

MINI HIMALAYA

MFG: ADVANTAGE RIDES
NAME: MINI HIMALAYA
TYPE: NON-KIDDIE

YOU MUST BE
SHORTER THAN
MY HAT OR
ACCOMPANIED
BY A CHILD



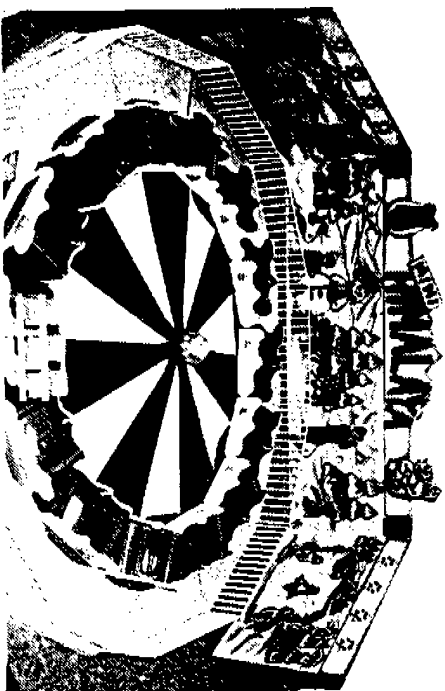
MINI HIMALAYA

Pat. Pend.

The **MINI HIMALAYA** has proven to be one of the most popular **FAMILY RIDES** ever manufactured. Its 12 RPM forward and reverse ride thrills kids and adults as well. The **MINI HIMALAYA** is available in both park and portable variations.

Both models feature fourteen cars capable of riding up to 42 passengers. Each car has a swing-away lap bar, making loading and unloading fast and simple. The control panel includes a compact disc sound system, driving two high-range speakers. Six quartz lights automatically flood the ride in a colorful program, accented by pin spotlights reflecting off the large mirror ball in the center of the ride.

A thrilling ride and a spectacular sound and light show make the **MINI HIMALAYA** one of the most popular rides on the midway.



SPECIFICATIONS PORTABLE MODEL

TRAILER: 8'-6" W x 33'-6" L x 13'-4" H
GROSS TRAILER WEIGHT: 13,400 lbs.
SCENERY: Aluminum folding
HITCH: Ball or gooseneck
SPACE REQUIRED: 42' x 51' deep
POWER: 10 KW, 3-phase, 220 volts AC
CONTROLS: Electronic soft start
SPEED: 12 RPM, forward & reverse
 All-aluminum fence and safety gates

PARK MODEL

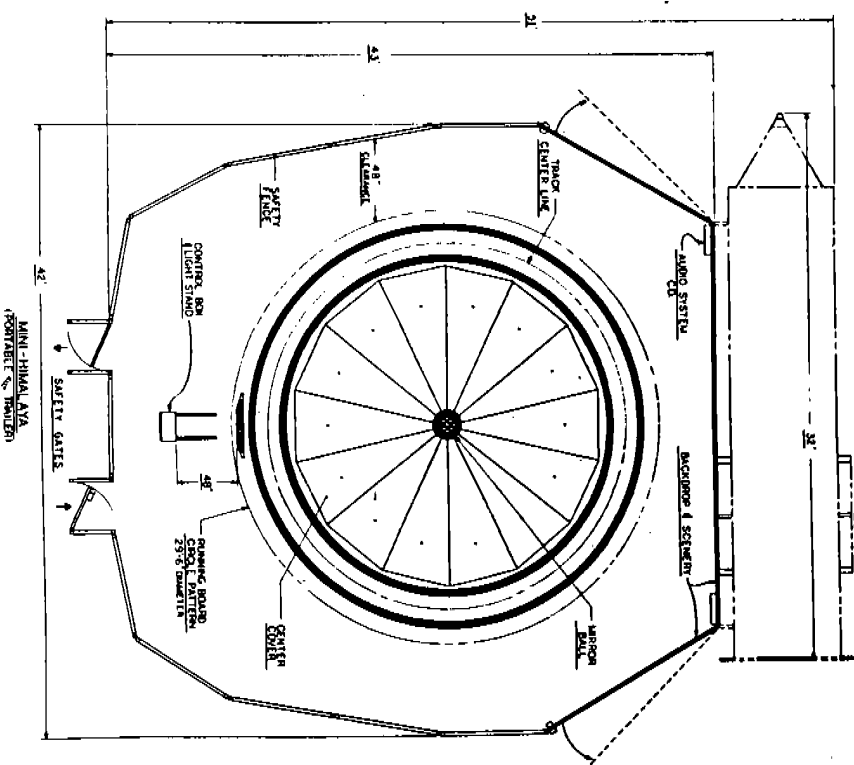
WITH SCENERY: 45' x 43' deep
WITHOUT SCENERY: 36' diameter
WEIGHT: 7100 lbs.
 Steel fence fitted to ramp contour

The park model **MINI HIMALAYA** features aluminum treadplate decks and fitted fence. Also available without back scenery, the **MINI HIMALAYA** is the perfect centerpiece for family-oriented parks.



