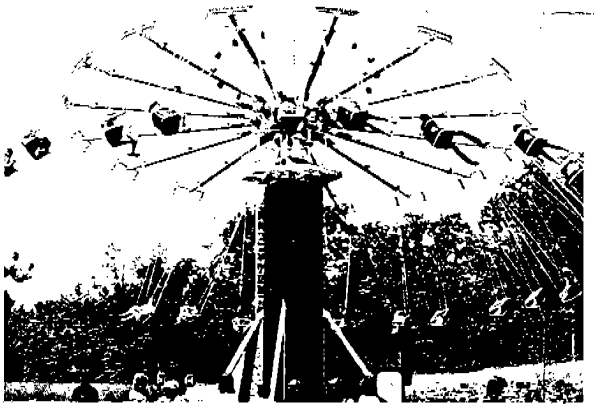
SPECIFICATIO[

This ride conforms with all applicable ASTM amusement ride standards in effect on the date

MFG: CHANCE RIDES, INC.
NAME: YO YO
TYPE: NON-KIDDIE



SEATING

Number of seats 32
Maximum number of passengers per seat 1
Maximum passenger weight per seat ..... 170 lbs.
Maximum total number of passengers 32
Maximum total passenger weight ..... 5,440 lbs.
Minimum passenger height ..... 42 inches
Loading ..... All seats simultaneously
Maximum unbalance ..... 8 adults (1,360 lbs.)

PERFORMANCE

Direction of travel ..... Counter-clockwise
Ride speed (maximum) ..... 10 rpm
Ride duration (maximum) ..... 2½ min.
Ride duration (recommended) ..... 2 min.
Maximum tilt angle ..... 10°
Maximum wind speed (operating) ..... 20 mph
Maximum wind speed (static) ..... 80 mph

DRIVE ..... Electro-Hydraulic

POWER REQUIREMENTS

Total ..... 50 kW
Motor ..... 30 kW
Lights ..... 20 kW
Minimum/Maximum line voltage 208/230

MOTOR

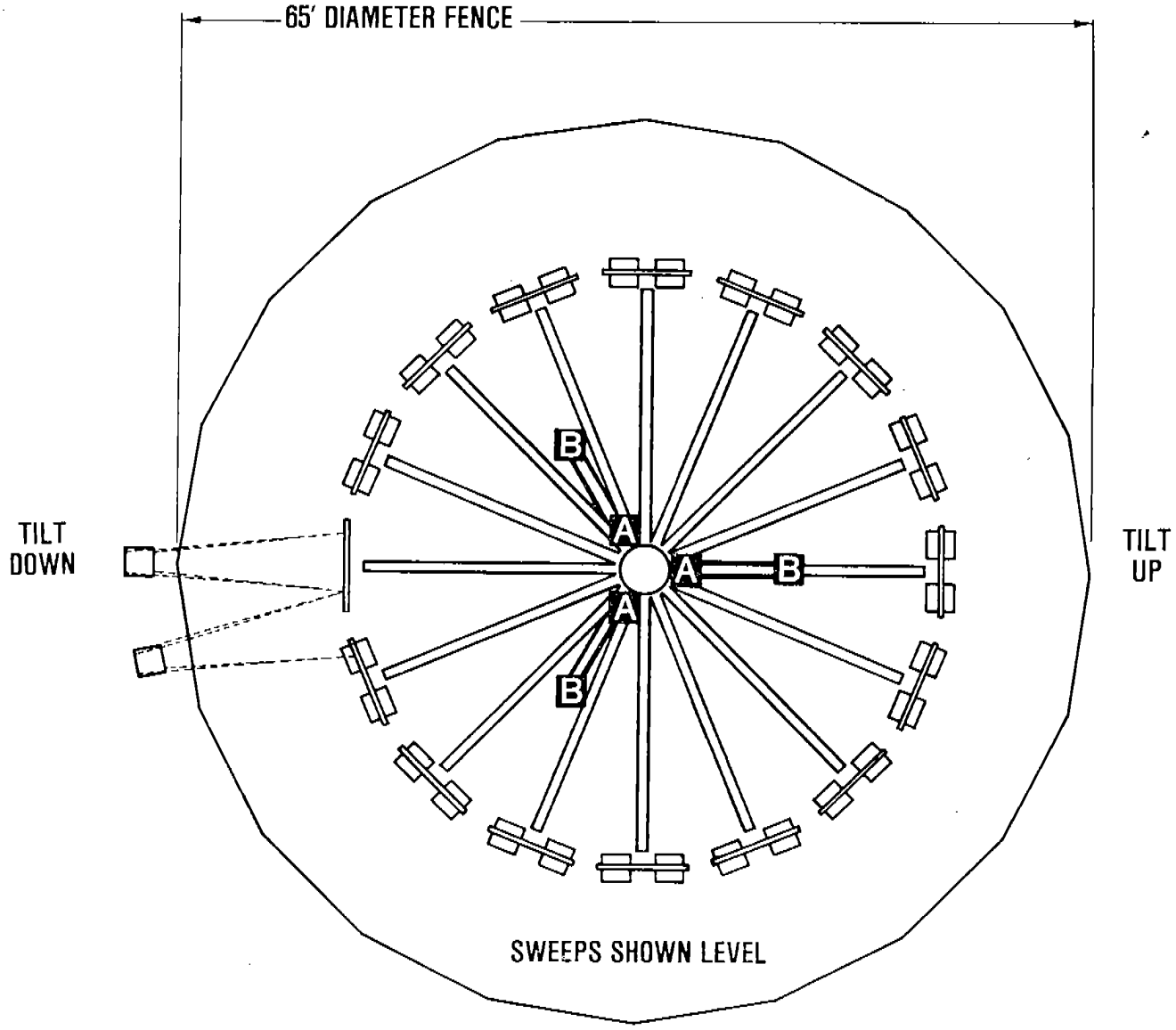
Type ..... 208 Y/460 volt, 3 phase, 60 Hz
Horsepower rating 40

LIGHTING ..... 110 volt incandescent and fluorescent

Specifications are effective as of publication date. Because we try to improve every Chance product, these specifications are subject to change without notice.

YO-YO

PARK MODEL



MIDWAY

MAXIMUM INDIVIDUAL GROUND LOADS (POUNDS)
REFER TO INSTALLATION DRAWINGS FOR SPECIFIC FOOTING LOCATION & LOADS.

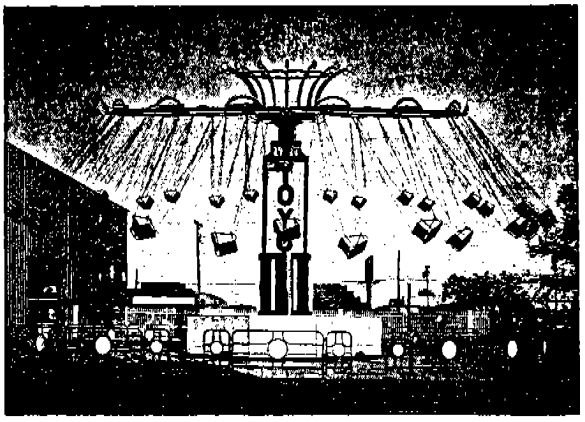
SYMBOL	DESCRIPTION	OPERATING NO WIND 40 PASSENGERS	ADD FOR 25 MPH WIND
A	PARK MODEL TOWER	22.000	±6.000
B	PARK MODEL BRACES	6.000	±2.000

RIDE CLEARANCE DIMENSIONS

Diameter at Ground ..... 67 ft. frontage
Diameter in Air ..... 73 ft. at 27 ft. high
Height ..... 37 ft.

SPECIFICATIONS

This ride conforms with all applicable ASTM amusement ride standards in effect on the date of manufacture.



SEATING
Number of seats 32
Maximum number of passengers per seat 1
Maximum passenger weight per seat ..... 170 lbs.
Maximum total number of passengers 32
Maximum total passenger weight ..... 5,440 lbs.
Minimum passenger height ..... 42 inches
Loading ..... All seats simultaneously
Maximum unbalance ..... 8 adults (1,360 lbs.)

PERFORMANCE
Direction of travel ..... Counter-clockwise
Ride speed (maximum) ..... 10 rpm
Ride duration (maximum) ..... 2½ min.
Ride duration (recommended) ..... 2 min.
Maximum tilt angle ..... 10°
Maximum wind speed (operating) ..... 20 mph
Maximum wind speed (static) ..... 80 mph

MAXIMUM RIDE WEIGHT (empty) ..... 43,000 lbs.

DRIVE ..... Electro-Hydraulic

POWER REQUIREMENTS
Total ..... 50 kW
Motor ..... 30 kW
Lights ..... 20 kW
Minimum/Maximum line voltage 208/230

MOTOR
Type ..... 208 Y/460 volt, 3 phase, 60 Hz
Horsepower rating 40

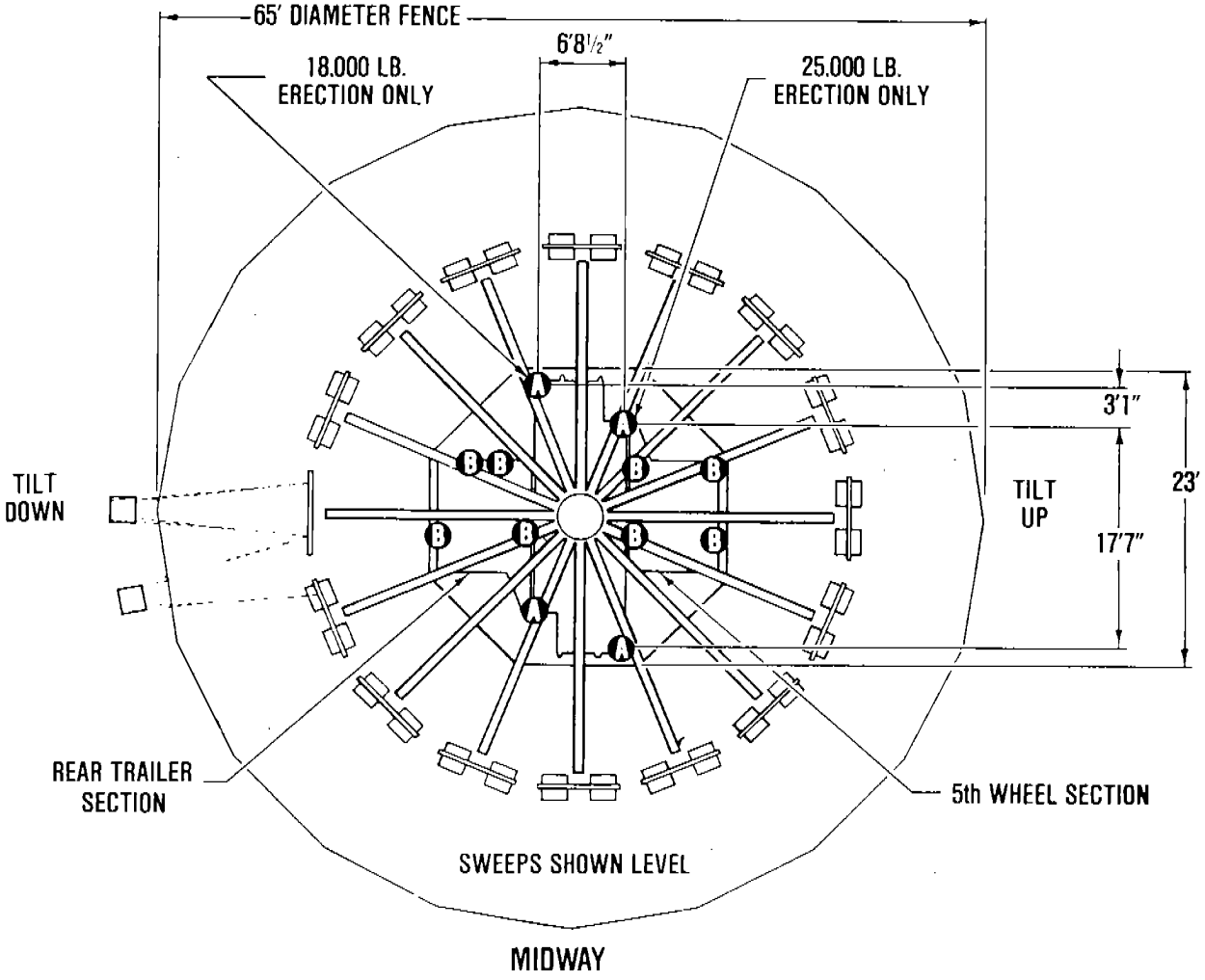
LIGHTING ..... 110 volt incandescent and fluorescent

STANDARD LEAD-IN CABLE
Size ..... 2/4 type G
Length ..... 100 ft.

TRAILERING
Height ..... 13 ft. 6 in.
Width ..... 8 ft.
Length ..... 40 ft. 6 in.
Total weight ..... 43,000 lbs.
Rear axle weight ..... 19,000 lbs.
Kingpin weight ..... 24,000 lbs.
Tire size ..... 10:00 x 20 (12-Ply)

Specifications are effective as of publication date. Because we try to improve every Chance product, these specifications are subject to change without notice.

PORTABLE MODEL **YO-YO**



MAXIMUM INDIVIDUAL GROUND LOADS (POUNDS)

REFER TO INSTALLATION DRAWINGS FOR SPECIFIC FOOTING LOCATION & LOADS.

SYMBOL	DESCRIPTION	OPERATING NO WIND 40 PASSENGERS	ADD FOR 25 MPH WIND
A	TRAILER LEVELING JACKS	10,000	2,000
B	TRAILER FLOOR JACKS	8,000	1,000

RIDE CLEARANCE DIMENSIONS

Diameter at Ground ..... 67 ft. frontage
Diameter in Air ..... 73 ft. at 27 ft. high
Height ..... 37 ft.

YO YO

Ride Serial Number _____ Owner _____ Date _____

FIELD INSPECTION POINTS

1. ( ) Inspect blocking and leveling

2. ( ) Inspect lock nuts on leveling jacks.

3. ( ) Inspect hydraulic valves for leveling jacks.

4. ( ) Inspect cable leads, electrical connections and grounding per local code.

5. ( ) Inspect fences for proper installation.

6. ( ) Inspect tie bar and turnbuckles on trailer sections (Bulletin B61-0307-00).

7. ( ) Inspect front section of trailer for cracks (Bulletin 77).

8. ( ) Inspect condition of pins and mounts for tower erection cylinder and stiff leg (Bulletin 102).

9. ( ) Inspect condition of hinge pins and cylinder ears on tower, tilt head and tilt cylinder (Bulletin B61-0226-00).

10. ( ) Inspect drive bearing bolts.

11. ( ) Inspect condition of sweep linkage and pivot bearings (Bulletins 125 and 137).

12. ( ) Check drive chain adjustment.

13. ( ) Inspect nuts on end of sweep cylinder rod.

14. ( ) Inspect sweep interlocks (Bulletin 125).

15. ( ) Inspect sweep cylinder attach bolts.

16. ( ) Inspect condition of sweep T-bar assemblies.

17. ( ) Inspect sweep spreader chains.

18. ( ) Inspect condition of seat hangers, chains, shackles and bolts (Bulletins 94, B61-0265-0A and B61-0284-00).

19. ( ) Inspect condition of seat belts, crotch straps and lap bars (Bulletins A61-0263-00 and B61-0265-0A).

20. ( ) Inspect for 24" ground clearance of seats with sweeps down.

21. ( ) Inspect performance of ride, including stability, lift, tilt, etc.

22. ( ) Check ride speed - 11 rpm maximum. Check for maximum tilt of 15°.

23. ( ) Check ride for excessive vibration.

24. ( ) Inspect structure for cracks, bad welds, etc.

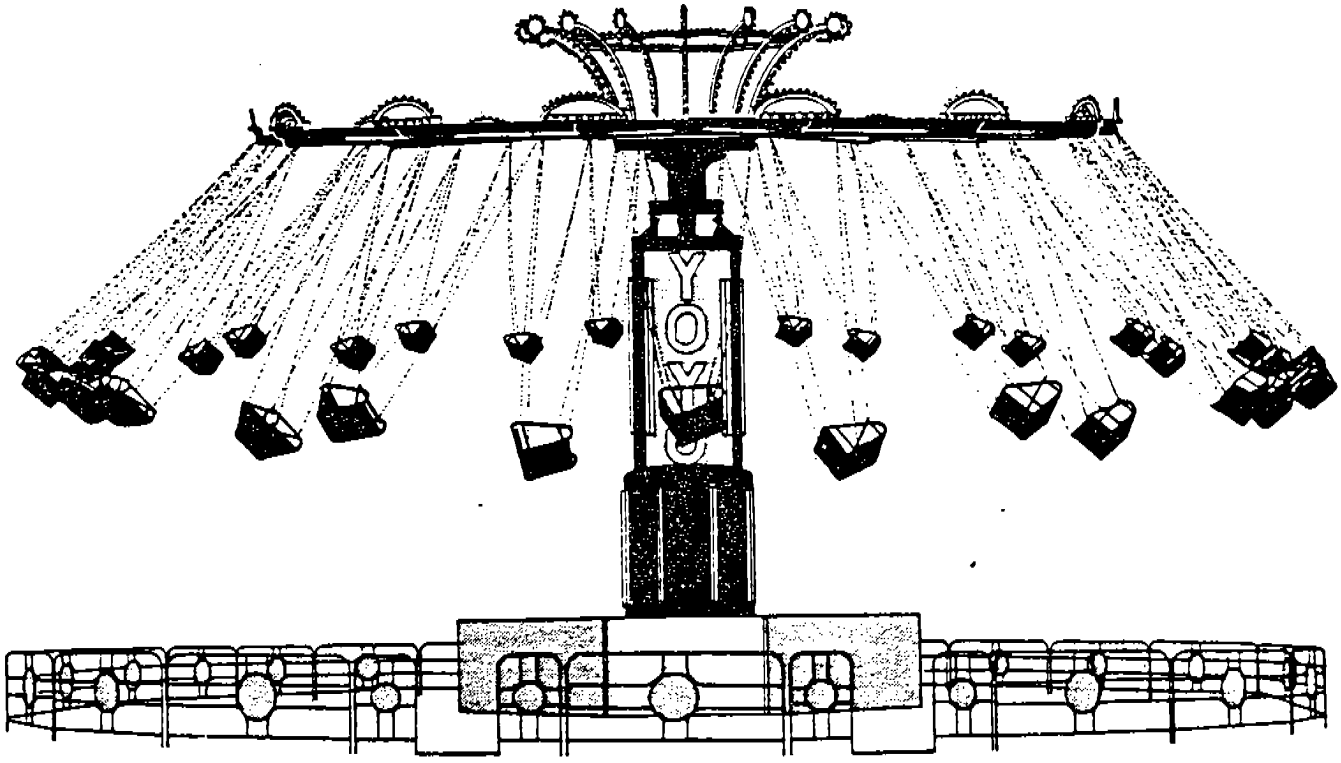
25. ( ) Inspect electrical circuit for short circuits, bad wires, etc.

26. ( ) Inspect for hydraulic leaks.

27. ( ) Inspect overall appearance of ride for cleanliness and general overall upkeep.

28. ( ) Check expiration date on sweep lift cylinder I.D. plate (Bulletin B376R1077-0).

29. ( ) Inspect operating controls.

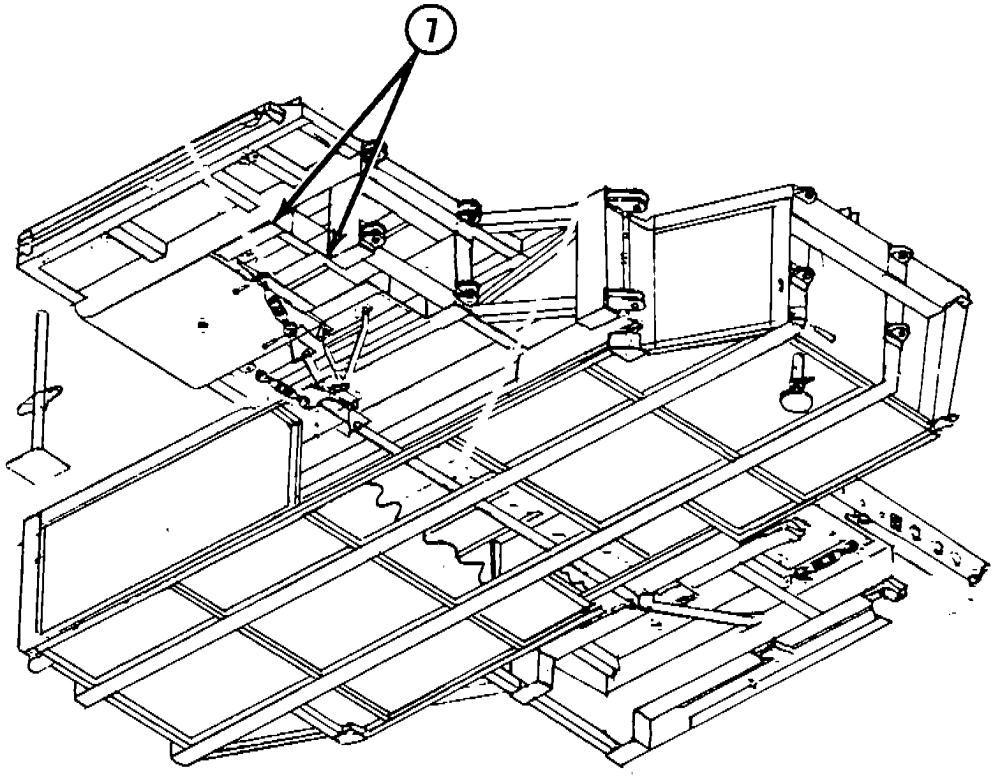


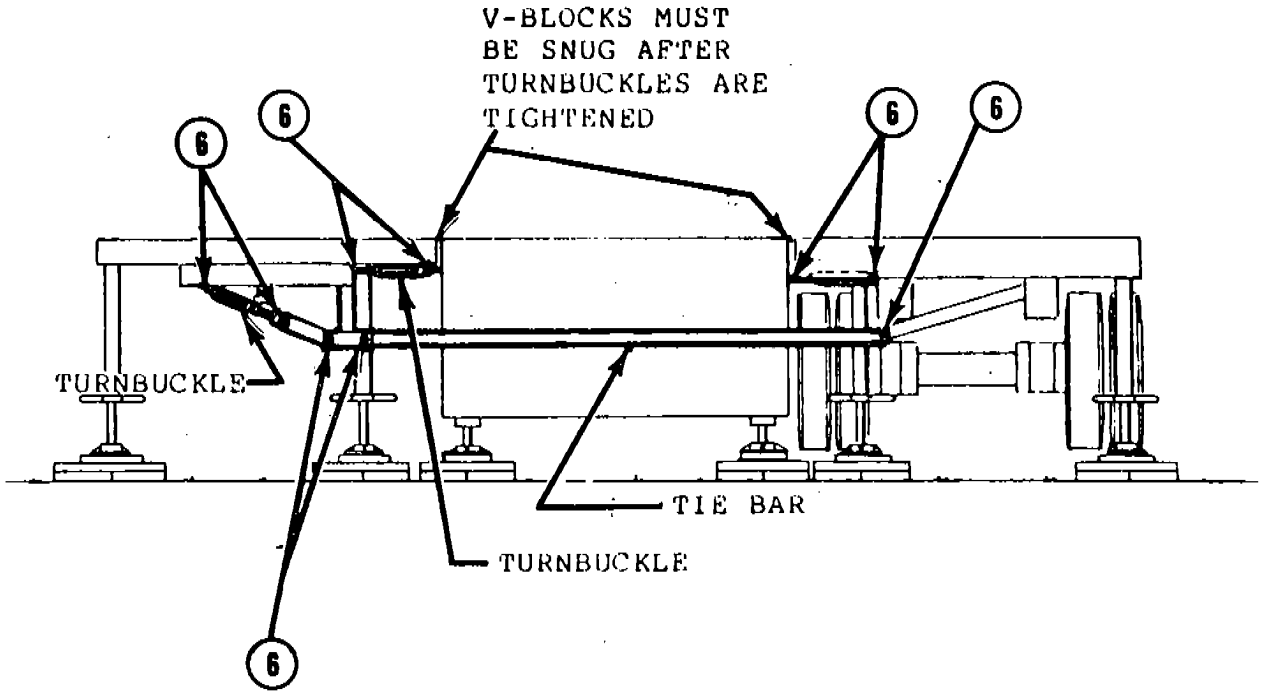
1. ( ) Inspect blocking and leveling

20. ( ) Inspect for 24" ground clearance of seats with sweeps down.

21. ( ) Inspect performance of ride, including stability, lift, tilt, etc.

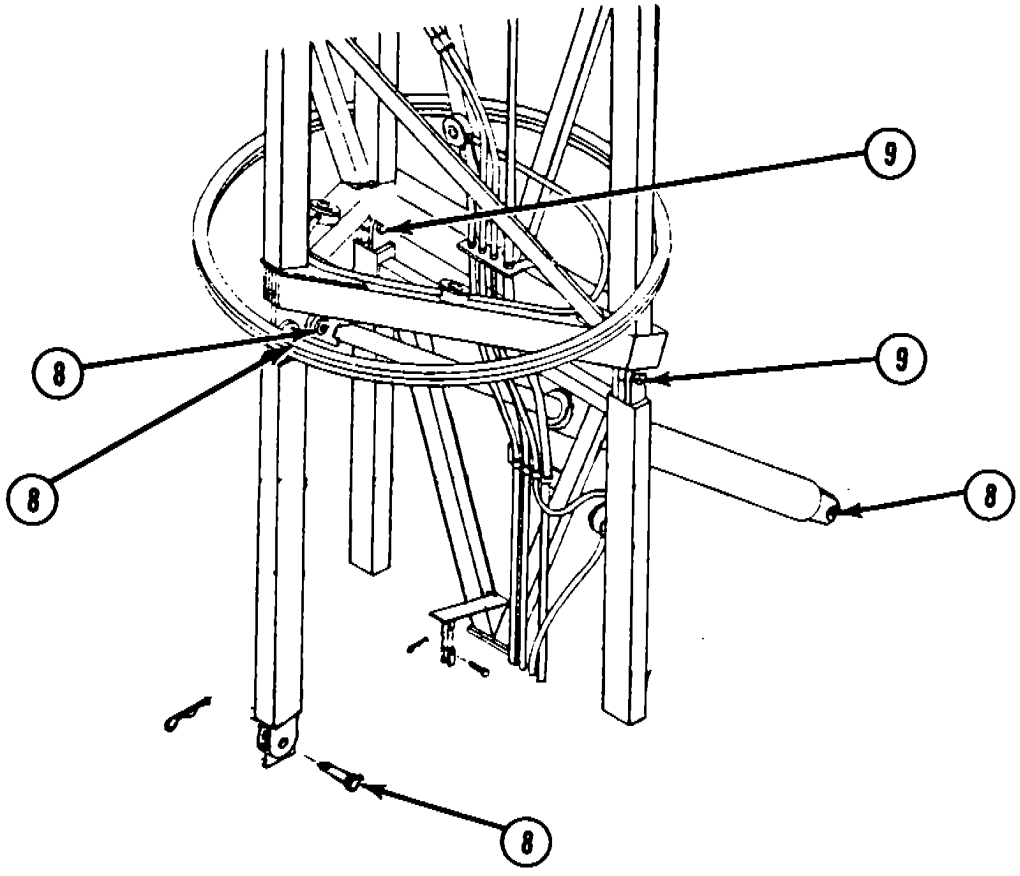
22. ( ) Check ride speed - 11 rpm maximum. Check for maximum tilt of 15°.





