LITTLE ELI

- 6 Seats; 18 Passengers Per Load
- Suitable for Indoor Mall or Outdoor Park
- Programmed Incandescent Lighting Standard
- Single Lever Speed Control/Hydrostatic Transmission
- Many Color Options (Including Upholstery) Available
- Racked Trailer Available As An Option

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800 CASE AVENUE JACKSONVILLE, ILLINOIS 62650 USA

800-274-0211 (217-245-7145) FAX 217-479-0103

E R E C T I N G I N S T R U C T I O N S

FOR

NO. 6 BABY ELI WHEEL

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ELI BRIDGE COMPANY

Jacksonville, Illinois, U.S.A.

*
***
*

Serial No. _____ Year Model 1955

NAME: JEFFERY W. ABENDSHIEN

ADDRESS: _____

CITY: DELAWARE, STATE: OHIO

*
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*

BABY ELI WHEEL ERECTING INSTRUCTIONS

Erection of the BABY ELI WHEEL is very easy. With the exception of one operation, the Wheel can be erected by two men.

First: Select the location where you want the Wheel to stand. BABY ELI Wheel requires a space of 11 ft. deep by 16 ft. 7½ in. wide. This space must be clear of trees and wires for a height of 20 ft.

Lay out the various parts of the Wheel as shown in Photo No. 1. Block up or dig out until you have the baseboard perfectly level. Put the bases on the baseboards. The baseboard has a socket on each end for the tower plate of the bases to fit into. When facing the Wheel from the front, the plain base should be on your left with the slot to receive the windbrace on the outside; the base with the gear plate should be on your right side with this plate on the inside. Block up the bases until they are level.

Put in the base crossbars and pin them in place. Then uncoil enough of the drive cable to lay on the inside of the base on the gear side; it will then be ready to put in place at the proper time (see "CABLE"). You are now ready to assemble the towers.

HUBS - AXLE - TOWERS

Put the hubs on the axle. These slide on and either hub will go on either end of the axle. Put the spacer carrying electric light rings on the axle next to the hub. This will fit on either side, depending on which side you want your lead wires to come in. Place the plain spacer casting on the opposite end of axle next to the hub. Now slip the towers on the end of axle and put the collars on to hold them securely. Then pin the towers to bases and drop the cotter keys in the slots of these pins. Fasten the electric brushes on the towers and run the outside drop down the inside of the tower. You are now ready to hoist the towers to place.

HOISTING TOWERS

Towers should be hoisted into place as shown in Photo No. 3. Four men are required to do this operation. DO NOT try to hoist the towers with less than four men as these towers are heavy. After the towers are in place, put in the two additional tower pins and the cotter keys. The Wheel can then be completed with just two men.

KNEEBRACES - WINDBRACES

The kneebraces go into place very easily. Refer to Photos Nos. 4 and 5. The kneebraces fit into the slot provided at the top of tower, and at the end of the base. They are held in place at the bottom by the little keys as shown in Photo No. 4. Next put in the windbraces as shown in Photo No. 5. These fit in the slot provided at the top of towers and are pinned in place. Take the lock plates and tap them (without forcing) behind the rivet heads at the top of the windbraces (Photo No. 5). These keep the pins from working out. The bottom of each windbrace is pinned to the windbrace crossbar which is, in turn, pinned to the tower.

BRAKE BAND AND OPERATING EQUIPMENT

Place the brake band clevis over the plate on the front side of gear tower. (This extends to the outside of tower). Push the threaded end of brake rod through one hole in the clevis and then through hole in tower plate.

Now place the spacer pipe (3/8 X 1-5/8") over the threaded end of the rod. Place one side of brake band over the rod next to spacer and push rod through back side of clevis. Put on brake band spring, and other side of brake band, applying nut to hold band in place. See Photo No. 10.

CLUTCH - GEARING - BRAKE DRUM

Put these items in as shown in Photos Nos. 6 and 9 and you will have no trouble. Place the extension of brake rod in the hole in brake ratchet and handle attached to main rod with clevis connection, and place brake ratchet on side of base as shown in Photo No. 6.

SPOKES - RIMS

Spokes are interchangeable; any spoke will fit any one of the sockets provided. You cannot get the spokes in wrong, as they will go in just one way. Have one man sit on the axle and pin these spokes in place as the other man holds them. Put all of the spokes on one side of the Wheel in first, and then the spokes on the opposite side. See Photo No. 6. After the spokes are all in place, take the large rings and snap them in place on the hubs. This prevents the pins from coming out.

Put in the spoke crossbars next as shown in Photo No. 7. Follow this operation with the installation of the spoke cables. Do not draw the cables up tight. This will be done when you true the Wheel. Put in one pair of cross cables from one set of spokes to the next. Now tighten the set screws in the hubs securely to the axle.

Put in the rims and the woodrims. When putting in the seat pins the pipe spacers should be placed directly under the nut of the pins on the left side of the Wheel. On the drive side these spacers should go under the woodrims.

TRUING THE WHEEL

To true the BABY ELI WHEEL turn the Wheel until one pair of spokes is in line with the towers. Loosen or tighten the turnbuckles of the cross cables until this pair of spokes is in line with the towers; then go on around the Wheel truing each pair of spokes in the same manner. Then by loosening or tightening the spoke cables, see that the center of each woodrim is the same distance from the tower as the center of the drive sheave. Now put in the remainder of the cross and parallel Wheel cables.

