

Dartron

Issuing Entity:
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Bulletin # SB-5K-001

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Effective Date: May 1, 2004

Supersedes: N/A

Complete Inspection by June 15

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SERVICE BULLETIN

Ride Manufacturer: Dartron Industries, Inc.	Affected Production Dates: All Cliff Hanger Rides
Ride Name: Cliff Hanger	Affected Serial #'s: All
Model #'s: All	

Abstract of Issue: Dartron is aware of Cliff Hanger rides that have developed cracks in the bearing base. The cracks may result from or be aggravated by transporting the Cliff Hanger without adequately supporting the sweeps and/or from unbalanced ride loading.

Reason for release: Failure to eliminate the cracks could eventually result in the bearing base not adequately supporting the center bearing causing an expensive failure of the bearing. Failure to adequately support the sweeps while transporting the ride will continue to introduce unintended forces into the bearing base and bearing and can damage sweeps. Corrective action steps are included. Loading the Cliff Hanger in an unbalanced manner could shorten the life of major components. Dartron requires that the passenger load be balanced before Cliff Hanger operation.

Action to be taken:

1. Before operating a Cliff Hanger a one time visual inspection must be conducted to inspect for cracks in the Bearing Base and Separator Plates as detailed on Page 2 and 3 of this Bulletin.
2. As soon as the one time visual inspection is complete the Bearing Base Inspection Form (Page 4) must be completed and faxed to Dartron.
3. If no cracks are found the following action is required:
 - a. A visual inspection for cracks must be conducted every 30 days until instructed otherwise by Dartron or until the reinforcing plates are installed. There is no inspection reporting requirement unless cracks are found.
 - b. The sweep support jack must be modified as described on Pages 5 and 6 of this Bulletin.
4. If cracks are found the following action is required within 120 days of discovering a crack unless Dartron determines from the crack description that action should be taken sooner:
 - a. Cracks must be repaired as described in Dartron Product Improvement Bulletin PI-5K-003.
 - b. Reinforcing plates provided by Dartron must be installed as described in Bulletin PI-5K-003.
 - c. The sweep support jack must be modified as described on Pages 5 and 6 of this Bulletin.

Procedure For Visually Inspecting Cliff Hanger Bearing Base

Step 1: If the ride is in the racked position the aluminum set up decks must be removed from their transport rack to allow access to the bottom of the Bearing Base.

Step 2: If the ride is set up proceed to Step 3.

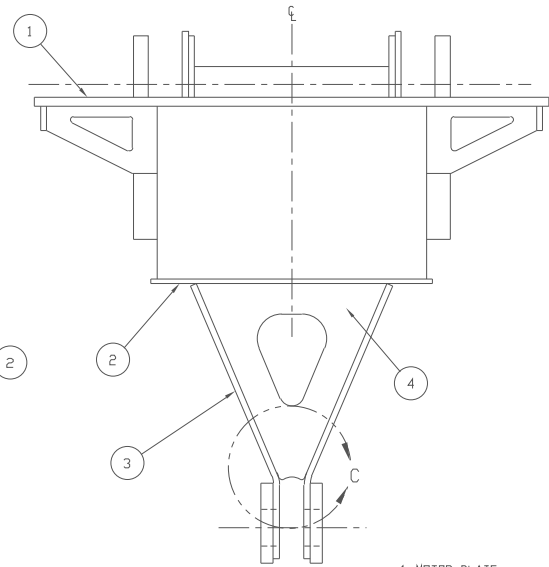
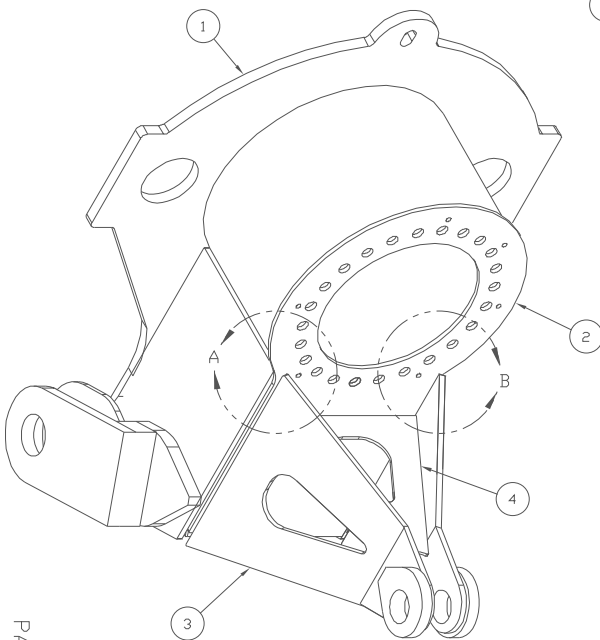
Step 3: Three areas must be visually inspected. Those areas are shown on Page 3 as Detail A, B and C.

