

1.	All Rides	Advantage	All Components	10 yrs Overhaul (every 10 years)	Required by the Rides' Manuals
2.	High Flyer	A. R. M	See the High Flyer Manual, P. 6.12.	Bi-Annual Dye Penetrant, Magnetic Particle and Ultrasonic (see High-Flyer Manual P. 6.11)	High Flyer Manual Pages 6.10, 6.11 and 6.12
3.	Ali Baba aka/1001 Nights	A. R. M.	NDT Structural	Annual	Manual P 5.08-6.08
4.	Ali-Baba Aka/1001 Nights	A. R. M.	Check main arm joint weldment, check main arm to center weldment, check car mounting blocks and car frame weldments, check tower bolt blocks weldment, check tower to trailer weldment, check car slewing ring mounting plate to arm weldment	Non-destructive test (NDT) must be completed every 2 years	Per 1001 Nacht's or Ali-Baba Operations Manual, Section 6
5.	Ali-Baba, aka 1001 Nights.	A.R.M	Welds and Parent metal in their direct vicinity in all Critical Areas indicated by drawing on P. 5.09 and described on P. 5.10 of the Manual (section 5).	NDT to be performed annually, contact manufacturer for details. General Inspection to be Performed by 3 rd Party	A.R.M Ali-Baba Manual, section 5.
6.	High Flyer/Screamer	A. R. M.	NDT Safety critical Areas	Annual	Manual pgs. 5.07-6.01

7.	High Flyer/Screamer	A. R. M.	NDT Safety critical Areas	Every 2 years	Manual Pgs. 6.10-6.12
8.	Quasar	A. R. M.	Lifting Frames, weldment of main hinge boss to Link Assembly, and in the Link Parent Metal	Annual NDT (Electromagnetic and Ultrasonic recommended)	ARM Bulletin S.B/QUA/03/003, dated February 1994
9.	Quasar	A. R. M.	NDT main lifting frame	Annual	SB /QUA/03/003
10.	Sky Master aka Tomahawk	A. R. M.	NDT structural	Every 2 years	Manual P 5.19-5.21
11.	Sky Master aka Tomahawk	A. R. M.	Refer to your owner's manual, page 5.10	Non-destructive test (NDT) must be completed every 9 months	Per ARM owner's manual, pages 5.06, 5.08, 5.09, and 5.10.
12.	Sky Master aka Tomahawk	A. R. M.	Over the Shoulder Restraints	Replace all over the Shoulder Restraints on your ride before the ride turns 5 year old	Per ARM US Bulletin SB 013007 dated 2/16/07 and Massachusetts Notice of Recommended Action Dated 8/10/06
13.	Touchdown 6 Car	A. R. M.	Diagrams 5.1 and 5.2	Non-destructive test (NDT) must be completed annually	Per ARM Operation & Maintenance Manual, Section 5
14.	Aerial Trams & Lifts	All	Refer to ANSI	Refer to ANSI	Comply with ANSI 4.34.3B77.1-1982 pertaining to testing of grips or clips
15.	Sky Fighter	Allen Herschell	Stabilizing rods, threads	Non-destructive test (NDT) must be completed annually	Per U.S. Consumer Product Safety Commission safety notice dated June 9, 1992 and August 2, 2000
16.	Coaster (steel)	Arrow	Track rails, strong back and ties, Saddle welds to strong back,	Non-destructive test (NDT) must be completed annually or every 2000	Per Arrow technical bulletin #99-1 dated November 24, 1999

			Column welds	hours	
17.	Coasters Corkscrew, Loop and Suspended	Arrow-Huss	Welded areas of track, anti-roll back units, chain guide wheel spindles, axle housings, wheel carrier weldments, chassis main vertical spindle, body support frame, hitch yoke	Non-destructive test (NDT) must be completed annually	Per Arrow-Huss bulletin dated November 17, 1981 and January 4, 1988 and the operators Manual
18.	Coaster	Bolliner & Mallard	3-10-09 Margaret will send in documentation from Manufacturer		
19.	Coaster Top Gun	Bolliger & Mallard	Per the manufacturer's requirements	Non-destructive test (NDT) must be completed annually	Comply with manufacturers maintenance manual and letter dated December 6, 2000
20.	Ski Lift Grips Borvig	Borvig	Grips	Non-destructive test (NDT) must be completed annually	Per Borvig instruction manual & drawing. C-3064
21.	Balloon Races	Bradley & Kaye	Superstructure, sweep support rod	Non-destructive test (NDT) must be completed annually	Per Balloon Races operations manual 1A thru 4
22.	Century Wheel	Chance	Weld between the main steel tube and the hub plate at the bottom of each gondola (after removing access cover)	Annual visual Non-Destructive Test	Per Chance bulletin number 406CRM135-0 dated 03-31-05
23.	Trabant	Chance	Boom	Monthly	Per Chance service bulletin #92