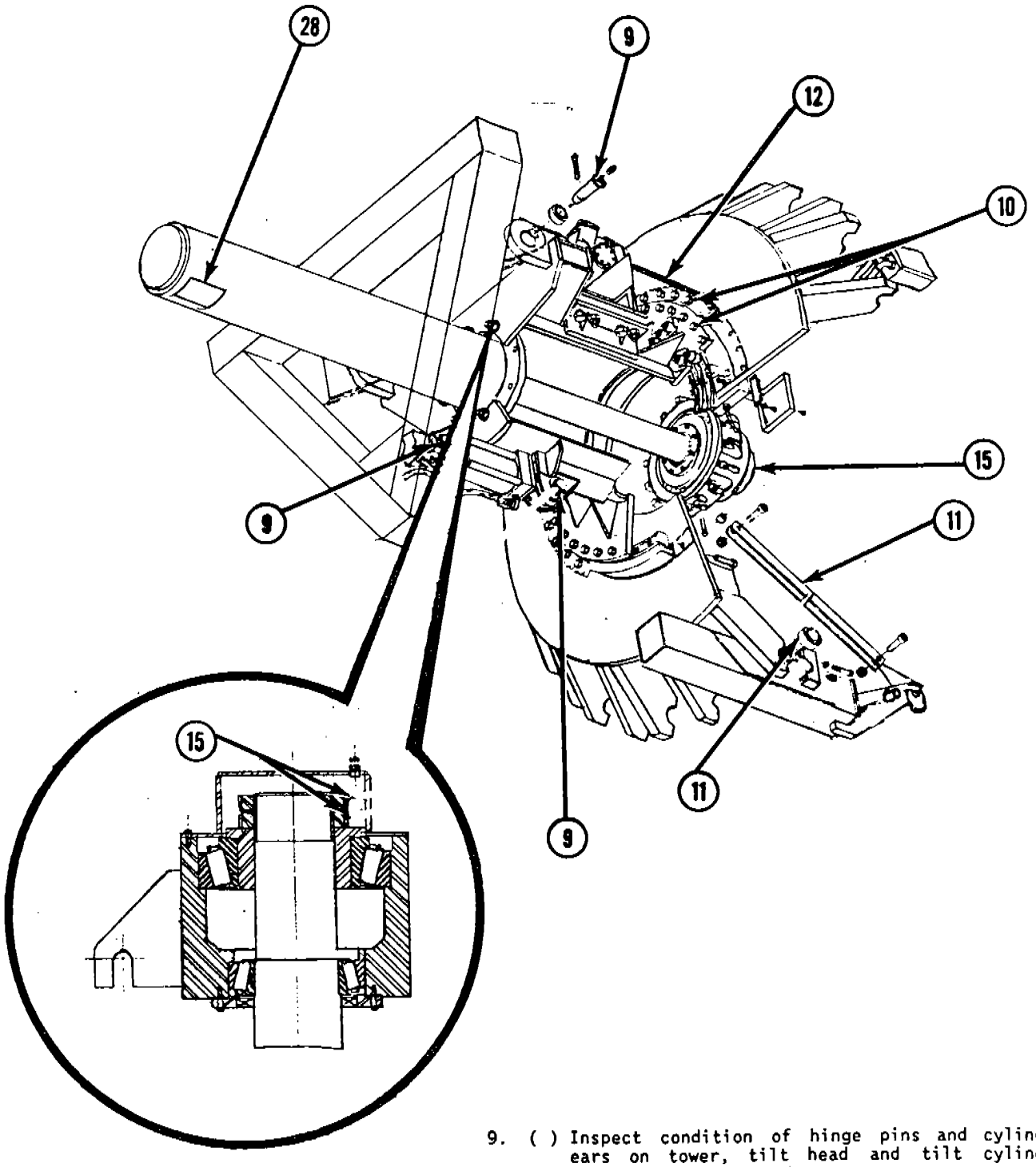
6. ( ) Inspect tie bar and turnbuckles on trailer sections (Bulletin B61-0307-00).

7. ( ) Inspect front section of trailer for cracks (Bulletin 77).



8. ( ) Inspect condition of pins and mounts for tower erection cylinder and stiff leg (Bulletin 102).

9. ( ) Inspect condition of hinge pins and cylinder ears on tower, tilt head and tilt cylinder (Bulletin B61-0226-00).



9. ( ) Inspect condition of hinge pins and cylinder ears on tower, tilt head and tilt cylinder (Bulletin B61-0226-00).

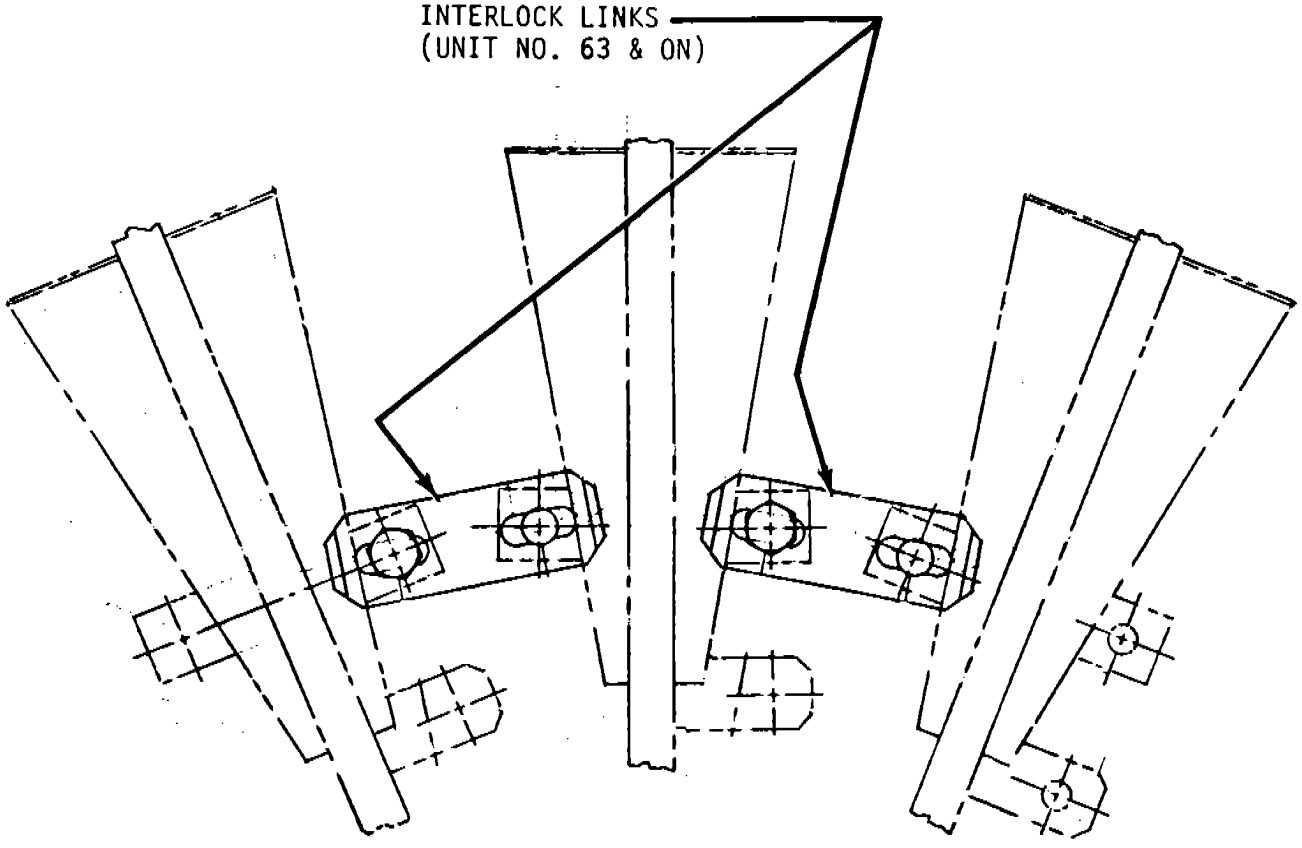
10. ( ) Inspect drive bearing bolts.

11. ( ) Inspect condition of sweep linkage and pivot bearings (Bulletins 125 and 137).

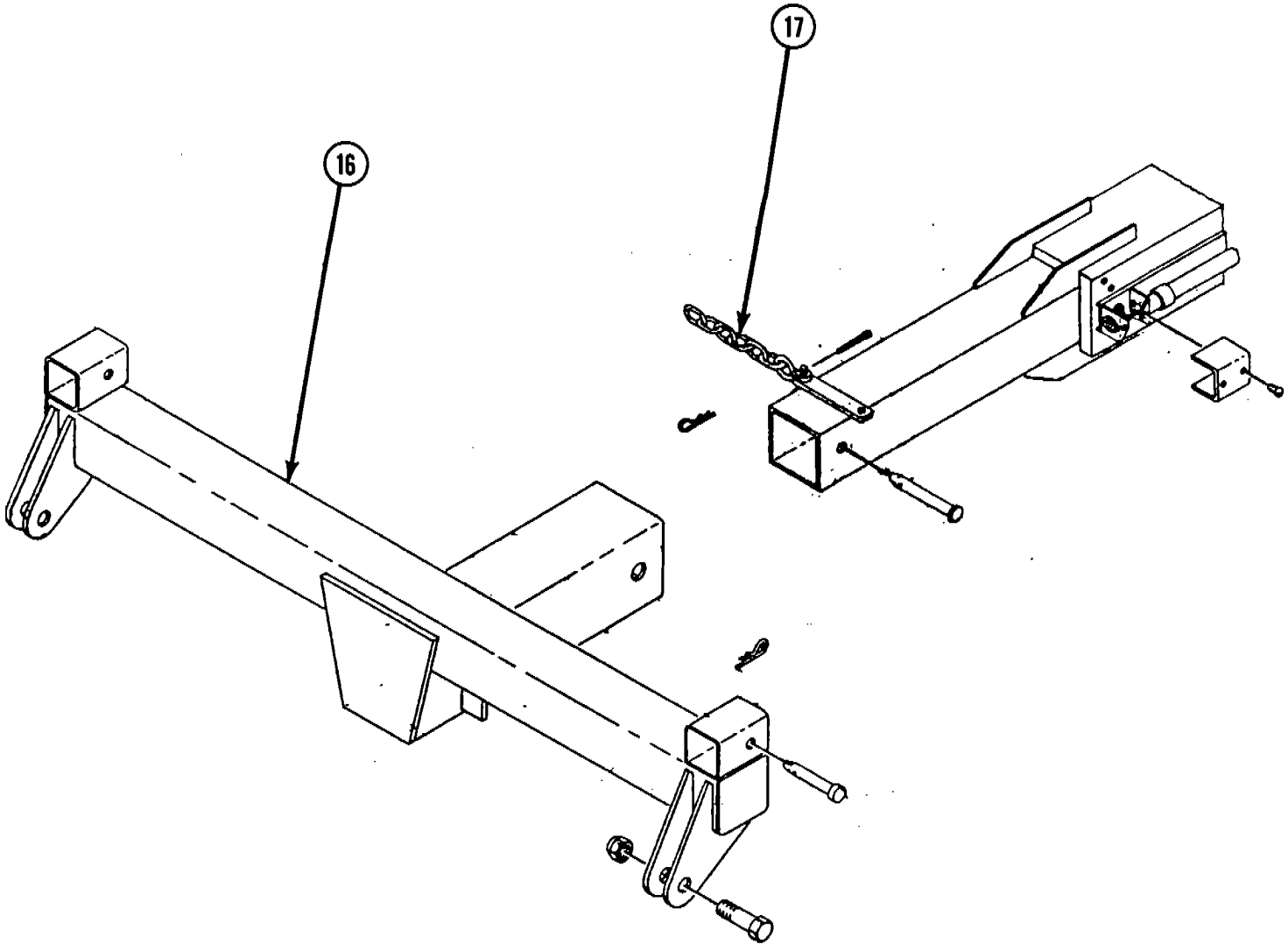
12. ( ) Check drive chain adjustment.

15. ( ) Inspect sweep cylinder attach bolts.

28. ( ) Check expiration date on sweep lift cylinder I.D. plate (Bulletin B387R1077-0).

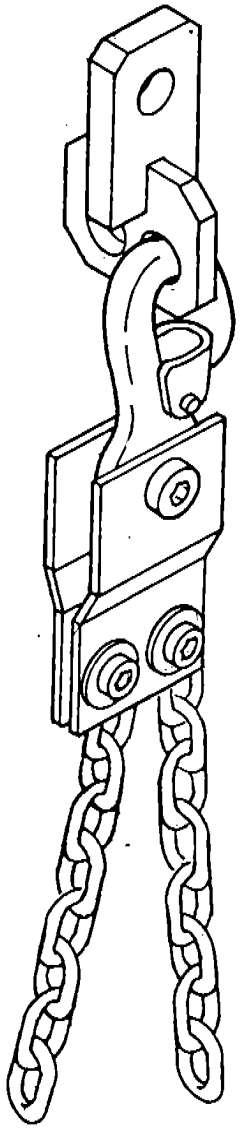


11. ( ) Inspect condition of sweep linkage and pivot bearings (Bulletins 125 and 137).

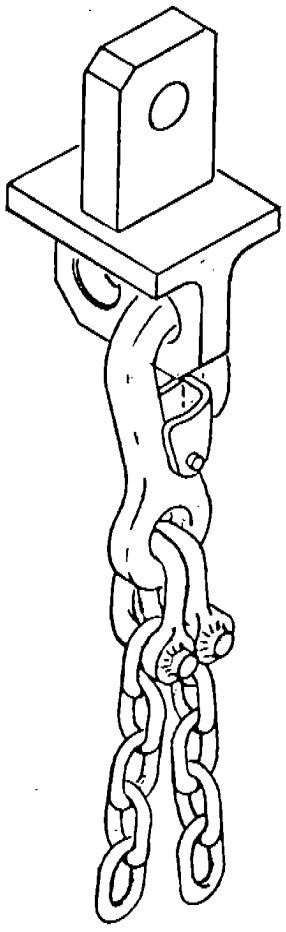


16. ( ) Inspect condition of sweep T-bar assemblies.

17. ( ) Inspect sweep spreader chains.

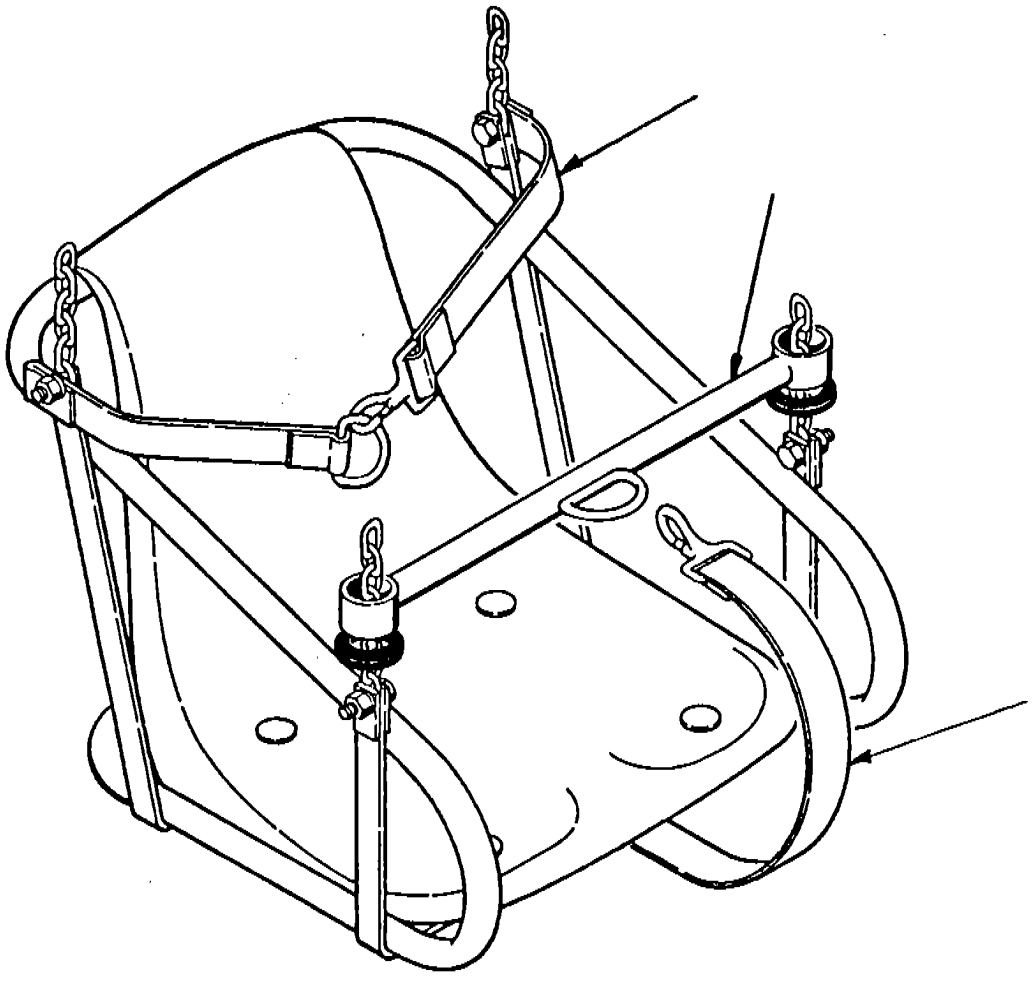


NEW STYLE

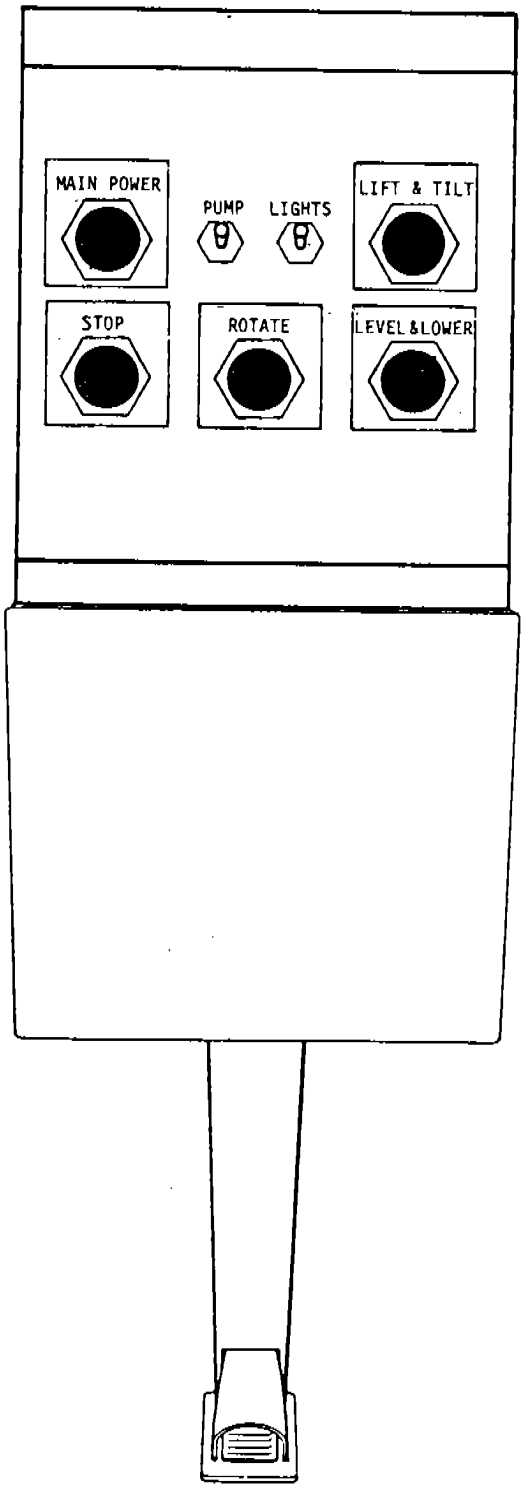


OLD STYLE

18. ( ) Inspect condition of seat hangers, chains, shackles and bolts (Bulletins 94, B61-0265-0A and B61-0284-00).



19. ( ) Inspect condition of seat belts, crotch straps and lap bars (Bulletins A61-0263-00 and B61-0265-0A).



29. ( ) Inspect operating controls.

NUMBER: B376R1077-0

DATE: May 22, 1990

SUPERSEDES: B61-0217-00
B61-0273-00

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: All Units - Chance Rides, Inc.
All Units - Chance Manufacturing Co., Inc.

Chance Rides, Inc. SPECIFICALLY DISCLAIMS ANY LIABILITY for losses associated with rides produced by Chance Manufacturing Company, Inc.

Ride: YO-YO

Subject: Sweep Cylinder

Chance Rides, Inc. requires inspection of all YO-YO amusement ride sweep cylinders to be completed within five (5) years after the ride was originally put into service and every five (5) years thereafter, as outlined in this bulletin.

To complete the five (5) year inspection procedure all YO-YO owner/operators must remove the sweep cylinders from their rides as outlined in SECTION II of this bulletin. Upon removal, the cylinder shall be returned to Chance Rides, Inc. for inspection, rework and certification.

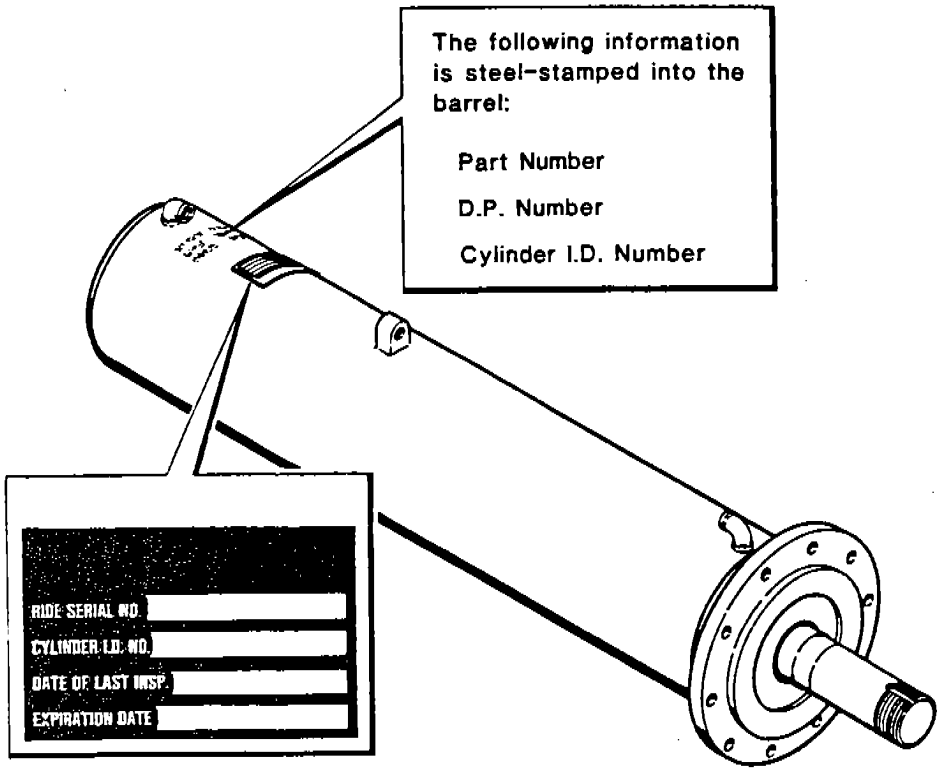
Chance Rides, Inc. rework consists of the following new parts:

1. New rod
2. New piston
3. New seal kit

Upon inspection, if the bore of the cylinder is greater than the manufacturer's specifications, the cylinder must be replaced.

DO NOT OPERATE THE RIDE AFTER THE EXPIRATION DATE OF THE CYLINDER.

NOTE: If the cylinder identification markings are damaged, removed or are otherwise illegible, contact the Chance Rides, Inc. Customer Service Department.



SECTION II

REMOVAL OF SWEEP CYLINDER FROM THE RIDE

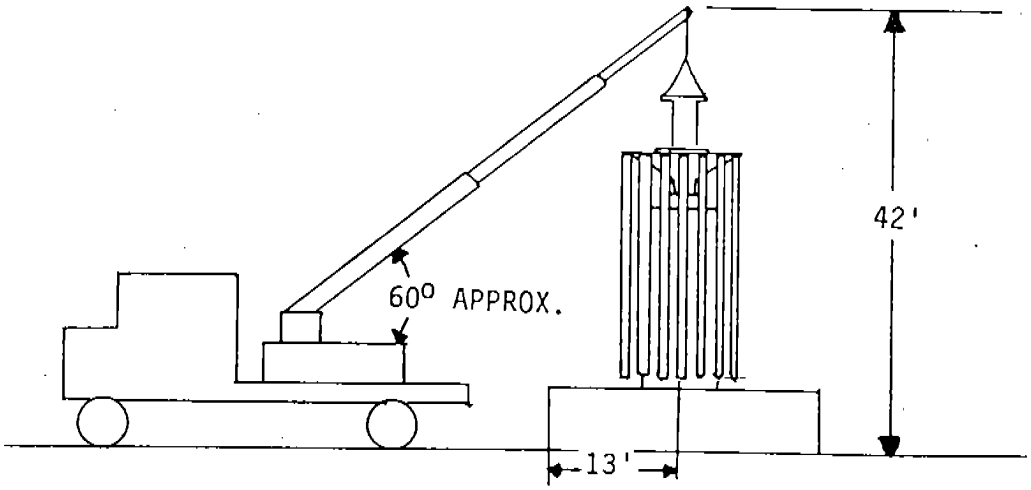
1. With the ride erected and the sweeps folded against the tower, remove the seats and "T" bars.

2. Disconnect the bar linkage stripper bolts at the sweeps. Select two linkage bars 180 degrees and connect them together at the top with a stripper bolt, for use as a pick up. Bundle the remaining bars together with a rope.

3. Remove the 1" bolts, nuts and lockwashers holding the cylinder in the ride. Retract the cylinder rod by engaging the raise switch, stopping the retraction about 6" short of full retract.

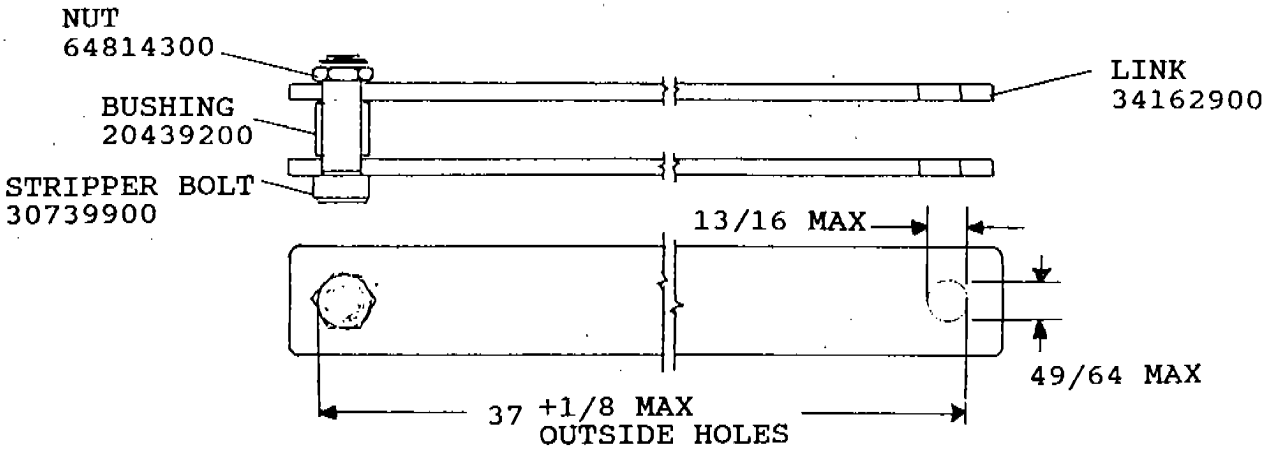
4. Remove hoses from cylinder, and cap all open hoses and fittings. Remove handle from valve at base of cylinder and turn all fittings against the side of the cylinder body for removal clearance through the mounting hole.

5. Select a mobile crane with a capacity of 1500 pounds at boom angle and elevation as illustrated for removal of the cylinder.



6. Raise cylinder out of the top of the ride, observing clearance of plumbing, through mounting hole, as it is removed. Lower cylinder to a pallet on the ground, protecting the plumbing and bar linkage as it is being placed onto the pallet.

7. Remove bar linkage from spider and inspect all stripper bolts and steel bushings for wear. Holes in bar linkage should not be elongated more than shown on illustration.



8. Return cylinder to Chance Rides, Inc. for a five (5) year reconditioning and replacement of the rod.

9. Sweep bearings should be inspected at this time by swinging each sweep out away from the tower four (4) to six (6) feet, with the aid of a 2x4 timber or bar. The sweep should free fall back into place without help. Sweeps that are bound up require new sweep bearings.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation.

NOTICE

Use only those components authorized, specified or provided by Chance Rides, Inc.