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TABLE OF CONTENTS

SERIAL NUMBER

10 YEAR OVERHAUL

SPECIAL CAUTION

CAUTIONS

PERSONAL CONDUCT

AVOIDING LAW SUITS

OABA BULLETIN

ASTM - PHYSICAL INFORMATION

ASTM - OPERATION PROCEDURES

ASTM - OWNER/OPERATOR'S RESPONSIBILITY - OPERATION

ASTM - MAINTENANCE PROCEDURES

ASTM - OWNER/OPERATOR'S RESPONSIBILITY - MAINTENANCE

ASTM - OWNER/OPERATOR'S RESPONSIBILITY - INSPECTION

SAMPLE GUIDE FOR OUTSIDE AMUSEMENT RIDE SAFETY OFFICERS

OPERATOR SELECTION AND INSTRUCTION

OPERATIONAL LOAD TESTING

ASSOCIATIONS

VRM SAFETY BULLETINS

PARTS LIST

ELECTRICAL SCHEMATIC

SUPPLIER BULLETINS

This manual is for the Mini Himalaya Amusement Ride

Your Serial Number is _____

Your Ride was Manufactured _____

10 YEAR OVERHAUL

When your ride becomes ten years old, a complete safety reconditioning is recommended. If your ride, whether you purchased it new or used, has been properly maintained and safety bulletins have been implemented as they were issued, this reconditioning program will be easier. This work may be performed by one of the following:

1. By Advantage Ride Mfg., Inc., in its factory.
2. In a factory which has the full capabilities of handling this work.
3. By the owner, provided the work is inspected by a Advantage inspector or other outside inspector, fully competent to check that all work has been properly and completely performed.

SPECIAL CAUTION

The most important safety requirement on this ride is a well trained, alert operator. You must always remember this ride is not a product designed for use by an untrained person. Failure to do so could result in a severe personal accident. Many hours of direct training on the operation of this ride are mandatory before any individual can be allowed to take full responsibility. It is mandatory for the operator to be intimately familiar with this manual.

It is our philosophy that accidents are not acceptable as they represent human suffering and property damage which are preventable through proper management.

CAUTIONS

1. Be intimately familiar with this manual and properly trained before attempting to operate this ride. Do not loose this manual. Its 1992 replacement cost is \$25.00.
2. This ride is electrically grounded. This helps prevent a person from being shocked should a short develop in the ride. This also produces a very dangerous condition. Should you touch a live wire and grounded ride, you may be killed even though it is only 110v and you are young and healthy. Therefore, ALWAYS, ALWAYS DISCONNECT the main power source before doing anything which might bring you in contact with anything electrical.
3. This ride is heavy moving machinery. Should you or anyone else be hit or become tangled in its machinery, the results will be worse than you expect.
4. Anything happening on or near this ride is your responsibility. Your not seeing anything is no excuse. Be extra alert at all times.
5. Always listen for any unusual noise from your ride. Should you hear or notice anything unusual, stop the ride and immediately contact your supervisor before attempting further operation.
6. Be polite and cautious even when customers are not. Your attitude has a major effect on safety on this ride.
7. Always allow plenty of time to complete all pre-opening and closing procedures. Keep your ride area clean and orderly.
8. In case of an accident, even a small one:

- a. Stop the ride.
 - b. Get help (office or supervisor)
 - c. Aid the injured as best you can.
 - d. Stay calm.
 - e. Control crowds.
 - f. When help arrives, assist them.
 - g. Remember the facts---don't gossip---you will have plenty of time to tell the real story at a later time.
9. Always make absolutely certain everyone is properly seated and strapped in before starting the ride.
 10. Check carefully that everyone is clear of the ride and outside the fence before starting the ride.
 11. Do not let anyone climb on, play on, or lean over the fence.
 12. Keep the fence a safe distance from the ride.
 13. Use common sense.
 14. Understand that everything inside the fence is your personal responsibility.
 15. Should there be an accident and you even had beer on your breath, had been drinking, or were taking any type of illicit drugs, you could be charged with a felony and sentenced to prison.
 16. When erecting or dismantling a ride, most injuries occur because:
 - a. Something falls on someone.
 - b. Someone slips and falls.
 - c. Something touches a high voltage line.
- REMEMBER, the wires on the regular wooden poles often carry 7200 volts.
17. Preventing a child from being injured is by far your most important job.
 18. Periodic factory safety bulletins--put these into effect immediately and add them to this book.

19. When you leave the ride, turn power off.

20. *Be cautious and ready for the unexpected when dealing with children.*

NEVER ALLOW A CHILD TO GET IN FRONT OF A MOVING AMUSEMENT RIDE VEHICLE. IT COULD RESULT IN A SERIOUS INJURY OR DEATH.

CAUTION: Never ride anyone without the proper seat restraint.

CAUTION: Never let anyone lean over or sit on the fence while the ride is in motion.

CAUTION: Never operate the ride without watching the ride while in motion.

CAUTION: Never operate the ride while anyone not on the ride is inside the fence.

PERSONAL CONDUCT

The following should not be permitted while operating a ride:

1. Any use of alcohol or illicit drugs.
2. Eating, smoking, or drinking beverages at the ride.
3. Failure to follow the instructions of your supervisor.
4. Failure to follow standard operating procedures and safety rules.
5. Arguing or using profanity in front of customers.
6. Leaving the ride unattended.
7. Listening to radios or tape players.
8. Visiting or having long conversations with others.

AVOIDING LAW SUITS

In addition to providing a safe operation, a little PR can go a long way in preventing a minor injury from becoming a major law suit. We recommend you train your employees in the art of being courteous, helpful and considerate to anyone with even the slightest injury. Employees should immediately notify their supervisors so that they may show additional extraordinary consideration to make absolutely certain that the injured party and friends know that you are concerned and have done everything possible to keep the injury from spoiling a day of fun.

