



Issuing Entity:
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Bulletin No.: L17-002
Release Date: 07/12/17
Effective Date: Immediately
Supersedes: n/a
Completion Date: 7/31/17
Pages: 4

SERVICE BULLETIN

Ride Manufacturer: Larson International Inc. Affected Production Dates: 1998-2017
Ride Name: Giant Loop Affected Serial Nos.: 1-16

Abstract Of Issue:

Preventive maintenance includes inspecting all wheel axles to ensure they are properly secured. This bulletin provides additional detail to highlight the procedure. A new guide wheel axle design will make this process easier and should be installed as soon as practicable.

Reason for Release:

Loose wheel axles will rotate during operation and cause wear to the axle and the mounting plates which could result in component failure during ride operation.

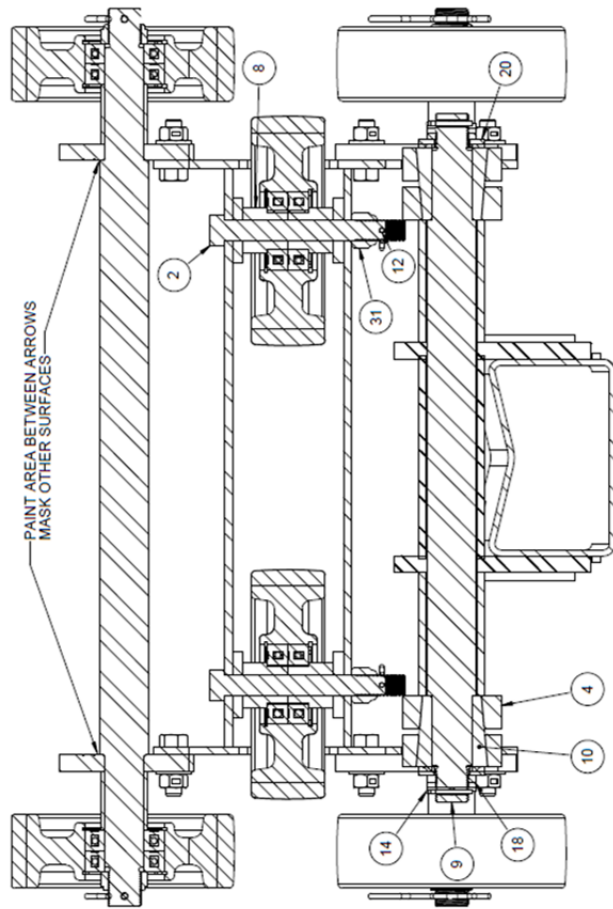
Action To Be Taken:

1. Update maintenance procedures to include the following ongoing inspections:
 - a. Daily Inspection
 - Verify all axle nuts and cotter pins (or R-clips) are in place
 - Check each wheel for lateral and vertical freeplay in axle
[replace guide wheel axle bolts that exhibit wear from rotating]
 - b. Monthly Inspection
 - Verify axle nuts have proper torque (torque stripe visual verification OK)
 - Spin each wheel to listen for bearing issues
2. Replace all guide wheel axle bolt hardware with new design (see pages 2-4)
3. Mounting plate wear limit 0.6875 inch (maximum hole dimension)
4. Tighten all loose axles with the following procedure:
 - a. Tighten axle nuts to proper torque
(guide wheels 140 ft-lb, road/upstop wheels 100 ft-lb)
 - b. Visually check that mounting plates are clamping against the guide wheel bushings.
 - c. If freeplay is still observed, there may be an issue with the bearings or it may be necessary to add shims to the guide wheel axles. Hardened 0.625 inch washers are ok to use as shims provided the mounting plate surface is not worn.