Chance Rides, Inc. SPECIFICALLY DISCLAIMS ANY LIABILITY for losses associated with any unauthorized alterations and/or modifications or additions and installations of unauthorized components.

Number: B376R1017-0

Date: September 9, 1987

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers: All Units

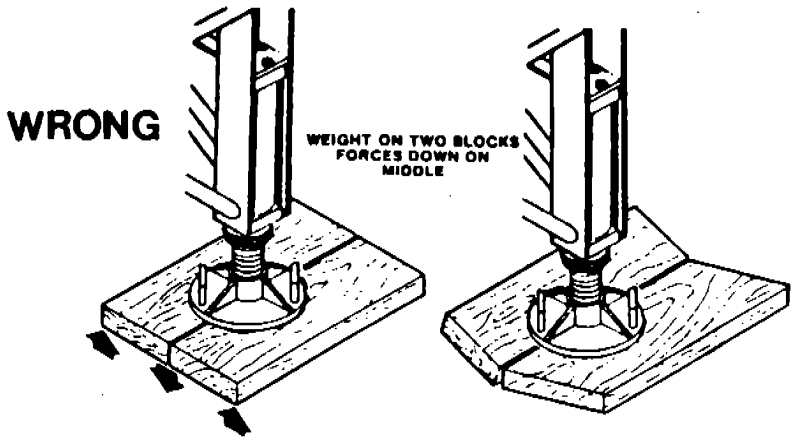
Ride: YO YO

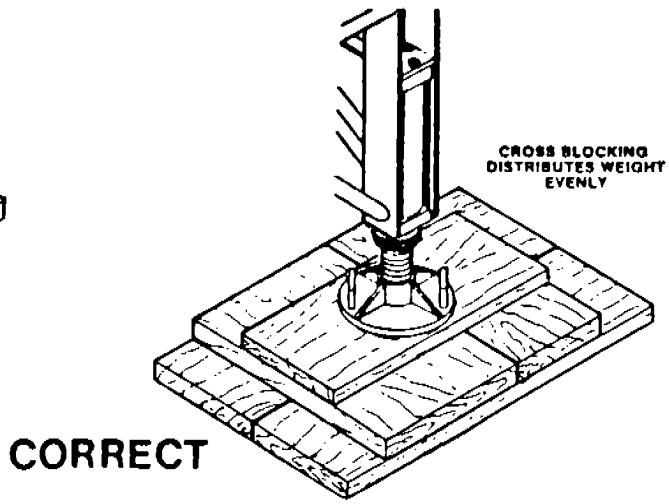
Subject: Trailer Set-Up, Loading And Operation

As a safety precaution, CHANCE RIDES, INC. requires that owners of all YO YO amusement rides instruct their employees on the proper porcedures and instructions contained in this bulletin.

TRAILER SET-UP

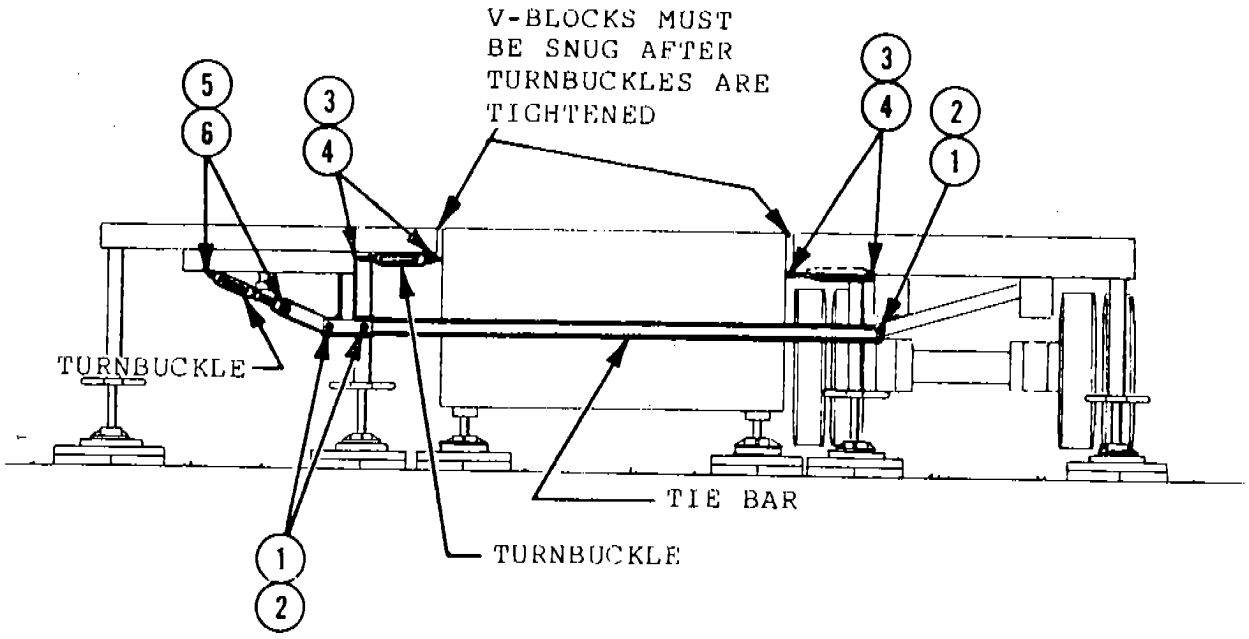
1. Inspect the blocking under each of the four (4) leveling jacks and eight (8) screw jacks under the front and rear trialer sections. Good, solid blocking, preferably wooden 3 x 12's, must be placed under each jack point. As blocks are stacked, criss-cross each layer, ending the stack with a single block as shown in the following illustrations.





2. Make sure the lock rings on the leveling jacks are tight against the bottom of the jack. All needle valves and the hand pump valve must be OPEN to relieve hydraulic pressure in the leveling jacks. This is important because hydraulic oil in the jacks can expand when exposed to heat, such as direct sunlight, causing the jack to extend.

3. The tie bar and five turnbuckles must be secured with the CORRECT PINS AND HAIRPINS as specified in the illustration below. Do not substitute bolts or any other hardware. The turnbuckles must be tightened so that the mating V-blocks on sections of the trailer are snug.



REF. NUMBER	PART NUMBER	DESCRIPTION	QUANTITY REQUIRED
1	390-52295	TAPER PIN (CSN10A05-02)	3
2	694-51902	HAIRPIN (5/32 Diameter)	3
3	390-52296	TAPER PIN (CSN10A05-03)	8
4	694-51902	HAIRPIN (5/32 Diameter)	8
5	390-52491	TAPER PIN (CSN10A06-03)	2
6	694-51904	HAIRPIN (3/16 Diameter)	2

LOADING AND OPERATION

If the ride is being operated at less than its full passenger capacity, direct the passengers around the ride to balance the load. NEVER OPERATE THE RIDE WITH AN IMBALANCE OF MORE THAN SIX (6) ADULTS ON ANY ONE SIDE OF THE RIDE.

Number: B376R1003-0

Date: 5/25/86

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers: ALL UNITS

Ride: YO YO

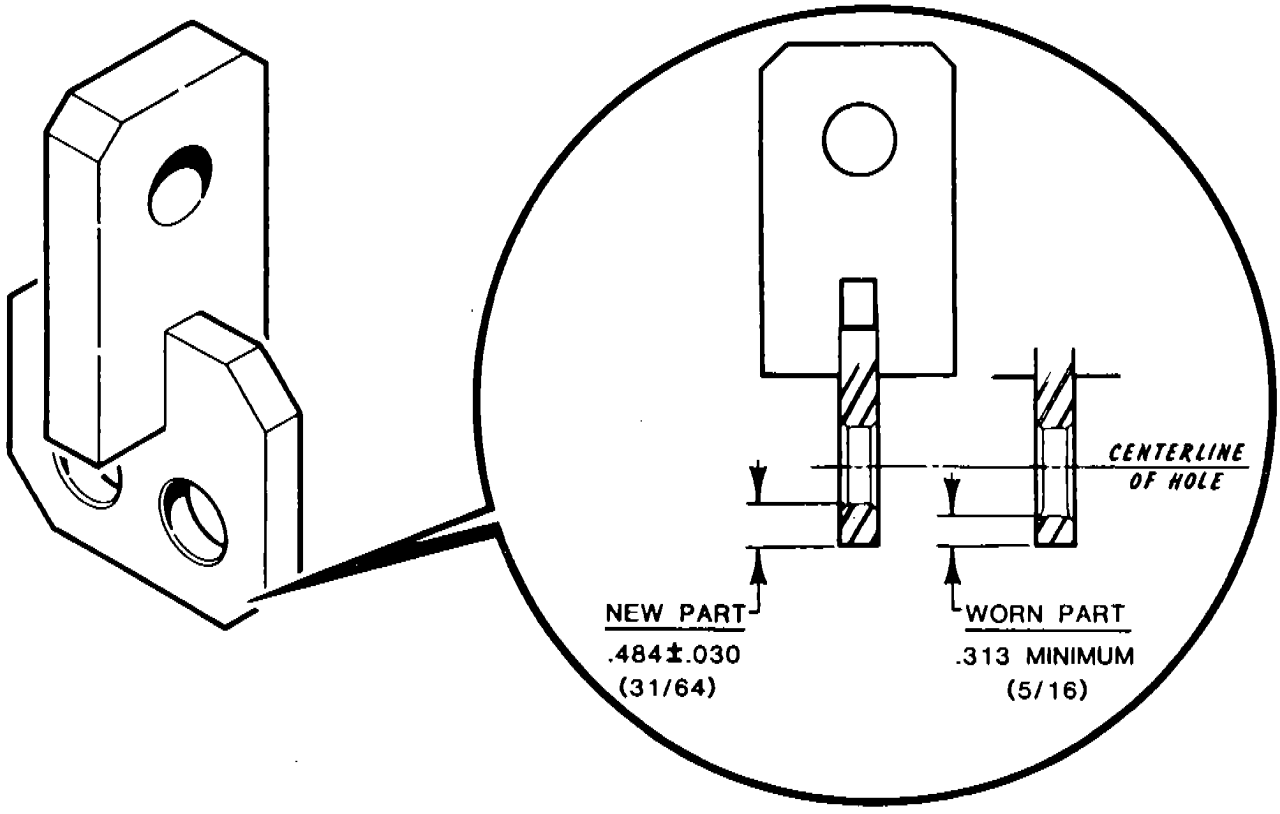
Subject: Chair Hanger Wear Limits

As a safety precaution, CHANCE RIDES, INC. recommends that the following inspection be performed on all YO YO amusement rides at every set-up or weekly, whichever occurs first.

The inspection must be performed by competent personnel, capable of understanding the function of the parts and their proper installation.

Measure the edge distance on all chair hangers as shown. If the dimension is less than .313 (5/16"), do not operate the ride until the chair hanger is replaced.

New chair hangers are available from CHANCE RIDES, INC. Order part number 361-32706.



Number:B376R1001-0

Date:4-15-86

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers: All Units

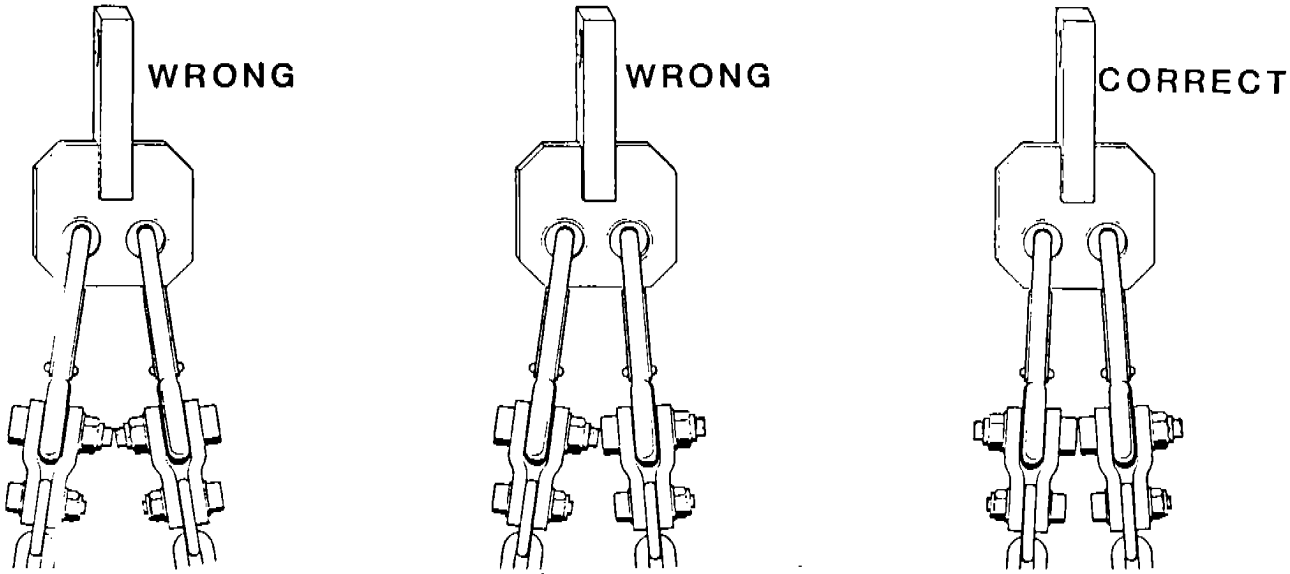
Ride: YO YO

Subject: Chain and Seat Inspection

As a safety precaution, CHANCE RIDES, INC. recommends that the following inspection be performed on all YO YO amusement rides at every set-up or weekly, whichever occurs first.

The inspection must be performed by competent personnel, capable of understanding the function of the parts and their proper installation. A parts list is included for identification of parts and as a convenience for ordering any necessary parts.

1. CHAIR HANGER - Inspect for damage or wear in the holes for the snap hook.
2. SNAP HOOK - Check the inside of the hook for damage or wear. The spring catch must operate freely and close the hook completely.
3. ADAPTER PLATES AND ATTACHING HARDWARE - Check the position of the hardware which secures the chains and snap hooks to the adapter plates. The heads of the shoulder bolts must be to the inside of each chair hanger as shown. Contact of the threaded ends of the shoulder bolts can cause damage to the fasteners.

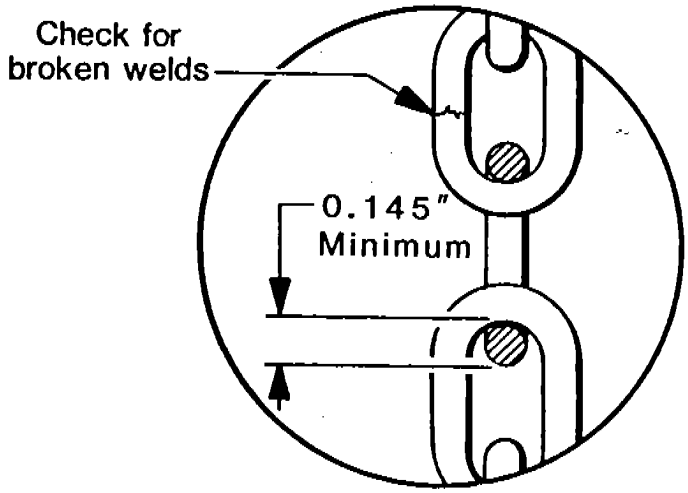


Torque the 1/2-inch shoulder bolts (3/8-16 thread) to 36 lb-ft. Torque the 3/8-inch shoulder bolts (5/16-18 thread) to 17 lb-ft. DO NOT SUBSTITUTE HARDWARE.

Factory and Sales Office: 4219 Irving · P.O. Box 12328 · Wichita, Kansas 67277-2328 · (316) 942-7411 · Telex: 910 997-6518 (CHANCE WIC)

4. CHAINS - Carefully inspect all chains for wear, damage or broken welds on links. Measure chain wear on links near the seat as shown. The minimum acceptable dimension is 0.145 inch. If replacement is required, use only 3/16-inch proof coil chain. DO NOT SUBSTITUTE CHAINS. DO NOT SPLICE OR OTHERWISE ATTEMPT TO REPAIR CHAINS.

   If end links are worn, up to three links can be removed to shorten all four chains by the same amount. ALL FOUR CHAINS FOR EACH SEAT MUST BE THE SAME LENGTH (13 ft. 5- 3/8 in. minimum).



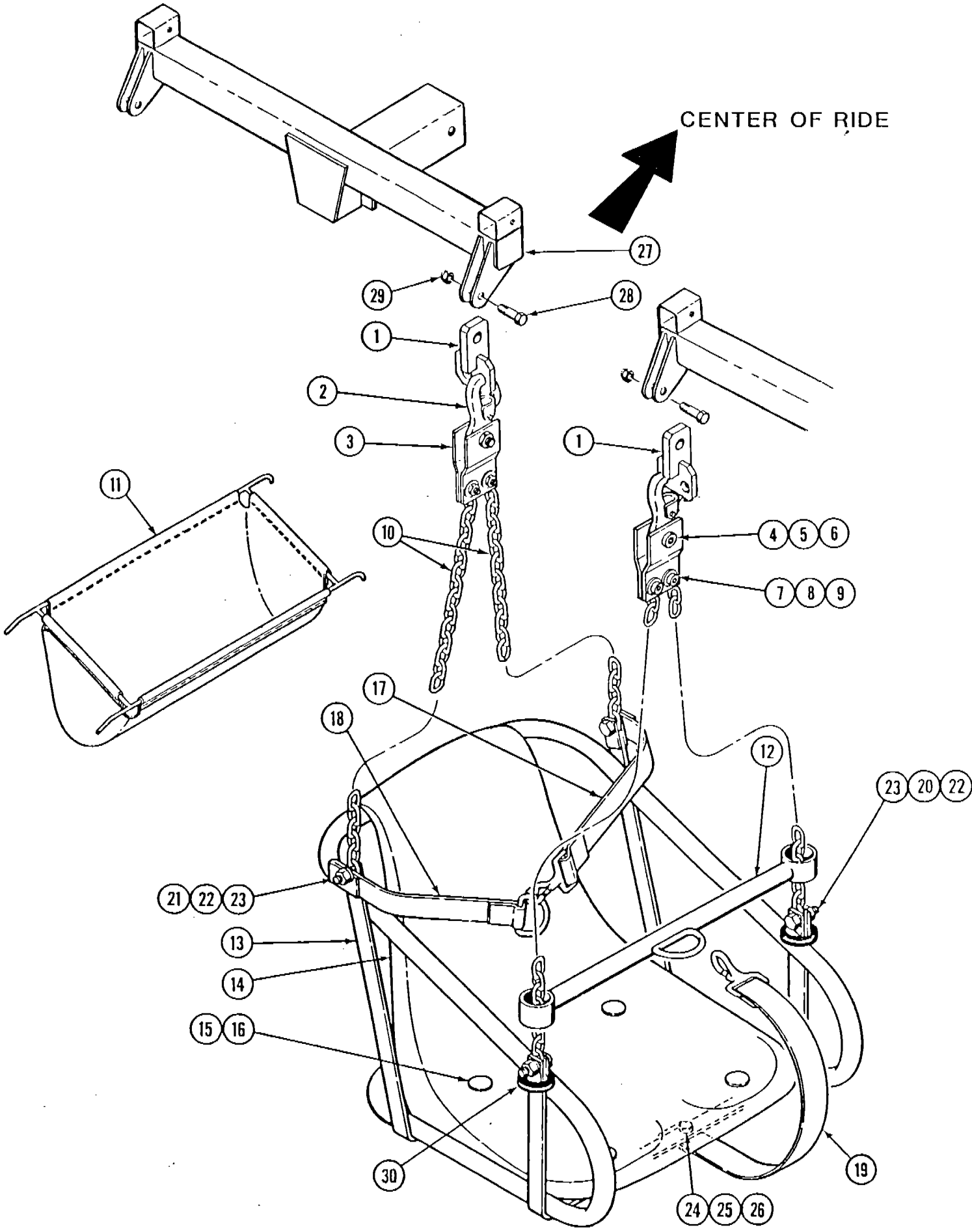
5. SEAT ATTACHMENT HARDWARE - Make sure that all bolts point out from seat. Torque the nuts to 13 lb-ft. DO NOT SUBSTITUTE HARDWARE.

6. SEAT AND SEAT FRAME - Check for cracks in the plastic seat. Inspect the seat frame for damage or wear in the area where the lap bar rests.

7. CHEST STRAP, CROTCH STRAP AND LAP BAR - All seats must be equipped with the complete passenger restraint system as shown. Replace any worn, damaged or missing parts.

8. OVERALL INSTALLATION OF CHAINS AND SEATS - All seats must be facing in the same direction - forward in relation to ride rotation. Each seat must be suspended from two chair hangers. DO NOT ATTACH BOTH SNAP HOOKS FOR A SINGLE SEAT TO THE SAME CHAIR HANGER. Snap hooks must be installed in the chair hangers toward the center of the ride as shown. Make sure the chains are not twisted.

If you have any questions or need replacement parts, contact the CHANCE CUSTOMER SERVICE DEPARTMENT.


CENTER OF RIDE
27
29
28
1
2
3
1
11
10
4 5 6
7 8 9
17
18
12
23 20 22
21 22 23
13
14
15 16
30
19
24 25 26

Parts List

Ref. No.	Part No.	Description	32 Seats Per Ride, Qty. Reqd. Per Seat
1	361-32706	Chair Hanger (376-209-001)	1
2	290-69296	Snap Hook	2
3	361-53843	Adapter Plate (376-118-001)	4
4	690-12267	Shoulder Bolt - Socket Head (1/2 x 1, 3/8-16 Thd)	2
5	696-85310	Washer - Flat (3/8)	2
6	691-48046	Nut - Flexlock (3/8-16)	2
7	686-12232	Shoulder Bolt - Socket Head (3/8 x 1, 5/16-18 Thd)	2
8	696-85304	Washer - Wrought (5/16)	2
9	691-48044	Nut - Flexlock (5/16-18)	2
10	290-15213	Chain (3/16 Proof Coil x 13 ft. 8 in. long)	4
11	361-15290	Chain Bag (376-914-001)	1
12	361-04043	Lap Bar Weldment (376-111-001)	1
13	361-29215	Seat Frame (376-110-001)	1
14	361-64993	Seat (376-113-001) Specify Color: Black, Red, Navy Blue or Sand	1
15	686-12219	Carriage Bolt (1/4-20 x 1-1/4)	4
16	691-47808	Lock Nut - Full Nylon Insert (1/4-20)	4
17	261-05443	Chest Strap (376-114-002)	1
18	261-05442	Chest Strap (376-114-001)	1
19	261-05443	Crotch Strap (376-114-002)	1
20	686-12232	Shoulder Bolt-Socket Head (3/8 x 1, 5/16-18 Thd)	2
21	686-12233	Shoulder Bolt-Socket Head (3/8 x 1-1/4,5/16-18 Thd)	2
22	696-85308	Washer - Wrought (3/8)	8
23	691-48044	Nut - Flexlock (5/16-18)	4
24	686-07004	Bolt - Hex Head Capscrew (1/4-20 x 1)	1
25	696-85300	Washer - Wrought (1/4)	1
26	691-47808	Lock Nut - Full Nylon Insert (1/4-20)	1
27	361-04045	Tee Bar Weldment (376-213-001)	*
27	361-04047	Tee Bar Weldment With Ladder Hooks (376-213-009)	*
28	686-09526	Bolt - Hex Head Capscrew (3/4-10 x 3-1/4 Grade 5)	32/ride
29	691-47836	Lock Nut - Full Nylon Insert (3/4-10)	32/ride
30	261-85602	Cushion Ring	2/seat

* Portable rides require one Tee Bar With Hook (376-213-009) and fifteen Tee Bars (376-213-001). Park model rides require sixteen Tee Bars (376-213-001).

Number: B61-0284-00

Date: 5/25/86

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers: ALL UNITS

Ride: YO YO

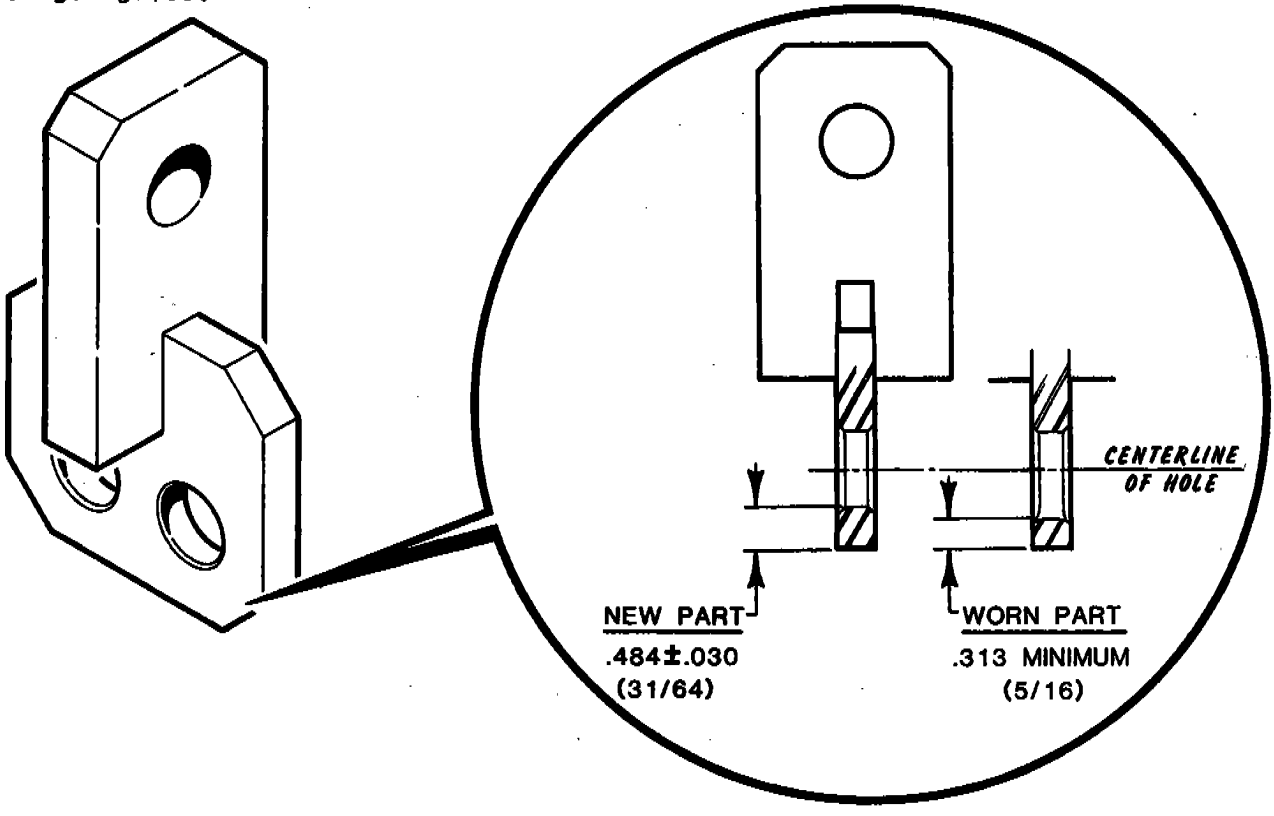
Subject: Chair Hanger Wear Limits

As a safety precaution, CHANCE MANUFACTURING COMPANY, INC. recommends that the following inspection be performed on all YO YO amusement rides at every set-up or weekly, whichever occurs first.

The inspection must be performed by competent personnel, capable of understanding the function of the parts and their proper installation.

Measure the edge distance on all chair hangers as shown. If the dimension is less than .313 (5/16"), do not operate the ride until the chair hanger is replaced.

New chair hangers are available from CHANCE MANUFACTURING COMPANY, INC. Order part number 361-32706.



Factory and Sales Office: 4219 Irving • P.O. Box 12328 • Wichita, Kansas 67277 • (316) 942-7411

CHANCE MANUFACTURING CO., Inc.

Number: B61-0265-0A

Date: 4-15-86

Supersedes: B61-0265-00 (2-20-85)

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers: All Units

Ride: YO YO

Subject: Chain and Seat Inspection

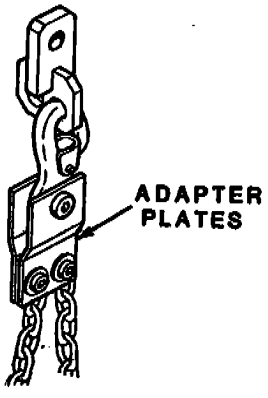
As a safety precaution, CHANCE MANUFACTURING CO., INC. recommends that the following inspection be performed on all YO YO amusement rides at every set-up or weekly, whichever occurs first.

