

CHAIR SET

MFG: SPECIALTY MFG.
NAME: CHAIR JET
TYPE: NON-KIDDIE

OPERATIONS MANUAL

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201-565-0410

SPECIALTY MFG.

Newark, N.J.

201-288-3560

CHAIR SET

AFTER THIS---OTHERS WILL LOOK INCOMPLETE!

Capacity	24 Adults / Children
Rotation	12-13.5 R.P.M. CCW
Set-up area requirements	65' Dia X 29' Height / 19.8 m X 8.8 m
Set-up time / men	1.5hr / 1 man
Construction	Steel-Alum-Stainless-Fiberglass
MOTIVE POWER	Electric over hydraulic
Motor	45Amps-3 Ph- 220 Volts
Lighting	3 / 500 Watt Quartz
	935 European type
TRAILER	
Weight	12760 Lb. / 5800 Kilos Pin 4240 Lb. / 1927 Kilos Axles 8520 Lb. / 3873 Kilos
Height	13'0" / 3962.4 mm
Width	8'0" / 2438.4 mm
Length	18'7" / 5715 mm
Brakes	Air over Electric

Specifications subject to change without notice

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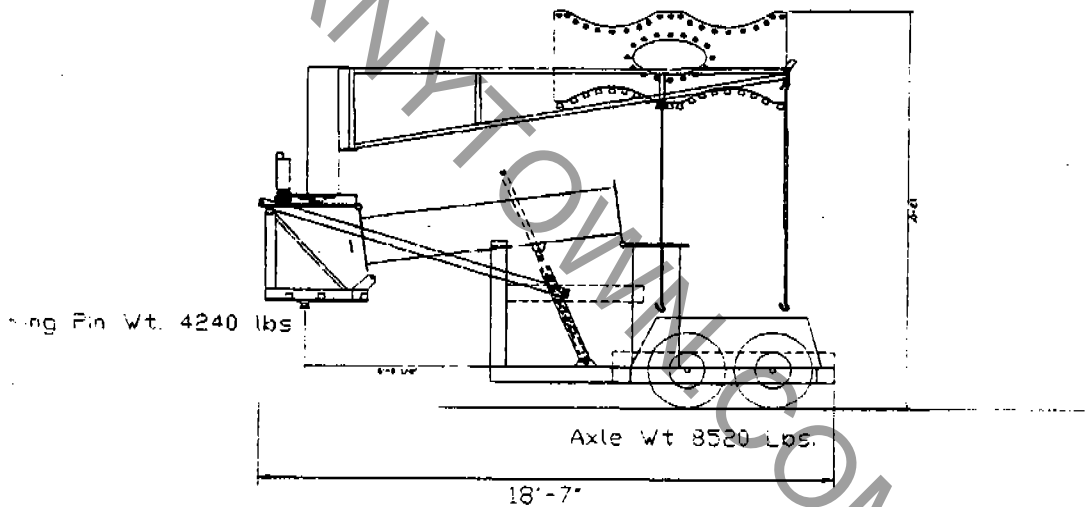
SPECIALTY MFG.

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CHAIR SET

SPECIALTY Mfg. - CHAIRJET 95-
Pictured ready for transportation
Gross Weight with Canvas 12760 Lbs.



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201-288-3560

CHAIR JET SET-UP PROCEDURE

1. Center the trailer with in a 65 foot diameter circle that is mostly level. If the ground is a little unlevelled, have the tow vehicle aimed toward the up grade. Block the tires and remove the tow vehicle properly.
2. Pull out and pin the rear stabilizers and level the lower section of the tower, (the hydraulic tank), using the level provided on the tower. **DO NOT** use the side stabilizers at this time. Level by using the front and rear stabilizers only. Use crib type blocking under foot pads to avoid screw jacks from extending more than 8 inches. Be sure to raise the trailer to take some weight off the trailer axle springs.
3. Raise the flag pole and raise the canvas up 3-4 feet.
4. Lower the support beam under the spokes.
5. Release but don't remove both chains that hold the spokes secure for transit.
6. Unhook **one** of the two chains holding the spokes and open that set of spokes pinning each scenery spreader in place as you go. Be sure the canvas top does not get caught on anything or get dirty while you are doing this.
7. Unhook the other chain and Repeat step 6 on the remaining spokes.
8. Un pin the main spoke from the support beam. You can now turn the ride by hand.
9. Turn the circle to the opposite side and join the spokes together using the turnbuckle behind that scenery spreader. **(BE SURE YOU ARE FAMILIAR ON HOW TO USE TURNBUCKLES)** Do not over tighten. Tighten just enough to install the pins in the hub at the middle of the circle. Install the pins.
10. Turn the spokes and check that the canvas top is attached to spokes and spreaders all the way around.
11. Close the seam of the canvas.
12. Raise the canvas and put quarter polls in place being careful not to abuse or dirty the canvas.
13. Remove the center gear guard and with the help of another, grease the center bearing while the other person turns the spokes. Some models have remote grease fittings and there will be no reason to remove the gear guard. **(CAUTION!! DANGER!!-- BE CAREFUL NOT TO GET CAUGHT IN THE GEARS WHILE THE OTHER PERSON TURNS THE SPOKES). (CAUTION!! DANGER!! BE SURE ELECTRIC IS IN THE OFF POSITION IN CASE YOU COME IN CONTACT WITH THE BRASS RINGS).**
14. Replace the gear guard and turn on the electric for the lighting.
15. Now is a good time to replace any defective bulbs.
16. Unpin the fifth wheel that the tow vehicle was attached to by removing the two pins that hold it in place. **(CAUTION!! the entire hitch unit will swing forward at this time).**
17. Install the seat hooks. Long hooks go on the ends of the spokes while short hooks go on the inside of the spokes. The opening should face the center of the ride.(see fig 4)
18. Lay out seats and install on to hooks. If seats are color coded, be sure to place colored pairs on opposite spokes.**(CAUTION! Be sure cables are not cross tangled)**
19. Install fencing. There is enough fence to create a 65 foot circle with an entrance and exit.
20. Unpin tower from trailer.(see fig 5)
21. Purge electric motor and be sure motor is turning in the correct direction.
(CAUTION!-Serious damage could result to hydraulic pump if rotation is

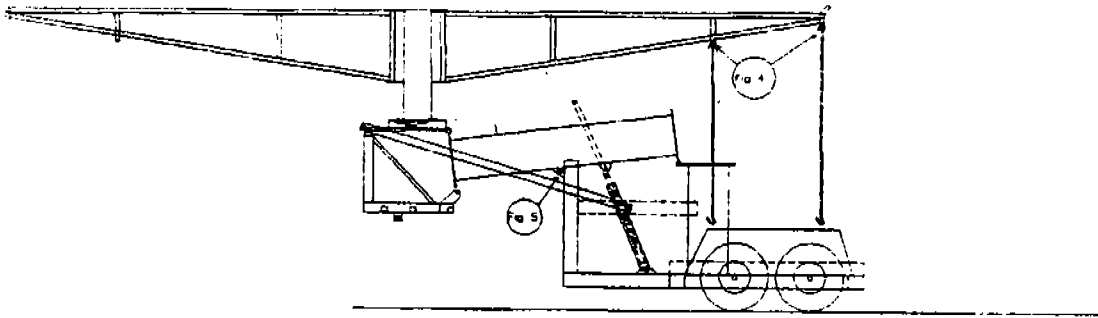
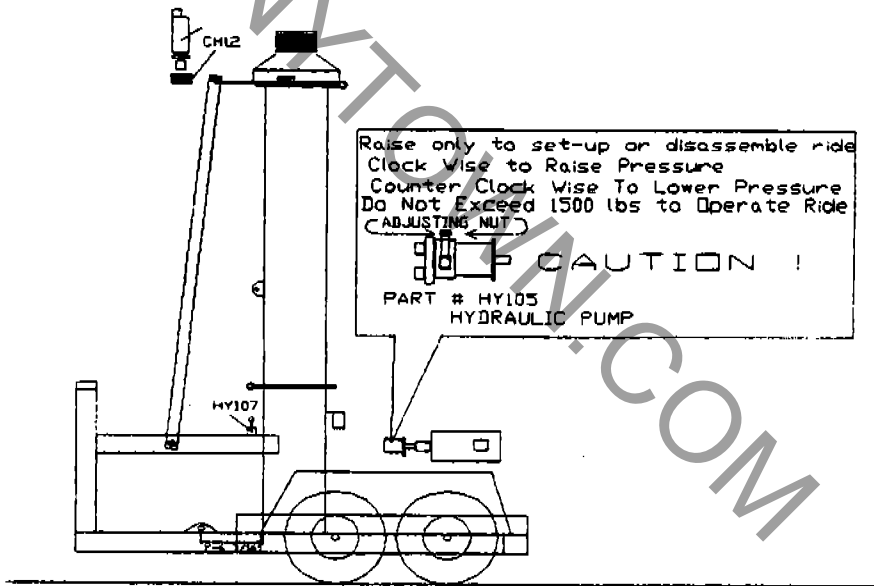


