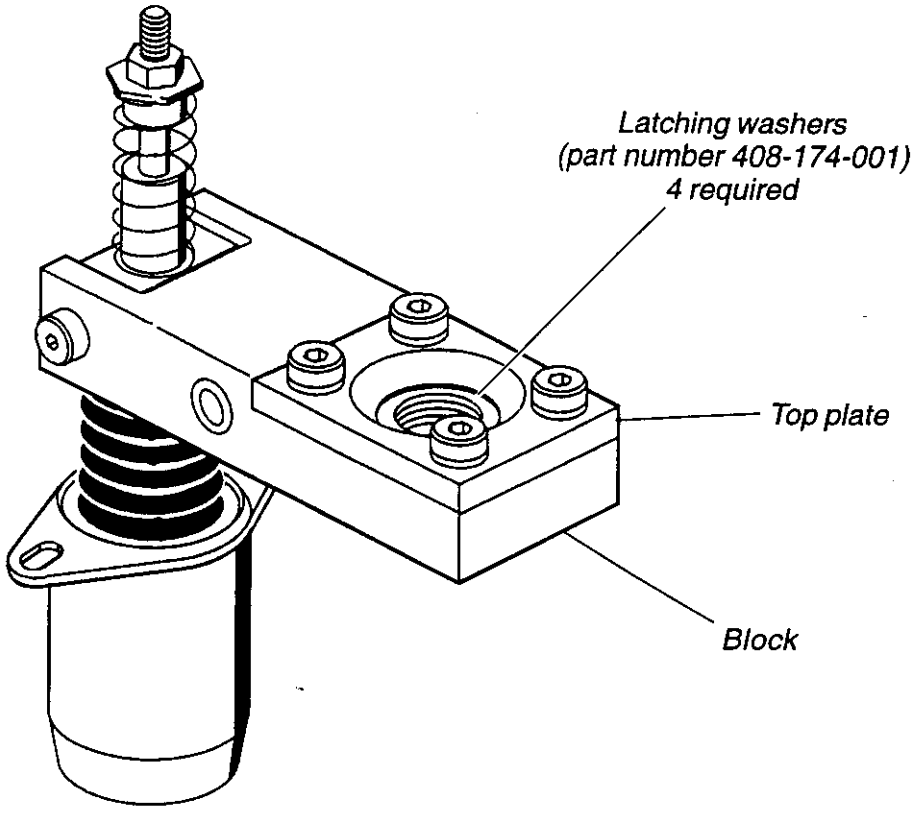
Ride Name: CHAOS
Affected Serial Nos.: 408-00296 through 408-01997

Model No.: 408

Detail of Issue (continued):

1. Inspect the lap bar latches for the following:

   - The inside diameter of the four latching washers must not show signs of chamfering. The inside edges must be square, with no elongation of the holes.
   - If the holes in the top plate or block show signs of contact with the latching rod, this indicates wear of the latching washers.
   - All parts must be clean and free of lubricants or any other residue. When assembled, the washers must move freely in the block.



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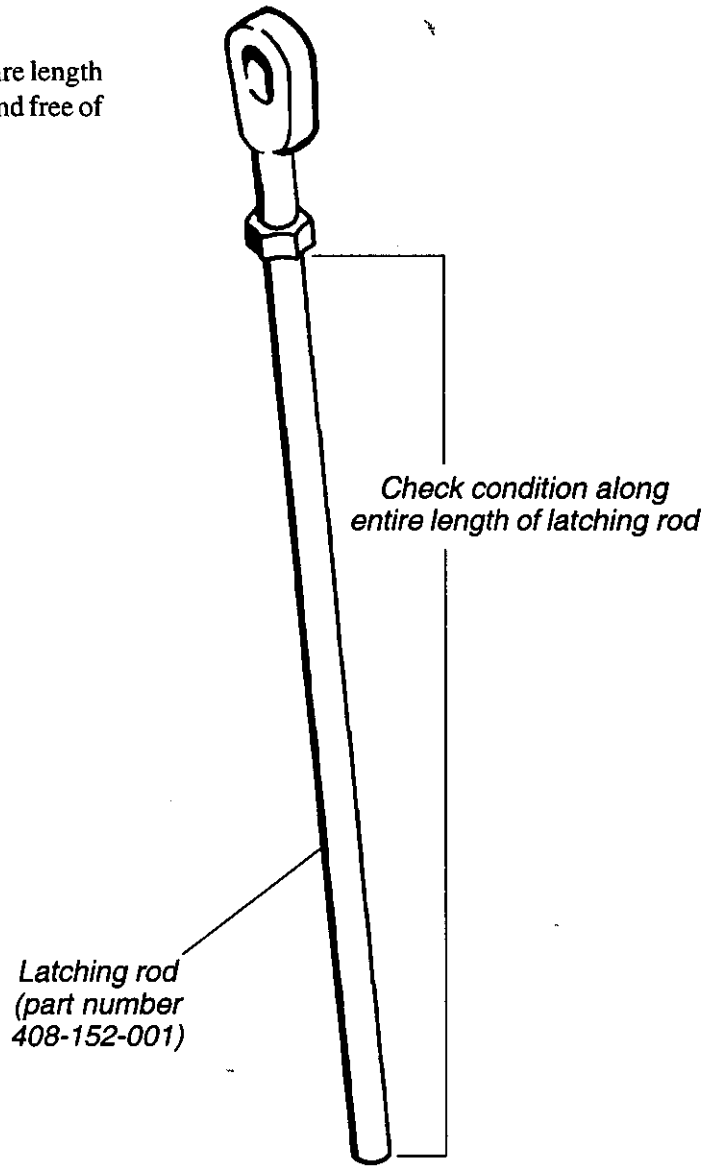
Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 6/28/96 through 1/28/97

Ride Name: CHAOS
Affected Serial Nos.: 408-00296 through 408-01997

Model No.: 408

Detail of Issue (continued):

2. Inspect the latching rods. The entire length of the rod must be clean, smooth and free of corrosion or other damage



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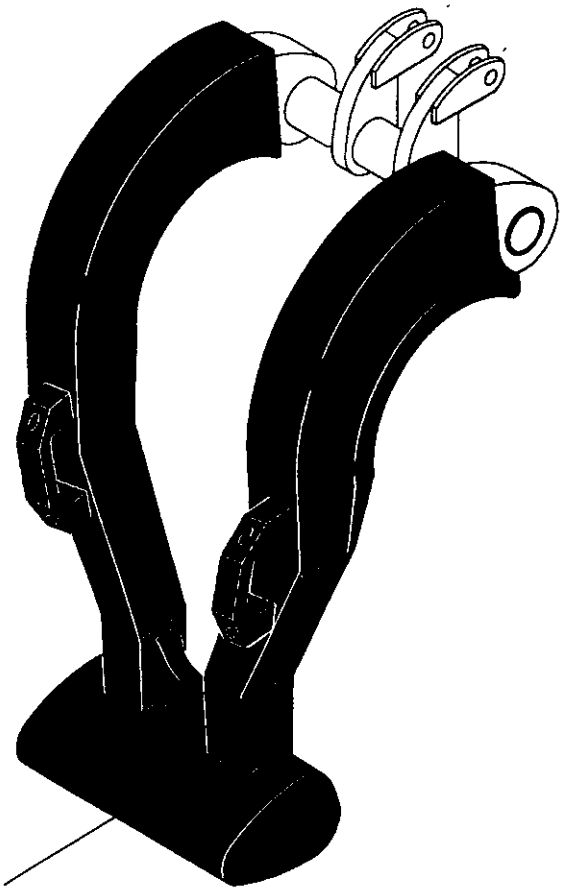
Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 6/28/96 through 1/28/97

Ride Name: CHAOS
Affected Serial Nos.: 408-00296 through 408-01997

Model No.: 408

Detail of Issue (continued):

3. Inspect the lap bar padding where it contacts the secondary restraint bar. If the padding has a groove matching the contact area of the secondary restraint bar, this indicates the latching washers are worn. The lap bar padding must be in good condition.



Inspect padding in this area for grooves matching the contact area with the secondary restraint bar

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Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 6/28/96 through 1/28/97

Ride Name: CHAOS
Affected Serial Nos.: 408-00296 through 408-01997

Model No.: 408

Detail of Issue (continued):

WEEKLY OPERATIONAL CHECK

With the cover removed from the rear of the vehicle, watch the operation of the two lap bar latches. Repeat the process for both lap bars on every vehicle. This check must be made weekly or at every set-up, whichever occurs first.

1. Make sure the latching washers move freely. DO NOT LUBRICATE THE WASHERS OR LATCH RODS.

2. As the lap bar is raised, the left hand latch must fully engage and lock on the latching rod before the right hand latch engages.

3. Manually hold the left hand latch up to prevent it from engaging on the latch rod. As the bar is raised, the right hand latch must fully engage on the latching rod.

4. Check the operation of the secondary restraint bar. With the secondary restraint bar closed, manually release and raise each lap bar. Check for solid contact between the lap bar padding and the secondary restraint bar.

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Bulletin No: B408R1214-0
Release Date: September 10, 1999
Effective Date: September 10, 1999
Supersedes: N/A
Completion Date: October 10, 1999

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 4/1/99

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-04399

Model No.: 408

Abstract of Issue:
Sweep Insert Panel Rework

Reason For Release:
Chance Rides, Inc. has become aware that the sweep insert panels on the CHAOS amusement ride can wear at the guide pins. If the wear becomes severe, the panel can separate from the ride, causing possible damage to the ride or injury to the passengers and/or bystanders.

Action to be Taken:
All owners of the above noted amusement rides are required to order and install the Sweep Insert Modification Kit, part number K408R1214-0. The kit will be provided at a reduced cost if ordered within 30 days of the release date of this bulletin.

Install the kit using the instructions provided in this bulletin.

Kit number K408R1214-0 contains the following:

Part Number	Component	Quantity
K408R1214-003	GUIDE PIN WELDMENT	36
408-269-018	GUIDE PIN	36
60700600	HEX HEAD CAPSCREW (1/4-20 x 1-1/4")	36
60700800	HEX HEAD CAPSCREW (1/4-20 x 1-1/2")	36
68530200	FLAT WASHER (1/4")	72
68537000	LOCK WASHER (1/4")	36
64780800	LOCK NUT (1/4-20, Nylon Insert)	72

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

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Bulletin No: B408R1214-0
Release Date: September 10, 1999
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Supersedes: N/A
Completion Date: October 10, 1999

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 4/1/99

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-04399

Model No.: 408

Detail of Issue (continued):

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.

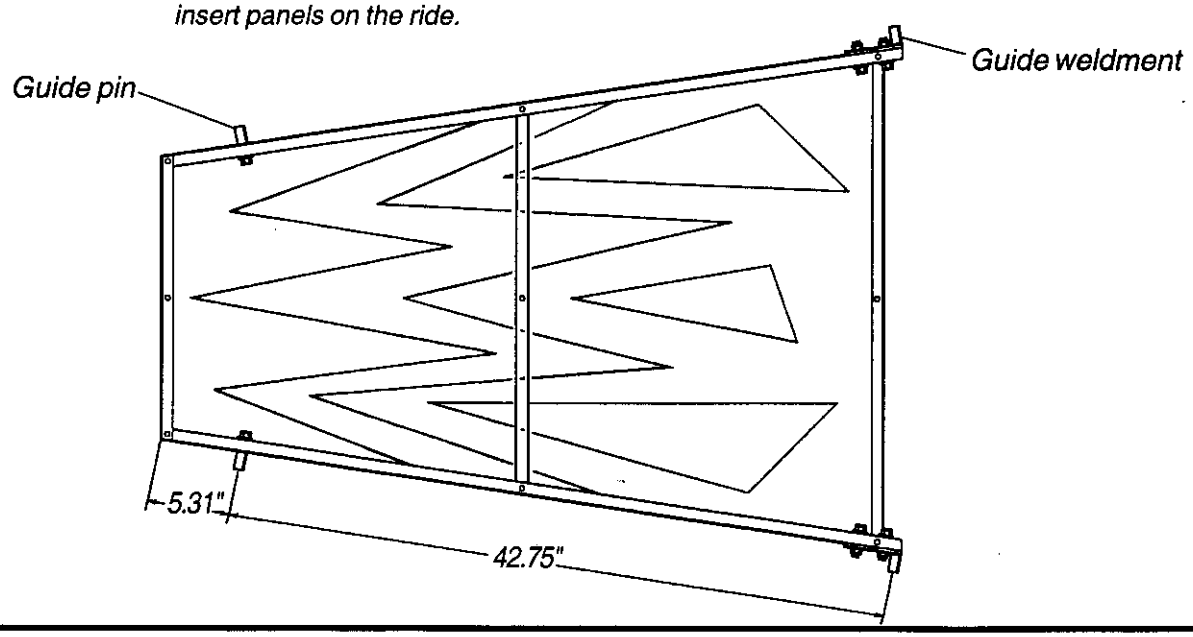
INSTALLATION INSTRUCTIONS

1. Cut off existing guide pins and grind smooth (4 places each insert panel).

2. Locate the holes for the guide pins at the narrow end of the insert panel and the guide weldments as shown. Drill 0.28" diameter (6 places each insert panel).

3. Install guide pins with 1/4-20 x 1-1/2" hex head capscrews, flat washers and lock washers. Install the guide weldments with 1/4-20 x 1-1/4" hex head capscrews, flat washers and lock nuts. Install all capscrews from the inside, pointing out.

