MFG: ALLEN HERSCHELL
RIDE: GHOST TRAIN

# PORTABLE DARK RIDE

## OPERATION, SERVICE, LUBRICATION, AND PARTS CATALOG

Amusement Rides

Since 1880 AH®

**ALLAN HERSCHELL**
COMPANY, INC.

*"World's Largest Manufacturer of Amusement Rides"*

1165 CLINTON STREET · BUFFALO 6, NEW YORK · PHONE: TA 5-8300

AREA CODE 716
PHONE 825-8300

# ALLAN HERSCHELL COMPANY

Division of Lisk-Savory Corp.

Amusement Rides

1165 CLINTON STREET BOX 465 BUFFALO, NEW YORK 14240

## SPECIFICATIONS

| | |
|---|---|
| Track length | 172' |
| Car Speed | 3.5'/sec. |
| Power | 220v 1phase 60amp |
| Capacity | 2 adults/3 children |
| Weight | 300lbs/car |
| Transformer | 32v AC 9½KVA |
| Motors | 32v AC ½hp 1140 RPM |

PLAN VIEW

DARK RIDE Portable

AREA CODE 716
PHONE 825-8300

# ALLAN HERSCHELL COMPANY

Division of Lisk-Savory Corp.

Amusement Rides

1165 CLINTON STREET BOX 465 BUFFALO, NEW YORK 14240

## SET UP INSTRUCTIONS

1. Locate trailer according to layout page. Be certain area is clear of overhead wires and branches for approx. 30 feet.

2. Uncouple truck-tractor and level trailer both directions using landing gears and suitable wood blocking under them.

3. Roll out front and attach adjustable support legs. No. 1 and 2 go on the front end of trailer and leg No. 3 attaches on the back. (Rear pull-out has only one brace). Adjust height of panels in relation to trailer using pinned jack-stands. Attach support legs and stake them down at this time. (If you are unable to stake them due to a hard surface, use sandbags or attach to truck-tractor.

4. Hook up electrical service: 220 volt, single phase 60 amp

5. Install ten porch braces found in rack behind tires. Open front by gently pulling down on porch until it goes over-center and then catch it and lower it slowly on to porch braces. Swing around rear ONLY scenery panel and install wheel cover section. Install stairways to each side of porch.

6. Open up large swinging walls on back-side of trailer and fold them around 180 degrees and tie them to something secure to prevent wind catching them!

7. Remove jackstands, feet, adjustable pipes and floor support rails from their racks underneath. Two support rails have eyebolts underneath. They go to the far outsides to provide a place to tie down sides of canvas top. All others are interchangable. Erect jackstands, pipes and pin to approximate height and fine adjust to level with screw threads.

8. Unpin three tubing segements holding floor for transport and let them drop down and hang by chain.

9. Pull the floor out until any cable slack is removed.

10. With one man inside and one or two outside pulling on lower portion of floor, begin to lower the winch, while outside men continue to keep pulling the slack out of the cable. At some point (approx 45 degrees) the floor will overcome friction and begin sliding down the rails by itself.

11. When floor is completely down, unpin and raise the set of small double doors and install the two braces securing them to the solid trailer wall.

DARK RIDE SET UP INSTRUCTIONS, CONT:

12. Untie outside walls and swing them into place pinning one to the tab provided on top of the small set of double doors. The other wall may need to be held until it can join the back wall.

13. Unpin the back wall from floor and raise it carefully joining into the slots on the side walls to form a solid building.

14. Using two or three men for safety, remove long pipes from channel iron racks and slip them on to short mounts going from back wall to just inside trailer ceiling. IMPORTANT: do not let pipes drop on one end as they will cause injury or bend their holders.

15. One man climbs on the roof of the trailer with a rope and hook to pull up fold-down front sections as another man unpins them and raises them up high enough the "roof" man may finish pulling them vertical and tying them off securely.

16. Castle towers may now be raised off the roof with the first section on each side pinning securely to the front section previously raised and tied off. Tower sections may now be comleted with cross-bracing and top "catwalk" platforms, which become a place to stand to now add castle top halves and pin.

17. Floodlights may now be hung on the castle tops to the inside edges to light both the tower fronts and the sign when raised, preventing "dark" spots on the sign front.