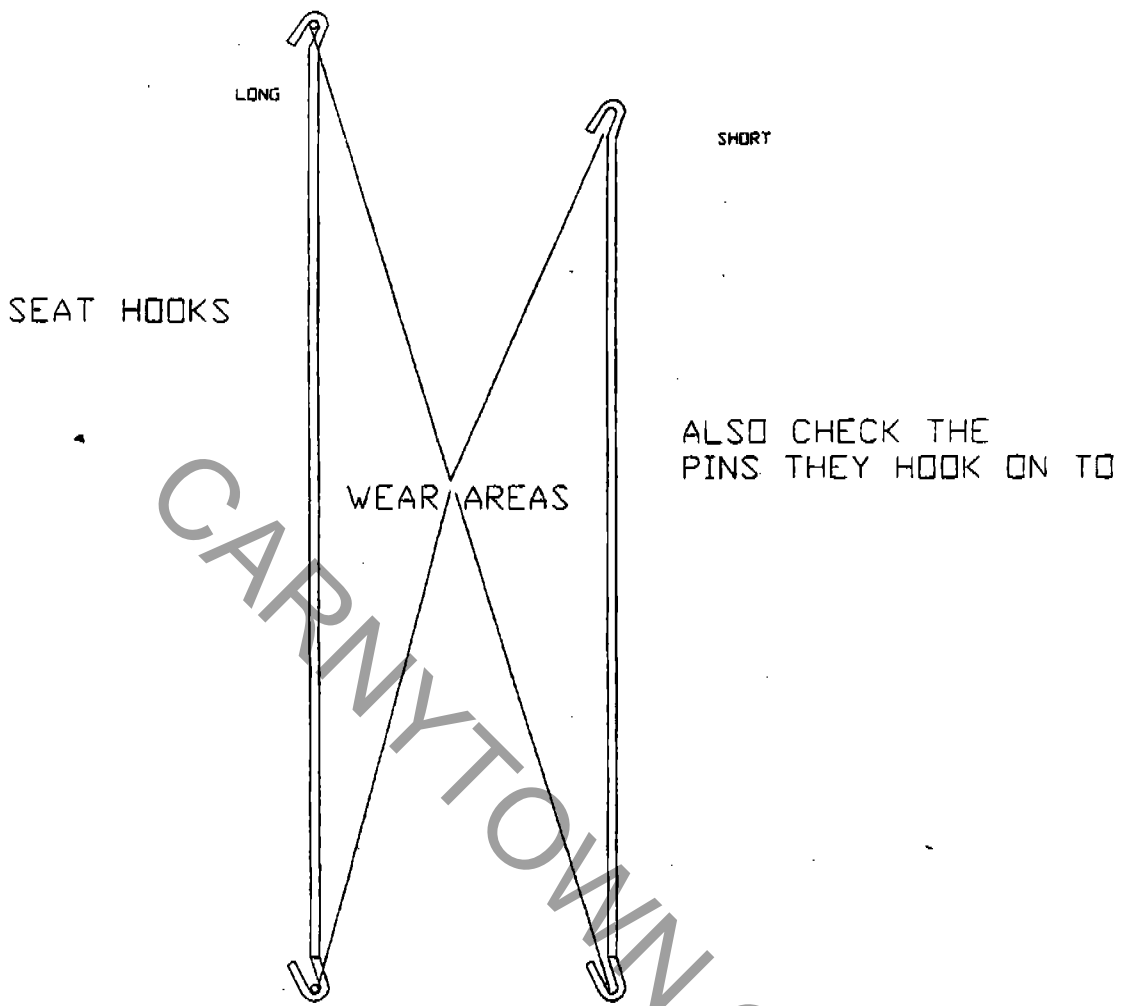
Fig 6



SETUP INSPECTION POINTS

TO BE PERFORMED WEEKLY BESIDES DAILY INSPECTION

1. Inspect that bearing bolts are tight and have not broke loose
2. Grease Main Bearing
3. Look for any stress cracks in structure, hinge points, and 5th wheel component.
4. Check for excessive bolt wear on sweep hinges. (REPLACE these bolts with same grade 8 quality bolts every 10th anniversary.
5. Condition of tires
6. Seat Hooks for excessive wear (3/16").
7. Excessive wear on sweep hanger pins and seat union pins. (3/16")
8. Commutator Brush Contact.
9. Condition of turnbuckle that joins the circle of sweeps.
10. Condition of fabric top
11. Pinion gear for excessive wear
12. Hydraulic Leaks
13. Condition of stainless steel aircraft cable including inside seats
14. Condition of seats
15. Condition of dogclips and cable on seats
16. Fence clearance
17. Electrical grounding
18. Electrical connection
19. Condition of control station.
20. Check main bearing for any plastic looking particles
21. Check there is no foreign mater that could get caught in gears during operation.
22. Check for excessive wear on hydraulic hoses.



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CHECK LIST FOR CHAIR JET

TO BE COMPLETED EACH DAY BEFORE OPENING RIDE TO THE PUBLIC

THE SAFETY OF THE PASSENGERS IS THE OPERATORS RESPONSIBILITY,
YOUR NAME GOES ON A ACCIDENT REPORT AS THE OPERATOR OF THE
RIDE.

Be sure you know emergency procedures as outlined in your hand book. It is also the operators responsibility to keep the ride clean, moving parts lubricated, maintained, and to also report any problems or incidents to the top foreman in charge on the job site.

LOCATION: _____

WEEK OF: _____ RIDE OPERATOR: _____

OK= allright-----NG= Unsatisfactory-----NA= NOT Applicable

Grounded Electric																				
BLOCKING																				
Seat Cables & Fraying																				
Dog Clips on seats																				
Tower Turnbuckles																				
Stress Cracks in Structure																				
Hydraulic Leaks																				
Entrance & Exit																				
Fence clearance																				
Tripping Hazzards in ride area																				
TEST RUN RIDE																				
unusual noise or vibration																				
Electrical Cords IN CLAMPS																				
Do you have a TICKET BAG																				
How Many BULBS NEEDED																				
OTHER																				

COMMENTS;

SAFETY PROCEDURES

NEVER COMPROMISE SAFETY!

1. Anyone designated to set-up, inspect, repair, etc., should be familiar and knowledgeable as to the understanding of tools, procedures, terminology of terms and statements. In other words, all work should be done by a person competent and qualified to do so.
2. This ride should be inspected as it is erected, once completely set-up, and daily before opening it to the public, to determine that the ride is not damaged or worn to a point that it causes a risk to the public.
3. Maintenance should be performed on the ride as described in this manual by a competent person familiar with lubrication, hydraulic systems, electrical systems, torquing of bolts, wear of bolts or pinned joints and hinges, passenger securing devices, operating and emergency controls, and that all parts are securely in place and functional including updated parts.
4. Study each job carefully to determine all hazards so that necessary safeguards can be taken.
5. Use proper tools for each job and know how to use them. (Ground all electrical tools used on the ride)
6. Perform your job dressed in the appropriate attire as to avoid clothing from getting caught in moving or electrified parts.
7. Wear approved safety glasses to protect your eyes.
8. For hazardous work such as working on moving parts or live electrical circuits, have another person work with you in case of emergency.
9. If guards must be removed from equipment, make sure they are replaced before leaving the job.
10. Clean up each job and dispose of garbage in the correct manor.
11. Keep records of parts replaced and date of replacement. Inform the manufacturer of any repetitious repairs and conditions that may cause ride failure in the future.
12. Make modifications and additions as outlined in the manufacturer's Service and Safety Bulletins.

DS

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 Chairjet. This includes the operator as well as the passengers.

9. **LOOSE ITEMS** - The passengers on the Chair Jet must not be allowed to ride with loose or loose type footwear, or carry on items etc., that might be dislodged from the ride while in motion.

10. **FOOD AND DRINK** - It is recommended that no food or drink be allowed onto the ride.

NUTS AND BOLTS

CAUTION; Torque values are given for steel bolts and steel nuts screwed in to 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.

