

MFG: WMI INDUSTRIES LTD
NAME: JOLLY CHOO-CHOO
TYPE: KIDDIE

JOLLY CHOO CHOO

WMI Industries, Ltd.

P.O. Box 5000

Sterling, CO 80751

~~303~~-522-7515

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JOLLY CHOO CHOO MANUAL

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ASSEMBLY PROCEDURE

1. Select the site, mark where the JOLLY CHOO CHOO is to set up for operation.
2. Lower the leveling jacks and disconnect the truck. **Note:** Keep the truck in the area to operate the 12 volt winch to lower the sides and raise the canvas top.
3. Place the two short adjustable screw jacks under the rear of the trailer.
4. Level the trailer using these two jacks and the two front landing gear.
5. Unload the fence and set up around the ride.
6. Connect the two 12 volt cables to the battery on the truck. The cables are located near the circuit breaker box at the front of the trailer.

LOWER THE DRIVERS SIDE WING FIRST.

7. Connect the hook from the 12 volt winch to the ring mounted on the edge of the wing.
8. Take up the slack in the cable using the 12 volt winch until it is snug.

WARNING!!!! Never let anyone near the side of the trailer while lowering the sides. If the cable should fail or come loose the wing will fall on the person standing near the side of the trailer.

9. Remove the rear cross bar holding the wings up.
10. Unpin the front corner of the wing.
11. Disconnect the brace at the center that is holding the wing up.
12. Slowly lower the wing with the 12 volt winch. Push out on the wing to get it started.

WARNING!!!! Do not allow very much slack in the cable, if the wing should drop it could break the cable.

13. Lower the wing until it is about two thirds of the way down.
14. Unpin and remove canopy lifting brace from wing.
15. Place four screw jacks under the wing and lower the wing onto the jacks.
16. Adjust the four jacks until the wing is level and all four jacks support the wing equally.
17. Rewind the cable and connect to the other wing.
18. Follow the procedures listed in steps number 7 through 16.
19. Remove front brace on right wing.
20. Remove load strap on the front of the canopy.
21. Fold out each side of the canopy.
22. Push out the last scenery section.

23. Use the threaded rods to fasten the canopy together where it folds around and touches. Two threaded rods with a handle are used about one foot from the center of the ride.
24. Use the over center link to fasten the sweeps together at the outside edge.
25. Swing out the quartz light arms and pin in place.
26. Remove the canopy rack.
27. Place center pole on top of ride. Be sure to run the cable over the top of the pulley before standing it up.
28. Spread out the canvas and connect the hook from the 12 volt winch to bail ring on the canvas.
29. Lace up the canvas.
30. Connect the outside edge of the canvas to the hooks on the back of the scenery.
31. Raise the canvas with the 12 volt winch until it is snug.
32. Fold down the car sweeps that will not hit any of the cars in the racks.
33. The end of the sweep swings around until it is straight. Slide the two pins into place and safety key.

NOTE: The "R" clips must be installed from underneath.

34. Unpin the two cars that are fastened to the wings.
35. Install the cars onto the sweeps. Be sure that the car locking roller attached to the air cylinder is pushed toward the pivot bearing. This will allow the car to slide all the way down into position.
36. Put a little grease on the car pivot shaft to help when tearing the ride down.
37. The car should turn freely after it is installed.
38. Install the two rear cars on the sweeps that can fold down.
39. Remove the rear car rack and fold down rear sweeps.
40. Remove the front cars from the transport rack and move them to the corners of the wings.
41. Fold down and pin remaining sweeps.
42. Install remaining cars onto the sweeps.
43. Install the center canvas and fasten down.
44. Place the control stand next to the car spin control handle.
45. Plug in control stand.
46. Disconnect battery cables from truck and stow out of the way.
47. Connect main power to ride and test run. The ride runs counter clockwise.

DISASSEMBLY PROCEDURE

Follow the above procedures in reverse order to disassemble the JOLLY CHOO CHOO.