CABLE

Run the cable around the Wheel as shown in Photo No. 8. Then put in the idler sheave and thread the cable on these sheaves. Pull the cable tight, but not too tight - just enough to pull the Wheel without slipping.

Now again, true the spokes to be sure that every woodrim is in line above the drive sheave and the cable runs true.

LIGHT CIRCLE

Put in the light circle as shown in Photo No. 8. The panel sections are fastened at the crossbars with 3/8 X 1½" machine bolts. Connect each section together by adding the jumpers provided, running the inside drop up to the electric rings.

LOADING PLATFORM

The loading platform pins to the two base crossbars which are shown in Photo No. 4. The ramp is attached to the loading platform by loose pin hinges. By pressing with the foot on the treadle at the side of the loading platform, the operator can bring the platform up to the seat foot-bottom for loading and unloading seats. By releasing the treadle the platform drops down out of the way of the seats.

SEATS IN POSITION

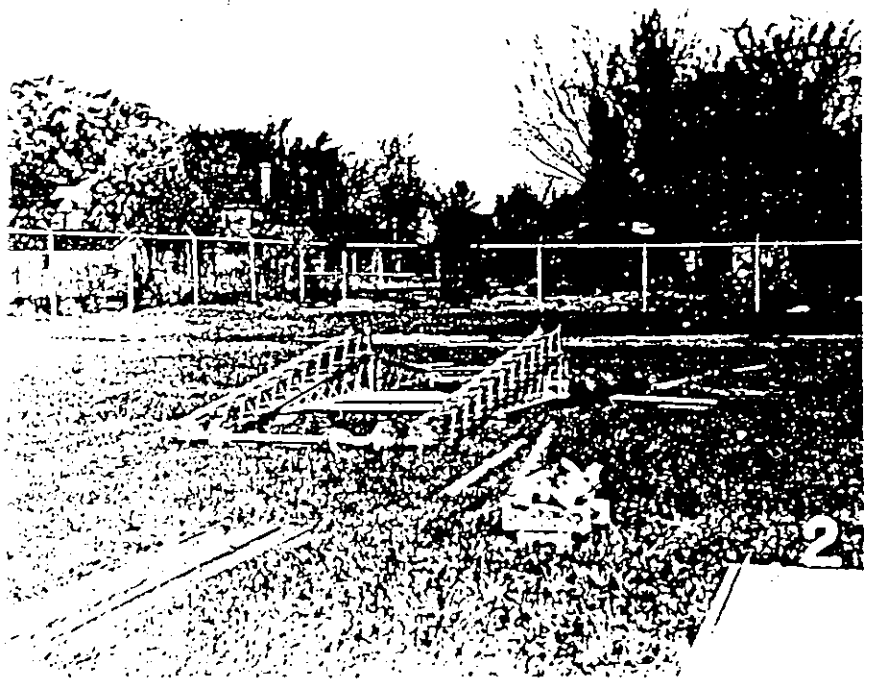
Hang the seats on the Wheel locking them in place with the 3/16 X 3" cotter keys. These keys must be used as they keep the seats from coming off the pins.