SECTION B-B

PAINT AREA BETWEEN ARROWS
MASK OTHER SURFACES



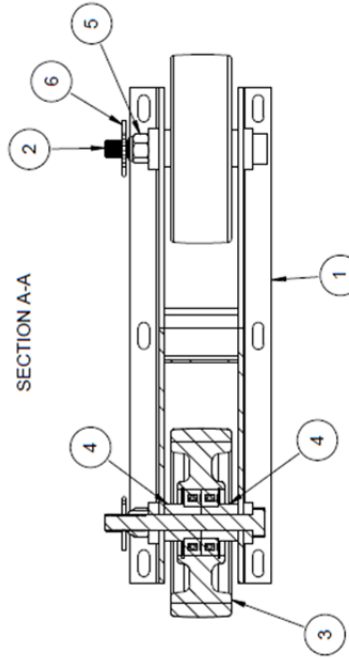
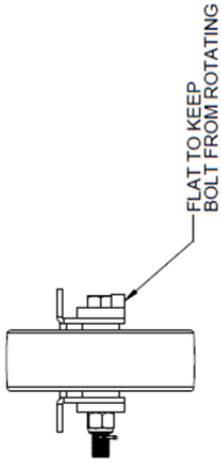
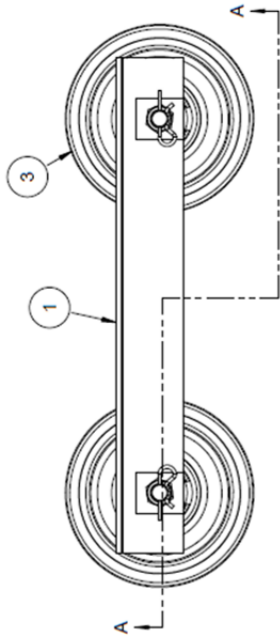
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY
31	H225084	LOCKNUT 5/8" NF NYLOCK GR8		2
30	I155420	INERTIA RING SIDE SECTIONS		1
29	I155319	INERTIA RING TRAIN ENDS		1
28	I155318	INERTIA RING SIDE SECTIONS		1
27	I155279	INERTIA RING TOP SIDE		1
26	L155277	INERTIA RING TRAIN ENDS		1
25	L155275	INERTIA RING TRAIN CONNECTION		1
24	L155273	INERTIA RING - TRAIN PIN, TOP		1
23	L155271	INERTIA RING TOP SSECTION (W/LUG)		1
22	L155269	INERTIA RING TYP W/O STEPS		1
21	012120	TRANSMISSION FLUID (1/2QT)		1
20	H310110	FLAT WASHER 1"		4
19	H225114	1" NF JAM NYLOCK GR 8		6
18	LV100836	HEX NUT, SLOTTED 1"NF HALF		2
17	H310066	FLATWASHER T.H. SAE (1/2" X 1 1/16")		12
16	H225061	1/2" 2 WAY LOCK HEX NUT		12
15	H103060	CAPSCREW 1/2"NC X 1 1/2"		12
14	H400340	PIN, COTTER 3/16" X 1 1/2"		2
13	H450105	"R" CLIP .177 X 3 1/4"		6
12	H450089	"R" PIN 1/8 X 1-15/16		2
11	H750000	PIPE PLUG 1/8"		1
10	M100659-25	BUSHING #JXA-0011		2
9	L155541	RND: 1 1/2" X 21"	AISI 4340	1
8	I155433	RND TUBE: 1 3/8" O.D. X 3/8"W X 1 7/16"	AISI CR 1026	4
7	L155349	AXLE MOUNT WELDMENT		1
6	L155345	RND TUBE: 1 7/16" O.D. X .120"W X 1 15/16"	AISI CR 1026	6
5	I155341	GL WHEEL ASSY, ALUM W/POLY		8
4	L155335	SHAFT SPACER WELDMENT		2
3	L155331	PL: 1/2" X 4 1/8" X 5 3/4"	ASTM A36	6
2	L155323-10	GUIDE WHEEL BOLT (H104226)		3
1	L155307-1	RND: 1 1/2" X 27 3/8"	AISI 4340	2

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PROJECT: GIANT LOOP
INERTIA RING, TYPICAL W STEPS (L155318)

SCALE: 3:8
FILE NAME: L155356-357-452-270-1 OF 1
NEXT ASSEMBLY: 7/15/2017
DRAWN: L155328
CHECKED: L155328
DATE: 7/15/2017
WEIGHT: 256.49 lb
RECORD: 6
REV: 1155356

REV	E.C.O.	REVISION DESCRIPTION	DATE	BY
A	2715	INITIAL SPIN OFF OF L155326 (THIS VERSION HAS A FULL LOCKNUT VS. HALF LOCKNUT)	6/24/16	KW
B		QTY PER RIDE WAS 8; START GL#17	7/7/17	KW
C	2730	LOCKNUT AND BOLT CHANGED TO GR8; START GL#17	7/12/17	KW