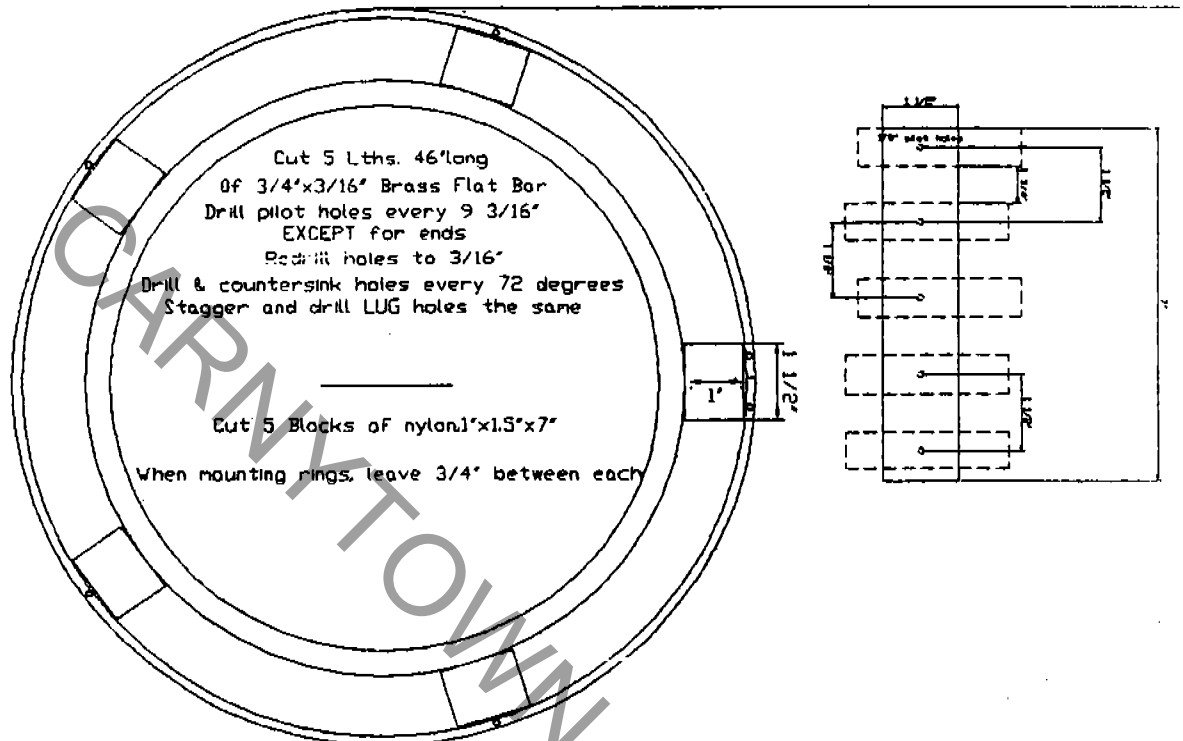
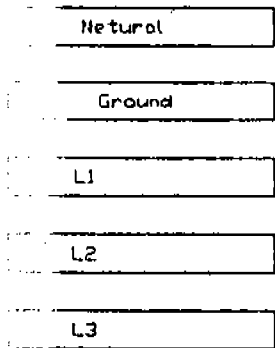
Thus if the mechanic can exert a 100 lb. pull, 5 feet times 100 lbs. would equal 500 ft. lbs. Any other torque desired can be reached by simply dividing the desired torque value by approximately 110 to determine the length of the pipe or "cheater" bar that is needed.

OPERATOR -SELECTION AND INSTRUCTION

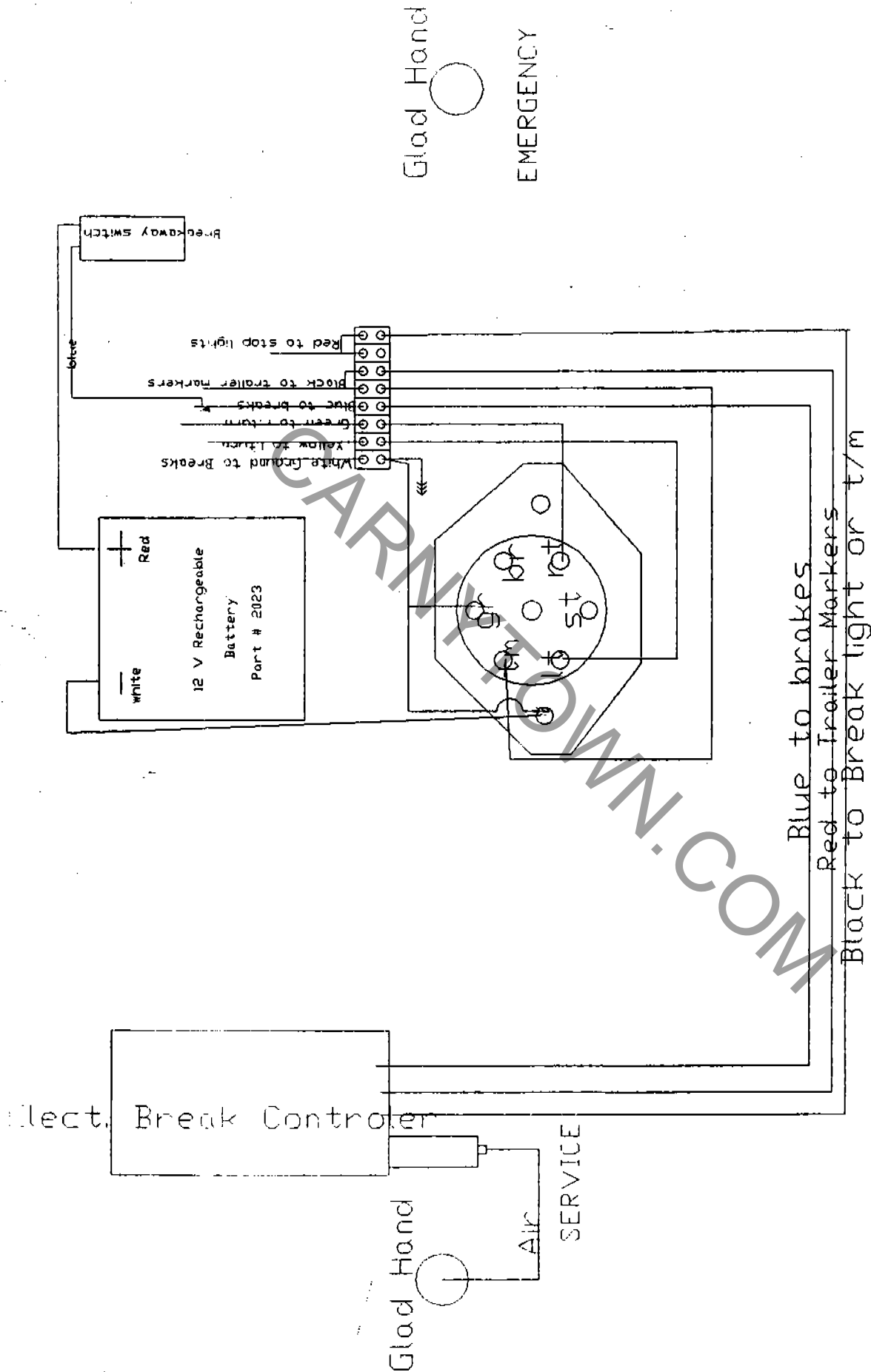
Select competent, mature operators, capable of understanding the function and use of amusement rides and their control.


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 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 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, turning upside down, 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 qualified operator, operate the controls of the ride, except those portions of the ride that are specifically designed to be controlled by the passenger.

Part #	Description	Amt. Required
1	Seat	24
1A	Seat	24
1B	Seat Insert	24
1C	Long Seat Hanger	12
1D	Short Seat Hanger	12
1E	Seat Union Hanger	24
1F	Nylon Hanger Bushing long	24
1G	Nylon Hanger Bushing Sht	24
Hy100	Hydraulic Cylinder	1
Hy101	Soloid Coil	1
Hy102	Soloid Subplate	1
HY103	Complete Valve	1
Hy104	Return Line Filter	1
Hy105	Hydraulic Pump	1
Hy106	Hydraulic Drive Motor	1
Hy107	Control Valve	1
Hy108	Restrictor Safety Valve	2
FC150	Rubber Spider Insert	1
FC15078	Pump Coupling Half	1
FC150158	Motor Coupling Half	1
22	Screw Jack Foot	6
23	1 1/2"x12"Screw Jack	6
24	Outside Scenery/spreader	12
25	Outside Top Scenery N/Lites	12
26	Alum Fence Section W/Foot	31
26a	Safety Gates	2
27a	Commutator Ring	5
27	Commutator Ring	1
28	Brush Assembly Complete	1
29	Umbrella	1
25A	Plexiglass Mirror	24
T309	Canvas top	1
109	Operators Station Complete	1
109A	Operators Panic button Comp.	1
109B	Start Button Complete	1
109 C	Switch N.Open	1
109 D	Switch N Closed	1
109 E	Start Name Plate	1
109 F	Emergency Stop Plate	1
110	Motor Starter	1
110A	Starter Coil 220volts	1
110B	Starter Rebuild Kit	
110 C	Starter Complete w/timer and relay	1
111	Relay	1
120	TOP LIGHT FLASHER	1
121	BOTTOM LIGHT FLASHER	1
130	Break Away Safety Switch	1



COMMUTATOR RINGS (swing 95--)



Glad Hand 

EMERGENCY

TRAILER LIGHT & BRAKES

GOOSENECK WIREING

05/20/95

TROUBLESHOOTING

SYMPTOMS

POSSIBLE SOLUTIONS

Electric motor will not start

Not connected to power supply correctly: Be sure the lead wiring is connected to a 3ph, 60 amp supply — Green is ground, White is neutral, Red, Black, and Orange are hot lines.

Circuit Breaker Tripped: Check and reset if necessary, the main circuit breaker and the circuit breakers located on the ride that power the motor controls.

Blown Fuse: Check the fuse located in the motor starter and replace if necessary.

