MFG: CHANCE RIDES, INC.
NAME: CENTURY WHEEL
TYPE: NON-KIDDIE

CENTURY WHEEL (PRELIMINARY)

Service manual

Manual number 2xxxxxxx

CENTURY WHEEL

Introduction

Contents

Manual number 2xxxxxxx
(Issued April, 1993)

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Introduction

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 air compressor cover on the front curbside of the trailer. 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 RIDES CUSTOMER SERVICE DEPARTMENT, always specify the model and serial number of your ride. Record this information in the spaces on the plaque shown.

CENTURY WHEEL
PORTABLE MODEL

MODEL NO. 406

SERIAL NO. 406-00193

MAXIMUM PASSENGER CAPACITY: 60 ADULTS OR 90 CHILDREN (10,200 LB.)

MAXIMUM SEAT CAPACITY: 4 ADULTS* OR 6 CHILDREN (680 LB.) - 15 SEATS

MINIMUM PASSENGER HEIGHT: 42 INCHES UNACCOMPANIED BY AN ADULT

MAXIMUM RIDE SPEED: 3½ RPM

MAXIMUM UNBALANCE: 8 ADULTS (1,360 LB.)

RIDE CYCLE: 2.5 MINUTES (LONG PROGRAM) - 1.5 MINUTES (SHORT PROGRAM)

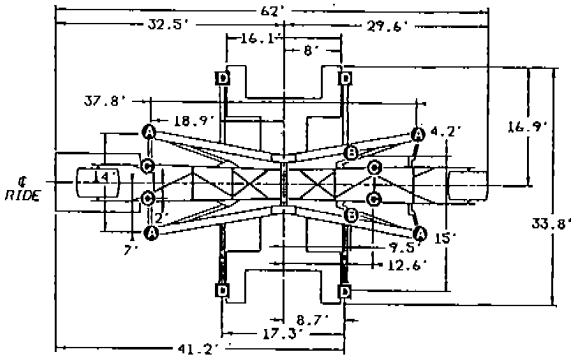
MAXIMUM WIND SPEED: 35 MPH OPERATING - 45 MPH STATIC (GUY WIRES RECOMMENDED IN HIGH WINDS)

POWER REQUIREMENTS: DRIVE 30 kVA, 230V 3 PHASE, 60 Hz
LIGHTS 30 kVA, 208/230V, 3 PHASE WYE 60 Hz

RIDE DIMENSIONS: HEIGHT - 66 FT., DEPTH 34 FT.
WIDTH (FRONTAGE) - 54 FT. ON GROUND, 60 FT. AT AXLE HEIGHT

MAXIMUM RIDE WEIGHT EMPTY: [redacted]

* A MAXIMUM LOAD CAN BE DERIVED FROM RANDOM INDIVIDUAL PASSENGER WEIGHTS, BUT MUST NOT EXCEED THE SPECIFICATIONS GIVEN.



MAXIMUM INDIVUAL VERTICAL GROUND LOADS (POUNDS)
REFER TO INSTALLATION DRAWINGS FOR SPECIFIC FOOTING LOCATION AND LOADS

SYMBOL	DESCRIPTION	—OPERATING— NO WIND 60 PASSENGERS	—OPERATING— 35 MPH WIND 60 PASSENGERS	—STATIC— 45 MPH WIND NO PASSENGERS
A	STUB TOWER JACK	13,000	12,000	9,000
B	LIFT CYLINDER JACK	1,000	1,000	6,000
C	TRAILER SCREW JACK	5,000	9,000	7,000
D	WIND BRACE	3,000	10,000	16,000

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

Conforms with all applicable ASTM amusement ride standards in effect on date of manufacture.

24616200

IMPORTANT: The specifications shown are for reference only. Always refer to the ride information plaque on your ride for specifications.

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

Operation

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 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 veiw 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 part of the ride 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.

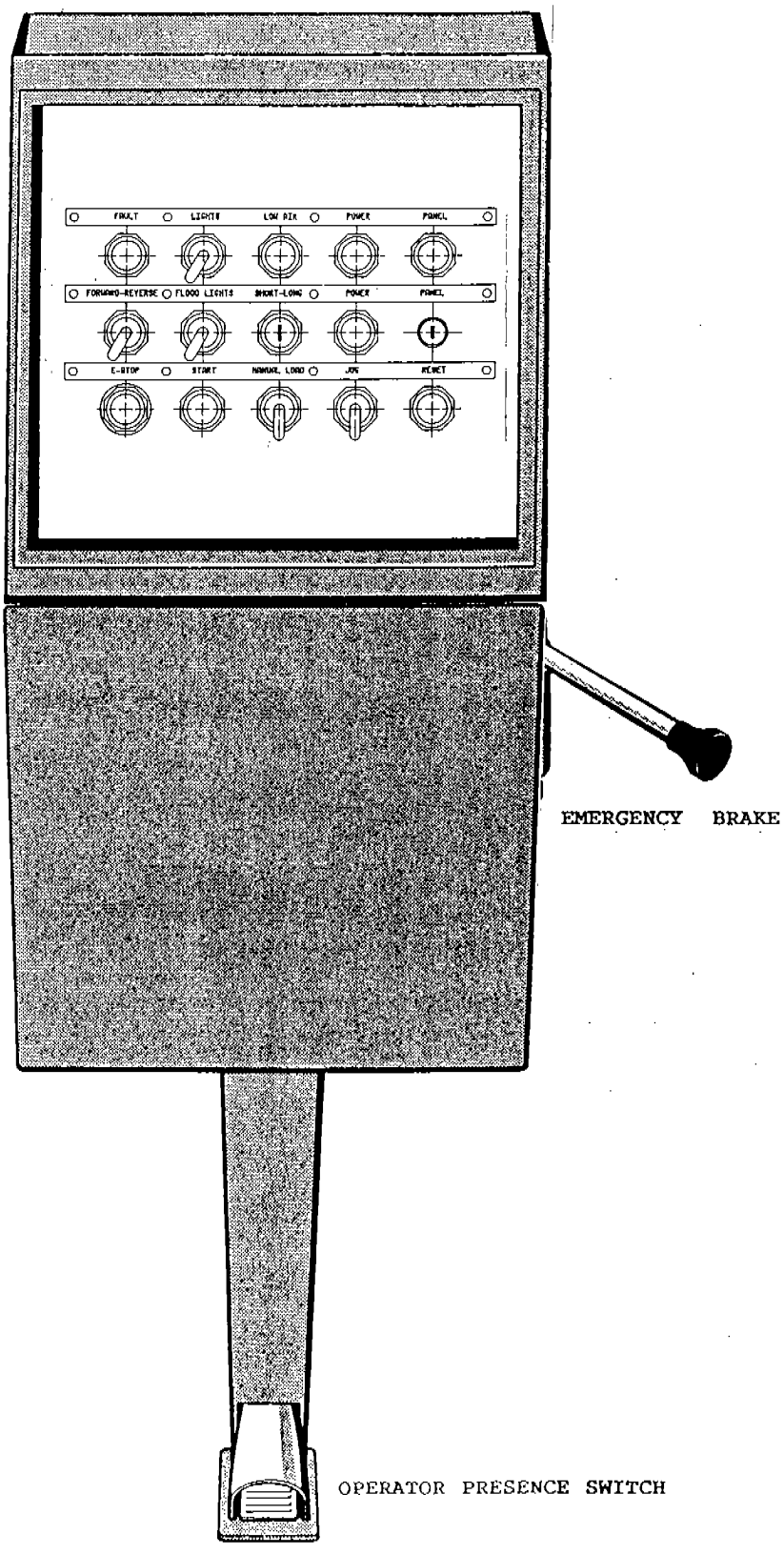
11. Advise the operator that factory-installed safety devices must not be tampered with or removed.

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.

Operation

Operator's console



1. **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. Notify the appropriate maintenance personnel. Do not attempt to operate the ride until the fault has been corrected.

2. **Lights switch** - Use this switch to control all the decorative lighting on the ride.

3. **Low air pressure indicator light** - This red light is normally off. If the air pressure is not sufficient to operate the ride, the light will come on

IMPORTANT: Do not start the ride when the LOW AIR PRESSURE INDICATOR LIGHT is on.

4. **Main power indicator light** - This green light is on when the main power circuit breaker in the motor control cabinet is in the "ON" position.

5. **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.

6. **Direction switch** - Use this switch select the direction of wheel rotation, either clockwise or counter-clockwise.

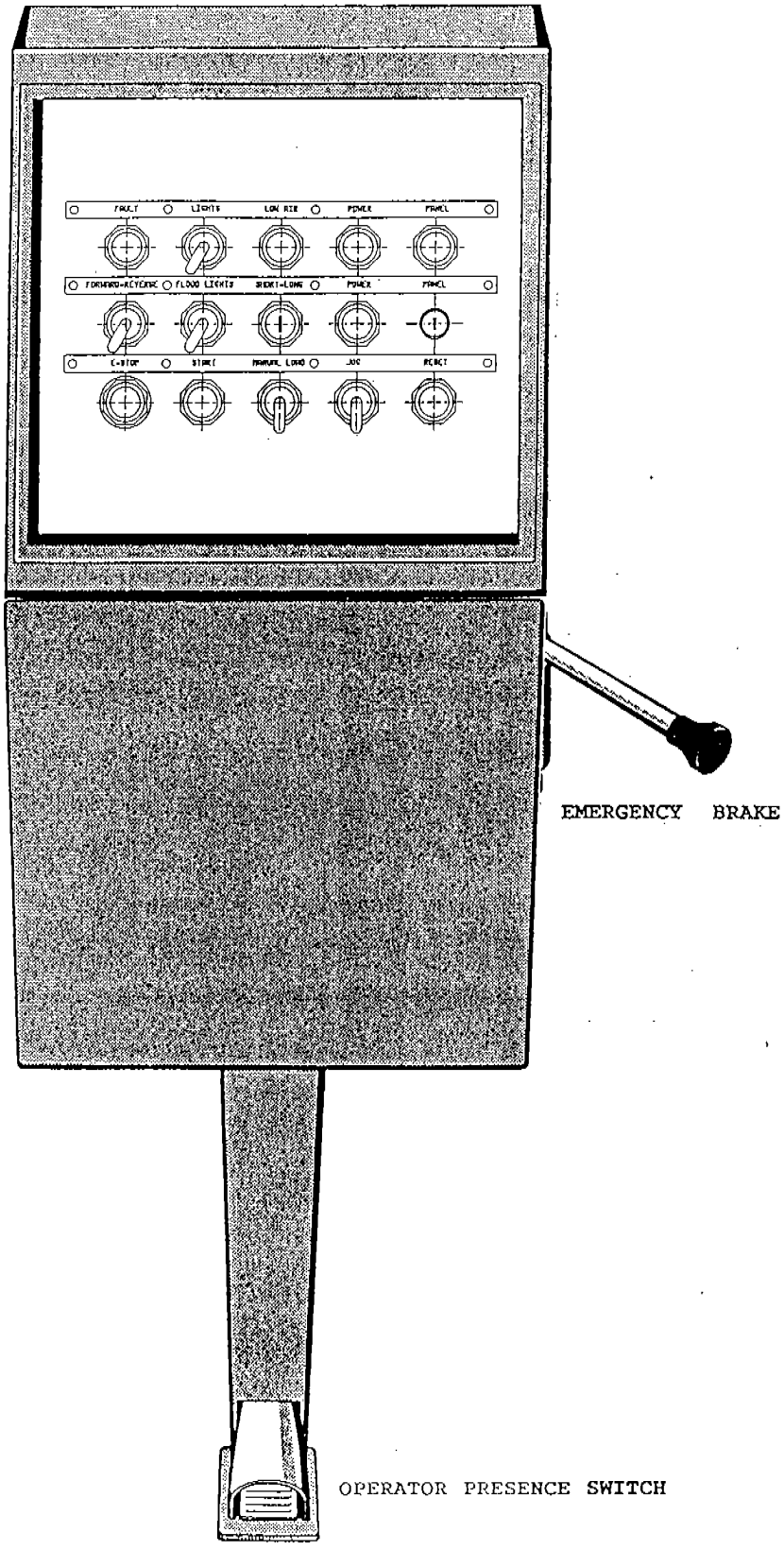
7. **Flood lights switch** - This switch controls the flood lights on the ride.

8. **Program switch** - Use this key-operated switch to select either the short ride program or the long ride program.

NOTE: Do not change the position of the program switch after the ride is started.

9. **Power switch** - Use this switch to turn off the MAIN POWER circuit breaker in the motor control cabinet. 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 pwer to the control panel. The CONTROL PANEL INDICATOR LIGHT will come on.


EMERGENCY BRAKE
OPERATOR PRESENCE SWITCH

11. **E-stop switch** - This switch interrupts the drive program. The wheel will come to a normal, programmed stop.

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.
    - CONTROL PANEL POWER INDICATOR LIGHT must be on.
    - FAULT INDICATOR LIGHT must be off.
    - OPERATOR PRESENCE SWITCH must be engaged

13. **Manual load switch** - This switch allows the operator to rotate teh wheel to any postion for loading of passengers. The switch operates only when the OPERATOR PRESENCE SWITCH is engaged.

14. **Jog switch** - The jog feature allows the operator to slowly rotate the wheel to any position for erection of the ride and loading of passengers. The jog feature operates only when the OPERATOR PRESENCE SWITCH is engaged.

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 SWTICH, notify the appropriate maintenance personnel.

16. **Emergency brake** - The EMERGENCY BRAKE is not to be used under normal operating conditions. It is for emergency use, such as when electrical power to ride is lost. Refer to "Emergency Procedures" in this section

    NOTE: The EMERGENCY BRAKE must be in the "DISENGAGED" position before starting a normal, programmed operation cycle. The emergency brake is inoperative during normal, programmed operation of the ride.

17. **Operator Presence Switch** - This switch must be engaged to operate the START, MANUAL LOAD or JOG SWITCHES. If the switch is released, the drive program is interrupted and the ride will come to a normal, programmed stop.

CAUTION: Do not operate the ride unless all parts of the gondola are in good condition, including the doors and acrylic extension panels. 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: All persons less than 42 inches in height must be accompanied by an adult.

CAUTION: Do not allow any passenger on the ride who cannot be properly secured because of passenger size or condition.

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, for their own safety, they must keep their hands and arms inside the gondola and remain seated at all times. Also, throwing objects from the gondola is not permitted.

CAUTION: **Never allow the gondola to become overloaded. Maximum capacity of each gondola is four adults or six children, with a maximum weight of 864 pounds.**

Maintain a balanced load in each gondola by directing passengers to seats on each side of the gondola.

WARNING: **When loading passengers, make sure that the passengers are properly seated and the doors are fully closed.**

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

When loading an empty ride, it is necessary to maintain a balanced load. Once the ride has been filled, it can be loaded and unloaded simultaneously, three gondalas at a time.

IMPORTANT: Never operate the ride with an imbalance of more than two full gondalas (1728 pounds).

The following is a suggested method of loading an empty ride:

1. With the wheel stopped at any loading position, load two gondolas. Make sure the doors are closed and the passengers are properly seated.
2. Engage the OPERATOR PRESENCE SWITCH.
3. Push the MANUAL LOAD SWITCH to rotate the wheel, stopping with the seventh (7^{th}) empty gondola in the center loading position.
4. Load three gondolas.
5. Continue to rotate the wheel, loading gondolas on opposite sides until the ride is fully loaded.

