

HUSS

SERVICE LETTER EN-09
ISSUED BY HUSS MASCHINENFABRIK
JANUARY 28, 1983

RE: Enterprise Fiberglass Gondola Seats

We have new fiberglass gondola seats available in four different colors, yellow, green, blue, and red. You may choose one color or all four. The choice is up to you.

We are confident that your investment in these seats will more than pay for themselves in attractiveness and time and money spent repairing your old seats.

Please call us today with your order.

ENTERPRISE RIDE INTERIM CORRECTIVE ACTION PLAN
U.S. Consumer Product Safety Commission
March 2, 1984 [Revised 7/15/93]

1. All pivot pins all bearing block holders for the car shall be of the latest Huss design. In each pivot pin, there shall be three (3) 10mm retainer plate hex cap screws of Property Class 10.9 that are 20mm (about 3/4 inch) long, not including head. For each car, there shall be a Huss-designed safety-chain or safety-cable system that will serve as a reliable back-up safety device in the event of separation of either end of the car from the sweep structure.
2. Modification of the car shall be done as necessary to make practical the removal of all floor plates and of all fiberglass cowling for inspection.
3. The Enterprise ride shall be inspected for cracks or other potential problems by a knowledgeable person under good lighting conditions. Inspections shall take place as follows:
 - At the time the ride has first been set up at each site before it is used with passengers
 - Once each day that the ride is operated at the site for passenger use whether or not passengers have ridden the ride.

THESE CLOSE-UP INSPECTIONS SHALL CONSIST OF THE FOLLOWING:

- (a) Inspections for cracks in each bearing block holder and its welds and repair of all cracks before use of the ride by passengers. Any cracks shall be properly repair welded by a welder who has appropriate certification.
- (b) Inspection for cracks in visible pivot pin welds and in the parts of each car structure and their welds that are visible without removal of the fiberglass cowling. Any cracks shall be properly repair welded by a welder who has appropriate certification.

(c) Inspection for failure of each pivot pin screw in each pivot pin. The wired heads shall be poked as necessary to determine whether they are broken off. Any broken screws shall be replaced with unused new screws which shall be tightened with an appropriate torque wrench using the torque recommended by Huss.

(d) Inspection for integrity of the wiring of the heads of pivot pin screws. Any broken wiring shall be replaced before operating with passengers.

(e) Inspection for axial play of each car assembly relative to one of the associated bearing block holders. Such axial play shall not exceed 1/4 inch.

4. The following inspections and corrective repairs shall be conducted every 20 to 30 operating days when the ride is not in storage.

(a) This inspection shall be done after removal of all fiberglass cowling parts of the roof; the four cowling elements just below the roof which shroud the structural parts of the frame above the pivot pins; the three "diamond" floor plates; the passenger seat; and the passenger backrest. Inspection for cracks in all visible parts of the car structure, including roof structural parts; parts above, at, and below the pivot pins; and associated welds.

(b) Inspection for axial play of each bearing block on its pivot pin. This shall be done after the cars have been taken off the sweep structure. Such axial play shall not exceed 1/32 inch.

5. The following inspection and corrective repairs shall be conducted every 12 to 13 calendar months.

(a) Inspection shall be done after removal of the car from its bearing block holders and removal of the three floor plates and all parts of the fiberglass cowling (including all roof cowling, all fore and aft cowling, and all bottom cowling). Inspection shall consist of magnetic particle inspection (e.g., Magnafluxing) by qualified personnel (i) for cracks in the bearing block

holders and in the car structure (including structural parts of the roof and structural parts above, at, and below the pivot pins); and (ii) for cracks in the welds of these parts and the welds that attach these parts. Any cracks shall be properly repair welded by a welder who has appropriate certification.

6. Installation on each car and at all ticket purchase locations selling tickets to the Enterprise ride of signs that are supplied by Huss and approved by the U.S. Consumer Product Safety Commission, or signs provided by the owners/operators and approved by the Consumer Product Safety Commission, that effectively inform all riders of the following:
 - (a) The number of riders allowable in each car.
 - (b) Total weight of riders allowable in each car.
 - (c) That both of the above restrictions are safety related.
7. The manufacturer shall provide to all Enterprise owners/operators information regarding Huss-recommended turnbuckle installation procedure at each set up including installation torque and sequence.
8. Each Enterprise ride owner/operator shall maintain detailed, signed and dated documentation of inspections and modifications as called for in paragraph numbers one (1) through (7) above and of associated maintenance and repair work performed for a period of seven (7) years. In addition, each owner/operator shall maintain documentation of any and all repairs made to each Enterprise ride, including any and all rewelding, with the date of such action and the name and address of the person making such repairs for a period of seven (7) years. This documentation shall be made available to the U.S. Consumer Product Safety Commission and to State and local agencies that regulate amusement rides upon request of their respective representatives.
9. Any ride failure or potential ride failure and any observations of additional cracks on the Enterprise ride shall be immediately reported to the U.S. Consumer Product Safety Commission (Telephone: 301-504-0608 or toll-free 1-800-638-CPSC) as well as to the State and local agencies that regulate amusement rides in the State or locality in

which the rides are operating at the time of the ride failure, potential failure, or observation of additional cracks.

ENTERPRISE AMUSEMENT RIDES SHALL NOT BE OPERATED IN THE EVENT ANY OF THE FOLLOWING OCCURS:

- I. Any of the actions per paragraph numbers 1 through 9 above are not, at all times, being fully and properly followed and implemented.
- II. Any cracks found during inspections per paragraph numbers 3a, 3b, 4a, and 5a above are not properly repair welded by an appropriately certified welder.
- III. Any failed screws found during an inspection per paragraph number 3c above have not been replaced with unused new 20-mm-long 10 mm hex cap screws of Property Class 10.9 using an appropriate torque wrench and the torque recommended by Huss.
- IV. Any defective screw wiring found during inspection per paragraph number 3d above has not properly replaced.
- V. Any car has been found, during inspection per paragraph number 3e above, to have axial play greater than 1/4 inch.
- VI. Any bearing block has been found, during inspection per paragraph number 4b above, to have axial play greater than 1/32 inch.

RESTRICTED

ENTERPRISE RIDE INTERIM CORRECTIVE ACTION PLAN
(U.S. Consumer Product Safety Commission Staff Document--Revised 3/2/84)

PENDING THE RESULTS FROM ANTICIPATED TESTING AND ANALYSES THE FOLLOWING INTERIM CORRECTIVE ACTION SHALL BE IMPLEMENTED BY ALL HUSS ENTERPRISE AMUSEMENT RIDE OWNERS/OPERATORS BEFORE AND WHILE OPERATING THE RIDE:

1. All pivot pins and all bearing block holders for the car shall be of the latest Huss design. In each pivot pin, there shall be three (3) 10 mm retainer plate hex cap screws of Property Class 10.9 that are 20 mm (about 3/4 inch) long, not including head.
2. Modification of the car shall be done as necessary to make practical the removal of all floor plates and of all fiberglass cowling for inspection.
3. The Enterprise ride shall be inspected for cracks or other potential problems by a knowledgeable person under good lighting conditions. Inspections shall take place as follows:
 - At the time the ride has first been set up at each site before it is used with passengers.
 - Once each day that the ride is operated at the site for passenger use whether or not passengers have ridden the ride.