Red emergency button is depressed: Release emergency mushroom button so it is in the OUT position.

Electric motor will not stay on.

Blown Fuse: Check the fuse located in the motor starter and replace if necessary.

Ride will not raise to the up-right position.

DANGER! Wrong rotation of electric motor!: Motor rotation should be **CLOCKWISE** when viewing the motor from the rear of the trailer. Have a qualified person switch two of the three hot lines of the electrical circuit to change motor rotation.

5th wheel (king Pin) assembly not unpinned from tower: Un pin the two pins that connect the 5th wheel assembly to the tower.

Connecting pin not removed — See Fig 5 in manual: Remove pin

Hydraulic pump pressure not adequate: See Fig 6 in manual to raise hydraulic pressure on pump. **CAUTION!** Lower pump pressure to under 1500 lb. to operate ride.

Flow divider valve in off position in off position: Once adjusted at the factory, this valve should not be adjusted. However if some one did move it, it is possible that it was moved to the off position. This valve is located just below and to the left of the

Hydraulic oil excessively hot.

nitrogen: Have the hydraulic accumulator checked by a qualified person. Nitrogen should be set at 200 lb. Replace if necessary.

Main bearing: Tear down the ride to the point of having the top section still in tact and check to feel that the top can be turned easily in both directions. IF NOT-- Main rotation bearing may be in need of lubrication or going bad due to lack of lubrication. to check this, visually inspect the bearing surface for plastic or metallic particles. Also inspect that the bearing race is not contacting the mounting plate. If any of these conditions exists call the factory.

Hydraulic component going bad: More then likely the pump or motor is going bad. Consult a person qualified in hydraulics or call the factory.

Ride stops too fast

Main bearing: Tear down the ride to the point of having the top section still in tact and check to feel that the top can be turned easily in both directions. IF NOT-- Main rotation bearing may be in need of lubrication or going bad due to lack of lubrication. to check this, visually inspect the bearing surface for plastic or metallic particles. Also inspect that the bearing race is not contacting the mounting plate. If any of these conditions exists call the factory.

Gears make a rumbling noise when running.

Lack of lubrication on gear surfaces: Remove gear guard and spray gear contact surfaces with Lubriplate Open Gear Grease. Replace guards.

Crushed obstacles in gears: Remove gear guards and check that no foreign mater is in gears. Replace guards.

Main bearing: Tear down the ride to the point of having the top section still in tact and check to feel that the top can be turned easily in both directions. IF NOT-- Main rotation bearing may be in need of lubrication or going bad due to lack of lubrication. to check this, visually inspect the bearing surface for plastic or metallic particles. Also inspect that the bearing race is not contacting the mounting plate. If any of these conditions exists call the factory.

Excessive movement of lower section of ride while ride is in motion.

Ride being operated out of balance: All rides should be balanced with respects to passenger placement. This is extremely important on the

Pin) hook up to provide a ground for your trailer. A connection must be made through the light plug connecting the tow vehicle to the Chair Jet.

Brake linings worn out: Have a qualified person check the brake system.

Brakes JAM on when applied

Tow vehicle air hoses connected incorrectly: Be sure the hoses are connected correctly. Try reversing the hoses.

Electric brake controller out of adjustment: The electric brake controller is located behind the aluminum cover plate on the 5th wheel (king Pin) assembly. Remove the plate and there is a adjusting lever on the controller. Follow the directions on the controller or the directions that came with your "manual package" as to how to adjust the controller.

Cracking welds or stress marks in steel.

**REPORT IMMEDIATELY TO
FACTORY!**

CARNYTOWN.COM

Timothy A. Horn, P.E.

July 28, 1995

Mr. Neil E. Cashman, Jr., Director
Commonwealth of Pennsylvania
Department of Agriculture
Bureau Of Amusement Rides and Attractions
2301 N. Cameron St.
Harrisburg, PA 17110-9408

Dear Mr. Cashman:

Ref: "Chair Jet" Amusement Ride by Specialty Mfg.

In accordance with a request by Mr. Ronald Cooke of Specialty Mfg. my services as a professional engineer have been retained with respect to the "Chair Jet" Amusement Ride.

Examination of the Amusement ride, Engineering Drawings, and Operating Procedures was performed on July 28, 1995 at the manufacturing facility located at Newark, NJ. The "Chair Jet" was examined for conformance with the following ASTM Standards and to the Amusement Ride Regulations for the Commonwealth of Pennsylvania:

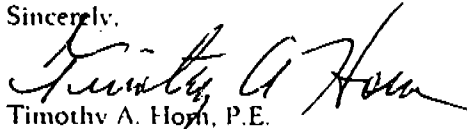
ASTM F698-88 Physical Information
ASTM F747-89 Definitions of Terms
ASTM F770-88 Operation Procedures
ASTM F846-92 Testing Performance
ASTM F853-91 Maintenance Procedures
ASTM F893-87 Inspection
ASTM F1159-92 Design and Manufacture
ASTM F1193-88 Quality Assurance

The results of my review indicate that the "Chair Jet" amusement ride, and the manufacturer, Specialty Mfg., conform to the applicable requirements of the ASTM Standards and the Amusement Ride regulations for the Commonwealth of Pennsylvania.

Based upon the above results, I do hereby Certify conformance of the "Chair Jet" amusement ride manufactured by Specialty Mfg. of Newark, NJ to the applicable ASTM Standards referenced above and to the Amusement Ride Regulations for the Commonwealth of Pennsylvania.

Should you have any questions regarding the above, please contact me. Thank you for your help in this matter.

Sincerely,


Timothy A. Horn, P.E.
Consulting Engineer

c:Mr. Ronald Cooke



Certificate of Flame Resistance



REGISTERED
APPLICATION
CONCERN No.

F-222

ISSUED BY
WATERLOO TENT & TARP CO. INC.
1029 COMMERCIAL ST.
WATERLOO, IA 50702
319-234-4679
800-537-1193

Date Work Performed

December 1, 1984

This is to certify that the materials described on the reverse side hereof have been flame-retardant treated (or are inherently nonflammable).

FOR Ron Cooke, Inc. AT 219 Hamilton Ave.
CITY Hasbrouck Heights STATE NJ 07604

Certification is hereby made that: (Check "a" or "b")

(a) The articles described on the reverse side of this Certificate have been treated with a flame-retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in conformance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal.

Name of chemical used Chem. Reg. No.
Method of application

(b) The articles described on the reverse side hereof are made from a flame-resistant fabric registered and approved by the State Fire Marshal for such use.

Trade name of flame-resistant fabric used Mardi Gras Reg. No. F-222

The Flame Retardant Process Used Be Removed By Washing

Bruin Plastics, Inc. By Dennis Angelone Title

We hereby certify this to be a true copy of the original "CERTIFICATE OF FLAME RESISTANCE" issued to us, "original copy" of which has been filed with the California State Fire Marshal.

WATERLOO TENT & AWNING CO., INC.

By

Chair Jet because of the speed and changing Characteristics of the ride when in motion. Instruct the operator to keep out of balance situations to a minimum and never to operate the ride with more than four seats out of balance. **BE SURE THE OPERATOR UNDERSTANDS THIS!**

Seats swing in and out in a uncontrolled manor.

Operator not holding the start button down hard enough or bad green start button: Try running the ride in the test mode by flipping the toggle switch on the motor starter controller to the test position. (Ride will operate and stop on its own when the green start button is pushed once.) If this corrects the problem then the operator is not holding the button in firmly enough, or the button is bad.

Wind may be a factor: Do not operate the ride when severe wind is present or storm conditions are apparent.

TRAILER

Trailer brakes will not work.

Be sure the trailer markers are on: The electric brake controller gets its main power from the trailer marker lights therefore the lights must be on for the breaks to work.

Electric brake controller out of adjustment: The electric brake controller is located behind the aluminum cover plate on the 5th wheel (king Pin) assembly. Remove the plate and there is a adjusting lever on the controller. Follow the directions on the controller or the directions that came with your "manual package" as to how to adjust the controller.

Breaks may be out of adjustment: Have a qualified person check the brake system.

Magnet coils burned out: Electric breaks operate by having electric sent to a electro-magnet that implements the breaking action. These wear out and or break in time and must be replaced. Have a qualified person check the brake system.

Broken wiring: Check to make sure all your wiring is in tact for the operation to work. Check that the wiring conforms with the "Trailer Lights & Brake Schematic" included in the manual.

Bad Ground: Do not rely on the 5th wheel (King

valve used to raise and lower the tower. Just open the valve just enough to move the tower at a safe rate of speed.

Motor on, and rotation OK, but ride will not run.

Hydraulic system selector valve in the wrong position: After raising the ride the selector valve located under the motor cover, must be switched to the opposite direction. Depress the emergency red button to turn off the motor and switch the position of the selector valve. Restart the motor and try running the ride.

Coil on electrical control valve is bad: With the motor off and the emergency red button in the out (OK) position and the green button pushed, check to see that electric is getting to the coil. If so the valve should click when the green start button is pushed.