Operation

Operator'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 enter, exit and 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. Persons waiting in line must not be allowed to hang over the fences or sit on the fences.

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

The attendant on the loading platform is responsible for the safety of the passengers as they wait to board the gondolas and should do the following:

1. Control access to the ride through the entrance gates.
2. Ensure the safe loading of passengers onto the ride.
3. 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 arms inside the gondola.
   - Do not throw objects from the gondola.

The attendant on the unloading platform is responsible for the safety of the passengers as they enter and exit the gondolas and should do the following:

1. Assist passengers loading and unloading by holding the gondola steady.
2. Make sure the passengers are properly seated with the doors completely closed berfore the operator starts the ride.
3. Control access to the ride from the unloading platform.

Operation

Operating the ride

1. Turn on the main power circuit breaker in the main power electrical cabinet.
2. Load the passengers as described in the "Loading" procedure in this manual.
3. Take your place behind the operator's console.
4. Engage the OPERATOR PRESENCE SWITCH.
5. Press the START SWITCH to start the ride.
6. 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.

WARNING: 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 personal injury.

Operation

Emergency procedures

In the event of loss of all electrical power to the ride during operation:

1. The ride will coast to a stop.
2. Apply the emergency brake.
3. Unload the gondolas at the loading and unloading stations.
4. Release the emergency brake and carefully allow the ride to turn.
5. Repeat Steps 1 through 4 until all passengers are unloaded.

In the event that a passenger is in an unsafe position, or if the ride needs to be unloaded for any reason:

1. Press the E-STOP SWITCH or release the OPERATOR PRESENCE SWITCH.
2. The ride will come to a stop.
3. Use the JOG SWITCH to rotate the wheel to the desired postion,
4. Apply the emergency brake.

CENTURY WHEEL (PRELIMINARY)

Maintenance manual

Maintenance

Preventive maintenance

Preventive maintenance is the easiest and most economical means of assuring many satisfactory, productive hours of operation. Properly scheduled maintenance is the key to lower operating costs and longer service life.

Hourly intervals have been established for servicing the ride. Intervals are based on the number of hours the ride has run.

The items listed in this section are separated into maximum hourly intervals. These intervals are based on "average" operating conditions. Actual conditions under which your ride is operated are the determining factors when setting up a maintenance schedule. When operating under "severe" conditions, such as excessive heat, cold, dust, mud or water, more frequent servicing is necessary.

First Week Of Operation

The ride has been completely serviced and tested before leaving the factory. However, during the first week of operation and after each set-up, the ride operator must be especially observant and watch for loose parts, leaks, etc.

In addition to scheduled maintenance, check the following:

1. Check the torque of all functional load-carrying capscrews after the first week of operation and after each set-up. This allows for initial seating of components. Check the torque at monthly intervals thereafter.

2. Check for leaks in the hydraulic system and air system, if equipped. During transport, vibrations can cause leaks at hoses and fittings.

3. Check for lubricant leaks from gearboxes and chain drive enclosures.

MAINTENANCE

General information

Proper maintenance of the ride is vital to safe operation, reduced operating costs and longer equipment life.

This manual provides detailed information on scheduled maintenance and lubrication of the ride. It also includes troubleshooting information.

Contents

Maintenance

Preventive maintenance

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3. Check for lubricant leaks from gearboxes and chain drive enclosures.

Maintenance

Fluids and lubricants

Timely lubrication and the use of high quality lubricants is necessary to obtain the maximum life of the ride and its components. Use only the fluids and lubricants specified in the following chart.

Fluids and lubricants chart

Component	Capacity	Specification
Drive gearboxes (8 places)	As required	Universal® 4450 or equivalent
Hydraulic reservoir	40 gallons	Non-detergent motor oil meeting A.P.I. Service Classification MS SAE 10W (Reference: SAE Technical Report J183a) *Examples: D.T.E.-24 Mobil® 10-10w Universal® Hydraulic Fluid*
Air compressor	As required	Naphthetic base air compressor oil, 500 SUS @ 100° SAE 30 non-detergent oil DO NOT USE MULTI-VISCOSITY OILS
Air system oiler	As required	Non-detergent motor oil meeting API Service Classification MS SAE 10W (Reference SAE Technical Report J183a) *Examples: D.T.E.-24 Mobil® 10-10W Universal® Hydraulic Oil*
All zerks	As required	NLGI No. 2 lithium base grease

Maintenance

Maintenance schedule

Daily

Ref. #	Service point	Service required
1	Hydraulic reservoir	Check fluid level at sight glass, fill as required
2	Air compressor crankcase	Check oil level,add oil as required
3	Air compress intake filter	Check air intake filter, clean or replace as required
4	Air compressor drive belt	Check tension, adjust as required
5	Air system filter/ regulator	Drain water. Check pressure, adjust as required
6	Air tank	Drain water

Weekly or at every set-up

Ref. #	Service point	Service required
7	Drive gearboxes (4 places)	Check lubricant level at sight glass. Fill as required

Monthly or at every set-up

Ref. #	Service point	Service required
8	Front and rear main hub bearing zerks (2 places)	Grease
9	Sweep zerks (15 places)	Grease (accessible at hub)
10	Collector ring bearing zerk	Grease
11	Tower pivot bearings (4 places)	Grease
12	Stub tower pivots (4 places)	Grease

Twice yearly

Ref. #	Service point	Service required
13	Tower pivots (4 places)	Grease
14	Stub tower pivot bearings (4 places)	Grease
15	Gondola handling trolley wheels (8 places)	Grease

Annually

Ref. #	Service point	Service required
16	Main hydraulic system	Drain and refill with new oil*

Every two years

Ref. #	Service point	Service required
17	Drive gearboxes	Drain and refill with new oil

*Drain and replace the oil in the hydraulic reservoir if it has a milky appearance, indicating contamination by water

Maintenance

Safety

The following is a list of general rules which should be observed by everyone.

Remember that the key to safe and successful operation is to have well trained and well supervised employees.

General Safety Guidelines

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 specified and in the manner described in this manual.

4. Study each job carefully to determine all hazards so that necessary safeguards can be taken.

5. Examine safety devices (tools, ladders, etc.) before they are used to make sure 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. Ground all hand electric power tools before use.

7. Wear close-fitting, comfortable clothing when working on or close to moving parts or live electrical circuits. Avoid finger rings, jewelry or other articles which can be caught in moving parts or come in contact with electrical circuits.

8. Protect your eyes by wearing approved safety glasses or goggles.

9. Wear a hard hat at all times. When working in elevated areas, use a safety belt.

10. Where work to be performed is hazardous, at least two persons shall work together.

11. If guards must be removed from equipment, make sure they are replaced before leaving the job. Check that all safety decals, signs and placards are properly installed and legible.

12. Clean up after each job, and properly dispose of surplus materials.

13. Keep a record of parts replaced and the date of replacement. Inform the manufacturer of any replacement requirements that are frequent or cause unsafe conditions.

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

Maintenance

Troubleshooting procedures

Before calling the CHANCE RIDES CUSTOMER SERVICE DEPARTMENT for help, be prepared with the following information:

1. Have the ride serial number and name available.

2. Have the service manual ready to use as a reference.

3. If ride was previously owned, by whom? (Chance records often show changes made to a ride by its previous owner).

4. Have the same person make all calls. Be sure to get the name of the person to whom he is speaking at the factory. All calls should then be made to that person.

5. Have a phone number ready at which you can be reached.

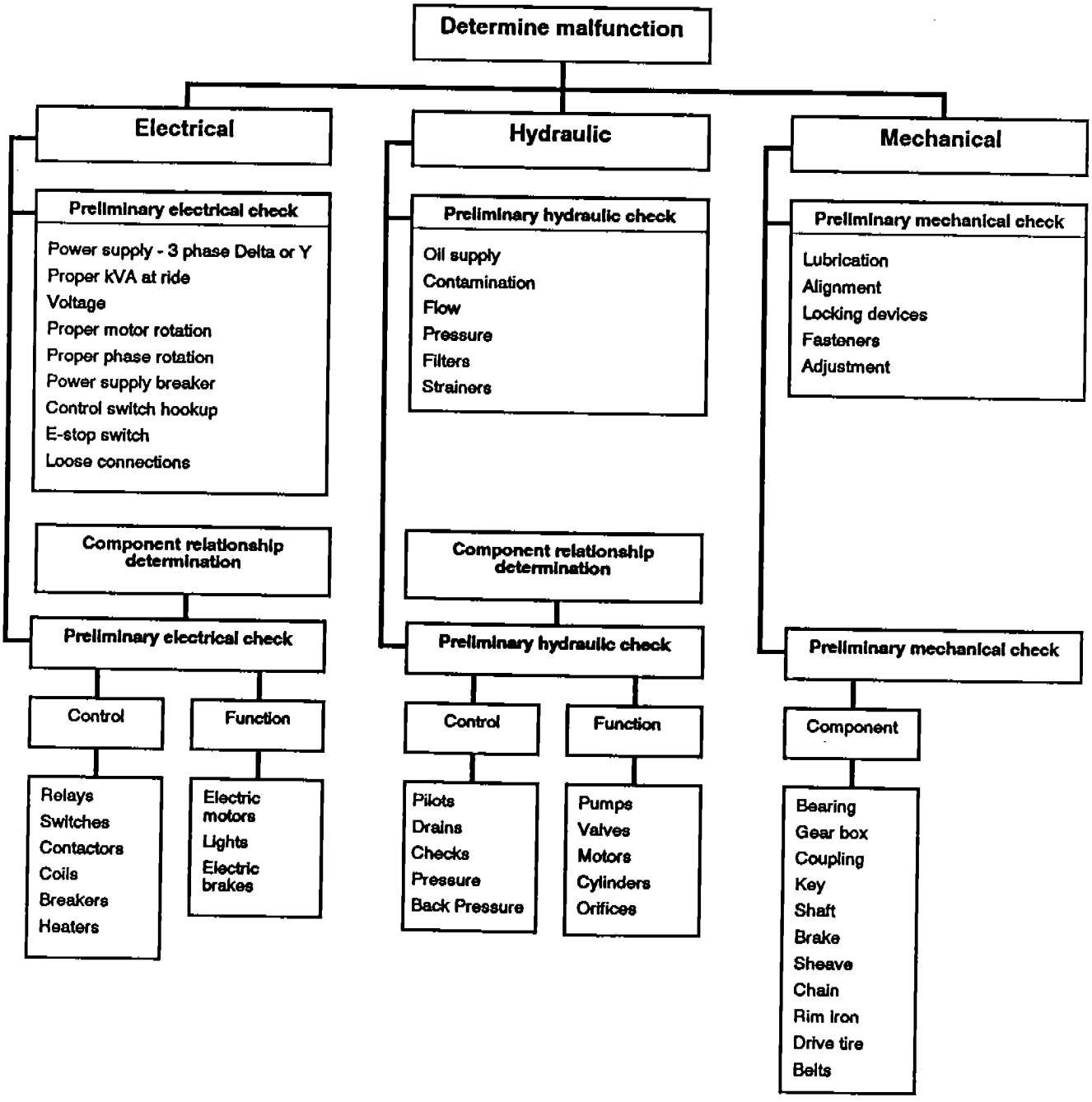
6. Have shipping instructions ready (how, when, and where to ship parts).

7. Have a list of any alterations, modifications or kits that have been added to the ride.

8. The person calling the factory must be familiar with the problem and be able to describe symptoms of the ride problem (such as: was the problem gradual, did it suddenly quit; are any sounds occurring that are not normal; does the problem occur continuously or is it intermittent; does the ride run in one direction only; does the ride run but have no braking, etc.).

9. Many times the problem that completely stops a ride from working is one of many simple things that are forgotten or overlooked. Listed on the following chart are many of the items that can cause this, as well as all items that must be checked before any calls are made to the factory. Use this chart to try to determine the cause. It can save several expensive phone calls or a more expensive visit by a factory representative, as well a valuable time.

Troubleshooting chart



Maintenance

Fasteners

Capscrews

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

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

and/or

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

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

Torque requirements

Capscrews must be tightened to the torque values listed in the torque chart, unless otherwise specified. 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, INC.uses only grade 5 or better capscrews

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

* Sweep attaching capscrews on ride serial number 406-00193 must be tightened to 250 ft-lbs. torque. DO NOT EXCEED THIS TORQUE VALUE.

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

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

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 head or locknut (whichever is accessible for tightening).

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

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

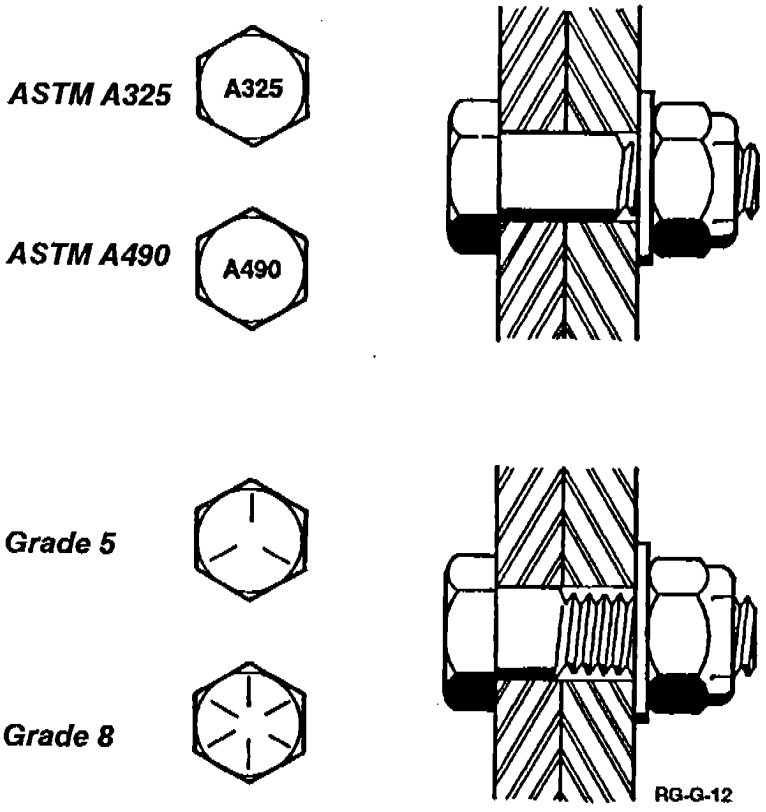
NOTES
1. Use anti-seize lubricant on capscrew shank when tightened from head end.
2. Use 10% less torque when anti-seize or other lubricant is used on threads.
3. Use same torque range for holes tapped in steel.

have machined threads and can have die seams along the shank.

