

Dartron Industries, Inc.	P.O. Box 13114 Salem, Oregon 97309 Phone: 503-362-2341 Fax: 503-362-2536	Bulletin #	SR-5K-001
		Release Date	FEB 20, 2001
		Effective Date	MARCH 1, 2001
		Supercedes	
		Completion Date	JULY 4, 2001
		Page	1 of 4

SAFETY ALERT

Ride Manufacturer	Dartron Industries, Inc.	Affected Production Dates	1998 thru 1999
Ride Name	Cliffhanger	Affected Serial #'s	806081-5K, 807121-5K, 810061-5K, 810283-5K, 811201-5K, 901011-5K
Model Number	N/A		902071-5K, 902221-5K, 903021-5K, 903272-5K, 905101-5K, 9060091-5K, 908311-5K, 909201-5K

Reason For Release:
 Dartron has determined that the two cylinders that raise and lower the car storage racks on either the curb or drivers side could move at different speeds. If the rack operator continues the rack movement the rack could twist resulting in the rack rotation shaft being pulled out of the pillow block or the pillow block fracturing. Either situation could cause the cars to fall to the ground.

Solution
 A flow divider must be added for each car rack.

Inspection
 Inspect to see if flow dividers have been installed in the hydraulic lines going to hydraulic cylinders of the passenger carrier storage racks.

Order Parts
 A kit containing all parts needed to add two flow divider valves is available from Dartron. Contact Steve Jones at (503) 362-2341.

Detail of Issue
 SEE ATTACHED PAGES 2 THRU 4.

BULLETIN # SR-5K-001

P.2

INSTRUCTIONS:

The flow divider kit should be installed on the Cliff Hanger when the ride is set up, or when the passenger carrier transport racks are in the down position. All passenger carriers must be removed.

FLOW DIVIDER INSTALLATION INSTRUCTION:

Step 1: Drill holes through the gooseneck deck skin using the layout pattern as showed on page 3 Diagram A.

Step 2: Install 2 flow dividers with fittings as showed on page 3 Diagram B.

Step 3: Make sure the passenger carrier transport racks are in the down position, all cylinders are fully extended and all passenger carriers are removed.

Step 4: Identify the hose attached to the rod end of the driver side rear cylinder, and follow it down to the bulkhead tee fitting under the gooseneck.

Step 5: Remove all three hoses from this bulkhead tee fitting and replace the tee in the trailer with the straight fitting from the kit.

Step 6: Extend this bulkhead fitting over to the center port of either one of the flow dividers with one of the hoses from the kit, as shown on page 3 Diagram B.

Step 7: Hook up the two hoses from the cylinders to the other side of the flow divider. The flow divider now takes the place of the tee that was removed. See schematic on page 4.

Step 8: Repeat steps 4-7 for the other side.

Step 9: Remember that you now have air in the lines and the racks may not work quite right until the air is purged. The flow dividers have an internal relief valve, which will allow the cylinders to synchronize. Bottoming the first cylinder out and continuing to apply pressure with the hydraulic controls until the relief opens, which allows the second cylinder to bottom out, achieve this. Raising and lowering the racks once should be enough to purge all of the air out of the lines. The racks can Be raised all the way up when the ride is set up, by lifting the boom.

