



MFG: WISDOM
NAME: ALL RIDES
TYPE: N/A

February 25, 1998

To Whom It May Concern:

Fantasy amusements called today for suggestion on blocking for their Mid Himalaya.

Apparently one of the front leveling jack has been bent or broken.

Blocking the ride for operation, if properly done should present no problem.

Blocking must support the main frame of the trailer, not just the tool boxes or possum belly. It will probably be necessary to place this blocking under the gooseneck near the fifth wheel plate. Landing gear should be replaced at first opportunity.

The additional earth ground, required by the State of Florida, is usually done by grounding the trailer assembly to an earth ground rod. As we understand the situation, this is what has been done.

James R. Merrell

A handwritten signature in cursive script that reads "James R. Merrell".

Wisdom Industries Ltd.



INSPECTION GUIDE
FOR
WMI INDUSTRIES
FABRICATED AND REBUILT RIDES

PREFACE

This inspection guide is designed to aid the inspector in determining the recommended items to be checked on a periodic basis.

I have tried to make this guide as straightforward as possible. Please consult this whenever a question arises as to what to check.

Victor Wisdom
Vice President
WMI INDUSTRIES LTD.

SIZZLER

1. The ride start button must be a momentary contact type of control. A constant contact switch should not be used or modification of the control which will allow the operator leave the ride while it is running.
2. Oil the foot tub hinge bolts weekly. The foot tub hinge bolts can rust into position and cause the hinge bolt to shear off when the foot tub is opened. This is especially important when the ride is stored for the winter.
3. Check each hinge bolt and nut weekly. If the nut is loose do not use the seat until it is replaced with a new lock nut.
4. The foot tub should have at least 4 inches clearance from the bottom of the foot tub to the gooseneck of the trailer when the seat is empty and 2 inches when the seat is loaded with 350 pounds.
5. Check that the seat lock brass is tight and that the seat lock pin engages the brass by $\frac{3}{8}$ inch. Worn brass should be built up or replaced.
6. Check that seat lock pins move freely in and out. Lubricate weekly.
7. Bolts or extra long set screws should not be used at any time to retain the seat lock pin.
8. Check that seat signs are legible.
9. Check the seat sweeps next to the seat for cracks.
10. Check that the moving sweep safety turnbuckles are snug.
11. Check the cabbage head ears for cracks daily. They should be magnafluxed yearly. The cabbage head ear safety plates are mandatory.
12. The top sweeps should be checked for cracks near the main hinges each week.
13. Check that the drive rims are dry. Oil on the drive rim will keep the ride from stopping properly.
14. If the trailer axle has been flipped out from under the trailer while going down the road the main axle should be checked for cracks.
15. Check around the center pole cutouts for cracks.

16. On all SIZZLERS, the axle is held in front by two clips or pins. The axle should always be fastened going down the road. The axle can flip out from underneath the trailer when the brakes are applied at highway speeds.
17. The trailer hoist should be checked for cracks weekly. Never crawl under the trailer unless it is hooked up to a tractor.

SUPER SIZZLER

NOTE:

Many of the items listed for the regular SIZZLER are the same for the SUPER SIZZLER. Use the previous page and the following when inspecting the SUPER SIZZLER.

1. Check that the sweep side panels are pinned up and safety keyed.
2. Check the top sweeps for cracks at and near the hinges.
3. Check cabbage head ears each week for cracks where they weld to the cabbage head.
4. Check that both pins are installed and safety keyed on the swing around sweep.
5. The swing around sweeps should be pinned with the pins provided or grade 8 bolts.
6. Foot tub side panels must be installed when operating.
7. Check the seat lock air cylinder for freedom of movement. The air cylinder is air unlock spring lock.
8. Check that the seat back rail is securely fastened and all bolts are installed.
9. Check that the handle bar rod ends are not worn out.
10. Check that the stop chain stops the handle bar before the air shocks reach the end of their stroke. The handle bar should remain up by itself.
11. Check that the seat lock bracket is tight to the side of the car and that all bolts are installed.
12. Check that the three corner platform pieces are pinned and safety keyed.