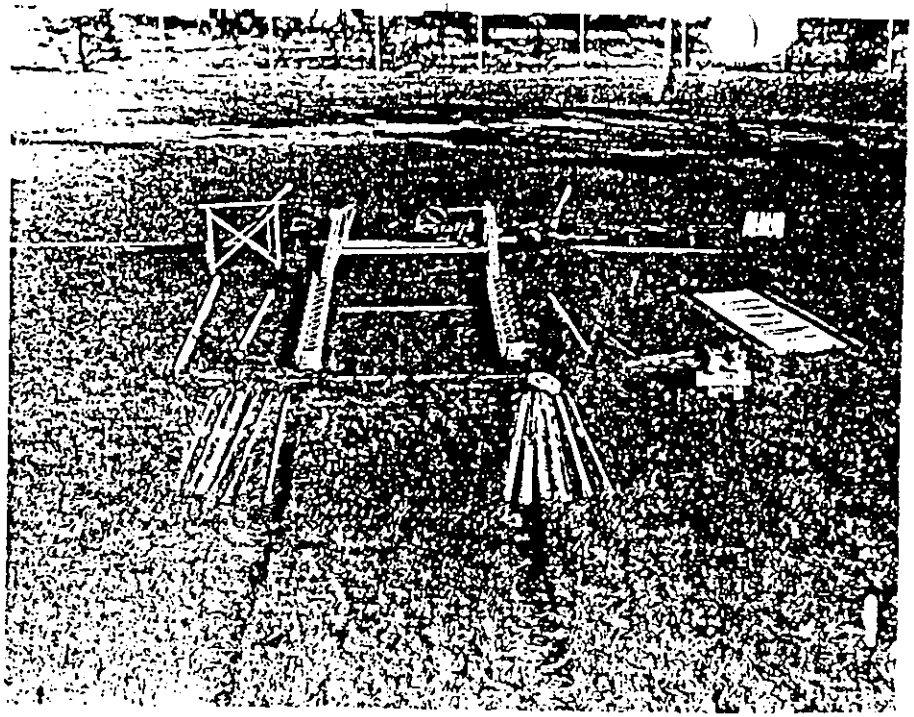
TICKET BOX

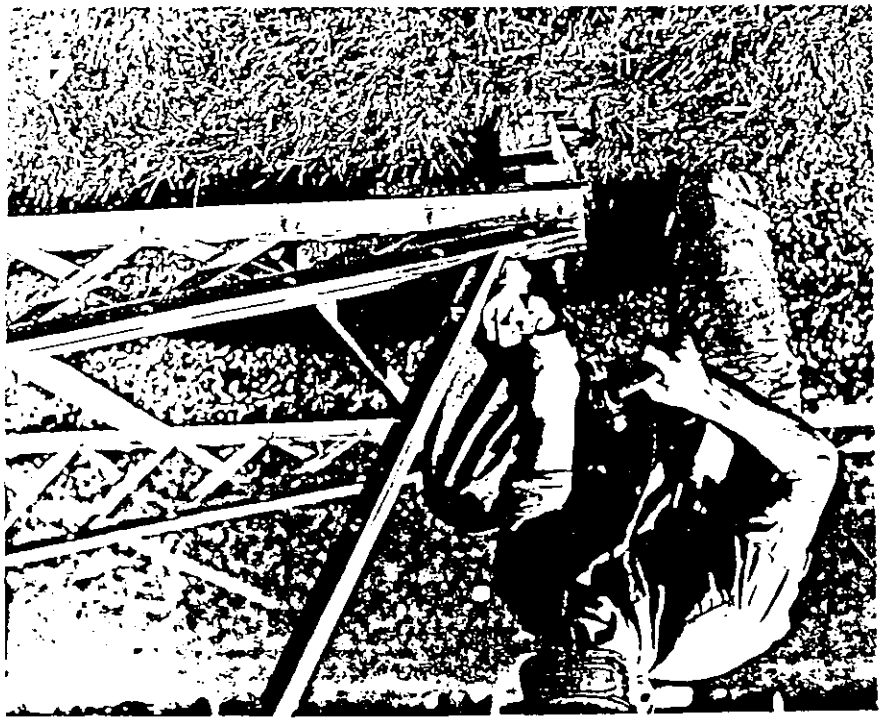
Assemble the Ticket Box, hook up the Lights and Electric Motor and you are ready for business.

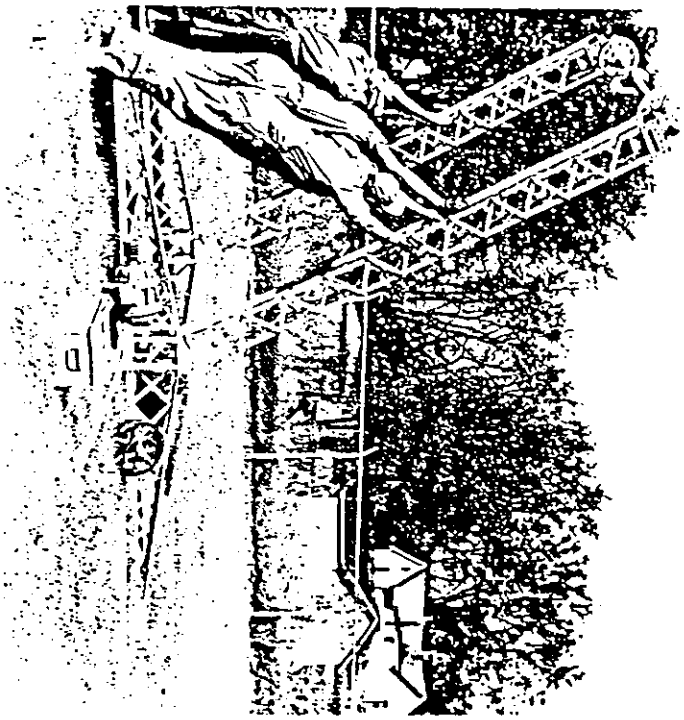
Follow these directions and the Photographs, and you will have no trouble getting started with the BABY ELI WHEEL.

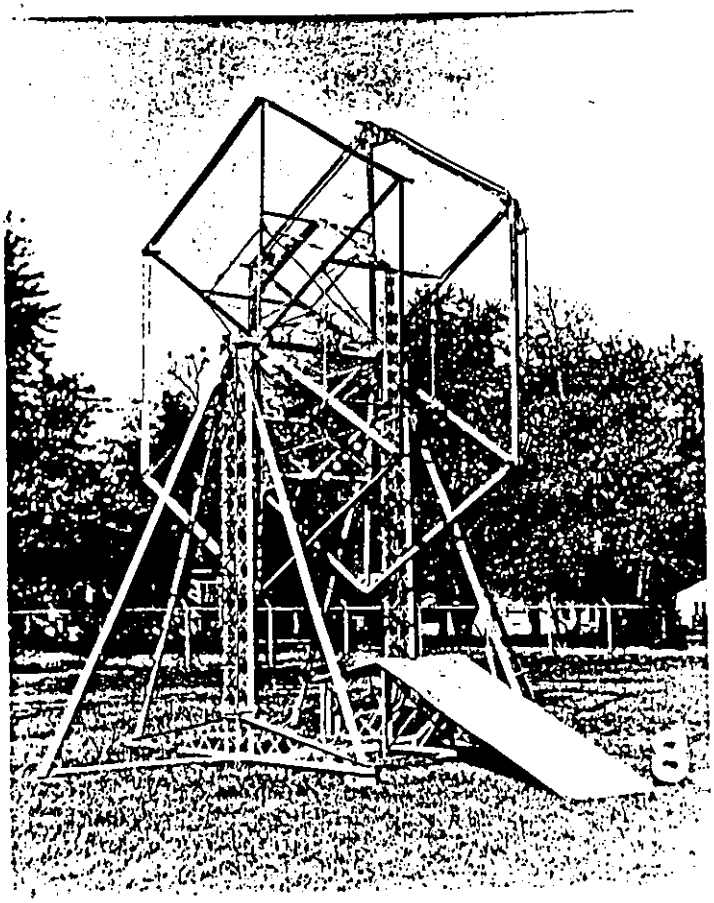
ELI BRIDGE COMPANY
800-820 Case Avenue
Jacksonville, Illinois