24.	Inverter and Double Inverter	Chance Manufacturing	Vehicle arm, counterweight arm, vehicle arm, adapter box	Non-destructive test (NDT) no longer required after May 6, 2003 - only visual inspection required	Per Chance 2001 field inspection guide, page 64 and page 66
25.	Falling Star	Chance Rides	Drive sprocket	Non-destructive test (NDT) must be completed annually	Per Chance Rides bulletin #B391R11440 dated January 7, 1994
26.	Falling Star	Chance Rides	2 Vehicle Axles (Front & Rear)	1. Calculation of Axle's accumulated number of revolutions before Nov 3, 2009. 2. Axles that operated through 3 million revolutions or more must be replaced or kept only if they pass annual NDT. 4. Axles that pass NDT may be operated no more that 1 year thereafter, provided they pass annual NDT.	Chance Bulletin number B391CRM166-0, dated October 3, 2009.
27.	Giant Gondola Wheel	Chance Rides	Torque tube flange	Non-destructive test (NDT) must be completed annually	Per Chance Rides bulletin #B400R11750 dated May 17, 1996
28.	Sky Wheel	Chance Rides	Bull wheel axle, boom axle	Non-destructive test (NDT) must be completed annually	Per Chance Rides bulletin #111 and Chance Rides bulletin #B379R1041-0 dated July 17, 1989
29.	Trabant Casino	Chance Rides	Per the manufacturer's bulletin	Non-destructive test (NDT) must be completed annually	Per Chance Rides bulletin #92 dated December 5, 1974
30.	Yo Yo	Chance Rides	Sweep lift cylinder (must be removed and sent to Chance for	Rebuild and recertification Non-destructive test (NDT)	Per Chance Rides 1999 Field Inspection Test Guide, page 28 and bulletin

			recertification)	must be completed every 5 years	B376R1077-0
31.	Yo Yo	Chance Rides	Sweep Lift Cylinder Bearing Assembly	Uncover assembly and insert ¼” gauge between upper bearing nut and gauge plate,	CRM Bulletin B376CRM146-B, Dated Sept 4, 2008
32.	Zipper	Chance Rides	Boom weld at spindle	Non-destructive test (NDT) must be completed annually on all units without the Chance Rides Zipper repair kit.	Per Chance Rides 1999 Field Inspection and Test Guide, Zipper, page 40 & 41 bulletins B106R1057-0 and A106R1057-A dated May 22, 1990
33.	Coaster	D.H. Morgan Manufacturing	Axle	Annually, as specified in manufactures manual	Per D.H. Morgan Manufacturing letters dated March 7, 1988 and June 22, 1994
34.	Cliff Hanger	Dartron Industries	Car hanger stem, all stem gusset joints	Non-destructive test (NDT) must be completed annually on all rides built prior to January 23, 2004	Per Dartron Industries safety bulletin # SR-5K-002 dated January 23, 2004
35.	Big Eli Hy-5, Eagle 16 and Double Eagle Wheels	Eli Bridge Manufacturing	Drive-rim removable bolts and pivot bolts.	Ultra sound or X-ray. In addition to NDT requirements, gives wear limits of parts (prompting replacement thereof), torque requirements for bolts, as well as other requirements.	Per Eli Bridge Manufacturing memo to all owners dated October 7, 2005. Per Patty Sullivan/Eli Bridge, this is a one-time requirement that Eli Bridge will send out new bulletin to clarify.