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY
6	H450089	'R' PIN 1/8 X 1-15/16		2
5	H225084	LOCKNUT 5/8" NF NYLOCK GR8		2
4	I155433	RND TUBE: 1 3/8" O.D. X 3/8"W X 1 7/16"	AISI CR 1026	4
3	I155341	GL WHEEL ASSY, ALUM W/POLY		2
2	L155323-10	GUIDE WHEEL BOLT (H104226)		2
1	I155315	GUIDE WHEEL BRACKET		1

UNLESS SPECIFIED OTHERWISE
DIMENSIONS ARE IN INCHES
DIM'S TO CENTER UNLESS NOTED
ALL DIMENSIONS TO BE HONED
BREAK AND DEBURR ALL SHARP EDGES
DO NOT SCALE DRAWING

PROJ: L155326-10
SCALE: 1:4
FILE NAME: L155326-10
SHEET: 1 OF 1

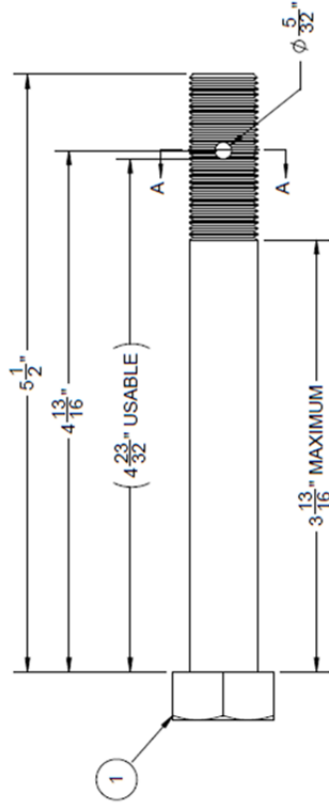
PROJECT: GIANT LOOP
TITLE: TRAIN GUIDE WHEEL ASSEMBLY

PLAINVIEW, TEXAS 76072
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DATE: 6/21/2016
CHK: KW
DATE: 6/21/2016
APPR: KW
DATE: 6/21/2016

GENERAL SURFACE FINISH: 13/
WEIGHT: 18.96 lb
DRAWING NUMBER: L155326-10
QUANTITY: 10
REV: 10
REV: 10

REV	E.C.O.	REVISION DESCRIPTION	DATE	BY
A	2720	BOLT WAS 5" LONG (H104205); BOLT WAS COMING IN SHORT; START GL#15	10/21/16	KW
B	2730	BOLT WAS GRADE 5; NOW GRADE 8; START GL#17	7/12/17	KW



ITEM NO.	H104226	DESCRIPTION	MATERIAL	QTY
1		CAPSCREW 5/8"NF X 5 1/2" GR8		1
PART NUMBER		PROJECT/ID	GIANT LOOP	
TITLE		GUIDE WHEEL BOLT (H104226)		
UNLESS SPECIFIED OTHERWISE		SCALE: 1:1 FILE NAME: L155323-10 SHEET: 1 OF 1		
DIMENSIONS ARE IN INCHES. DIMENSIONS ARE TO CENTER UNLESS SPECIFIED. TOLERANCE UNLESS SPECIFIED IS ±.005. ALL DIMENSIONS ARE TO UNFINISHED SURFACES. DO NOT SCALE DRAWING.		NEXT ASSEMBLY: L155326-10 QUANTITY: 56 REQ'D/IRIDE		
FRACTIONS: 1/16" XX = 20/100		WWW.LARSONINTL.COM		
DECIMALS: 1/32" XX = 4/100		PLAINVIEW, TEXAS 78072		
ANGLES: 1/4" XX = 10/100		PROPERTY OF LARSON INTERNATIONAL, INC.		
GENERAL SURFACE FINISH: ✓		THIS DOCUMENT AND THE DESIGN INFORMATION ON IT IS THE PROPERTY OF LARSON INTERNATIONAL, INC. IT IS TO BE USED IN ANY MANNER THAT MAY BE DETERMINED BY LARSON INTERNATIONAL, INC.		
DRAWN: KW	DATE: 6/21/2016	CHK: DATE:	APP'D: DATE:	SIZE: WEIGHT: B 0.07 lb
DRAWING CODE: L155323-10				REV