GENERAL GUIDELINES

OPERATOR SELECTION AND INSTRUCTION

1. Select competent, mature operators capable of understanding the function and use of amusement rides and their control.
2. Instruct each operator fully in the proper use and function of the ride he is to supervise, including:
 - A. Controls and procedures for normal and emergency operations.
 - B. Manufacturer's recommended maximum load.
 - C. Manufacturer's recommended length of ride time.
 - D. Any foreseeable misuse of the ride as determined by the manufacturer or owner, or by special conditions such as weather, location or crowds.
 - E. Each operator must have IMMEDIATE AVAILABILITY and a complete working knowledge of the manufacturer's operator's manual for the ride he supervises.
3. Require each operator to inspect the ride he supervises on each day of operation.
 - A. Determine that no portion of the ride is damaged, omitted or worn in such a manner that it is unsafe or that may develop into an unsafe condition.
 - B. Report any irregularities to superintendent or owner.
 - C. Do not operate the ride if any irregularities are found until such condition is corrected.
4. Instruct the operator to allow no passenger to ride who is visibly ill or under the influence of drugs or alcohol.
5. Instruct operators and attendants on the proper methods of securing passengers in the ride. Do not allow a passenger in the ride who cannot be properly secured due to passenger size or because of malfunction of the securing device.
 - A. Stop the ride immediately if any passenger is observed tampering with any restraining device or behaving dangerously, such as standing up.

6. Advise the operator against starting or operating the ride while any person (passenger, spectator, or employee) is in an endangered or unsafe position on the ride or within the ride area.
7. Insist that each operator remain in full control of the operating controls during operation of the ride, and give his full attention to the ride and its passengers.
8. Instruct operator to allow no other person, other than another trained operator, to operate the controls of the ride.
9. Instruct operator and attendants fully as to the proper method of assembly and disassembly of portable rides. Supply adequate personnel and equipment to do this safely.
10. Instruct operator to inspect and correct or replace damaged, lost or worn parts that are unsafe or that may develop into unsafe parts simultaneously with assembly or disassembly.
11. Advise operator of owner/supervisor procedure for assisting ill or injured passengers.
12. Advise operator that factory-installed safety devices are not to be tampered with or removed.
13. Instruct operators and attendants that patrons are required to secure all loose articles such as keys, change, eye glasses, etc.
14. We recommend that every operator take a first aid course after their first season.

SAMPLE GUIDE FOR OUTSIDE AMUSEMENT RIDE SAFETY OFFICERS (INSPECTORS)

A. INVOLVE MANAGEMENT

1. Require the owner, manager or whoever is in the real position to control safety to accompany the inspector during the complete inspection at least once per season.
2. Require the ride foreman to be there during the inspection.
3. Make certain the ride foreman has access to the ride manual and understands everything in the manual.

B. THE INSPECTION

1. Check all passenger restraints for operation and mechanical condition.
2. Make certain the seat will stay on the ride. Check:
 - a. Pins and safety pins.
 - b. Bolts and nuts.
 - c. Bearings and shafts.
 - d. Wheels
 - e. Cracks in sweeps.
 - f. Anything repaired or homemade.
3. Check guards, fence and other devices to protect the public and the operator from the machinery.
4. Go over your prepared list to see if there is anything that this particular ride needs checked.
5. Interview the foreman with three goals in mind:
 - a. To teach safety to the foreman
 - b. To learn more yourself.
 - c. To improve safety attitude and knowledge in the management.

NOTE: The interview should be friendly, cooperative, and informal. The following items should be covered.

1. What could be done to make this ride safer mechanically?
2. Does he understand that all safety inside the fence is his personal responsibility?
3. What could be done to make this ride safer?
4. Ask him how he knows if the ride has problems... does he listen for sounds? What if it jerks or jumps? To whom would he report anything unusual?
5. What would he do if someone got hurt on the ride? What if he got a drunk customer? What if he had some customers get in a fight?
6. Is he aware that his ride is electrically grounded? This makes the ride less likely to shock him or his customers. Warn him that a grounded ride is much more dangerous if anyone touches a live wire and the ride at the same time. It is just like holding a bathroom faucet and touching a live wire. It really can kill you... Because the ride is grounded so well, 110 volts can be much more dangerous than much higher voltage under different circumstances.
7. Explain that should there be an accident and even if he had some beer on his breath or taken any illicit (non-prescription) drugs, he could be charged with a felony. That is very serious.
8. Ask how often he inspects the ride. Suggest a couple times a day. Teach him the first four points of your inspection.
9. For carnivals:
 - a. New DOT laws.
 - b. Sleeping under trucks.
 - c. Cranes and high voltage.
 - d. Falling while erecting or fixing rides.

C. OWNER/MANAGER MEETING AFTER INSPECTIONS

Try to encourage them to become a couch-counselor, emphasizing the following:

1. Give your workers a chance to do their job with pride.

2. Make certain they know their job.
3. Make your workers feel important and contributing.
4. Take steps to reduce employee turnover.
5. Listen and learn from your workers.
6. Most accidents are the result of a chain of relatively unimportant situations.