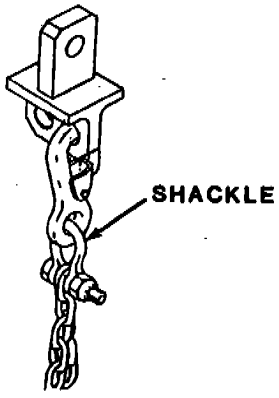
The inspection must be performed by competent personnel, capable of understanding the function of the parts and their proper installation. A parts list is included for identification of parts and as a convenience for ordering any necessary parts.

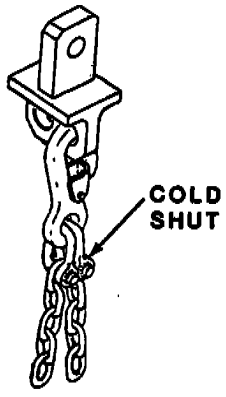
Inspection Points

1. CHAIR HANGER - Inspect for damage or wear in the holes for the snap hook.
2. SNAP HOOK - Check the inside of the hook for damage or wear. The spring catch must operate freely and close the hook completely.
3. ADAPTER PLATES AND ATTACHING HARDWARE -

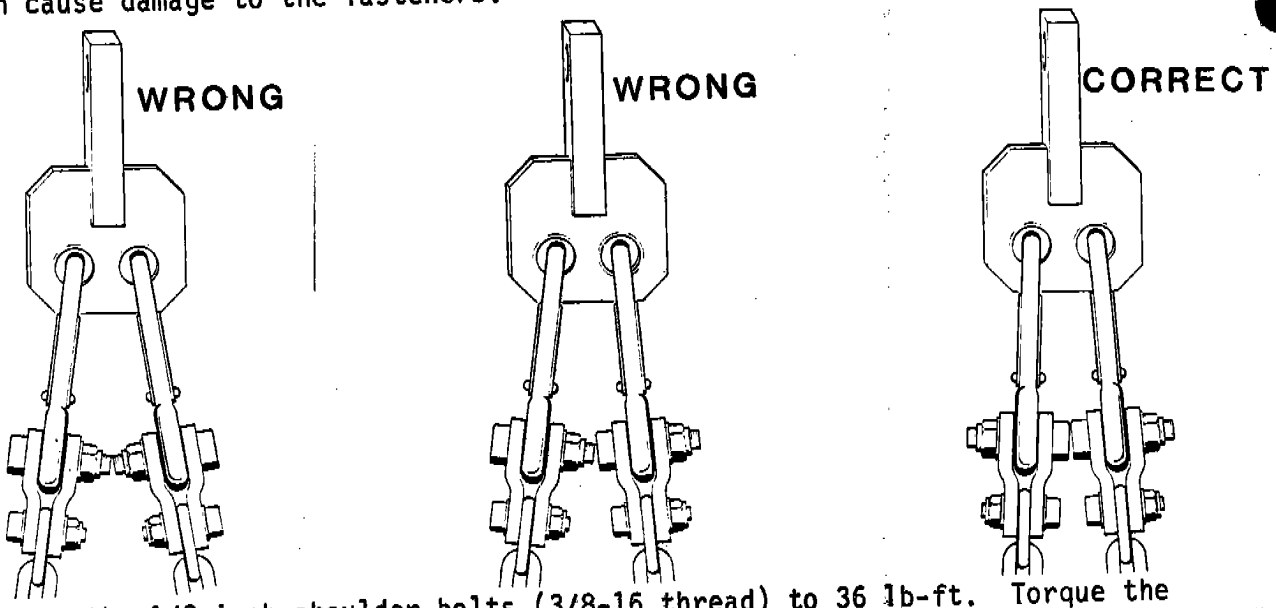
   NOTE: Early production rides were equipped with either shackles or cold shuts to attach the chains to the snap hooks. Inspect these for damage or wear, and refer to Service Bulletin No. 94. If your ride is equipped with either shackles or cold shuts, go to Step 4.







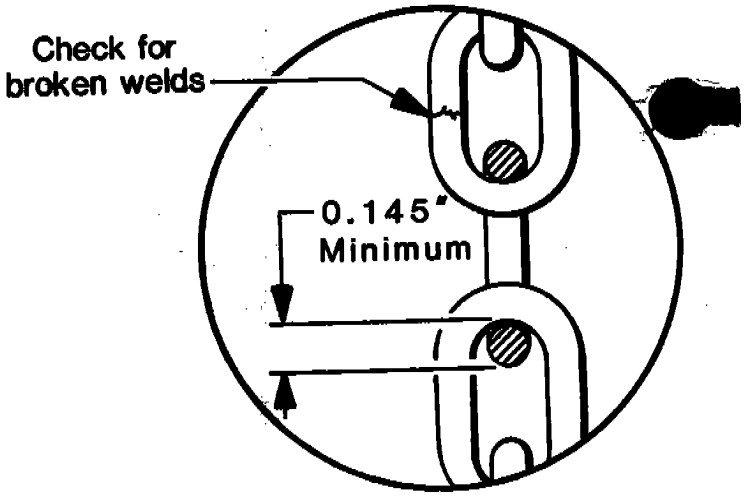
Check the position of the hardware which secures the chains and snap hooks to the adapter plates. The heads of the shoulder bolts must be to the inside of each chair hanger as shown. Contact of the threaded ends of the shoulder bolts can cause damage to the fasteners.



Torque the 1/2-inch shoulder bolts (3/8-16 thread) to 36 lb-ft. Torque the 3/8-inch shoulder bolts (5/16-18 thread) to 17 lb-ft. DO NOT SUBSTITUTE HARDWARE.

4. CHAINS - Carefully inspect all chains for wear, damage or broken welds on links. Measure chain wear on links near the seat as shown. The minimum acceptable dimension is 0.145 inch. If replacement is required, use only 3/16-inch proof coil chain. DO NOT SUBSTITUTE CHAINS. DO NOT SPLICE OR OTHERWISE ATTEMPT TO REPAIR CHAINS.

   If end links are worn, up to three links can be removed to shorten all four chains by the same amount. ALL FOUR CHAINS FOR EACH SEAT MUST BE THE SAME LENGTH (13 ft. 5-3/8 in. minimum).



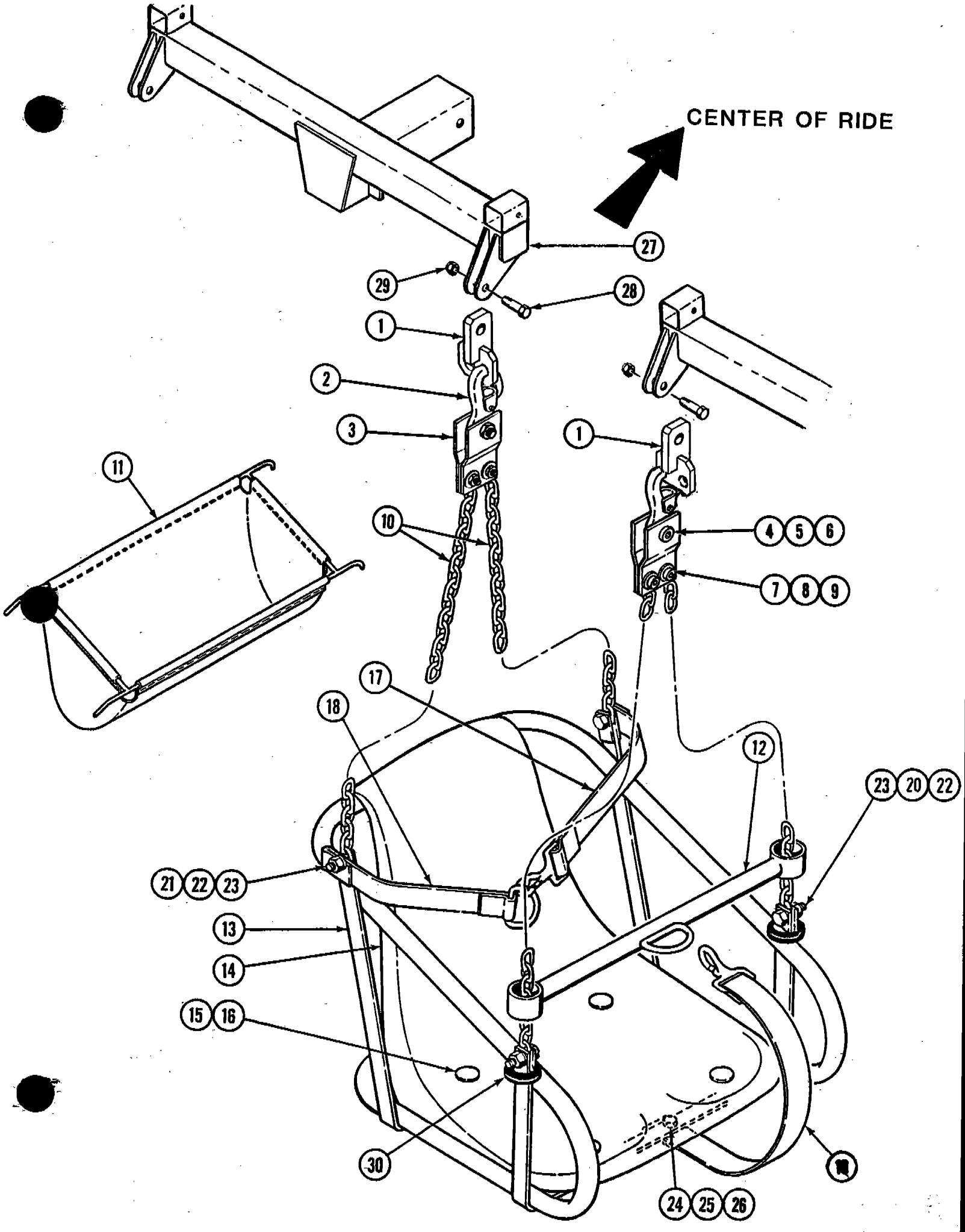
5. SEAT ATTACHMENT HARDWARE - Make sure that all bolts point out from seat. Torque the nuts to 13 lb-ft. DO NOT SUBSTITUTE HARDWARE.

6. SEAT AND SEAT FRAME - Check for cracks in the plastic seat. Inspect the seat frame for damage or wear in the area where the lap bar rests.

7. CHEST STRAP, CROTCH STRAP AND LAP BAR - All seats must be equipped with the complete passenger restraint system as shown. Replace any worn, damaged or missing parts.

8. OVERALL INSTALLATION OF CHAINS AND SEATS - All seats must be facing in the same direction - forward in relation to ride rotation. Each seat must be suspended from two chair hangers. DO NOT ATTACH BOTH SNAP HOOKS FOR A SINGLE SEAT TO THE SAME CHAIR HANGER. Snap hooks must be installed in the chair hangers toward the center of the ride as shown. Make sure the chains are not twisted.

If you have any questions or need replacement parts, contact the CHANCE CUSTOMER SERVICE DEPARTMENT.


CENTER OF RIDE
27
29
28
1
2
3
1
11
10
4 5 6
7 8 9
17
18
12
23 20 22
21 22 23
13
14
15 16
30
24 25 26

Parts List

Ref. No.	Part No.	Description	32 Seats Per Ride, Qty. Reqd. Per Seat
1	361-32706	*Chair Hanger (376-209-001)	1
2	290-69296	Snap Hook	2
3	361-53843	**Adapter Plate (376-118-001)	4
4	690-12267	Shoulder Bolt - Socket Head (1/2 x 1, 3/8-16 Thd)	2
5	696-85310	Washer - Flat (3/8)	2
6	691-48046	Nut - Flexlock (3/8-16)	2
7	686-12232	Shoulder Bolt - Socket Head (3/8 x 1, 5/16-18 Thd)	2
8	696-85304	Washer - Wrought (5/16)	2
9	691-48044	Nut - Flexlock (5/16-18)	2
10	290-15213	Chain (3/16 Proof Coil x 13 ft. 8 in. long)	4
11	361-15290	Chain Bag (376-914-001)	1
12	361-04043	Lap Bar Weldment (376-111-001)	1
13	361-29215	Seat Frame (376-110-001)	1
14	361-64993	Seat (376-113-001) Specify Color: Black, Red, Navy Blue or Sand	1
15	686-12219	Carriage Bolt (1/4-20 x 1-1/4)	4
16	691-47808	Lock Nut - Full Nylon Insert (1/4-20)	4
17	261-05443	Chest Strap (376-114-002)	1
18	261-05442	Chest Strap (376-114-001)	1
19	261-05443	Crotch Strap (376-114-002)	1
20	686-12232	Shoulder Bolt-Socket Head (3/8 x 1, 5/16-18 Thd)	2
21	686-12233	Shoulder Bolt-Socket Head (3/8 x 1-1/4,5/16-18 Thd).	2
22	696-85308	Washer - Wrought (3/8)	8
23	691-48044	Nut - Flexlock (5/16-18)	4
24	686-07004	Bolt - Hex Head Capscrew (1/4-20 x 1)	1
25	696-85300	Washer - Wrought (1/4)	1
26	691-47808	Lock Nut - Full Nylon Insert (1/4-20)	1
27	361-04045	Tee Bar Weldment (376-213-001)	***
27	361-04047	Tee Bar Weldment With Ladder Hooks (376-213-009)	***
28	686-09526	Bolt - Hex Head Capscrew (3/4-10 x 3-1/4 Grade 5)	32/ride
29	691-47836	Lock Nut - Full Nylon Insert (3/4-10)	32/ride
30	261-85602	Cushion Ring	2/seat

* The chair hanger shown is interchangeable with the chair hangers originally equipped on early production rides.

** Early production rides were equipped with either shackles or cold shuts, which are no longer provided for this application. When replacing these parts, order items 3 through 9 in the quantities specified.

*** Portable rides require one Tee Bar With Hook (376-213-009) and fifteen Tee Bars (376-213-001). Park model rides require sixteen Tee Bars (376-213-001).

Number: A61-0263-00

Date: February 20, 1985

Supersedes:

America's Largest Manufacturer of Amusement Rides

SAFETY ALERT

Effective Serial Numbers: All Units

Ride: YO YO

Subject: Lap Bar Kit

CHANCE MANUFACTURING CO., INC. has become aware of at least one accident involving the YO YO amusement ride. The passenger apparently was pulled by another passenger and/or slid forward under the lap bar and out of the seat while the ride was in motion.

CHANCE MANUFACTURING has developed a new lap bar which increases passenger safety. The new lap bar design incorporates a crotch strap, which secures the lap bar in the lowered position. The existing chest strap must be used in conjunction with the new lap bar to complete the passenger restraint system.

ALL OWNERS OF YO YO RIDES ARE REQUIRED TO REPLACE THE EXISTING LAP BARS WITH THE NEW LAP BAR SYSTEM.

Order kit number K61-0263-00, which includes the new style lap bars, crotch straps and all necessary hardware for one complete ride (32 seats). Install the kit using the instructions on the reverse side of this bulletin. Fill out and return the attached Certification of Compliance for installation of the kit within seven (7) days from receipt of the kit.

PARTS LIST

Components of Kit No. K61-0263-00

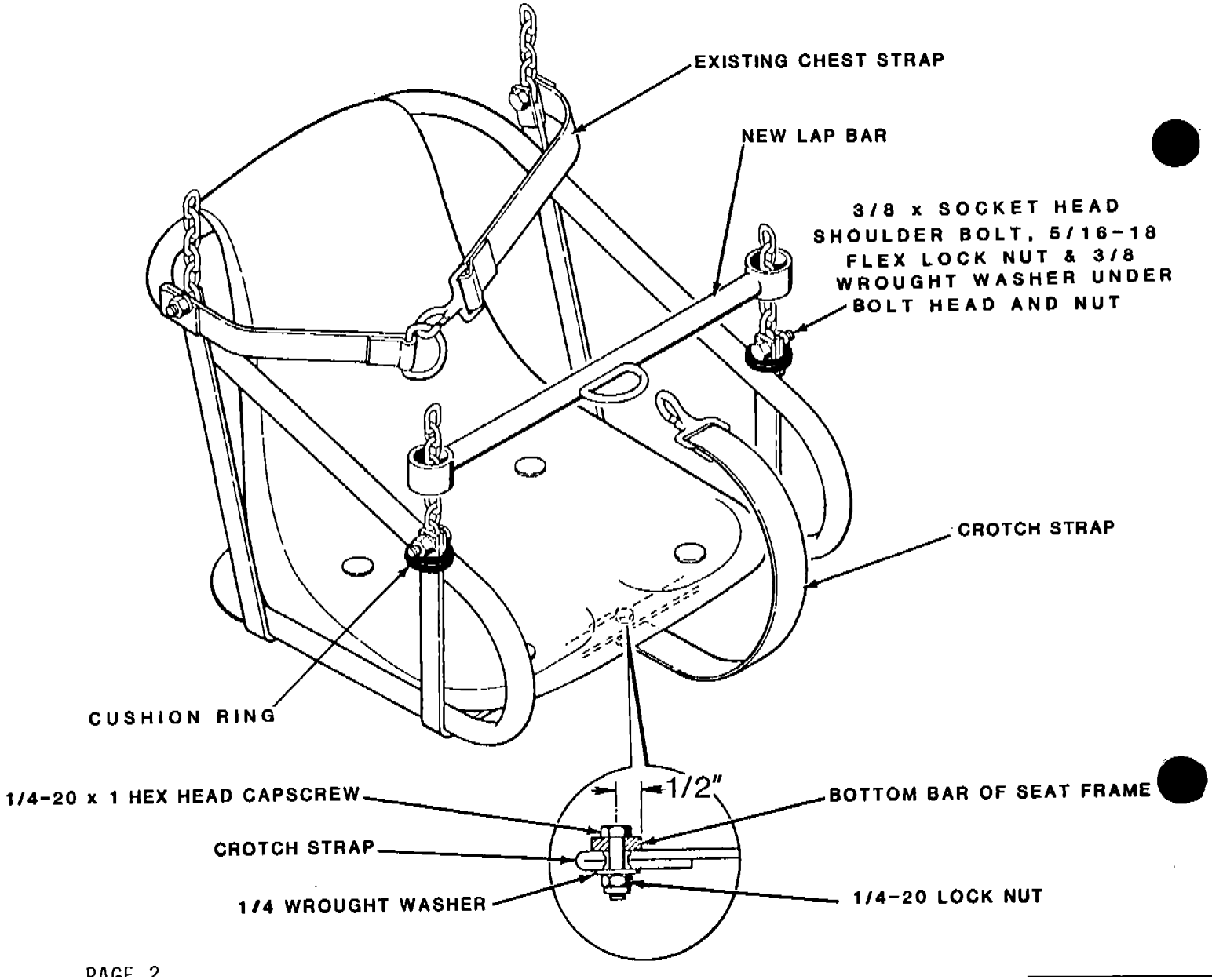
Part No.	Description	Quantity
361-04043	Lap Bar	32
261-05443	Crotch Strap	32
686-07004	Bolt - Hex Head Capscrew (1/4-20 x 1)	32
696-85300	Washer - Wrought (1/4)	32
691-47808	Lock Nut - Full Nylon Insert (1/4-20)	32
686-12232	Shoulder Bolt - Socket Head (3/8 x 1)	64
691-48044	Flex Lock Nut (5/16-18)	64
696-85308	Washer - Wrought (3/8)	128
261-85602	Cushion Ring	64

Installation Instructions

All work must be performed by competent mechanics, capable of understanding the function of the parts and their proper installation.

Read these instructions thoroughly and make sure you understand them before installing the kit. Identify all parts by checking them against the parts list. If any parts are missing, contact CHANCE MANUFACTURING immediately. Do not substitute an inferior grade of material or part.

1. With the ride stopped and the master circuit breaker in the "OFF" position, remove the two front chains from any seat. Remove the lap bar.
2. Inspect all four chains for wear per Service Bulletin B65-0266-00.
3. Install a cushion ring over each front upright on the seat frame.
4. Install the new lap bar on the chains with the D-ring toward the front of the seat. Install the new hardware with the bolts pointing out from the seat as shown. Torque the nuts to 13 lb-ft.
5. Drill a 1/4-inch hole through the bottom bar on the seat frame, on the centerline of the seat as shown. Be careful not to drill into the plastic seat.
6. Install the crotch strap and hardware as shown. Torque the nut to 72 lb-in.
7. Repeat Steps 1 through 5 on all remaining seats.



Number: B61-0226-00

Date: 8-4-81

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers: ALL RIDES

Ride: YO YO

Subject: TILT CYLINDER EARS AND STOPS

A condition has occured on one ride in which the bottom ear fastening the tilt cylinder to the top of the tower, tore loose. We are requesting that all owners of Yo Yo's immediately inspect the weld and metal adjacent to the weld on the ear attached to the tower, (FIGURE A). The ear at the top of the cylinder attached to the tilt head, (FIGURE B). and the leveling stop tube where it attaches to the tower (FIGURE C), should also be checked.

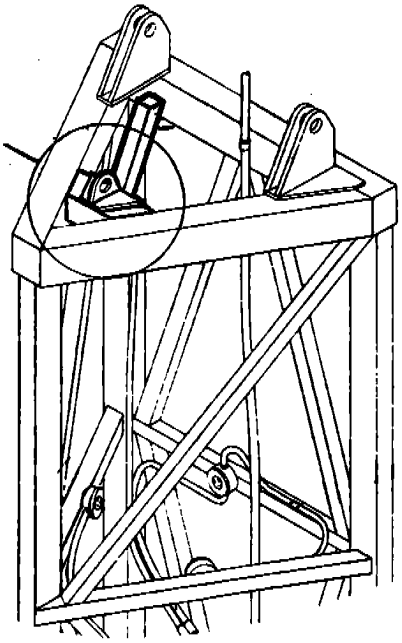
These areas should be established as "Special Care Areas" and given regular weekly visual inspections by qualified individuals.

Please report the presence of cracks at areas "A", "B", or "C" immediately to Chance Manufacturing Co., Inc.

The attached Certification of Compliance must be completed and returned to Chance Mfg. within seven days of receipt of the bulletin.

A

INSPECT ALL WELDS IN THIS AREA



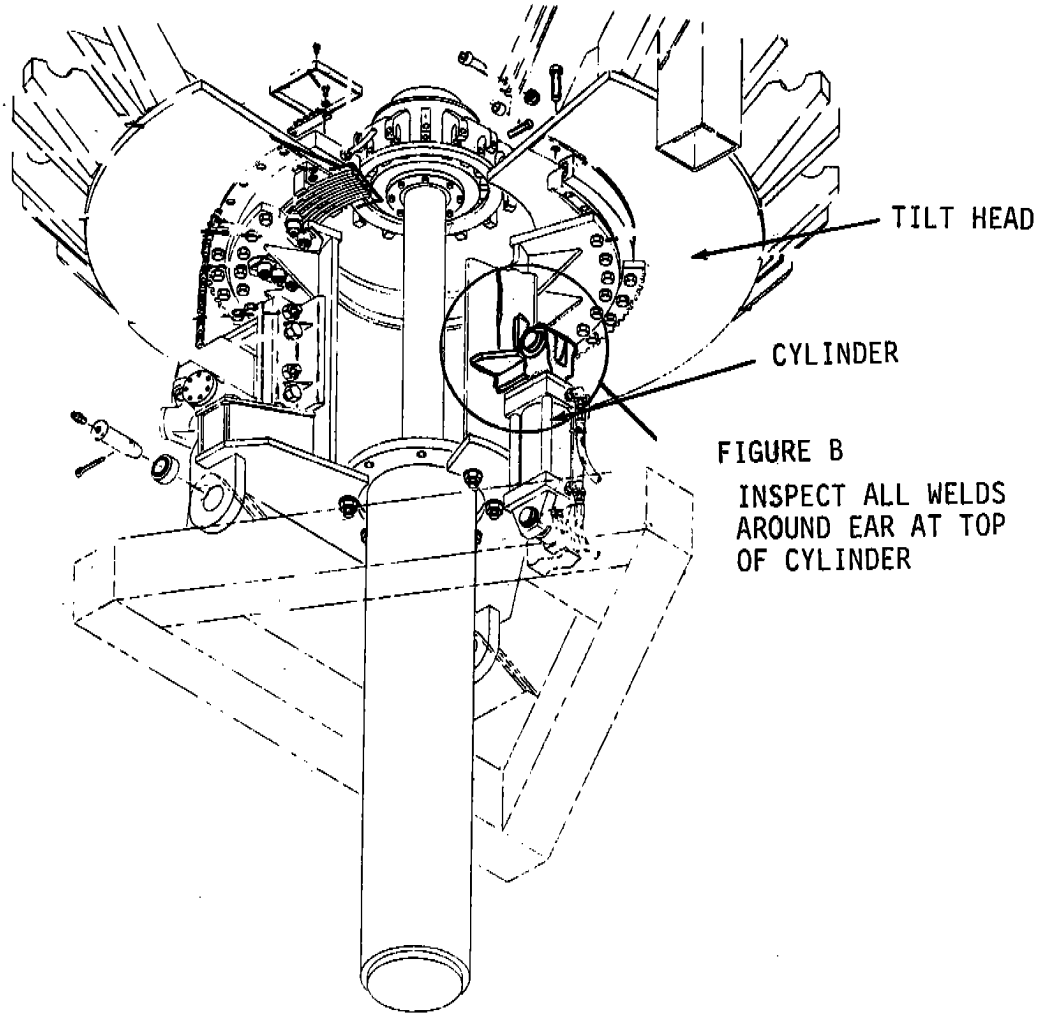


FIGURE B

INSPECT ALL WELDS AROUND EAR AT TOP OF CYLINDER

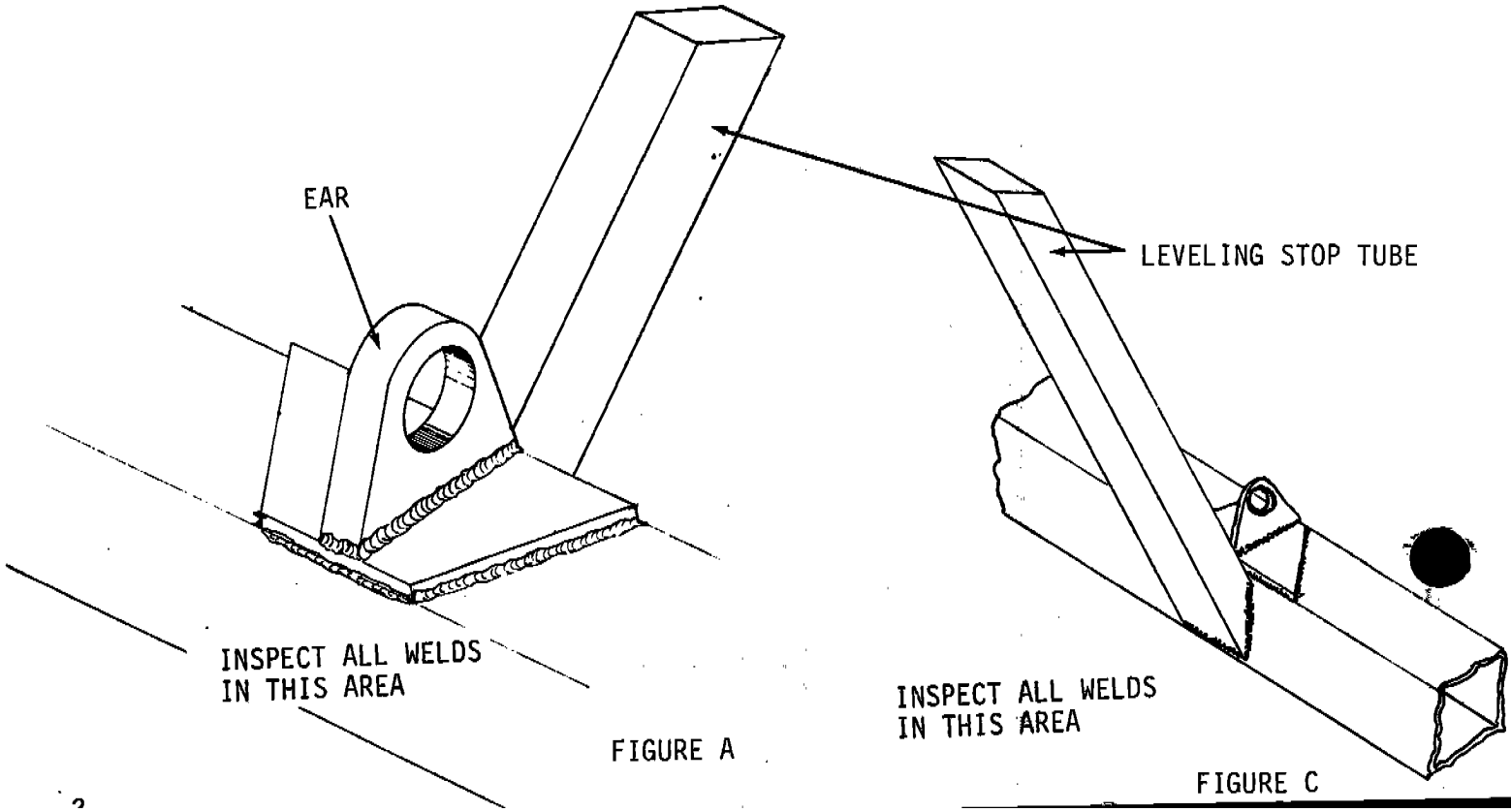


FIGURE A

FIGURE C

CHANCE MANUFACTURING CO., Inc.

