

Dartron Industries, Inc. is not the manufacturer of Hurricane rides built from 1972 until 1991. This bulletin is being issued in the interest of correcting a potential problem on rides whose manufacturer is no longer in business. This bulletin in the interest of safety should in no way be construed as Dartron Industries, Inc. assuming the role of manufacturer of Hurricanes manufactured before 1992.	P.O. Box 13114 Salem, Oregon 97309 Phone: 503-362-2341 Fax: 503-362-2536	Bulletin #	SR - 5H - 903
		Release Date	March 26, 1999
		Effective Date	March 26, 1999
		Supersedes	
		Completion Date	June 30, 1999
		Page	1 of 2

# SAFETY ALERT

Ride Manufacturer	Frank Hrubetz & Co., Inc. Kilinski Mfg. Company Man-Co Mfg., Inc.	Affected Production Dates	1973 until 1991
Ride Name	Hurricane	Affected Serial #'s	All
Model Number	All		

**Reason For Release:** It has been determined that the changes explained below are necessary for the assured safe operation of the Hurricane ride. These changes must be retro fitted on all previously manufactured Hurricanes.

**Inspection** Before implementing the changes explained below remove the cars from the sweeps. Locate the grease Zerk on the end of the Sweep. Add lubrication to this zerk until the cavity is full. Inspect the bolt or roll pin shown as item 20 on Page 2. If a bolt is found be sure the bolt is a grade 8. Inspect to be sure that it is not damaged and capable of maintaining the pin in its bore and prohibiting the pin from rotating. Replace with a 3/8 NC x 4" grade 8 bolt and grade 8 nyloc nut if any damage is found. Car buckets must also rotate freely in relation to the sweep, indicating that the bushings in the sweep end are not binding on the shaft. Keeper bolt orientation must be as shown on Page 2 in order to clear pin retainer.

**Detail of Issue**

**Pin Retainer**

Page 2 shows the pin retainers that must be bolted to both sides of the car buckets that are attached to the end of the sweeps on all Hurricanes. With the pin retainers in place the shaft will be retained in position in the sweep even without the proper functioning of the pin locating bolt. Using an electric drill, drill one hole in both sides of the sweep bucket. The location of these holes is shown in Page 2 at 2 7/8". Bolt the pin retainer on with one bolt so that the tab of the retainer covers the end of the bucket pin. Now use the retainer as a jig to drill through for the lineup of the second 3/8 hole. Bolt the retainer in place using grade 8 bolts, grade 8 nyloc nuts and flat washers as called out in the material list on page 2. Insert the bolt from the inside to the outside of the bucket. Place the nyloc nut on the outside face of the bucket so it can be easily inspected. Torque to 40 ft. lbs. The flat washers are located under the bolt head and under the Nyloc nut.