THESE CLOSE-UP INSPECTIONS SHALL CONSIST OF THE FOLLOWING:

- (a) Inspections for cracks in each bearing block holder and its welds and repair of all cracks before use of the ride by passengers. Any cracks shall be properly repair welded by a welder who has appropriate certification.
- (b) Inspection for cracks in visible pivot pin welds and in the parts of each car structure and their welds that are visible without removal of the fiberglass cowling. Any cracks shall be properly repair welded by a welder who has appropriate certification.
- (c) Inspection for failure of each pivot pin screw in each pivot pin. The wired heads shall be poked as necessary to determine whether they are broken off. Any broken screws shall be replaced with unused new screws which shall be tightened with an appropriate torque wrench using the torque recommended by Huss.

RESTRICTED

- (d) Inspection for integrity of the wiring of the heads of pivot pin screws. Any broken wiring shall be replaced before operating with passengers.
 - (e) Inspection for axial play of each car assembly relative to one of the associated bearing block holders. Such axial play shall not exceed 1/4 inch.
4. The following inspections and corrective repairs shall be conducted every 20 to 30 operating days when the ride is not in storage.
- (a) This inspection shall be done after removal of all fiberglass cowling parts of the roof; the four cowling elements just below the roof which shroud the structural parts of the frame above the pivot pins; the three "diamond" floor plates; the passenger seat; and the passenger backrest. Inspection for cracks in all visible parts of the car structure, including roof structural parts; parts above, at, and below the pivot pins; and associated welds.
 - (b) Inspection for axial play of each bearing block on its pivot pin. This shall be done after the cars have been taken off the sweep structure. Such axial play shall not exceed 1/32 inch.
5. The following inspection and corrective repairs shall be conducted every 12 to 13 calendar months.
- (a) Inspection shall be done after removal of the car from its bearing block holders and removal of the three floor plates and all parts of the fiberglass cowling (including all roof cowling, all fore and aft cowling, and all bottom cowling). Inspection shall consist of magnetic particle inspection (e.g., Magnafluxing) by qualified personnel (i) for cracks in the bearing block holders and in the car structure (including structural parts of the roof and structural parts above, at, and below the pivot pins); and (ii) for cracks in the welds of these parts and the welds that attach these parts. Any cracks shall be properly repair welded by a welder who has appropriate certification.
6. Installation on each car and at all ticket purchase locations selling tickets to the Enterprise ride of signs that are supplied by Huss and approved by the U.S. Consumer Product Safety Commission, or signs provided by the owners/operators and approved by the Consumer Product Safety Commission, that effectively inform all riders of the following:

RESTRICTED

- (a) The number of riders allowable in each car.
* NO MORE THAN 2 RIDERS PER CAR * (MK)
- (b) Total weight of riders allowable in each car.
* MAXIMUM WEIGHT OF 330 lbs PER CAR * (MK)
- (c) That both of the above restrictions are safety related.
7. The manufacturer shall provide to all Enterprise owners/operators information regarding Huss-recommended turnbuckle installation procedure at each set up including installation torque and sequence.
8. Each Enterprise ride owner/operator shall maintain detailed, signed and dated documentation of inspections and modifications as called for in paragraph numbers one (1) through seven (7) above and of associated maintenance and repair work performed for a period of seven (7) years. In addition, each owner/owner shall maintain documentation of any and all repairs made to each Enterprise ride, including any and all rewelding, with the date of such action and the name and address of the person making such repairs for a period of seven (7) years. This documentation shall be made available to the U.S. Consumer Product Safety Commission and to State and local agencies that regulate amusement rides upon request of their respective representatives.
9. Any ride failure or potential ride failure and any observations of additional cracks on the Enterprise ride shall be immediately reported to the U.S. Consumer Product Safety Commission (Telephone: 301-492-6608 or toll-free 800-638-CPSC) as well as to the State and local agencies that regulate amusement rides in the State or locality in which the rides are operating at the time of the ride failure, potential failure, or observation of additional cracks.
10. Each Enterprise ride owner/operator shall provide to the Commission on a monthly basis, copies of all inspection reports consisting of log of the daily, monthly and annual inspection for that previous month.
11. Upon the sale or lease of the Enterprise ride, the present owner shall forward the name, address and telephone number of the buyer or person leasing the ride.
12. Huss will provide to each ride owner a operating manual for the Enterprise ride. Each ride owner will maintain a copy of the

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ENTERPRISE

operating manual and in the event the ride is sold or leased, the manual will be provided to the new owner or operator.

ENTERPRISE AMUSEMENT RIDES SHALL NOT BE OPERATED IN THE EVENT ANY OF THE FOLLOWING OCCURS:

- I. Any of the actions per paragraph numbers 1 through 12 above are not, at all times, being fully and properly followed and implemented.
- II. Any cracks found during inspections per paragraph numbers 3a, 3b, 4a, and 5a above are not properly repair welded by an appropriately certified welder.
- III. Any failed screws found during an inspection per paragraph number 3c above have not been replaced with unused new 20-mm-long 10 mm hex cap screws of Property Class 10.9 using an appropriate torque wrench and the torque recommended by Huss.
- IV. Any defective screw wiring found during inspection per paragraph number 3d above has not been properly replaced.
- V. Any car has been found, during inspection per paragraph number 3e above, to have axial play greater than 1/4 inch.
- VI. Any bearing block has been found, during inspection per paragraph number 4b above, to have axial play greater than 1/32 inch.

(4)



SERVICE LETTER EN-01
ISSUED BY HUSS MASCHINENFABRIK
APRIL 10, 1984

RE: Enterprise Roof Modification

This service letter is being issued to advise all customers that it is mandatory to modify the Enterprise roof and the gondola bearing retaining plate according to the newest requirements.

If your Enterprise has not been modified by a HUSS technician, please notify us immediately.



SERVICE LETTER EN-08
ISSUED BY HUSS MASCHINENFABRIK
JULY 6, 1984

RE: Enterprise Conversion Kit (to run ride backward)

Be one of the first to own and operate an Enterprise that gives your customer double the excitement by running backwards as well as forward.

Don't delay, order your conversion kit today by calling Don Hereth at North American Parts, Inc.



SERVICE LETTER EN-02
ISSUED BY HUSS MASCHINENFABRIK
MAY 22, 1985

RE: Enterprise Acceleration Bars

Huss has recently designed new style acceleration bars with the sole purpose of making your Enterprise ride run more quietly, as well as adding to the life of the pins and bracing brackets.

These newly designed bars are not a requirement for safety reasons but for the purpose of making your maintenance easier and less expensive.

Should you have any questions or need additional information, please feel free to contact our office.