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

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

Correct markings	Examples of unacceptable markings
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 3** Corrosion resisting Longer shank and shorter thread length than Grade 5 81,00 yield 	 **ASTM A325 Type 2** Low carbon martensitic RG-G-11
SAE J429 Grade 8 Medium carbon 130,00 yield 	 **ISO R898** Class 8.8 Medium carbon 92,000 yield 
ASTM A490 Alloy steel Longer shank and shorter thread length than Grade 8 130,00 yield 	 **ISO R898** Class 10.9 Alloy steel 130,000 yield 



Capscrew comparison

ASTM A325 or ASTM A490 Capscrew - Longer shank shorter threads

Grade 5 or Grade 8 capscrew - Shorter shank longer threads

Replacement of capscrews and locknuts

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

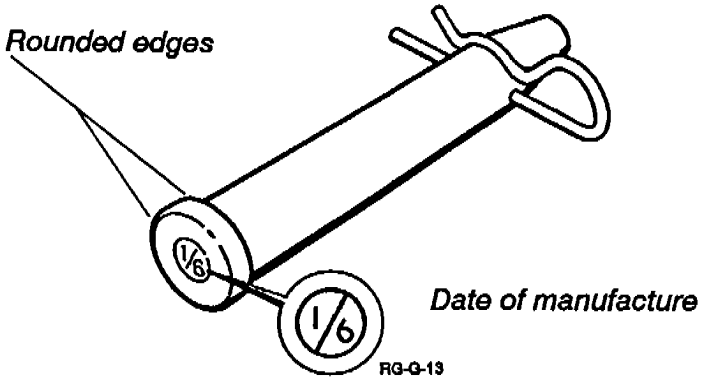
Capscrews and locknuts which are frequently disassembled for portability must be replaced each operating season. If the capscrews and locknuts become damaged, corroded or require excessive torque for removal, they must be replaced. If a torque wrench is not used to measure excessive removal torques,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

Pins

Tapered pins used on amusement rides are subject to deterioration due to improper use and wear. CHANCE RIDES, Inc. specifies certain pins for certain applications on amusement rides. These pins have been developed over a period of years, taking into account size, design, material and hardness characteristics.

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

Pin Identification

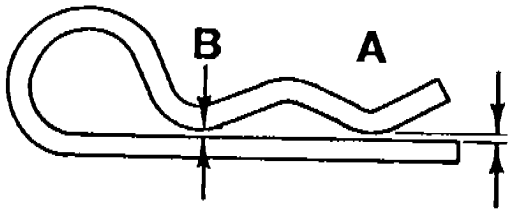


Use care when installing and removing tapered pins. Since these pins are hardened (as are hammers and punches) care must be taken to strike the pin straight on. Striking a pin at an angle can cause the pin to chip, resulting in personal injury. For this reason APPROVED SAFETY GLASSES OR GOGGLES MUST 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.

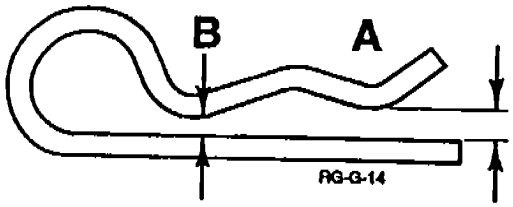
Pin keepers

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.



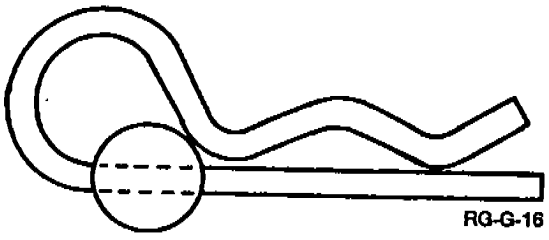
Acceptable hair pins
Dimension "A" equals dimension "B" in a relaxed position



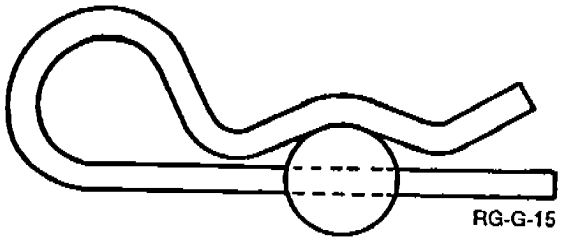
Unacceptable hair pins
Dimension "A" is greater than dimension "B" in a relaxed position

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, 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.*

Maintenance

Inspection

General

Prior to daily operation, certain inspection procedures must be followed. These inspection points include, but are not limited to:

1. Fences, gates, ramps and walkways.
2. Blocking and foundation supports.
3. Drives.
4. Structure, including sweeps, towers, spreader bars, axles and fasteners.
5. Gondolas.
6. All safety signs and decals.
7. Run the ride through 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.

Drive tire inspection

The following items must be checked weekly or at every set-up, whichever comes first. In addition, the operator should spot-check these items on a continuing basis, watching for slippage of the drive tires.

1. Check the inflation pressure in each of the four drive tires. Maintain 60 psi pressure. If the tire is damaged or the tread is excessively worn, replace it.
2. Check the tire contact area on the rim irons. Maintain a contact area of 5 to 6 inches. If adjustment is required, tighten or loosen the adjusting turnbuckles.
3. Use a torque wrench to check the lug bolts for tightness. Tighten to 22 ft-lbs.

Maintenance

Lubrication

Drive gearboxes

Lubricant Level

Check the lubricant level of each of the four gearboxes weekly. The fluid must completely fill the sight glass when the ride is in the operating position. Refer to the fluids and lubricants chart in this section.

Lubricant change

Drain and refill the gearboxes with new oil every two years. Follow the procedure outlined in the "Sumitomo Machinery Operation and Maintenance Manual"

Maintenance

Hydraulic system

Hydraulic system maintenance

Hydraulic reservoir oil level check

The oil level in the hydraulic reservoir must be checked at the sight glass weekly, or at every set-up, whichever comes first. The oil must be visible within the limits of the sight glass. Add oil as required in accordance with the "Fluids and lubricants chart".

Main hydraulic reservoir oil change

The oil in the hydraulic reservoir must be changed once a year, or any time the oil has a milky appearance, indicating contamination by water.

Remove the drain plug on the bottom of the reservoir and allow the oil to drain completely. Remove the oil strainer screens and wash in solvent. Thoroughly flush the reservoir to remove any deposits of dirt, sludge, etc.

Replace the drain plug and the strainer screens. Fill with new oil in accordance with the "Fluids and lubricants chart".

Hydraulic system oil filter change

A spin-on hydraulic oil filter is located at the main hydraulic reservoir. This filter is among the most important components in the system. All of the oil in the hydraulic system passes through this filter and is cleansed of foreign particles. The removal of these particles greatly increases the service life of other components in the system. The filter must be replaced at least twice a year, or if the system becomes contaminated between changes.

Maintenance

Air system

Air system maintenance

Air system filter/regulator

Drain the water from the filter/regulator daily, or more often if necessary. Check the air system for correct air pressures as follows:

- 100 psi at the reservoir
- 40 psi at the regulator

Air tanks

Drain water from the air tanks daily, or more often if necessary. Open the drain cock on the bottom of each tank until no water comes out.

Visually inspect the air tanks and all tubes, hoses and fittings for leaks. Repair or replace any loose, broken or missing parts immediately.

Air compressor oil level check

The oil level in the air compressor must be checked daily. Remove the fill plug near the base of the compressor. The oil must be level with the plug opening. Add oil as required in accordance with the "Fluids and lubricants chart".

Air compressor oil change

The oil in the air compressor must be changed every month. Remove the drain plug at the compressor base and allow the oil to drain completely. Replace the plug and remove the fill plug near the base of the compressor. Fill with new oil in accordance with the "Fluids and lubricants chart". The oil must be level with the plug opening.

Air compressor drive belt

Visually inspect the air compressor drive belt daily. Look for signs of wear or damage. The belt must be clean and free of grease. Replace the belt if worn, glazed, cut, oil- soaked or otherwise damaged.

Check for slippage and adjust tension as required.

Air compressor intake filter

Check the intake filter daily and replace as required. Change the filter at least twice a year.

NUMBER: B406R1174-0

DATE: March 22, 1996

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: All Units except 406-03395

Ride: CENTURY WHEEL

Subject: Gondola Door Rework

Chance Rides, Inc. has designed a new door collar which acts as a retention device for the gondola doors on the above noted CENTURY WHEEL amusement rides. These door collars, when properly installed, will reduce the possibility of someone inadvertently opening the gondola doors while the ride is in operation.

In addition to these new door collars, Chance Rides, Inc. has also designed a new caution decal to be positioned on the inside of the gondola doors. This decal warns persons not to attempt to open the doors unless the gondola is stopped in the load/unload station.

Chance Rides, Inc. requires all owner/operators of the above noted CENTURY WHEEL rides to order and install both the new door collars and decals. A total of 30 right-hand door collars, part number 406-132-8, and 30 left-hand door collars, part number 406-132-9, are required per ride. Fifteen caution decals, part number 406-177-001, are also required. In addition, 60 "PUSH DOWN AND IN" decals, part number 406-179-1 and 60 "PUSH DOWN AND PULL" decals, part number 406-178-1 must be installed on each ride noted above. The door collars and the decals are available at no charge if ordered within 90 days of the date on this bulletin. Use the instructions in this bulletin to install both the door collars and the decals.

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

Factory and Sales Office: 4219 Irving · P.O. Box 12328 · Wichita, Kansas 67277-2328 · (316) 942-7411 · FAX: (316) 942-7416

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 for Door Collars and Decals

1. Remove the top 1/4-20 x 1/2 inch long hex head capscrew which secures the gondola door to the top door hinge angle and remove the door.

2. Drive the expansion pin out of the existing door collar and remove the collar.

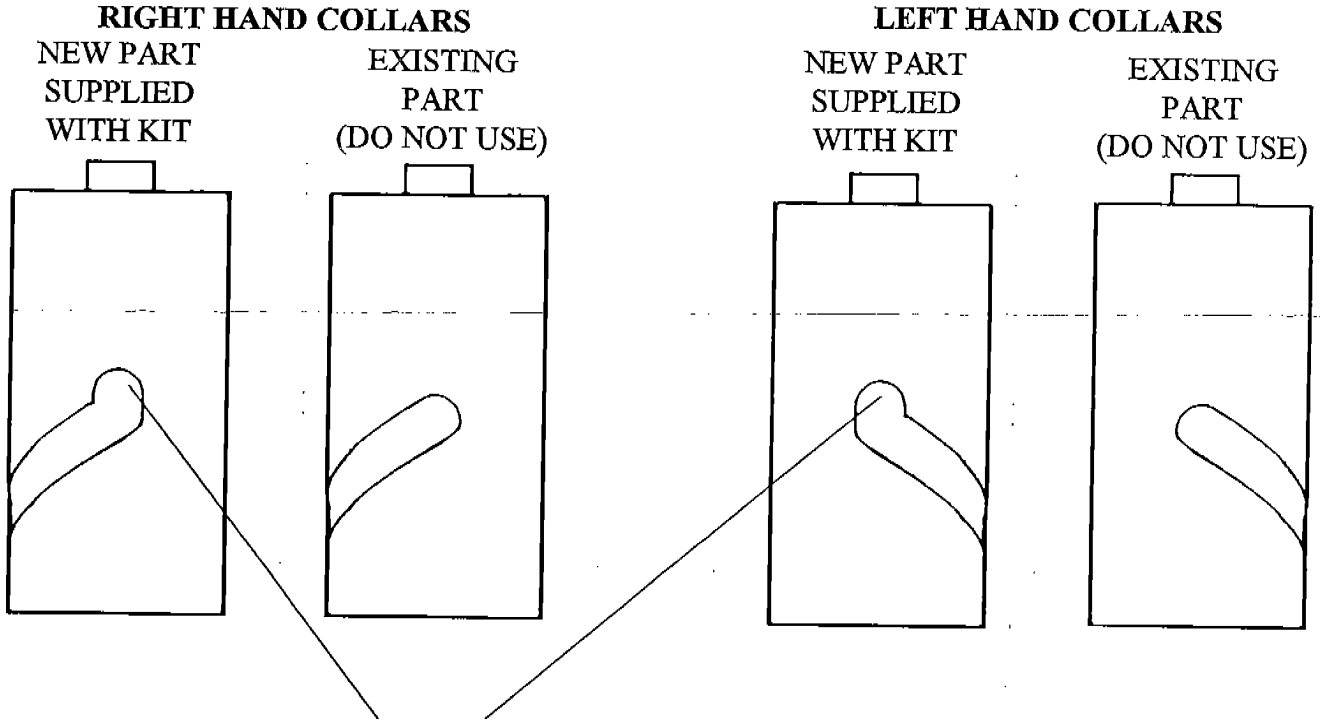
3. Position the new collar in place and install the new expansion pin, part number 65183402. Sixty expansion pins are required.

   NOTE: Be sure to install the right-hand collar on the right-hand door and the left-hand collar on the left-hand door, so doors open inward only.

4. Reinstall the door to the door hinge angle and tighten the 1/4-20 hex head capscrew until the lock washer is flat.

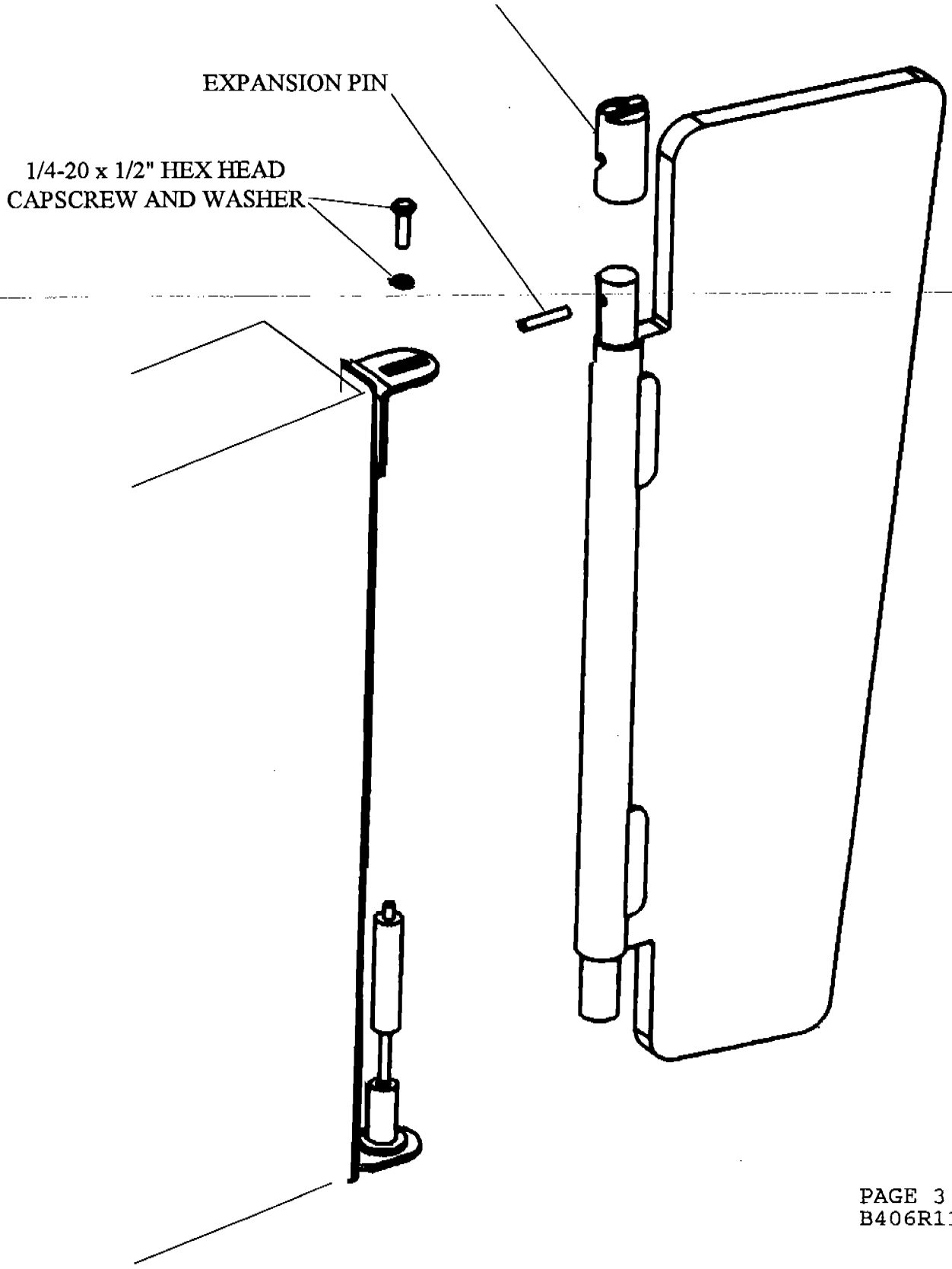
5. Install new decals, over existing ones.