Number: 137

Date: 6-3-77

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers:

Ride: YO YO

Subject: SWEEP PIVOT BEARING

We have been informed that a YO-YO sweep pivot has sheared due to a seized sweep pivot bearing. This was caused by the sweep pivot bearing not being adequately lubricated. (See page 3-5 of YO-YO maintenance manual and Service Information Bulletin Number 125.) All YO-YO owners must check their sweep pivot bearings immediately.

Check each sweep pivot bearing by observing the bearing races as the sweeps are raised and lowered. The inner races must turn with the sweep pivots and the outer races must be held stationary in the bearing housings.

Bearings allowed to seize can cause sweep pivots to shear and allow the sweeps to drop.

Bearings which turn in the bearing housings will gall the housings. If bearing housings become galled to the point that bearings can no longer be held securely, the installation of a new hub weldment and match bored bearing caps will be required.

If any bearings do not function as described, remove the bearings and inspect them to see that they are not seized.

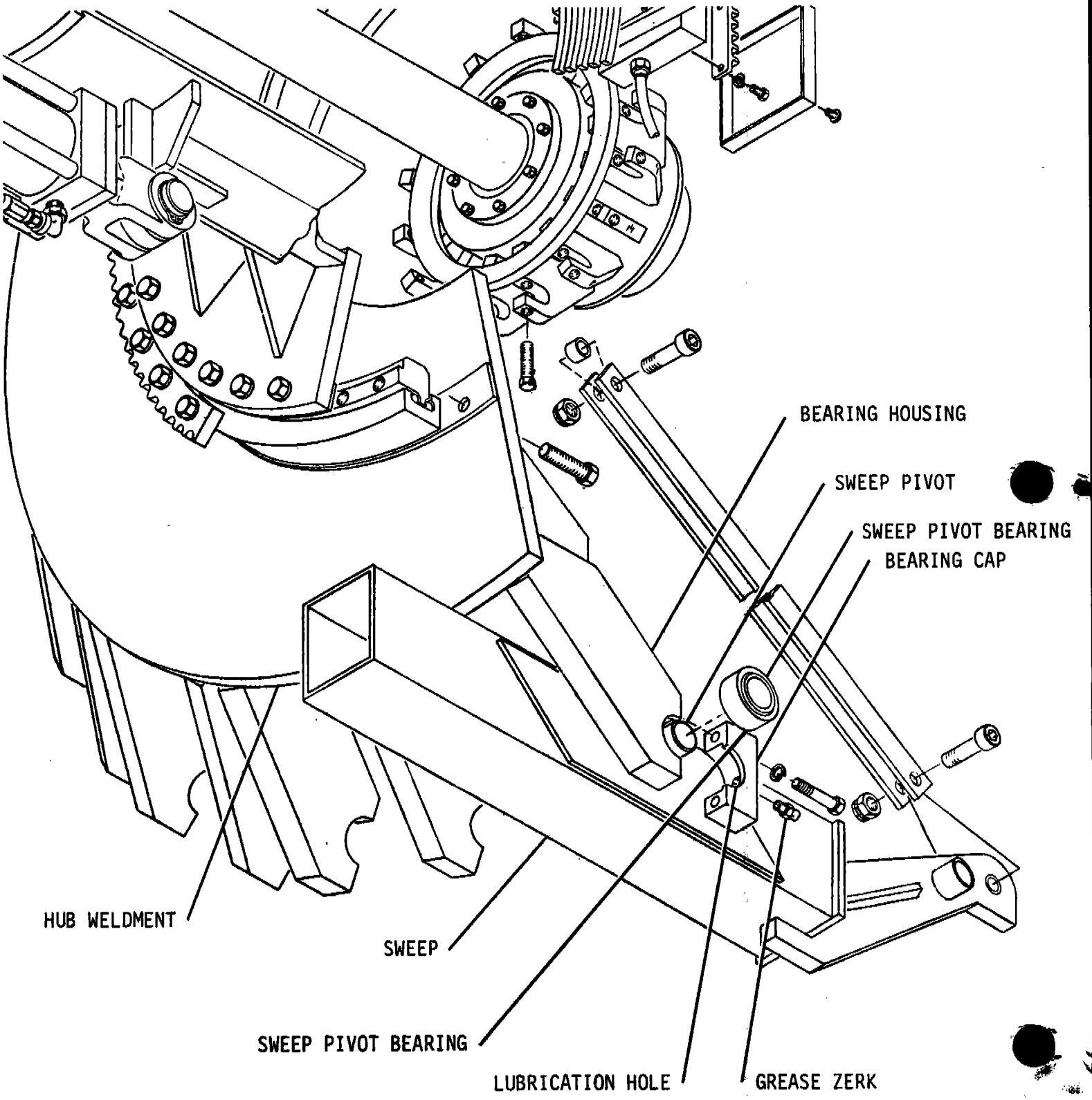
CAUTION: BEARING CAPS AND HOUSINGS ARE MATCH BORED TO ACCEPT BEARINGS. EACH BEARING CAP MUST REMAIN WITH ITS ORIGINAL HOUSING.

Any bearings which do not turn freely must be replaced. Do not try to free seized bearings.

Teflon bearings which require no lubrication are available for rides serial numbers 74-3304, 74-3306 through 74-3311, 74-3313 and on. Order bearing number 261-04399.

Rides serial numbers 74-3300 through 74-3303, 74-3305 and 74-3312 use original equipment bearing number 290-04854.

To insure proper operation of bearings which require lubrication, inspect each bearing cap to see that the lubrication hole aligns with the groove in the bearing outer race. If a lubrication hole does not align with a groove, enlarge the bore of the hole on the inner side of the bearing cap until the hole overlaps the groove. Also inspect the holes in the outer race of the bearing to see that they are not plugged.



CHANCE MANUFACTURING CO., Inc.

Number: 136

Date: 5-10-77

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers: 74-3304 & 74-3307 THROUGH 75-3336

Ride: YO YO

Subject: REPLENISHING CHECK REPLACEMENT

We have been informed of a hydraulic leakage problem on some YO YOs. The replenishing check valve which mounts in the manifold block may leak after the ride has been in operation for a period of time. This leak is internal and will cause the hydraulic motor that drives the turret to slow down.

To correct this problem, we are providing a new replenishing check valve and retainer. This check valve and retainer mount in the manifold block behind the braking relief valve assembly. See Figure A.

Remove the braking relief valve assembly. Then remove the old retainer and check valve. Discard the old retainer and check valve. Install the new check valve and retainer.

The shoulder of the retainer should protrude 1/16" to 3/32" from the surface of the manifold block. Do not use force to press the shoulder of the retainer flush with the manifold block. See Figure B.

If the shoulder of this retainer protrudes more than 3/32" or fits flush against the manifold block, a different brass spacer must be used on the check valve.

Check the depth of the 3/4" bore in which the check valve and retainer fit. If the bore is 3 3/8" deep, use one 1/8" brass spacer and one 1/4" brass spacer on the check valve. If the bore is 3 1/2" deep, use two 1/4" brass spacers on the check valve. See Figure B.

KIT NUMBER 136

CHECK VALVE ASSEMBLY.....361-84570
RETAINER.....361-60163
SPACER 1/4".....361-70173
SPACER 1/8".....361-70172
O-RING.....290-61297

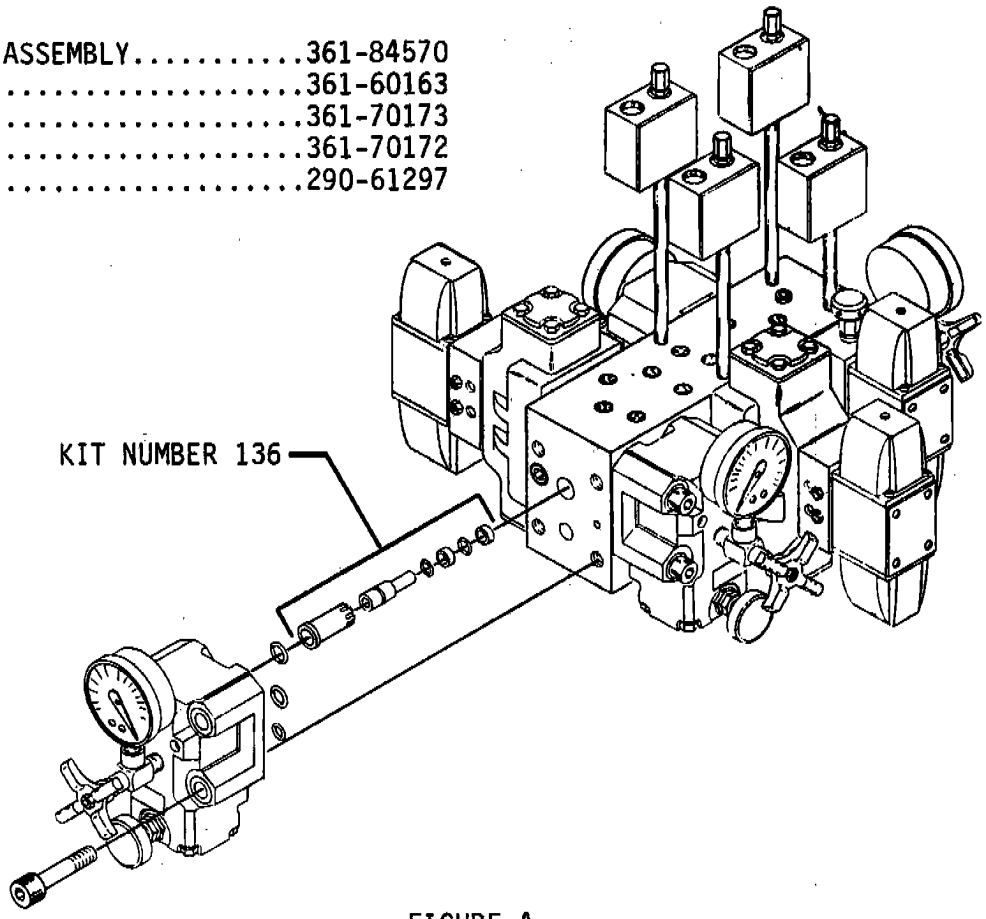


FIGURE A

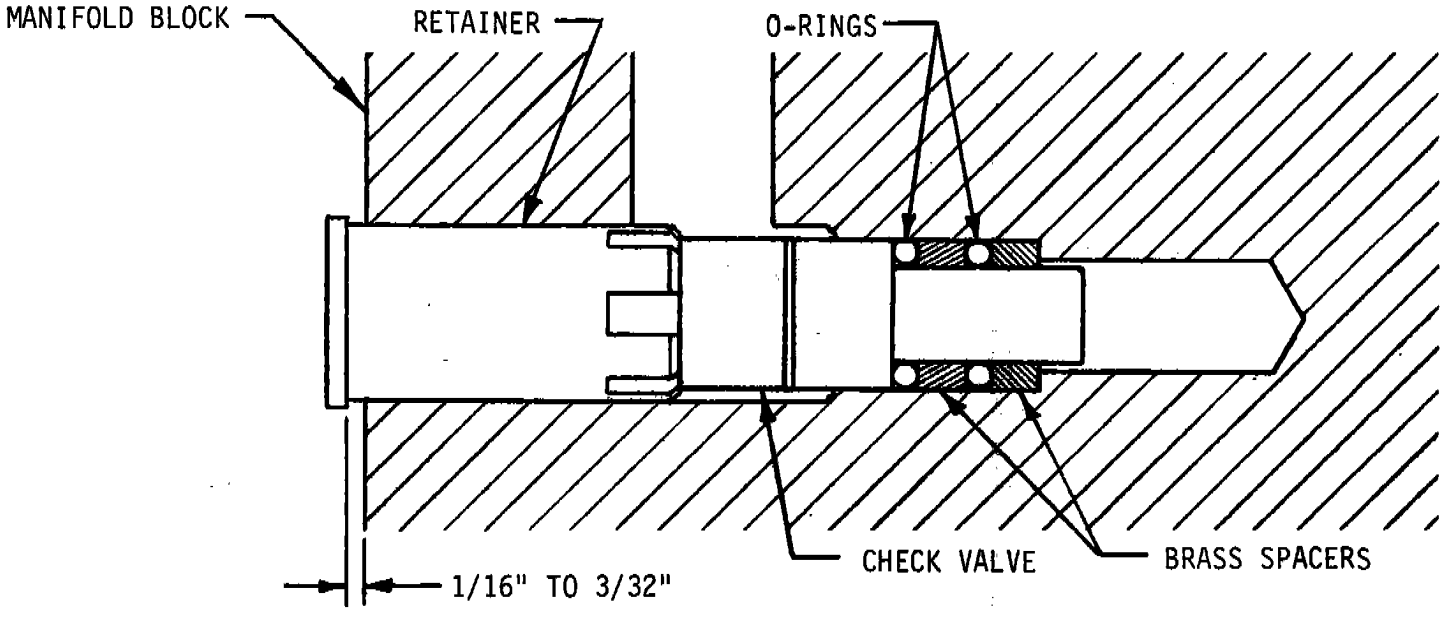


FIGURE B

Number: 135

Date: 3-3-77

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

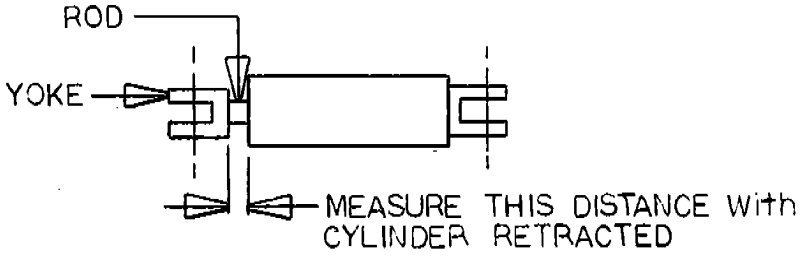
Effective Serial Numbers:

Ride: YO YO

Subject: INSTALLATION OF TILT CYLINDER

When installing a new tilt cylinder it is necessary to make sure that the head is level when installation is complete. If the head is not level you will experience difficulty racking sweeps in lower U shaped racks.

The simplest method to accomplish this, is to measure the distance that the yoke is screwed down on the rod and install yoke on new cylinder in the same location.



After cylinder is installed, check head for level by measuring the distance from the top of the tower to the bottom of hub plate at three locations (each of the corners of the tower triangle). Adjust yoke on tilt cylinder until all three dimensions are the same, then tilt head will be level.

CHANCE MANUFACTURING CO., Inc.

Number: 134

Date: 3-3-77

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers:

Ride: YO YO

Subject: INSTALLATION OF SEQUENCE VALVE

STEP ONE

Remove all pressure switches, (located on top of manifold block in opossum belly). Remove wiring to these pressure switches. Plug holes in manifold block with 1/4 NPT pipe plugs (4 places).

STEP TWO

Remove two steel lines from manifold block at ports marked 1.5A and 1.5B, plug with 1/4" NPT pipe plugs.

STEP THREE

Remove ICP-600-S-19-M pilot check valve located on sweep lift cylinder. Replace with new port block and port block support using existing clamping strap and new clamping strap, furnished with kit. Remove 376-610 -11 & -13 steel tubes and replace with -4 & -5 hose assembly furnished with kit. Tie -4 hose assembly to sweep cylinder using wire ties furnished with kit.

Units 9 thru 15 has Hydraulic Specialities double pilot operated check. Units 16 thru 36 use ICP-600-S-19-M pilot check.

STEP FOUR

Install RCT-06-F2-23 sequence valve in 3/4" NPT port on new port block (set pressure at 2000 PSI). Install MV 400 needle valve on sequence valve.

STEP FIVE

Remove 376-669-1 orfice assembly from tilt cylinder A and B port. Install 376-648 check valve in B port (lower port) of tilt cylinder. Then using existing hose that went from B port on tilt cylinder to pipe in tower, plumb B port on tilt cylinder to needle valve on sequence valve.

STEP SIX

Plumb drain on sequence valve to B-80 motor drain. Use existing hose that went from drain on C-572-E 4 way valve to tower pipe.

STEP SEVEN

Install 376-649 check valve in A port on tilt cylinder. Plumb check valve to 1/4" NPT port on new port block. Use existing line that went from A port on tilt cylinder to pipe in tower.

STEP EIGHT

Reset pressure setting on MRFN 12P relief valve to 1200 PSI. Valve is located on pipe in upper portion of opossum belly over manifold block. Reset pressure setting on MRFN-16M relief valve to 2200 PSI. Valve is located on back of manifold block in opossum belly.

ELECTRICAL

STEP ONE

Remove all wiring from tilt 4 way valve (valve is no longer used). Valve is located on manifold block in opossum belly.

STEP TWO

Hook A coil, which is up sweeps and up tilt cylinder to up side of double pole toggle switch in hand control box. Splice wires inside 4 x 4 conduit box mounted on manifold block opossum belly.

Number: 125

Date: 6-29-76

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers:

Ride: YO YO

Subject: MAINTENANCE

During the recent inspection of YO YO's, several problems have been brought to our attention:

During set-up, pins securing sweep ends to tower must be removed before raising sweeps. Failure to do this has resulted in bent sweeps. If you cannot trust your help to remove the pins, leave them out when tearing ride down and wrap a chain around the sweeps securely.

On some rides the safety interlocks have been removed because of interference from bent sweeps. The interlocks are installed at the factory to help insure safe operation and should never be removed or altered.

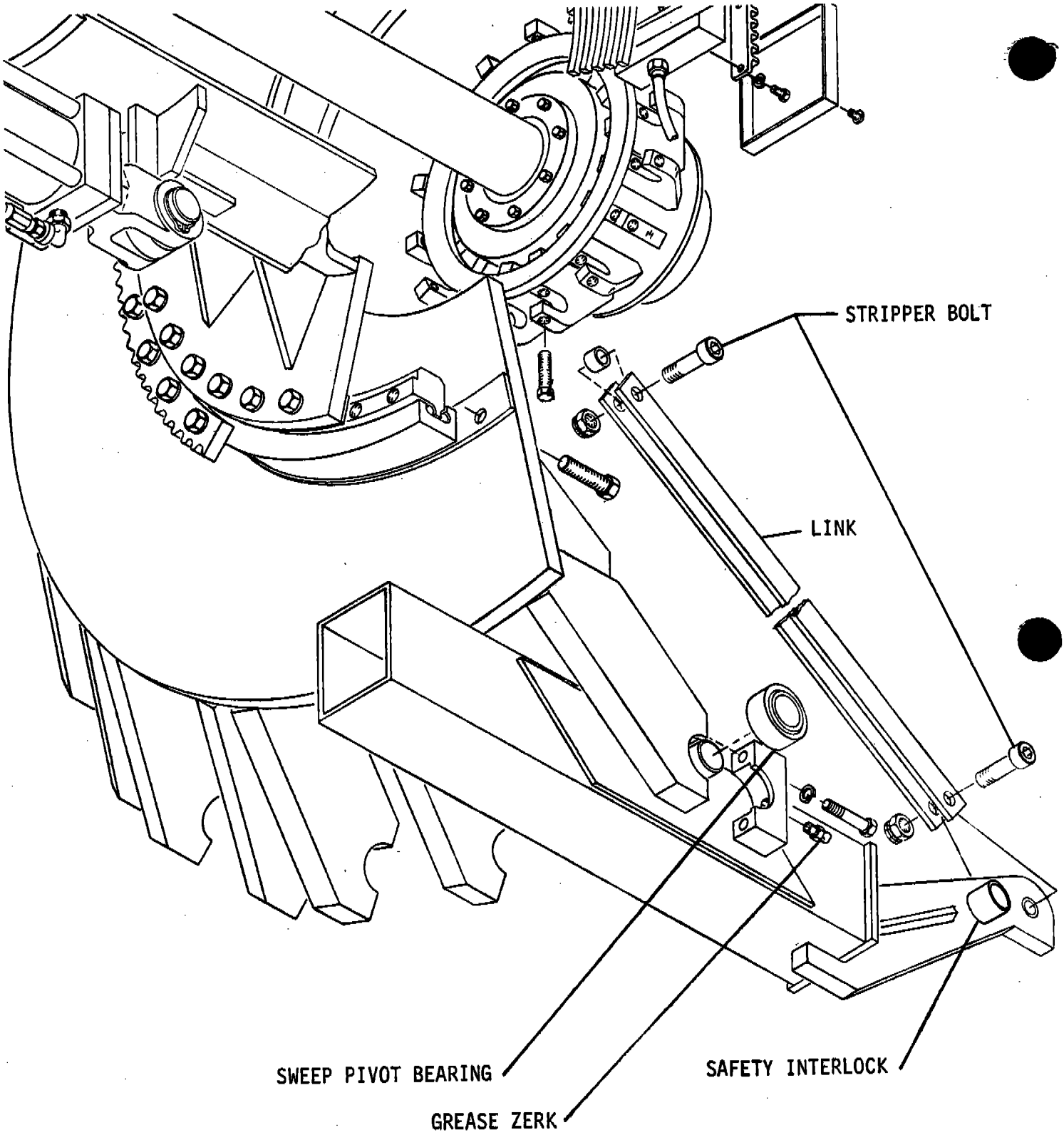
The links and stripper bolts connecting the hub to the sweeps should only be replaced with factory purchased parts or parts meeting factory specifications.

The sweep pivot bearings should be greased weekly with the sweeps in full up, full down and several intermediate positions to grease the entire bearing. Teflon bearings which require no lubrication are available from the factory.

SEE REVERSE SIDE FOR DRAWING

Factory and Sales Office: 4219 Irving • P.O. Box 12328 • Wichita, Kansas 67277 • (316) 942-7411

Form TP-0007-883


STRIPPER BOLT
LINK
SWEEP PIVOT BEARING
GREASE ZERK
SAFETY INTERLOCK

CHANCE MANUFACTURING CO., Inc.

Number: 124

Date: 6-29-76

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers: 74-3300 THROUGH 76-3342

Ride: YO YO

Subject: CYLINDER END CAP CHECK AND REPLACEMENT

Due to a sweep lift cylinder end cap having blown out on a YO YO, we have had tests performed by an outside testing firm. The failure was determined to be due to an overloading of the hydraulic system. To prevent further incidents, maximum hydraulic pressure settings should not be exceeded and a new cylinder end cap installed. There is a hydraulic schematic for your ride attached to this bulletin. Rides 74-3300 through 75-3333 have had a temporary kit installed on the end cap which should serve through the remainder of the season. Rides 75-3333 through 76-3342 have been operating less than one season and should serve until the new design end cap can be installed at the end of this season.

New stronger design end caps will be available from the cylinder manufacturer for all rides through 76-3342 by mid-July. Make appointments for installation of these kits with Dick Chance as soon as possible. If you are in our area, installation is available at the factory. This installation will be much faster than road service, which is also available.

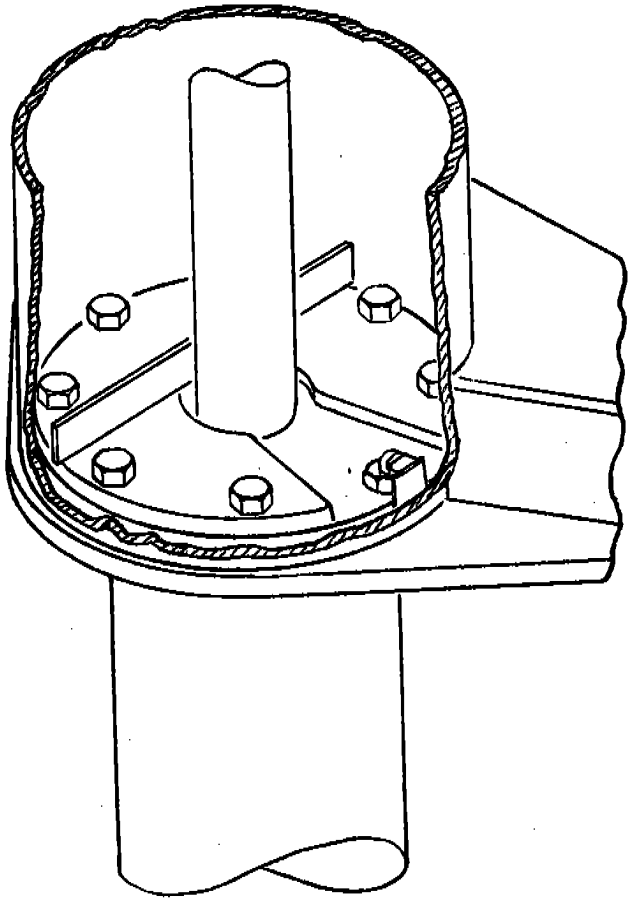
SEE REVERSE SIDE FOR DRAWING

Factory and Sales Office: 4219 Irving • P.O. Box 12328 • Wichita, Kansas 67277 • (316) 942-7411

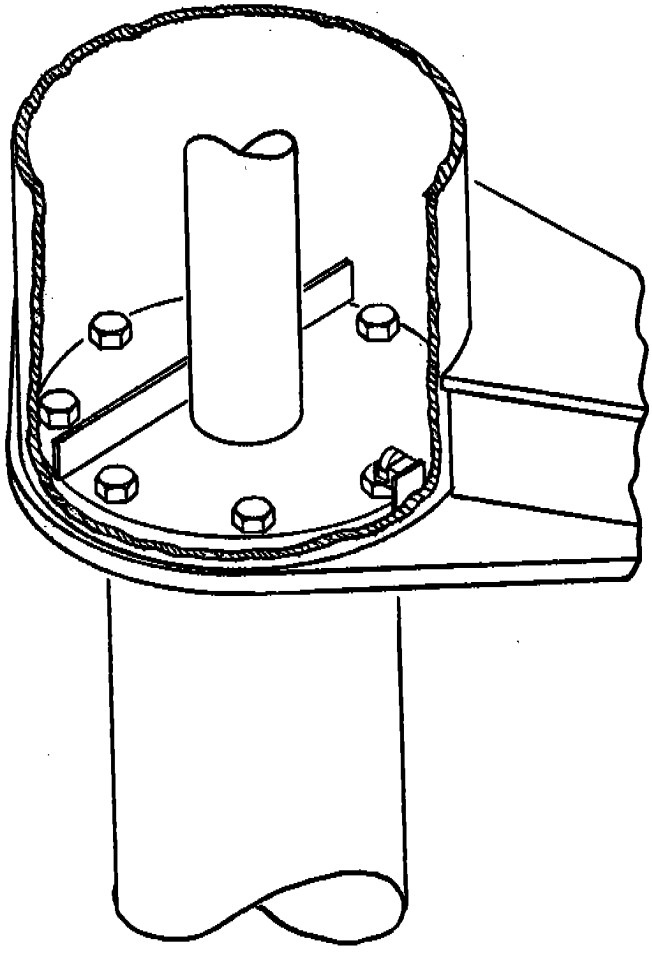
Form TP-0007-883

To insure safe operation until the new design end caps are installed, cylinder end caps on all rides should be checked weekly as follows:

Place a straight edge across the end cap as shown in drawing. Check in at least two positions, 90° apart. Try to insert a 1/16" feeler gauge under straight edge. If end cap shows more than 1/16" gap, notify factory at once.



