

THE CITY OF NEW YORK
DEPARTMENT OF BUILDINGS

DEPARTMENTAL MEMORANDUM

DATE: September 30, 1982

TO: Borough Superintendents & Chief Elevator Inspectors
FROM: Commissioner Irwin Fruchtman, P.E.
SUBJECT: AMUSEMENT RIDE INSPECTIONS

Hereafter, all Elevator Inspectors shall utilize the following procedure and enclosed check list in the course of making inspections of Temporary Amusement Rides in street fairs and carnivals, and the like, in accordance with Reference Standard RS 18-10.

1. Visual Inspection:

The inspection shall include ground levels, stairways, railings carrier seating, flooring, cotter pins, operating controls, safety straps, bars, foot rests, padding, ground strap and pin.

The inspector shall check that all sharp edges of the carrier have been deburred. The structural material, whether wood or metal, must be examined for rust, cracks, and excessive wear around fastenings. All doors, door safety latches, safety pins, outriggers, guy wires, walkways, access and egress stability of carriers, proper machine protection, annual full load certification, identification and rating plates are to be checked.

On hydraulic rides all hoses, hose connectors, pistons and pressure tanks must be checked.

2. Operational Inspection:

While the amusement devices are in operation the following inspections must be made.

The carriers balance, drive belts, chains, cables, spockets and sheaves.

The clearances on all rides for both the passengers and the operator of the device.

All disconnect switches, anti-roll back devices, brakes swivels, retardation, structural blocking, and machine guards. While in motion all leveling legs and platforms must be checked for vibration and stability. Load tests shall be performed in accordance with Section 6.12 of Reference Standard RS 18-10.

3. The processing of the green tags requires the following information: The name of the ride, site and site boundaries, owners' name and address, operator's name and address, sponsoring organization and address, Certification of Operator, dates and signatures.

No green tags shall be issued for any amusement device unless it has satisfactorily passed the foregoing inspections and applicable tests. No prior green tags shall be accepted in lieu of a current inspection and applicable tests.

The foregoing shall be applicable as appropriate to amusement rides in permanent amusement parks. However, this shall not be construed to mandate retroactive applicability of Reference Standard RS 18-10, unless there is a hazardous condition.


Irwin Fruchtman, P.E.
Commissioner

cc: Denise M. Scheinberg, Community Assistance Unit
Lee Gounardes, Community Assistance Unit
Karen Miller, Consumer Affairs
Captain Love, Police Department, Office of Operations
Lt. Jordan, Fire Department
Phil Brooks, Bureau of Gas & Electricity
Deputy Commissioner Minkin
Deputy Commissioner Parascandola
Assistant Commissioner Dennis
Assistant Commissioner Grill
Assistant Commissioner Cox
Executive Chief Inspector Loudon
Executive Staff

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INSPECTION CHECKLIST

DESIGNER _____ DATE _____

OWNER; OPERATOR; LESSEE _____

MAILING ADDRESS _____ ZIP CODE _____

LOCATION _____ NAME OF RIDE _____

ADDRESS _____
(Street) (City/Town)

MFG. _____ CAPAC. _____ PASS. _____ SPEED _____ POWER _____ DRIVE _____ SER. NO. _____

BRAKE _____ NUMBER OF SEAT _____ DATE MFG. _____

ITEM	ITEM
<input type="checkbox"/> - Leveling Jacks <input type="checkbox"/> - Fences - Panels <input type="checkbox"/> - Walkway and Stairway <input type="checkbox"/> - Structure (cracks, bad welds, deformation of metal, break-down and set-up, check gusset plates to move frequently) <input type="checkbox"/> - Electrical <input type="checkbox"/> - Hydraulic (pumps/sweeps, jack stands, brakes, pressure)	<input type="checkbox"/> - Restraints <input type="checkbox"/> - Trailer <input type="checkbox"/> - Before opening (pre-start checklist, start ride, listen for strange noises) <input type="checkbox"/> - Portable Fire Extinguisher. <input type="checkbox"/> - Test and Data Information <input type="checkbox"/> - Bolts <input type="checkbox"/> - Cables and Chain <input type="checkbox"/> - Wear of Joints and Pins

Remarks:-

An inspection checklist must be filled out for each ride.