D. As a safety inspector, your job is accident prevention in its broadest concept.

1. Apply your efforts to those areas most likely to prevent accidents.
2. Help, don't hinder, the profitability of the ride operation is invariably a safer operation.

MINI HIMALAYA

The following is presented in accordance with ASTM F698-83, Standard Specification for Physical Information to be Provided for the Amusement Rides and Devices.

Information Requirements

3.2 Ride Serial Number

3.2.1 Name Plate

Located on the control panel or base structure.

3.3 Model Number

The name Mini Himalaya is used in lieu of a model number.

3.4 Date of Manufacture

Located on the name plate.

3.5 Trailering Information

The trailer used to transport the Himalaya is 13'-5" x 8'-5" x 32' and weights 6140 lbs. without the ride.

3.6 Static Information

The ride excluding scenery in a rest position on the ground is approximately 50" high and 30' in diameter. The fence diameter is 41'. The ride weighs 13000 lbs.

3.7 Dynamic Information

When the ride is Operational, its dimensions are the same as when it is at rest.

3.8 Ride Speed

3.8.1 Maximum Revolution per Minute

12 rpm.

3.9 Direction of Travel

Circular, forward and reverse.

3.10 Power Requirements

3.10.1 Electrical

The ride requires 220 volts, 3 phase, 50 amps, 10 kw. The voltage should not vary 10% from this recommendation.

3.10.2 Mechanical

Two 5 horsepower electric motors are required to operate the ride.

3.11 Load Distribution per Footing

3.11.1 Maximum average static loading on each foot pad (48 on ride) is 150 lbs.

3.11.2 Maximum dynamic loading of each footing is 300 lbs.

3.12 Passenger Capacity

3.12.1 Maximum Total Passenger Weight

5040 lbs.

3.12.2 Maximum Number of Passengers

56 children of 90 lbs. each, or combination of adults and children not to exceed 5040 lbs., or 360 lbs. per car.

3.13 Ride Duration

The recommended ride duration is two minutes if operated in one direction only, or 1 1/2 minutes per direction if forward and reverse are used.

3.14 Balance of Passenger Loading & Unloading

Precise weight distribution is not critical to the operation or safety of the ride.

3.15 Passenger Restrictions

No children under age 3 unless accompanied by parent. No person suspected of drinking. No obese persons.

3.16 Environmental Restrictions

The ride should not be operated in a high wind, rain, or other condition which would impede traction of the

drive motors, limit visibility of the ride operator, or result in slippery conditions for loading or unloading.

3.17 Fastener Schedule

All fasteners, pins, cables, safety ropes and cleats must be replaced with items provided by the manufacturer.

OPERATION PROCEDURES

The following information is provided in accordance with ASTM F770-82, Standard Practice for Operation Procedures for Amusement Rides and Devices.

Manufacturer's Responsibility

3.1.1 Description of the Ride, Function and Operation

The ride consists of fourteen cars mounted on a circular track driven by two five horsepower motors turning at 12 rpm.

3.1.1.1 Description of the Motion

The ride runs clockwise or counter clockwise in a circle over two humps in the track.

3.1.1.2 Passenger Loading Procedures

The ride operator should unlock the entrance gate and permit the proper amount of persons to enter the ride area only after the ride has come to a complete stop. The largest rider should be seated on the outside of the car.

3.1.2 Safety Procedures

3.1.2.1 Maximum Riders, Weight and Ride Travel

The ride should carry no more than four small children per car or 56 children at 90 lbs. each or less, or a combination of adults and children not to exceed 504 lbs. or 360 lbs. per car.

3.1.2.2 Description of Passenger Restraint

The seat safety rope is used to restrain the passengers. The ride operator should

insure that the safety rope is properly laid across the rider's lap, making sure that no arms are under it, passed around the steel retaining bar on the outside panel, over the outside back of the seat, into the rope cleat, and cinched securely before starting the ride. The ride operator should inform the riders to remain seated until he returns to let them out.

3.1.2.3 Ride Operator's Safety Check

Before the ride starts, the ride operator or attendant should circle the ride, making sure that each rope restraint is locked into its cam cleat, and that no one is inside the fence. During the operation of the ride, a visual check can be made by looking at the rope cleat to insure that no rope has been removed from the cleat. The operator and/or attendant should watch the ride at all times it is in motion, making sure that no one attempts to stand up. Any abnormal facial or body expressions is reason to turn the ride off immediately.
NOTE: Do not let anyone sit on or lean over the fence while the ride is in motion.

3.1.2.4 Instruction to the Patrons

Remain seated until operator signals the ride is over.

3.1.3 Operator's Location and Operating Procedure

The operator should not reverse the travel of the ride until it has come to a complete stop. The operator should stand at the front of the ride facing the ride at all times. The operator should understand the distance it takes the ride to stop relative to the amount of passengers on the ride. Avoid jogging the ride into a particular position.

3.1.3.1 Daily Pre-Opening Inspections

1. Check all safety ropes to insure that the rope is not frayed or damaged, and that all cam cleats are operating satisfactorily.
2. Check all taper lock bushings on the four drive wheels and the two pulley shafts to insure that they are tight.