IMPORTANT: *Inspect all components of the sweep insert panels, including the rivets which secure the molded panel to the frame. Replace any worn or damaged parts before installing the sweep insert panels on the ride.*



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Bulletin No: B408R1210-0
Release Date: August 18, 1999
Effective Date: August 18, 1999
Supersedes: N/A
Completion Date: September 18, 1999

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS

Affected Serial Nos.: 408-00196 and 408-02097 through 408-03998

Model No.: 408

Abstract of Issue:

Inspection, Replacement and Operation of Hydraulic Lock Cylinders

Reason For Release:

The passenger restraint system on the above noted CHAOS amusement rides incorporates three hydraulic lock cylinders on each vehicle - one for each lap bar and one for the secondary restraint bar. In the event a hydraulic lock cylinder fails, a redundant mechanical lock prevents the restraint bar from opening.

Chance Rides, Inc. has become aware of a manufacturing defect which can affect the reliability and/or service life of the hydraulic lock cylinders. Although the defect has been corrected by the manufacturer, some defective cylinders have been shipped on new products and as replacement parts.

Action to be Taken:

All owners of the above noted amusement rides are required to inspect all hydraulic lock cylinders per the instructions on the following page of this bulletin. If any defective cylinders are found, order and install part number 22162104 in the appropriate quantity to replace all defective cylinders.

The parts will be provided at no charge if ordered within 30 days of the release date of this bulletin, subject to the return of the defective cylinders.

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

NOTICE

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Completion Date: September 18, 1999

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02097 through 408-03998

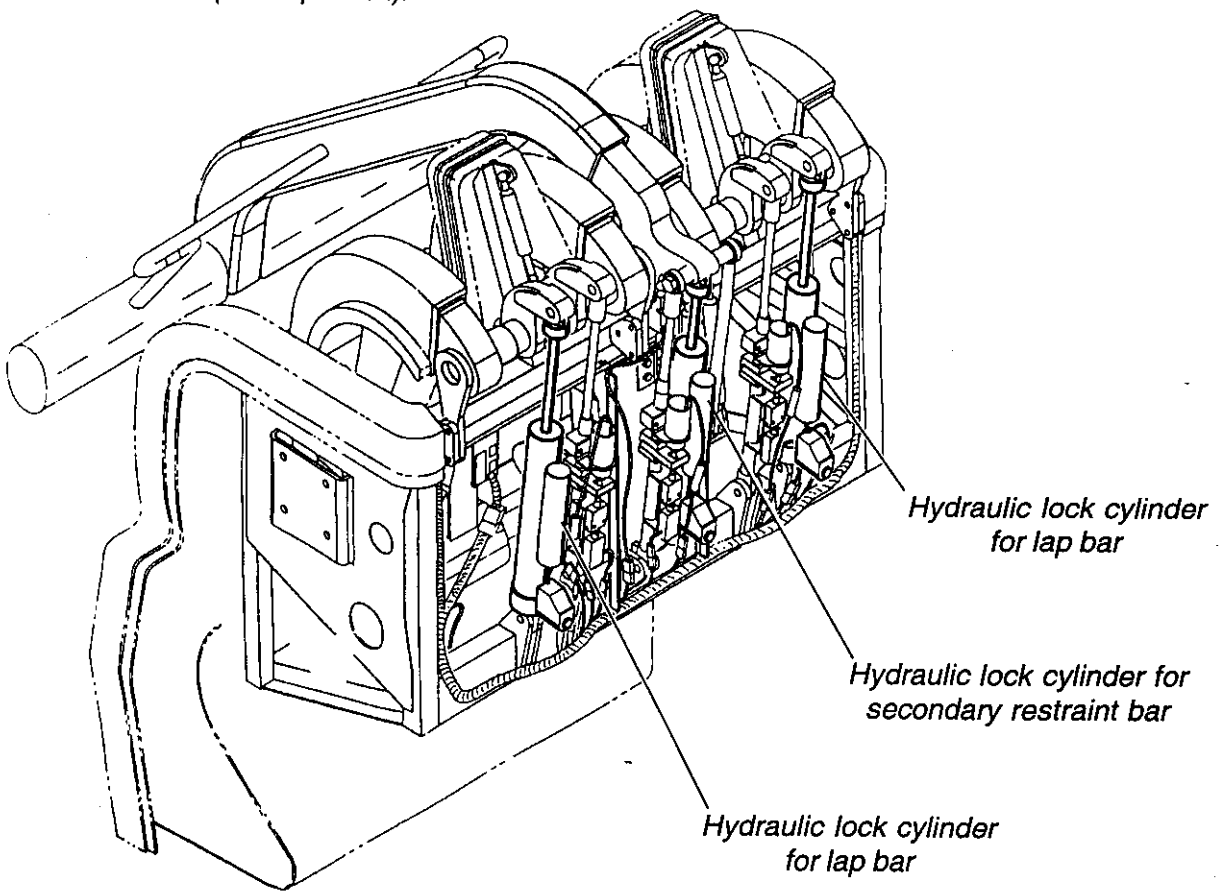
Model No.: 408

Detail of Issue (continued):

Inspection Procedure

Inspect the three hydraulic lock cylinders on all vehicles (54 total). Identify the cylinders based on the distinguishing characteristics detailed on the next page.

IMPORTANT: *Note the location at which each cylinder is installed. Pay particular attention to the cylinder for the secondary restraint bar (center position).*



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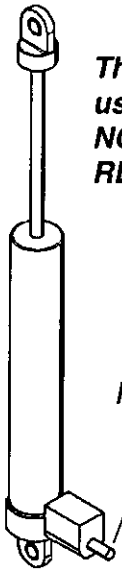
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02097 through 408-03998

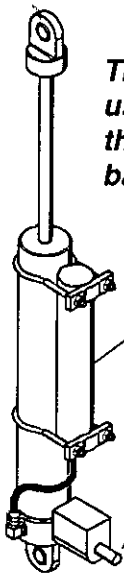
Model No.: 408

Detail of Issue (continued):



These cylinders can be used on the lap bars, but NOT THE SECONDARY RESTRAINT BAR (center)

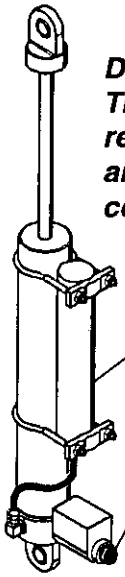
Red release plunger



These cylinders can be used on the lap bars and the secondary restraint bars

Accumulator

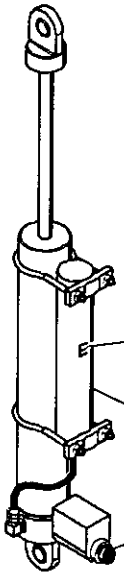
Red release plunger



DO NOT USE. These cylinders must be returned to the factory and replaced with the correct cylinder.

Accumulator

Black release button



These cylinders can be used on the lap bars and the secondary restraint bars. They are visually the same as the cylinder at left, except for the stamped letter as shown.

*Letter "**E**" stamped on accumulator*

Accumulator

Black release button

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Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02097 through 408-03998

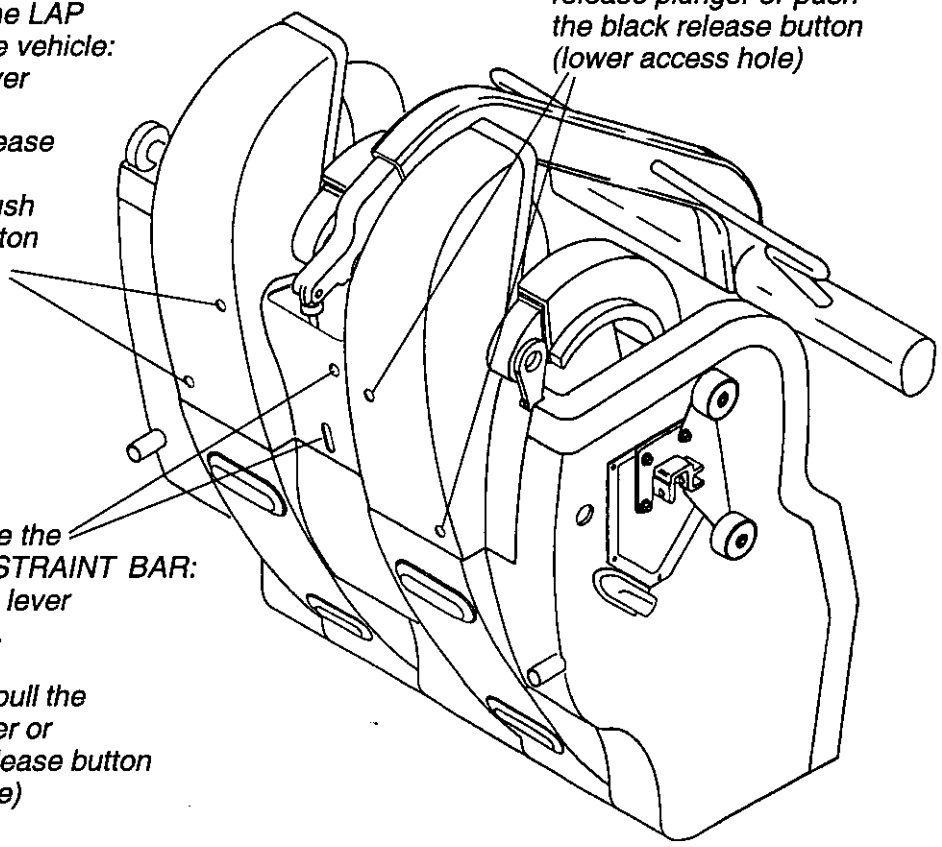
Model No.: 408

Detail of Issue (continued):

Operation - Manually releasing passenger restraints

Use the following information in conjunction with the procedure in the CHAOS Operation Manual.

To manually release the LAP BAR on this side of the vehicle:
- *Raise the release lever (top access hole).*
- *While holding the release lever up, pull the red release plunger or push the black release button (lower access hole)*



To manually release the LAP BAR on this side of the vehicle:
- *Raise the release lever (top access hole).*
- *While holding the release lever up, pull the red release plunger or push the black release button (lower access hole)*

To manually release the SECONDARY RESTRAINT BAR:
- *Raise the release lever (top access hole).*
- *While holding the release lever up, pull the red release plunger or push the black release button (lower access hole)*

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Bulletin No:	B408R1222-0
Release Date:	July 21, 1999
Effective Date:	July 21, 1999
Supersedes:	N/A
Completion Date:	August 21, 1999
Page:	1 of 3

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: 1/31/96 and on

Ride Name: CHAOS

Affected Serial Nos.: 408-00196 and
408-02097 and on

Model No.: 408

Abstract of Issue:
Inspection of Secondary Restraint Bars

Reason For Release:
Chance Rides, Inc. has become aware of a single occurrence where a crack developed in the curved area of the secondary restraint bars of the CHAOS amusement ride. A break in the secondary restraint bar can possibly result in personal injury to the operator, passengers, and/or bystanders.

Action to be Taken:
All owners of the above noted amusement rides are required to perform the inspection described in this bulletin. The inspection must be made annually.

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

NOTICE

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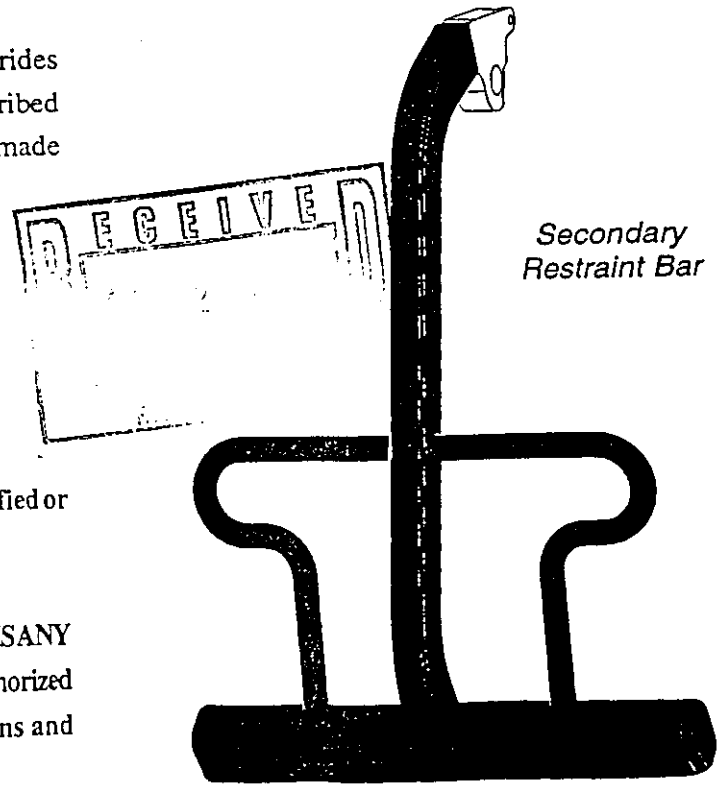

Secondary Restraint Bar

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Page:	2 of 3

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 and on

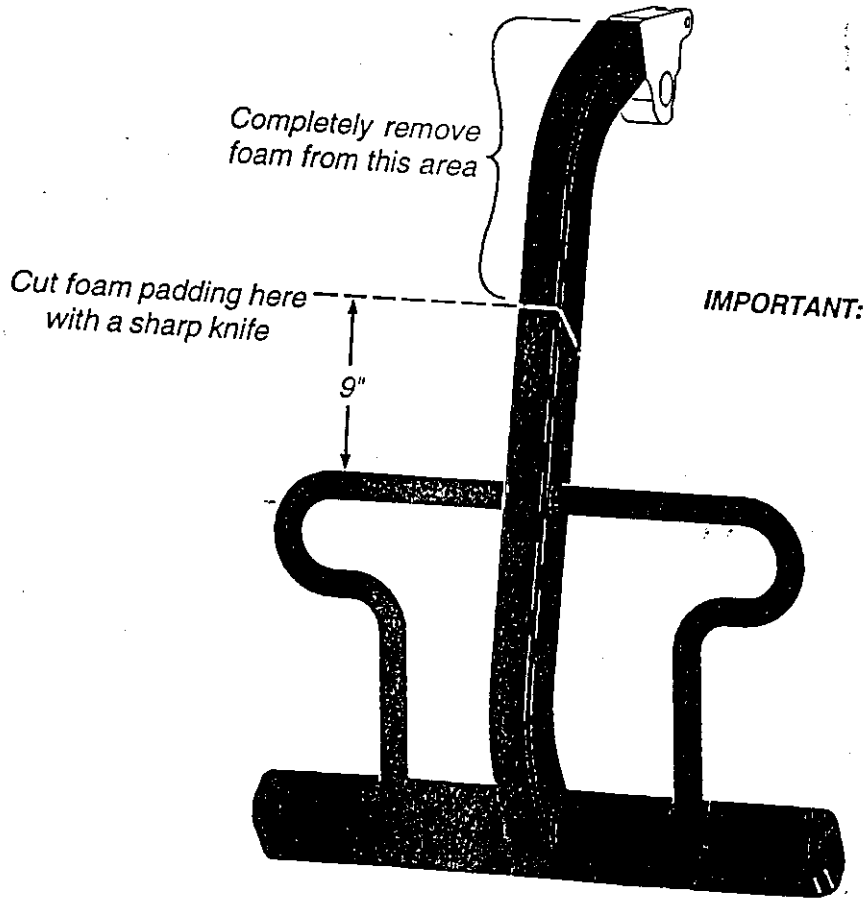
Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02097 and on

Model No.: 408

Detail of Issue (continued):

Annual Inspection Procedure

1. Use a sharp knife to carefully cut the foam padding as shown on all 18 secondary restraint bars.



IMPORTANT: *When cutting the foam, be careful not to score the aluminum tube inside the foam. This will severely weaken the tube.*

2. Remove the foam above the cut as shown. This will expose the entire curved area of the frame and the full length of the welds on the doubler plate.