Follow the daily inspection and operation instructions before starting the ride.

JOLLY CHOO CHOO PRE-OPEN CHECK LIST

1. Check that the trailer and wing stands are tight.
2. Check that the ride turns counter clockwise.
3. Check that the air compressor is running and pressure is built up for the car position locks.
4. Check that all cars turn freely with the position locks turned off.
5. Check that the two hinge lock pins on each sweep are safety keyed.
6. Check that there is nothing on the deck of the ride that anyone can trip or slip on.
7. Check that all the seat liners are secure in the seats. Do not use a seat that is not in proper operating condition.
8. Check that all of the seat belts are installed and the mounts are secure.
9. Check that the fence is at least 30 inches from the platform clear around the ride.
10. Check that the canopy is fastened where the two sweeps come together.
11. Check that the sweep rollers turn freely.
12. Check that the sweep rollers are not loose and turn freely.
13. Check that the cars lock securely into loading position.

DAILY INSPECTION CHECK LIST

DAY

1 2 3 4 5 6-7

FLOOR AND AROUND RIDE

CHECK

(	)	(	)	(	)	(	)	(	)	Ground is clear of any objects or tools.
(	)	(	)	(	)	(	)	(	)	Fence at least 30 inches from wing outside edge.
(	)	(	)	(	)	(	)	(	)	Floor is clear of any objects or tools.
(	)	(	)	(	)	(	)	(	)	Trailer stands tight.
(	)	(	)	(	)	(	)	(	)	Wing stands are tight.

CARS

CHECK

(	)	(	)	(	)	(	)	(	)	Turn freely.
(	)	(	)	(	)	(	)	(	)	Seat bolts are secure.
(	)	(	)	(	)	(	)	(	)	Seat Liners are not loose.
(	)	(	)	(	)	(	)	(	)	Position lock operates correctly.
(	)	(	)	(	)	(	)	(	)	Car bearings are tight.

SWEEPS

CHECK

(	)	(	)	(	)	(	)	(	)	2 hinge pins safety keyed from bottom.
(	)	(	)	(	)	(	)	(	)	Wheels turn freely.
(	)	(	)	(	)	(	)	(	)	Wheel mounting?

JOLLY CHOO CHOO
OPERATION INSTRUCTIONS

1. Turn on the circuit breakers in the electrical box at the front of the trailer.
2. Check that the air compressor is running and turns off when it has built up proper pressure.
3. Check that the ride turns counter clockwise.
4. Check that there are no objects on the floor that the customers can trip or slip on.
5. Turn the seat load position switch "ON".
6. Load the passengers. NOTE: Because this is a kiddie ride, you may have to help the passengers onto the platform and into the cars.
7. Check that all passengers are securely fastened into the car using the provided seat belt.

WARNING!!!! NEVER allow a passenger to ride the ride without the seat belt being fastened and pulled tight.

8. Check that all other spectators or operators are outside the fence before starting the ride.
9. Push whistle button before starting ride to warn passengers and others that the ride is starting. (You can blow the whistle as much as you like for effect on the ride).
10. Push the start button.
11. Turn off seat position switch.
12. Pull on spin handle or step on foot pedal to spin cars. By varying the pressure on the control handle you can vary how fast the cars spin.

WARNING!!!! For small children start them spinning slowly, do not jerk them as they may slip sideways in the car.

13. You can spin only the cars that the passengers want to spin. Do not spin the cars continuously for the small children. One easy spin will probably last the ride for them.
14. After four to five revolutions of the center pole turn on the seat positioning switch and the cars will lock into their outward facing loading position.
15. Release the start button and the ride will stop.
16. Unfasten the seat belts and help the passengers out of the cars and onto the ground if necessary.

It is best to lock the seats into position before stopping the ride to prevent any of the children from being hit by a spinning car if the ride stops before the cars stop turning.

MAINTENANCE INSTRUCTIONS

The JOLLY CHOO CHOO is designed for a minimum of maintenance over it's operating life. Following are a list of items to check and service regularly.

