

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:	B414CRM105-0
Release Date:	September 23, 2002
Effective Date:	September 23, 2002
Supersedes:	B414R1211-0
Completion Date	: N/A
Page:	1 of 6

SERVICE BULLETIN

Ride Manufacturer: CHANCE RIDES, INC.

Affected Production Dates: All

Ride Name:

INVERTER

Affected Serial Nos.: All Units

Model No.:

414

Abstractofissue:

Inspection, Replacement and Operation of Hydraulic Lock Cylinders

Reason For Release:

Chance Rides, Inc. service bulletin B414R1211-0 is superseded by this bulletin and is no longer in effect.

The passenger restraint system on the INVERTER amusement ride incorporates a hydraulic lock cylinder for the primary restraint bar (lap bar) at each seat. In the event a hydraulic lock cylinder fails, the secondary restraint bar (T-bar) prevents the lap 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 as described on the following pages of this bulletin. A manufacturing defect was discovered in one version. Chance Rides, Inc. service bulletin B414R1211-0 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.

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 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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Affected Production Dates: All

Ride Name:

INVERTER

Affected Serial Nos.: All Units

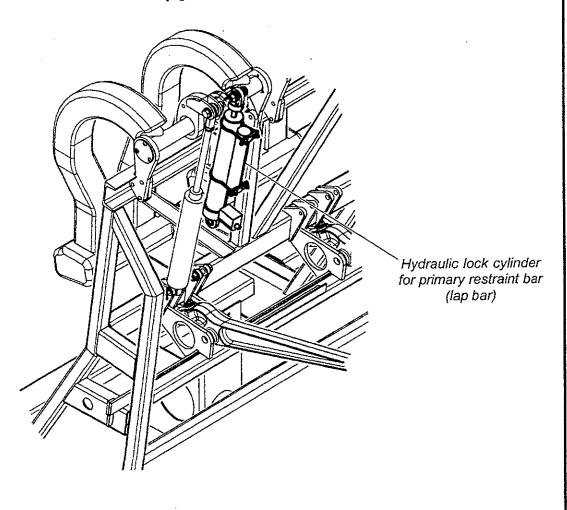
Model No.:

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Detail of Issue (continued):

Inspection Procedure

Inspect the hydraulic lock cylinders for all seats (24 total). Identify the cylinders based on the distinguishing characteristics detailed on the next page.





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Ride Name:

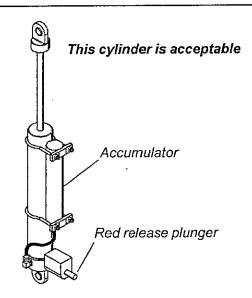
INVERTER

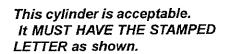
Affected Serial Nos.: All Units

Model No.:

414

Detail of Issue (continued):





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 is acceptable. 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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Affected Production Dates: All

Ride Name:

INVERTER

Affected Serial Nos.: All Units

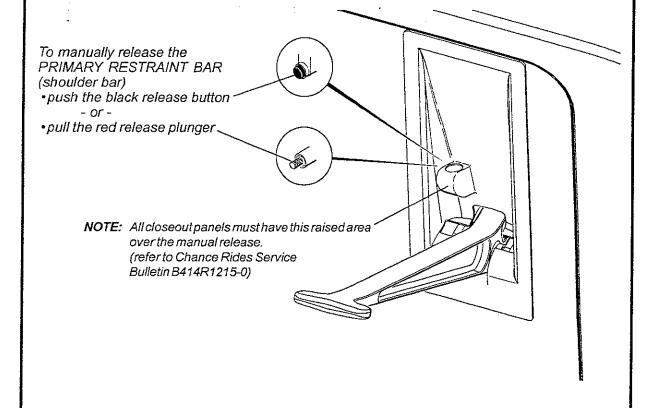
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Detail of Issue (continued):

Operation - Manually releasing passenger restraints

Use the following information in conjunction with the procedure in the INVERTER Operation Manual.





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Ride Manufacturer: CHANCE RIDES, INC. Affected Production Dates: All
Ride Name: INVERTER Affected Serial Nos.: All Units

Model No.: 414

Detail of Issue (continued):

Monthly Inspection of Hydraulic Lock Cylinders

The primary restraint bar on each seat incorporates a hydraulic lock cylinder. Remove the back cover from the seat to gain access to the lock cylinders on that row of seats.

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

- 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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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 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 passenger restraint 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 to prevent moisture from entering.

Chance Rides Manufacturing, Inc. issues notifications 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 issues notifications 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 manufacturers other than Chance Rides Manufacturing, Inc.