IMPORTANT: NOTE THE DIFFERENCE BETWEEN THE EXISTING PARTS AND THE NEW PARTS SUPPLIED WITH THE KIT, AS SHOWN BELOW.



Replace existing COLLAR with the COLLAR provided.

IMPORTANT: NOTE THE DIFFERENCE BETWEEN RIGHT-HAND AND LEFT HAND COLLARS. DOORS MUST OPEN INWARD ONLY.



PUSH DOWN, THEN PULL IN TO OPEN DOOR WHEN INSTRUCTED BY RIDE OPERATOR.

406-178-001

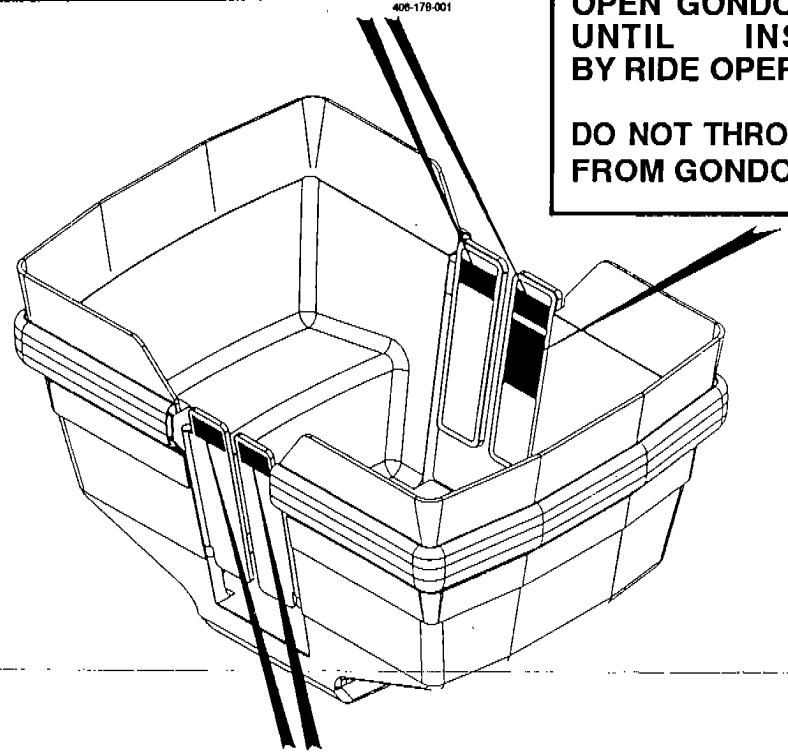
⚠ CAUTION

EXITING RIDE WHEN GONDOLA IS NOT IN THE LOAD/UNLOAD STATION CAN RESULT IN SERIOUS INJURY.

REMAIN SEATED WITH ARMS AND HANDS INSIDE GONDOLA.

DO NOT ATTEMPT TO OPEN GONDOLA DOORS UNTIL INSTRUCTED BY RIDE OPERATOR.

DO NOT THROW OBJECTS FROM GONDOLA.



PUSH DOWN, THEN IN TO OPEN DOOR WHEN INSTRUCTED BY RIDE OPERATOR.

406-179-001

NUMBER: B406R1168-0

DATE: NOV. 11, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: All Portable Units

Ride: CENTURY WHEEL Subject: Tear-down Pins

Chance Rides, Inc. has become aware that some owner/operators of the above noted CENTURY WHEEL amusement rides have not followed the manufacturer's recommendations as to the sequence in which the tear-down pins are installed or removed. Failure to follow the manufacturer's recommendations as to the installation and removal of the tear-down pins will result in serious structural damage and possible injury to personal. The set-up and tear-down procedures are found in the CENTURY WHEEL Set-up manual, which is part of the Service Manual. Refer to the Chance Rides, Inc. Service Manual for complete instructions.

Set-Up Procedure:

Installation of the tear-down pins is as follows:

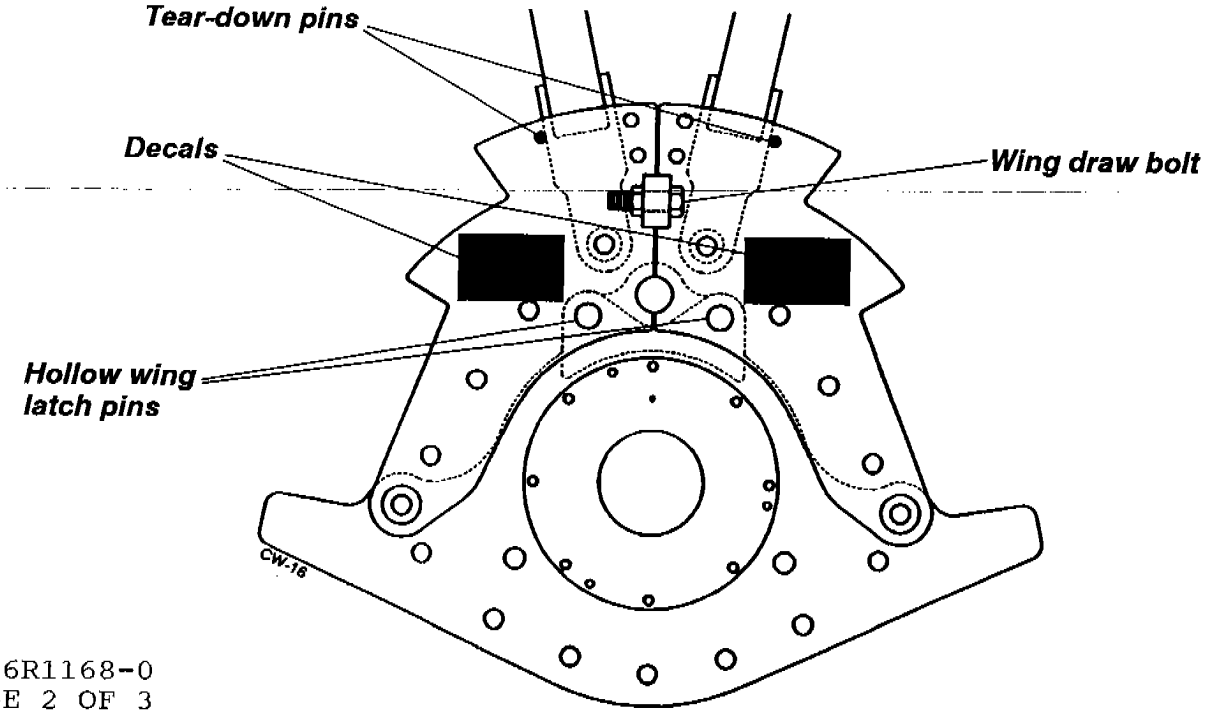
1. Pull sweeps, installing short and long spreader bars each time until the last set of long and short spreader bars are ready to be installed.
2. At the hub of the wheel, install the special wing draw bolts, lock nuts and hairpins, four places.
3. Tighten the wing draw bolts to pull the wings completely together.
4. Install the hollow wing latch pins and hairpins, four places.
5. **Install the tear-down pins and hairpins, four places.**
6. Turn the wheel so that the opening for the last set of short and long spreader bars is at the bottom, install the short spreader bars and then the long spreader bars.
7. Continue the set-up of the wheel.

Tear-Down Procedure:

Removal of the tear-down pins is as follows:

1. Remove the two adjustable short spreader bars and the corresponding solid long spreader bars.
2. Make sure the tear-down pins are in place.
3. Rotate the wheel 180 degrees, so the opening where the adjustable spreader bars and the corresponding solid long spreader bars were, is now at the top of the wheel.
4. Remove the hollow wing latch pins and hairpins, four places.
5. Loosen and remove the wing draw bolts, lock nuts and hairpins, four places.
6. Using the winches to spread the sweeps, remove the long spreader bars and the short spreader bars from both sides of the center sweep, which is opposite the space where the adjustable spreader bars had been located. Let these sweeps fold down to the center.
7. Use the winches to spread the sweeps and remove the next two sets of long and short spreader bars. Let these sweeps down approximately half way.
8. **Remove the tear-down pins and hairpins, four places.**
9. Continue the tear-down of the wheel.

A decal, located on the wings, also describes the proper sequence for removal of the tear-down pins. If this decal is missing or worn it must be replaced. Order decal part number 22197703. Two are required per ride.

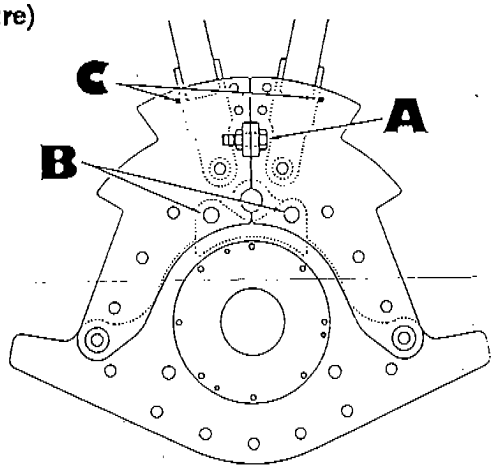


⚠ WARNING

THE TEAR-DOWN PINS MUST BE INSTALLED AND REMOVED EXACTLY AS DESCRIBED. ANY VARIATION COULD CAUSE SERIOUS STRUCTURAL DAMAGE AND RESULT IN PERSONAL INJURY.

SET-UP (See manual for complete set-up procedure)
After all sweeps are spread but before adjustable spreader bars are installed:

1. Install special wing draw bolt, lock nut and hairpin , "A", four (4) places.
2. Tighten draw bolts to pull wings fully together.
3. Install the hollow wing latch pins and hairpins, "B."
4. Install tear-down pins, "C."

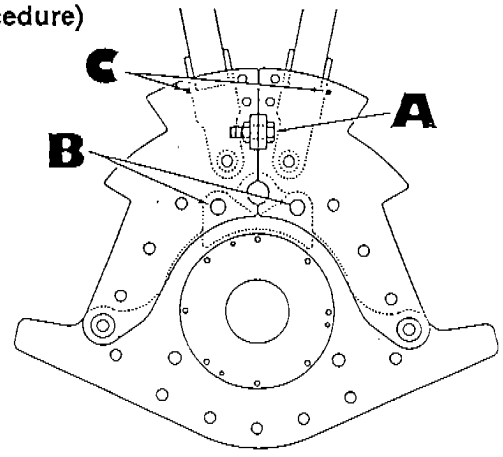


⚠ WARNING

THE TEAR-DOWN PINS MUST BE INSTALLED AND REMOVED EXACTLY AS DESCRIBED. ANY VARIATION COULD CAUSE SERIOUS STRUCTURAL DAMAGE AND RESULT IN PERSONAL INJURY.

TEAR-DOWN (See manual for complete tear-down procedure)
After adjustable spreader bars are removed but before any solid spreader bars are removed:

1. Make sure the tear down pins, "C," are in place.
2. Remove the hollow wing latch pins and hairpins, "B."
3. Loosen and remove the special wing bolt, lock nut and hairpin, "A."
4. Use the winches to remove the solid spreader bars connected to the sweep that is opposite the adjustable spreader bar (between sweeps #1 and #2 and between sweeps #1 and #3.) Let these sweeps fold down to the center.
5. Remove the solid spreader bars from between sweeps #2 and #4 and between sweeps #3 and #4.
6. Let the sweeps down approximately half way, then remove the tear-down pins, "C."



NUMBER: B406R1165-0

DATE: SEPT. 1, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 40600293 through 40602594

Ride: CENTURY WHEEL

Subject: Lifting Adapter Replacement

Chance Rides, Inc. has become aware that a gondola could fall from the lifting adapter during set-up or tear-down of the CENTURY WHEEL amusement ride. Improperly engaging the lifting adapter in the gondola or irregular wearing of the lifting adapter can result in the gondola coming off of the lifting adapter. If this occurs, injury to personnel or damage to the equipment may occur.