SERVICE LETTER EN-06
ISSUED BY HUSS MASCHINENFABRIK
JUNE 12, 1985



RE: Huss Enterprise Gondola

The German safety control institution, Technischer Uberwachung Verein (commonly known as TUV) responsible for all amusement rides, as well as we, the manufacturer, reject the proposal for incorporating additional safety cables on the Enterprise ride for the following reasons:

- 1) Twenty five years ago, a law in West Germany was deleted in March of 1960; DIN 4112, paragraph 7.9 regulation of additional suspension (due to motion stress on critical components reduced to 50%).
- 2) New regulations were added in February of 1983 to DIN 4112, as the gondola suspension is not the only critical part, all technical components have to be examined by stress analysis for permanent stress.
- 3) The new and the modified gondola suspensions correspond with the DIN 4112, March 1960 and DIN 4112, February 1983.
- 4) Additional safety cables were deleted because the motion would be in most cases uncontrolled.
- 5) There is a condition that exists which could cause the gondolas to rotate 360 degrees. The ride has been designed to allow this to happen without damage or injury. The safety cable would prevent the rotation.
- 6) If the cables are installed, the length of the cable becomes a factor. A long safety cable increases the possibility of entanglement. In a case of dislodgement, there may be a clearance problem between the backwall of the decking fencing on the gondola. If a short safety cable is used to avoid these problems, it becomes significantly more dangerous, due to the fact that the extremely high forces are transmitted to the cantilever arm. This results in an overload on adjacent gondolas producing a possible chain reaction where a number of gondolas may separate from the ride.

It should be noted that if the ride is properly inspected and maintained, it is not possible for such a failure to occur.



SERVICE LETTER EN-03
ISSUED BY HUSS MASCHINENFABRIK
APRIL 25, 1986

RE: Lighting Conversion Kit - Enterprise

We are offering a conversion kit so that you can change your original light bulbs to a smaller bulb with lens, and are sending you a sample of the new unit. This smaller bulb has a much longer life span and the lens comes in a variety of colors. Both the bulb and the lens are stocked in Clarence, New York for fast, reliable delivery to you.

The conversion kit includes an E14 socket which screws into the present E27 socket, the light bulb and the lens.

The lens comes in the following colors: red, blue, orange, yellow, green, violet and clear.



SERVICE LETTER EN-04
ISSUED BY HUSS MASCHINENFABRIK

RE: Enterprise - Wheel Disc Modification Kit

We would like to offer you a Wheel Disc Modification Kit for your Enterprise. This kit includes the following:

- 1 Set - 20 pcs overdimensional center pins
- 1 Set - Acceleration Bars incl. pins & fitting
- 1 Set - Remaining overdimensional Pins
- 1 Set - 10 pcs tie rods for center ring
- 1 Set - Fitting Parts

If you have any questions about this kit, or want more information, please call us.



SERVICE LETTER EN-05
ISSUED BY HUSS MASCHINENFABRIK
OCTOBER 27, 1986

RE: Enterprise Sweep Modification

We have discovered that the wheel disc of the Enterprise will require modifications after extended use. It is, therefore, necessary for you to inspect all of the pins and holes on the wheel disc and check for excessive wear.

In the event that the pins and holes have more than 2mm of wear on the smaller pins and more than 2mm on the large center pins, they should be replaced with Huss oversized pins. (2mm to be understood as the difference in diameter between pin and hole.)

We also recommend the installation of our new acceleration bars kit which will reduce further pin wear.

If you have any questions, please contact Henry Martin at (813) 283-4601.



SERVICE LETTER EN-12
ISSUED BY HUSS MASCHINENFABRIK
APRIL 13, 1987

RE: Enterprise - Wheeldisc outer turnbuckles

After each erection and at least once a week, the turnbuckles have to be checked.

It is important that these are only hand-tight with slightly oiled thread.

After this procedure, secure them with the locknuts.



SERVICE LETTER EN-10
ISSUED BY HUSS MASCHINENFABRIK
SEPTEMBER 10, 1987

RE: Enterprise - Park/Road model Hydraulic Hoses

Due to a recent incident, we want to emphasize again the importance of following the manual. Replacement hoses have to qualify to our standards. A locally purchased replacement hose does not generally meet our high pressure hose standards. Also, hoses should be replaced after 4000 hours of operation.



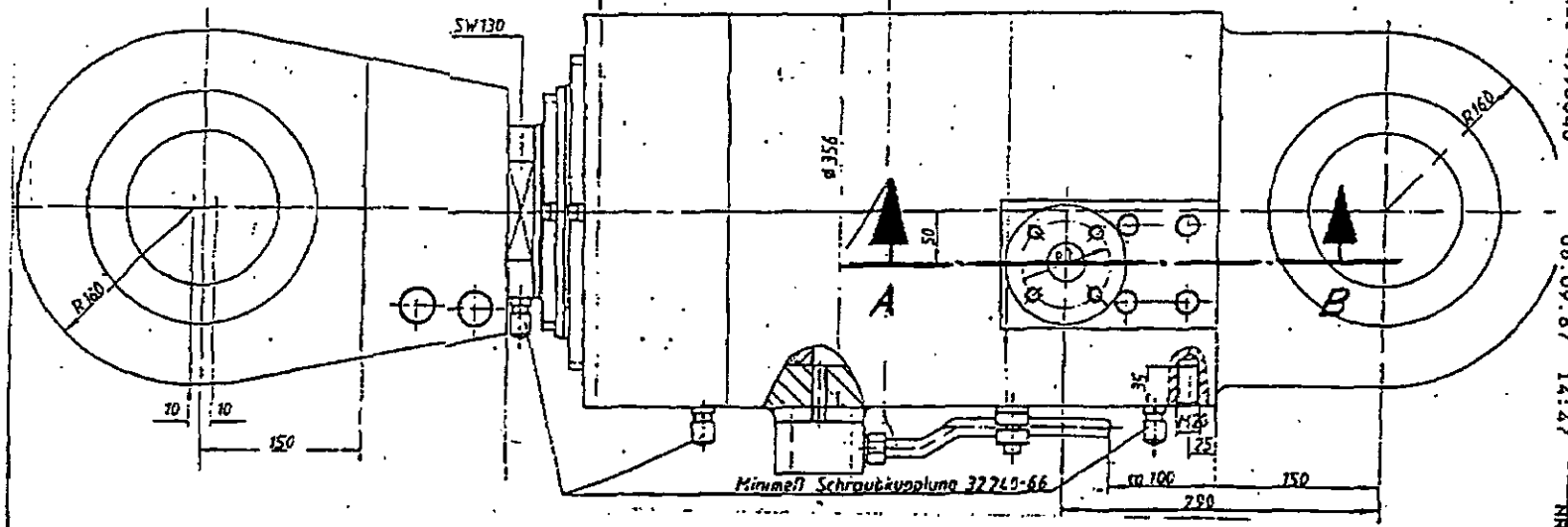
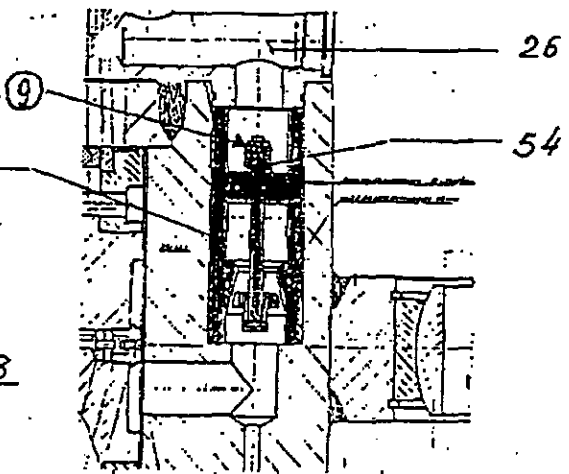
SERVICE LETTER EN-11
ISSUED BY HUSS MASCHINENFABRIK
SEPTEMBER 10, 1987

RE: ENTERPRISE - PARK/ROAD MODEL PIPE BRAKE VALVE

The built in pipe break valve (see attached drawing) prevents the drop of the wheel in case of a burst hose, etc. It should be visually checked at the annual inspection.