Ride will not lower when disassembling

Hydraulic pump pressure not adequate: See Fig 6 in manual to raise hydraulic pressure on pump. **CAUTION!** Lower pump pressure to under 1500 lb. to operate ride.

Flow divider valve in off position in off position: Once adjusted at the factory, this valve should not be adjusted. However if some one did move it, it is possible that it was moved to the off position. This valve is located just below and to the left of the valve used to raise and lower the tower. Just open the valve just enough to move the tower at a safe rate of speed.

Blockage in safety valve located at bottom of hydraulic cylinder: The valve located at the bottom of the hydraulic cylinder is free flowing entering the cylinder and restricted to a pinhole when fluid is exiting the cylinder to prevent the ride from just dropping if a hose should burst. This pinhole has been known to get clogged thus preventing the fluid from emptying from the cylinder causing the ram not to lower.

Ride operates too fast.

Hydraulic pressure too high: Adjust pressure to under 1500 lb. See Fig 6

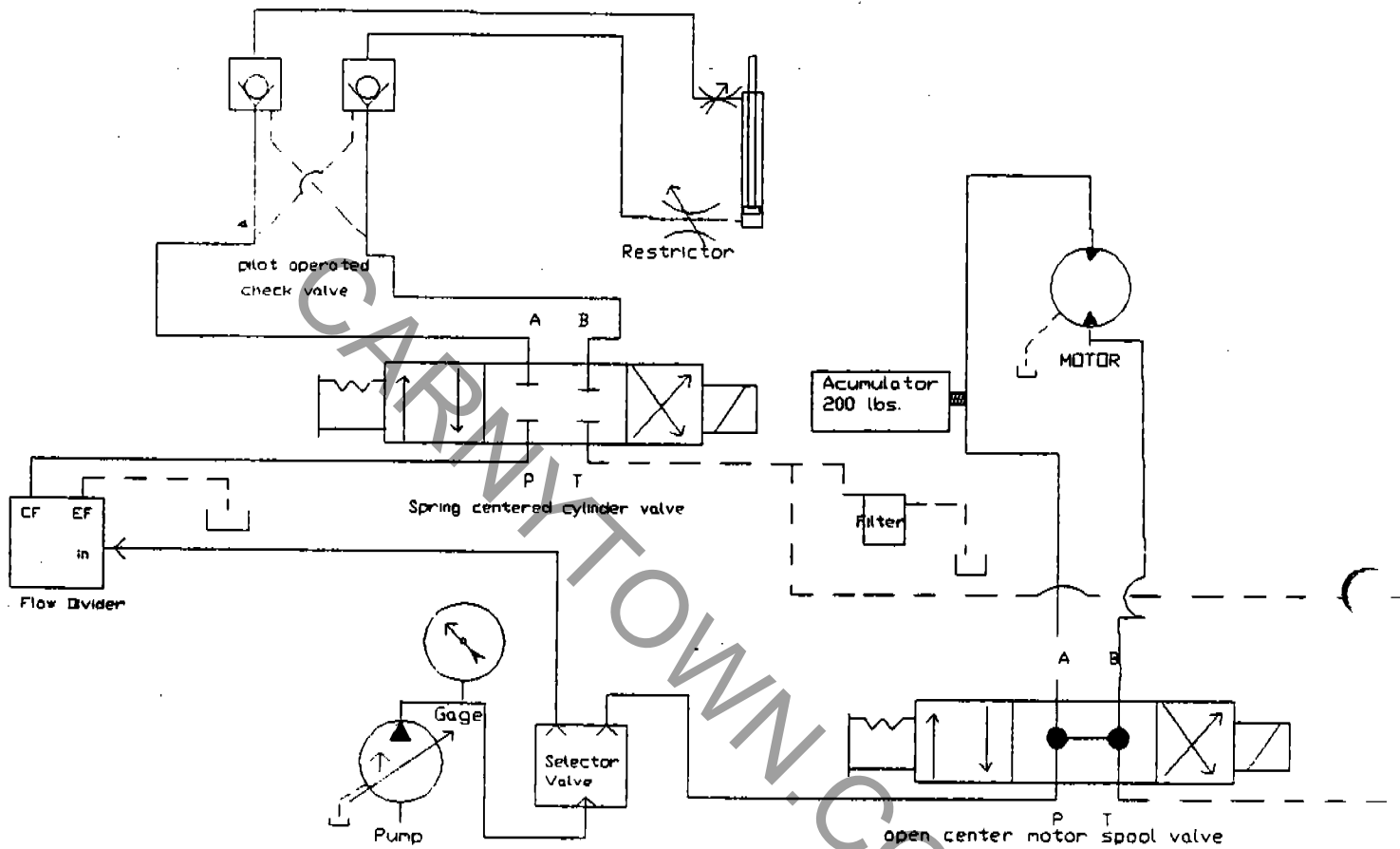
Ride starts too hard sometime.

Hydraulic pressure too high: Adjust pressure to under 1500 lb. See Fig 6

Ride start too hard all of the time.

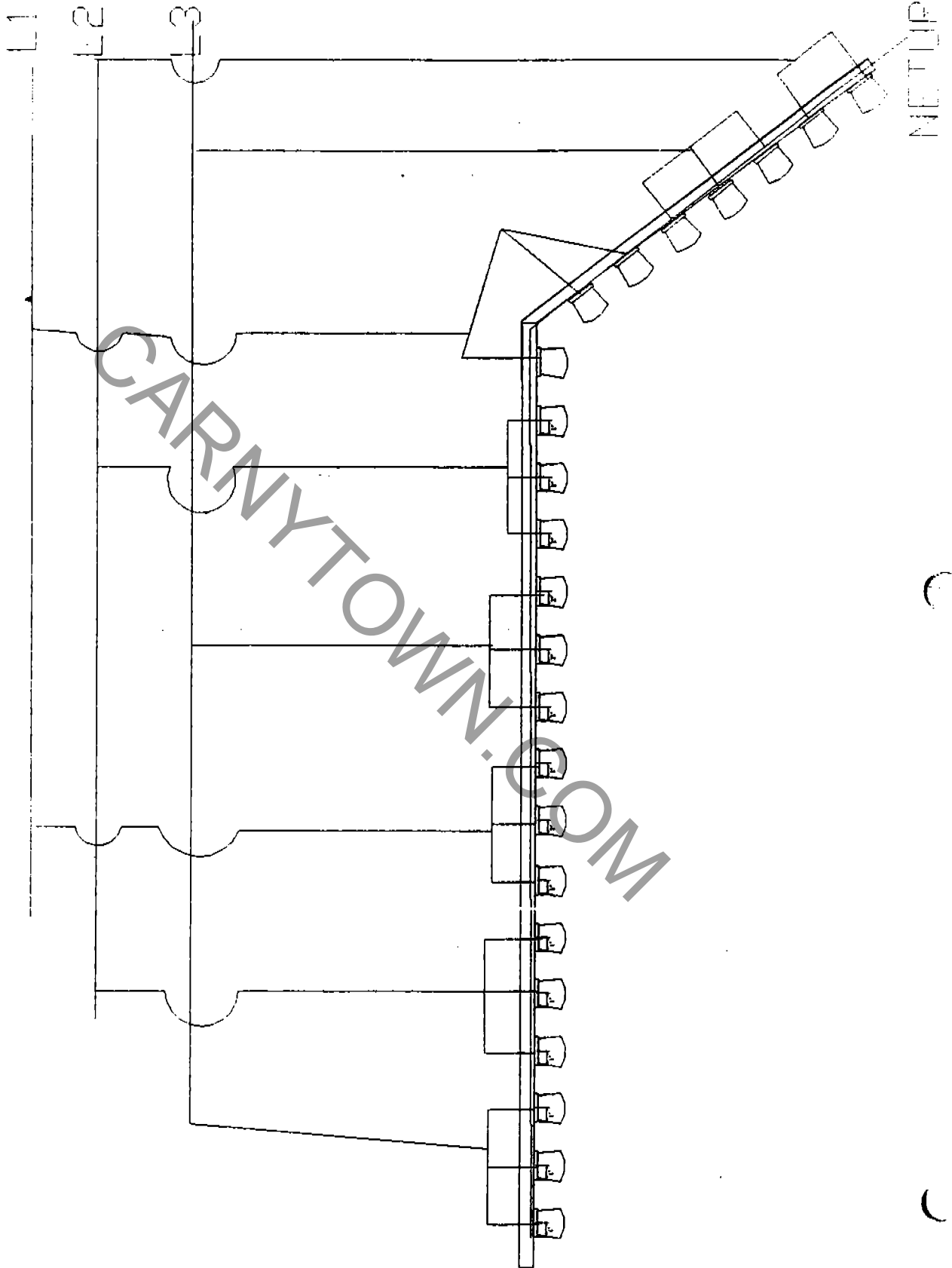
Hydraulic pressure too high: Adjust pressure to under 1500 lb. See Fig 6