WITH TEMPORARY KIT



WITHOUT TEMPORARY KIT

CHANCE MANUFACTURING CO., Inc.

Number: 123

Date: 6-9-76

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers:

Ride: YO YO

Subject: LIFT CYLINDER FAILURE

URGENT

STOP OPERATION OF ALL YO YO RIDES IMMEDIATELY.

We have a report of a YO YO which has blown the end out of the lift cylinder, allowing all the sweeps to drop to the ground. Fortunately, no one was on the ride and no one was hurt. All YO YOS are of the same design and are subject to the same incident.

SHUT DOWN THE OPERATION OF YOUR RIDE IMMEDIATELY. We are sending personnel to install a temporary repair kit that will allow you to operate until a permanent repair can be made.

CHANCE MANUFACTURING CO., Inc.

Number: 102

Date: 5-29-75

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers:

Ride: YO YO

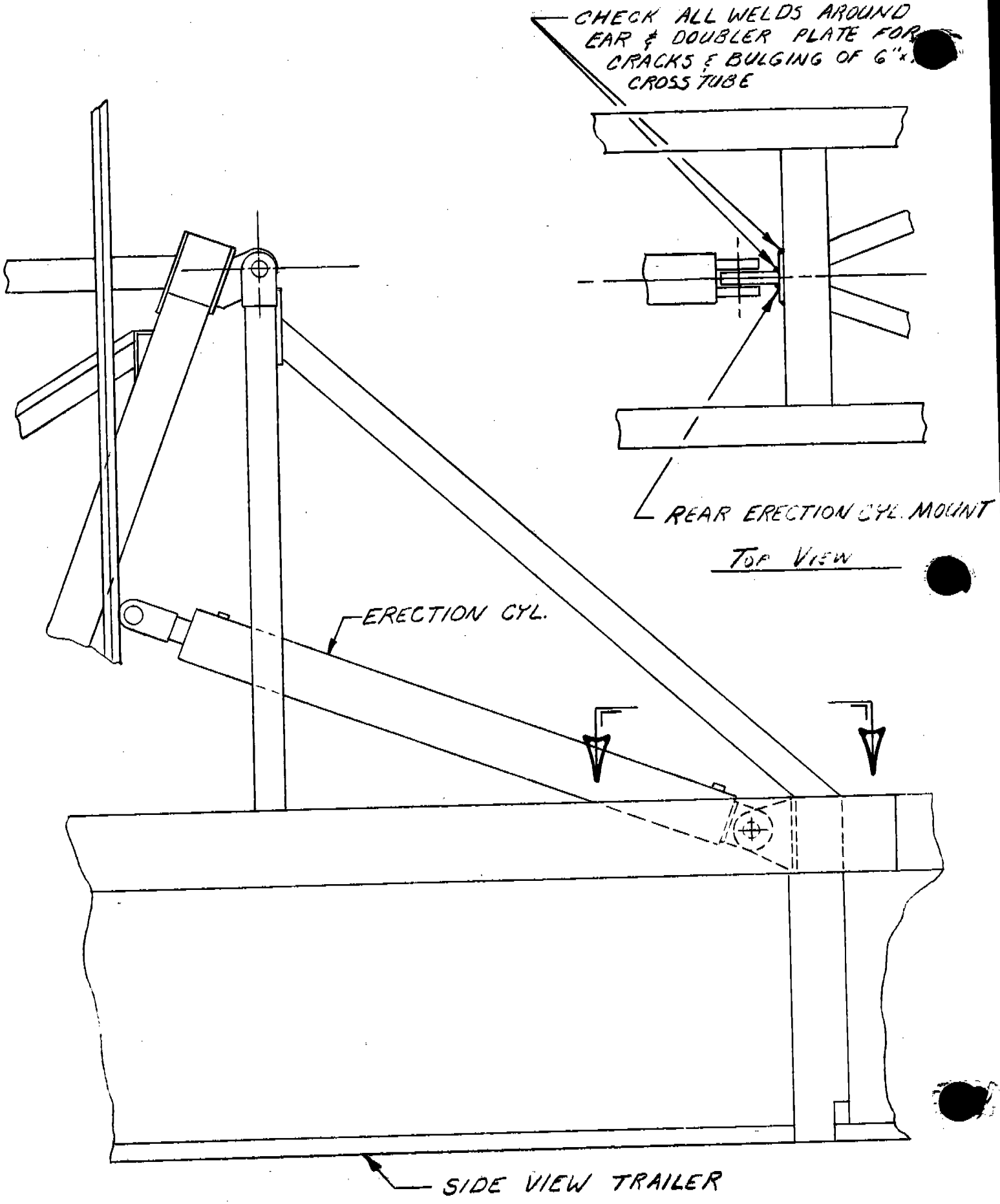
Subject: REAR ERECTION CYLINDER MOUNT

URGENT

Recently we have become aware of a condition on the YO YO Ride that could cause a serious accident. The problem is in the area of the tower erection cylinder mount, shown on the back of this sheet. If your ride personnel reverse the direction of the tower lift cylinder with the tower stiff leg brace pinned in position, it may tear the rear erection cylinder mount off the trailer frame. This will allow the tower to fall when the pin is removed, which would have catastrophic results.

It is imperative that you check the rear erection cylinder mount immediately to see that it has not been broken or cracked. Also, you must alert your ride personnel as to this condition so they will not reverse the direction of the erection cylinder until the tower stiff leg pin has been removed.

In order to eliminate the possibility of this condition occurring, we are making a change in the hydraulic circuit that operates the tower erection cylinder. Please contact Richard G. Chance at the factory so we can schedule a service representative to make this change on your ride. This change will be made at no cost to you, and it is very important that you contact us immediately.


CHECK ALL WELDS AROUND EAR & DOUBLER PLATE FOR CRACKS & BULGING OF 6" x CROSS TUBE
REAR ERECTION CYL. MOUNT
TOP VIEW
ERECTION CYL.
SIDE VIEW TRAILER

CHANCE MANUFACTURING CO., Inc.

Number: 94

Date: 12-5-74

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers:

Ride: YO YO

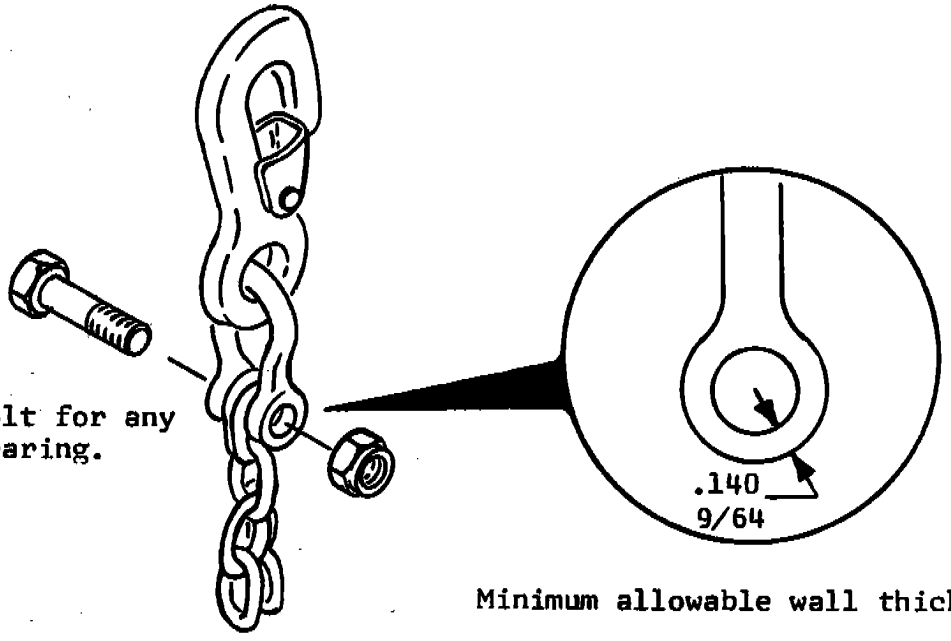
Subject: CHAIR CHAIN SHACKLE INSPECTION AND BOLT REPLACEMENT

As a safety precaution, all YO YO owners are being asked to inspect the Shackles securing the chair support chain to the Snap Hook.

Because of manufacturing tolerances in the Shackles, the wall thickness of the eyes will vary. As a result of this condition, it has become necessary to specify a minimum wall thickness to insure an adequate safety factor.

All YO YO owners should check each Shackle, replacing any not meeting the minimum wall thickness requirements.

As the bolts are removed, they should be checked for any sign of wear. If wear is indicated, they should be replaced with 3/8-16 x 2" long Grade 5 bolts.



Inspect bolt for any sign of wearing.

Minimum allowable wall thickness

Shackles not meeting minimum wall thickness will be replaced, upon notification of factory.

Number:

Date: 77

9-12-74

Supersedes:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Numbers:

Ride: 74-3300 THRU 74-3316, 74-3318

Subject:

YO YO

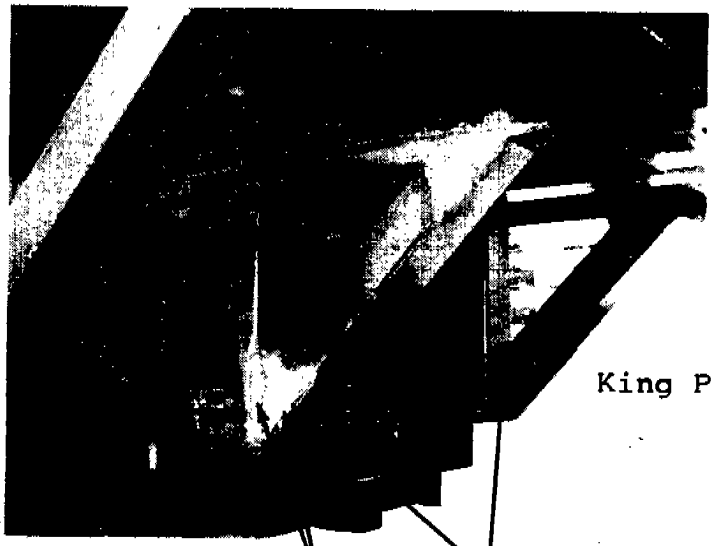
GUSSET PLATE ADDITION

Because of a combination of factors, among them rough road conditions, one area of the YO YO trailer is receiving a higher degree of stress than was expected. This has resulted in the partial failure of the weld joints.

As soon as we receive the enclosed card from you, we will ship eight gusset plates which should be added to the trailer as shown.

It is important that these gusset plates be added even though your trailer presently shows no signs of fatiguing.

PART NUMBER	DESCRIPTION	NO. REQ'D.
376-550-133	Gusset Plate	8



King Pin Section of Trailer

3/8 inch Fillet Weld-two sides E70XX Rod

Weld gusset plates on both side of tube

NUMBER: B376R1124-0

DATE: FEB. 19, 1993

SUPERSEDES:

America's Largest Manufacturer of Amusement Rides

SERVICE BULLETIN

Effective Serial Number: All Portable Units -
Chance Rides, Inc.
Chance Manufacturing Co., Inc.

Chance Rides, Inc. SPECIFICALLY DISCLAIMS ANY LIABILITY for losses associated with rides produced by Chance Manufacturing Company, Inc.

Ride: YO-YO

Subject: Tower Roading Decal

Portable YO-YO amusement rides are designed with turnbuckles to secure the top end of the tower to the trailer when the ride is in the roading position. Failure to properly secure the tower for roading, as shown in the operator's manual, could result in structural damage to the ride, the trailer or personal injury.

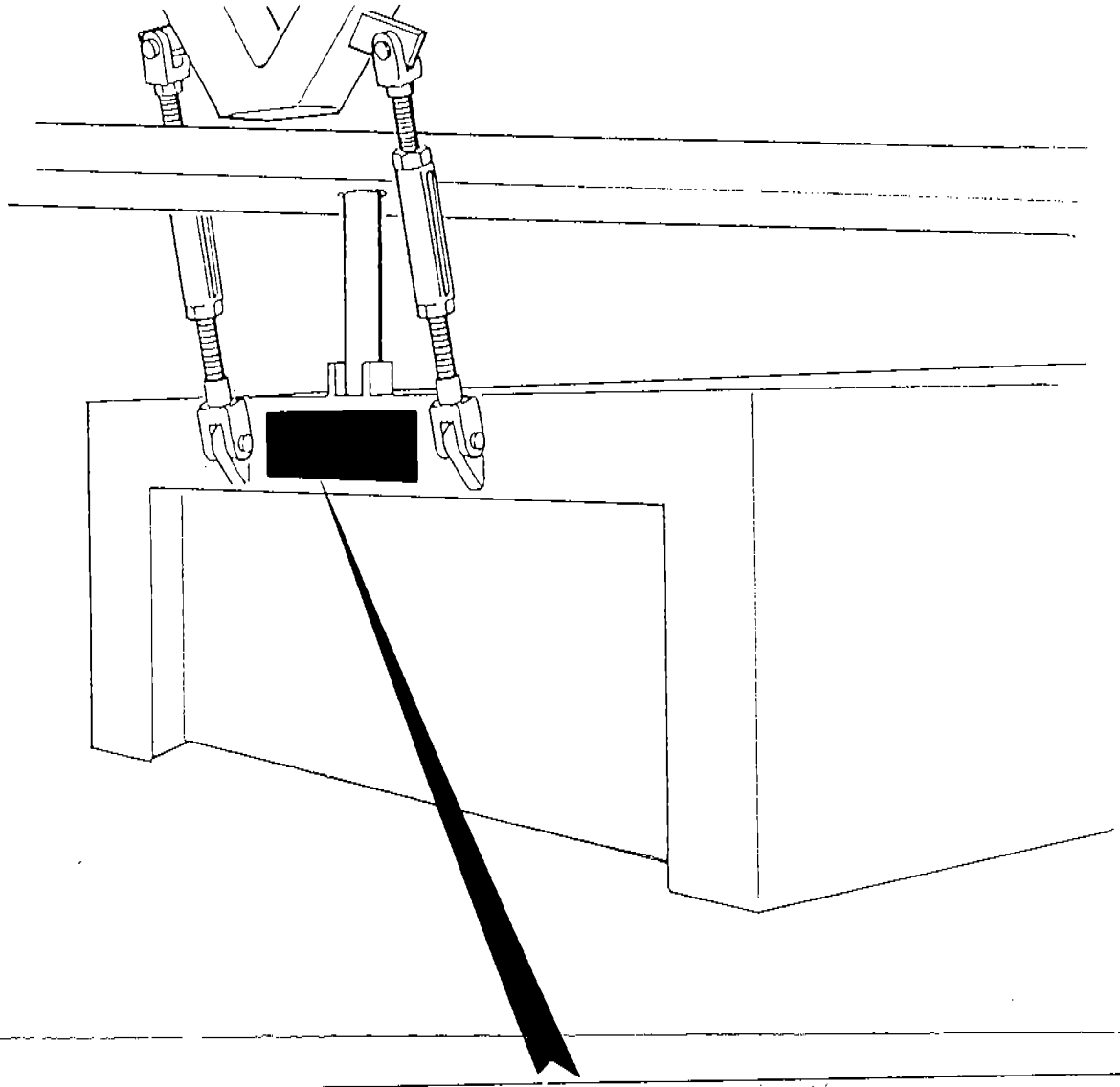
Chance Rides, Inc. has developed a decal to help alert owner/operators of the correct way in which to secure the YO-YO tower to the trailer for roading. All owner/operators of portable YO-YO amusement rides are required to order and install this decal, part number 22203304, as outlined in this bulletin. One decal is required per ride and is free of charge if ordered within 90 days of the date on this bulletin.

All work must be performed by qualified personnel, capable of understanding the function of the parts and their proper installation.

NOTICE

Use only those components authorized, specified or provided by Chance Rides, Inc.

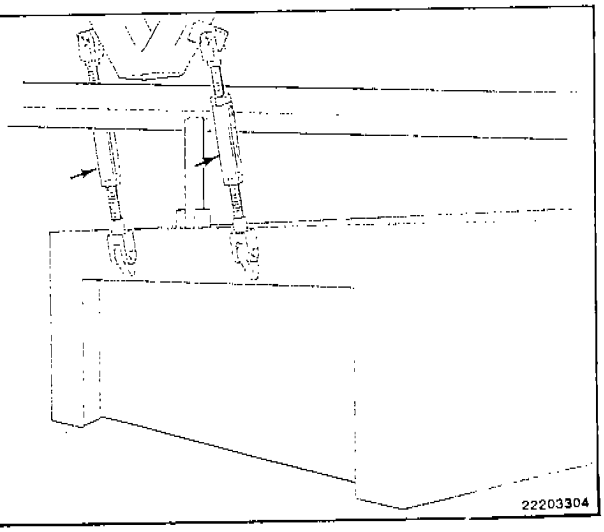
Chance Rides, Inc. SPECIFICALLY DISCLAIMS ANY LIABILITY for losses associated with any unauthorized alterations and/or modifications or additions and installations of unauthorized components.



NOTICE

ALWAYS ATTACH AND TIGHTEN THE TOWER ROADING TURNBUCKLES BEFORE TRANSPORTING THE RIDE.

FAILURE TO ATTACH THE TURNBUCKLES CAN RESULT IN SERIOUS DAMAGE TO THE STRUCTURE.



22203304

YO YO

Field inspection and test guide

Manual number 24329309

YO YO

Field inspection and test guide

Contents

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4219 Irving
P.O. Box 12328
Wichita, KS 67277-2328

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toll free 1-800-242-6231
fax (316) 942-7416

Introduction

Proper maintenance is essential to the safe operation of this ride. The tests and inspection points outlined in this field guide are not intended to replace the recommended maintenance schedule. This guide does not contain maintenance and repair procedures and should only be used as a ride inspection and test guide.

When repairs are necessary, use only those components authorized, specified or provided by the manufacturer. If any alterations, modifications and/or additions, installations of unauthorized components are made to the original design without the manufacturer's explicit written consent or without direct supervision by a manufacturer's representative, CHANCE RIDES, INC. makes no claims as to the integrity of the altered or modified ride (product).

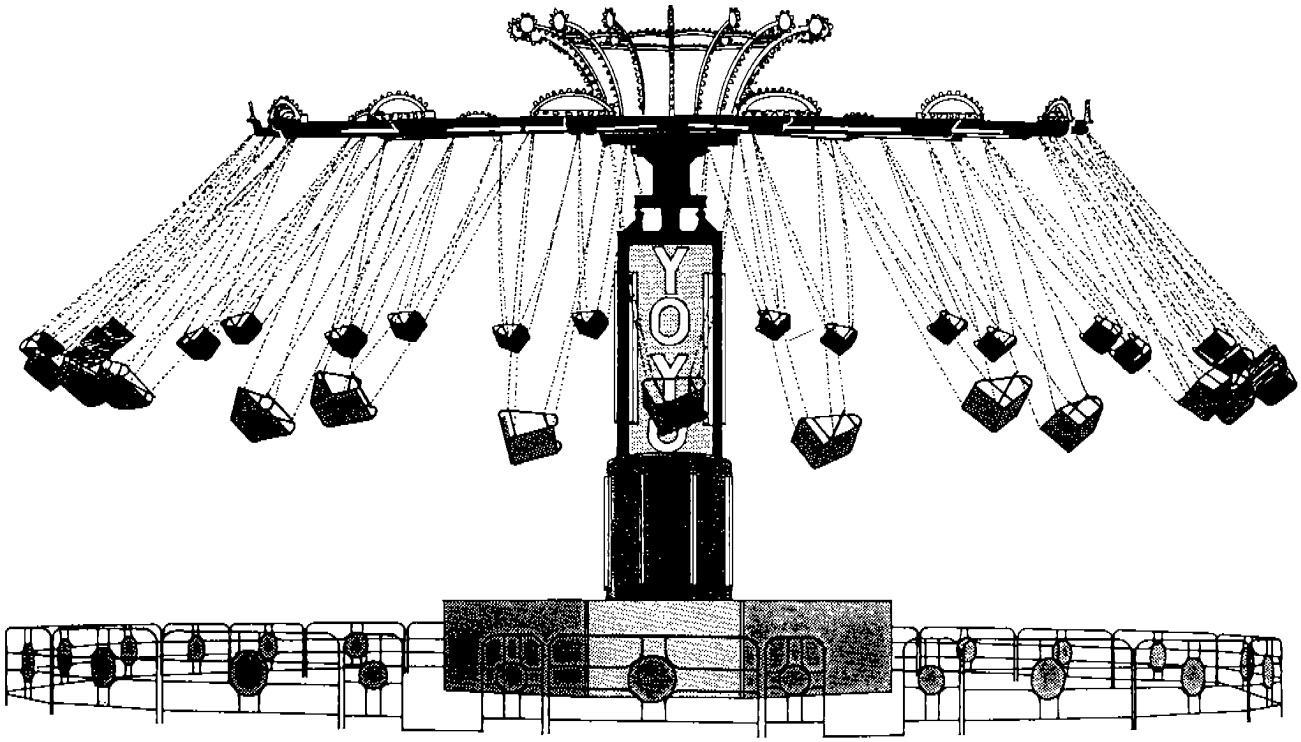
Information in this field inspection and testing guide applies only to products manufactured by CHANCE RIDES INC. built after January 1, 1986 (**Yo Yo** serial number 86-33065 and serial numbers 376-06686 and on).

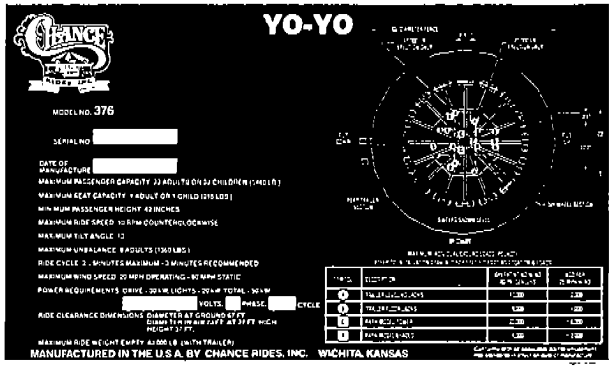
CHANCE RIDES INC., reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to such changes.

Ride description

The **Yo Yo** is mounted on a a trailer (portable model) or a stationary base, anchored to the ground (park model). The ride has an electro-hydraulic drive system with hydraulic braking.

The ride information plaque is mounted to the tower structure. It lists specifications, operating dimensions, ground loads, as well as model and serial number and date of manufacture.





The ride information plaque is mounted to the tower structure

Detailed operation and maintenance information is available in the *Yo Yo Operation And Maintenance Manual* (manual number 24327000). For more information, or to order manuals, contact CHANCE RIDES, INC.

Operation

Operating controls

NOTE: Ride serial number 376-06889 and earlier do not have programmed drive. Different control functions for these units are noted.

1. Stop switch - This switch interrupts the drive program. The ride will swing to a stop. The hand brake can be used to help stop the vehicle.

NOTE: Rides serial number 376-06889 and earlier do not have programmed drive. Push this switch to stop the rotation.

2. Ready indicator light - This green light indicates that the programmed drive is ready. It must be on before the start switch is operative.

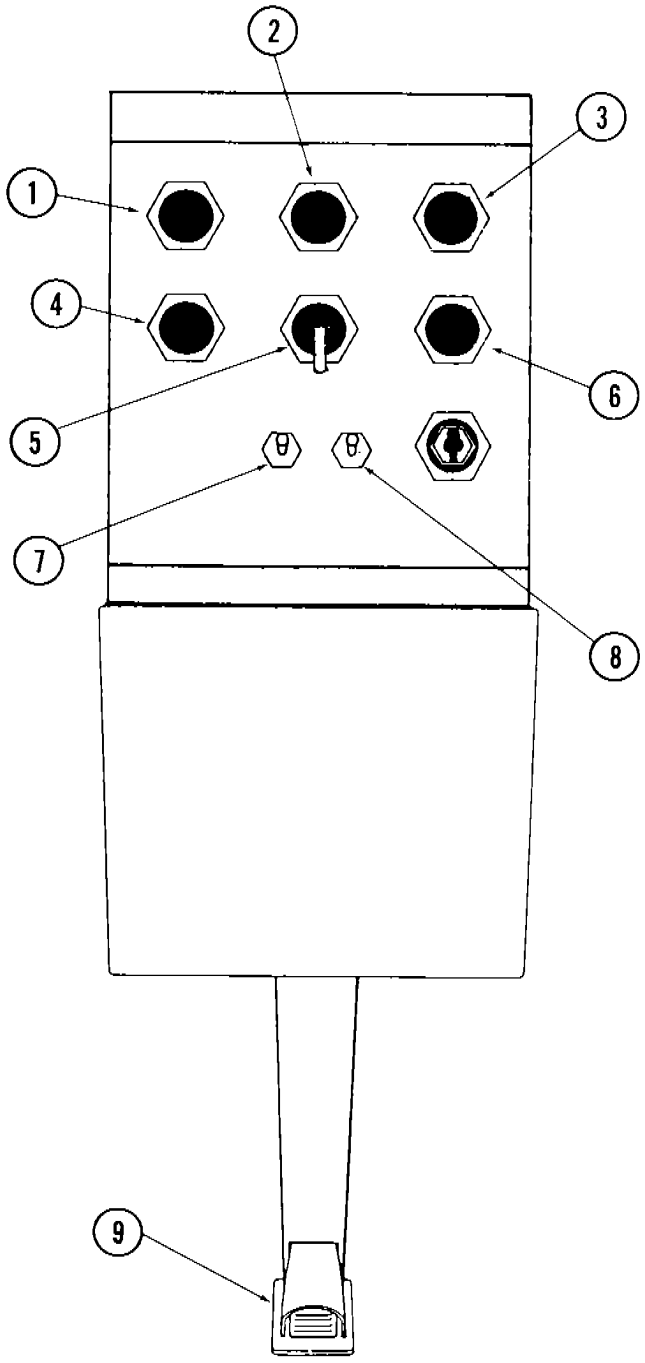
NOTE: Rides serial number 376-06889 and earlier are not equipped with a ready light.

3. Power switch - This switch turns off the main circuit breaker.

4. Start switch - Push this switch to start the programmed ride cycle.

NOTE: Rides serial number 376-06889 an earlier are not equipped with a start switch.

5. Jog switch - lift/lower - This switch allows the operator to move the tower up to its fully elevated/tilted position, independent of the program. The operator presence switch must also be depressed.



Operating controls

1. Stop switch
2. Ready indicator light
3. Power switch
4. Start switch
5. Jog switch lift/lower
6. Jog switch rotate
7. Pump switch
8. Lights switch
9. Operator presence switch

NOTE: *Rides serial number 376-06889 and earlier are equipped with two switches, "Lift & Tilt" and "Level & Lower" to perform the functions of the jog switch.*

6. Jog switch - rotate - This switch allows the operator to rotate the ride independent of the program. The operator presence switch must also be depressed.

NOTE: Rides serial number 376-06889 and earlier are equipped with two switches, "Lift & Tilt" and "Level & Lower" to perform the functions of the jog switch.

7. Pump switch - This switch controls the hydraulic pump. Turn the switch off before leaving the control console. Do not stop the ride by turning off the pump.

8. Lights switch - This switch controls the decorative lighting on the ride.

9. Operator presence switch - This foot switch is located directly below the ride operating controls. It must be depressed to operate the forward, reverse or jog switches. If the switch is released, the drive program is interrupted and the ride will brake to a stop.

Operating the ride (Test cycle)

The operating procedure is provided in the *Yo Yo Operation Manual and Parts Catalog*. Make sure that a copy of the manual is readily available. Test the operation of all controls, including the operator presence switch and the emergency stop switch. As the ride runs through the programmed cycle, check the ride profile for correct operation sequence, speed and tilt angle. Check the overall performance of the ride based on previous operating performances of the individual ride.

General inspection and testing

Testing

Field performance testing of amusement rides[2]

The following specifications conform with ASTM F846 standard guide for *Testing Performance Of Amusement Rides And Devices,* in effect on date of ride manufacture.