Rohrbruchsicherung
pipe-break-valve

Schnitt A-B



SENDER
HOSS BREMEN 49 421 4990040
08.09.87 14:47
NR.02



MASCHINENFABRIK
VI.
SAFETY REGULATIONS

**RETURN RECEIPT
REQUESTED**

for

CARROUSEL "ENTERPRISE"

1. The ride must be set up in such a way as to guarantee that throughout operation the gondolas (and thus also the passengers) are at all times kept at a distance of at least 20 inch (0,5 m) away from all structures, trees, power lines, or other objects, especially on all swinging movements.
2. Prior to erection, the structural and moving parts must be inspected to make sure that they are in flawless condition. Faulty parts must be replaced immediately. Make sure that the structure is stable at all times, i.e. also during assembly and dismantling. After erection is completed, all parts must be properly connected, with connection elements and all necessary anchoring devices properly mounted and secured.
3. The ENTERPRISE operator or his deputy must see to it that clear instructions are given to on-site personnel as to proper handling of the individual parts during assembly and dismantling as well as during loading, unloading and transport. He must furthermore supervise and, if necessary, direct the work.
4. All connection equipment pertaining to the system must be suitably secured against inadvertent loosening.
5. The rotor section of the system must under no circumstances be loaded with more than 40 passengers at a time, with at most two persons occupying each gondola.
6. As far as feasible, the seated passengers should be evenly distributed over the circumference of the rotor section. It is imperative to avoid imbalanced loading by more than 6 persons, i.e. max. 1000 lb (450 kg) more on one side.
7. Children under 8 years of age and of a height of less than 4,5 ft (137 cm) are not permitted on the ride .
8. Children under 14 years of age may be admitted to the ride, provided they sit in the gondolas together with adults, i.e a maximum of one child with one adult in each gondola.
9. Persons exhibiting signs of drunkenness must be refused admittance.
10. The machinery may not be switched on until:
 - a) all passengers are properly seated in the gondolas,
 - b) all sliding doors are closed and locking into position,
 - c) the entire central platform area swept by the horizontally circling gondolas as well as the first steps next to that area on all sides of the tilting arm (up to the intermediate railings) are clear of onlookers and waiting passengers.



MASCHINENFABRIK

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11. Whenever the passengers themselves have not closed and locked the sliding doors of their gondolas, this must be done by the operating personnel prior to starting the ride.
12. During the first turn after the ride has started, the operator must make sure that all passengers are properly and safely seated in their gondolas and that all safety bars are fully closed and locked.
13. While the system is in operation, waiting passengers must only be allowed to stand on the lower circular stepway around the platform area; do not allow passengers onto the steps bordering the range of the tilting arm. Appropriate supervision on the part of the operating personnel will be necessary.
14. The supervisory personnel must prevent access to the areas of the platform and the steps within the range of rotating and swinging parts.
15. Leaning out of the gondolas, smoking and taking animals, umbrellas, sticks, or other unwieldy or sharp objects into the gondolas is strictly forbidden.
16. The notice boards drawing attention to the prohibitions and operating regulations as per Item 7, 8, 9 and 15 must be clearly and legibly displayed at suitable locations.
17. The M16, class 10.9 bolts on the gondola bearings must be tightened in accordance with the provisions of Plan No. B1-5.8 with a torque of 218 ft lb (295 Nm). For this purpose the bolts should be lightly lubricated.

The 42 bolts M20, class 10.9 to connect the slewing ring to the swinging arm must be tightened with a torque of 340 ft lb (460 Nm). After certain periods of operation, it is necessary to check the pretensioning. In any parts of the ride are found to have settled with time, these checks must be carried out more frequently.

18. All data adjusted and logged by the manufacturer are not allowed to change. An acceptance certificate is available, if required.
19. If necessary, the site for setting up the ride must be levelled to ensure stability of the equipment and unhindered access.
20. The underbushing (supports) between the ground and the base structure must be kept low and must be constructed so that they are immobile and stable.
21. The equipment is not designed for snow loads. Should it be erected during the snowy season, any snow must be removed immediately.



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22. The frame of the base chassis must be underbushed in accordance with Drawing No. A5.43. A permissible ground pressure of min. 22 lb/in² (15 N/cm²) is necessary. For stationary model, the foundation must be designed for the bearing loads specified in Drawing No. A1-5.62.
23. The operational safety of the amusement ride must be checked daily before starting operation. The main connections, moving and mechanical components must also be observed during operation; any faults which arise must be immediately corrected. If necessary, operation must be stopped. Repairs which could endanger passengers or operating personnel are not permissible during operation.
24. Sitting or standing on railings, swaying to the music and rhythmic stamping on the platforms must not be permitted. If necessary, the music should be stopped and the machinery switched off.
25. Climbing in and out of gondolas during operation of the system, holding out arms or legs, leaning out of gondolas, sitting on side walls and, if necessary or required, smoking must not be allowed.

SERVICE LETTER
EN-14



MASCHINENFABRIK

Huss Maschinenfabrik GmbH & Co. KG - Postfach 110206, D-2800 Bremen

Siresenarristr. 56 · Telex 2 45 180 huss d
☎ (04 21) 490000 · Telefax 4 9900 40

Ihre Zeichen/Nachricht

Unser Zeichen

Telefon-Durchwahl / Kommission / Tag

11.09.89

RE: Enterprise #

Dear Customer:

As an amendment to our safety regulations sent to you on July 22, 1989, we would like to explain that the height recommendation is based on european experience.

Our recommendation and your experience is important, but it is still up to the State Inspector to make the final decision as to the height restriction on your particular ride.

HUSS MASCHINENFABRIK
GmbH & Co.KG

RECEIVED OCT 12 1993



MASCHINENFABRIK

Certified Mail 10/12/93, I thought you should see a copy.
RECEIVED OCT 12 1993
RETURN RECEIPT REQUESTED

Huss Maschinenfabrik GmbH & Co. KG - Postfach 110306, D-2800 Bremen

Strosemannstr. 58 - Telax 246 100 Huss g
☎ (0421) 499000 - Telex 4990040

KENTUCKY KINGDOM
Mr. Ron Barni
P.O. Box 9016
4005 1/2 Crittenden Dr.
Louisville, KY 40209-9016

Ihre Zeichen/Nachricht

Unser Zeichen
dr

Telefon-Durchwahl / Kommission / Tag
Oktober 1, 1993

SERVICE LETTER EN-15

RE: Enterprise/Inspection of
Pipe Break Valve & Delay Valve

Because of the importance of the proper functioning of the pipe break valve, we strongly recommend that all Enterprise owners order an inspection of the pipe break valve by a Huss factory technician.