36.	Monster	Eyerly Aircraft Company	All areas around structural modification, kit components, seat tubing	Non-destructive test (NDT) must be completed annually Non-destructive test (NDT) must be completed every 5 Years	Per Eyerly Aircraft Company notice dated June 12, 1981 U. S. Consumer Product Safety Council safety alert dated September 13, 1994.
37.	Octopus	Eyerly Aircraft Company	Eccentric, sweep support rods, seat tubing	Non-destructive test (NDT) must be completed annually Non-destructive test (NDT) must be completed every 5 Years	Per Eyerly Aircraft Company, bulletins #0-48-86 and #0-50-86 --Per US Consumer Product Safety Council bulletin dated August 16, 1994 & September 13, 1994.
38.	Spider	Eyerly Aircraft Company	Eccentric, sweeps w/16" base, sweep support rods, seat tubing	Non-destructive test (NDT) must be completed annually Non-destructive test (NDT) must be completed every 5 years	Per Eyerly Aircraft Company, bulletins #0-48-86, #0-49-86, #0-50-86 and #8-88-1 --Per US Consumer Product Safety Council bulletin dated August 16, 1994 and September 13, 1994.
39.	Double Shock	Far Fabbri	Vehicle attachment bolts	Replace Bolts every 3 years, or Annual NDT (contact Fabri for type of NDT), replace bolts failing NDT.	Operation & Maintenance Manual and per Fabbri Letter Dtaed May1, 2008
40.	Raft Ride	Fabbri	Centre wheel shaft retaining socket to base frame welds	Annual Visual Inspection. For possible additional NDT contact Fabbri	NAFLIC Bulletin 350, Dated Aug 2008
41.	Crazy Dance	Far Fabbri	Sweep hooks & welding	Non-destructive test (NDT) must be completed annually (only applies to	Per Far Fabbri bulletin #FC 002

				1990–1995 models)	
42.	Hi Flyer	Far Fabbri	Secondary sweep ends	Non-destructive test (NDT) must be completed annually	Per Far Fabbri Bulletin #FR-034 magnetic particle inspection is NOT acceptable, per Preston Amusement letter of April 20, 1994
43.	Kamikaze (aka Ranger, Hi Flyer or Phoenix)	Far Fabbri	Vehicle, tower & counterweight bolts	Non-destructive test (NDT) must be completed annually	Per Far Fabbri bulletin #FR-034 magnetic particle inspection is NOT acceptable, per Preston Amusement letter dated April 20, 1994.
44.	Phoenix	Far Fabbri	Vehicle, column & tower bolts	Non-destructive test (NDT) must be completed annually	Far Fabbri bulletin #FR-034 magnetic particle inspection is NOT acceptable, per Preston Amusement letter dated April 20, 1994.
45.	Ranger	Far Fabbri	Vehicle, column and tower, bolts	Non-destructive test (NDT) must be completed annually	Per Far Fabbri bulletin #FR-034 -magnetic particle inspection is NOT acceptable per Preston Amusement bulletin dated April 20, 1994.
46.	Sling Shot	Funtimes (Hnadeks Gesmbh)	Swivel shaft and capule welds - refer to operators manual	Per operators manual every year. Paint must be removed every 5 years and weld inspection be completed.	Per Operators Manual
47.	Merry Mixer (Ground	Garbrick Manufacturing	Seat spindles	Non-destructive test (NDT) must be completed annually for all GROUND	Per manufacturer's safety alert letter to all Merry Mixer ride owners dated

	Mount rides only)			mounted Merry Mixers. Trailer mounted rides do not require NDT.	July 3, 1991
48.	360 Degree (aka Typhoon)	General Kiddie Ride	Main axle & axle housing, welded on shoulder supports, welded areas of legs, welded areas of counterweight, revision of the gear teeth that support the shoulder harnesses	A Magnetic Particle and Dye Penetrant non-destructive test (NDT) must be completed annually A visual non-destructive test (NDT) must be completed every 3 months	(ASTM), F-24 Committee Standards on Amusement Rides and Devices Per Manufacturer, General Kiddie Rides letter dated March 21, 1991
49.	70 Degree (aka Pirate Ship or Viking Ship)	General Kiddie Ride	Main axle & axle housing, welded areas of legs, change of security belts	A Magnetic Particle, Dye Penetrant and X-ray non-destructive test (NDT) must be completed annually A non-destructive test (NDT) must be completed annually	(ASTM), F-24 Committee Standards on Amusement Rides and Devices Per Manufacturer, General Kiddie Rides letter dated March 21, 1991
50.	Pirate Ship (aka 70 Degrees or Viking Ship)	General Kiddie Rides	Main axle, axle housing, weld area of legs	A visual non-destructive test (NDT) must be completed annually Magnetic particle, Dye Penetrant and X-ray must be complete every 3 years	(ASTM), F-24 Committee Standards on Amusement Rides and Devices Per Manufacturer, General Kiddie Rides letter dated March 21, 1991