3. Check all safety cables to insure that they are attached properly.
4. Check all wheels to make sure that they are turning freely and that there is no appreciable wear or erosions.
5. Check all joint pins to make sure that they have a safety pin properly inserted.
6. Disengage and engage all 14 safety ropes making certain all cam cleats are operating properly
7. Run the empty ride. Listen for unusual noises. Observe if the ride is starting faster or slower than normal.
8. Make certain the control box lid is properly closed.
9. Check all electrical ground cables looking for tripping dangers and bare wires.
10. Clean up the area.
11. Check all electrical plugs and connections on the control box.
12. Check to make sure that the ground wire is properly installed at its power source connection.
13. Be alert and think safety the rest of the day.

3.1.3.2 Ride Operator's Position and Function

The ride operator and attendants should assist anyone requiring help to get into the ride. The ride operator should be behind the control box or the fence if more than one operator is used in the operation. NOTE: Never let anyone sit or lean over the fence while the ride is running.

3.1.3.3 Operating Procedures of Ride

1. Open the gate to the ride and let in the riders.

2. Open the safety rope and let the rider sit in the seat. NOTE: Place heaviest riders to the outside of the seat.
3. Properly attach the safety rope per 3.1.2.2.
4. Inform each rider to stay seated until the ride is stopped.
5. Circle the ride to make sure that all ropes are secure.
6. Replace the gate.
7. Stand behind the control box and start the ride.
8. Operate the ride the lengths of time recommended per 3.13 of F698-83.
9. When the ride is at a complete stop, detach the safety ropes and assist the riders out if necessary.
10. Open the exit gate.
11. Close the exit gate.

3.1.4 Emergency Procedures

If anyone begins to stand up in his seat, stop the ride immediately.

3.1.4.1 Evacuation of the Ride

Evacuate the ride through the front gate exit.

3.1.4.2 Use of Emergency Power Equipment - N/A

3.1.4.3 Description of Emergency Equipment - N/A

3.1.4.4 Emergency Procedures - Interrupted Power

With the interruption of electricity, turn off the ride and do not restart until checking that everyone is securely seated and no one is inside the fence.

Owner/Operator's Responsibility - Operation Procedure

4.1 Each owner/operator of an amusement ride or device shall read and become familiar with the contents of the manufacturer's recommended operating instructions and specifications, when received as provided in 3.1. Each owner/operator shall prepare an operating fact sheet. This fact sheet shall be made available to each ride or device operator and attendant of the amusement ride or device. The owner's/operator's fact sheet (on a ride-to-ride basis) shall include but not be limited to the following:

4.1.1 Specific ride or device operation policies and procedures with pertinent information from the manufacturer's instructions.

4.1.1.1 Description of the ride or device operation.

4.1.1.2 Duties of the specific assigned position of the ride or device operator or attendant.

4.1.1.3 General safety procedures.

4.1.1.4 Additional recommendations of the owner/operator.

4.1.2 Specific emergency procedures in the event of an abnormal condition or an interruption of service.

4.1.3 The owner/operator shall provide training for each ride or device operator and attendant of an amusement ride or device. This training shall include but not be limited to the following, where applicable:

4.1.3.1 Instructions on ride or device operating procedures.

4.1.3.2 Instructions on specific duties of the assigned position.

4.1.3.3 Instructions on general safety procedures.

4.1.3.4 Instructions on emergency procedures.

4.1.3.5 Demonstration of the physical ride or device operation.

- 4.1.3.6 Supervised observations of the ride or device operator's physical operation of the ride or device.
- 4.1.3.7 Additional instructions deemed necessary by the owner/operator.
- 4.1.4 The ride or device operator of each amusement ride or device shall conduct a daily pre-opening inspection of each ride or device prior to carrying passengers. This inspection shall include but not be limited to the following:
 - 4.1.4.1 Visual check of all passenger-carrying devices, including restraint devices and latches.
 - 4.1.4.2 Visual inspection of entrances, exits, stairways, and ramps.
 - 4.1.4.3 Test of all communications equipment necessary for the operation of the ride or device.
 - 4.1.4.4 Prior to carrying passengers, the ride or device shall be operated for a minimum of one complete operating cycle.

MAINTENANCE PROCEDURES

The following is presented in accordance with ASTM F853-83, Standard Practice for Maintenance Procedures for Amusement Rides and Devices.

Manufacturer's Responsibility

3.1.1 Description of Ride

The Kiddie Himalaya is a circular ride consisting of fourteen cars attached in a continuous circle and powered by two 5HP motors. It runs forward and reverse and travels at a speed of 12 rpm.

3.1.1.1 Description of Motion

The ride runs on a circular track which has a regular rise and fall configuration of two hills and two valleys.

3.1.2 Set-Up Procedures

1. Select an appropriate area of 50' deep x 41' front.
2. Position the trailer at the rear of the location centering the back scenery at the center of the back line.
3. Level the trailer.
4. Unpin and lift the control panel from the front of the trailer. Set it in the front of the ride approximately forty feet from the trailer and run the cables back toward the trailer.
5. Unpin and open the two wings placing the jack-stand under each end.
6. Attach the wing braces running from the trailer to the back of the wings.
7. Attach the wind brace to each wing and stake down.
8. Set the center slip ring approximately 20 ft. from the trailer at the center of the scenery.