18. Raise middle sign halves and install support braces.

19. Unpin fold-down sections on the roll-out front and lower them gently to protect the life of the hinges. Key them to the adjustable jackstands. Now swing around scenery section to cover gooseneck area and pin.

20. Swing up roof panel on rear of trailer with a prop pole, high enough so floor may lower and clear. Swing out both walls and erect jackstand, feet and two short floor support rails. Making certain walls are spread apart far enough to clear, use the winch and begin to lower to floor until it rests on support rails. Unhook winch cable and roll it up safely out of customer's reach. Stand up back wall and lower roof to meet it. Pin the two together. Open up inside wall and pin this divider to the ceiling.

21. Put on canvas top and snap-on darkening strip along trailer roof.

DARK RIDE SET UP INSTRUCTIONS, CONT:

22. Install "U" shaped safety pins and floodlight fixtures to front. This will complete the structural integrity of the front panels.

23. Bolt on three removable track sections and tighten all connections securely to prevent heat during operation. IMPORTANT: Do not allow hot rail connection to touch top or bottom flange of track or a shorted transformer will occur!

24. Divider curtains may be hung from ceiling pipes inside.

25. Sweep out any and all debris that might have accumulated in track. If air compressor is available, blow out track periodically to keep metal shavings from causing potential "shorts".

26. Go around and re-adjust jackstands and make certain floor support rails are lying between hinge gaps on underside of folding floor. If not, a raised area will appear in floor area and track will not align properly.

27. Track being clear of all obstacles, unpin cars from transport hold-downs and prepare to run. Turn on track. If transformer "hums", shut off track immediately and search for hot connector touching rail flange somewhere in track. A mis-placed tool or wrench may sometimes be the problem also.

28. If ride performs normally, turn off service lights and operate as per instructions in this manual.

Amusement Rides
ALLAN HERSCHELL COMPANY INC.
and
THE MINIATURE TRAIN CO. Division
104 OLIVER STREET NORTH TONAWANDA, NEW YORK

# DARK RIDE OPERATION GUIDELINES

Since the single story dark ride is a high speed loading/unloading device, it is recommended to have a prudent, quick-reflexed operator when running all six cars to assure cars are not accidentally started while passengers are boarding or unloading.

Some rides are fitted with auxiliary controls for an exit area operator when running capacity business. The second man will assure passengers disembark quickly and prevent other cars from running into the back of their stopped vehicle. The second operator will pay off quickly in increased capacity and revenues per hour during peak periods.

It is reportedly a habit of some owners to have threads or nylon strings suspended from roof pipes to frighten passengers. THIS IS NOT RECOMMENDED! They become entangled in eyeglasses and rings, jewelry and wristwatches of moving patrons. They also are pulled down only to wrap up in car trolley brushes and car bearings.

Do not overload the cars as a practice. Two medium size adults should fit comfortably in the seat. If not, ride them separate. Capacity per car is 300lbs.

If cars become stalled inside, advise passengers to remain seated and manually push the car out. It is not recommended to have the patrons get out unless of rapid emergency or car is unmovable. Keep passengers inside cars for short-term power failures. Emergency lighting will come on at this time. If power will be off indefinitly, turn off track power and walk patrons to the nearest of the three exits. Turning off track power will assure their safety in case power should be restrored while they are exiting. Never lock maintenance doors during operating hours.

Cars should not be dispatched until patrons are sitting and arms,legs and feet are well inside the car frame. Loose articles like toys and purses should remain inside car. No food, drink or smoking shall be permitted, nor visable cigarette lighters, firecrackers, smoke bombs, knives etc. for obvious reasons.

Disfiguring, vandalizing or getting out of moving cars should not be tolerated.

Turn off track before doing any repairs.

Amusement Rides

Bulletin No. _____

Date _____

# ALLAN HERSCHELL COMPANY INC.

and

# THE MINIATURE TRAIN CO. Division

104 OLIVER STREET NORTH TONAWANDA, NEW YORK

# Service Bulletin

Ride DARK RIDE Subject WIND PRECAUTIONS File _____

In an effort to insure safe erection and dismantling of the ride building and front during high winds or unpredictable gusts, the following tips are recommended:

1. Secure each step of set-up or tear-down with stakes or safety ropes until parts are firmly braced or joined together to complete the section, or it is secured for transport.

2. Leave safety pull ropes attached to fold-up front panels even during operation, so they will be available should a high wind emergency arise.