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Page:	3 of 3

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: 1/31/96 and on

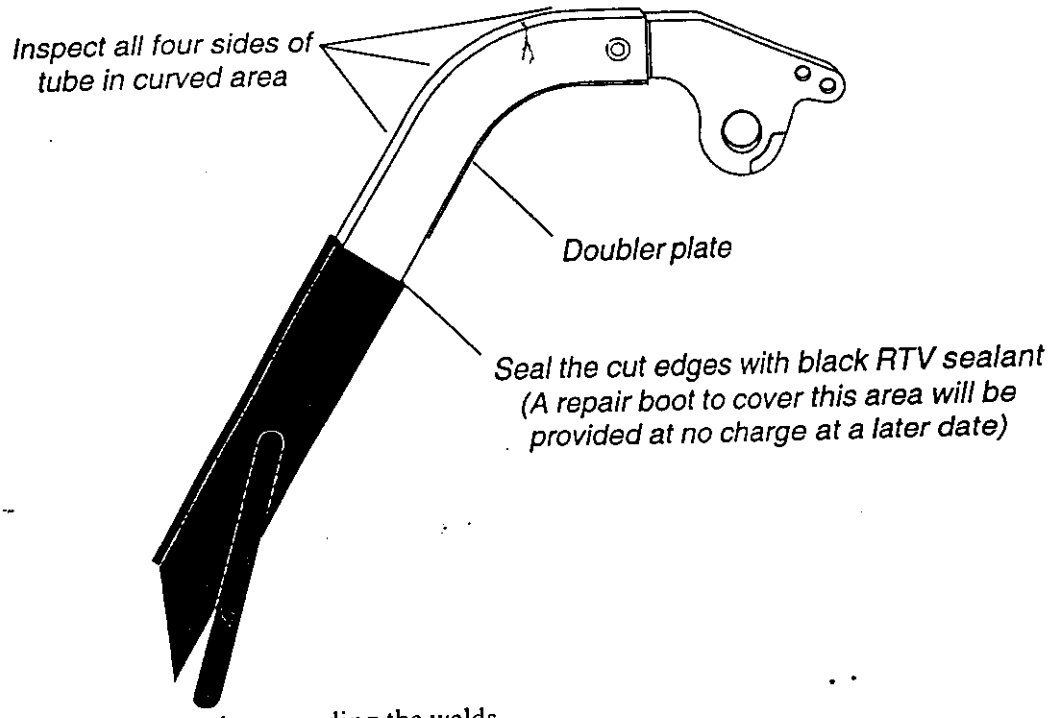
Ride Name: CHAOS

Affected Serial Nos.: 408-00196 and
408-02097 and on

Model No.: 408

Detail of Issue (continued):

3. Visually inspect all four sides of the aluminum tube in the curved area. Also, inspect the welds on the



doubler plate and the metal surrounding the welds.

4. If any indications are noted, contact the Chance Rides Customer Service Department immediately. DO NOT LOAD PASSENGERS IN THAT VEHICLE UNTIL REPAIR OR REPLACEMENT IS MADE.

5. If no indications are found, seal the cut edges of the foam with a generous fillet of black RTV sealant.

6. A repair boot which covers the inspection area is currently being developed and will be provided at no charge when available. Instructions for installation of the repair boots will be provided in a revision of this bulletin.

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Completion Date:	August 7, 1999
Page:	1 of 2

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All

Model No.: 408

Abstract of Issue:
Inspection of Primary Restraint Bars

Reason For Release:
Chance Rides, Inc. has become aware that cracks can form in and around the ears on the back of the primary restraint bars on the CHAOS amusement ride.

Action to be Taken:
Chance Rides, Inc. requires all owner/operators to perform the inspection described in this bulletin. The inspection must be made annually.

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.

CHANCE RIDES, INC.
4219 Irving
Wichita, KS 67277-2328
U.S.A.
Phone: 1-800-242-6231 • FAX: 1-316-942-7416
Website: www.rides.com
E-mail: rides@rides.com

Bulletin No:	B408R1212-0
Release Date:	July 7, 1999
Effective Date:	July 7, 1999
Supersedes:	N/A
Completion Date:	August 7, 1999
Page:	2 of 2

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

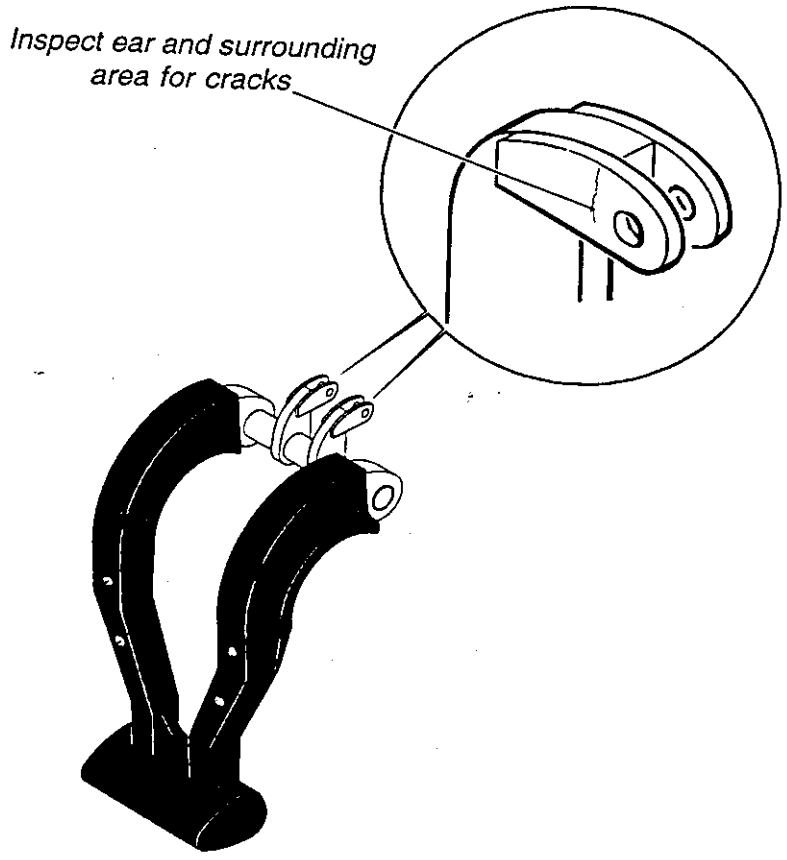
Ride Name: CHAOS Affected Serial Nos.: All

Model No.: 408

Detail of Issue (continued):

Annual Inspection Procedure

Visually inspect both primary restraint bars on all vehicles (36 total) as shown. If any cracks are found, contact the Chance Customer Service Department immediately. DO NOT ATTEMPT TO REPAIR THE CRACK.



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Website: http://www.rides.com

Bulletin No:	B408R1217-0
Release Date:	July 7, 1999
Effective Date:	July 7, 1999
Supersedes:	N/A
Completion Date:	August 7, 1999
Page:	1 of 2

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: 1/31/96 through 6/1/99

Ride Name: CHAOS

Affected Serial Nos.: 408-00196 through 408-044998

Model No.: 408

Abstract of Issue:

Boom Inspection

Reason For Release:

Chance Rides, Inc. has become aware that cracks can form in and around the tilt head mounts on the boom of the above noted CHAOS amusement rides.

Action to be Taken:

Chance Rides, Inc. requires all owner/operators of these rides to inspect the boom in the area of the tilt head mount. This is an annual inspection.

Detail of Issue:

Perform the inspection described on the next page of this bulletin. If any indications are found, contact the CHANCE Customer Service Department immediately for instructions on further action to be taken. DO NOT ATTEMPT TO WELD OR OTHERWISE REPAIR THE BOOM, EXCEPT AS SPECIFICALLY INSTRUCTED BY CHANCE RIDES, INC.

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

NOTICE

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Bulletin No: B408R1217-0
Release Date: July 7, 1999
Effective Date: July 7, 1999
Supersedes: N/A
Completion Date: August 7, 1999

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 6/1/99

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 408-044998

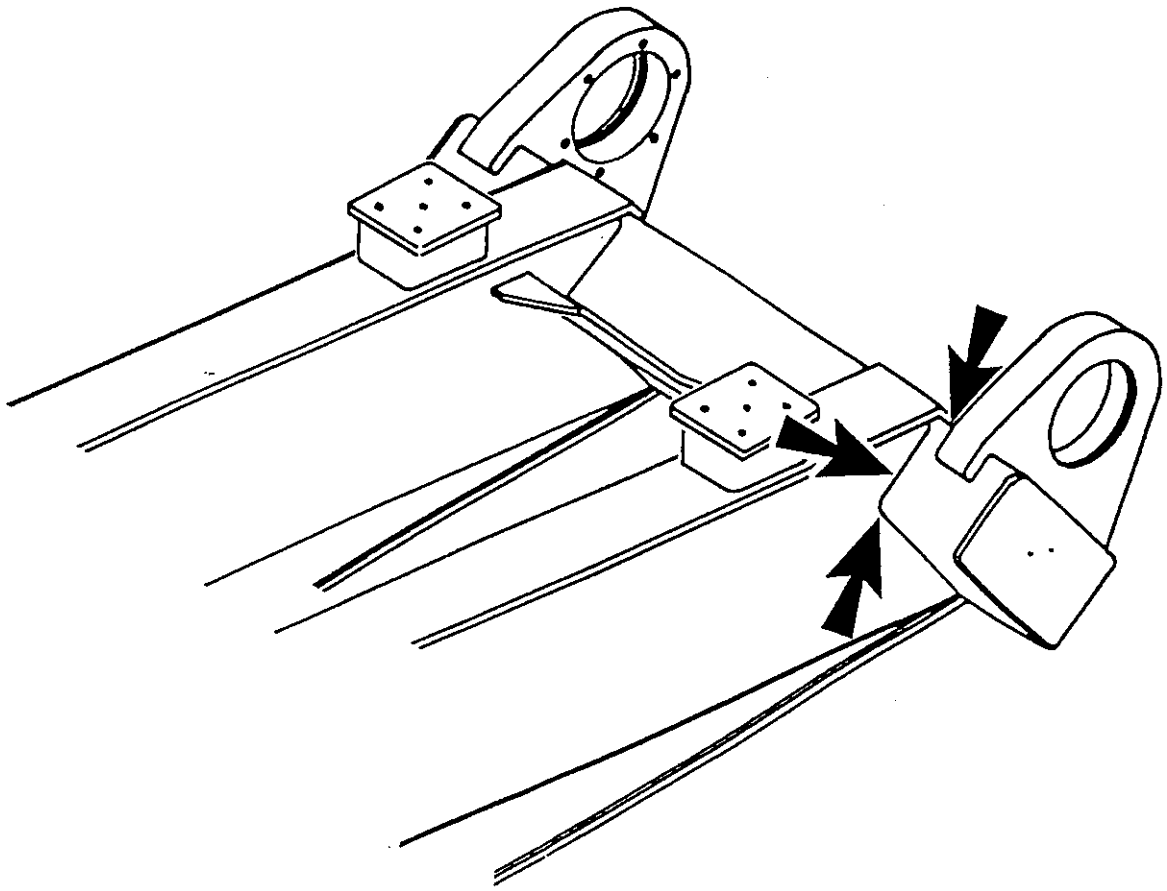
Model No.: 408

Detail of Issue (continued):