9. Remove the track from the side of the trailer and place on the ground at least five feet from the trailer in front of the scenery. NOTE: Start with the lowest track section placing the lowest end at the center line of the scenery. Work either way from that point, taking care to match up the welded numbers.
10. Complete the circle. Do not bolt one high section at the right of the circle as you face the scenery. Remove this section after the track is bolted together. NOTE: Use only 3/4" x 4 1/2" grade 5 bolts with a lock nut or lock washer. Do not use any other size.
11. Extend the boom from the top rear of the trailer and pin into place.
12. Unpin the rear car on the top of the trailer and move it under the chain fall or winch.
13. Secure the lifting frame under the two rubber covered grab bars and lift the weight of the car off the track.
14. Slide the car off the end of the track and lower it onto the wheelbarrow.

CAUTION: Never stand under a car while being raised or lowered to or from the trailer.
15. Take the car to the open section of the track and slide it onto the track with running board to outside.
16. Repeat steps 12-15.
17. Using the same pin that hitched it on the trailer, pin the first two cars together making sure that the head of the pin is on the center side of the car tongue.
18. Secure with a 3/16" safety pin.
19. Repeat these steps using up to five regular cars. Do not use a drive car as the last car on the ride. Its weight makes it difficult to slide the track together. The drive cars should be 180 degrees apart.
20. Remove a drive car next attaching it as the rest. Run the power cord to the center slip ring and connect to its mating twist lock plug.

NOTE: Center the slip ring by attaching the four alignment bars to the base of the slip ring and attaching the other end to the track jackstand pockets.

21. Repeat as above until the last car is ready to install. Move the loose section of track as close to the opening as possible and slide the car onto the track.
22. Slide the track section and car into position.
23. Bolt the last section of track together.
24. Pin the last cars together.
25. Attach all safety cables from one car to the next, securing them with a safety pin or cotter pin.
26. Spread the center tarp over the center slip ring. The grommets go over the 3/8" pins on the top table of the slip ring. Insert 18" hairpins to secure the top.
27. Place the mirror ball on top at the slip ring and pin into place.
28. Attach the tarp to each end of each car using the hooks provided.
29. Locate and attach the lighting cables to their respective signs.
30. Mount the speakers in their proper locations at the hinge point, top, of the scenery on the trailer.
31. Aim the spotlights at the mirror ball.
32. Remove the fence from the trailer and set it up according to the layout provided at the rear of this manual.
33. Attach the main power cord to its power source. CAUTION: Use 220 volt, 3 phase with a neutral and a ground wire. Color code: Green - Ground; Orange - Hot; Black - Hot; Red - Hot; White - Neutral.
34. Conduct a maintenance safety inspection as outlined in 3.1.3.1 of ASTM F770-82, Section 3, Manufacturer's Responsibility.

35. Turn on all breakers and check to see if all lights and sound equipment are operational.
36. Run the ride by turning the spring loaded switch to forward. Run for 10-15 revolutions. Stop the ride by releasing the switch. After a complete stop, reverse the ride for 10-15 revolutions.
37. Check the taper lock bushings again to make sure they are properly seated.
38. The ride is now ready to operate. **IMPORTANT:** Read section 3.1.3.3, recommended series of steps to operate the ride, of ASTM F770-82, before riding patrons.
39. Disassembly of the ride is done in the reverse order of the steps described above. **CAUTION:** Never disassemble with any electrical power circuit on. Disconnect the main power lead before disassembly.
40. Before moving the ride on the trailer make a visual check to make sure all pins used in holding equipment on the trailer have an approved safety pin securing the pin in its proper location.
41. Check all running lights, brake lights and clearance lights before towing.
42. Be sure there is an approved safety pin or padlock in the hitch latch and that safety chains have been properly attached.
43. Check to be sure that the electric brakes are operating properly and that all tires are properly inflated.

3.1.3 Lubrication Procedures

3.1.3.1 Types of Lubrication

1. Wheel bearings on the cars should be packed with multi-purpose lithium base grease.
2. The swivel bearings should be greased with a grease gun using multi-purpose lithium base grease.

3. The scenery hinges should be oiled with any medium weight lubricant.
4. The trailer bearings should be packed with multi-purpose lithium base grease.

3.1.3.2 Frequency of Lubrication

1. Check all wheel bearings on the cars at least once every four weeks to make sure bearings are greased.
2. Lubricate the drive car axle bearings at least once every four weeks.
3. On earlier model Mini Himalayas, serial #18001 - 18005, grease the swivel bearings on each tongue at least once every six weeks of operating.
4. Lubricate the hinges on the scenery wings at least once a year.
5. Lubricate the bearings on the trailer every 10,000 miles.

3.1.3.3 Lubrication Chart - N/A

3.1.3.4 Special Lubrication - N/A

3.1.4 Description of Daily Pre-Opening Inspection

See 3.1.3.1 of F770-82.

3.1.5 Frequency of Inspections & Testing

3.1.5.1 Wear Limits and Tolerance

1. Drive wheels are to be checked weekly and replaced when their outer diameter does not exceed the following dimension
 - a. Outer drive wheel = 4 1/2"
 - b. Inner drive wheel = 4"
2. Wheels that run on top of the track should be checked weekly and replaced when their outer diameter does not exceed 4 1/2".

3. Horizontal guide wheels running against the vertical leg of the outside track should be checked weekly and replaced when their outer diameter does not exceed 4 1/2".
4. Guide wheels running against the horizontal and vertical legs of the track should be checked weekly and replaced when their urethane wears to less than 1/2" thick.