51.	Typhoon (aka 360 Degrees)	General Kiddie Rides	Main axle and axle housings, welded on shoulder supports, welded areas of legs, revision of the gear teeth that support the shoulder harnesses, change of security belts, welded areas of counterweight	Non-destructive test (NDT) must be completed annually A visual inspection is required every 3 months	(ASTM), F-24 Committee Standards on Amusement Rides and Devices Per Manufacturer, General Kiddie Rides
52.	Viking Ship (aka Pirate Ship or 360 Degrees)	General Kiddie Rides	Main axle and axle housings, Welded areas of legs	Non-destructive test (NDT) must be completed annually	(ASTM), F-24 Committee Standards on Amusement Rides and Devices Per Manufacturer, General Kiddie Rides
53.	Steel Coaster cars	Gerstlauer	Per the manufacturer's requirements	Non-destructive test (NDT) must be completed annually	Comply with manufacturers requirements
54.	Ejection Seat Permanent 120'	Gravity Works	Towers' leg to flange welds (about 40' up from ground)	Magnetic particle, annually, plus complete owner inspection of towers every 2000 launches	Per Gravity Works letter to Ejection Seat owners, dated circa July, 2000
55.	Hustler and Tempest	Grover Watkins	Per the manufacturer's requirements	Non-destructive test (NDT) must be completed annually	Comply with manufacturer's safety bulletin dated August 24, 1978 & CPSC safety bulletin
56.	Swinger	Grover Watkins	Per bulletin	Non-destructive test (NDT) must be completed annually	Comply with CPSC bulletin dated June 21, 1996
57.	Rock Spin &	Hampton	Tub shafts	Non-destructive test	Per Hampton bulletin

	Roll			(NDT) must be completed annually	#107-91
58.	Tubs of Fun	Hampton	Main shaft w/3" diameter tub shaft	Non-destructive test (NDT) must be completed annually on rides made before January 1, 1979.	Per Hampton Rides Bulletin #104-90, and Hampton Rides Bulletin #3105-90 which is an addendum to #104-90 and #105-90
59.	All Rides	Hi – Lite	As required	Complete overhaul every 10 years	Ride Manuals
60.	Paratrooper	Hrubetz/ Kilinski, Man Co, Dartron	Spindle, main spindle hub housing	Non-destructive test (NDT) must be completed annually	Per Man Co Manufacturing Company bulletin #QC-UI-I, Rev. 3; Bulletin #QC-MI-1-Rev O; and bulletins BU-136MC and BU-138MC Per Dartron bulletin #BU 201 PR 01 dated January 15, 2002
61.	Enterprise	Huss	Bearing block holders, car structure parts of the roof and parts above, at and below pivot pins; and for cracks in the welds of these parts and welds that attach these parts.	Non-destructive test (NDT) must be completed annually	Per U.S. Consumer Product Safety Commission - Enterprise Ride Interim Corrective Action Plan dated December 7, 1993.
62.	Rainbow	Huss	Bevel gears	Non-destructive test (NDT) must be completed after every 5,000 hours of operation	Per Huss recommended checking procedure dated January 5, 1990

63.	Super Twist	King	Per the manufacturer's requirements	Non-destructive test (NDT) must be completed annually	Per the manufacturer's requirements
64.	Swinger	King	Per the manufacturer's requirements	Non-destructive test (NDT) must be completed annually	Per the manufacturer's requirements letter dated August 10, 1989
65.	After Burner	KMG	Swing arm weld of 12 sided tube to bottom bearing flange	One time magnetic particle test of welds. Required corrective action is to repair any cracked welds, and to install gussets to preclude future cracking.	Per KMG bulletin number FRBSB006, dated August 8, 2007, impacting ride serial numbers FRB-24-XX
66.	Freak Out	KMG	Annual Visual Inspection	Annual	Manual Pg 10
67.	Super Loop, aka Ring of Fire	Larson International	Hinge pins on units	Non-destructive test (NDT) must be completed every 5 years	Per Larson International service bulletin #94-1 dated July 18, 1994
68.	Caterpillar (Raupenbahn)	Mack	Center plate, sweeps, sweep bolts, holder for cover, gondola support frames, gondola support bolts, gondola frames, safety bars, track, supports, base structure, center decoration, center structure	Non-destructive test (NDT) must be completed every 10 years or after 20,000 hours-some parts Non-destructive test (NDT) must be completed every 5 years or after 10,000 hours-some parts Monthly visual and dye penetrant, if crack is suspected	Per NDT Guidelines for MACK Caterpillar" (Raupenbahn)