ANNUAL INSPECTION PROCEDURE

1. Visually inspect both sides of the boom in the areas shown.

2. If any cracks are found, contact the CHANCE Customer Service Department.



March 29, 1999

MEMORANDUM

TO: All Inspector Specialist
Thru: Rommes
cc: Jacobs

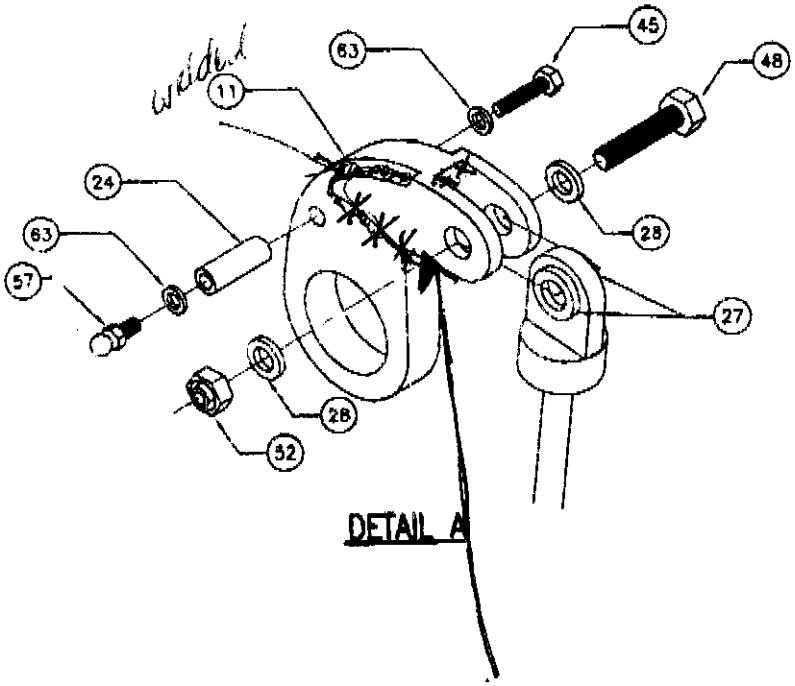
FROM: Mike Rinehart, O&MCII

SUBJECT: IMPORTANT NOTICE REGARDING Chance Chaos

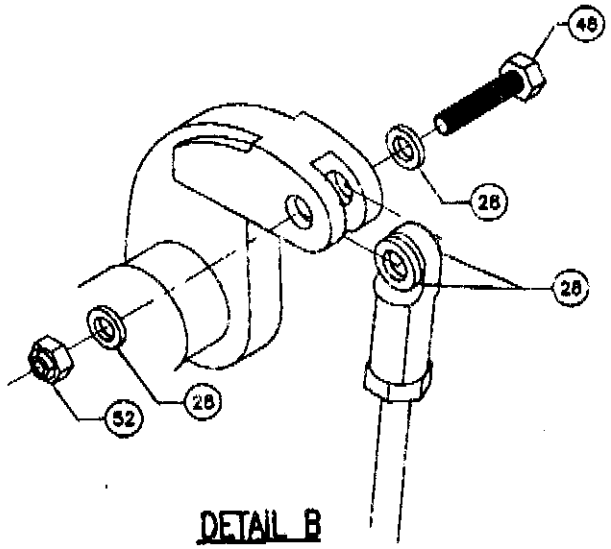
IMPORTANT NOTICE REGARDING THE CHANCE CHAOS

Unofficial information has been received that on at least one of Chance's Chaos the Lap Bar Mount (See diagram enclosed) has developed hair line cracks on some seats. In the " xxxx" area on the diagram.

If you have any questions regarding this matter do not hesitate to give me a call.



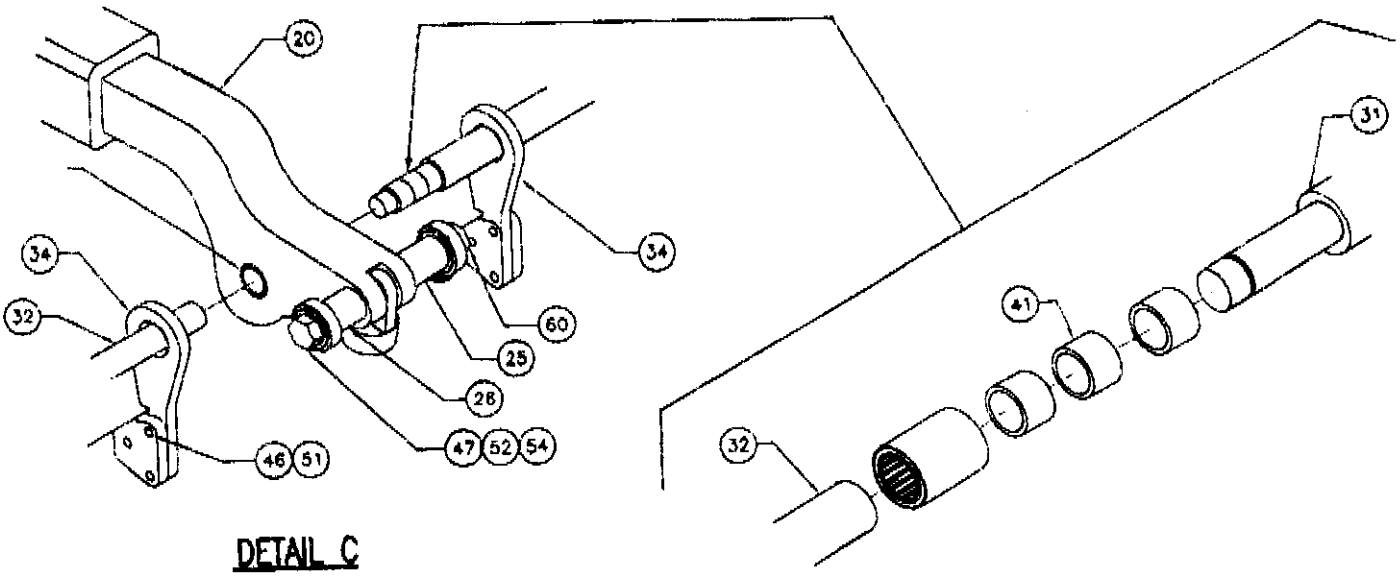
DETAIL A



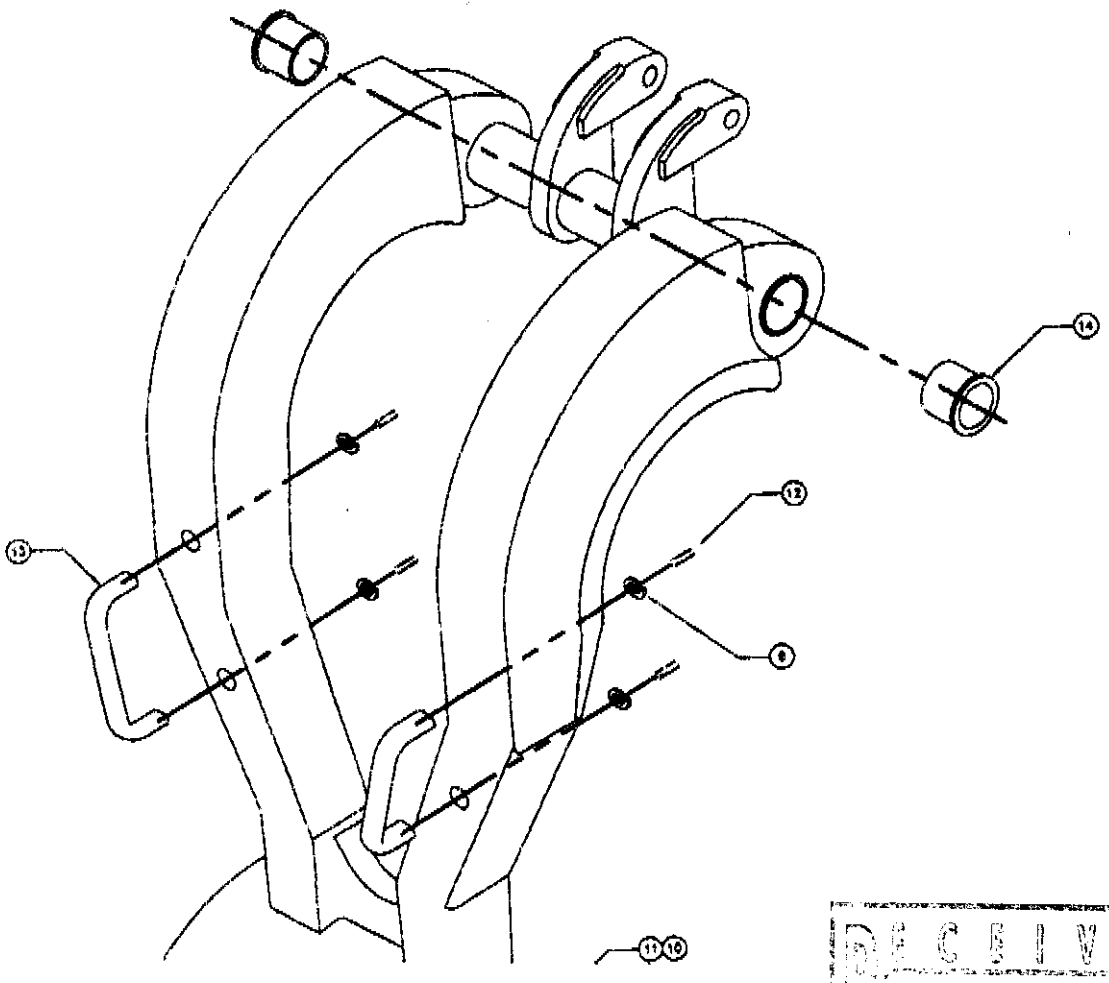
DETAIL B

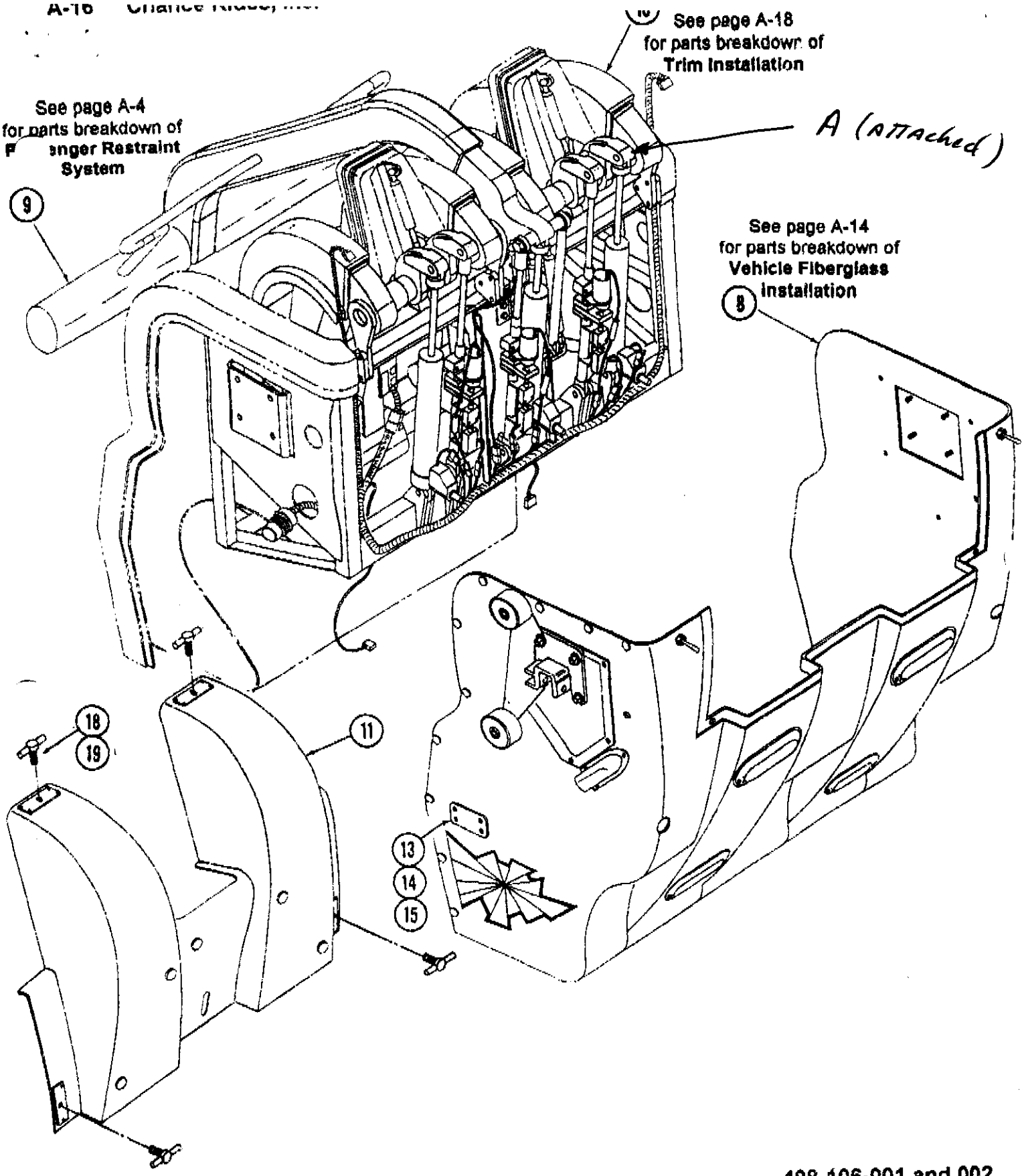
CHAOS SPOT
WELDS ON SOME SEAT
HAVE HAIR LINE CRACKS
THERE ARE 4 SPOT WELDS ON
HANGER.

ROBERT HAS CALLED
CHANCE.