FIBERGLASS PANELS

The fiberglass panels should be washed after each setup in order to protect the surface from dust abrasion and to make the panels more attractive. Once a month the panels should be waxed with a liquid wax to preserve the shine.

SLEW RING BEARING

This is the main bearing supporting the center of the ride. The bearing is very large and requires greasing once a week for the first month, then once a month after that time. A high grade grease should be used. At least 1/2 liter should be used each time so the grease is moved through the complete bearing. The grease Zerks for the bearing are located between the trailer frame and the rotating table. Turn ride after every 3-4 shots of grease to keep from pushing seal out of bearing.

ELECTRIC MOTOR

Grease annually as directed on the motor.

SEATS

Check seat attaching bolts daily. Locktite if necessary.

FLUID COUPLER

Change oil once a year and check level when the ride takes longer than 30 seconds for the ride to start up.

V BELTS

Check the main drive belts each week for glazing, looseness, or cracks.

GEAR BOX

Check oil level weekly and change each year with a quality S.A.E. 50 weight oil.

CAR PIVOT SHAFT BEARINGS

Grease each bearing monthly with 2 oz. of grease (about one shot of a grease gun).

SWEEP WHEEL

Grease weekly with one to two shots of grease.

DRIVE CHAIN

Spray a chain lube on the drive chain weekly.

CAR POSITION LOCK

Grease pivot bolt weekly. Grease wheel bolt weekly. Check that arm moves freely with air cylinder.

SAFETY REQUIREMENTS

The key to safety is well trained and supervised employees. Make certain that all employees know how the ride operates. The employees should have a good attitude towards safety and common sense.

REMEMBER, SAFETY MUST ALWAYS COME BEFORE REVENUE.

Do not neglect the employee's safety. Before starting the ride, be certain there are no personnel inside the fences or on the ride structure. Be certain all electricity is turned off whenever an employee might come into contact with electrical connections or components. Safety helmets should be worn by all personnel when erecting or disassembling a ride.

GENERAL SAFETY GUIDELINES

The following is a list of a few general rules which should be adhered to by everyone. Remember that in the long run, the key to a safe and successful operation is to have well-trained and well supervised employees.

1. All work must be done by competent, qualified mechanics capable of understanding the function of the parts and their proper installation.
2. Inspect the ride each day of operation to determine that no portion of the ride is damaged, omitted, or worn in such a manner that it is unsafe, or that unsafe conditions may develop.
3. Perform manufacturer's recommended maintenance procedures at intervals and in the manner specified by the Operation and Maintenance Manual, in the following general areas.
 - a) Lubrication
 - b) Air, hydraulic, and electrical systems
 - c) Torquing of bolts
 - d) Wear of bolted or pinned joints
 - e) Adjustment and care of mechanical components such as; brakes, clutches and air compressors
 - f) Passenger securing devices
 - g) All parts are present and installed
 - h) Operating and emergency controls
 - i) Factory installed safety devices
4. Study each job carefully to determine all hazards so that necessary safeguards can be taken.
5. Examine safety devices, tools, ladders, etc. before they are used to make sure they are in good condition.
6. Use the proper tool or equipment for each job. Ground all hand electric power tools before use unless the manufacturer advises otherwise.
7. Wear close fitting comfortable clothing when working on or close to mechanical apparatus or live electrical circuits. Avoid finger rings, jewelry, or other articles which may be caught in moving parts or come in contact with electrical circuits.
8. Protect your eyes by wearing approved safety glasses or goggles.
9. Wear hard hats at all times. When working in elevated areas, use a safety belt.
10. Where work is to be performed is hazardous, such as live electrical circuits, at least two men should work together.

11. If guards must be removed from equipment, make sure they are replaced before leaving the job.
12. Clean up each job and dispose of surplus materials.
13. Keep a record of parts replaced and date of replacement. Inform the manufacturer of any replacement requirements that are frequent or cause unsafe conditions.
14. Make modifications and additions as outlined in the manufacturer's Service and Safety Bulletins.