During this inspection the Huss technician will replace the pipe break valve with a new adjusted and certified one, under an exchange program.

The delay valve of the emergency system must be synchronized with the new pipe break valve. Therefore, during this inspection the Huss technician will also test the delay valve, and if necessary the delay valve will be repaired or replaced.

Huss Maschinenfabrik
GmbH & CO. KG.

O. Dreier
Service Department

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$\phi 36$

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$\phi 68^{H7}$

Pos. 34

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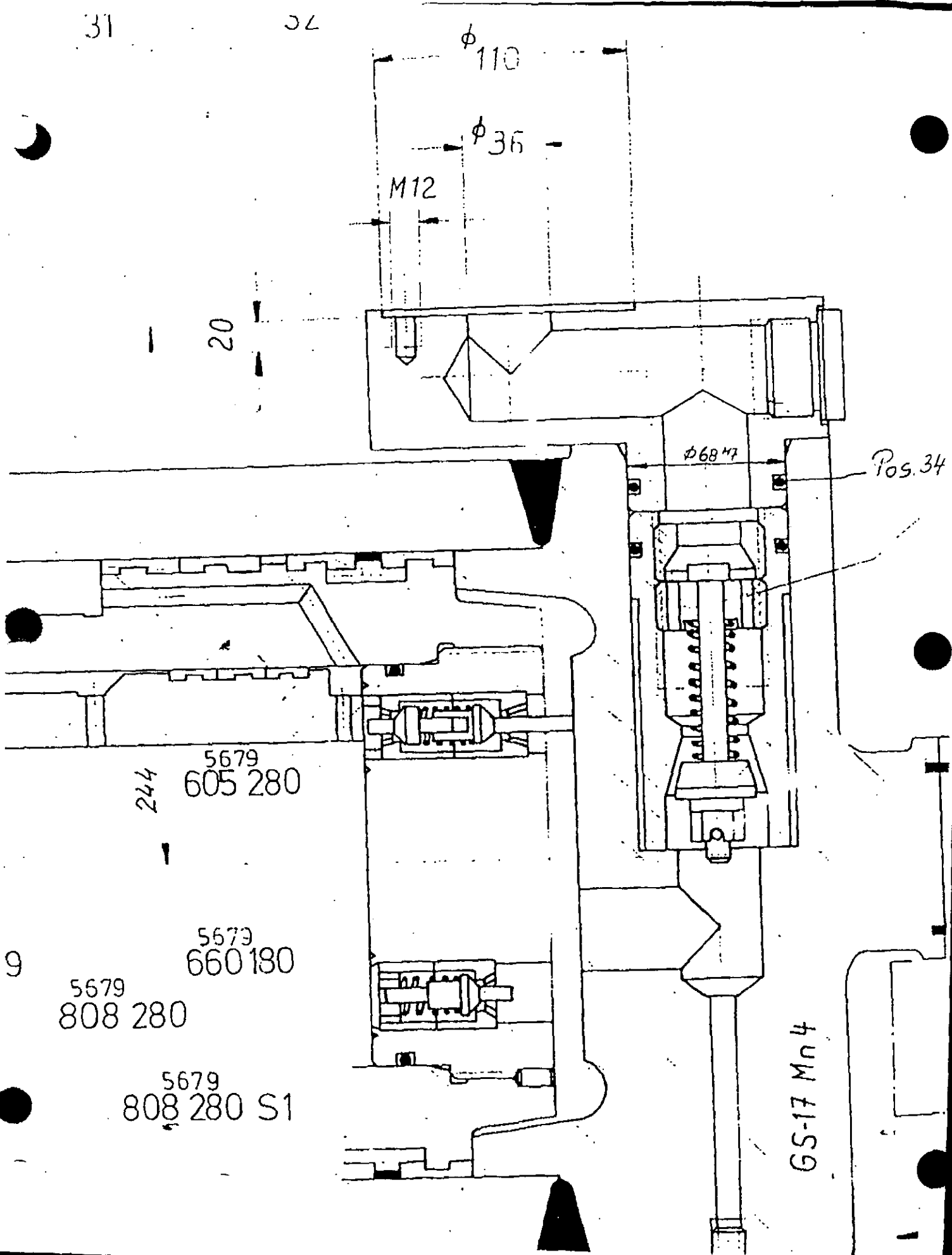