Erection or installation testing

Each erection or installation of a ride shall be given an inspection prior to carrying passengers that shall include but not be limited to the following:

a. Determine that ride has been erected according to the set-up procedures in the operations manual.

b. Inspect field inspection points listed in the *Field Inspection Guide.*

c. Visual check of all passenger carrying devices including restraint devices and latches, and the pins and capscrews securing them.

d. Visual inspection of entrances, exits, stairways and ramps and devices securing them.

e. Test of all communications equipment necessary for operation of the ride or device.

f. Operate the ride to determine that direction of travel conforms to the information plate, ride manual field inspection guide of specification sheet.

g. Operate the ride for a minimum of three ride cycles to determine that the ride speed does not exceed the speed specified in the information plate, ride manual field inspection guide of specification sheet.

Daily pre-opening inspection

This inspection shall include a daily inspection of all items as specified in the previous item (erection or installation testing).

Documented field performance and operational testing
Documentation and certification shall be performed by a person who by demonstrated education and field experience is knowledgeable with construction, erection, operation, maintenance and repair of amusement rides.

Operational load testing
Any operational test including load testing performed on a ride shall be completely non-destructive in nature. Overload testing exceeding the rated limits listed on the information plate, operation manual, field inspection guide or specification 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.

Non destructive 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 as non-destructive 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 non-destructive 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.

CHANCE RIDES, INC. considers 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.

Non-destructive testing[5]

REFERENCE STANDARD
1. ASTM-F24 Standard On Amusement Rides And Devices
a. F846-86 Testing Performance Of Amusement Rides
b. F853-86 Maintenance Procedures For Amusement Rides And Devices
c. F893-87 Inspection Of Amusement Rides And Devices

CHANCE RIDES, INC., at the time of design and manufacture, determines by calculations and testing of a prototype amusement ride the appropriateness for use, of not only the parts, but the entire system of a newly designed ride. These calculations and tests are utilized to, as feasibly as possible, determine the requirements for expected design life of major components. Based on this design criteria, CHANCE RIDES, INC. does not identify critical components on amusement rides to be singled out for non-destructive testing.

If through field experience, there is an indication that a structural or mechanical problem may develop on rides currently operating, CHANCE RIDES, INC. will notify owners by bulletin of the recommended procedures to inspect and correct the possible problem. Any possible defect which could affect the continued safe or proper operation of the ride should be reported immediately to the manufacturer by the owner/operator. This information is necessary so that a determination can be made for either the repair or replacement of the possible defective parts.

Field repairs should not be undertaken without the approval and proper instructions from the manufacturer and should be performed by qualified personnel. These persons should have a complete understanding of both the component's function and the manufacturer's instructions.

It is the responsibility of the individual inspector to thoroughly inspect the ride as he deems necessary based on his knowledge and field experience and manufacturer's recommendations. If the inspector finds an area or component that could be a problem, structural or otherwise, the factory should then be notified. It is then the responsibility of the inspector to ensure that the manufacturer's recommendations for repair,

5 8090R1022-0 March 21, 1988

replacement or otherwise have been completed and are in compliance with the required specifications.

Load testing is a destructive form of testing and is not recommended by the manufacturer, as per previous topic "Field performance testing of amusement rides."

Fasteners

Capscrews

Capscrews used by CHANCE RIDES, INC. are classified as functional load-carrying capscrews if:

- They are used as tension members in the erection or operation of the ride

and/or

- The are required to resist shear through friction-type connections in the erection or operation of a ride.

Capscrews are selected with consideration to grade, size and quantity, using joint capacities based on tightness torques of 60% rated yield and group joint efficiencies of 62.5%

Torque requirements[7]

Capscrews must be tightened to the torque values listed in the torque chart. These values were selected to produce a tightening torque range of 60% to 70% of proof load, when tightened with a hardened washer under the nut or capscrew head (whichever is accessible for tightening). When the capscrew is tightened from the head end, apply anti-seize lubricant to the shank end of the capscrew. When the threads are lubricated, use 10% less torque to tighten the capscrew.

DO NOT TIGHTEN CAPSCREWS OVER THE RECOMMENDED TORQUE. This can damage the capscrew, due to variances in coefficients of friction and torque wrench accuracy.

Always use a torque wrench. It is impossible to accurately measure the tightness of a capscrew by other methods. Torque wrenches must be checked for accuracy twice each operating season.

7 B090R1075-0 May 25, 1990

Size Diameter - Threads/inch	Foot pound torque range (see notes 1 and 2) with locknut and hardened washer	
	SAE J429 Grade 5 ASTM A325	SAE J429 Grade 8 ASTM A490
1/4 - 20	5-6	7-8
1/4 - 28	6-7	8-10
5/16 - 18	11-13	15-18
5/16 - 24	12-15	17-21
3/8 - 16	19-24	27-33
3/8 - 24	22-27	31-38
7/16 - 14	30-35	45-55
7/16 - 20	35-40	50-60
1/2 - 13	50-60	65-80
1/2 - 20	55-65	75-90
5/8 - 11	95-115	130-160
5/8 - 18	105-130	150-180
3/4 - 10	165-200	235-285
3/4 - 16	185-225	260-320
7/8 - 9	270-325	380-460
7/8 - 14	295-360	415-505
1 - 8	400-490	565-690
1 - 12	440-535	620-755
1 1/8 - 7	495-600	800-975
1 1/8 - 12	555-675	900-1095
1 1/4 - 7	700-850	1135-1380
1 1/4 - 12	775-940	1255-1525
1 1/2 - 6	1215-1480	1975-2395
1 1/2 - 12	1370-1660	2220-2700

Torque chart

Torques for functional load carrying cold finished hex head capscrews with dry rolled threads, used with locknuts (see note 3), and tightened with an ASTM A325 hardened washer under the capscrew or locknut head (whichever is accessible for tightening).

This torque range will develop 60% to 70% of proof load.

Refer to ***Replacement of capscrews and locknuts*** *for conditions requiring replacement*

NOTES

1. Use anti-seize lubricant on capscrew shank when tightened from head end.
2. Use 10% less torque when anti-seize or other lubricant is used on threads.
3. Use same torque range for holes tapped in steel.

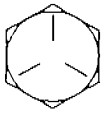
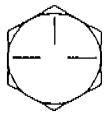
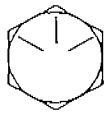
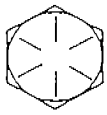
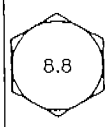
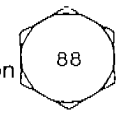
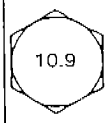
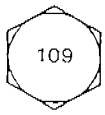
Capscrew grades

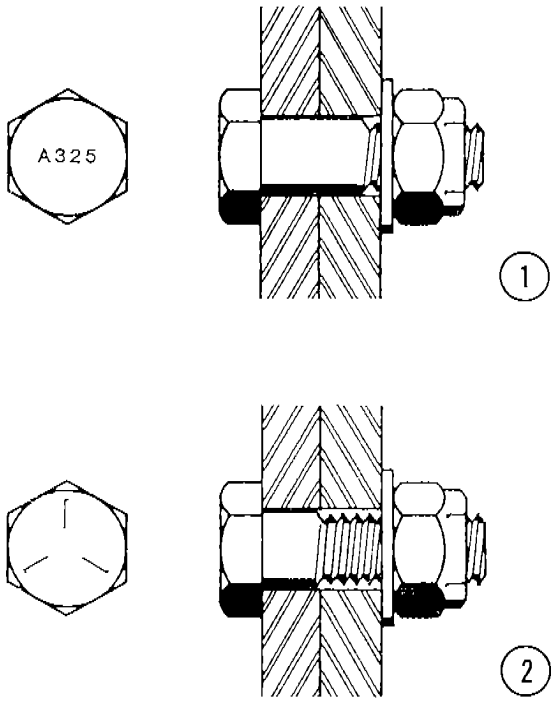
CHANCE RIDES, INC. uses only grade 5 or better capscrews and grade 8 locknuts, with A325 hardened washers for functional loads. The *Grade markings chart* shows the capscrew markings to be found on CHANCE rides. The manufacturer's identification symbols must be present on all functional load carrying capscrews.

CHANCE RIDES, INC. requires the use of cold-formed hex head capscrews with rolled threads. Hex bolts and hot formed hex head capscrews are not recommended because they may have machined threads and can have die seams along the shank.

NEVER REPLACE CAPSCREWS OR NUTS WITH PARTS OF A LESSER GRADE, OR DIFFERENT LENGTHS THAN THOSE SHOWN IN THE CHANCE PARTS CATALOG.

Grade markings for functional load carrying capscrews
Manufacturer's identification symbols must be present on all capscrews

Correct markings	Examples of unacceptable markings
SAE J429 Grade 5 Medium carbon 81,000 yield 	 **Grade 5.1** Low carbon  **Grade 5.2** Low carbon martensitic
ASTM A325 Type 1 Medium carbon Longer shank and shorter thread length than Grade 5 81,000 yield  **ASTM A325 Type 3** Corrosion resisting Longer shank and shorter thread length than Grade 5 81,00 yield 	 **ASTM A325 Type 2** Low carbon martensitic
SAE J429 Grade 8 Medium carbon 130,00 yield 	 **ISO R898** Class 8.8 Medium carbon 92,000 yield 
ASTM A490 Alloy steel Longer shank and shorter thread length than Grade 8 130,00 yield 	 **ISO R898** Class 10.9 Alloy steel 130,000 yield 



Capscrew comparison
1. ASTM A325 Capscrew
Longer shank
shorter threads
2. Grade 5 capscrew
Shorter shank
longer threads

Replacement of capscrews and locknuts
When permanently installed capscrews and locknuts are disassembled for repair or adjustment, they must be replaced if they have been in service over five (5) years, or corrosion, or other damage requires over-torquing for removal. If a torque wrench is not used to measure excessive removal torques, the capscrews and locknuts must be replaced.

Capscrews and locknuts which are frequently disassembled for portability must be replaced each operating season. If the capscrews and locknuts become damaged, corroded or require excessive torque for removal, they must be replaced. If a torque wrench is not used to measure excessive removal torques, the capscrews and locknuts must be replaced.

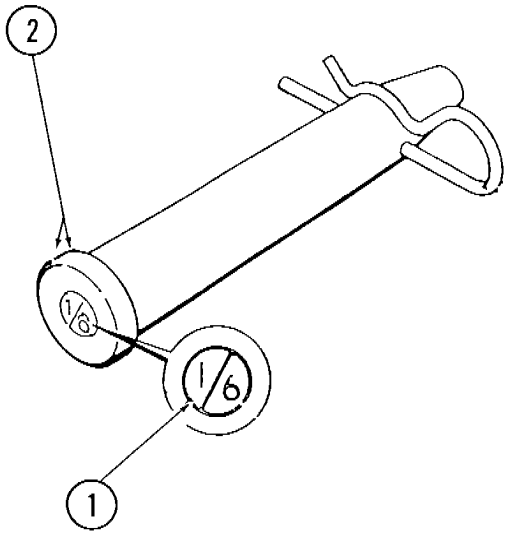
Pins[6]

Tapered pins used on amusement rides are subject to deterioration due to improper use and wear. CHANCE RIDES, INC. specifies certain pins for certain applications on

amusement rides. These pins have been developed over a period of years, taking into account size, design, material and hardness characteristics.

Use only the pins specified by CHANCE RIDES, INC. These pins are identified as shown in the following illustration. Always use the correct hairpin.

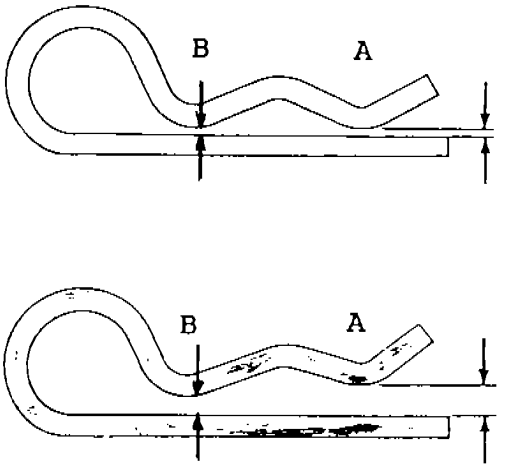
Pin identification
1. Date of manufacture
2. Rounded edges



Use care when installing and removing tapered pins. Since these pins are hardened (as are hammers and punches) care must be taken to strike the pin straight on. Striking a pin at an angle can cause the pin to chip, resulting in personal injury. For this reason APPROVED SAFETY GLASSES OR GOGGLES MUST BE WORN AT ALL TIMES when tapered pins are being installed or removed. If a tapered pin is chipped, bent, or "mushroomed" on either end, discard it and replace it with a new pin.

Pin keepers
All keepers (R-keys, hair pins, lynch pins, etc.) must be inspected for wear. If a keeper is bent out of shape or "sprung", it must be replaced.

Hairpins are expendable parts. After repeated use, they become worn and "sprung" as shown.

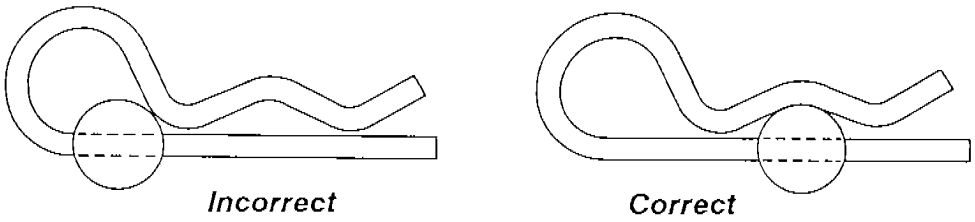


Acceptable hair pins
Dimension "A" equals dimension "B" in a relaxed position

Unacceptable hair pins
Dimension "A" is greater than dimension "B" in a relaxed position

NEVER ATTEMPT TO BEND A HAIR PIN BACK INTO SHAPE. REPLACE IT WITH A NEW PART.

The correct installation of a hairpin is shown. Incorrectly installed hairpins are more likely to fail, and will distort after only a few uses.



Incorrect *Correct*

CHANCE RIDES, INC. recognizes and recommends the safety procedures specified in *ASTM Standards F770 Operation Procedures for Amusement Rides and Devices and F853 Maintenance Procedures for Amusement Rides and Devices.*

Inspection

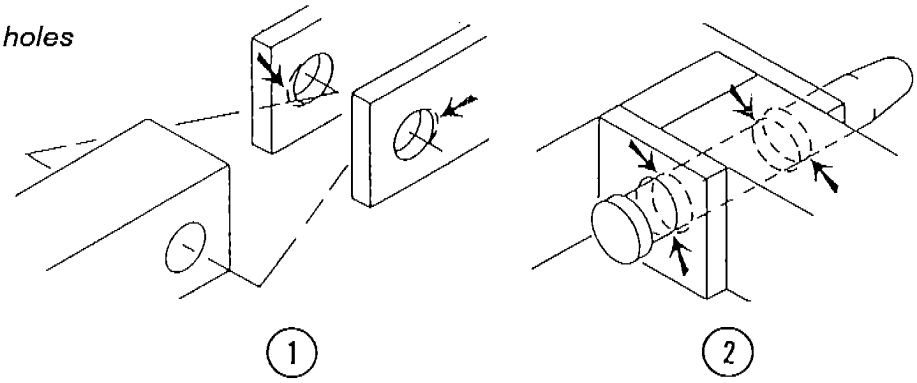
Joint inspection

Some joints will appear to wear rapidly on new rides. This is usually a result of the holes not aligning in the mating parts. When this condition occurs it results in "point contact". A joint with this condition will generally wear rapidly until the load is distributed evenly over the fastener and the parts.

If in doubt about the condition of a bolt, pin or hole on a new ride consult CHANCE RIDES, INC., and replace as required.

1. Inspect stationary joints for "egg-shaped" wear and loose pins.

1. Stationary joint wear
2. Stationary joint-misaligned holes resulting in point contact



2. Inspect moving joints for wear and lubrication.

3. Inspect welded structural joints for cracking or fatiguing.

4. Inspect bolted structural joints for cracking, fatiguing and proper bolt tightness.

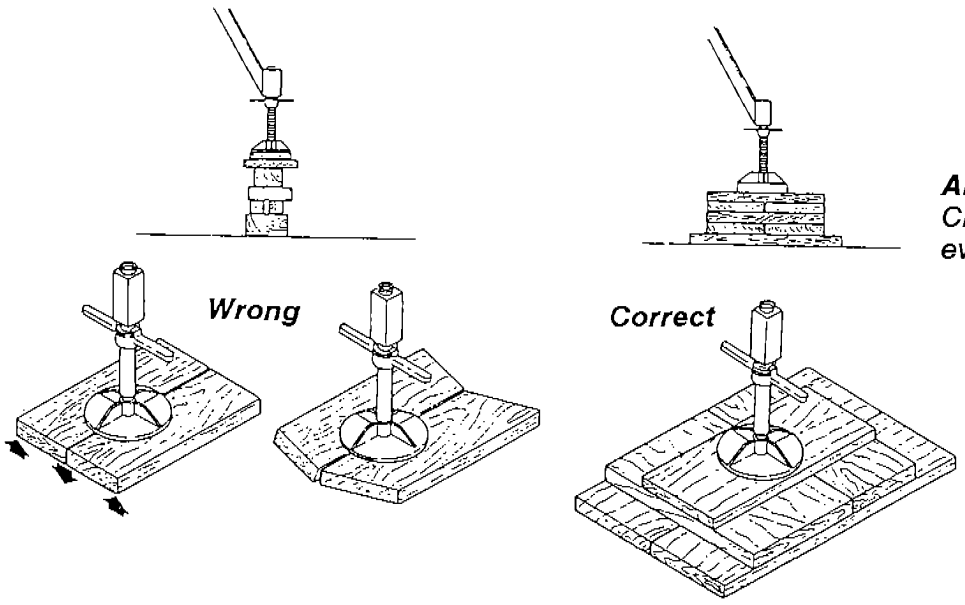
5. Inspect pins and keepers on all pin joints for wear and proper installation.

6. Inspect all pins for proper CHANCE identification.

Leveling and blocking (portable models)

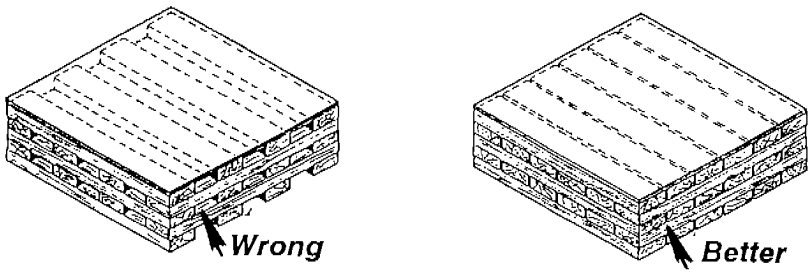
1. Inspect leveling and blocking at each set up and at the start of each day (rides erected in soft locations require more frequent inspection)[4].

2. Inspect for proper cross blocking or crib blocking. Cross blocking distributes weight evenly.



Always cross block
Cross blocking distributes weight evenly.

To avoid crushing under load "crib" blocking should be spaced no more than 1/4" for drainage.

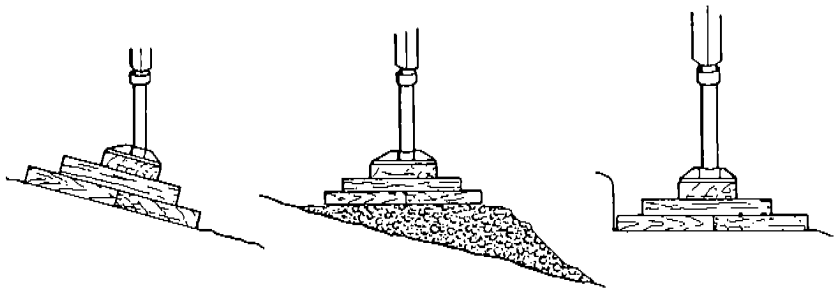


"Crib" blocking
Large voids can let blocking crush under load. 1/4" spaces allow adiquate drainage.

3. Inspect blocking for proper contact with ground.

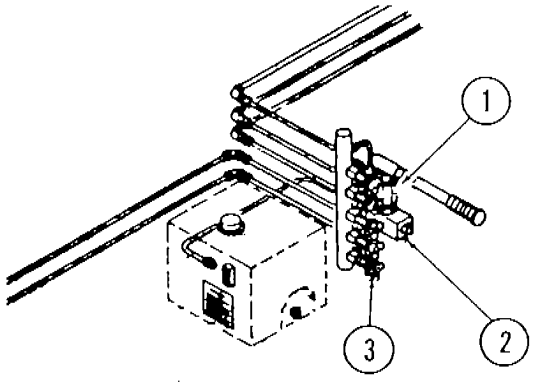
4. Level ground under blocking.by digging where possible, instead of filling. Fill dirt will be soft and allow settling.

Blocking on a slope
Level the ground beneath blocking by digging where possible. Don't fill, the fill dirt will be soft allowing the ride to tilt



No ! ***Poor*** ***Better***

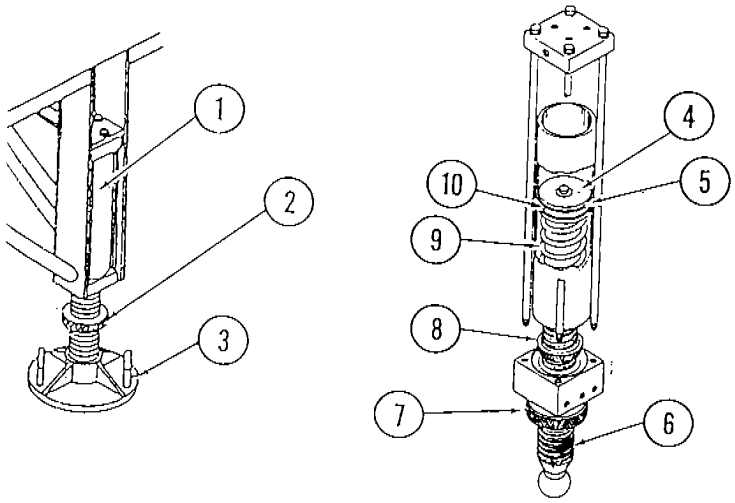
5. Inspect hydraulic leveling jacks for leaks at every set-up. The hydraulic jacks are for leveling purposes only. After the ride is leveled and all locking rings have been tightened, open the needle valves and the hand pump valve to relieve hydraulic pressure on the leveling jacks.[4]



Open shut-off valve to release pressure.

1. Hand pump
2. Hand pump valve
3. Needle valve

6. Check the lock rings on all screw jacks for tightness[4].



1. Leveling cylinder
2. Locking ring
3. Base

[4] B376R1017-0 September 9, 1987

General safety guidelines

The following is a list of general safety rules to which everyone should adhere.

1. All work must be performed by competent, qualified mechanics, capable of understanding the function of the parts and their proper installation.

2. Inspect the ride before each day of operation to determine that no portion of the ride is damaged, missing or worn in such a manner that unsafe conditions can develop.

3. Perform the manufacturer's recommended maintenance procedures at the intervals and in the manner specified in the operation and maintenance manual.

4. Study each job carefully to determine all hazards so that necessary safety precautions can be taken.

5. Examine safety devices (tools, ladders, etc.) before they are used to make sure they are in good condition. Ladders must be clean and unpainted.

6. Use the proper tool or equipment for each job. All hand electric power tools must be properly grounded.

7. Wear close fitting, comfortable clothing when working on or near moving parts or live electrical circuits. Avoid finger rings, jewelry or other articles which can 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 a hard hat at all times. When working in elevated areas, use a safety belt.

10. Where work performed is hazardous, never work alone.

11. If guards are removed from equipment, make sure they are replaced before leaving the job.

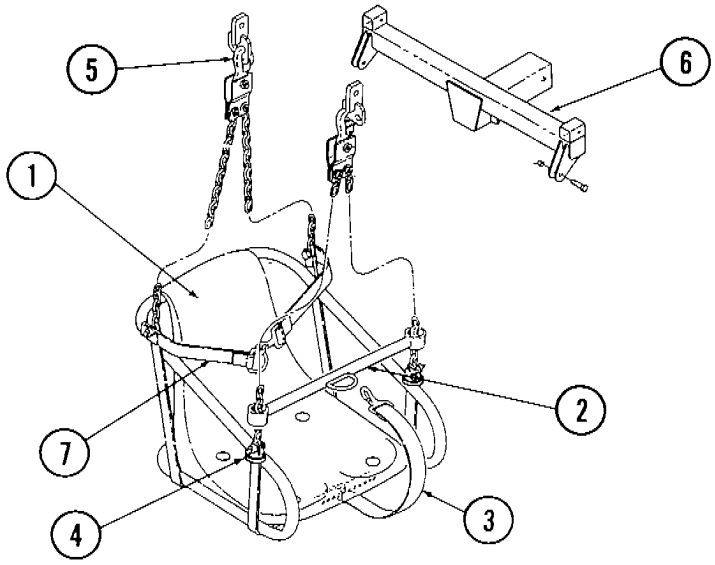
12. Clean up after each job, disposing of surplus materials.

13. Keep a record of parts replaced and the date of replacement. Inform the manufacturer of any replacement requirements which are frequent or cause unsafe conditions.

14. Make modifications and additions only as outlined in manufacturer's service and safety bulletins.

Seat inspection

1. Inspect the lap bars, chest straps and crotch straps on all seats. Replace any worn, damaged or missing parts.



1. Seat
2. Lap bar
3. Crotch strap
4. Cushion ring
5. Snap hook
6. T-bar
7. Chest strap

2. Inspect the cushion ring under each end of the lap bar.

3. Check the capscrew for the crotch strap. It must be tightened to 72 in-lbs.

4. Check the four capscrews which attach the seat frame to the chains. These capscrews must be tightened to 72 in-lbs. Make sure all capscrews point out, away from seat.

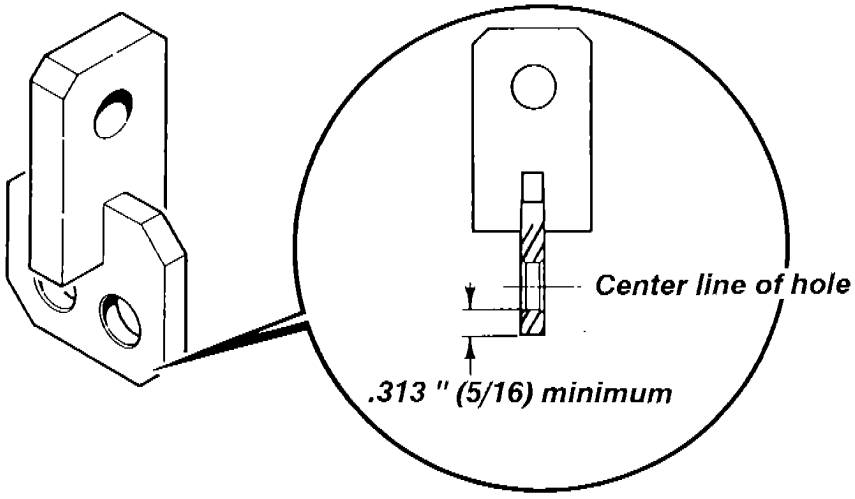
5. Check for 24" ground clearance of all seats with sweeps fully lowered.