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 operation.
 - b) Manufacturer's recommended maximum speed and load.
 - c) Manufacturer's recommended length of ride time and frequency of repeat rides.
 - 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 of a Manufacturer's Operation Manual for the ride he supervises.
3. Require each operator to inspect the ride he supervises, each day of the operation.
 - a) Determine that no portion of the ride is damaged, omitted or worn in such a manner that it is unsafe or that it may develop into an unsafe condition.
 - b) Report any irregularities to the superintendent or owner.
 - c) Do not operate the ride if any irregularities are found until such condition has been corrected.
4. Instruct the operator to allow no passengers to ride who are visibly ill, or under 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 to board a ride if he cannot be properly secured because of his size or because there is a malfunction of the securing device.

STOP the ride immediately if any passenger is observed moving from their seat, or behaving dangerously.

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 gives his full attention to the ride and its passengers.
8. Instruct the operator to let no other person, other than another trained operator, operate the controls of the ride, except those portions of the ride that are specifically designed to be controlled by the passenger.
9. Advise the operator that factory-installed safety devices are not to be tampered with or removed.
10. Advise the operator of owner/supervisor procedures for assisting ill or injured passengers.
11. Instruct operators and attendants that patrons are required to secure all articles, such as keys, change, eye glasses, etc., which may become loose while riding.

OPERATOR RESPONSIBILITIES

1. **HANDICAPPED PERSONS** - Persons who are physically handicapped must not be allowed to ride violent or fast moving rides. If the management of the amusement area allow handicapped to ride certain slow rides, the operator must ensure that the handicapped person is under the full control of an adult person who will ride with them and provide supervision during the ride.
2. **PROHIBITED PASSENGERS** - Operators should not allow a passenger on the ride who cannot be properly secured due to his size or if there is a malfunction to the securing device. Similarly, they must refuse service to a pregnant woman, or a passenger who is visibly ill, or under the influence of alcohol or drugs.
3. **CLEARANCE PRECAUTION** - Before operating the ride, it is important to ensure that there are no personnel around the ride structure or any exposed electrical components or other areas where there could be a risk of injury.
4. **ON-DUTY ATTENTION** - Insist that each operator remain in full control of the operating controls during operation of the ride with complete attention to the ride and passengers. Under no circumstances should the operator leave his or her position while the ride is in operation.

If it does become necessary for the operator to leave his post at the controls, he must turn the ride off completely to ensure it does not accidentally start and injure passengers or staff.
5. **INSPECTION/CHECK LIST** - Operators must inspect the ride and complete a General Check List before each day's operation.
6. **DAILY WARM-UP** - The operator must always run the ride through several cycles before the first passengers are loaded. This warm-up without passengers is necessary to make sure the ride is safe and there are no problems mechanically not detected previously.
7. **PRECAUTIONS BEFORE AND DURING THE RIDE** - Never start the ride unless the operator or assistant is facing the ride and is in a position to observe the whole area because:
 - Patrons have been known to jump fences.
 - Patrons have been known to try to change positions while the ride is running.
 - Patrons have been known to "skylark" causing their own safety and that of others to be put in jeopardy.
 - The operator's assistant may wish to make a last minute adjustment and be put in a dangerous position when the operator puts the ride in motion.
8. **SMOKING** - Smoking is not allowed on the JOLLY CHOO CHOO. This includes the operator as well as the passengers.
9. **LOOSE ITEMS** - The area on the platform must be clear of any items that can cause a passenger or operator to slip or trip.
10. **FOOD AND DRINK** - It is recommended that no food or drink be allowed onto the ride.

BOLT TIGHTENING

CAUTION; Torque values are given for steel bolts and steel nuts screwed into threaded holes in steel. Be certain threaded parts are not aluminum, brass, or other soft alloys.