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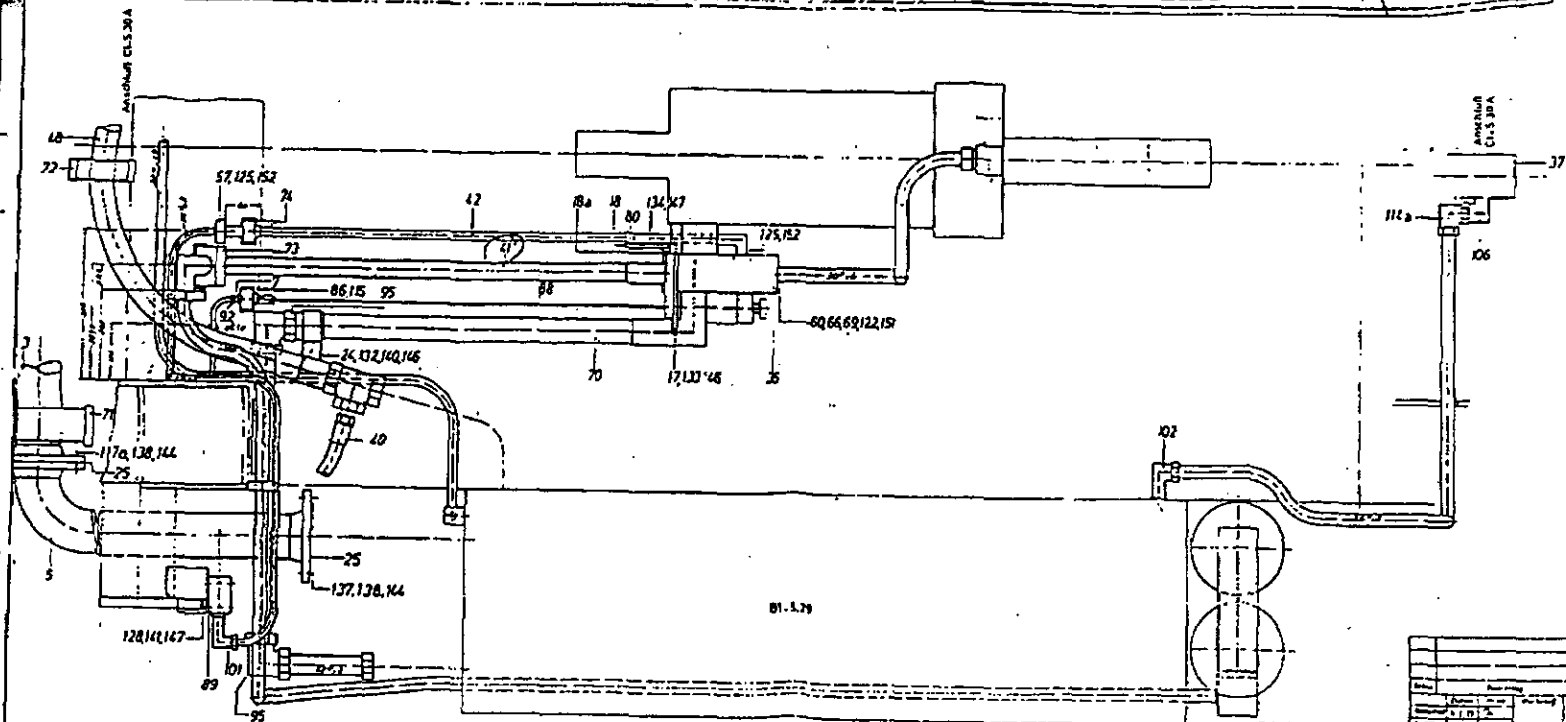
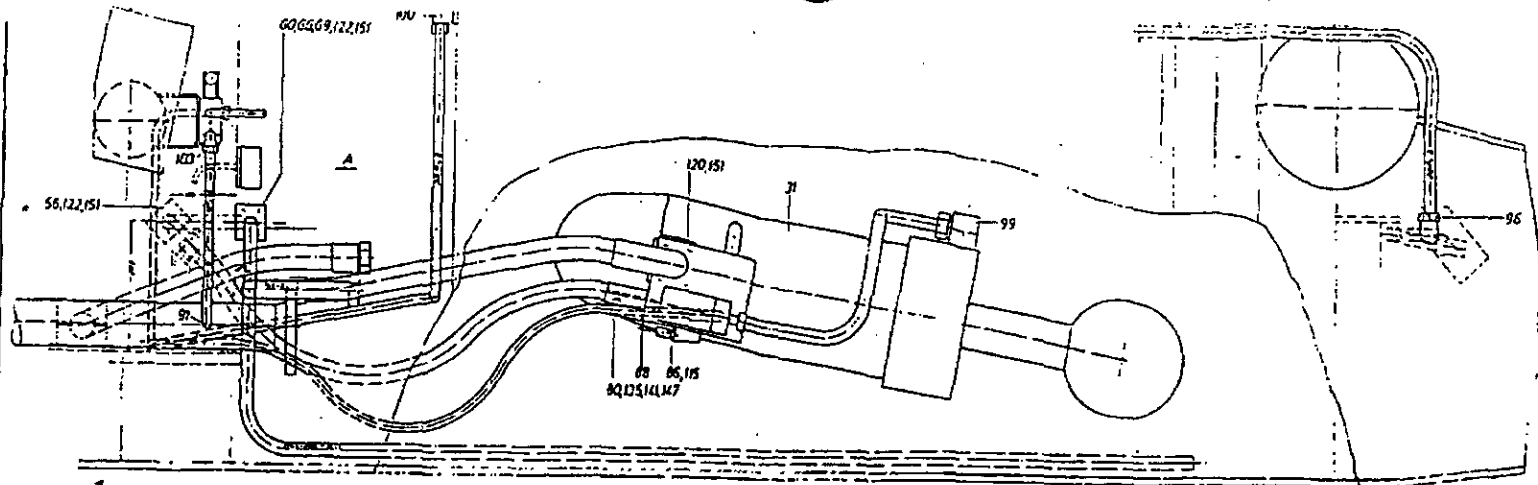
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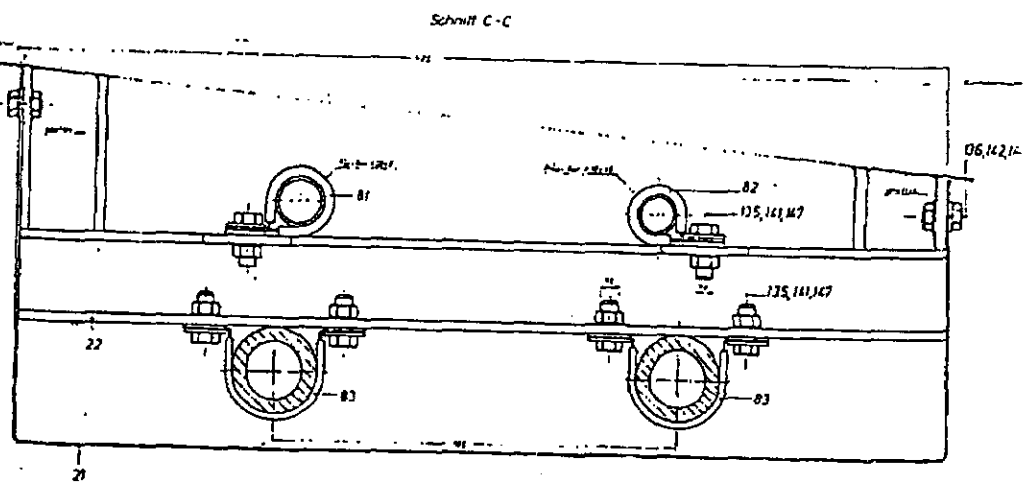
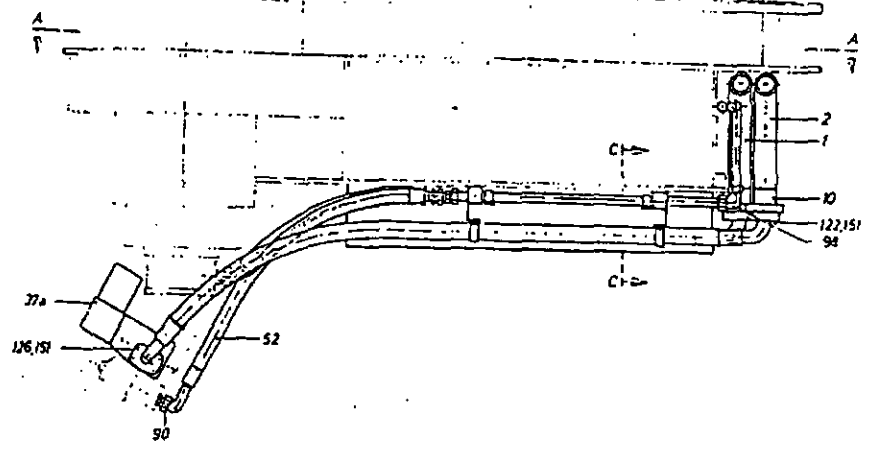
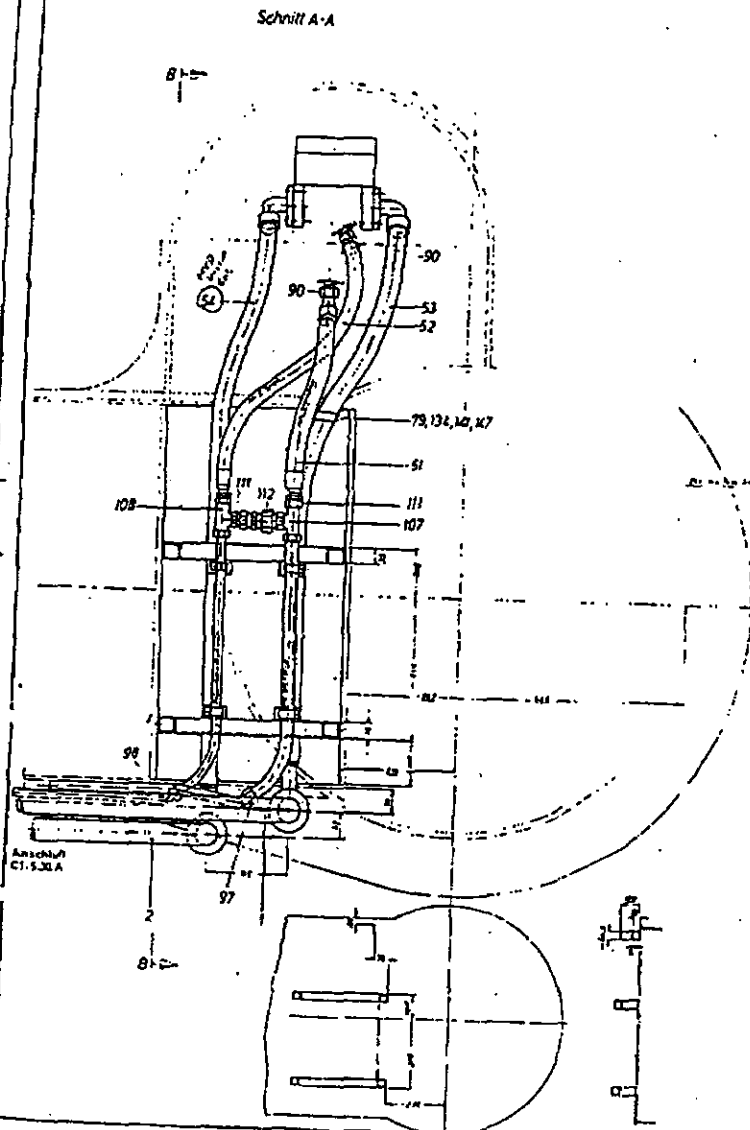
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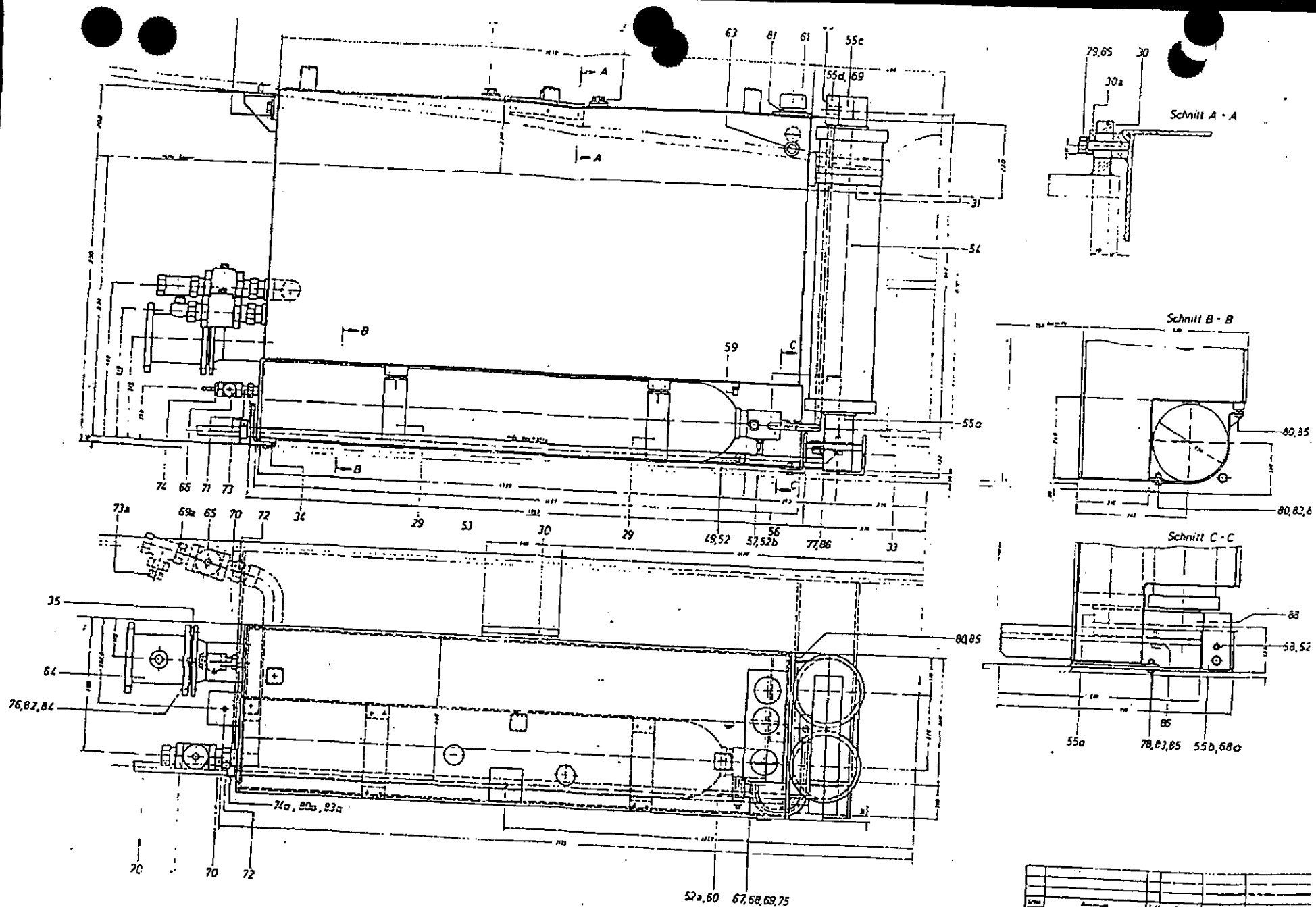