Hydraulic Accumulator bad or wrong amount of



SPECIALTY Mfg. - CHAIRJET -
HYDRAULIC DIAGRAM

SWEEP LIGHTS



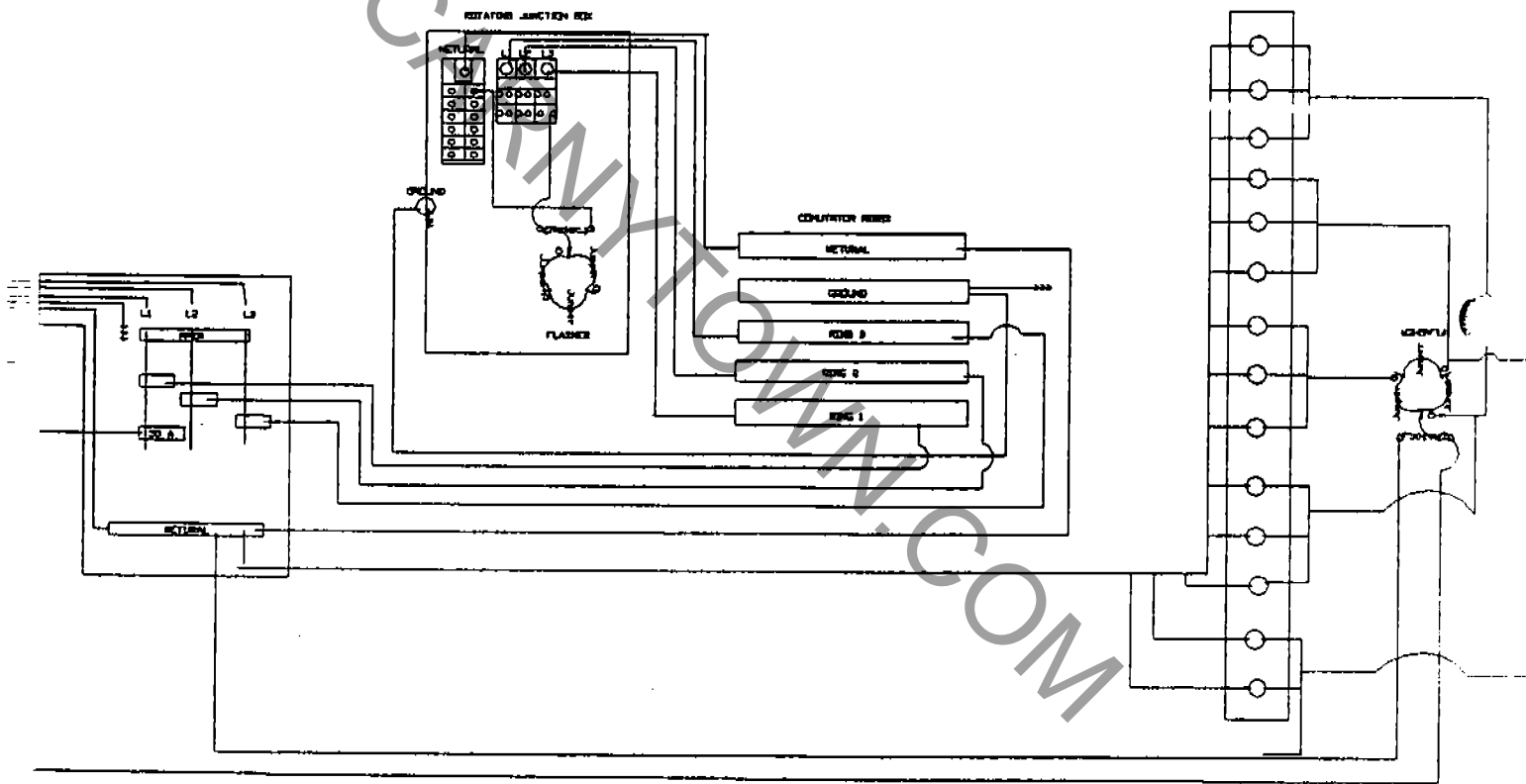
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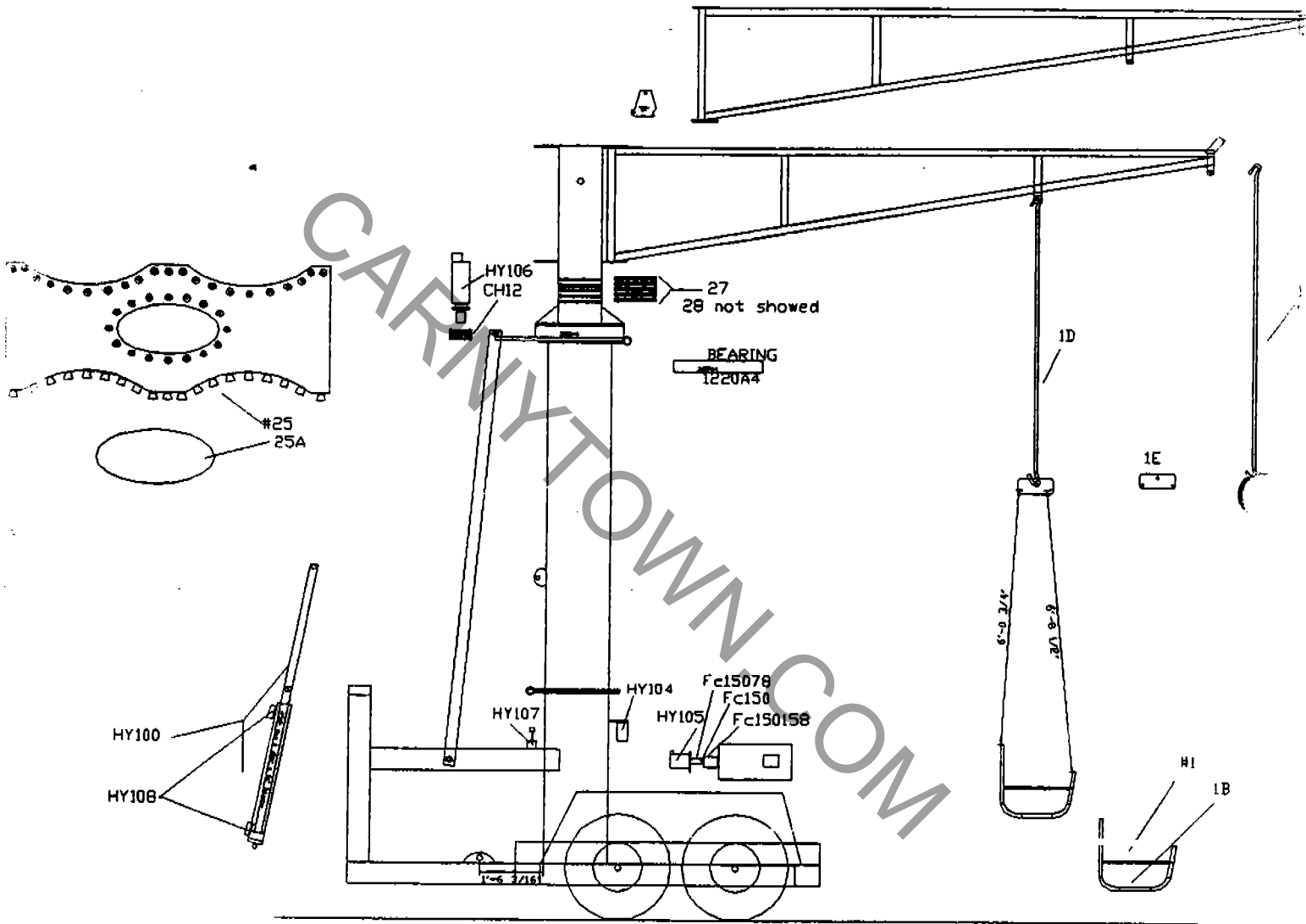
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CHECK OTHER LAYERS FOR MOVEMENT

LAYER 2

ELECTRICAL SCENE (LIGHTS & CONTROLLERS)





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.
- It. 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.

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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 preload to the bolt that will be very close to the same value that would be achieved if a torque wrench had been used.

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OPERATING AMUSEMENT DEVICES

OPERATOR INSTRUCTIONS

The following are the correct loading (balance) procedures for amusement devices: Every amusement ride must always be operated with a balanced load of passengers at all times.