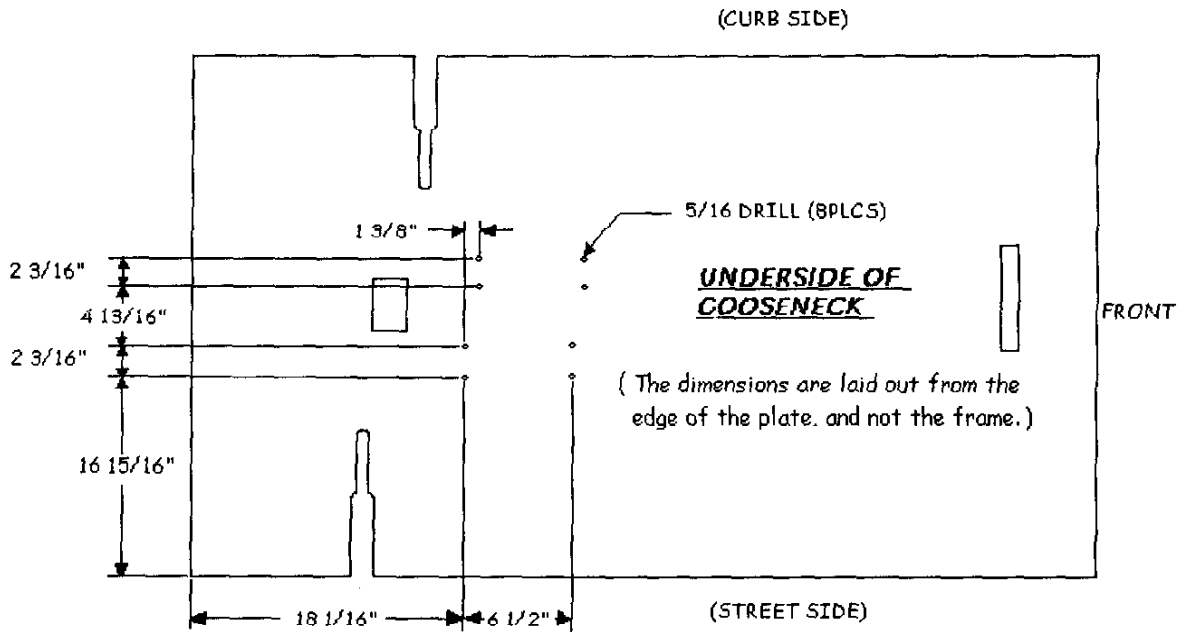


DIAGRAM A (LAYOUT PATTERN)

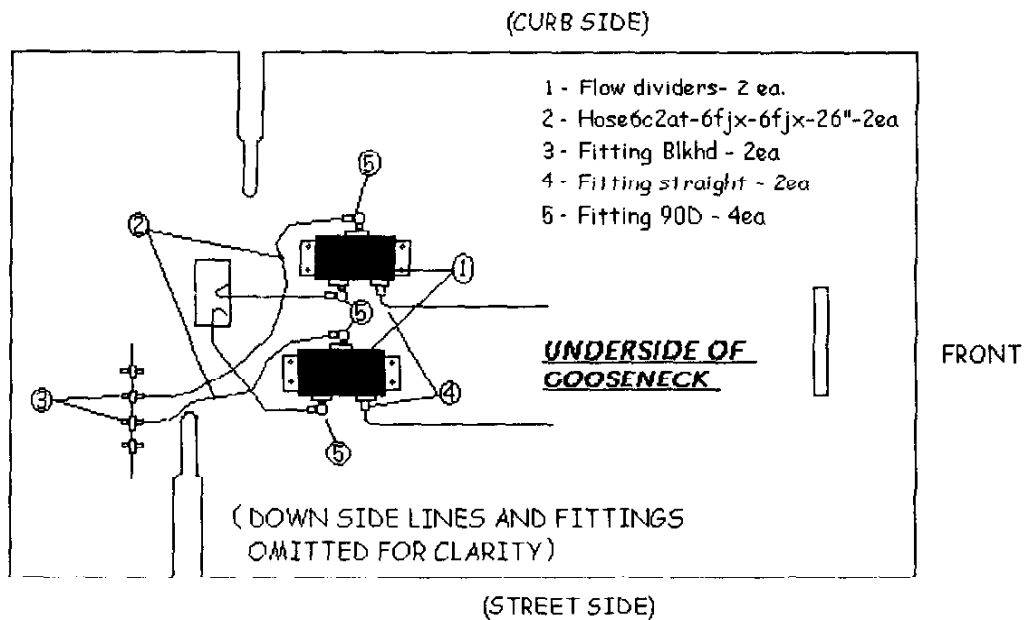


DIAGRAM B (FLOW DIVIDERS)

Darttron Industries, Inc.
P.O. Box 13114 - Salem, Ore. 97309

BULLETIN # SR-5K-001

P.4

FLOW DIVIDER
HYDRAULIC SCHEMATIC