DETAIL C





VEHICLE FINAL ASSEMBLY

408-106-001 and 002

99-08 A

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Bulletin No: B408R1209-0
Release Date: March 18, 1999
Effective Date: March 18, 1999
Supersedes: N/A
Completion Date: April 18, 1999

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02297 through 408-03998

Model No.: 408

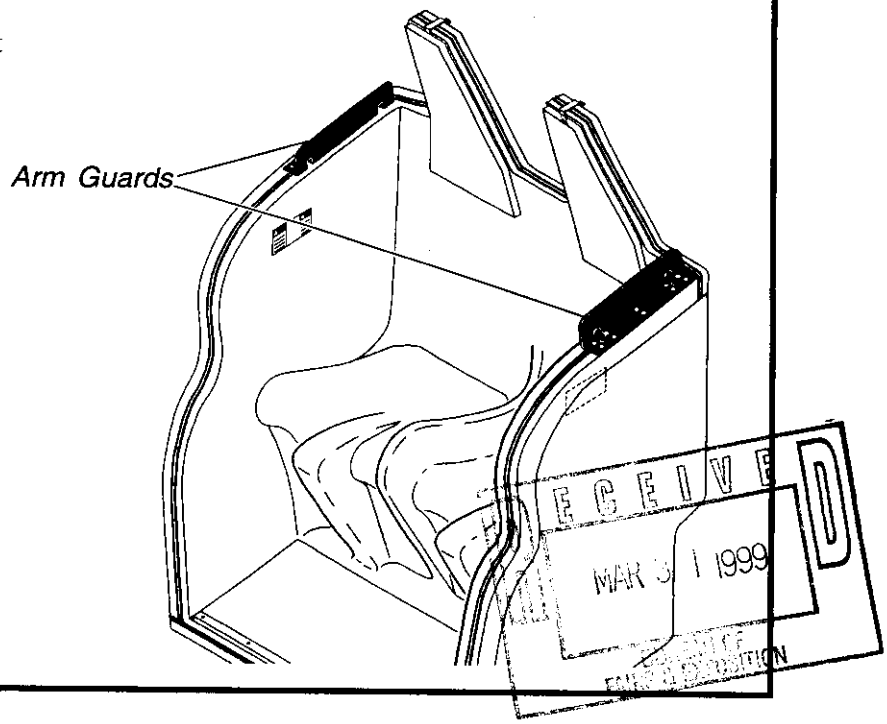
Abstract of Issue:
Arm Guard Kit

Reason For Release:
Chance Rides, Inc. specifies in the CHAOS Operation Manual the correct way in which passengers are to be secured before the ride is started. The manual states that to avoid serious personal injury, passengers must keep their hands and feet inside the vehicle. It is the operator's responsibility to give safety instructions to the passengers and to make sure that they have their hands, arms, and feet inside the vehicle while the lap bar is being closed and locked. To further ensure that passengers' arms remain in the correct position, a caution decal* and an arm guard kit have been developed.

Action to be Taken:
All owners of the above noted amusement rides are required to order and install the Arm Guard Kit, number K408R1209-0.

This kit will be provided at no cost if ordered within 30 days of the release date of this bulletin.

The installation of this kit is in addition to following the recommendations in the CHAOS Operation Manual.



* *Refer to Chance Rides, Inc. service bulletin B408R1202-0*

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Bulletin No: B408R1209-0
Release Date: March 18, 1999
Effective Date: March 18, 1999
Supersedes: N/A
Completion Date: April 18, 1999

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

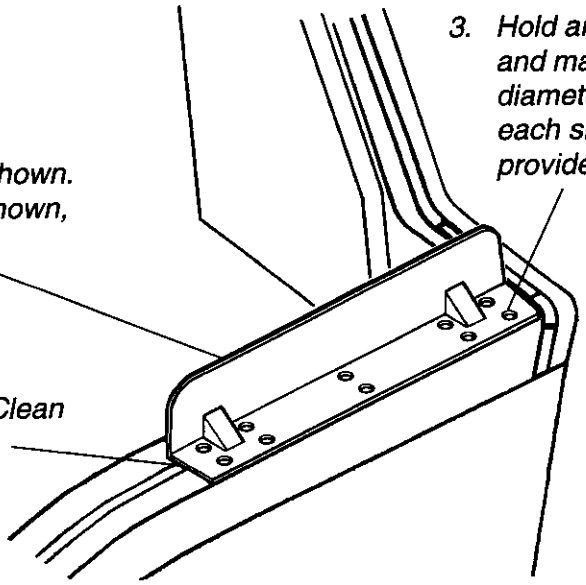
Ride Name: CHAOS
Affected Serial Nos.: 408-00196 and 408-02297 through 408-03998

Model No.: 408

Detail of Issue (continued):
Install kit number K408R1209-0 using the instructions provided in this bulletin. Kit number K408R1209-0 contains the following:

Part Number	Component	Quantity
408-178-001	ARM GUARD - Left Hand	18
408-178-002	ARM GUARD - Right Hand	18
66149000	RIVET - AD66BS (3/16")	360

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



NOTICE

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99-08 B

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Bulletin No:	B408R1208-0
Release Date:	March 18, 1999
Effective Date:	March 18, 1999
Supersedes:	N/A
Completion Date:	Immediate
Page:	1 of 1

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All

Model No.: 408

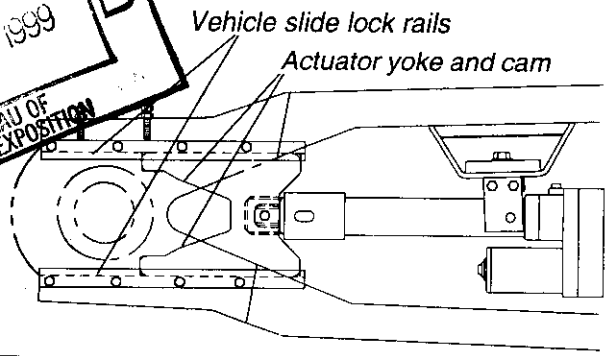
Abstract of Issue:
Vehicle Lock Slide Rail Lubrication

Reason For Release:
Chance Rides, Inc. has revised the lubricant specification for the vehicle lock slide rails and actuator yoke and cam on the CHAOS amusement ride. The new lubricant provides several benefits over the previously specified lubricant - better lubrication, longer maintenance intervals and better protection in extreme operating conditions.

Action to be Taken:
All owner/operators of CHAOS amusement rides must use the lubricant specified in this bulletin to provide maximum service life of the slide lock components.

Detail of Issue:
Apply Loctite® Anti-Seize Lubricant (or equivalent) on the vehicle lock slide rails and actuator yoke and cam weekly, or at every set-up, whichever occurs first. This product can be obtained from most lubricant suppliers, and is available in an aerosol container. This allows application through the access holes in the sweep end covers. Apply lubricant in the areas shown on all sweeps.

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



NOTICE

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99-08c

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Bulletin No:	P408R1207-0
Release Date:	March 18, 1999
Effective Date:	March 18, 1999
Supersedes:	N/A
Completion Date:	N/A
Page:	1 of 2

NOTIFICATION

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All prior to 12/31/98

Ride Name: CHAOS
Affected Serial Nos.: All prior to 408-04099

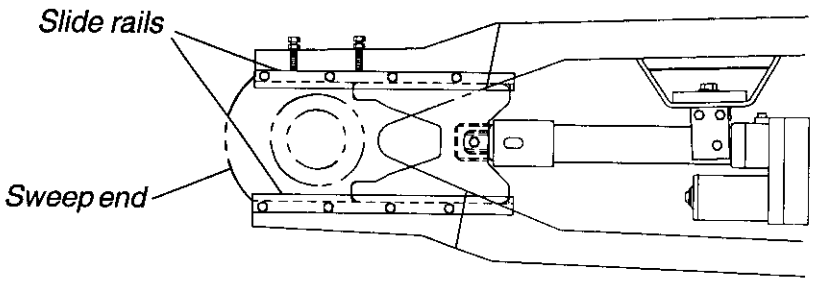
Model No.: 408

Abstract of Issue:

VEHICLE LOCK SLIDE RAIL REWORK

Reason For Release:

Chance Rides, Inc. has developed a new slide rail for the vehicle lock mechanism on the CHAOS amusement ride. The new design incorporates adjustment for accurate rail alignment, and steel rails for long service life.



Action to be Taken:

This product improvement can be made to the above noted amusement rides at the owner's option.

Detail of Issue:

Order and install kit number K408R1207-0. The kit includes all necessary parts to rework one complete ride, with complete instructions for installation. The kit will be offered at a reduced price if ordered within 90 days of the release date of this bulletin

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

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Bulletin No:	P408R1207-0
Release Date:	March 18, 1999
Effective Date:	March 18, 1999
Supersedes:	N/A
Completion Date:	N/A
Page:	2 of 2

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All prior to 12/31/98

Ride Name: CHAOS Affected Serial Nos.: All prior to 408-04099

Model No.: 408

Detail of Issue (continued):

Kit K408R1207 consists of the following:

Part Number	Description	Quantity
408-235A-001	VEHICLE LOCK SLIDE RAIL (Tapped holes)	18
408-235A-002	VEHICLE LOCK SLIDE RAIL (Slotted holes)	18
60767600	HEX HEAD CAPSCREW (3/8-16 x 2-1/4, Grade 5)	72
64781600	LOCK NUT - Nylon Insert (3/8-16)	72
68531000	FLAT WASHER - SAE (3/8)	144
60749400	HEX HEAD CAPSCREW (5/16-18 x 1, Grade 5)	36
64760000	JAM NUT (5/16-18)	36
60767000	HEX HEAD CAPSCREW (3/8-16 x 1-1/2, Grade 5)	72
68537400	LOCK WASHER (3/8)	72
408-240-002	SHIM - SLIDE RAILS (0.014)	576
K408R1207-0	INSTALLATION INSTRUCTIONS (drawing)	1

NOTICE

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CHANCE Rides, Inc.®

Fax

To:	Mike Runhart State of Florida	**From:**	Steven Laycock
Fax:	850-488-9023	**Pages:**	10
Phone:		**Date:**	02/18/99
Re:	Amusements of Buffalo – CHAOS	**CC:**	Bill Green 407-259-5581

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

Bill Green with Amusements of Buffalo ordered Kit number K-408R1203-0 as referenced in one of the following bulletins which it seems he failed to receive. As long as the center hub section has been inspected for cracks and none are present, the ride can be operated through the current spot. However, installation of the kit must be completed prior to operating the ride at the next spot or by March 1st, which ever occurs first.

If you have any questions regarding any of this information, please feel free to contact me.

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Bulletin No: B408R1203-0
Release Date: January 11, 1999
Effective Date: January 11, 1999
Supersedes: N/A
Completion Date: February 1, 1999

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS

Affected Serial Nos.: 408-00196 through 40802097 and 408-02297 through 408-03998

Model No.: 408

Abstract of Issue:
Hub Gusset Kit

Reason For Release:
Chance Rides, Inc. has become aware that cracks can form in and around the gussets on the hub of the above noted CHAOS amusement rides.

Action to be Taken:
Chance Rides, Inc. requires all owner/operators to perform the following inspection and to order and install kit number K408R1203-0. This kit includes all of the parts needed to rework one ride. Kit K408R1203-0. is offered at no charge if ordered within 60 days of the issue date of this bulletin.

Kit number K408R1203-0 contains the following:

Part Number	Component	Quantity
K408R1203-2	GUSSET WELDMENT	7
60849700	HEX HEAD CAPSCREW (1/2-13 x 2-1/4" Grade 8)	14

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

NOTICE

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Bulletin No: B408R1203-0
Release Date: January 11, 1999
Effective Date: January 11, 1999
Supersedes: N/A
Completion Date: February 1, 1999

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 40802097 and 408-02297 through 408-03998

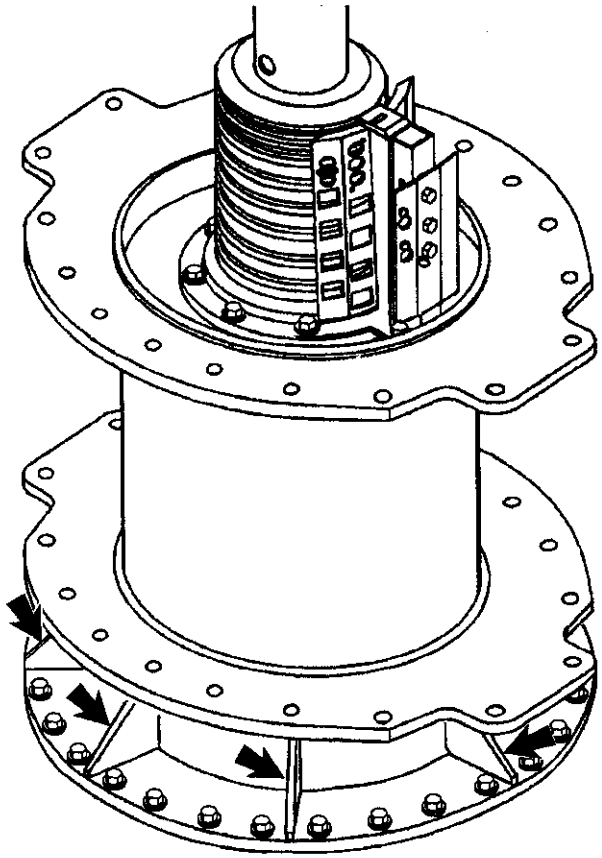
Model No.: 408

Detail of Issue (continued):

INSPECTION PROCEDURE

1. Visually inspect the seven existing gussets and the weld area around each gusset as shown.

2. If any cracks are found, contact Chance Rides, Inc. Customer Service Department for a repair procedure. If no cracks are found, install Kit number K408R1203-0.