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AMERICAN PIPE SAFETY CHECKLIST

A) LEVELING JACKS

1. firm footing
2. blocks (good condition) (wider than plate)
3. check cylinders for hydraulic leaks
4. Hydraulic jacks:
 - a. locking rings (tightened)
 - b. relieve pressure on leveling jack
5. damaged jacks

B) FIXES - PANELS

1. properly installed
2. secured (safety keys)

C) WALKWAY AND STAIRWAY

1. firm blocking
2. secured (safety keys)
3. handrails properly installed
4. non-skid strips
5. clean from oil and grease

D) STRUCTURE

1. cracks (inform supervisor)
 - a. manufacturer should be notified
 - b. use low hydrogen rods when welding or rods recommended by manufacturer
2. bad welds (inform supervisor)
3. deformation of the metal
4. during breakdown and set-up
5. check gusset plates to move frequently

E) ELECTRICAL

1. adequate power supply
2. check grounding (rads and plant)
3. bare wires
4. lights (locked and in position)
5. wiring (tapping hazard)
6. prevent wires laying in water

F) HYDRAULIC

- a. rumps and sweeps
- b. jack stands
- c. brakes
- c. pressure (manufacturer's recommendation)
 1. complete loss of hydraulic power
 - a. pump not functioning
 - b. pump rotating in wrong direction

F) - HYDRAULIC (continued)

2. pump excessively noisy
 - a. pump cavitation (low on hydraulic fluid)
3. pump cavitation
 - a. air leaks between reservoir and pump
 - b. clogged tank strainers
 - c. shut-off between tank and pump partially closed
4. damaged hydraulic hoses
 - a. foreign matter in hydraulic oil
 - b. damaged or dried out seals from lack of oil when stored
5. pressure on pumps
 - a. check manufacturer's recommendations

G) WEAR OF JOINTS AND PDS

1. wear on fastener
2. wear on the walls of the hole
3. check wear on new holes
 - a. holes not aligned (pinpoint contact)
 - b. joints worn enough (full surface contact)
4. holes become eggshape or sloppy
 - a. the part should be align drilled and over-size pin installed
 - b. do not jump more than one size
 - c. contact manufacturer
5. moving joints
 - a. replace worn bushing or bearing when detected
 - b. keep moving joints lubricated

H) CABLE AND CHAINS

1. cable
 - a. cables must be replaced in sets
 - b. evidence of severe corrosion
 1. rust appearing to stem from interior of cable
 2. cable is clean but pitted condition from past corrosion exists
 - c. structural cable retaining diameter of cable
 - d. physical damage
 1. kinking
 2. crushing
 3. bird cutting
 - e. one strand being 75% broken through
 - f. certified by the manufacturer for the intended load
2. chains
 - a. chains will generally wear on the first link of each end
 - b. certified by the manufacturer for the intended load

I) - BOLTS

1. check for loose bolts
2. most all bolts on structure sides must be grade 5

I) **SCREWS (continued)**

3. when replacing bolts use the equivalent or a high grade of bolt
4. tighten bolts according to torque chart
5. loose bolts
 1. inspect the threads on bolt
 2. if threads are good, clean hole with non-oil base solvent
 3. blow-dry and apply green Loctite to threads
 4. install new lock washer
 5. tighten bolt according to torque chart

J) **RESTRAINTS**

1. locked in position before starting ride
2. padded
3. durable
4. safety key in place
5. all kiddie rides

K) **TRAILER**

1. check for trailer structure for deformation.

L) **BEFORE OPERING**

1. pre-start checklist
2. start ride
3. listen for strange noises
(contact supervisor)

M) **POTENTIAL FIRE HAZARDS**

1. check for charged extinguisher
2. proper location (150' apart)
3. inspection tags
4. location of additional fire protection

N) **TEST AND DATA INFORMATION**

1. date of hydro pressure tests
2. date of non-destructive testing of critical parts _____
3. manufacturer's data plate

O) **EMERGENCY ROUTE POSTED**

1. ambulance
2. fire department
3. hospital or clinic