3. Use truck-tractor roof for portable work platform if substantial step ladder is not available, especially for installing floodlight fixtures on outer ends of front.

4. Never leave front or folding walls unsecured or unbraced for even short periods (lunch breaks, etc.)

5. Secure top tower sections on roof for transport with a rope or nylon strap over the top.

6. Rainwater should not be allowed to build up all day on the canvas roof. Empty periodically.

Safety of employees during sudden wind gusts is of utmost importance!

RM No. 18-068-5M-658 ALLAN HERSCHELL COMPANY No. L-25387

Amusement Rides

ALLAN HERSCHELL
COMPANY, INC.

"World's Largest Manufacturer of Amusement Rides"
1[illegible]5 CLINTON STREET · BUFFALO 6, NEW YORK · PHONE: TA 5-8300

# DARK RIDE LUBRICATION

The single-level dark ride needs a minimum amount of lubrication compared with other amusement rides, however certain points with ensure longer life if attended to.

Zerk fittings are provided for each swivel on the car front trolley assembly and should be lubricated with any high-pressure grease, preferably Texaco Marfak product. Trolley wheel bearings are sealed and should have long life because of low RPM provided they are kept reasonably clean.

Track must be kept free of debris between the hot rail and main rail to prolong brush life. A brush-on graphite product will retard wear on brushes, however must be used very gently on the loading area as it will get on shoes and get on to ramps and stairways making them slick for patrons.

Standard 90 weight gear lube is recommended for the car gear reduction units and chains should have a brush on open lube. This also applies to inside stunt mechanisms.

Use caution to not get any lubricants on cars or seat cushions.

Portable model dark rides must follow manufacturer's recommendations on trailer axle bearings and fifth wheel pins.

Any questions or comments, please feel free to contact the Allan Herschell Company.

ALLAN HERSCHELL COMPANY, INC.

## GROUP ASSEMBLY PARTS LIST

| PART | NOMENCLATURE | FIGURE INDEX NO. | UNITS PER ASSY |
|---|---|---|---|
| 1. | Car frame | HD-197 | |
| 2. | Bumper | HD-212 | |
| 3. | Front trolley assy. | HD-256 | |
| 4. | Rear wheel & axle assy. | HD-254 | |
| 5. | Motor (Master ½hp 1340rpm 32v H66 frame) | | |
| 6. | Reducer (Amer Stock Gear Div ST 1810 C) | | |
| 7. | Sprocket(Browning 40B 24 X 3/4"bore) | | |
| 8. | Sheave (AK44 ½bore, 1/8 key) | | |
| 9. | Sheave (AK32 3/4 bore 3/16 key) | | |
| 10. | V-Belt (Browning 4L440) | | |
| 11. | Screw (¼ 20 1½"long) | | |
| 12. | Seat | HD-213 | |
| 13. | Backrest | HD-214 | |
| 14. | Bracket | HD-215 | |
| 15. | Chain (Browning 40X47) | | |

Rear wheels: Plate steel burned and machined
SKF 6206 2RS bearings
Tire: Rapi-Stan NG 8X2
45 3/8
Install before Final Painting by Assy.
STRAINER HOLES FROM BOTH PLATES, FAR SIDE
BRACKET
BACK REST
SEAT
CAR FRAME
ALLAN HERSCHELL CO. INC.
NORTH TONAWANDA, N.Y.

Pickup shoe (part #5) data:

3/8" x 5/8" hot

0.05-0.25 Phosphor Bronze
SAE 94
78.5- 81.5 Copper
9-11 Tin
9-11 Lead

| | | | | |
|---|---|---|---|---|
| 29 | 1 | Washer Plain 3/4 - SAE | | |
| 28 | 6 | Thumb Screw | | 18-112 |
| 27 | 6 | Hex Hd. Flexloc 3/4-16 Thd | | |
| 26 | 12 | Washer Plain 3/16" | | |
| 25 | 6 | Screw | | D0460 |
| 24 | 24 | Washer Plain 5/16 SAE | | |
| 23 | 6 | Shoulder | | HD-256 |
| 22 | 6 | Front | | HD-256 |
| 21 | 24 | Nut 5/16-18 | Series | |
| 20 | 6 | Screw | | |
| 19 | | Screw | | |
| 18 | 25 | Nylon Insert | | |
| 17 | 12 | Screw | | |
| 16 | 12 | Screw | | |
| 15 | 12 | Screw | | 6125-3 |
| 14 | 24 | Washer Lock Spring | | |
| 13 | 24 | Nut Hex Flexloc | | |
| 12 | 24 | Screw SKF 6204-2RS | | |
| 11 | 24 | Screw Machine | | |
| 10 | 6 | Front Wheel Assy | | HD-256 |
| 9 | 12 | Brush | | HD-256 |
| 8 | 96 | Insulator Guard Bearing | | HD-256 |
| 7 | 12 | Nylon Insert | | HD-256 |
| 6 | 12 | Insulator | | HD-256 |
| 5 | 6 | Pickup Shoe | | HD-256 |
| 4 | 6 | Front Axle Assy | | HD-256 |
| 3 | 6 | Brush Holder Double | | HD-256 |
| 2 | 6 | Brush Holder Single | | HD-256 |
| 1 | 6 | | | HD-256 |
| ITEM | NO REQD | DESCRIPTION | MATERIAL | DWG. NO. |

ALLAN HERSCHELL CO., INC.
BUFFALO, N.Y.

NAME: "Front Wheel Assembly"

USED ON: "Portable Dark Ride"

| | | | |
|---|---|---|---|
| DRAWN BY | DATE | MATERIAL | |
| DRAWN BY NB | DATE 2-28-62 | SCALE 1" = 1" | |
| CHECKED BY | DATE | PART No. HD-256 D | |
| REVISED | | | |

HD-254

| NO | WAS | DATE | CHANGE No | O.K. |
|---|---|---|---|---|
| B | Revised to Fitzsimmons | 4-10-63 | | |

| | | | | |
|---|---|---|---|---|
| 7 | 12 | Nut for Axle 3/8-11 Thin | | |
| 6 | 6 | Screw Cap hd 3/8-11 x 3 1/4 | | |
| 5 | 6 | Screw Cap hd 3/8-11 x 5/8 | | |
| ref. 4 | 6 | Spacer bushing | | HD-348 |
| ref. 3 | 18 | Spacer Washer | | HD-347 |
| 2 | 6 | Free Wheel Assy | | HD-350 |
| 1 | 6 | Drive Wheel Assy | | HD-351 |
| ITEM | NO REQ | DESCRIPTION | MATERIAL | DWG. NO. |

*Note*
1 - Assy req'd per car.
6 - Assy's req'd per ride

ALLAN HERSCHELL CO., INC.
BUFFALO, N. Y.

NAME: "Rear Wheel & Axle Assy"

USED ON: "Portable-Dark Ride"

| | | |
|---|---|---|
| DESIGNED BY | DATE | MATERIAL |
| DRAWN BY | DATE 2-19-63 | SCALE 12" = 1'-0" |
| CHECKED BY | DATE | PART NO. HD-[illegible] |
| SERVICE | | |

HD-140

| No. | Was | Date | Change No. | By |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 28 | 2 | Fiber Washer #375 3/8" Bore | | |
| 27 | 3 | Key Woodruff #120 | | |
| 26 | 1 | Pulley | | HD-150 |
| 25 | 12 | Washer plain 1/4" | | |
| 24 | 5 | Washer plain 3/8" | | |
| 23 | 1 | Neutral Position Assy | | HD-147 |
| 22 | 2 | Nut hex flat or 3/8"-12 | | |
| 21 | 12 | Nut hex flat or 1/4"-20 | | |
| 20 | 14 | Nut hex 1/4"-20 | | |
| 19 | 2 | Nut hex 3/8"-16 | | |
| 18 | 4 | Bolt lock 1/4"-20 x 1 1/4" | | |
| 17 | 4 | Screw Allen 1/4"-20 x 1 1/4" | | |
| 16 | 2 | Screw 3/8"-16 x 1 1/4" | | |
| 15 | 6 | Screw Cap 1/4"-20 x 1 1/4" | | |
| 14 | 1 | Screw Cap 3/8"-16 x 1 1/4" | | |
| 13 | 3 | Bushing Sintered Regal Oil Mfg. | 3/4" Bore | |
| 12 | 1 | Drift Bearing #4-480 | | |
| 11 | 1 | Drift Bearing #4-340 | | |
| 10 | 1 | Sheave Browning #BK-32 | 1/2" Bore | |
| 9 | 1 | Sheave Browning #BK-32 | 1/2" Bore | |
| 8 | 2 | Sheave Browning #AK-30 | 1/2" Bore | |
| 7 | 1 | Reducer Peerless #ST-1350 | | |
| 6 | 1 | Motor 1/2 HP 1PH | | HD-151 |
| 5 | 1 | Mounting Angle Reducer | | HD-148 |
| 4 | 1 | Connecting Link | | HD-147 |
| 3 | 1 | Lower Arm Short | | HD-143 |
| 2 | 1 | Lower Arm Long | | HD-142 |
| 1 | 1 | Shaft | | HD-141 |