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Bulletin No: B408R1203-0
Release Date: January 11, 1999
Effective Date: January 11, 1999
Supersedes: N/A
Completion Date: February 1, 1999

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 40802097 and 408-02297 through 408-03998

Model No.: 408

Detail of Issue (continued):

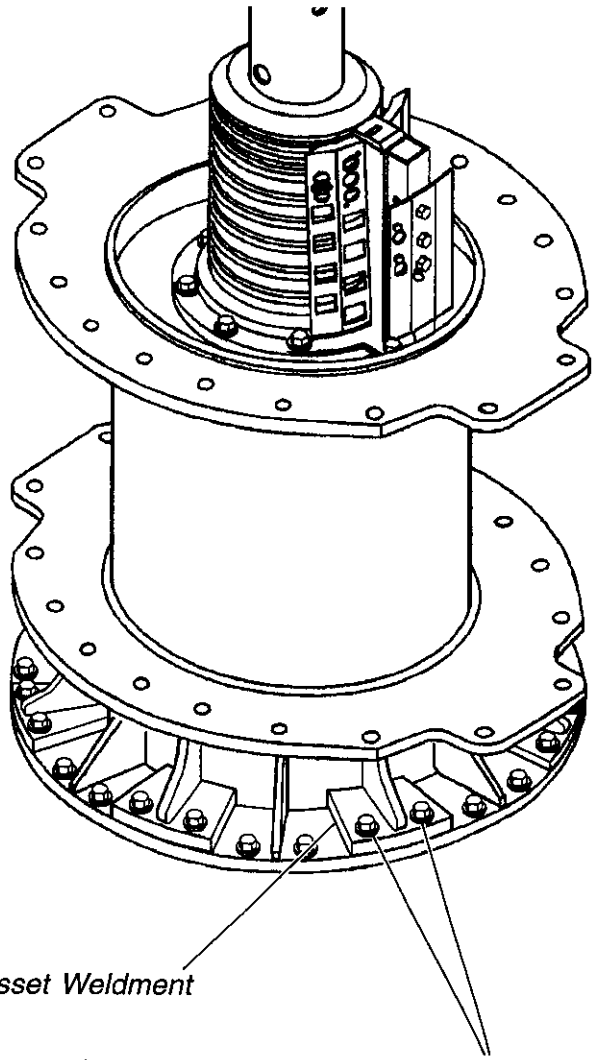
INSTALLATION INSTRUCTIONS -
Kit Number K408R1203-1

1. Remove and discard the two center hex head capscrew between two of the existing gussets. Retain the existing hardened washers which will be reused during installation of the new gusset weldments.

2. Clean the threaded holes of the bearing where the capscrews were removed.

3. Position one of the new gusset weldments in place. Using the existing hardened washers and the new 1/2-13 x 2-1/4" hex head capscrews, secure the gusset weldment in place. Apply Loctite® 271 (red) to the capscrew threads before installation. Using a torque wrench, tighten these capscrews to 90 ft-lbs.

4. Repeat Steps 1 and 2 above until all gusset weldments have been installed.



1/2-13 x 2-1/4" hex head capscrews with existing hardened washers. Apply Loctite® 271 (red) and tighten to 90 ft-lbs.

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Release Date: January 11, 1999
Effective Date: January 11, 1999
Supersedes: N/A
Completion Date: February 1, 1999

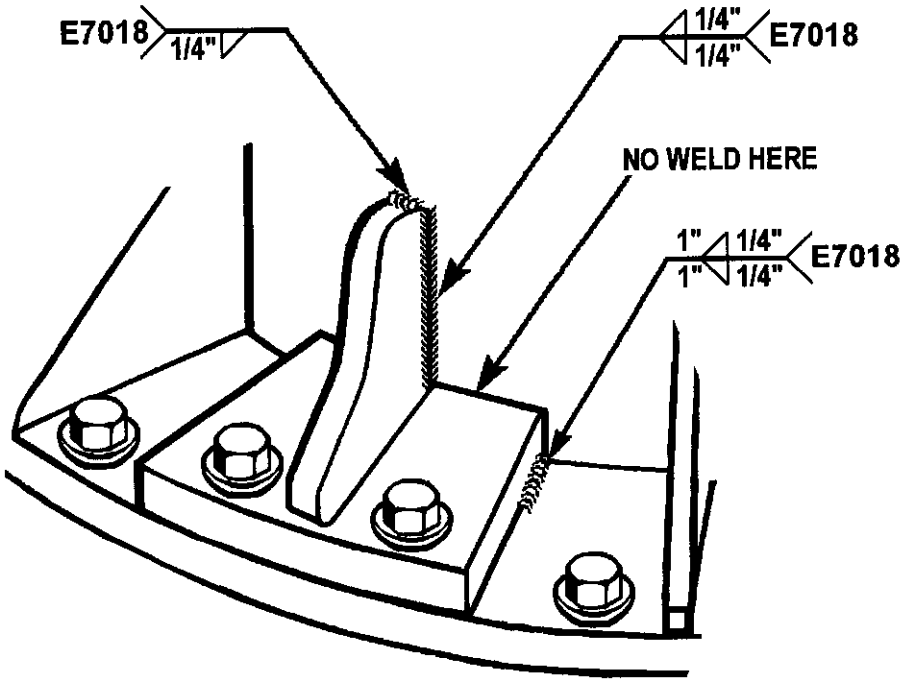
Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 40802097 and 408-02297 through 408-03998

Model No.: 408

Detail of Issue (continued):

5. Weld the gussets in place using E-7018 welding rod. Weld only in the areas shown below.



6. Material surface to be welded must be above 70° F before welding. To avoid heat distortion of the hub, welds must be performed in the sequence shown on the following page.

NOTE: *All welding must be done by a certified welder, following the sequence and procedure as outlined in this bulletin.*

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Release Date: January 11, 1999
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Supersedes: N/A
Completion Date: February 1, 1999

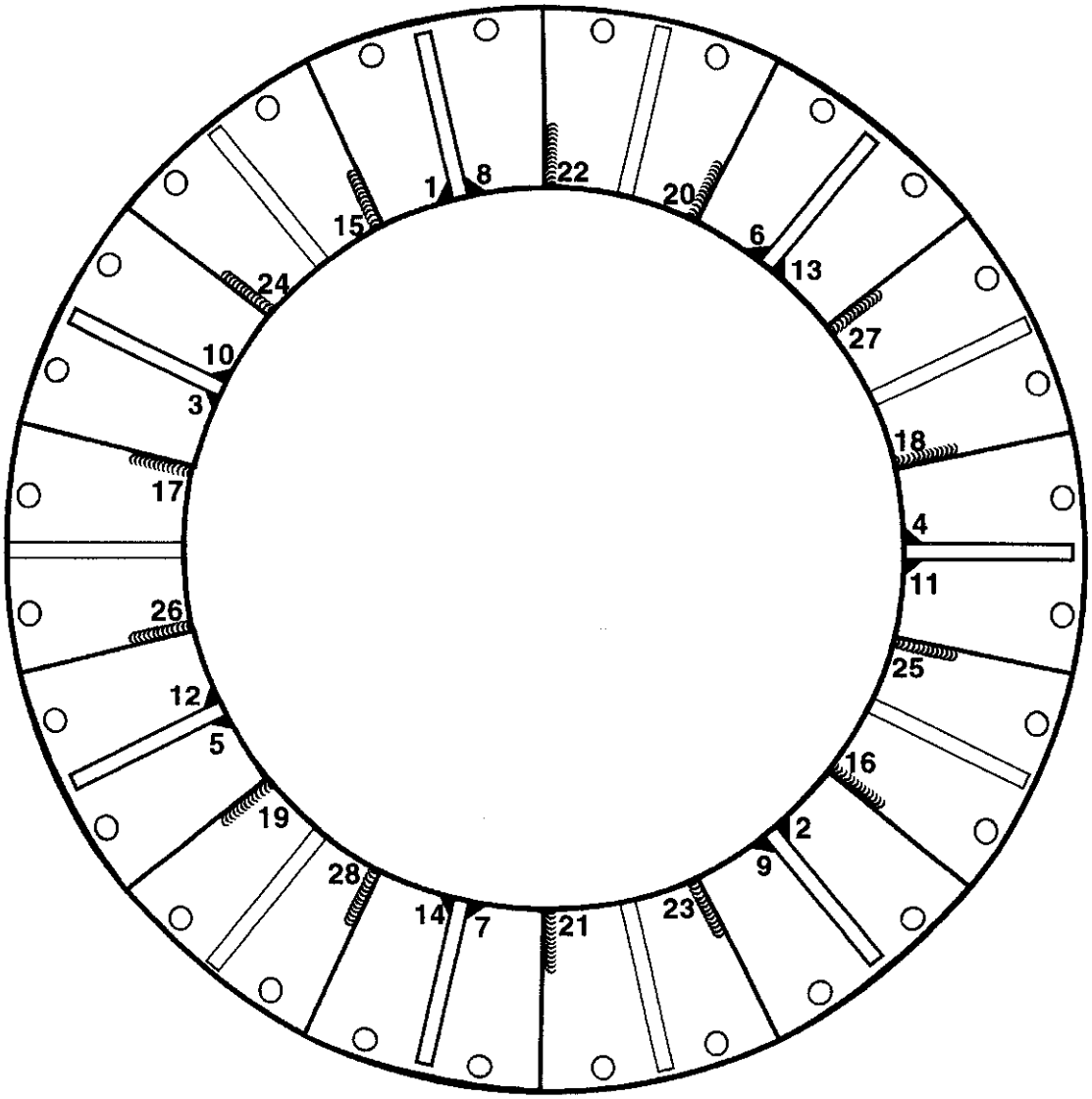
Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: 1/31/96 through 8/1/98

Ride Name: CHAOS
Affected Serial Nos.: 408-00196 through 40802097 and 408-02297 through 408-03998

Model No.: 408

Detail of Issue (continued):

Weld Sequence



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Website: http://www.rides.com

Bulletin No: B408R1204-0
Release Date: November 30, 1998
Effective Date: November 30, 1998
Supersedes: N/A
Completion Date: Immediate

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.
Affected Production Dates: All

Ride Name: CHAOS
Affected Serial Nos.: All Portable Units

Model No.: 408

Abstract of Issue:
Boom Lift Cylinder Blocking

Reason For Release:
Chance Rides, Inc. has become aware that the boom lift cylinder on the above noted CHAOS amusement rides need to be supported with blocking while the ride is being operated. Failure to block under the ride's boom lift cylinder can cause undue stresses to the trailer frame in the cylinder pivot point area. These stresses can result in the cracking of structural members of the trailer frame in the area where the boom lift cylinder pins.

Action to be Taken:
All owner/operators of trailer-mounted CHAOS amusement rides must install blocking as described in this bulletin at each set-up in order to correctly support the boom lift cylinder.

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

NOTICE

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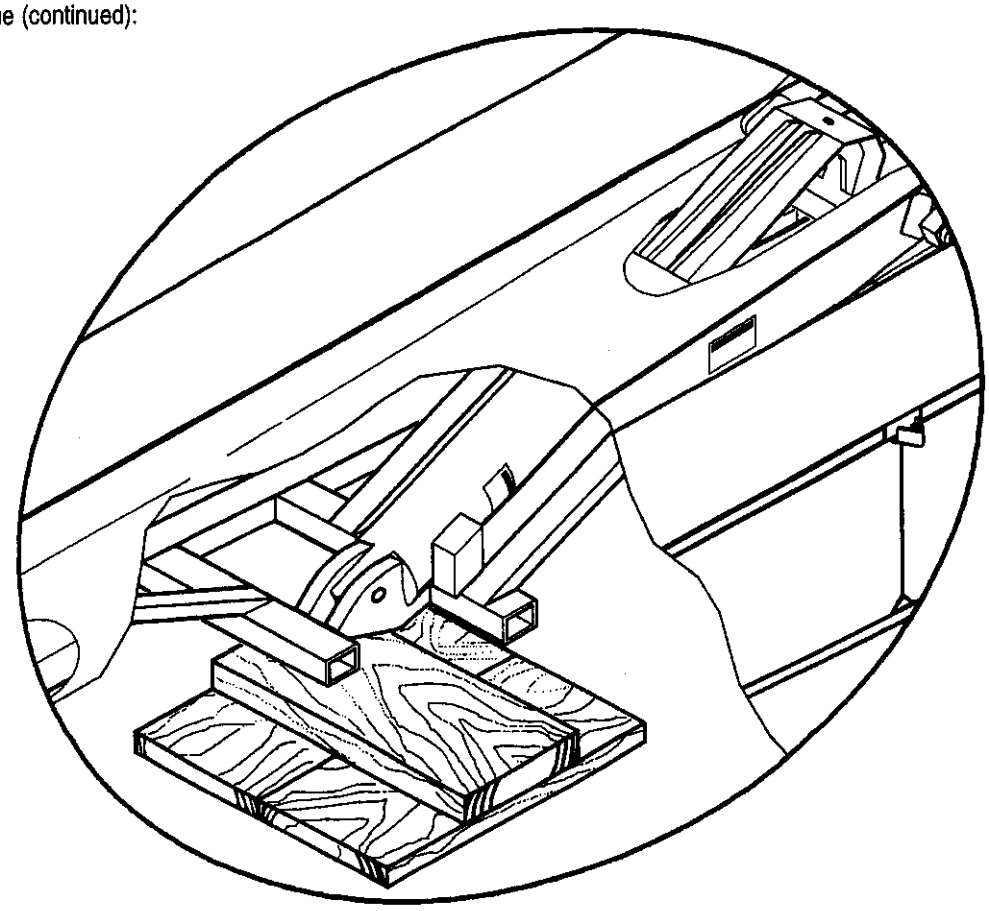
Bulletin No: B408R1204-0
Release Date: November 30, 1998
Effective Date: November 30, 1998
Supersedes: N/A
Completion Date: Immediate

Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All

Ride Name: CHAOS Affected Serial Nos.: All Portable Units

Model No.: 408

Detail of Issue (continued):



1. Recommended use is a minimum of two blocks stacked on top of each other in a cross block style.
2. Recommended block sizing is 3" x 12" x 48" blocks on the bottom and 3" x 12" x 24" block on top.
3. Install blocks centered under lowest point of boom lift cylinder mounting ears.
4. Shim blocks as required to bring blocking within 1/8 to 1/4 inch of the boom lift cylinder mounting ears.