BOLT TORQUE CHART

Bolt Size Grade 5	Max Torque	Recommended Torque Reusable Bolt	Recommended Torque Permanent Bolt
U.N.C.	ft. lbs.	f. lbs.	ft. lbs.
3/8	27	24	26-28
1/2	66	55	60-66
5/8	130	95	125-130
3/4	230	180	220-230
7/8	370	290	360-370
1	560	480	540-560

Maximum torque listed is 65% proof load of bolt.

NOTE: It is important to note the necessity of lightly oiling bolt before use as outlined above.

TORQUE METHODS (No torque wrench)

LEVERAGE METHOD

The average 200-225 lb. mechanic, while standing on his feet, can apply a steady pull with his good arm (right arm if right handed, etc.) of between 100 and 110 lbs. This pull is obtained without bracing his feet or free hand against any solid object such as a work bench or the machinery being worked on.

If a torque of any given value is desired, it becomes a simple matter of leverage. If the mechanic in question is tightening a 7/8" UNC thread bolt which recommends 520 ft. lbs. of torque, this value can be reached by using a heavy duty socket wrench and slipping a 5 ft. length of pipe over the handle of the wrench.

Thus if the mechanic can exert a 100 lb. pull, 5 feet times 100 lbs. would equal 500 ft. lbs. Any other torque desired can be reached by simply dividing the desired torque value by approximately 110 to determine the length of the pipe or "cheater" bar that is needed.

TURN OF THE NUT METHOD

This method applies only to bolts with UNC threads. If the bolt is shorter than eight times its diameter, tighten the nut until the pieces being joined are snugged up. Put a reference mark on the nut or socket wrench being used and tighten the nut, while preventing the bolt from turning, until the nut has been turned an additional 1/2 of a turn. If the bolt is longer than eight times its diameter, proceed as above but tighten the nut 3/4 of a turn. This will apply a pre-load to the bolt that will be very close to the same value that would be achieved if a torque wrench had been used.

PNEUMATIC TIRES ON AMUSEMENT DEVICES AND SUPPORT VEHICLES

- * It is strongly recommended to carry a quality spare tire and wheel for every type you have in operation, and inflated to pressure.
- * Check pressures regularly on all tires in operation and maintain to manufacturer's recommendations.
- * Unless unavoidable, it is strongly recommended that repairs or the fitting of new tires to rims be carried out by experts at recognized tire dealers using correct equipment.

******CAUTION******

Respect the potential power and explosive force of air under pressure. Serious accidents have resulted from lack of awareness of the explosive potential of compressed air. Respect it as you would DYNAMITE.

The following pages of guidelines, safety precautions and procedures of tire changing are included to make all operators aware of the dangers that can be encountered by neglecting the care and safety in handling tires and compressed air.

TIRE SAFETY - MOUNTING/DEMOUNTING

The following guidelines and safety procedures are intended to be used for reference only. Procedures will vary for different tire mounting equipment and different types of rims. If at any time an uncertainty exists about the method of assembly or component parts or use of equipment, consult specific equipment manuals.

The following precautions apply generally for all types of tires. In addition, each section emphasizes specific precautions for each particular type of tire.

******WARNING******

FAILURE TO OBSERVE THE PRECAUTIONS OUTLINED IN THIS SECTION MAY RESULT IN FAULTY POSITIONING OF THE TIRE AND/OR RIM PARTS, CAUSING THE ASSEMBLY TO BURST WITH EXPLOSIVE FORCE SUFFICIENT TO CAUSE SERIOUS PHYSICAL INJURY OR DEATH.

CORRECT PROCEDURES - Do it this way.