| Item No. | Description | Material | Part No. |
|---|---|---|---|

ALLAN HERSCHELL CO., INC.
NORTH TONAWANDA, N. Y. U.S.A.

NAME: Stunt Drive Assy.

USED ON: Portable Dark Ride

| | | | |
|---|---|---|---|
| Designed By | Date | Material | |
| Drawn By: E.E.W. | Date: 9-6-62 | Scale: 1" = 1'-0" | |
| Checked By | Date | Part No. | HD-140 |
| Remarks | | | |

Next Assy HD-

ELEVER

| | | | | |
|---|---|---|---|---|
| 20 | 1 | Mounting Rate Spec. | | HD-153 |
| 19 | 1 | Cover special | | HD-93 |
| 18 | 1 | Box special | | HD-93 |
| 17 | 1 | Night Cover | | HD-93 |
| 16 | 1 | Cover box | | HD-93 |
| 15 | 1 | Center Box | | HD-93 |
| 14 | 2 | Actuator #5MA #1 Work | | |
| 13 | 2 | Actuator #5MA #2 Rev | | |
| 12 | 1 | Night Cover | | HD-94 |
| 11 | 4 | Hirco Switch #B2-2K-A2 | | |
| 10 | 1 | Switch Heinemann #3003 | 50A | |
| 9 | 1 | Transformer Hindle | | |
| 8 | 3 | Fuse midg. #5AG C | 5 Amp | |
| 7 | 4 | Fuse tron FRN 45 | 45 Amp | |
| 6 | 1 | Fuse Box Cutler Hex #4022 | | |
| 5 | 1 | Fuse box Showmet #3680 | | |
| 4 | 2 | Contactor A.B. #10250D35 | | |
| 3 | 1 | Screw Cap Bulb ½ BP21 | | |
| 2 | 1 | Box Cover | | HD-27 |
| 1 | 1 | Electrical Box | | HD-27 |
| REF | NO. REQ | DESCRIPTION | MATERIAL | DWG. NO. |

**ALLAN HERSCHELL CO., INC.**
BUFFALO, N. Y.

NAME: Wiring Diagram Rear Ext.

USED ON: Hunt Dark Ride Special #2

DESIGNED BY: | DATE: | MATERIAL:

DRAWN BY: E.E.W. | DATE: 2-20-69 | SCALE: None

CHECKED BY: | DATE: | PART NO: HD-387

REMARKS:

HD-174

Painted Steel
Painted Steel
Painted Steel
Painted Steel
Fees To Hot Rail 3 Pulls Locate At Erection
Concrete Block
Concrete Block
Concrete Block

HI-505

Hot Rail ref
Track ref.
Typical Stmt pick up
Unloading Zone Control ref.
Stmt Motor ref.
ALLAN HERSCHELL CO. INC.
Electric Rail General Assy
Portable Dark Ride

-392

MATERIAL: PHOSPHOR BRONZE CASTING
S.A.E. STANDARD #64 (COPPER 78.5-81.5; TIN 9 TO 11;
PHOSPHORUS 0.05 TO 0.25; ZINC, MAX, 0.75; LEAD 9 TO 11).
PATTERN HD-392 — No longer Available

| ITEM | No. REQD | DESCRIPTION | MATERIAL | DWG. No. |
|---|---|---|---|---|
| | 6 | | SEE NOTE | |

ALLAN HERSCHELL CO., INC.
BUFFALO, N. Y.

NAME PICKUP SHOE

USED ON PORTABLE DARK RIDE

| | | |
|---|---|---|
| DESIGNED BY | DATE | MATERIAL |
| DRAWN BY J.T. | DATE 1-25-65 | SCALE FULL |
| CHECKED BY | DATE | PART NO. HD-397 |