6. Inspect the seat frame for cracks, bends or other damage.

7. Inspect for cracks in the plastic seat.

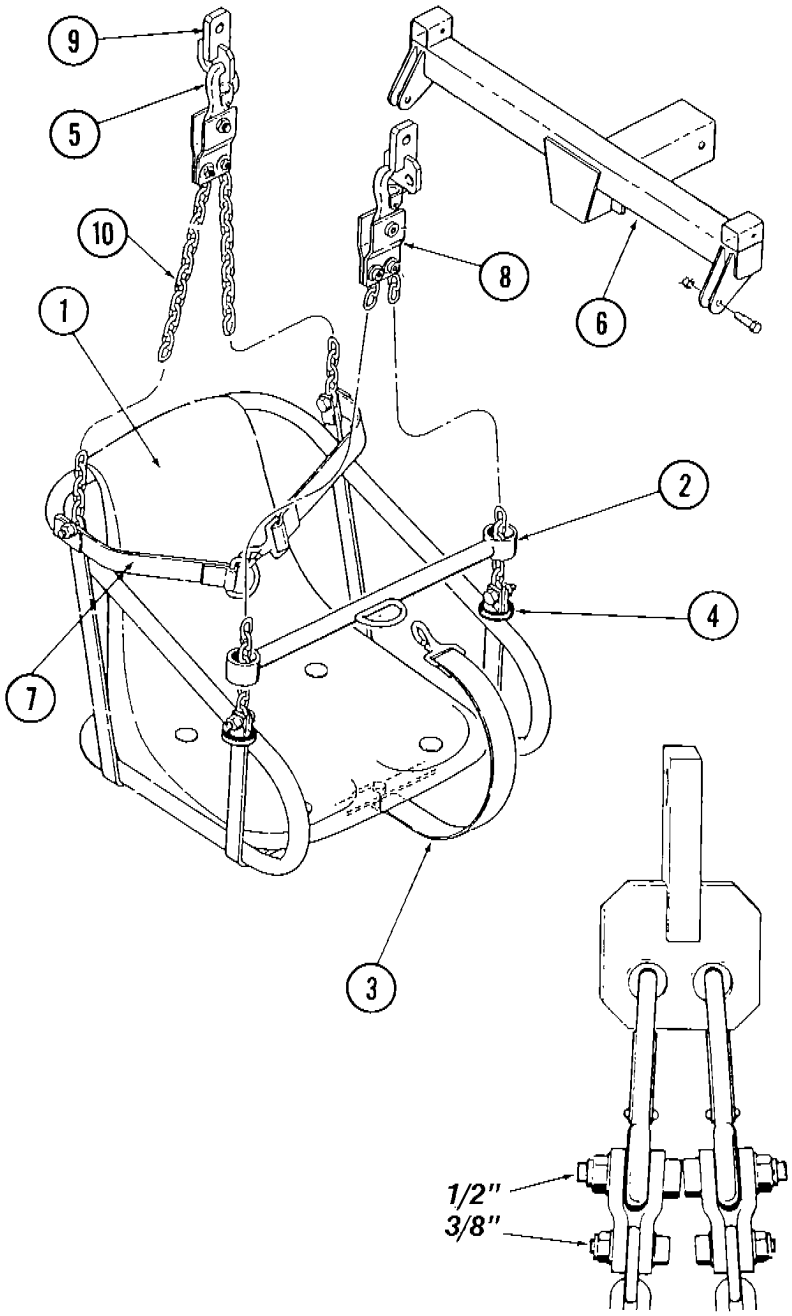
Chain and seat hanger inspection

1. Inspect all chair hangers for damage or worn holes for the snap hook. Measure the edge distance on all chair hangers. If the dimension is less than .313 (5/16) inch, the chair hanger must be replaced[3].



2. Inspect all snap hooks for damage or wear. The spring catch must operate freely and close the hook completely[1].

1 B376R1001-0 April 15, 1986
3 B376R1003-0 May 25, 1986



1. Seat
2. Lap bar
3. Crotch strap
4. Cushion ring
5. Snap hook
6. T-bar
7. Chest strap
8. Seat hanger
9. Adapter plate
10. Chain

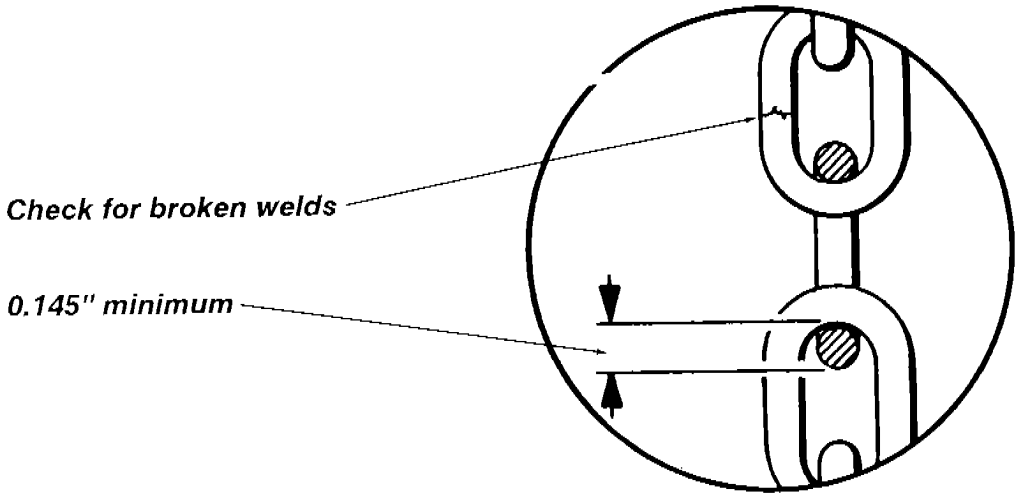
Shoulder bolts must be positioned exactly as shown.
Torque 1/2" shoulder bolts (3/8-16 thread) to 36 ft-lbs.
Torque 3/8" shoulder bolts (5/16-18 thread) to 17 ft-lbs.

3. Inspect the adapter plates and attaching hardware. Check the position of the fasteners which attach the chains and snap hooks to the adapter plates. The heads of the shoulder bolts must be to the inside of each seat hanger as shown. Contact of the threaded ends of the shoulder bolts can cause damage to the fasteners[1].

4. Inspect the shoulder bolts in the adapter plates and check torque. Substitution of hardware is not allowed[1].

1 B376R1001-0 April 15, 1986

5. Inspect all chains for wear, damage or broken welds on links. Measure chain wear as shown. The minimum acceptable dimension is 0.145 inch[1].



NOTE: *Chain is 3/16 inch proof coil chain. Substitute material or spliced chains are not acceptable.*

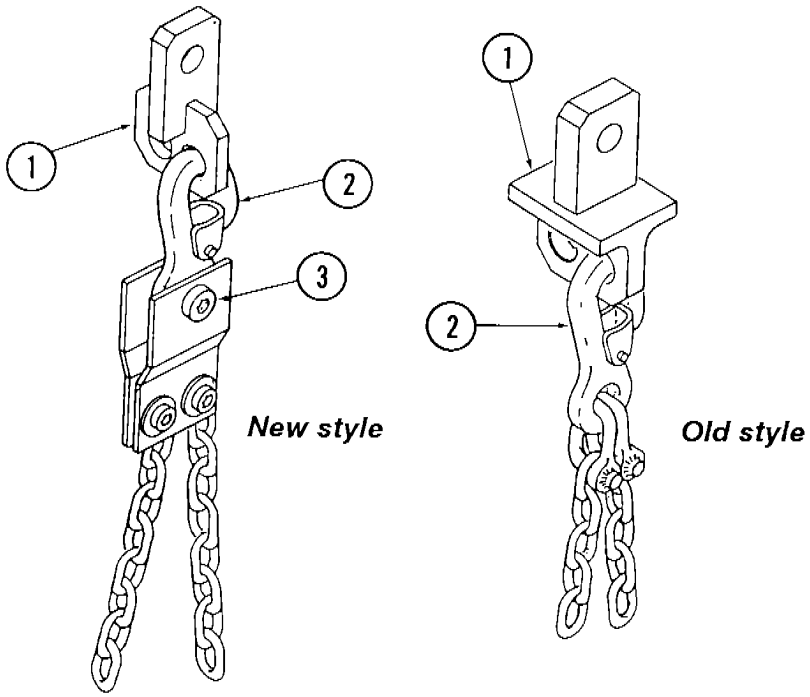
6. Inspect for equal length on all four chains for each seat. Minimum chain length is 13 feet, 5-3/8 inches[1].

7. Inspect the overall installation of seats. All seats must be facing the same direction - forward in relation to ride rotation. Each seat must be suspended from two seat hangers.. Never attach both snap hooks from a single seat to on seat hanger[1].

8. Inspect installation of snap hooks. Hooks must be installed through the seat hanger toward the center of the ride as shown. Chains must not be twisted[1].

Sweep inspection

1. Inspect the sweep attachment and links. Inspect the shoulder bolts in the links and the snap hook. Substitution of hardware is not allowed.

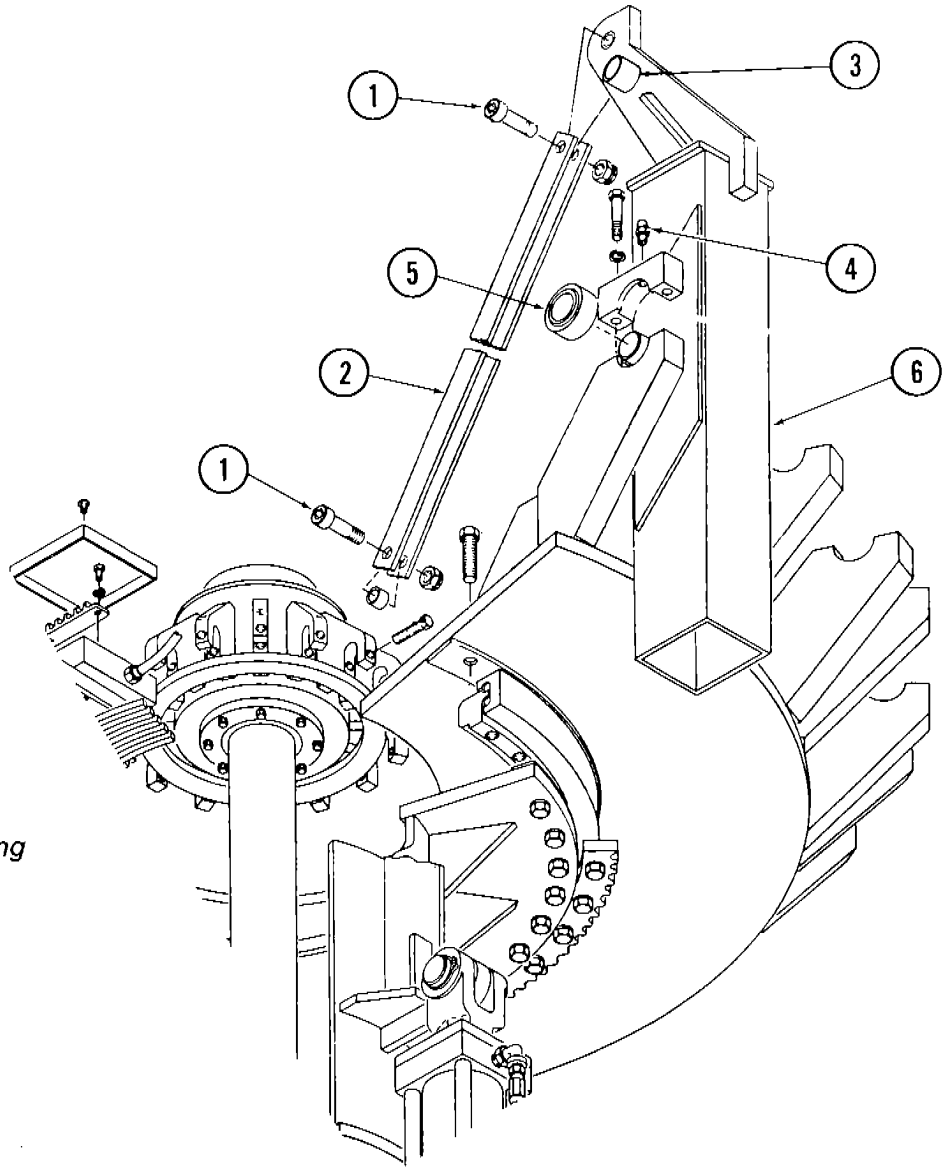


1. Sweep link
2. Snap hook
3. Shoulder bolts

2. Inspect each sweep pivot bearing for proper operation. Observe each bearing as the sweep is raised and lowered. The inner race must turn with the sweep pivot and the outer race must remain stationary with the bearing housing. Next, swing each sweep out from the tower four to six feet, using a 2x4 timber or bar. Each sweep must free-fall back into place without help. Replace any bearing immediately if there is any indication of binding.

NOTE: *Bearing caps and housing are match-bored for proper bearing fit. Each cap must remain with its original housing.*

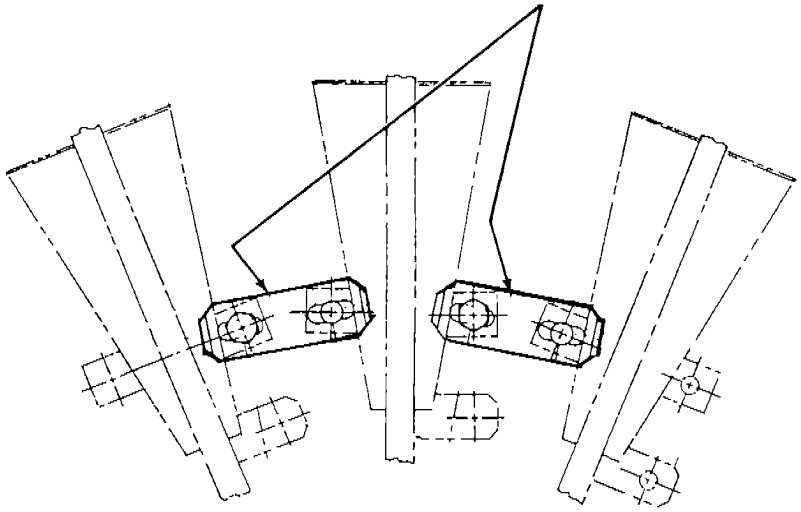
3. Inspect each sweep pivot bearing for proper lubrication. The lubrication hole must align with the groove in the outer race of the bearing. The holes in the outer race must not be plugged.



1. *Stripper bolt*
2. *Interlock link*
3. *Sweep interlock*
4. *Grease zerk*
5. *Sweep pivot bearing*
6. *Sweep*

4. Inspect the sweep interlocks and interlock links. Sweep interlocks must not be removed or altered.

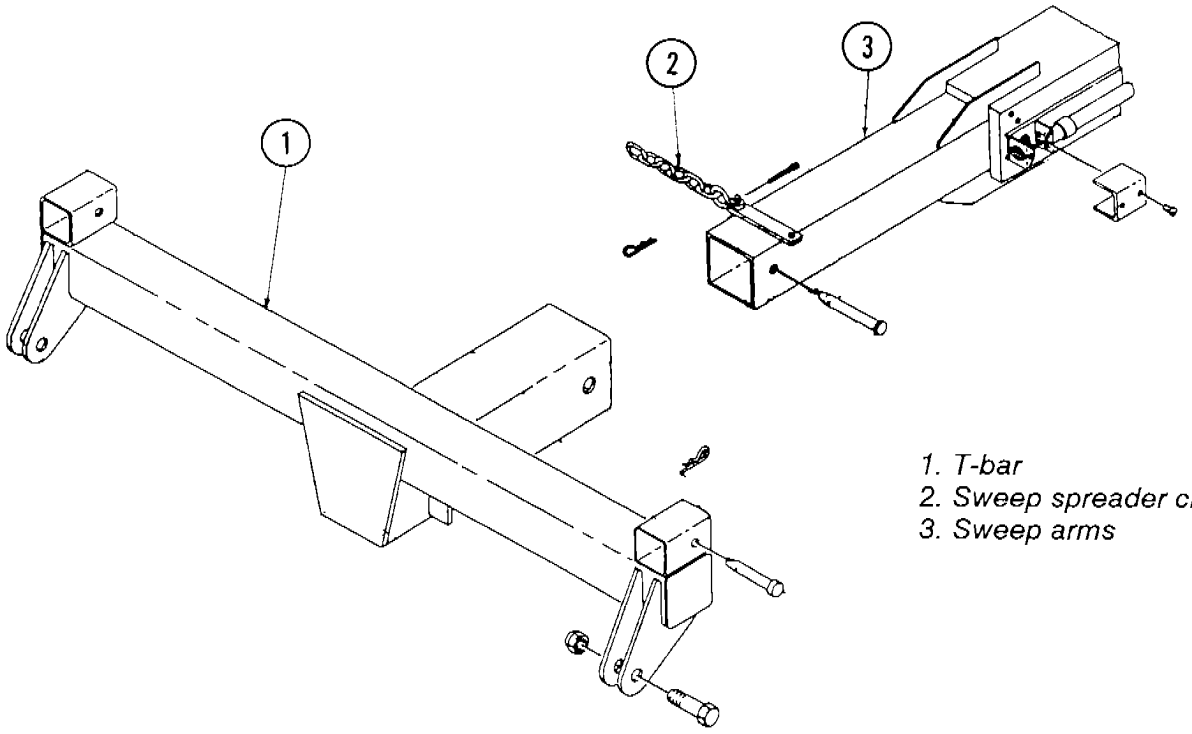
Interlock links



5. Inspect the condition of the sweep t-bar assemblies.

6. Inspect the sweep spreader chains.

7. Inspect the sweep arms for cracks, bends or other damage.



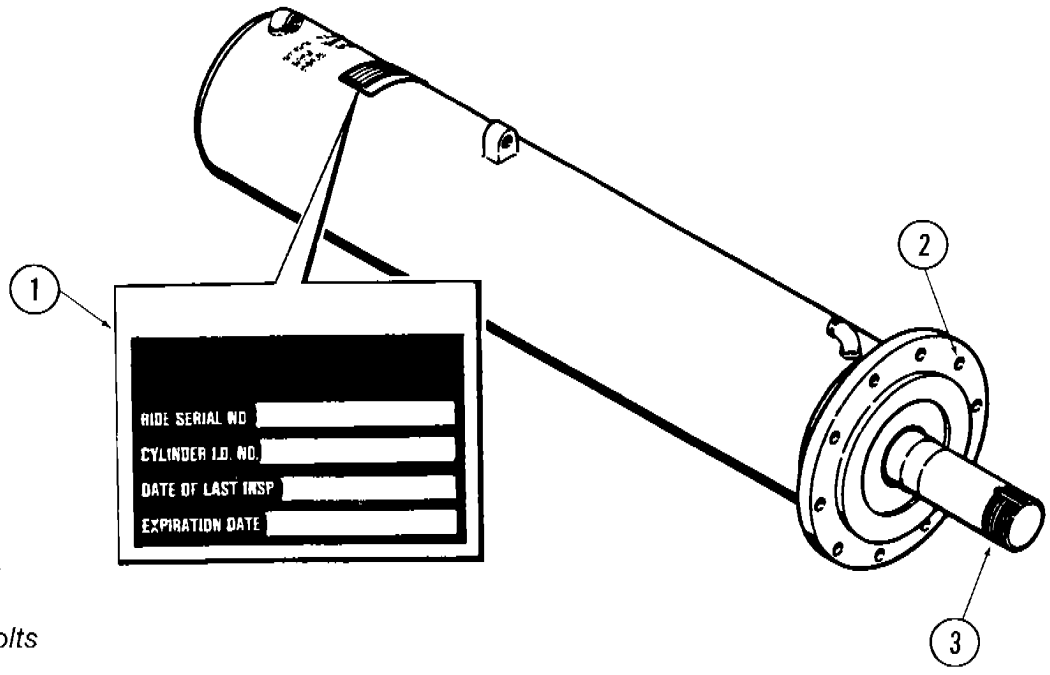
1. T-bar
2. Sweep spreader chains
3. Sweep arms

Sweep cylinder inspection

1. Check the expiration date on the sweep lift cylinder identification plate. If the identification markings are damaged, removed or otherwise illegible, contact the factory[8].

2. Inspect the sweep cylinder attaching bolts. These are Grade x bolts and must be tightened to xx-xx ft-lbs.

3. Inspect the nuts on the end of the sweep cylinder rod. The nuts must be tightened to xx-xx ft-lbs.



Sweep lifting cylinder
1. Identification plate
2. Cylinder attaching bolts
3. Sweep cylinder rod

Electrical and lighting inspection

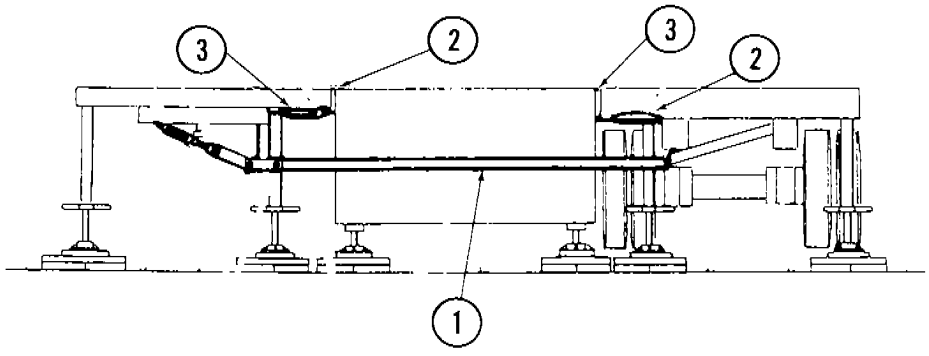
1. Inspect cable leads, electrical connections and grounding per local code.

2. Test the operator controls, including emergency stop switch, operator presence switch and power switch.

Trailer and base inspection

1. Inspect mounting locations on park model rides at regular service intervals.

2. Inspect the tie bar and turnbuckles on trailer sections. The v-blocks must be snug after the turnbuckles are tight[4].



V-blocks must be snug after turnbuckles are tightened.

1. Tie bar
2. Turnbuckle
3. V-block

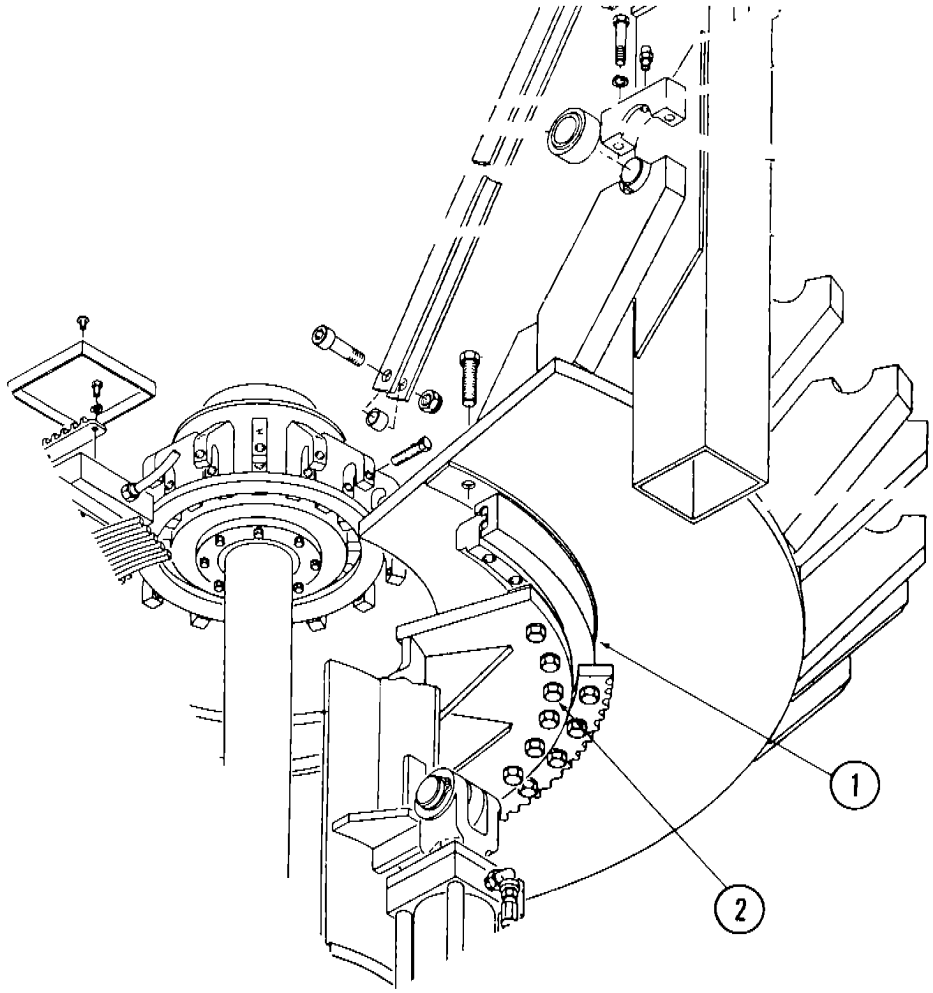
3. Inspect the trailer or park base structures for visible cracks or damage.

Drive inspection

1. Inspect the capscrews in the drive bearing. These are Grade x capscrews and must be tightened to xx-xx ft-lbs.

2. Check that the drive chain is taut.

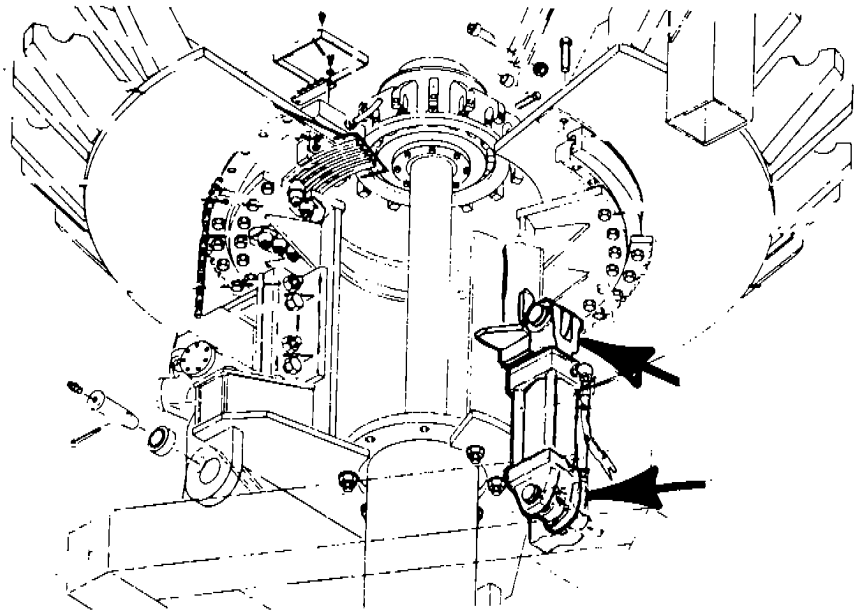
3. Inspect the entire hydraulic system including hoses, tubes, fittings and other components for leaks.



1. Drive bearing
2. Drive bearing capscrew

Tower inspection

1. Inspect the weld and parent metal adjacent to the weld on the tilt cylinder ear on the tower. Also check the ear at the top of the cylinder where it attaches to the tilt head.



Inspect all welds around the mounting ears at the top and bottom of the tilt cylinder

2. Inspect the hinge pins on the tower, tilt head and tilt cylinder.

3. Inspect the stop tube where it attaches to the tower.

4. Check that the tilt head is level. Measure from the top of the tower to the bottom of the hub plate in three locations, at each corner of the tower triangle. If all three measurements are not equal, this can indicate improper installation of the tilt cylinder yoke.

5. Inspect the pins and mounts for the tower erection cylinder and stiff leg (portable models). Inspect the condition of hinge pins and cylinder ears on the tower cylinder.

6. Inspect the tower structure for visible cracks or damage.

Platform and fence inspection

1. Inspect fences for proper installation.

2. Inspect all gates and queue line chains.

3. Inspect floors and jackstands for proper installation and leveling.

Bibliography

The following service bulletins and manuals are referenced in the preceding text. Service bulletins issued after publication of this guide are located at the back of each section. Any future bulletin releases affecting a ride will be provided by CHANCE RIDES, INC. Bulletins received after receipt of this guide should be considered updates to this guide.

Yo Yo Operation And Maintenance Manual
24327000
February, 1975

1. *Chain And Seat Inspection*
   B376R1001-0
   April 15, 1986

2. *Field Performance Testing Of Amusement Rides*
   B090R1002-0
   May 14, 1986

3. *Chair Hanger Wear Limits*
   B376R1003-0
   May 25, 1986

4. *Trailer Set-up, Loading And Operation*
   B376R1017-0
   September 9, 1987

5. *Non-destructive Testing*
   B090R1022-0
   March 21, 1988

6. *General Safety - Taper Pins*
   B090R1056-0
   February 9, 1990

CHANCE RIDES, INC.
4219 Irving
P.O. Box 12328
Wichita, KS 67277-2328

7. *Replacement And Torque Requirements For Functional Load Carrying Capscrews*
   B090R1075-0
   May 25, 1990

8. *Safety Decal*
   B090R1083-0
   August 17, 1990