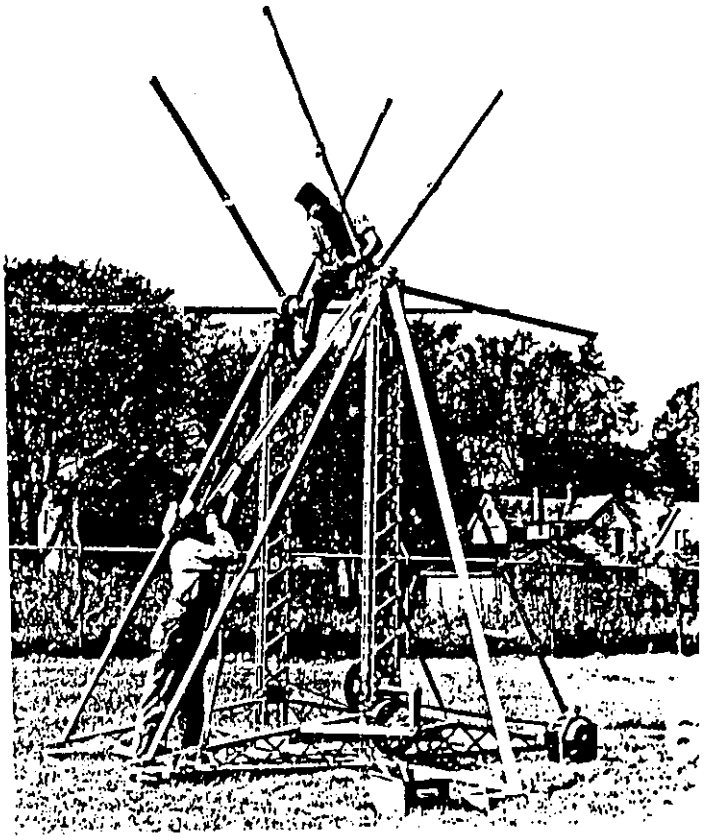


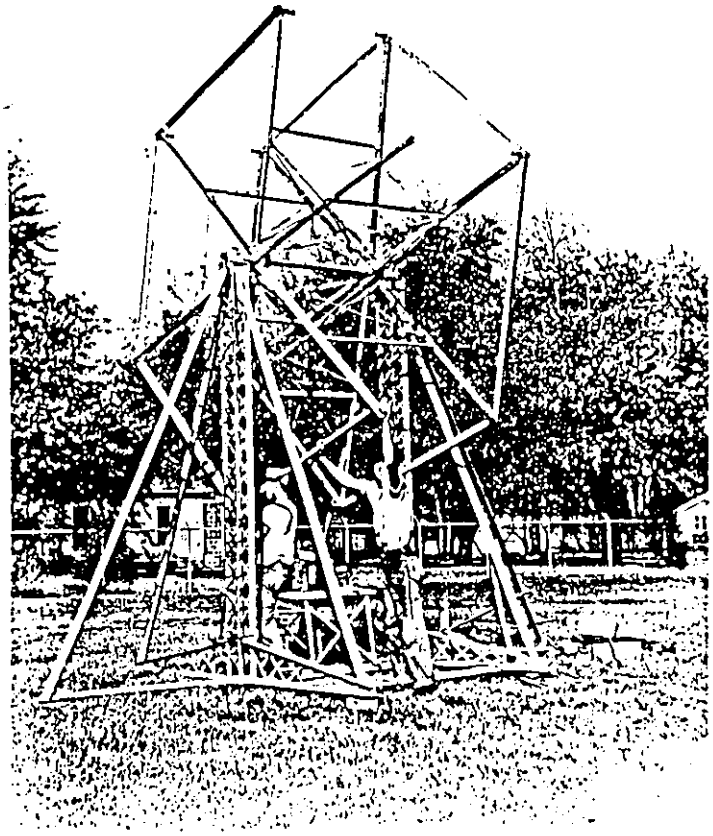


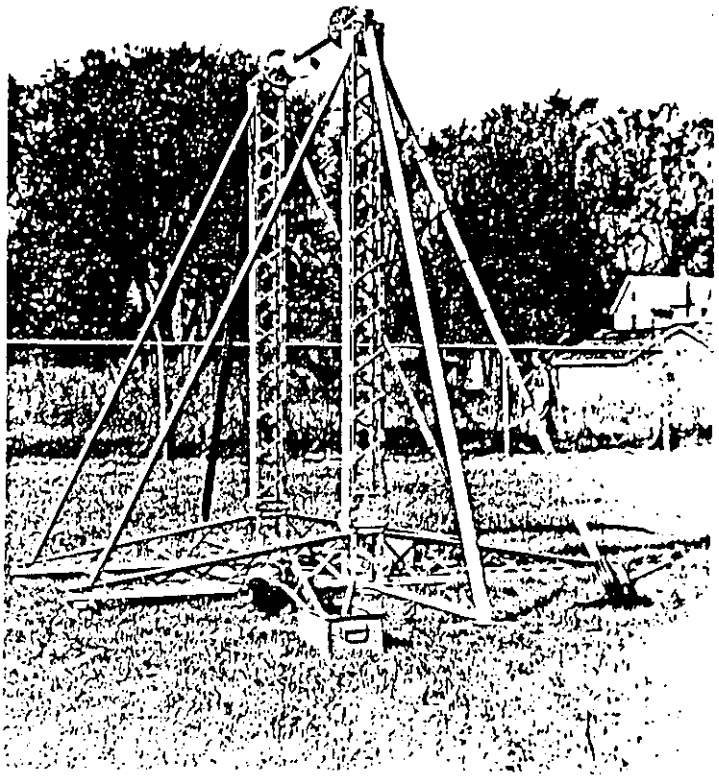


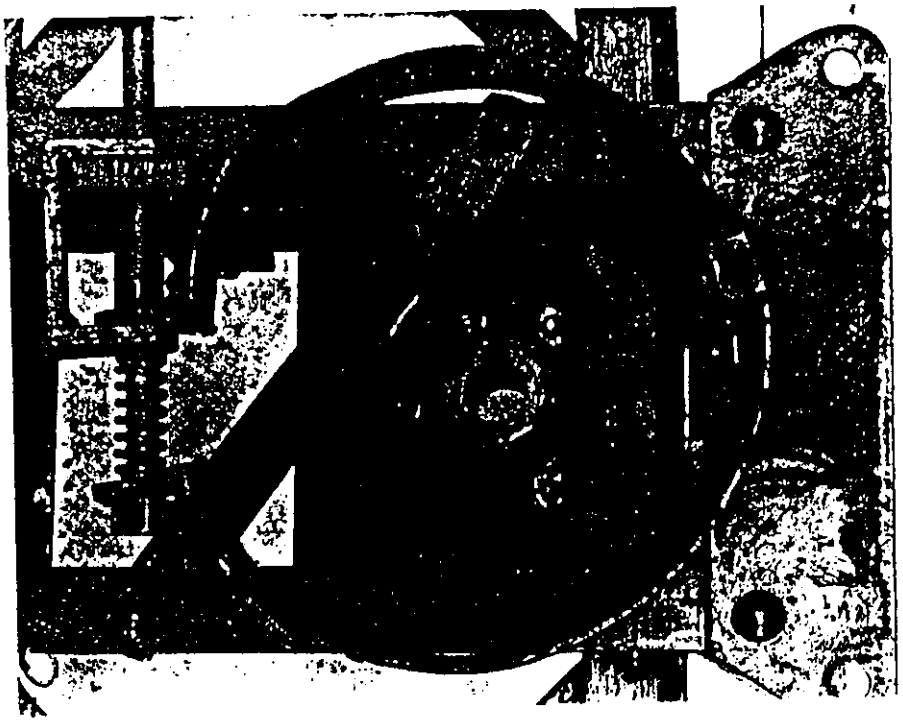


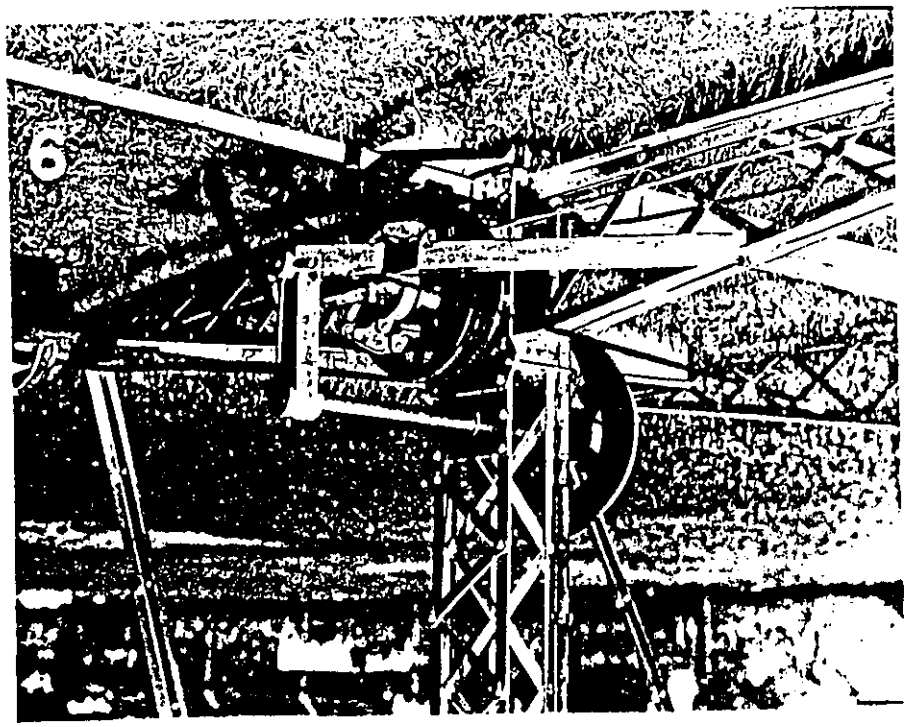











6

LITTLE WHEEL

SPECIFICATIONS

CAPACITY

Number of Seats, all Aluminum	6
Maximum Passengers Per Seat	3
Maximum Passengers Per Load	18
Maximum Weight Per Seat	270 lbs/122 kg
Maximum Weight Per Load	1,620 lbs/735 kg
Maximum Height Limit	48 inches/121.9 cm
Loading Single Ride Speed	7.0 RPM

LIGHTING

110 Volt Programmed Incandescent TURBOLITES - Approx. 1600

MOTOR

Hydraulic: * Variable Displacement Hydrostatic Transmission
Built-In Relief and Check Valves

Electric: * 5 HP, 1750 RPM, 230/460 Volt, 60 HZ, 3 phase

DRIVE:

Dual Chain / Sprocket with Dual Hydraulic Disc Braking
Single lever controls, 30 Gallon Reservoir.

POWER REQUIREMENTS

TOTAL	12 KW; Motor - 10KW, Lights - 2KW; two-30 AMP Disconnect boxes - one for Lights & one for the Motor
LEAD CABLE	100 ft / 30.5 m 10/5 Type SO

GROUND SPACE REQUIREMENTS

Height	16 feet / 4.9 m / free of ALL Overhead Obstruction
Width	12 feet / 3.7 m
Length	18 feet / 5.5 m

TRANSPORT

Height	13 feet / 4 m
Width	98 inches / 248.9 cm
Length	18 feet / 5.5 m
Total Weight	4,000 lbs / 1,814.4 kg

All Specificiations in Accordance With ASTM Standards Where Applicable

LITTLE ELI WHEEL

SPECIFICATIONS

CAPACITY

Number of Seats, all Aluminum	6
Maximum Passengers Per Seat	3
Maximum Passengers Per Load	18
Maximum Weight Per Seat	270 lbs / 122 kg