69.	Cortina Bob	Mack	Safety bars, gondola supports, track, supports, base, center decoration, center structure	Non-destructive test (NDT) must be completed every 5 years or after 10,000 hours and monthly visual. If cracks are suspected non-destructive test/dye penetrant must be completed annually	Per Cortina Bob Operator's Manual
70.	Himalaya	Mack	Center plate, sweep bolts, sweeps, gondola bolts, gondola frames, safety bars, gondola supports, track, supports, base, center decoration, center structure	<p>Non-destructive test (NDT) must be completed every 10 years or after 20,000 hours/some parts</p> <p>Non-destructive test (NDT) must be completed every 5 years or after 10,000 hours/some parts</p> <p>Monthly visual and if cracks are suspected a non-destructive test/dye penetrant must be performed annually</p>	Per Mack Operator's Manual
71.	Matterhorn	Mack	Refer to test guidelines	Refer to test guidelines	Comply with the manufacturer's test guidelines and letter dated January, 2000

72.	Music Express	Mack	Center plate, sweep bolts, sweeps, gondola supports, gondola bolts, gondola frames, safety bars	<p>Non-destructive test (NDT) must be completed every 10 years or after 20,000 hours</p> <p>Non-destructive test (NDT) must be completed every 5 years or after 10,000 hours</p>	Per Music Express Operator's Manual
73.	Round Up	Man Co Manufacturing	Main boom rocker shaft, cylinder anchor shaft, spindle, main spindle hub housing	Semi-Annually as follows: For Round-Up rides operating in Illinois on or between April 1 and Oct. 31; the NDT must be performed after March 22 and before operation. For Round-Up rides operating in Illinois on or between Nov. 1 and March 31; the NDT must be performed after Oct. 22 and before operation.	<p>Per Man-Co Manufacturing bulletin CO QC-UI-I, Rev. 3: QC-MI-1-Rev O; and bulletins BU-136MC and BU-138MC, and Dartron bulletin BU0201 PR01, dated January 15, 2000</p> <p>Unless at the time of the NDT inspection, the Department places a seal upon the ride prohibiting the assembly and operation until the Department removes that seal.</p>
74.	Fireball	Man Co Manufacturing Company	Spindle, main spindle hub housing	Non-destructive test (NDT) must be completed annually	<p>Man Co Manufacturing Company</p> <p>#QC UI-I; Rev. 3: #QC-MI-1, Rev. O; and bulletins #BU-136MC and #BU-138MC</p>
75.	Matterhorn	Matterhorn/Petersburger Schlittenfahrt	Sweep slew rings, sweep bolts, sweeps,	As specified in the Matterhorn/Petersburger	As specified in the Matterhorn/Petersburger

			wheel axles, gondola, bearing pins, intermediate, rods, gondola frames, safety bars	Schlittenfahrt's operator's manual	Schlittenfahrt's operator's manual
76.	Coaster, kiddie	Miler (only applies to coasters built after 1991)	Truck & structure, car bodies & frames, wheels & axles, hitch assy., lap-bar assy.	Non-destructive test (NDT) must be completed annually on all coasters built after 1991	Per Miler Coaster Operation Manual, pages 15-17
77.	Wood Coaster Vehicles	Morgan	Per the manufacturer's requirements		Comply with the manufacturer's requirements per letters dated March 7, 1988 and June 22, 1994
78.	Coaster, full size	Philadelphia Toboggan Company	Tractor wheel frame, axle, friction wheel frame, square head axle, clutch axle, clutch, coupler pin, draw head front, draw head rear	Non-destructive test (NDT) must be completed annually	Per Philadelphia Toboggan Company bulletins dated April 22, 1988 and December 10, 1992
79.	Coaster, Junior Size	Philadelphia Toboggan Company	Rear coupler, front coupler, frame, spindle, spindle frame	Non-destructive test (NDT) must be completed every 2 years	Per Philadelphia Toboggan Company bulletin dated April 22, 1988
80.	Explorer aka Matterhorn	Revershon	Capsule support axle	Non-destructive test (NDT) must be completed semi-annually or every 1000 hours	Per Revershon's owner's manual
81.	Frog Hopper and Rodeo Rider	S & S Power, Inc.	Boom and base welds (refer to bulletin) every three (3) years As shown on bulletin	Non-destructive test (NDT) must be completed annually MT/PT every 3 years	Per S & S Power, Inc. bulletin # 03.10.10 dated October 9, 2003 S & S Drawing Numbers