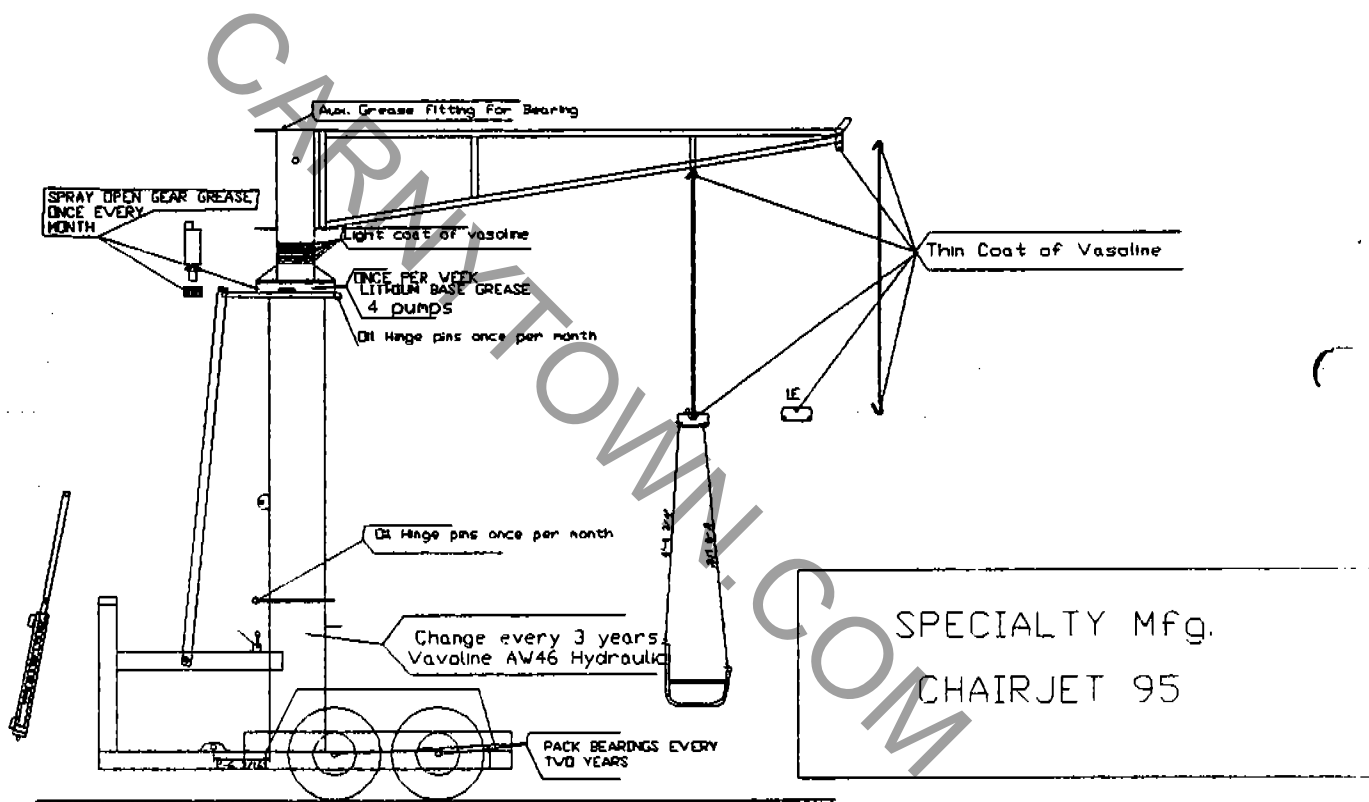
2. The balancing rule is to ensure an even load on the ride's structure and mechanical drive, which in turn will cause less wear and tear and ensure a safer, longer life of the structure with less down time for adjustments and repairs.
3. In practical terms, consider the difference in driving a motor vehicle with balanced wheels as against unbalanced wheels, which causes vibrations and eventually wear and tear. The majority of operators have experienced driving a car with unbalanced wheels and the consequent results. Amusement devices are mostly large wheels and react the same as an automotive wheel when out of balance.
4. Although the out of balance load on some devices cannot be felt by the passengers or operator, it is still essential for the ride to be balanced.
5. On an extremely fast moving ride, it is essential that the ride be accurately balanced at all times.
6. Although it may not be strictly essential to balance slower revolving rides, it is still most desirable to achieve a balanced load, in the interests of the passengers and the owner of the ride, for increased safety and less "wear and tear".

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

LUBRICATION POINTS

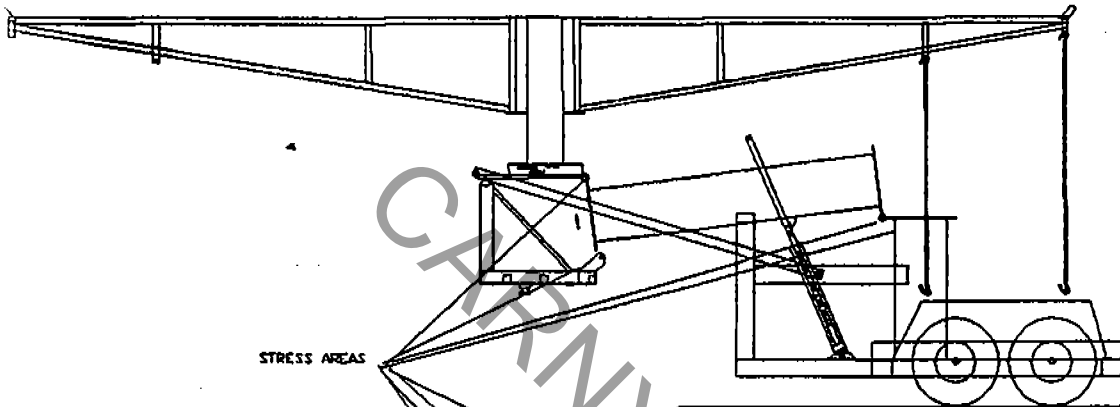


PASSENGER OPERATION

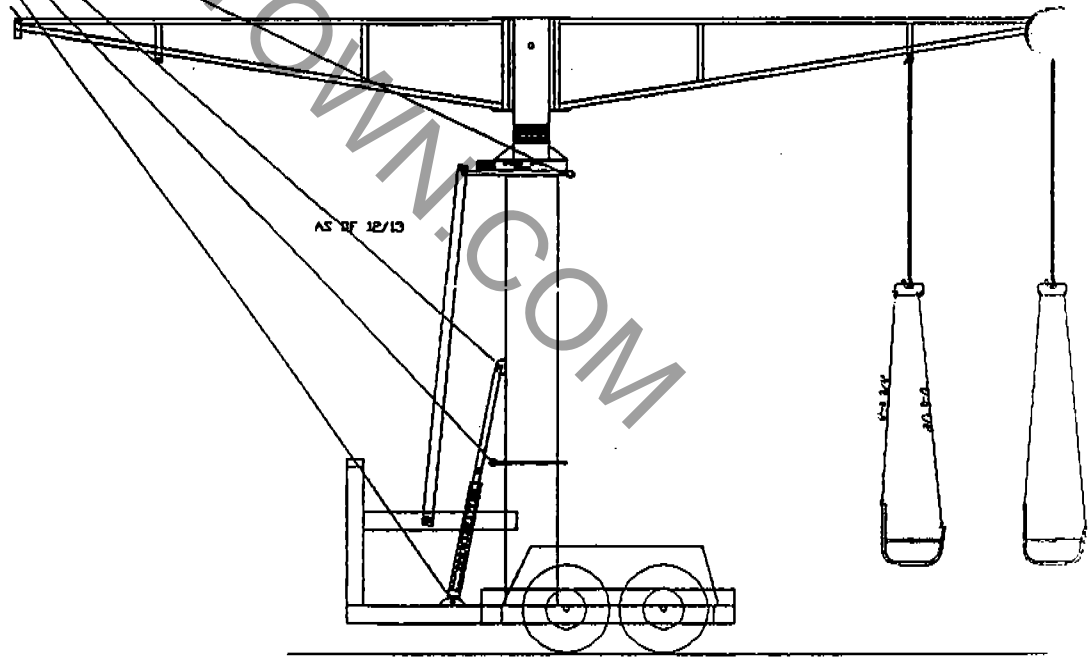
1. At the beginning of the ride cycle, IF you have enough passengers to fill the complete ride, allow 24 passengers in to the seating area. **If not, direct passengers to seats that will keep the ride in a somewhat balanced state. !! IF YOU DO NOT UNDERSTAND THIS STATEMENT, HAVE SOMEONE WHO DOES UNDERSTAND IT EXPLAIN IT TO YOU!!** We suggest not having a out of balance condition of more then 600 pounds (3-4 passengers) or serious damage may result to the ride that can cause injuries to passengers.!
2. Walk systematically around the ride facing the passengers in the seats and collect the tickets and at the same time check that they meet the height requirements and regulations and check that they are securely fastened in the seat.
3. Operate the ride for a duration of 1.5-2 minutes. While the ride is operating, keep a look out that the passengers are conducting themselves in a correct manor and that the spectators are also doing the same. **If at anytime anyone or thing violates the integrity of safety, use wisdom in doing whatever is necessary to correct the problem. A unruly passenger should be ejected from the ride. ALSO be aware of any strange noise that should not be present. If anything does not sound right, hit the safety button and follow what ever procedures are required of you. ALSO do the same if any serious leaks occur.**
4. At the end of the ride cycle, open a exit for the passengers and restart a new cycle.

THE FOLLOWING PEOPLE SHOULD NOT RIDE

1. No infants.
2. Those under 40" tall unless accompanied by an adult.
3. Those who are pregnant.
4. Those with heart conditions.
5. Those with back problems.
6. Those subject to motion sickness.
7. Those with health problems or physical disabilities.
8. Those under the influence of alcohol or drugs.