3.1.5.2 Operational Tests

1. At each set up point or at least weekly, the ride should be run and timed to be sure it is running at 11.9 - 12.1 rpm. If it is not, check the following:
 - a. Is the proper voltage being used to operate the ride? Voltage in excess or less than the prescribed amount can damage motors, lights, sound, and circuitry.
 - b. Are the drive wheels within the tolerance noted in 3.1.5.1 of this section: Wheels run below tolerance may eventually fail, causing expensive down time.

3.1.6 Specifications for Use of Replacement Fasteners

1. The pins used to join one car to another should be factory manufactured original equipment grade. No substitute is recommended.
2. Pins used to join the safety cables should be 1/2" diameter mild steel, 2 1/2" long with a 1/8" hole for a cotter pin or safety pin.
3. Safety cables should be replaced with factory manufactured originals. No substitute is recommended.
4. Only castle nuts should be used as replacement nuts on all wheel shafts. A cotter pin must be used in each nut.

3.1.7 Electrical Schematic - See Appendix

3.1.7.1 Maintenance for Electrical Components

See appendix for individual manufacturer's recommendations.

3.1.8 Schematics of Hydraulics and Pneumatics - N/A

3.1.9 List of Parts used in Assembly - See Appendix

3.1.10 Non-Operating Procedures

Minor scratches in fiberglass can be buffed out by using a fine grit auto rubbing compound and following up with a coat of wax. Deep scratches (deeper than the gel coat) call the factory for a repair kit. State color required.

Cracks due to mishandling or abuse can be repaired from underside using fiberglass mat and activator. Be sure surface is clean and dry.

Clean fiberglass with a soft cloth and a mild liquid detergent. Do not use scouring powder, steel wool or an abrasive cleaner as this will dull the surface.

Models with aluminum fence and safety gates, clean aluminum with dry Scotchbrite green scouring pads (available at most grocery stores).

3.1.11 Assembly & Disassembly Techniques - N/A

Owner/Operator's Responsibility - Maintenance

- 4.1 Each owner/operator of an amusement ride or device shall read and become familiar with the contents of the manufacturer's maintenance instructions and specifications when received, as provided in 3.1. Based on the manufacturer's recommendations, each owner/operator shall implement a program of maintenance, testing, and inspections providing for the duties and responsibilities necessary in the care of each amusement ride or device. This program of maintenance shall include a checklist to be made available to each person performing the regularly scheduled maintenance on each ride or device. The owner/operator's checklist (on a ride-to-ride basis) shall include but not be limited to the following:
 - 4.1.1 Description of preventive maintenance assignments to be performed.
 - 4.1.2 Description of inspections to be performed.
 - 4.1.3 Special safety instructions, where applicable.
 - 4.1.4 Any additional recommendations of the owner/operator.
- 4.2 The owner/operator of the amusement ride or device shall provide training for each person performing the regularly scheduled maintenance on the ride or device, pertaining to their duties. This training shall include, but not be limited to the following:
 - 4.2.1 Instruction on inspection and preventive maintenance procedures.
 - 4.2.2 Instruction on the specific duties of the assigned position.
 - 4.2.3 Instruction on general safety procedures.
 - 4.2.4 Demonstration of the physical performance of the assigned regularly scheduled duties and inspections.
 - 4.2.5 Supervised observation of the maintenance persons physical performance of their assigned regularly scheduled duties and inspections.
 - 4.2.6 Additional instructions deemed necessary by the owner/operator.

4.3 Prior to carrying passengers, the owner/operator shall conduct or cause to be conducted a daily documented and signed pre-opening inspection, based on provided instructions, to insure the proper operation of the ride or device. The inspection program shall include, but not be limited to the following:

4.3.1 Inspection of all passenger-carrying devices, including restraint devices and latches.

4.3.2 Visual inspection of entrances, exits, stairways, and ramps.

4.3.3 Functional test of all communication equipment necessary for the operation of the ride.

4.3.4 Inspection or test of all automatic and manual safety devices.

4.3.5 Inspection or test of all brakes, including service brakes, emergency brakes, parking brakes, and back stops.

4.3.6 Visual inspection of all fencing, guarding, and barricades.

4.3.7 Visual inspection of the ride structure.

4.3.8 The ride or device shall be operated for a minimum of one complete operating cycle.

4.4 Following an unscheduled cessation of operation, and the unloading of an amusement ride or device, necessitated by malfunction, adjustment, environmental conditions, mechanical, electrical, or operational modification, that affected the operation, the ride or device, or the specifically affected element, shall be appropriately inspected, and operated, without passengers, to determine that the cause of cessation of operation has been corrected and does not create an operational problem.

Owner/Operator's Responsibility - Inspection

4.2.1 Owner/operators of amusement rides or devices shall have an inspection program consistent with the inspections outlined in Practices F770 and F853.

4.2.2 Inspection documents deemed appropriate by the owner/operator to be maintained in the ride file shall be filed according to the procedures outlined in Practices F770 and F853.

4.2.3 The owner/operator of an amusement ride or device shall promptly notify the manufacturer of an incident, failure or malfunction which, in his judgment, seriously affects the continued proper operation of the ride or device and is information of which the manufacturer should be aware.

OPERATIONAL LOAD TESTING

Any operational test including load testing performed on a ride shall be completely nondestructive in nature. Overload testing exceeding the rated limits listed on the information plate, operation manual, field inspection guide or specifications sheet shall be deemed inappropriate. Where maximum total passenger weight is not readily available, passenger capacity multiplied by 170 pounds per adult and/or 90 pounds per child may be used.