Maximum Weight Per Load	1,620 lbs / 735 kg
Maximum Height Limit	48 inches / 121.9 cm
Loading Single Ride Speed	7.0 RPM

LIGHTING

110 Volt Programmed Incandescent TURBOLITES - Approx. 1600

MOTOR

Hydraulic: * Variable Displacement Hydrostatic Transmission
Built-In Relief and Check Valves

Electric: * 5 HP, 1750 RPM, 230/460 Volt, 60 HZ, 3 phase

DRIVE:

Dual Chain / Sprocket with Dual Hydraulic Disc Braking
Single lever controls, 30 Gallon Reservoir.

POWER REQUIREMENTS

TOTAL	12 KW; Motor - 10KW, Lights - 2KW; 2-30 AMP Disconnect boxes - 1-Lights & 1-Motor
LEAD CABLE	100 ft/30.5 m 10/5 Type SO

GROUND SPACE REQUIREMENTS

Height	16 feet / 4.9 m / free of ALL Overhead Obstruction
Width	12 feet / 3.7 m
Length	18 feet / 5.5 m
Total Weight	3,400 lbs / 1,542.2 kg

All Specificiations in Accordance With ASTM Standards Where Applicable

ALL STEEL PORTABLE
BIG ELI
FERRIS WHEELS

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BIG ELI

Bulletin No. 970129

Applies to all servo-controlled, two-directional HY-5 II, Eagle 16, Double Eagle, No. 5 and No. 16 Wheels

We have been informed that there have been occurrences of servo-controlled Wheels going "out of control", at which time they started running backwards unexpectedly while in the neutral (stop) position. Our position is that if the risk exists, the safest action to take is to shut the Wheel down until the problem is eliminated.

This condition is very dangerous, especially if the ride operator or passengers are on the loading platform or in the path of the Wheel when it starts moving.

There have been several causes suggested for this condition including a) the neutral leg going out on the power source, b) the controller board being bumped loose while traveling or c) burned out, d) water in the joystick device or e) a cracked gasket under the amphenol plug, (which allows hydraulic fluid to leak into the plug which breaks contact and the ride takes off).

The problem is tied in each case to the electronics and computer components. We have, therefore, designed a retrofit kit for the control wherein the servo, the joystick, and the control board are all removed and a mechanical control device is installed. Retrofit kits for the Sundstrand hydraulic transmission are available from us right now for $1,500 F.O.B. our factory, and kits for the OilGear hydraulic transmission will be available the middle of February (which will probably run about $2,000 or less). **We consider this modification to be mandatory.**

We have an alternative available as an immediate solution for OilGear customers. It is to purchase a new Sundstrand hydraulic unit with the retrofit kit (already partially attached). If you have an older OilGear unit this may make the most sense as we have obtained a special pricing on the Sundstrand transmission from our dealer. The transmission and retrofit kit together are $4,000.00 F.O.B. our factory. These prices are in effect until May 1, 1997.
There will be complete installation instructions provided with the kit.