					F-FRG-BOO-W-@, 002125, and 002278 on Frog Hopper/Rodeo Rider
82.	Turbo Force aka Stratoshere	Soriani	Tie rods	Non-destructive test (NDT) must be completed annually on rides made before 2004 with specific serial numbers	Per Soriani bulletin #2004 TF02 dated September 14, 2004
83.	Super Loop on top (Crazy Flip)	Soriani & Moser	Gondola arms joint	Non-destructive test (NDT) must be completed annually	Per Soriani & Moser Logbook pages 53, 54
84.	Orbiter (Predator)	Tivoli	Car attachment pins	Non-destructive test (NDT) must be completed annually	Per Tivoli bulletin #00120 dated December 10, 1990
85.	Predator (Orbiter)	Tivoli	Car attachment pins	Non-destructive test (NDT) must be completed annually	Per Tivoli bulletin #00120 dated December 10, 1990
86.	Scorpion	Tivoli	Pivot balls, main sweep flange bolts	Non-destructive test (NDT) must be completed every 2 years	Per Tivoli bulletin #001 for the Scorpion Ride
87.	Spin Out aka The Claw, Maelstrom, El Nino	Tivoli	Refer to bulletin	Non-destructive test (NDT) must be completed annually	Per Tivoli bulletin #SOSA0001-SOSA13 and U.S. Consumer Product Safety Commission safety alert dated March 30, 2004
88.	Star Force	Tivoli	Vehicle frame, car pivot ball, vehicle sweeps, sweep spreader, main sweep arms	Non-destructive test (NDT) must be completed annually	Per U.S. Consumer Product Safety Commission safety alert dated September 13, 1994
89.	Corkscrew, MK 1200,	Vekoma	Main axle, wheel spindles, guide sheels, up stop wheels,	Non-destructive test (NDT) must be completed annually	Per Velcoma Coaster Technical bulletins #V90-3 and #V90-4

	MK-900 and Suspended Looping Coasters		coupling, anti-roll backs, chassis		
90.	Suspended Looping Coaster	Vekoma	Suspended Seats	Welds marked in blue in the Suspended Seat Drawing in Bulletin are to be tested by MT, whereas welds marked in red sre to be tested by UT. Please contact Manufacturer regarding frequency of testing.	Vekoma Bulletin No. 1-SB-006-14052009, dated May 20, 2009.
91.	All Rides	Venture	All Components	10 yrs Overhaul	Required by the Manual
92.	Go Rounds	Venture	Critical components	Non-destructive test (NDT) must be completed every 16,000 hours or after 10 years	Per Venture-Go-Round operators manual
93.	Parachute Tower	Venture	Cylinder path, cylinder clevis, elevator head, tower base plate, 12" sheave shafts, attachments-- turn buckle	Non-destructive test (NDT) must be completed every 5 Years	Per Venture manual, Section 3.1.5.3
94.	Hustler	Watkins	Secondary sweep shafts, car center pins	Non-destructive test (NDT) must be completed annually	Per the IL Carnival-Amusement Safety Board – Refer to Grover C. Watkins Inc., Emergency Safety Bulletin for Tempest dated August 24, 1978. Per the U.S. Consumer Product Commission

					Safety bulletin dated August 4, 1993 (car center pins)
95.	Swinger	Watkins	Upright tube	Visual at every set up, if cracks are observed non-destructive test (NDT) must be completed annually	Per U.S. Consumer Product Safety Commission safety alert dated June 21, 1996
96.	Tempest	Watkins	Secondary sweep shafts, car center pins	Non-destructive test (NDT) must be completed annually	Grover C. Watkins Inc., emergency safety bulletin, dated August 24, 1978, and U.S. Consumer Product Safety Commission Safety bulletin dated August 4, 1993.
97.	Adult Coaster Cars	Wisdom	Inspection of Wheel Bracket Assembly	Visual & dye penetrant or magnetic flux	Per Wisdom bulletin dated February 25, 2004. Drawing number 9C 025
98.	Family Himalaya	Wisdom	NDT Wheel shafts	Every 3 yrs	Manual p.45
99.	Gravitron	Wisdom	Console Post	Turn Off Main Electrical Power, Lock Out the Disconnect, then visually inspect welds and parent metal for cracks, as detailed in Bulletin	Part of a Gravitron Bulletin Package dated Aug 12, 1993
100.	Himalaya one truck	Wisdom	Secondary sweep ends	Non-destructive test (NDT) must be completed annually unless sweep kit has been installed	Per Wisdom service bulletins dated March 15, 2000, and November 12, 2000 and clarified by V. Wisdom's letter of January 31, 2001
101.	Himalaya Silver	Wisdom	Sweeps	Non-destructive test	Per Wisdom service