Nondestructive testing with inert loads can be accomplished only with special care as to placement of the load so that it is centered both vertically and horizontally as would be the load of the passenger it replaces. Extra seat reinforcement must be used to offset any load concentration created. Such tests shall be documented and certified and nondestructive by the person making the test and the agency requiring it. Results of all load tests shall be communicated to the factory upon completion by the Certifying Agency.

Conducting a nondestructive operational load test assures the testing agency only that it will carry a given load in a given way at a given moment and in no way assures future safety of the ride.

Conducting a destructive load or overload test also assures the testing agency that it will carry a given load in a given way at a given moment and in no way assures future safety of the ride. However, it also introduces the probability of inflicting serious irreparable damage to the ride that may or may not be apparent at the time of the test.

We consider inert load testing of any nature appropriate only for situations requiring experimental development of stress-strain testing during prototype development. A certificate of load test on the prototype and certification that each production ride met the design criteria when it was manufactured is available from the factory upon request.

S A F E T Y B U L L E T I N

TO: Mini Himalaya Owners
FROM: Ellis F. Tyson Sr., President

SUBJECT: OVERHEATING OF MOTORS

Should you get overheating of your motors on your Kiddie Himalaya, it most likely will be one of four reasons:

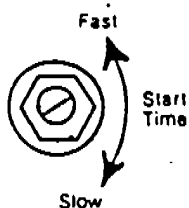
1. **SINGLE PHASING:** Should a wire come loose between the slip ring and one motor, it will cause single phasing in that motor. The other motor will then be required to do all of the work. Should this occur, the operator will notice that start-up time on the ride takes twice as long as normal. Failure to correct this situation will cause both motors to burn out. Most likely, the source of this problem is a loose wire in one of the electrical plugs between the motor and the slip ring.

2. **LOW VOLTAGE:** The electric motors and soft start are rated at 230 volts, and the minimum operating voltage is 220V. If you must operate on a 208V system please contact the factory.

3. **REVERSING MOTORS TO USE THE MOTORS AS A BRAKE:** Except when used for an emergency stop, motors should never be reversed until the ride comes to a complete stop. Otherwise, overheating will occur.

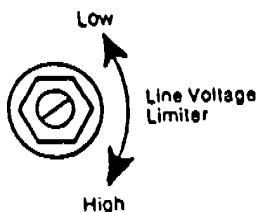
4. **SETTINGS OF THE SOFT START ADJUSTMENTS:**

A. START TIME ADJUSTMENT



1. Turn off power.
2. Loosen the locking nut.
3. Set at FASTEST speed.
4. Lock the adjustment by tightening the locking nut.

B. LINE VOLTAGE LIMITER



1. Turn off power.
2. Loosen the locking nut.
3. Set at HIGHEST setting.
4. Lock the adjustment by tightening the locking nut.

continued....

S A F E T Y B U L L E T I N

TO: Mini Himalaya Owners
FROM: Ellis F. Tyson Sr., President

SUBJECT: TRACK GUIDELINES

1. Always use 1/2" x 4-1/2" grade 8 bolts with a standard lock washer and nut. Make certain that the nut is torqued to 120 foot pounds.
 - a. Daily, check that these bolts are tight.
 - b. Daily, check for any cracks in the welding between the bolt, steel tubing and the track.
 - c. Daily, inspect the steel in the area of the bolts for cracks.
 - d. DO NOT USE NYLON LOCK NUTS AS THEY ARE NOT DESIGNED FOR REPEATED USE.

Operating your ride with the wrong bolt, no lock washer, or an improperly torqued nut can cause the bolt to work loose and can result either in track or bolt failure.

2. When setting up your ride:
 - a. First, always set all the track together and tighten all bolts with no cars on the track.
 - b. Next, securely block under the track as necessary.
 - c. Then, remove one section of track at the high part of the track.
 - d. Next, load the cars onto the track. Never put the cars on the track until:
 - the track has been exactly located by putting all sections of track together,
 - the track has been leveled, and
 - bolts have been torqued.

If the last section of track is not installed and then removed before the cars are loaded onto the track, then it becomes necessary to try to move the track with the weight of the cars in order to get the last section of track to fit. This puts undue stress on the track.

I M P O R T A N T

TO: Mini Himalaya Owners
FROM: Ellis F. Tyson Sr., President
SUBJECT: TAPER LOCK BUSHINGS

Your ride has eight (8) taper lock bushings. During the first eight hours of operation, these must be tightened according to the following schedule:

Caution your mechanic not to twist off the small tightening bolts on the bushing.

1. Before starting the ride, tighten all bushing bolts.
2. Start and stop the ride five times and tighten bolts.
3. After one hour of operation, tighten bolts.
4. For the next three hours, tighten bolts hourly.

Should your taper lock bushings become loose, the key will fall out and the taper lock bushing will spin on the shaft, possibly damaging the bushing and the shaft. We have found that once the taper lock bushing is completely "seated," further adjustments are unnecessary.

S A F E T Y B U L L E T I N

TO: Mini Himalaya Owners
FROM: Ellis F. Tyson Sr., President
SUBJECT: SAFETY REFRESHMENT

1. Always use a lock washer on the bolt and nut which holds the track together. There are 24 of these bolts on the ride.
2. Never stand under a Mini Himalaya car while raising or lowering it with chain hoist onto trailer.