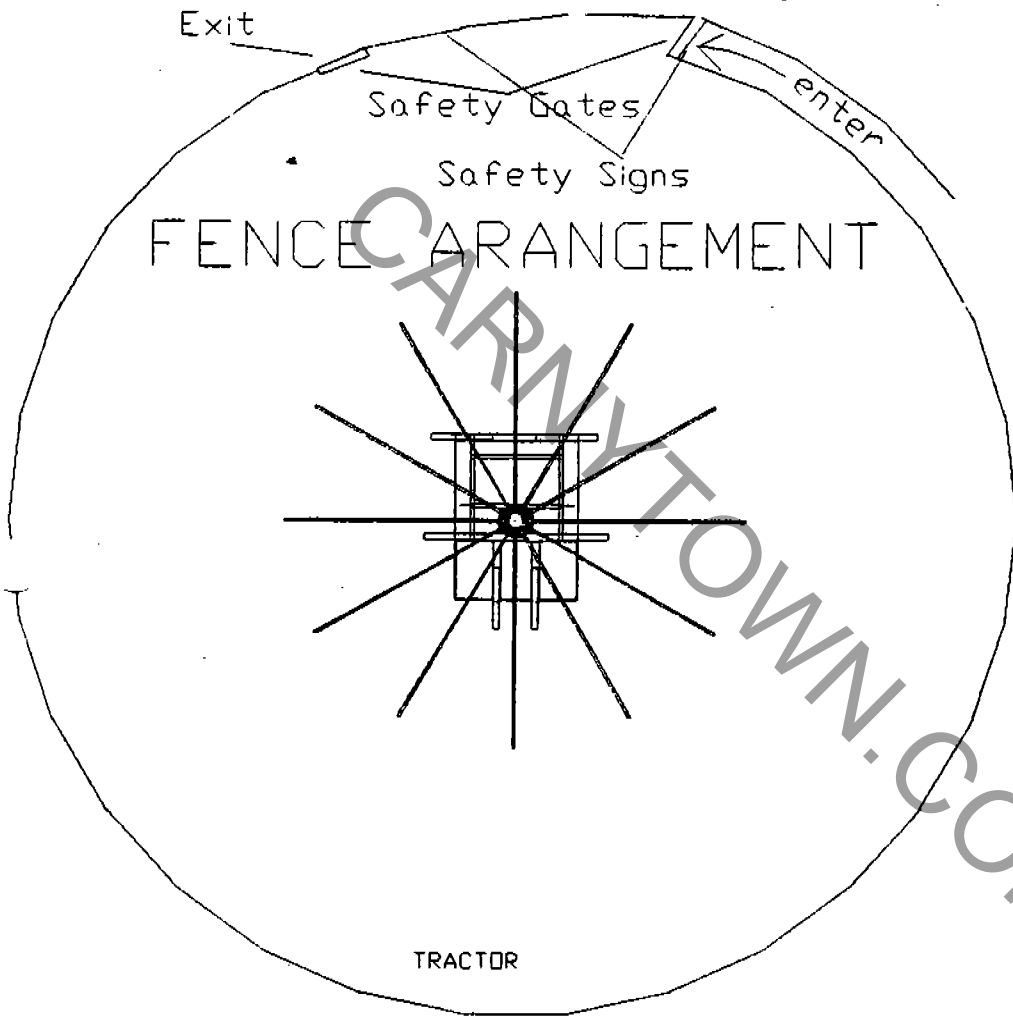


STRESS AREAS



AS OF 12/13

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FENCE ARRANGEMENT

- incorrect for a duration of time). When standing at the rear of the trailer, the pump shaft should be turning clockwise!
22. Pull out and pin side stabilizers. Tighten screw jacks a little more than snug only.
 23. CAUTIOUSLY raise the tower using the control valve located near the hydraulic tank by the sight glass. CAUTION!- As the tower raises, the center of gravity changes causing the tower to slam into the upright position. This must and can be avoided by easing back on the hydraulic control valve as the tower gets toward the upright position. Doing this will cause the hydraulic cylinder to act as a break to slow down the movement of the ram rod coming out of the cylinder, easing it into place rather than letting it slam into place. BE SURE YOU UNDERSTAND THIS MESSAGE!
 24. Once the tower is in place, install and tighten the two turnbuckles to lock the tower in the upright position.
 25. Move the hydraulic system selector valve to the opposite position to energize the rotation system. Lowering the pump pressure to under 1500 lbs is necessary at this time—See Fig 6.
 26. Perform a inspection of the ride and operate the ride a few times. (CAUTION! BE SURE ALL ASPECTS OF RIDE AND CONDITIONS ARE ADEQUATE TO ALLOW PASSENGERS TO RIDE SAFELY).
 27. The automatic mode of the control is for checking the ride only. Caution people to stay clear of the ride when testing clearances.

NEVER COMPROMISE THE SAFETY OF THE PASSENGERS

DISASSEMBLY

Disassembly can be achieved by reversing the set-up procedures. Some points to mention are;

1. Be sure to unatche the turnbuckles from the top tower.
2. Increase the pump pressure 1 turn.
3. When lowering, be sure nothing, espieccally the seats get caught on anything.
4. Pin the top tower to the trailer imeadiatly.
5. Shut off power.
6. Unstitch the correct side of the top canvas.
7. Pin the main sweep to the support brace.
8. Insert the safety chains to keep the sweeps closed over the road.
9. If the canvas top is left on; be sure the safety straps are in place as to prevent wind from damaging the top and causing a sail effect.
10. Lower the flag poll.
11. Insert a 6" X 6" block behind each rear tire to prevent rolling when hooking up to the tow vehicle.
12. Be sure all Pins and R keys are in place.

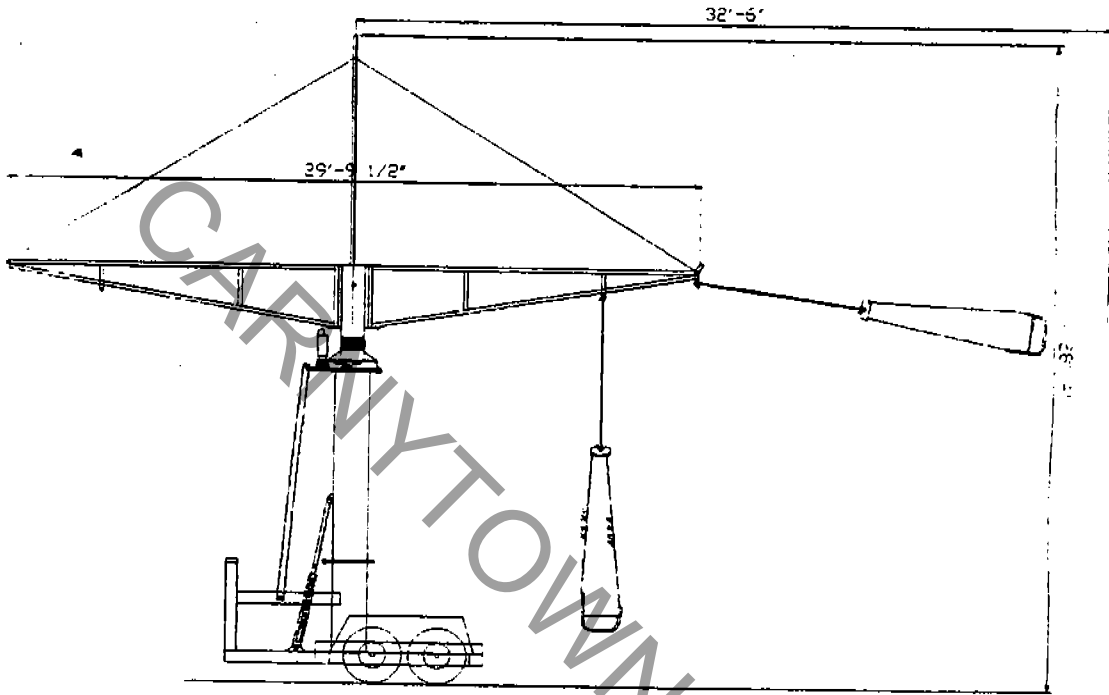
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CHAIR SET



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Florida Department of Agriculture & Consumer Services
BOB CRAWFORD, Commissioner
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Please Respond To:
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TO: Specialty Mfg. Co. **DATE:** May ¹³ 12, 1998
PHONE: 973-565-0410 **FAX:** ~~973-288-3560~~

201-288-9367

FROM: Michael W. Rinehart, Opns. & Mgmt. Consultant
Ph. (850) 413-7756 FAX (850) 488-9023

RE: "Chair Jet"
NUMBER OF PAGES (Including this cover sheet) 01

COMMENTS

We recently received a copy of your "Chair Jet" operations manual. We are unable to determine what the maximum weight capacity per seat is. Please advise so we can notify our inspectors.

Additionally I would appreciate your providing the name and address of the person(s) who can, if necessary, answer technical questions that may arise in the future.

Thanks for your prompt attention.

*9:49 msg. from Ronnie Cook
pages: 1-201-814-2319
phone: 1-973-565-1401
seats rated for 200#
Tactical Av 150 - in ?*