SOOPER JET/GO-GATOR

1. When the track is set up all the joints should fit tight with an equal amount of gap above and below the joint.
2. All track pins and wedges must be checked daily for tightness.
3. All wedges should point downhill.
4. At the lowest point the wedges should point in the direction the ride is running.
5. Jack stands should be checked daily and be tight when the ride is not running.
6. Hitches between the cars should be checked daily for looseness and wear. (lubricate weekly) The hitches should be slightly loose for best operation they should move up and down 1/8 of an inch when the front of the car is lifted.
7. Check wheels daily for looseness, wear, and adjustment.
8. Under wheels should be adjusted to keep the car centered on the track without binding adjust only on the curves.
9. Seat belts should be pulled up tight to keep the child from standing up during the ride.
10. Keep the track clear.
11. Do not allow anyone into the center of the ride during operation.
12. Safety chains should be installed between all cars.
13. A half inch spacer on the loading side of the drive car underneath wheel will help on adjustment of the drive car.
14. The back of one car should not touch the front of another car when the train is going up the station hump. The hitches can be redrilled to give more clearance between them.
15. Do not put the ride in reverse to stop the train except in an emergency.
16. Be sure the front car has a handle bar.
17. Check that seat liners are securely fastened into the car.
18. Check drive track for loose aluminum tread plate.

RAIDERS

1. Check that all the pins are safety keyed with the rounded part of the hair pin towards the traffic area of the walk way.
2. Check the main truss cables for broken strands or kinks when assembling the ride.
3. The cargo net should be tight with both side safety nets up and snug.
4. Do not allow anyone on the ride to carry anything while going through the ride.
5. If one of the air pillows or air slide gets cut the ride must not be operated until they are repaired.
6. All fence and post pins must all be installed and keyed.
7. Suspension bridge side nets must be connected to all sections of the bridge planks.
8. The side nets must be connected to all the rings on the end posts.
9. Check the bridge cables for broken strands or kinks.
10. Check that lower edge of the joints on the fiberglass slide is lower than the upper edge of the joint.
11. Check the interior of the slide daily for loose rivets that may protrude into the slide area.
12. The air slide should protrude into the air castle 4 to 6 inches. The steel frame work should not be exposed in this area.
13. The slide must not be lubricated with any type of lubrication. Injury to the customers will result if the hyfax is lubricated.
14. The air pillow at the bottom of the fiberglass slide should be tied or staked in place so that the end of the pillow is under the end of the slide.
15. Warning signs at the top of the fiberglass slide and air slide should be legible and strictly adhered to by all operators and customers.
16. Fence sections are required around the air pillow at the bottom of the fiberglass slide.

GRAVITRON CHECK LIST

BEFORE SETUP

1. Check the end of the top sweep ears for excessive wear where the pins go through.
2. Check that all floor and barrels pins for cracks before setting up the ride.

OUTSIDE OF RIDE CHECK LIST

1. Check that trailer stands are tight.
2. Check that wing safety bolts are installed, tight, and safety keyed.
3. Check that the outrigger brace, with the turnbuckle, is placed on the side with the low ear. Do not over tighten.
4. Check that the outrigger brace pins are all installed and have safety keys.
5. Check that skirting panels do not rub on idler tires and are not under the edge of the turntable.
6. Check that the steps are level, stable, and no more than 8 inches from the ground to the first step.
7. Check that the fence is more than three feet from the largest diameter of the turning portion of the ride.
8. Check that the cable in the canvas top is in the groove around the top of the ride panels and tight.
9. Check that work platform is folded back.
10. Check grid sign hinges and pins.
11. Check grid sign braces for safety keys.
12. Check that top sign braces are pinned and safety keyed.
13. Check that top sign hooks are pulled down and fully engaged and safety keyed.
14. Check that top sign is plugged in.
15. Check that there is nothing on top of ride that can be thrown off while the ride is running.
16. Check that there is nothing that can fall onto the ride while the ride is spinning.

DRIVE SYSTEM CHECK LIST

1. Check that drive belts are hooked up and adjusted.
2. Tighten lock nut on drive belt adjusting turnbuckle.
3. Check that drive wheel adjusting lock-nuts are tight.
4. Check that all wheel lug nuts are tight.
5. Check that all three wheel brakes work.
6. Check that idler tires have full tread contact.
7. Check air pressure in all drive and idler tires they should be about 35 P.S.I.
8. Check that battery is filled with water and battery charger works.

INSIDE OF RIDE CHECK LIST

1. Check that the special top wedges are the only wedges used to pin the top of the panels to the sweeps.
2. Check that all pins and wedges are installed, tight, and safety keyed.
3. Check that safety keys are in sweep hinge pins.
4. Check that couch support trusses are hooked on locks.
5. Check that all couches are evenly spaced and that the mounting bolts are tight.
6. Check that all seats move up and down smoothly.
7. Check that couplers between inside curved fence sections are all installed and pinned.
8. Check that the tumble boards are swung out behind the seats and pinned into place.