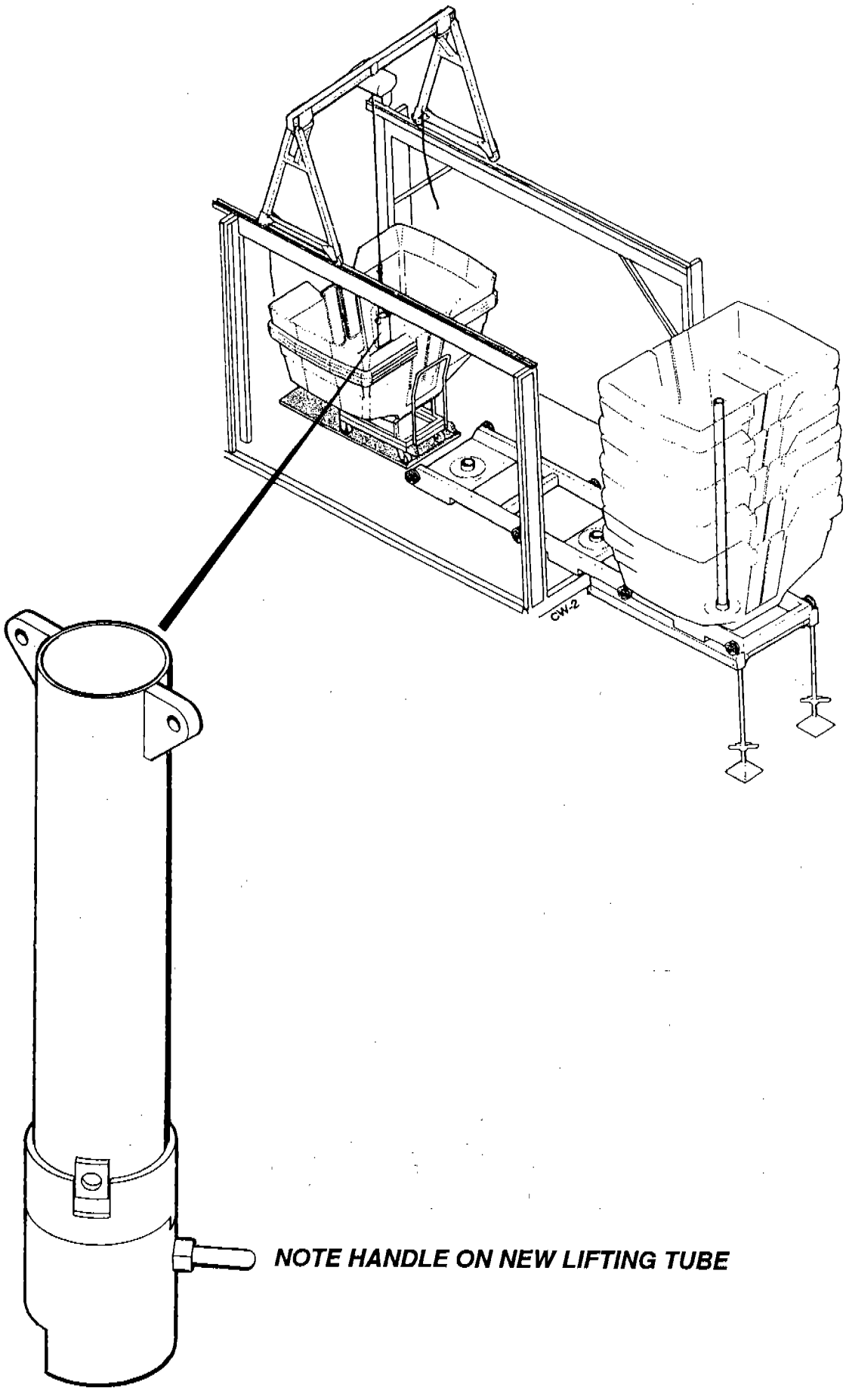
Chance Rides, Inc. has designed a new lifting adapter that engages the gondola from two sides and locks when the lifting adapter is in place. All owners/operators of the above noted CENTURY WHEEL rides are required to order and use the new lifting adapter. Order part number 38237501. This new lifting adapter is available at no charge if ordered within ninety (90) days of the date on this bulletin.

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

NOTICE

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

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



NOTE HANDLE ON NEW LIFTING TUBE

NUMBER: B406R1167-0

DATE: SEPT. 12, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 406-00193 through 406-02594

Ride: CENTURY WHEEL

Subject: Air Conditioner Rework

Chance Rides, Inc. has designed an air conditioner rain cover for the above noted CENTURY WHEEL amusement rides. This rain cover, when properly installed, will reduce the possibility of rain water getting into the air conditioning unit, which is mounted to the side of the main electrical control box. Failure to order and install this rain cover may result in possible electrical damage to the air conditioning unit.

Chance Rides, Inc. requires all owner/operators of the above noted CENTURY WHEEL rides to order and install the air conditioner rain cover, part number 32037537. This rain cover is available at no charge if ordered within 90 days of the date of this bulletin. Use the instructions in this bulletin to install the rain cover. All work must be completed and the Certification Of Compliance returned to Chance Rides, Inc. within fifteen (15) days of the receipt of the rain cover.

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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Factory and Sales Office: 4219 Irving · P.O. Box 12328 · Wichita, Kansas 67277-2328 · (316) 942-7411 · FAX: (316) 942-7416

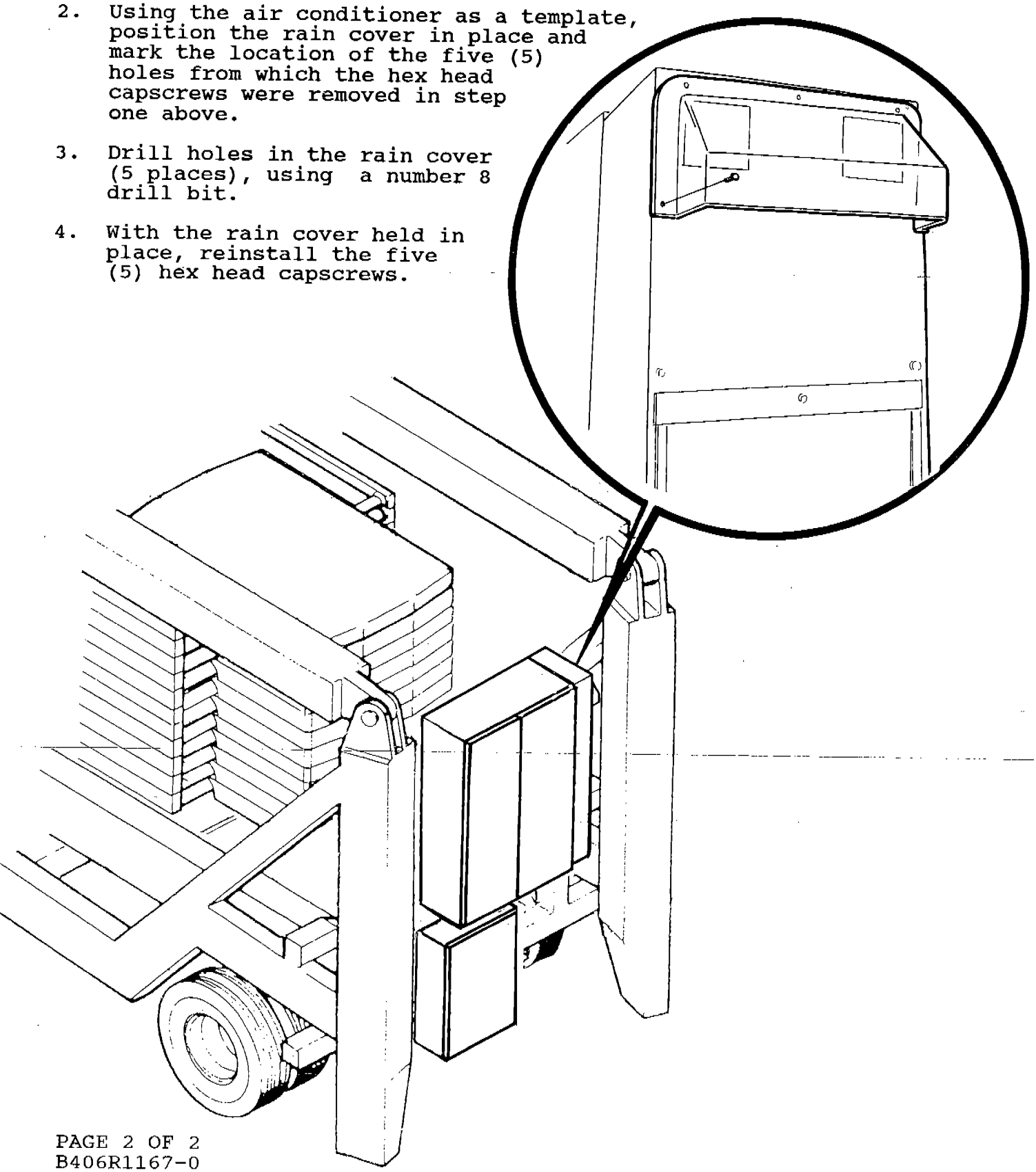
Installation Instructions for Air Conditioner Rain Cover

1. Remove the five (5) hex head capscrews around the top of the air conditioner unit.

2. Using the air conditioner as a template, position the rain cover in place and mark the location of the five (5) holes from which the hex head capscrews were removed in step one above.

3. Drill holes in the rain cover (5 places), using a number 8 drill bit.

4. With the rain cover held in place, reinstall the five (5) hex head capscrews.



CERTIFICATE OF COMPLIANCE

FOR

SERVICE BULLETIN

B406R1167-0

~~We hereby certify the procedure outlined in the above-mentioned service bulletin~~ has been performed on the CENTURY WHEEL, Serial Number _____, in accordance with the instructions and specifications supplied by Chance Rides, Inc.

Date Bulletin Received _____

Date Procedure Performed _____

Name and Address of Person Performing Procedure:

_____

_____

Attested:

Owner _____ Maintenance Supervisor _____

Address _____ Address _____

City _____ State _____ City _____ State _____

By _____

Date _____ Date _____

Results: Gearbox Serial Number _____

Output Shaft Style _____

Wear _____

This certification must be completed and returned to **CHANCE RIDES, INC., P.O. BOX 12328, WICHITA, KS 67277-2328**, within fifteen (15) days of receipt of parts.

NUMBER: P406R1156-0

DATE: AUG. 1, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

PRODUCT IMPROVEMENT NOTICE

Effective Serial Number: 40600193 through 40601894

Ride: CENTURY WHEEL

Subject: Spreader Bar Handling Platform

Chance Rides, Inc. has designed and is now offering a Spreader Bar Handling Platform Kit. This kit, number K406R1156-0, can be retrofitted to the above noted CENTURY WHEEL amusement rides. Each kit contains all parts and instructions necessary to rework one ride.

When this kit is properly installed and used, two persons can carry the spreader bars directly from their racked position at the front of the trailer to their installation position on the sweeps, without leaving the trailer deck. This will save time during the set-up and tear down procedure. Kit number K406R1156-0 is being offered at a reduced price if ordered within ninety (90) days of the date on this Product Improvement Notice.

Contact the Chance Rides, Inc. Customer Service Department regarding questions concerning this product improvement notice or to order kit number K406R1156-0.

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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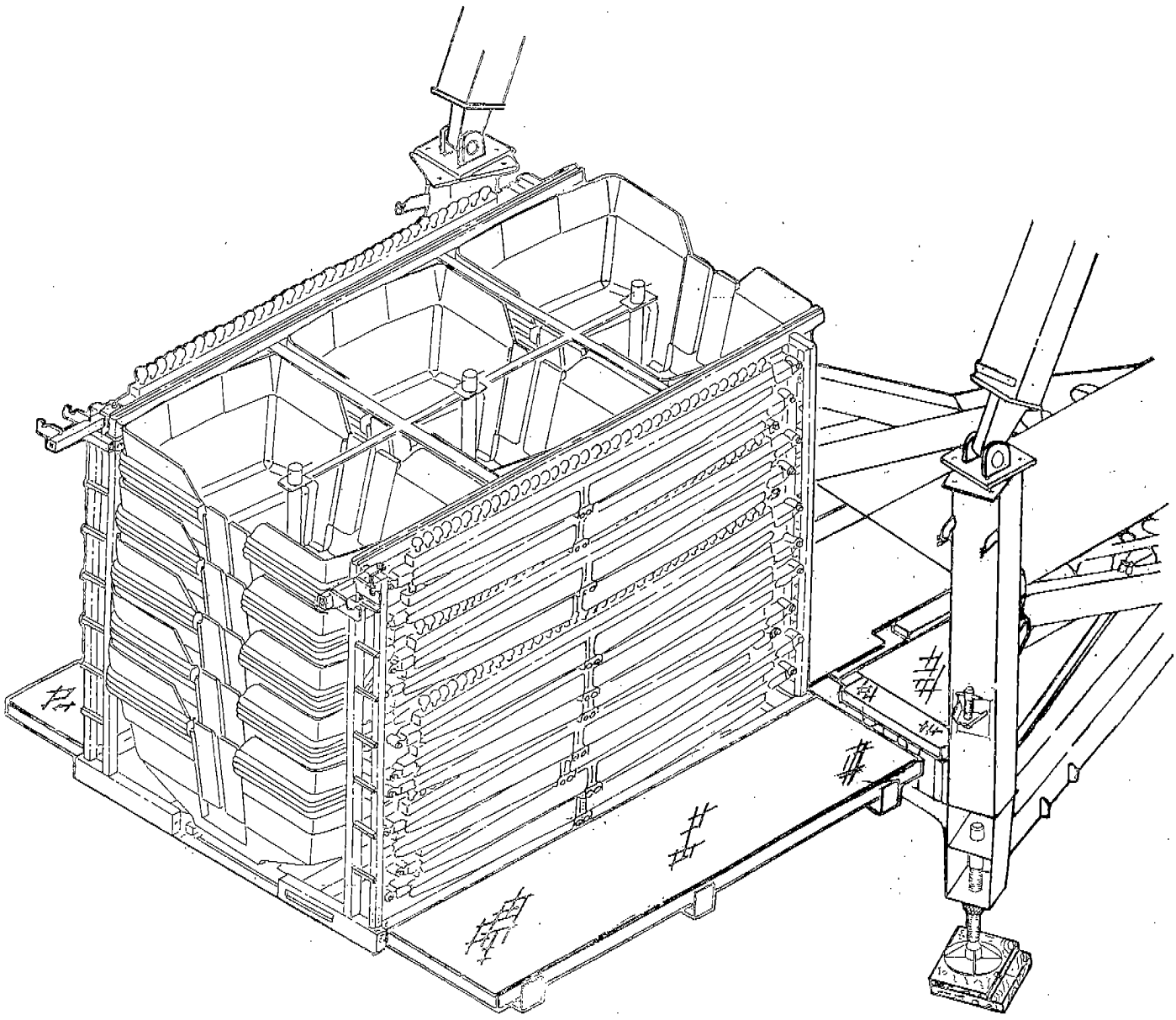
Factory and Sales Office: 4219 Irving · P.O. Box 12328 · Wichita, Kansas 67277-2328 · (316) 942-7411 · FAX: (316) 942-7416



SPREADER BAR HANDLING PLATFORM

NUMBER: B406R1153-0

DATE: JUNE 10, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 406-00193 through 406-01894

Ride: CENTURY WHEEL

Subject: Torque Wrench Support Kit

Chance Rides, Inc. has designed a new kit for the above noted CENTURY WHEEL amusement rides. This kit eliminates the need for someone to hold the torque wrench extension while the tower legs are being bolted to the stub towers.