PHONES: 800-274-0211 • 217-245-7145 • FAX 217-479-0103

ELI BRIDGE COMPANY
800 Case Avenue
Jacksonville, IL 62650 USA
Phone: (217)245-7145
FAX: (217) 479-0103

Bulletin No. 970417

Release Date: 4/17/97
Effective Date:4/17/97

SERVICE BULLETIN

Ride Manufacturer: ELI BRIDGE COMPANY
Ride Name: HY-5, HY-5 II, Eagle 16 and Double Eagle Wheels
Model Number: All ELI trailer-mounted Wheels

Affected Production Dates: All
Affected Serial Nos.: ALL

Abstract of Issue: WHEN THE WHEELS ARE DISMANTLED, IT IS IMPERATIVE THAT THE WINCH CABLE IS PROPERLY SEATED IN THE A-FRAMES OR THE WHEEL WILL DROP CAUSING SERIOUS (and EXPENSIVE) DAMAGE AND POSSIBLE INJURY. If the cable looks like it is not directed into the A-frames, the Wheel can be trued by tightening or loosening the corner guy cables to twist the Wheel around until it is lined up with the A-frame. DO assure that the Wheel is properly trued BEFORE the cable misses the A-frame. Once the cable slides down the outside of the A-frame, it is too late and the Wheel will drop.

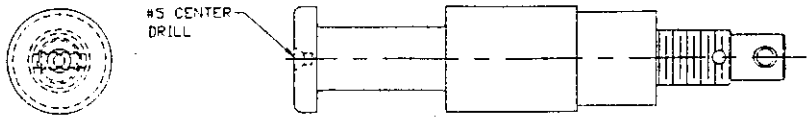
Reason For Release: As the responsibility for moving the Wheel may no longer involve individuals who were factory trained, we see more incidences of Wheels being dropped. We feel it is prudent to remind everyone **(1) to watch the cable, especially while the Wheel is being dismantled, to be sure the cable goes into the A-frames, (2) keep all personnel away from the Wheel where they would be in its path if it fell, and (3) on Eagle 16's and Double Eagles, the seat pin (journal bolt) for the master spoke is different from the others, it has been upgraded to a higher stress material.**

There is a great deal of stress put on the seat pins (journal bolts) on the master spokes. This is where the singletree is attached which is pulled around by the winch cable. The pins are designed to withstand this load. To the best of our knowledge, when the cable is properly seated in the A-frames (derrick) while the Wheel is being lowered by the winch, the pins have not experienced any failure.

However, there have been cases when the seat pins (journal bolts) on the Eagle master spoke were broken from the sudden impact of the drop when the cable missed the A-frames. Since March 1994, we started using a stronger material for the master spoke seat pins to better withstand the multiplied stresses generated by the impact of the drop, if it should occur. The pins are marked on the head by a #5 center drilled hole.

Action to Be Taken: (1) Inform all individuals involved in setting up or dismantling Wheels to ALWAYS watch the cable to see that it seats properly in the A-frame. Failure to do so can cause $30,000 or more in damage to the Wheel. (2) Stay off the spokes and out of the path of the Wheel. Failure to do so can cause death or injury to personnel. (3) When ordering replacement pins for master spokes on Eagles, order the master spoke pins (journal bolts) and be sure they are installed on the proper spokes. **THE MOST IMPORTANT THING IS TO NEVER MISS THE A-FRAME.**

Detail of Issue: Drawing: master spoke seat pin is distinguished by the #5 center drill in the head of the pin.



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Toll-free WATS line (800) 274-0211 is available in all 50 states during normal business hours, 8 A.M. to 5 P.M., Monday through Friday, except holidays.

BIG ELI Little Wheel Bulletin No. 3

Applies to No. 6 Baby Eli Wheel, Little Eli Wheel, Trailer-Mounted Little Wheel

DATE: May 2, 1994

SUBJECT: Wear of Seat Pins and "Y" Seat Hanger Castings

We have been asked for acceptable limits on the wear of seat pins and "Y" castings on No. 6 Baby Wheels, Little Wheels, and Little Eli's. These parts are smaller versions of the pins and castings used on adult-sized Wheels. To the best of our knowledge we are not aware of a failure ever occurring on either part, and the design has been in use for 68 years. Even so, wear can reach the point where the part should be replaced.

There are two places on the "Y" casting where wear can occur.

The most obvious place is at the top of the casting where the casting rests on the seat pin, as shown in Figure 1. THE THICKNESS ON THE END IS 3/8". WHEN IT IS WORN DOWN TO A THICKNESS OF 1/4" THEN THE CASTING SHOULD BE REPLACED.