DOOR CHECK LIST

1. Check that door cables are in good condition and adjusted with equal tension.
2. Check that the door cable clamps are tight.
3. Check that door micro-switches are adjusted properly so that door opener stops at the right place.
4. Check that the door does not slip down when open.
5. Check that trap door is unlocked.

TRAILER MOUNTED #5 FERRIS WHEEL

1. Tower hinge pins and pipes should be checked for cracks whenever the ride is set up. Oil hinge pin monthly.
2. Hydraulic cylinder pins and mountings should be checked yearly.
3. Check hydraulic hoses for wear and fittings for leaks whenever the ride is setup.
4. Check outriggers and leveling jacks for stability daily.
- *5. Check sweep hinge bolts and plates when set up for wear. Replace any that are worn or bent. Oil monthly.
- *6. Check sweeps and spreaders for cracks or bends whenever set up.
- *7. Check rim-iron ends and center hinges for cracks, where they pivot on the journal bolts, each time the ride is set up.
8. All rim pins must be installed, from the inside out, with safety clips, in the rim-iron center hinge.
9. All cross-cables must be installed and in good condition.
10. All guy cables must be in good condition.
11. The drive cable should be free from loose wires and excessive dirt.
12. Lubricate the cable weekly with pine tar, or a cable conditioner recommended by Eli Bridge.
13. Check idler wheel and bull-gear for excessive wear weekly.
14. Brakes should be adjusted as needed for total control of the ride.
15. Bent sweeps can be straightened but avoid heating if possible.
- *16. Tighten journal bolts after the ride is set up. Loosen before tearing down. Use only lock nuts.
17. All seats must have seat safety clips installed before operating the ride.

18. Lubricate bull-gear, idler, and main axle bearings weekly.
19. Change hydraulic oil and filter yearly.
- *20. Check that a solid shaft has been inserted, and welded on each end, into the center of the hollow main axle. (The early wheels did not have this shaft installed.)
21. Check journal bolts for cracks and wear each month. Do not use a journal bolt that is questionable.
22. Replace journal bolts every three years.
23. Clean and lubricate journal bolt ends before installing seats.
24. Operate the ride in accordance with Eli Bridge Co. operating recommendations.

Eli Bridge Company has an excellent book on the operation and maintenance of their wheels and it is an excellent idea to obtain one of these.

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OCTOPUS

1. Check seat pins yearly.
2. Check center-pole mountings monthly.
3. Check outrigger mountings monthly.
4. Check all other components as per original manufacturer's specs.
5. Check foot tub locks and hinges daily.

ROCK-O-PLANE

1. Check permanent X-brace pin yearly.
2. Check seat pins and bearings yearly.
3. Check door locks and safety belts daily.
4. Sweeps should be checked for cracks or fatigue visually whenever the ride is set up.

GEE WIZZ DAILY INSPECTION CHECK LIST

UNDER THE RIDE

- () Check all main trailer support jacks for tightness.
- () Check main outriggers for tightness.
- () Check that all platform screw jacks are snug.
- () Check that entrance steps are secure.
- () Check that there are no objects or cables at the bottom of the steps which could trip somebody.
- () Check that all of the gates and doors for the possum belly are closed before operating the ride.

BACK OF THE RIDE

- () Check the main through bolts and side bolts on each counterweight for tightness.
- () Check that the interlocks on the safety gates at the back of the ride are working by opening the gate and trying to operate the ride. The ride should not turn until the gates are closed.
- () Check that the danger signs are attached to the fencing where the counterweights are at the back of the ride.
- () Inspect the counterweight arms for any cracks or broken welds.
- () Check the tower support attachment at the floor for cracks.
- () Check for hydraulic leaks.

SCENERY

- () Check wedges, pins and braces supporting the sign, that they are installed, and tight.
- () Check that all of the braces for the wing scenery are installed.