Chance Rides, Inc. requires all owner/operators of the above noted CENTURY WHEEL rides to order and install kit number K406R1153-0. Each kit contains all items needed to rework one ride. **Installation instructions are included with the kit.** Installation of the kit must be within fifteen (15) days of the receipt of the kit and the completed Certification Of Compliance must be returned to Chance Rides, Inc. Kit number K406R1153-0 is offered free of charge if ordered within 90 days of the date on 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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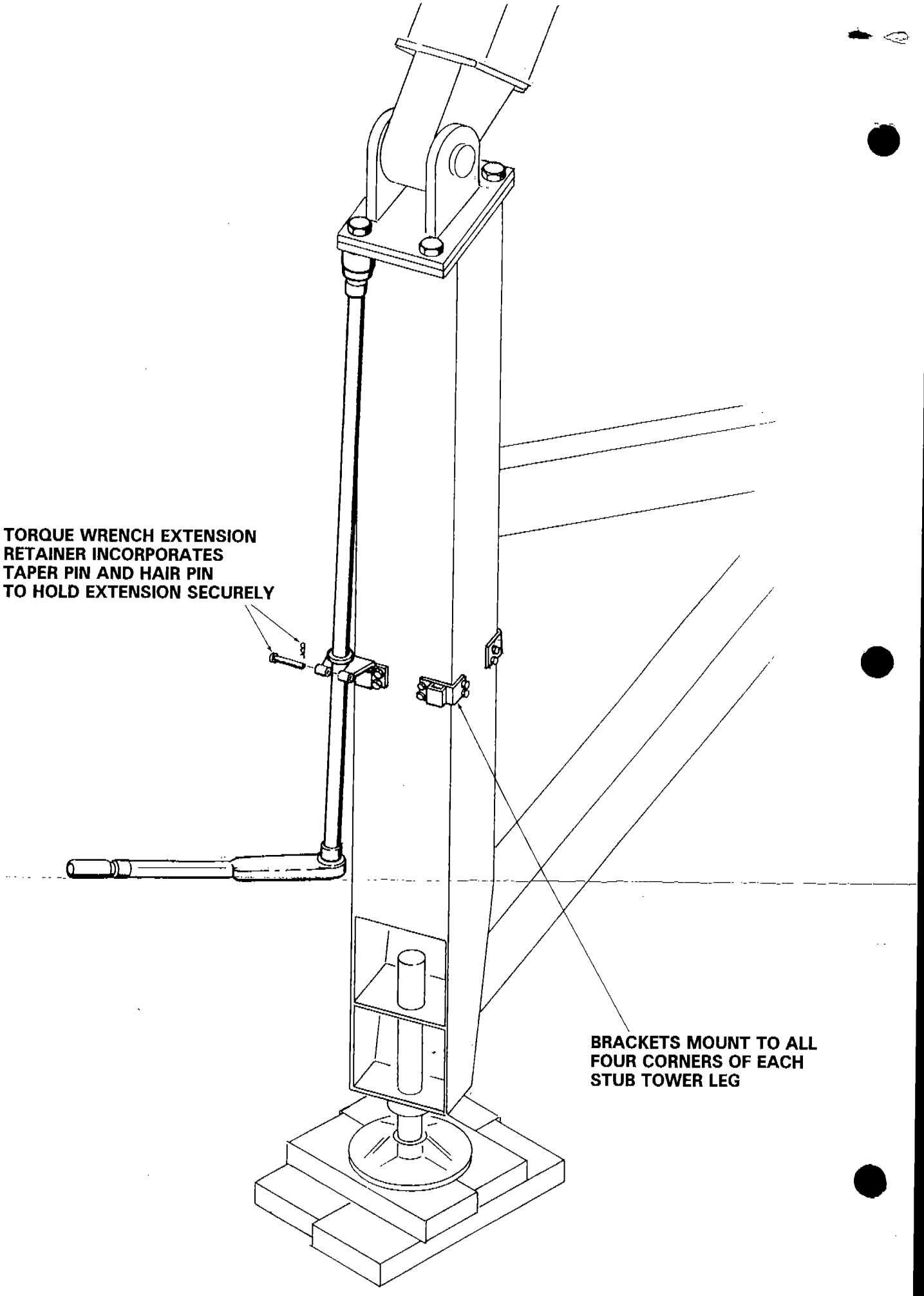
Factory and Sales Office: 4219 Irving · P.O. Box 12328 · Wichita, Kansas 67277-2328 · (316) 942-7411 · FAX: (316) 942-7416


TORQUE WRENCH EXTENSION
RETAINER INCORPORATES
TAPER PIN AND HAIR PIN
TO HOLD EXTENSION SECURELY
BRACKETS MOUNT TO ALL
FOUR CORNERS OF EACH
STUB TOWER LEG

NUMBER: B406R1158-0

DATE: JULY 8, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 40600293 and on

Ride: CENTURY WHEEL Subject: Cradle Brace Decal

Chance Rides, Inc. has become aware, through field experience, that structural damage to the rear stub tower legs of the CENTURY WHEEL amusement ride can result while attempting to raise the rear tower legs. Damage to the stub tower can occur if the axle assembly hangs up in the cradle. Failure to remove the cradle braces, as outlined in the manual, before raising the rear tower legs will cause the axle to hang up in the cradle.

Chance Rides, Inc. has developed a warning decal to remind all operators of the need to remove the cradle braces prior to attempting to raise the rear tower legs. All owner/operators of the above noted CENTURY WHEELS are required to order and install decal number 22203208 as outlined in this bulletin. Two decals per ride are required and are available at no charge if ordered within 90 days of the date on this bulletin.

In addition to installing decal number 22203208, all owner/operators of the above noted CENTURY WHEEL amusement rides must perform the following sequence, as outlined on pages 16 through 22 of the setup manual, when raising the rear tower legs:

1. Make sure all cradle supports including the cradle braces and the tie rods have been removed.

2. Remove all chains, turnbuckles and braces which secure the tower, hub and sweeps to the trailer.

3. Fully open the hydraulic shut-off valves for the rear tower erection cylinders.

4. Slowly raise both tower legs.

   NOTE: It is important to be sure that both tower legs come up out of the saddle at the same time. Manipulating one tower leg at a time may be necessary to insure this and to keep the main axle level.

5. Raise tower legs beyond their normal operating position.

6. Lower front tower legs to approximate position, lower and mate rear towers to front.

7. Install capscrews, hardened washers and nuts with 700 ft.lbs torque.

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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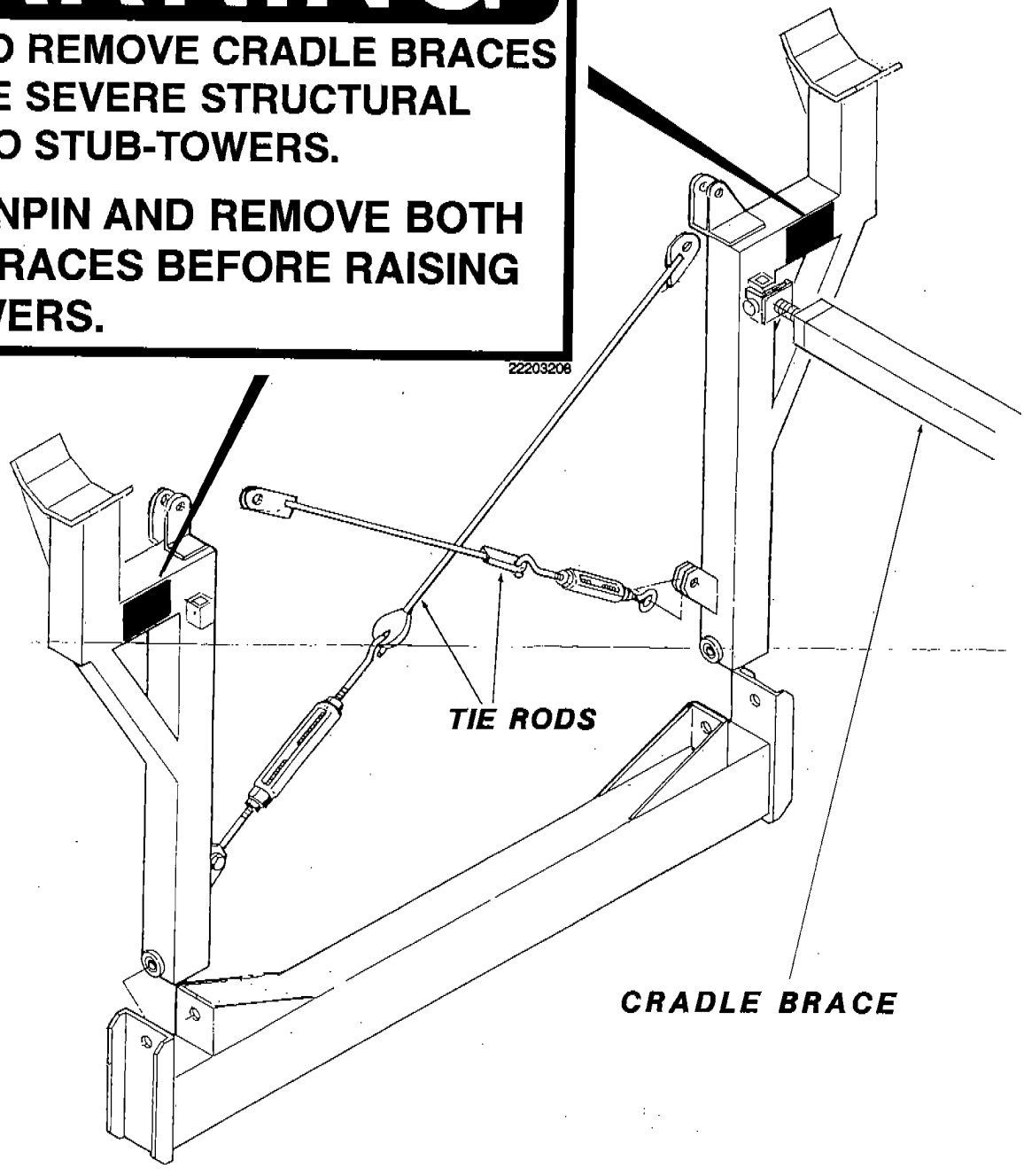
WARNING

FAILURE TO REMOVE CRADLE BRACES MAY CAUSE SEVERE STRUCTURAL DAMAGE TO STUB-TOWERS.

ALWAYS UNPIN AND REMOVE BOTH CRADLE BRACES BEFORE RAISING REAR TOWERS.



NUMBER: B406R1160-0

DATE: MAY 23, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 40600193 through 40601894

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

Ride: CENTURY WHEEL Subject: Spreader Bar Rack Rework

Chance Rides, Inc. has become aware that the racks welded to the front of the trailer on the above noted CENTURY WHEEL amusement rides, which supports the spreader bar for transporting, could fill with water. If this occurs, rusting from the inside out could cause premature deterioration of these tubes.

Chance Rides, Inc. requires all owner/operators of the above noted CENTURY WHEELS to perform the rework to the spreader racks, as outlined 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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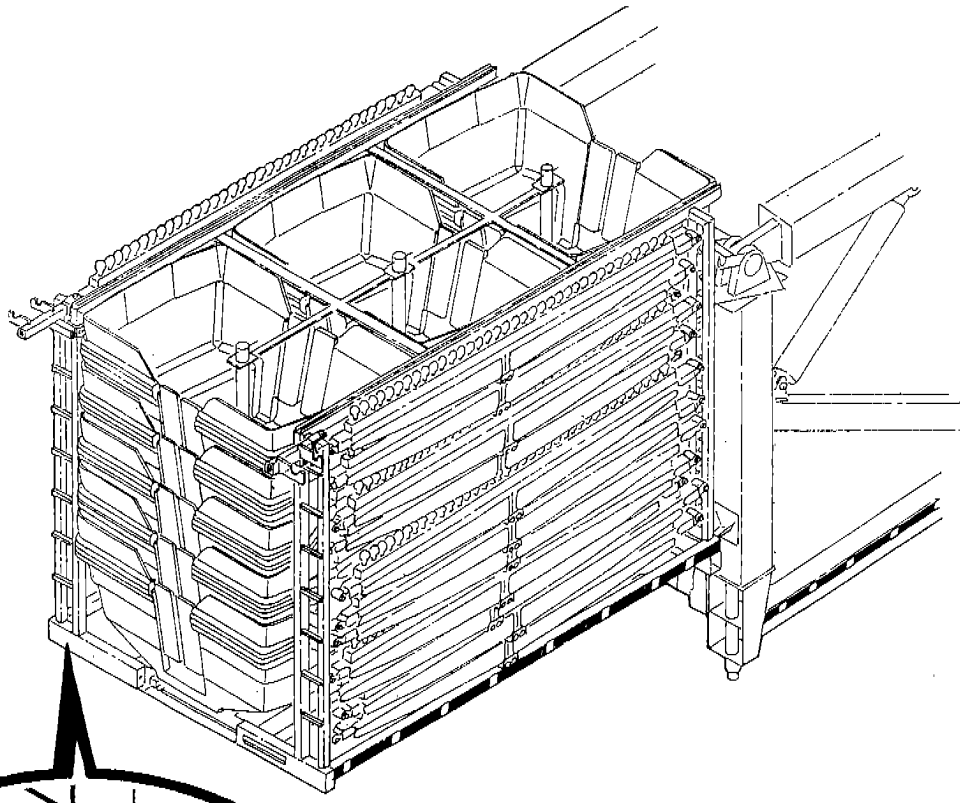
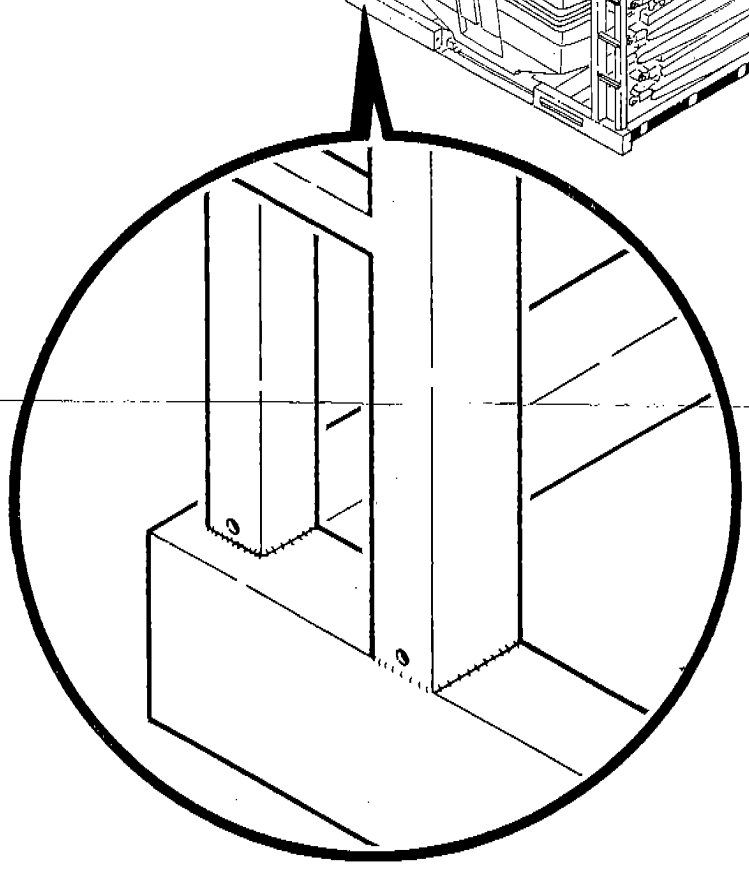




Drill 1/4" hole near base of each upright tube

(8 places)

NUMBER: B406R1141-0

DATE: OCT. 8, 1993

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

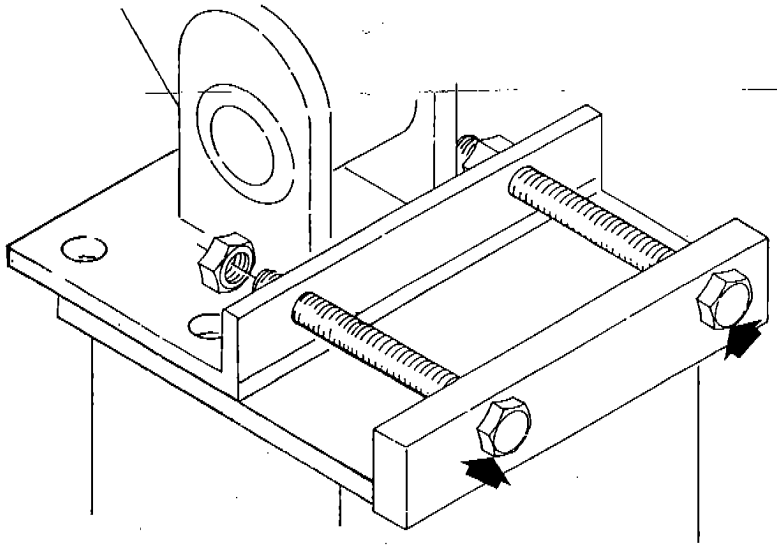
Effective Serial Number: 40600293 through 40600993

Ride: CENTURY WHEEL Subject: Pivot Plate Draw Bolt

Chance Rides, Inc. has designed a new pivot plate draw bolt for the above noted CENTURY WHEEL amusement rides. This bolt will allow the aligning of the rear tower legs to the stub towers in one operation, as opposed to the three step process now used, making the setup of the ride more time efficient.