Step 4: The areas to be inspected must be cleaned so that they are free of dirt and grease.

Step 5: Visually inspect the three areas for cracks or broken paint.

Step 6: If broken paint is found, the paint must be removed to allow a more through visual crack inspection.

Step 7: If a crack is discovered describe the crack on the form found on Page 6 & 7 of this Bulletin. Fax the form to Dartron at 503-362-2536. Dartron will coordinate a time to perform the repairs.



- 1. MOTOR PLATE
- 2. BEARING BASE
- 3. BOTTOM PLATE
- 4. LOWER PLATES

PAGE 3

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DARTRON IND., INC. P.O. BOX 13114 SALEM, OR 97309			TOLERANCES UNLESS NOTED			STRESS OR FAURE POINTS	DATE 09-06-03	SCALE NTS	DRAWN BY DH
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			.XX ± 0.06	± 1/16	± 30°				
			XXX ± 0.10						

Procedure For Installing Sweep Support Rack Jacking Instructions

1. Install the sweep support beam on the trailer and raise it until the sweeps are all properly meshed in their mating shoes on the beam.
2. Continue to raise the sweep support beam until the proper height is achieved. The proper height [tightness] is the point at which an average man of average strength can barely continue to turn the crank handle. [Item #6] The crank handle also has to rack in the angle iron clip on the jack tube. The crank handle can also be turned on the shaft if necessary to achieve the correct tightness and rack the handle. To do this remove the bolt that connects the crank handle to its drive shaft, turn the handle 180 degrees and then re-install the bolt.
3. Visual references for the following steps are found on page five (5) of this document.
4. After the correct height is achieved, drill a 3/8 hole [Item #4] through the inner tube sleeve [Item #1] of the jack as indicated. The lower edge of the 3/8 hole should be even with the top edge of the outer jack tube.
5. Use a center punch or other permanent marking device and install an arrow [Item #3] on the outer sleeve [Item #2] of the jack as indicated.
6. Install the warning label [Item #5] below the arrow on the outer jack sleeve. Warning labels are available from Dartron Parts and Service.

Visual Inspection Report Cliff Hanger Bearing Base

Date: _____

Cliff Hanger Owner/Operator Name: _____

Serial Number of Cliff Hanger: _____

Indicate Locations of cracks on supplied diagrams

Describe (in as much detail as possible) location and dimensions of cracks.

Diagram A _____

Diagram B _____

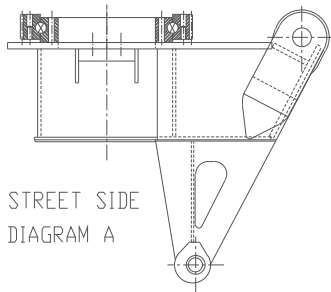
Diagram C _____

Diagram D _____

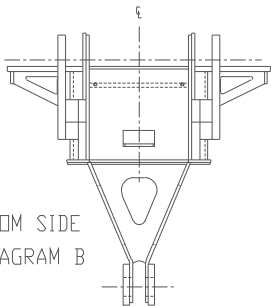
Diagram E _____

Inspectors Signature _____

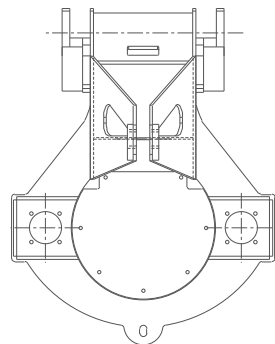
Title _____



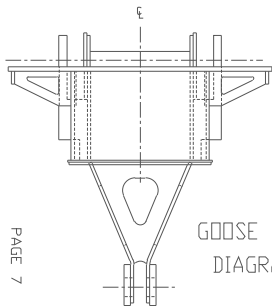
STREET SIDE
DIAGRAM A



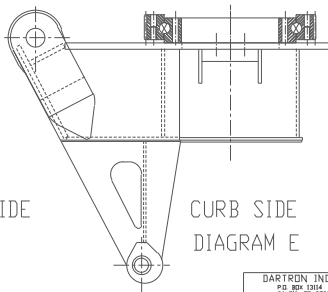
BOOM SIDE
DIAGRAM B



BOTTOM
DIAGRAM C



GOOSE NECK SIDE
DIAGRAM D



CURB SIDE
DIAGRAM E

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