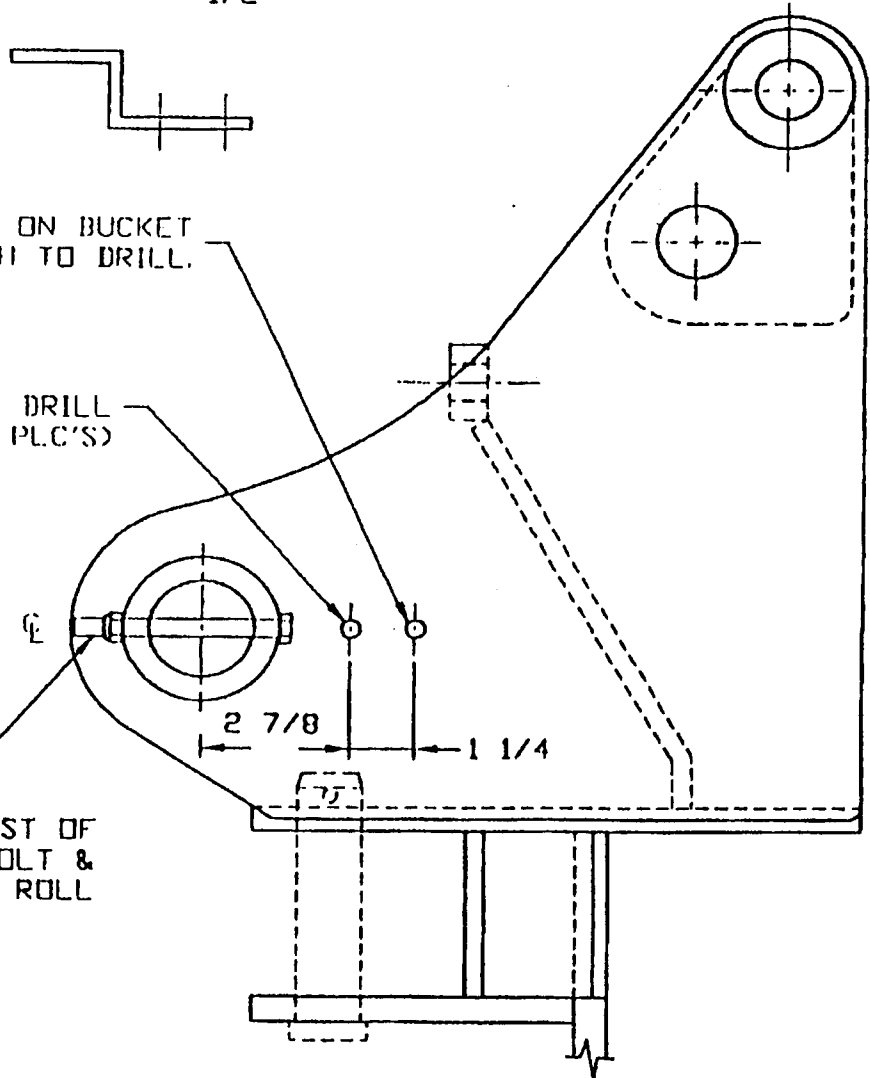
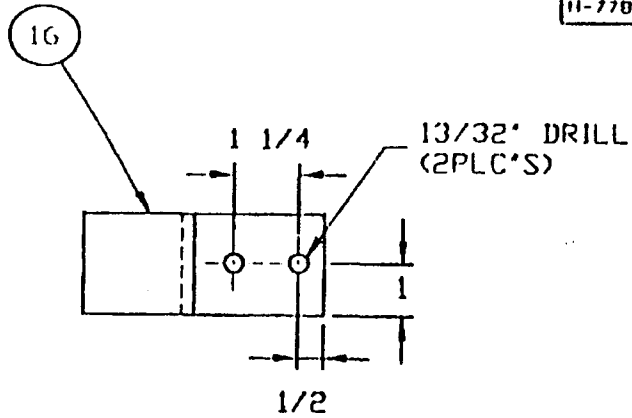
**Material Required**

Contact Steve Jones at Dartron concerning the purchase of the 12 pin retainers. The Hurricane owners must supply the exact hardware shown on Page 2.

**Inspection Required**

Daily inspection of the buckets are required. The inspection must insure that (1) The sweep end pin is lubricated (2) the pin locating bolt is in place and functioning properly (3) both pin retainers are securely bolted to the sides of the bucket.

ITEM	QTY.	DESCRIPTION
11-770-16	12	PIN RETAINER
11-770-17	24	3/8" NC. 1.5' GR II BOLT
11-770-18	24	3/8" NC. NYLOC NUT GR 8
11-770-19	40	3/8" FLAT WASHER



POSITION ITEM 16 ON BUCKET  
& CENTER PUNCH TO DRILL.

13/32 DRILL  
(2 PLC'S)

ITEM #20

ITEM #20 CONSIST OF  
3/8 GRADE 8 BOLT &  
NYLOCK NUT OR ROLL  
PIN.