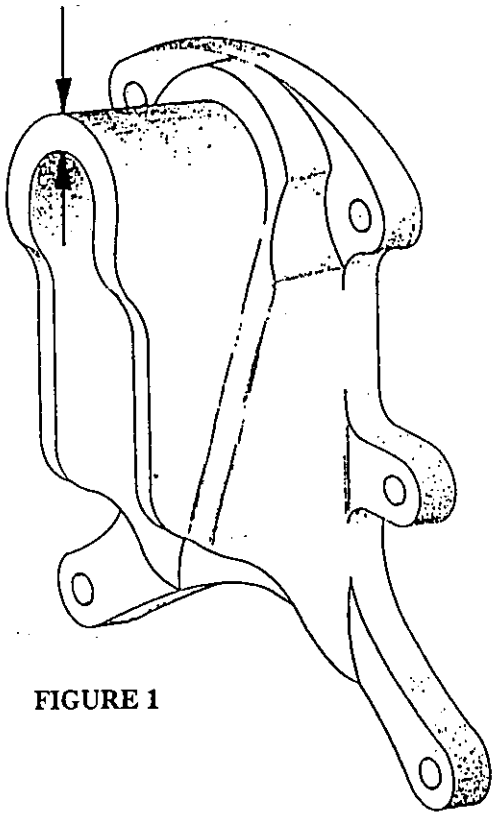

FIGURE 1

The second location for wear is the length "B" in Figures 2 and 3 (shown on page 2). The length "B" is normally 1-1/2", and the length "A" is 1-5/8". The seat pin can rub against either end of the "B" length, and if the outer end of the casting becomes substantially worn away the end of the seat pin can rub against the outside of the seat, as shown in Figure 3. With excessive wear the end of the pin can actually wear a hole through the side of the seat.

PHONES: 800-274-0211 • 217-245-7145 • FAX 217-479-0103

DATE: May 2, 1994

SUBJECT: Wear of Seat Pins and "Y" Seat Hanger Cas

We do not regard this as a safety hazard, but if you find that the end of the seat is being marked by the seat pin, this will be an indication that either the seat pin and/or the "Y" casting has become worn excessively.

The end of the pin was originally made with a fairly sharp corner on the end, and it is this corner which will dig into the side of the seat when wear becomes excessive. All seat pins for all sizes of Wheels now are manufactured with a 1/8" radius on this edge. Grinding a smooth 1/8" radius all around the contacting edge where the seat pin touches the side of the seat (Figure 3) will reduce any contact of the seat pin with the side of the seat.

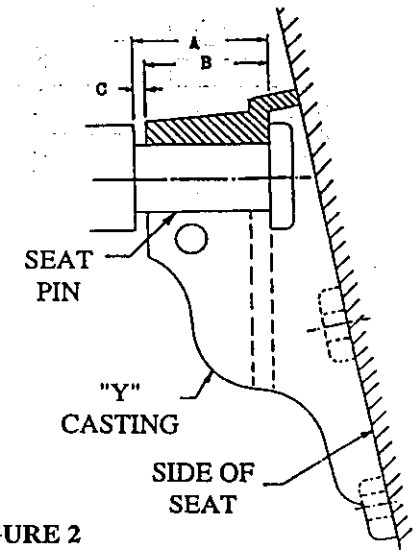

FIGURE 2

The "Y" casting is an iron molding with tapered surfaces for release from the molding sand. As the outer end of the "Y" casting is worn away the thickness at the top of the casting will actually become greater because of the tapering. The wear limit on dimension "B" should be 1-7/16". If that dimension is less than that, then the casting should be replaced.

The seat pin has a reduced diameter where it fits up inside the "Y" casting. See Figures 2 and 3. When the seat pin is locked in place the head of the pin is held by the recess in the "Y" casting. With wear, the dimension "A" will increase from the original 1-5/8" and when it has reached 1-11/16" the seat pin should be replaced.

The reduced diameter of the seat pin was originally .746". If this diameter decreases to .625", then the seat pin should be replaced.

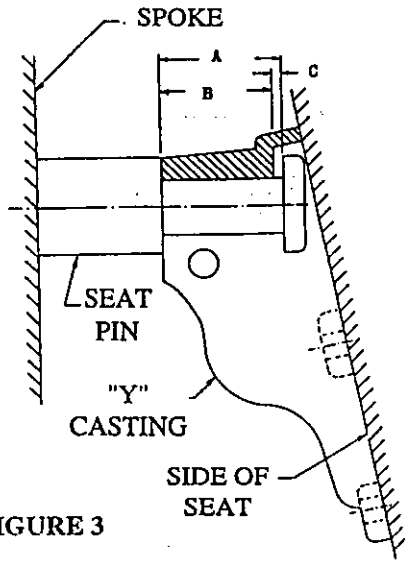

FIGURE 3

Lee A. Sullivan

Chairman of the Board
ELI BRIDGE COMPANY

ALL STEEL PORTABLE
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BIG ELI® WHEEL BULLETIN NUMBER 3

APPLIES TO ALL BIG ELI® WHEEL SEATS
DATE: March 20, 1990
SUBJECT: Mandatory Hairguards and Lapbars

This bulletin makes the application of hairguards and lap bars mandatory on all BIG ELI® WHEEL seats.

Based on seventeen years experience with hairguards, the evidence is abundant that hairguards are effective against hair pulling accidents. There is no need to risk this potential hazard for lack of guards.

Although we do not yet have a comparable length of experience with lap bars, we feel the protection afforded by them far outweighs any reluctance to invest in them.

When installed, the lap bars should reach within five (5) inches of the top edge of the seat bottom structure. There should not be more than two (2) inches gap between the lap bar and the top, front edge of the seat cushion; at its closest point. These dimensions are very important to the effectiveness of the lap bars.

ELI BRIDGE COMPANY

Lee Sullivan
President

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