CAR

- () Check wedges under the foot board for the seat frame, that they are wedged.
- () Check that the side panels are installed on the seat frame and secure.
- () Check the operation of the handlebar raising, lowering, and locking system.
- () Check that the air compressor turns on at about 90 PSI and off at 120 PSI.
- () Check the main arms at the front of the ride for cracks.
- () Check the main car frame for cracks.
- () Check the handlebars for cracks or loose bolts.
- () Lower the handlebars. Make sure that the bars are held securely in by the air
- () Release the lock air on the handlebars and set the mechanical locks and make sure that they all set and hold the handlebars closed.
- () Check that the ride will not operate with the handlebars raised.
- () Check each handlebar cushion, that it is oriented to push into the customer's lap or stomach and that it will not rotate up more than horizontal when you lift up on the pad with the bars in the down position.

FRONT OF RIDE

- () Check ride rotation and speed for 19 1/4 RPM.
- () Check that all of the fencing on the ride is secure and that the main fence posts on the platform are tight underneath.
- () Check that the platform is clear of any objects which might cause someone to slip or trip.

GEE WIZZ EMERGENCY PROCEDURES

PROBLEM

RIDE WILL NOT STOP

ACTION

RELEASE GREEN PALM BUTTON
PUSH DOWN LARGE RED PALM BUTTON
TURN OFF KEY
TURN OFF MAIN ELECTRICAL

RIDE STOPS WITH CAR UP IN THE AIR.
VALVE

PUSH IN ON BRAKE SOLENOID

LAP BAR WILL NOT RAISE

LOWER WITH MANUAL BRAKE RELEASE

PUSH DOWN ON BAR
RELEASE BOTH SAFETY DOGS
OPEN LAP BARS MANUALLY.

PROCEDURES EXPLAINED

EMERGENCY STOP

LET GO OF THE GREEN BUTTON. This should set the brake and stop the ride. If the ride does not stop, push the large red button to shut off the main electric motor and stop the ride. If the motor continues to run, turn off the key. The last resort is to turn off the main power at the rear of the ride. If there is no imminent danger wait to turn off the pump or power when the car is close to the bottom.

WARNING: MOVE THE CONTROL HANDLE TO NEUTRAL BEFORE STARTING THE PUMP AGAIN

LOWERING THE CAR MANUALLY

If the brake is set and the car is not close to the bottom, the brake can be released manually at the rear of the ride. First, move the selector valve that is located above the main electric motor to the other position. Screw in the knob on the side of the manual pump mounted next to the main electric motor. Pump the handle until the car starts to move down. You will have to keep pumping slowly as the brake will set again as the car is lowering. When the car is down, loosen the knob on the side of the manual pump and move the selector valve to the original position. If the manual pump is empty, fill the pump reservoir with hydraulic fluid. The plug on the end of the tank under the pump handle is the fill port.

WARNING! FAILURE TO MOVE THE SELECTOR VALVE TO THE ORIGINAL POSITION WILL CAUSE THE BRAKE TO NOT RELEASE FOR REGULAR RIDE OPERATION.

OPENING THE LAP BARS MANUALLY.

Unplug the air compressor or turn off the main power to the ride. The air compressor is mounted under the seats on the right side facing the ride. The compressor is plugged in on the back side of the seat frame. Drain the air from the air tank. The bleed port is under the air tank. Pull back on the two safety dogs for the lap bar that you want to raise. Raise the lap bar by hand and hold up. Use caution to keep from hitting a passenger when lowering the lap bar because it will not stay up by itself. Repeat for each lap bar.

MAGIC CARPET

1. Bearings should be tight on the seat hanger shaft.
2. Handle bars must be lowered over the customer lap before operating.
3. Center fence skirting must be installed.
4. Hydraulic cylinder lifting pins should be checked yearly.
5. Check for worn hoses and leaks weekly, especially on the lifting cylinders.
6. Hydraulic cylinder mountings should be checked monthly.
7. The interlock switch on the gate must be operational. The ride should run only when the gate is closed.
8. Main pivot bushing mountings should be checked daily for cracks or loose bolts.
9. Check main pivot shaft and seat pivot pins yearly for cracks. Use ultrasonic or magnafluxing.
10. Check main center pole lock nuts for looseness.
11. Check turntable for flatness. It should be a maximum of 3/4 of an inch total up and down travel.
12. Check seat posts and pins for cracks weekly.
13. Check turntable frame and drive rim for cracks.
14. Check trailer frame and lift frame for cracks every week.

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CLOWN-A-ROUND

1. Check the chain for tightness weekly, it should be tight enough to support itself.
2. Check the connecting bolts for the cars weekly for wear, and replace if needed.
3. Check the ear that the spring arm goes through on the car, for wear. (Lubricate daily.)
4. Seat chains should be used on every seat.
5. Check all casters for loose bolts or cracked plastic tire.