CHANCE RIDES, INC.
4219 Irving
Wichita, KS 67277-2328
U.S.A.
Phone: 1-800-242-6231 FAX: 1-316-942-7416
Website: http://www.rides.com

Bulletin No:	B408R1202-0
Release Date:	October 1, 1998
Effective Date:	October 1, 1998
Supersedes:	N/A
Completion Date:	November 1, 1998
Page:	1 of 2

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.	Affected Production Dates: ALL
Ride Name: CHAOS	Affected Serial Nos.: ALL
Model No.: 408	

Abstract of Issue:

PASSENGER RESTRAINTS

Reason For Release:

Chance Rides, Inc. specifies in the CHAOS amusement ride Operation Manual the correct way in which passengers are to be secured before the ride is started. The manual states that to avoid serious personal injury, passengers must keep their hands and feet inside the vehicle. It is the operator's responsibility to give safety instructions to the passengers and to make sure that they have their hands, arms, and feet inside the vehicle while the lap bar is being closed and locked.

Action to be Taken:

All owners of the above noted amusement rides must establish a training program which emphasizes the manufacturer's specifications as to how passengers are to be properly seated and secured. Operators must be instructed as to the dangers to the passengers if not secured per the manufacturer's specifications. All owners/operators of the CHAOS ride must read the Operation Manual and be familiar with all warnings and cautions printed in the manual prior to operating the ride.

Detail of Issue:

To help insure the safety of the passengers, Chance Rides, Inc. has developed a decal which, along with the operator's safety instructions, will alert the passengers to the proper way in which to be secured in the seat. All owner/operators of the above noted CHAOS rides are required to order and install these decals, part number 408-172-001. A total of 36 decals is required, two per vehicle. Follow the instructions contained in this bulletin for proper installation of the decals.

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

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Ride Manufacturer: CHANCE RIDES, INC.	Affected Production Dates: ALL
Ride Name: CHAOS	Affected Serial Nos.: ALL
Model No.: 408	

Detail of Issue (continued):

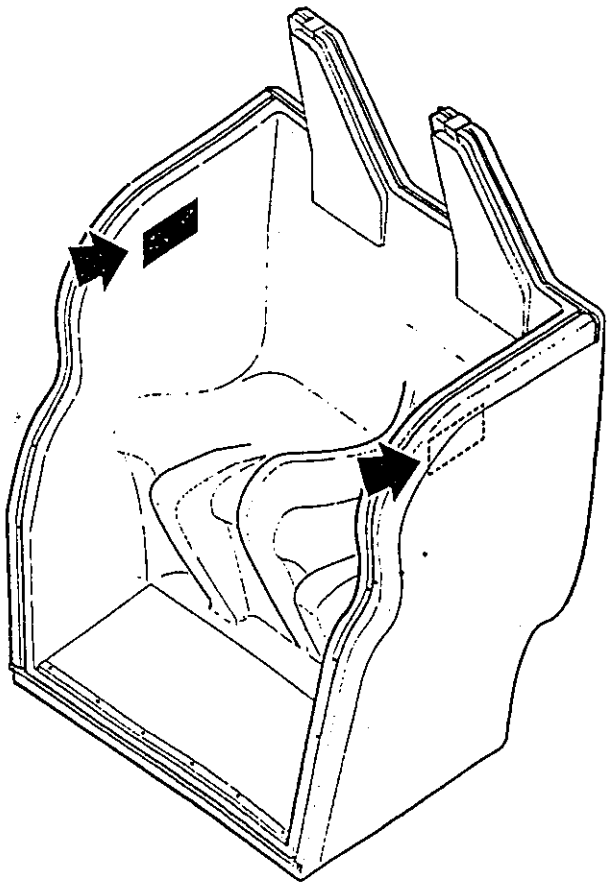
NOTICE

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 INSTRUCTIONS

Thoroughly clean the vehicle surface before applying the decals, then install decals in locations shown. Replace decals immediately if they are removed, damaged, or otherwise become illegible.



NUMBER: B408R1184-0

DATE: Sept. 12, 1997

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: All Units

Ride: CHAOS

Subject: Inspection of Cylinder Support Frames

Chance Rides, Inc. has become aware that it is possible for cracks to develop in the structural frame members which supports the main hydraulic lift cylinder on the CHAOS amusement rides noted above.

Chance Rides, Inc. requires all owner/operators to perform an annual visual inspection of all support frame members as outlined on the back of this bulletin. If any indications are found, contact Chance Customer Service for a repair procedure.

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

NOTICE

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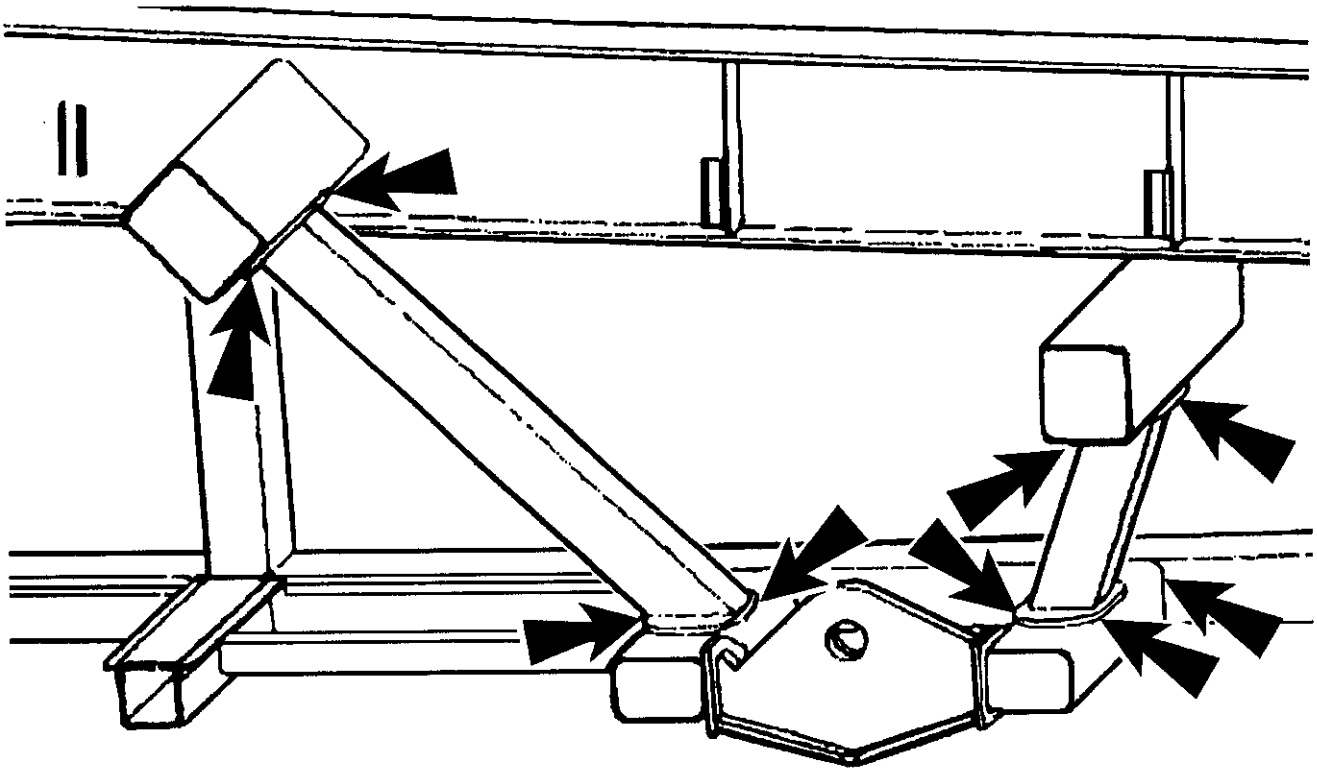
INSPECT ALL WELDS IN THE AREAS INDICATED BY ARROWS



NUMBER: B408R1180-0

DATE: June 20, 1997

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: All Units

Ride: CHAOS

Subject: Lap Bar Indicator Light Wiring Rework

Chance Rides, Inc., has developed a rework procedure for the lap bar indicator light wiring for the CHAOS amusement ride. The rework consists of securing the wire harness at the light to restrict movement of the wires and prevent fatiguing and breaking of the wires.

All owner/operators of the above noted amusement rides are required to perform the rework, using the installation instructions and parts furnished with this bulletin.

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

NOTICE

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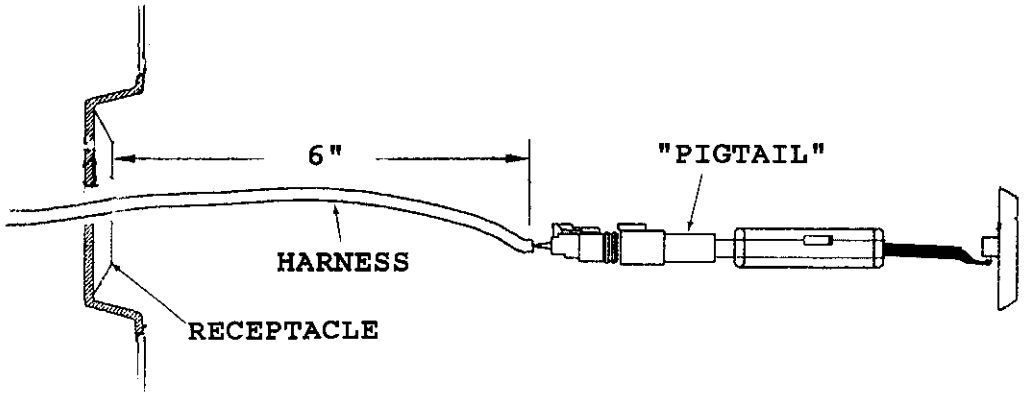
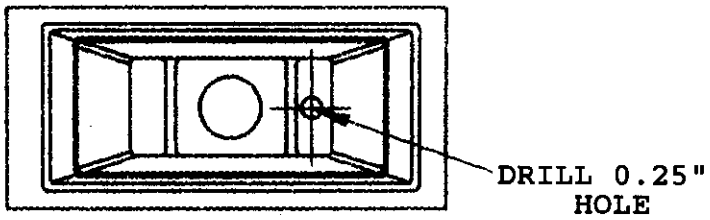
INSTALLATION INSTRUCTIONS

1. Turn off power to the ride, or open the lap bars to turn all lap bar indicator lights off. The indicator lights are located at the center of each vehicle near the passengers' feet.

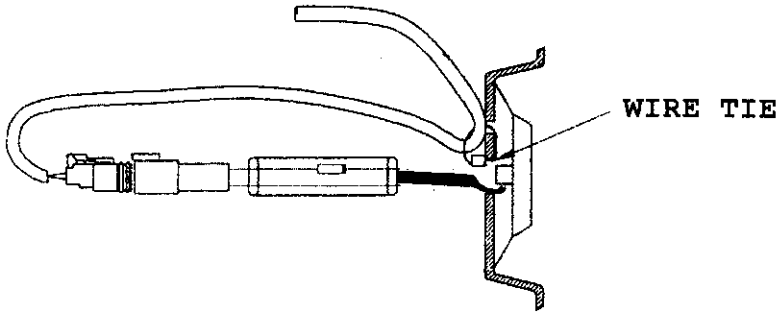
2. Remove the light using a screw driver. Pull the "pigtail" and harness out of the receptacle until about six inches of the harness are outside the vehicle.



3. Drill a 0.25" hole through the fiberglass behind the receptacle as shown. Be careful not to damage any wiring behind the opening.



4. Insert a wire tie (part number 68855200) through the small hole and pull back through the large opening. Needle-nose pliers work well.



5. Attach the wire tie aroud the harness (not the "pigtail") and pull until snug. Cut off excess wire tie.

6. Push the wire tie head and harness back through the large opening.

7. Feed the remainder of the "pigtail" back inside the vehicle and install the light.

8. Remove the cover from the back of the vehicle. Locate the same harness and pull up gently to remove any slack from the harness. Secure the harness to the vehicle frame with another wire tie.

NUMBER: B408R1178-0

DATE: June 6, 1997

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 408-96002 through 408-97019

Ride: CHAOS

Subject: Hydraulic System Rework

Chance Rides, Inc. has become aware of at least one case on a CHAOS amusement ride when the rod seal on the boom lift cylinder failed. The failure of the seal was caused by operating the ride in cold weather. The failure of the seal did not result in a safety problem, but rather allowed excessive leakage of hydraulic fluid from the system. Chance Rides, Inc. has designed a rework kit that, when properly installed will prevent excessive internal oil pressure from building up in the cylinder, reducing the possibility of failure of the seal.

All owner/operators of the above noted amusement rides are required to order and install kit number K408R1178-0, using the installation instructions furnished with this bulletin. Each kit contains all necessary parts to rework one ride. Kits are available at no charge if ordered within 90 days of the day on this bulletin. Failure to order and install this kit will cause any warranty on the lift cylinder to be voided.

Kit number K408R1178-0 contains the following:

Part Number	Component	Quantity
62701000	Reducer Bushing (1/2"MP-3/8"FP)	1
60274000	Plug - hex head pipe	1
60104600	Adapter (1/4"MOR-1/2"F 37 degree)	2
60095200	Adapter O-ring boss (3/8"FP-1/2"OR)	1
60078800	Adapter 90 degree elbow	1
60078600	Adapter 90 degree elbow	1
28464902	Relief valve cartridge (3500psi)	1
28467901	Valve body	1
408-661-020	Hose assembly	1

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All work must be performed by qualified people, 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.