Chance Rides, Inc. requires all owner/operators of the above noted CENTURY WHEELS to order pivot plate draw bolt, part number 30741900 and the mating nut, part number 64752800. A quantity of four (4) each is required, two for each rear tower leg. These parts are available at no charge, if ordered within 90 days of the date on this bulletin.

Follow instructions in the service manual for correct use of the draw bolt during setup of the ride.



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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NUMBER: B406R1139-0

DATE: SEPT. 3, 1993

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 40600193 THROUGH 40600693

Ride: CENTURY WHEEL Subject: FENCE REWORK

Chance Rides, Inc. has become aware that on the CENTURY WHEEL it is possible for the side fences around the operator's pedestal to slide up and down in the connecting sockets if the operator leans against the back fence section. If the side fences were to come all of the way out of the connecting sockets, injury to the operator and/or damage to the fences could result.

Chance Rides, Inc. requires all owner's of the above noted CENTURY WHEEL amusement rides to perform the rework outlined in this bulletin. To properly perform this rework, order and install the following items, which are available at no charge if ordered within 90 days of the date on this bulletin.

PART NUMBER	DESCRIPTION	QUANTITY
25234000	Clevis Pin 1/4 x 7/8	2
65189900	R-Key 3/32	2

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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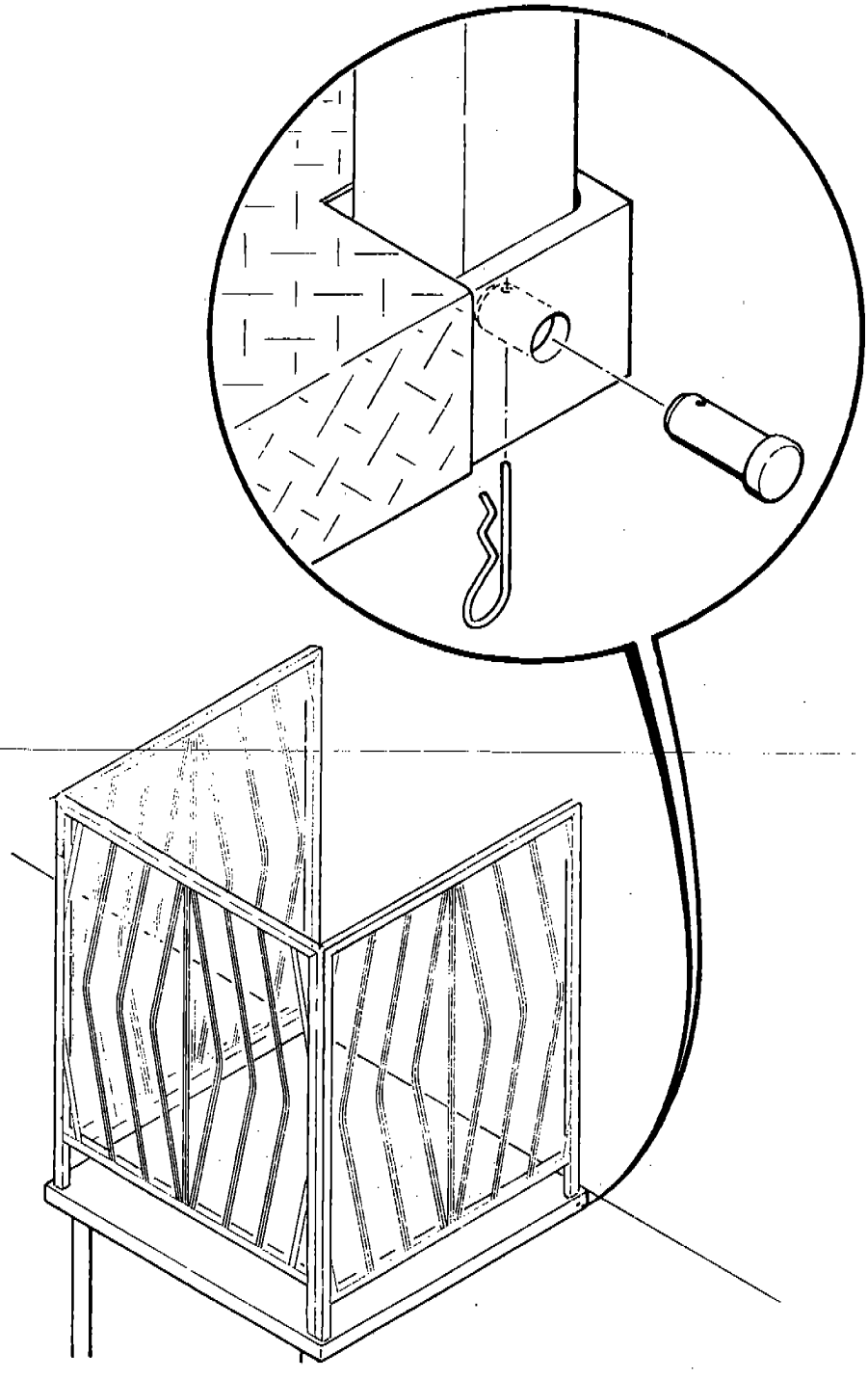
Follow the rework instructions in this bulletin and return the Certification Of Compliance within 15 days from receipt of parts.

REWORK INSTRUCTIONS

1. Install fences around operator's platform, making sure fences are properly seated in connecting sockets.

2. Centered in socket area, drill a 1/4 inch diameter hole (two places, opposite sides of platform) through side of platform and one side of the fence tube.

3. Insert clevis pin from outside and secure in place with R-key from underneath platform.



NUMBER: B406R1140-0

DATE: SEPT. 10, 1993

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 40600193 through 40600793

Ride: CENTURY WHEEL

Subject: Emergency Brake Bracket Installation

Chance Rides, Inc. requires the use of the emergency air-operated brake on the CENTURY WHEEL during installation of gondolas to the ride and removal of gondolas from the ride. A bracket has been designed that will allow the emergency brake to be attached to the operator's control box so that the emergency brake can be used before the fence sections have been installed. Once the ride has been completely set up, the emergency brake can be moved to the fence bracket for operation.

Chance Rides, Inc. requires all owner/operators of the above noted amusement rides to order and install the emergency brake bracket as outlined in the installation instruction in this bulletin. Bracket and hardware are available at no charge if ordered within 90 days of the date on 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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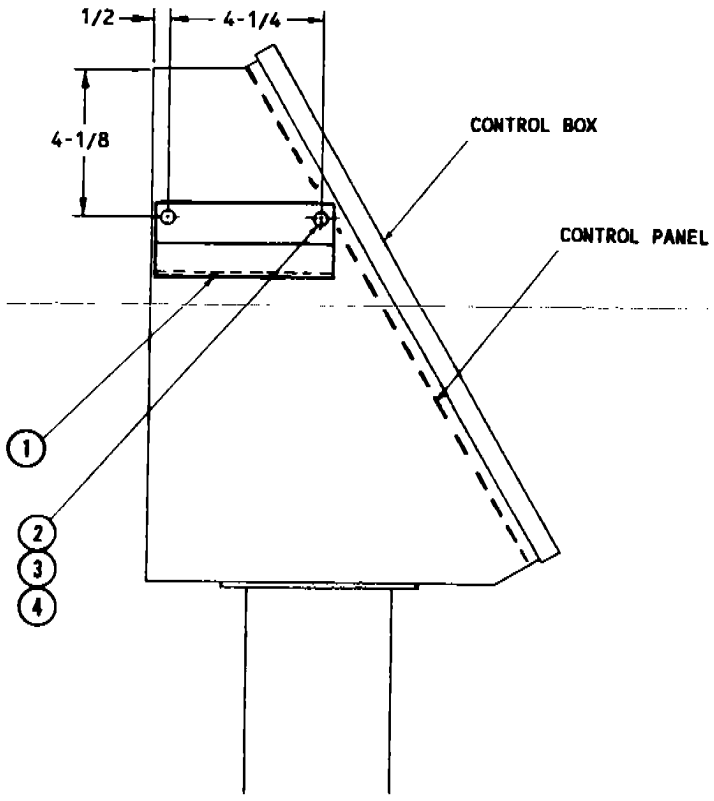
PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	30887300	Bracket	1
2	61143800	1/4 - 20 x 1/2 Mach Screw	2
3	68530200	1/4 flat washer	2
4	64780800	Hex head locknut	2

INSTALLATION INSTRUCTIONS

1. Make sure power source has been disconnected to the opertor's control pedestal.
2. Remove and keep the four screws holding the control panel to the control box, be sure wires are out of the way for installation of bracket.
3. Position bracket (Item 1) on outside of control box as shown.
4. Drill two 9/32 inch diameter holes on side of box to match bracket.
5. Attach bracket with machine screw (Item 2), flat washer (Item 3), and locknut (Item 4).
6. Re-install control panel with original hardware removed in step 2.



NUMBER: A406R1143-0

DATE: OCT. 22, 1993

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: All Units

Ride: CENTURY WHEEL Subject: Sweep and Spreader Lighting

Chance Rides, Inc. has become aware of at least one case in which all of the bases of the sweep lights enclosed by one light cover on the CENTURY WHEEL amusement ride broke. When this occurred, the section fell from the ride.

Chance Rides, Inc. requires all owner/operators of the above noted amusement rides to follow the rework safety precautions in this Safety Alert Bulletin. Failure to follow the rework instructions outlined in this bulletin prior to the operation of the ride can result in injury to patrons and/or employees.

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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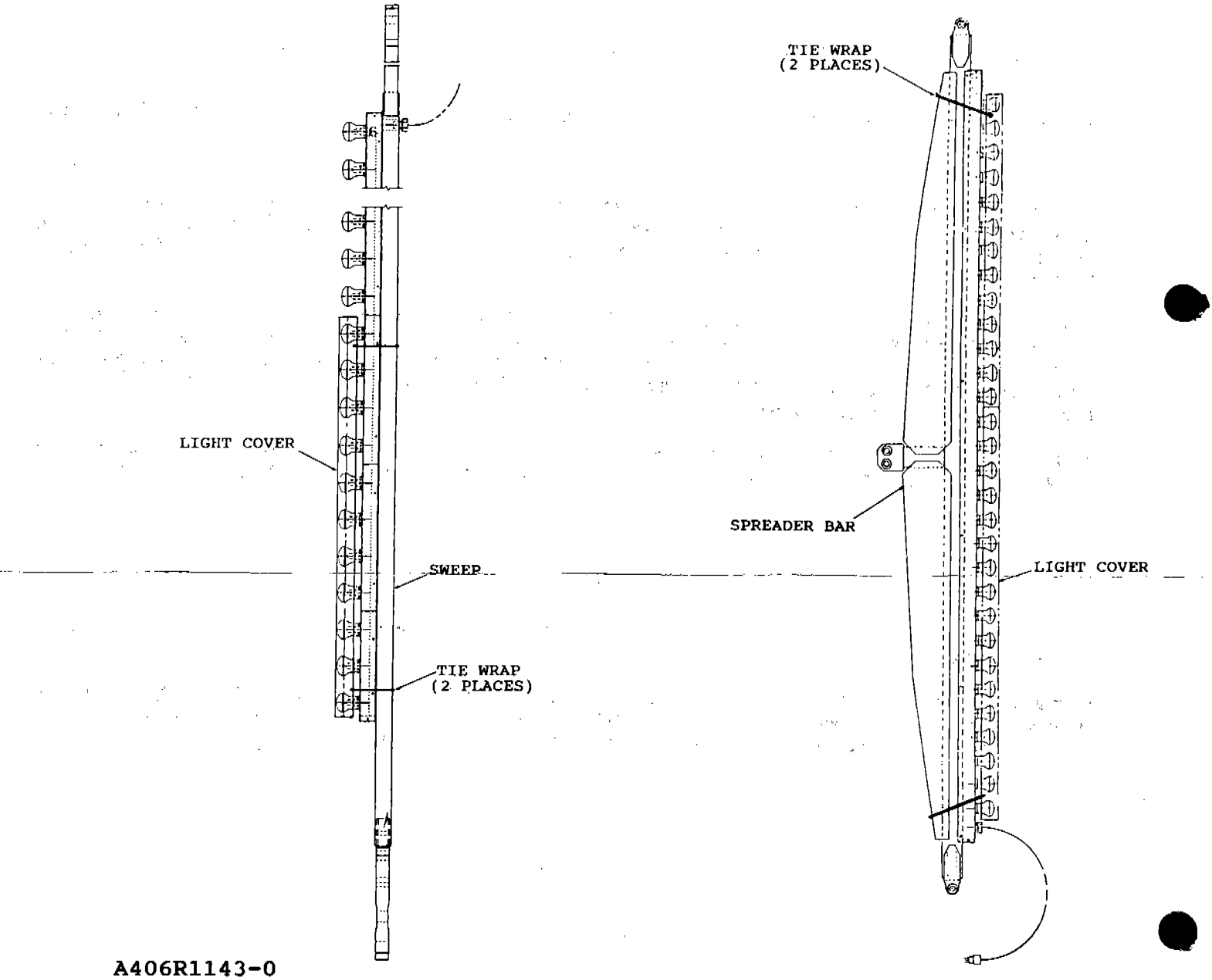
Rework Instructions

1. Remove the #10 x 2-1/4 long machine screw in the light covers located on each sweep.

2. Using 3/16 black tie wraps, secure the light covers to the sweeps. Insert one tie wrap through the holes where the machine screws were removed and fasten around the sweep. Secure each light cover at two locations. NOTE: If cover only contains one hole, drill a second hole at the opposite end of cover for the second tie wrap.

3. Perform the above steps on all spreader bar light covers as well as all sweep light covers.



NUMBER: B406R1146-0

DATE: JAN. 7, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 40600193 through 40601393

Ride: CENTURY WHEEL Subject: Handling Platform Rework

Chance Rides, Inc. has become aware that it is possible for the removable handling platform on which the gondola handling cart is used, to slide sideways and drop down into the trailer frame. If this occurs damage to gondola and possible injury to personnel can result.

Chance Rides, Inc. requires all owner/operators of the above noted amusement rides to order and install kit number K406R1146-0. This kit is available at no charge if ordered within 90 days of the date on this bulletin. Use the instructions in this bulletin to install the kit, complete the Certificate Of Compliance and return it to Chance Rides, Inc. within fifteen (15) days of the receipt of the kit.