	Streak, Family			(NDT) must be completed annually unless sweep kit installed	bulletin dated April 22, 2002
102.	Laser Ship	Wisdom	Ears and their weldments, see bulletin	Magnetic Flux, Non-destructive test (NDT) must be completed annually (per Vic Wisdom not clear in bulletin)	Per Wisdom's service bulletin dated November 1, 2005
103.	Magic Carpet	Wisdom	Main pivot shaft, seat pivot pin	Non-destructive test (NDT) must be completed annually	Per Wisdom's inspection guide requirements, seat pivot pin Fabricated and Rebuilt Rides, page 10, item 9
104.	Sizzler	Wisdom	Cabbage head ears, main center pole shaft	Non-destructive test (NDT) must be completed annually	Per Wisdom's inspection guide, Fabricated & Rebuilt Rides, page 2, item 11 and drawing 01-100 and bulletin dated June 3, 1985 and July 1994
105.	Twizzler	Wisdom	Car frames, rod ball swivel ends, frame pivot bushing, drive rim	Non-destructive test (NDT) must be completed annually visual	Per Wisdom's letter dated February 22, 2001 and the operators manual
106.	Crazy Bus	Zamperla	Welds on rotating hub flange	Non-destructive test (NDT) must be completed annually (only applies to rides built from 1990-1995)	Per Zamperla service bulletin #99CB1 dated June 28, 1999
107.	Crazy Bus	Zamperla	Motor Brake Liner	Quarterly Visual Inspection (every 3 months)	Per Zamperla Bulletin No: 08CB02, dated Nov 14, 2008
108.	Dragon or	Zamperla	Vertical spindles	Non-destructive test (NDT) must be completed	Per Zamperla maintenance bulletin dated January,

	Tornado Coaster			annually	1991
109.	Enterprise, Mini	Zamperla	Vertical spindle	Non-destructive test (NDT) must be completed annually only if cracks are suspected	Per Zamperla maintenance bulletin dated January, 1991
110.	Lolli Swing	Zamperla	Center section (must check for reinforcements)	Weekly visual Non-destructive test (NDT) must be completed annually on all units without factory reinforcement	Per Zamperla bulletin #97LS.1 dated March 20, 1998
111.	Mini Enterprise	Zamperla	See Zamperla bulletin number 2002 ME01, dated December 6, 2002 and attached drawing	One time Magnetic Particle testing of welds, different locations. (See bulletin drawing) Monthly visual inspection of the welds thereafter.	Per Zamperla bulletin number 2002 ME01, dated Dec. 6, 2002 and attached drawing, plus Zamperla email dated 1/10/08.
112.	Samba Balloon	Zamperla	Center column base, center frame structure	Non-destructive test (NDT) must be completed annually For rides manufactured after December 8, 1997, if Zamperla repair kit has been installed, a non-destructive test (NDT) is not required	Per Zamperla bulletin #97SB1 dated December 8, 1997
113.	Speedway	Zamperla	Support bars	Non-destructive test (NDT) must be completed annually	Per Zamperla service bulletin #99-SW1 REV dated July 2, 1999
114.	Wave Swinger	Zierer	Various	Numerous (see chart for	Per Zierer bulletin (no

				Test Method Code Legend). Frequency also varies. (see chart for Time Code Legend).	English bulletin number) dated March 28, 2005. Gives NDT requirements, detailed wear limits on parts (prompting replacement thereof). Plus maintenance instructions.
115.	Coaster (ZL42)	Zyklon Loop	Welded structural joints, center plate, sweep bolts, sweeps, gondola bolts, gondola frames	Non-destructive test (NDT) must be completed after each 960 hrs of use Non-destructive test (NDT) must be completed every 10 years or after 20,000 hours	Per Zyklon Loop Maintenance Manual, page 19