ASTRO-LINER

1. Each time the doors are closed by the operator, he should look out to make sure that no one is standing beneath the door. The door does come down fairly quickly, and can cause injury to someone standing underneath.
2. Adjust steps so that each flat is fairly level. The first step off the ground should be no more than 8 inches high.
3. During the operation of the Astro-liner the operator is responsible for keeping everyone seated while the Astro-liner is lifting or rotating. If someone stands up he should immediately stop the ride until that person has been reseated.
4. The fence should be set up around the Astro-liner so that no one can get near the lift section of the Astro-liner. Since the operator cannot see outside, it would be difficult to know whether someone was underneath the ride while it was being lowered. A second operator should be outside to watch.
5. Smoking is not allowed inside the Astro-liner. The carpet and fiberglass on the forward sections of the Astro-liner are flame retardant and a fire extinguisher should be in all Astro-liners.
6. The lifting hoist should be checked visually weekly for any wear on the main pins or joints.
7. The main cradle frame should be checked daily for cracks.
8. The main pins should be checked every two years for wear.
9. The pulley guard should be used at all times.
10. Check door hinges for looseness and missing bolts.
11. Check that all the seats are tight and no sharp edges protruding.
12. Check that all thrust rollers are touching while the ride is rolling.
13. Check that the 12 volt battery and battery charger is in good condition.
14. Check that the carpeting in the isle is not torn.
15. Check that the overhead ducting is securely fastened.

PORTABLE ADULT COASTER DAILY CHECK LIST

1. Check for loose or missing pins, wedges, & "R" clips.
2. Check lap bars for proper operation.
3. Check track jackstand adjustment screws for looseness.
4. Check track joint spreaders for cracks where they are welded to the pipe track.
5. Check car wheels for loose axle bolts.
6. Check car wheels for excessive wear.
7. Lubrication schedule has been completed.
8. Check car frames for cracks.
9. Check drive tires & brake tire for proper air pressure. (35 PSI)
10. Check drive tires for excessive wear.
11. Check brake for proper operation.
12. Check that the drive tires do not slip when operating ride.
13. Check car couplers for loose mounting bolts.
14. Check car couplers for cracks.
15. Check fiberglass body attachment bolts for looseness or missing bolts.
16. Check seat grab bars for looseness.
17. Check ride brake frame for cracks.
18. Check main motor and kicker motor frame for cracks.
19. Check main motor and kicker motor V-belts for tightness & wear.
20. Check gear boxes for leaks.
21. Check that train starts smoothly and accelerates to full speed before contacting Up Ramp kicker motor.
22. Check gear box oil level if leaks are showing.
23. Check lap bar mounting for security.
24. Check seat liner for security.
25. Check all upper scenery braces are installed & "R" clipped.
26. Check stairs for cracks.
27. Check stairs for level tread.
28. Check stairs for secure adjustment.
29. Check stairs for no more than 8" from ground to first step.



ILLINOIS DEPARTMENT OF LABOR

Jim Edgar
Governor

Shinae Chun
Director

March 9, 1995

Mr. Victor Wisdom
Wisdom Industries
P.O. Box 1534
Sterling, Colorado 80751

Dear Mr. Wisdom:

I would like clarification on the nondestructive testing requirements for WMI, Ltd amusement rides. The items in question are:

1. Item 11 on page 2 of your Inspection Guide for WMI Industries Fabricated and Rebuilt Rides require the Sizzler Cabbage Head Ears to be magnafluxed annually. Question: Does an inspection to WMI Drawing Number 01 100 satisfy this requirement? If not, what other information is required?
2. Are there any additional parts on the Sizzler that require nondestructive test?
3. On page 3 of the same Inspection Guide is a note under the Super Sizzler heading which states: Many of the items listed for the regular SIZZLER are the same for the SUPER SIZZLER. Use the previous page and the following when inspecting the SUPER SIZZLER.

Inspection Item 3 requires the Super Sizzler Cabbage Head Ears to be checked each week for cracks. Question: Does the annual nondestructive test requirement also apply?

A prompt reply will be appreciated.

Sincerely,

Carl Kimble, P.E.
Chief Inspector
Carnival & Amusement Rides
Telephone: 217-782-9347

CK:rh

Enclosure

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