1. Make sure that all rims are in good condition for use - not damaged, dented, or deformed.
2. Remove valve core and exhaust all air from the tire (or tires in the case of a dual assembly) before demounting. Probe the valve stem with a wire as a final check to make sure the valve is not plugged. Do not stand in front of a valve opening as dirt particles may be blown into your eyes.
3. Block vehicle in a positive manner so it cannot roll forward or backward after it is jacked up.
4. Place large hardwood blocks under the jack, regardless of how hard or firm the ground appears.
5. Place safety jacks, or crib up with blocks at an appropriate place under the vehicle, in case the jack slips.
6. Check rim diameter to be sure it exactly matches the rim diameter molded on the tire. If rim is multiple piece, check component parts to see if they are made by the same manufacturer.
7. Clean and inspect used rim parts thoroughly.
8. Use new tubes and new flaps in new tires.
9. Inspect inside of tire for loose cords, cuts, penetrating objects, or other carcass damage. Scrap tires that are beyond simple repair. Remove dirt, debris, and liquids from the inside of tire before tube is installed.
10. Lubricate with approved rubber lubricant, such as thin vegetable oil soap solution.
11. Use a clip on chuck and extension hose with remote control valve and pressure gauge, long enough to allow you to stand to one side, not in front of the assembly, during inflation.
12. Center tire properly on rim before inflating.
13. Secure lock wheel down, or place assembly in safety cage or portable safety device before attempting to inflate tire to seat beads.
14. Check for proper flange and lock ring seating.

15. Adjust air pressure to manufacturer's recommended cold operating pressure, after beads have been seated.
16. Inspect valve cores or proper air retention. Replace damaged or leaky cores.

FAULTY PROCEDURES - Do not do it this way.

1. Don't work on tire and rim assemblies until you have reviewed safety practices and procedures.
2. Don't loosen lug nuts on duals until all air is exhausted from both tires. A broken or cracked rim pat under pressure could blow apart and seriously injure or kill if lugs are removed before air is exhausted.
3. Don't ever apply heat or do repair work on an inflated tire, rim, and wheel assembly. Heat can increase air pressure to a level sufficient to burst the tire or rim.
4. Don't re-inflate a tire that has been run flat or seriously under-inflated without demounting the tire and checking the tire and tube for damage.
5. Don't mix rim parts of different manufacturers unless such use is approved by those manufacturers.
6. Don't attempt, under any circumstances, to rework, weld, heat, or braze rim parts. Replace damaged parts with the same size, type, and make.
7. Don't reuse tubes or flaps that have buckled or creased.
8. Don't use a tube in a tire larger or smaller than that for which the tube was designed.
9. Don't inflate beyond recommended bead seating pressure. Don't stand over tire when inflating.
10. Don't transport fully inflated tires mounted on multi-piece rims. Inflate only enough (10-15 PSI) to keep rim parts in place. Inflate tires to correct operating pressure only after tire and rim assembly have been fastened in place, all lug nuts properly torqued, and rim parts re-checked for proper fit.
11. Do not substitute petroleum based lubricants, silicon or anti-freeze for approved rubber lubricants.

Certificate of Flame Resistance

REGISTERED
APPLICATION
NUMBER

F.121.4



ISSUED BY
ANCHOR INDUSTRIES INC.
EVANSVILLE, INDIANA 47711

MANUFACTURERS OF THE FINISHED
TENT PRODUCTS DESCRIBED HEREIN

Date of Manufacture

V5082

2-28-89

This is to certify that the materials described have been flame-retardant treated (or are inherently noninflammable) and were supplied to:

NAME: W.M.I. Industries

CITY Sterling

STATE CO

Certification is hereby made that:

The articles described on this Certificate have been treated with a flame-retardant approved chemical and that the application of said chemical was done in conformance with California Fire Marshall Code, equal to or exceeds NFPA 701, CPAI 84 MIL-C-43000

Method of application: Laminated

Type, color and weight of canvas/vinyl: 15 oz. Boyles Big Top White Dacron

Description of item certified: Gravitron Top

**Flame Retardant Process Used Will Not Be Removed By
Washing And Is Effective For The Life Of The Fabric**

John Boyle & Co.

Name of Applicator of Flame Resistant Finish
Statesville, NC

Signed:

Louis R. Brown

TENT DEPARTMENT—ANCHOR INDUSTRIES INC.

Louis R. Brown

Certificate for Top on **JOLLY CHOO CHOO**

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