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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KIT K406R1146-0 PARTS LIST

Item No.	Part Number	Description	Quantity
1	30222600	Angle 2 x 1-1/2 x 1/8 x 29-1/8	1
2	60767600	H.H.C.S. 3/8-16 x 2-1/4 Gr. 5	4
3	68530900	Washer wrot 3/8	4
4	64781600	Locknut 3/8 - 16	4
5	25238900	Clevis Pin 1/4 x 2	2

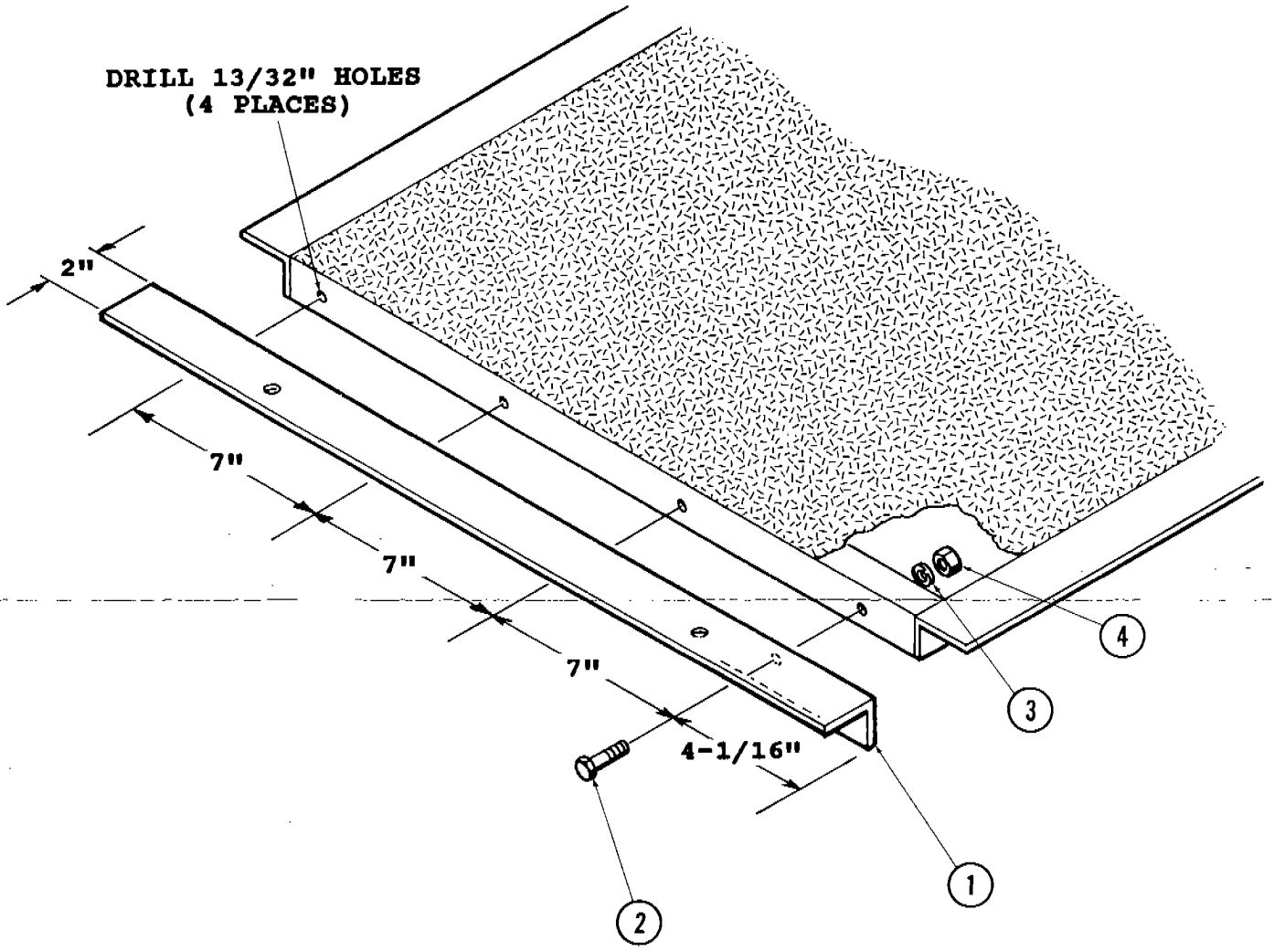
Installation Instructions

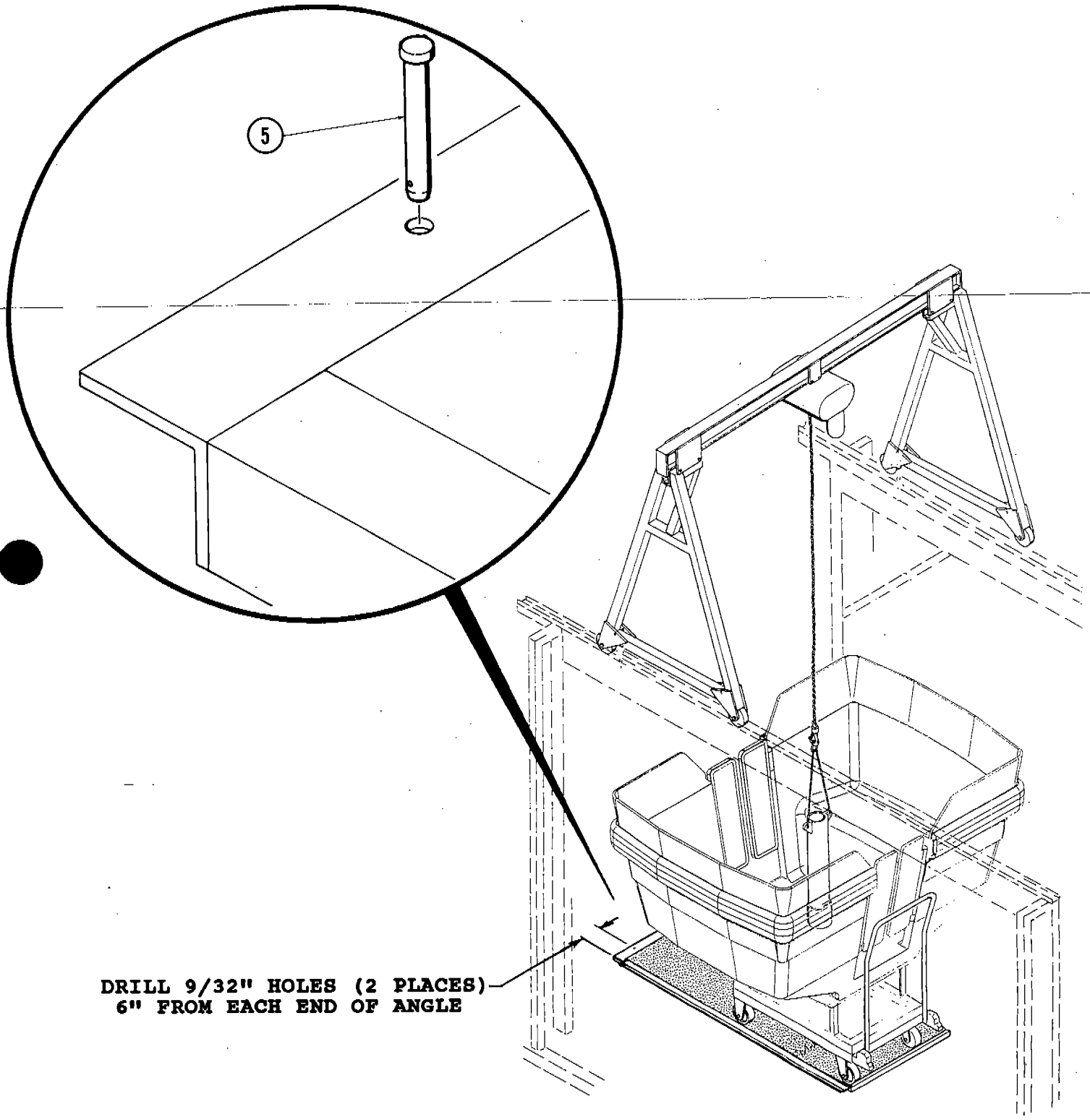
1. Clamp angle (Item 1) to front edge of handling platform as shown.

2. Drill four (4) 13/32" diameter holes through angle and 1-1/4" square tubing of platform as shown.

3. Secure angle to platform with hexhead capscrews (Item 2), washers (Item 3) and locknuts (Item 4).

4. Position handling platform in place on trailer. Drill two (2) 9/32" diameter holes through angle and trailer structure. Clevis pins (Item 5) are inserted through holes to secure handling platform in place during set-up and tear down.




5
DRILL 9/32" HOLES (2 PLACES)
6" FROM EACH END OF ANGLE

NUMBER: B406R1149-0

DATE: APR. 4, 1994

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: 406-00193 through 406-01093

Ride: CENTURY WHEEL Subject: Gondola Carrier Rework

Chance Rides, Inc. has become aware from field experience, that the gondola carrier on the above noted amusement rides can develop cracks in the crossmembers on which the gondola stacks sit and that the carrier wheel axles can break free from the carrier. Both of these items require rework as outlined in this bulletin.

Chance Rides, Inc. requires all owner/operators of the above noted CENTURY WHEEL rides to order and install kit number K406R1149-0. This kit is available at no charge if ordered within 90 days of the date of this bulletin. Use the instructions in this bulletin to install the kit. All work must be completed and the Certification Of Compliance returned to Chance Rides, Inc. within fifteen (15) days of the receipt of the kit.

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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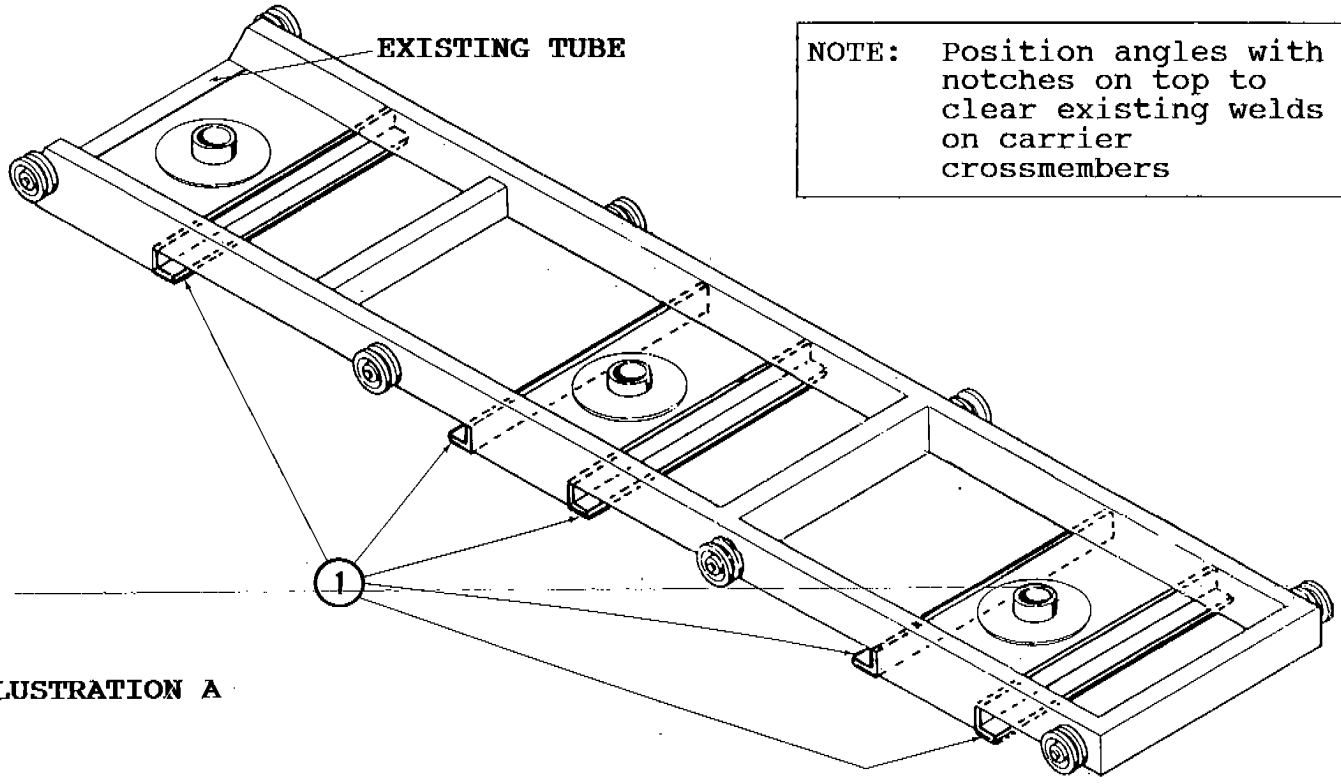
Kit K406R1149-0 Parts List

Item No.	Part Number	Description	Quantity
1	30221700	Angle 1-3/4 x 1-3/4 x 1/4	5
2	35191500	Axle Pin	8

NOTE: To install this kit, as outlined in this bulletin, the gondolas must be unloaded from the carrier and the carrier completely removed from the trailer frame.

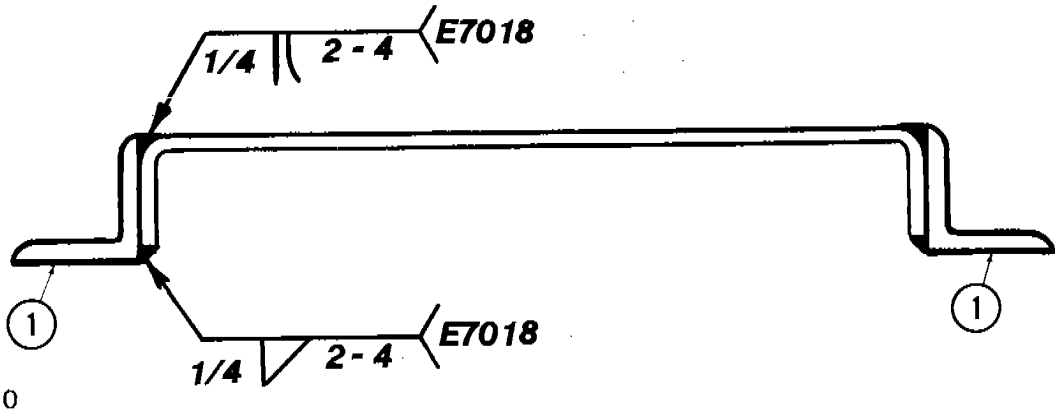
Installation Instructions for Kit K406R1149-0

1. Inspect front and rear sides of the carrier crossmembers for cracks. If any are present, contact Chance Rides, Inc. Customer Service Department for repair procedures.
2. Position and weld angles as shown in Illustration A.
3. Angles should be added at 5 locations, front and back of first two crossmembers and front only of third crossmrmber.



NOTE: Position angles with notches on top to clear existing welds on carrier crossmembers

ILLUSTRATION A



4. Grind off existing welds, remove and discard axles, eight (8) places.
5. Install new axles as shown in Illustration B.
6. Weld axle end to carrier using E7018 welding rod.
7. Repeat until all eight (8) axles have been welded in place.

ILLUSTRATION B