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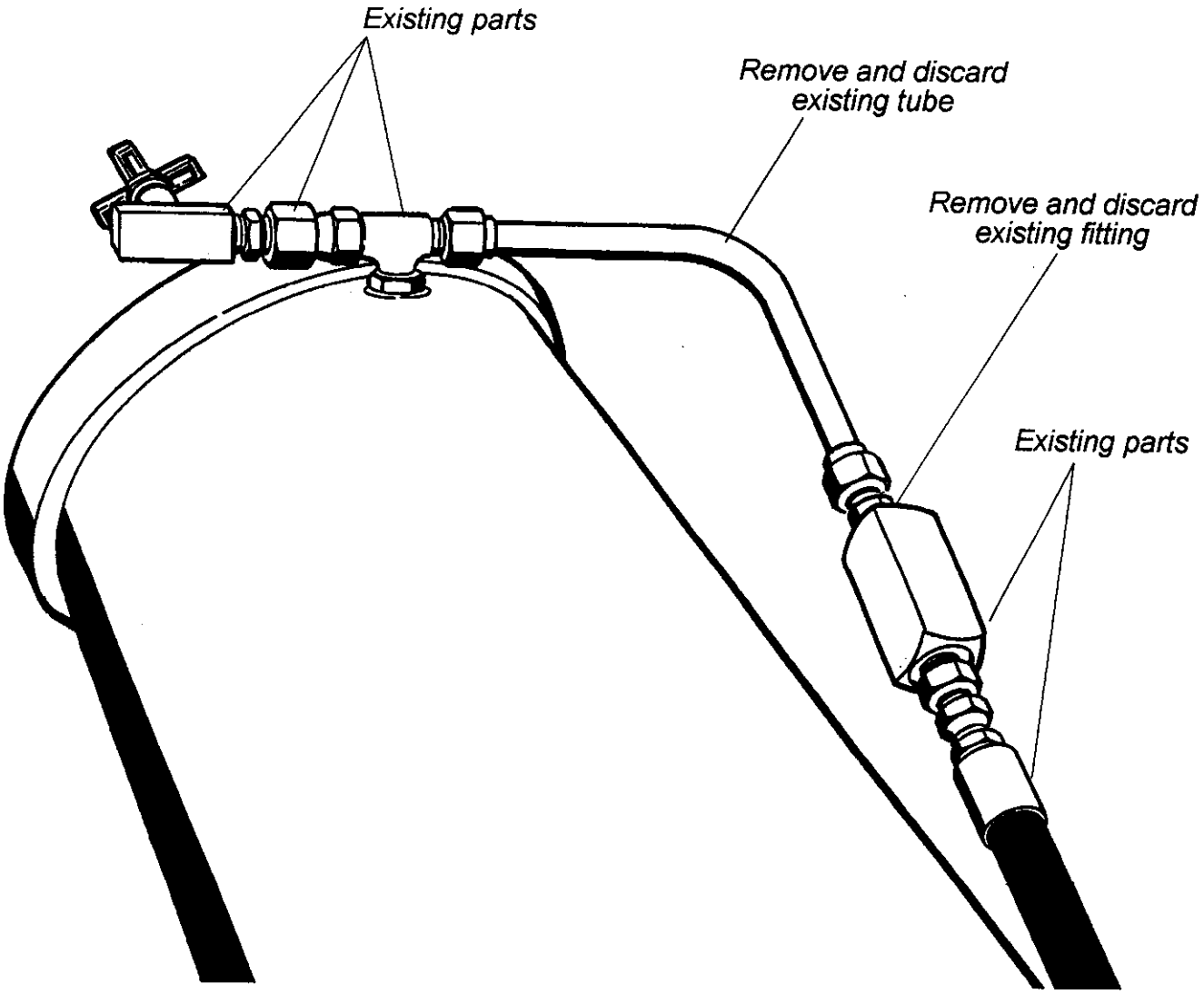
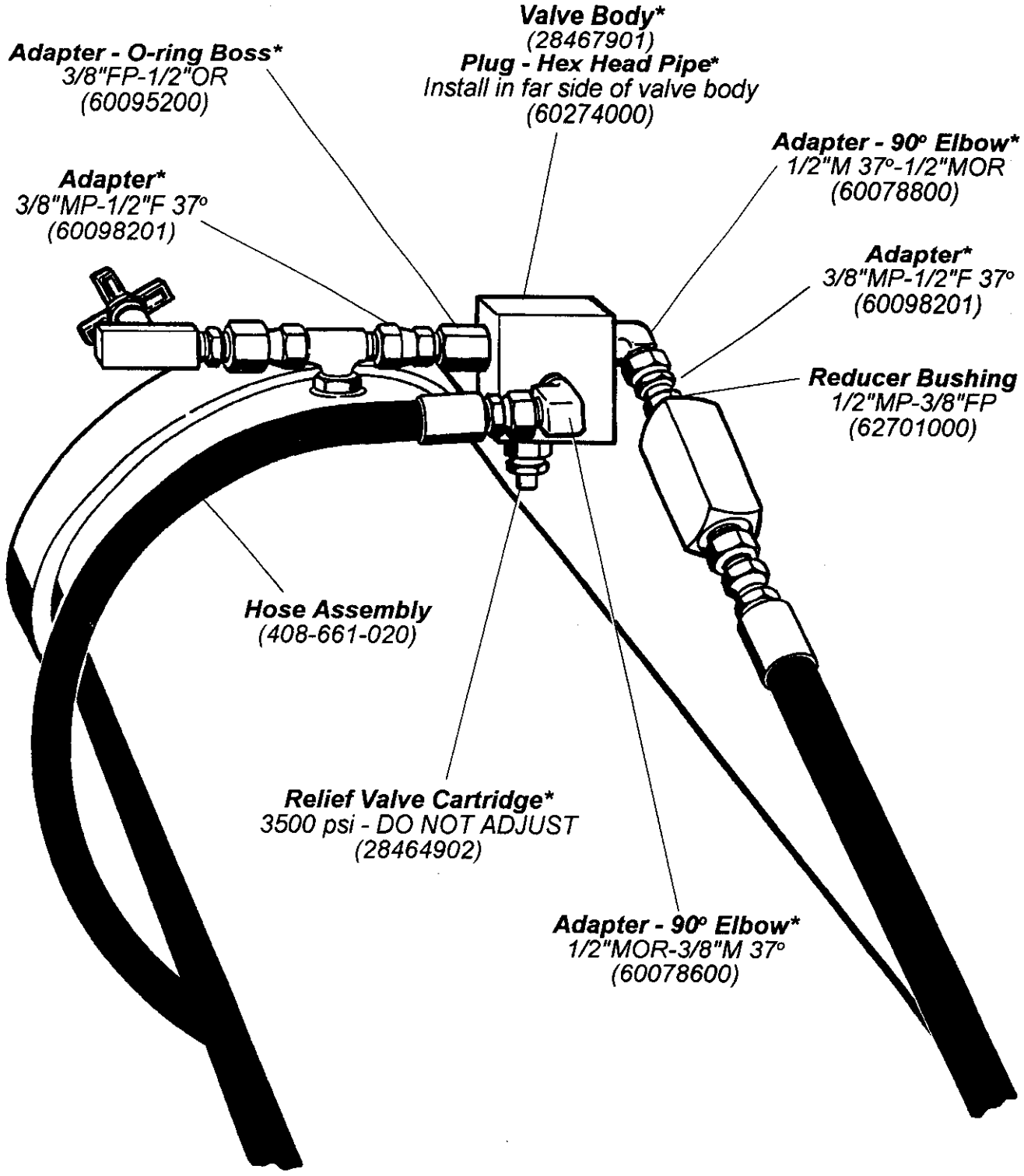
INSTALLATION INSTRUCTIONS
Hydraulic System Rework Kit

1. Lower the boom completely, stop the hydraulic pump, and shut off the power at the main breakers.
2. Locate the tube at the "T" fitting at the rod end of the boom lift hydraulic cylinder. Remove and discard the tube. Loss of hydraulic fluid will be minimal.

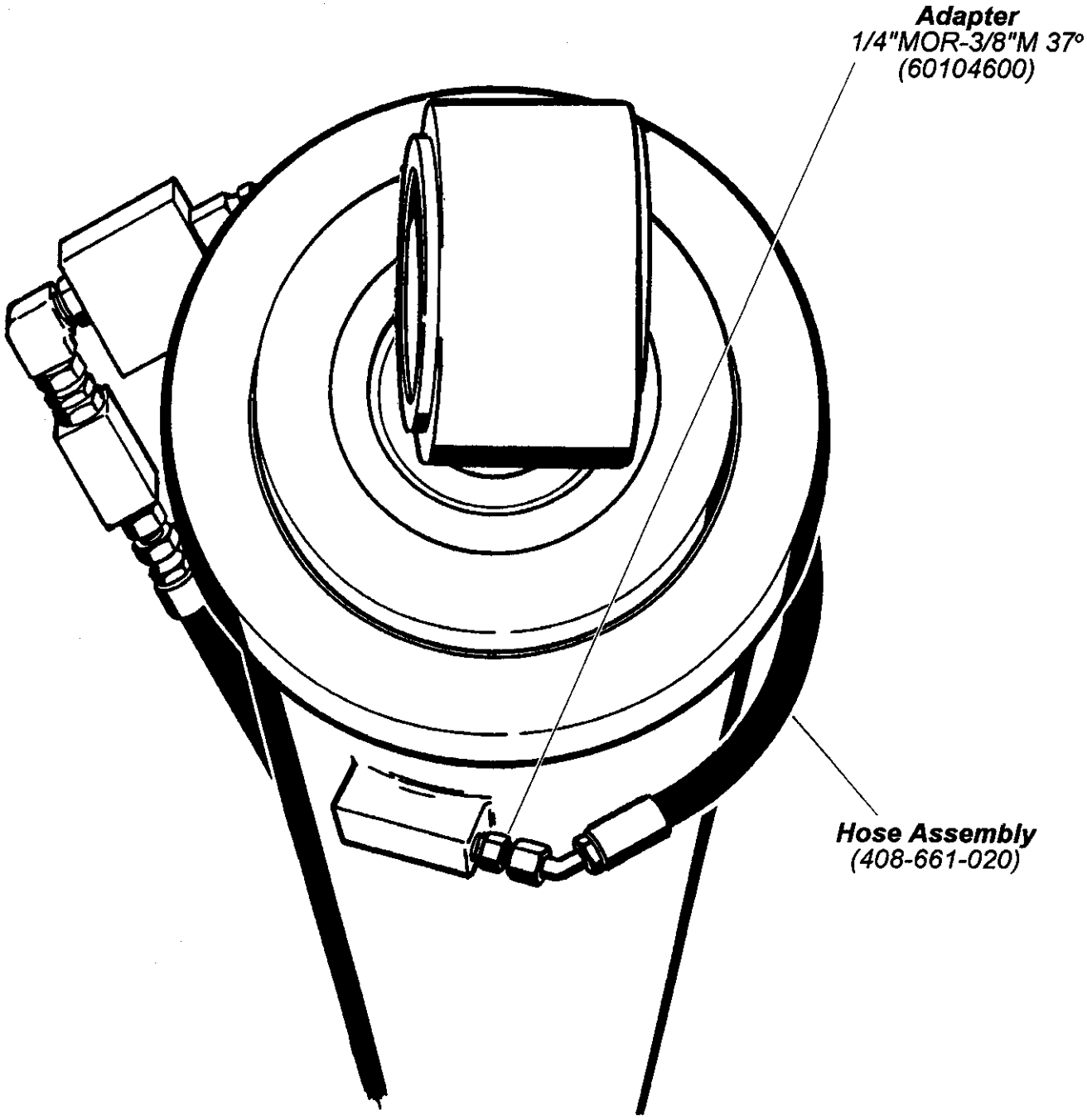


3. Install the parts provided in the kit as shown in the following illustrations.

4. After all parts are installed, operate the ride, then check for leaks at all hoses, tubes and fittings.



* ***These parts can be sub-assembled prior to installation on the ride.***



VIEW OF UNDERSIDE OF BOOM LIFT CYLINDER

Department of Agriculture and Consumer Services

Division of Standards

Bureau of Fair Rides Inspection

Company Name	General Name	S	USAID	Specific Name	Serial #	Manufacturer	Perm Expir
AMUSEMENTS OF BUFFALO	CHAOS	A	04583	CHAOS	408-00996	CHANCE RIDES, INC.	10/21/
DEGGELLER ATTRACTIONS, INC.	CHAOS	A	05309	CHAOS	408-01196	CHANCE RIDES, INC.	11/19/
FARROW AMUSEMENT CO., INC.	CHAOS	A	04624	CHAOS	408-00796	CHANCE RIDES, INC.	10/21/
MILLER AMUSEMENTS	CHAOS	A	07011	CHAOS	408-01496	CHANCE RIDES, INC.	11/11/
MURPHY BROS. EXPOSITION	CHAOS	A	05669	CHAOS	408-00596	CHANCE RIDES, INC.	10/8/9
THEBAULT - BLOMSNESS, INC. AKA G	CHAOS	A	04854	CHAOS	408-01997	CHANCE RIDES, INC.	11/6/9

DONE
Allan
A & B.
cc: Mike

CHANCE Rides, Inc.®

Fax

To:	Allan	**From:**	Steven Laycock
	Florida Amusement Ride Inspector		800-242-6231 ext. 2293
Fax:	850-488-9023	**Pages:**	
Phone:		**Date:**	11/09/00
Re:	CHAOS	**CC:**	

The indicator light located on the front of the CHAOS seat is used as a tool and does not affect the safe operation of the ride. If the ride will not start, due to a restraint bar not being in a locked position, the indicator lights allows the operator to pin point which seat without having to physically check each seat. As precaution, operators should always check every seat before starting the ride.

If you have any questions regarding this information, please feel free to contact me.