Die hier beschriebene Baugruppe ist ein Teil des Hydrauliksystems eines Fahrzeuges. Sie ist in der Lage, die Drücke in den verschiedenen Zylindern des Systems zu messen und diese Messungen über einen gemeinsamen Kanal zu einem zentralen Messgerät zu übertragen. Die Baugruppe besteht aus einem Gehäuse, in dem sich ein Messkolben befindet, der durch die Drücke in den verschiedenen Zylindern auf und ab bewegt wird. Die Bewegung des Messkolbens wird über eine Pleuelstange mit einem Pleuellager verbunden, das an einem Pleuellagerbolzen befestigt ist. Die Pleuelstange ist über Pleuellagerbolzen mit einem Pleuellagerbolzen verbunden, der an einem Pleuellagerbolzen befestigt ist. Die Pleuelstange ist über Pleuellagerbolzen mit einem Pleuellagerbolzen verbunden, der an einem Pleuellagerbolzen befestigt ist.

Zeichnungs-Nr.	01115521
Titel	Hydraulik - Tankzeile
Größe	E1-S.30.0
Material	
Verfasser	
Geprüft	
Freigegeben	
Datum	
Standort	



Hydraulik-Schwenkarm Kopf		CI-5.30 C
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Stück	Bezeichnung	Zeichn.	Größe	Material	Gruppen	Gruppen
11	Ölbehälter- und Druckspeicheranordnung					C1-5.29

UNITED STATES GOVERNMENT

U.S. CONSUMER PRODUCT
SAFETY COMMISSION
WASHINGTON, D.C. 20207

MEMORANDUM

October 6, 1993

TO : J. A. DeMarco, CECA
THROUGH: Frank Brauer, EXCE
James I. Price, Director, ESME
FROM : Thomas E. Caton, ESME *Thomas E. Caton*

SUBJECT: PSA 8559, CA842854, Review of State Inspections of Huss Enterprise and Manufacturer's Submissions

REF : (a) PSA 8425, CA842854, Huss "Enterprise" Amusement Ride Corrective Action Plan Review, 23 June 1993

(b) Status Report - Huss Enterprise Amusement Ride Investigation, 13 February 1984

REQUEST

Review attached state safety inspections of the Huss Enterprise amusement ride. Do the documents show that the rides have been retrofitted and are in compliance with the 1984 ICAP imposed by CECA staff? Review Huss's US agents response to questions about the 1/4-inch and 1/32-inch tolerances discussed in PSA 8425. Determine if significant changes are needed to the 1984 ICAP or if it should be eliminated.

BACKGROUND

Reference (a) reviewed the 1984 ICAP regarding the Huss "Enterprise" amusement ride. The conclusion was that the ICAP (attached) presents inspection requirements that amount to good practice for ride maintenance and safety, but that a few of the ICAP requirements are not substantiated as to why they are required. Other paragraphs of the ICAP cover practices that a responsible owner/operator should be doing as a routine safety practice.

DISCUSSION

The state safety inspection reports of the Huss Enterprise amusement ride and the documents provided by the US representative of Huss Maschinenfabrik (Huss), North American Repair, Inc. (NARI) were reviewed. The responses to the request that follow are based on the review.

ES received Florida, Georgia, Illinois, Kentucky, Maryland, and New York state amusement inspector reports and a NARI document entitled: "Ride Inventory by Customer - Printed 08/05/93" (Ride Inventory). The Ride Inventory indicates that there are 18 park model (fixed site) and 5 road model (mobile) Huss Enterprise amusement rides in the United States of America.

From a comparison of the Ride Inventory with the state amusement ride inspector reports it appears that all five mobile Huss Enterprise amusement rides have the retrofit kit installed on them and that these six states are aware of the ICAP. The

state amusement ride inspection reports imply that two fixed site Huss Enterprise amusement rides have the retrofit kit installed. The status of the other sixteen fixed site Huss Enterprise amusement rides was not provided, but fixed site rides are not subject to CPSC jurisdiction. The comparison of the state reports with the Ride Inventory revealed five Huss Enterprise amusement rides that had been inspected through 1989 but were not on the Ride Inventory. No information was provided about the status of these rides.

In July 1993, NARI forwarded the ICAP to Huss in Germany for their comment. Huss commented on paragraphs 1, 2, 3, 4a, 4b, 5, 6a, 6b, 7, 8, and 9 of the ICAP. ESME assumes that Huss is in agreement with the other paragraphs of the ICAP that Huss did not comment on. Remarks on the comments follow:

Paragraph 1 of the ICAP

Huss disagrees with the Paragraph 1 requirement that a safety-chain or safety-cable system should be used that will serve as a reliable back-up safety device in the event of separation of either end of a car from the sweep structure. They base this on their Service Letter EN-06 of June 12, 1985, which states that: (1) a gondola car is designed to rotate 360 degrees and such rotation could not occur with a safety-cable or safety-chain without damage or injury; (2) a long safety-cable or safety-chain could become entangled; and (3) a short safety-chain could transfer high forces onto the ride's cantilever arm, overloading adjacent gondolas, and possibly producing a chain reaction where numerous gondolas may separate from the ride.

ESME believes, based on Huss' comment, that their position is reasonable. It also appears that this requirement was never implemented.

Paragraph 2 of the ICAP

Huss disagrees with the use of quick-release fasteners for the practical removal of all floor plates and all fiberglass cowling because this could change the weight of the gondola cars in some manner.

ESME maintains that the ICAP does not suggest the use of quick-release fasteners, but that modifications be made to make the removal of the floor plates and fiberglass cowling practical. We have no information to evaluate the Huss assertion.

Paragraph 3 of the ICAP

Huss agrees with the inspection requirements for cracks and potential problems and states that similar checks are required in Germany.

ESME believes this requirement is reasonable.

Paragraph 3(e) of the ICAP

Huss did not comment on the statement that the axial play of each car assembly relative to one of the associated bearing block holders shall not exceed 1/4-inch as discussed in paragraph 3(e) of the ICAP.

ESME has no comment.

Paragraph 4(a) of the ICAP

Huss agrees with the inspection and corrective repair requirements and states that similar checks are required to be performed once a year in Germany. Huss emphasized that during re-assembly the screws should be secured, in some manner, so that they do not loosen after assembly.

ESME believes that the inspection and repair requirements are reasonable.

Paragraph 4(b) of the ICAP

Huss disagrees with a 1/32-inch tolerance for each bearing block's axial play on its pivot pin as discussed in Paragraph 4b of the ICAP. Huss states that "...the equipment is still sufficiently safe even when the axial play between the pivot and the bearing block amounts to 1/16 of an inch."

ESME has no reason to disagree.

Paragraph 5 of the ICAP

Huss agrees with the yearly inspection and corrective repair requirements and they state that in Germany such inspections are performed on a yearly basis.

ESME believes, based on Huss' comment, that the yearly inspection and repair requirement is reasonable.

Paragraph 6(a) of the ICAP

Huss indicated that "...the number of passengers per gondola is two adults or three children."

ESME has no comment.

Paragraph 6(b) of the ICAP

Huss indicated that "...the total weight of all passengers per gondola is 150 kg."

ESME has no comment.

Paragraph 7 of the ICAP

Huss states that the turnbuckles are to be tightened handtight and that the turnbuckles serve only to eliminate the play between the bolt and the hole.

ESME believes this information is reasonable.

Paragraph 8 of the ICAP

Huss has no objection to the requirement of paragraph 8 for the owner/operator maintaining a detailed documentation of inspection, modifications, repairs, and rewelding.

ESME believes that this requirement is reasonable.

Paragraph 9 of the ICAP

Huss has no objection to the requirement of paragraph 9 for the reporting of any ride failure, potential ride failure, or observations of cracks involving a Huss Enterprise to CPSC, state, and local agencies that regulate rides.

ESME believes that this requirement is reasonable.

CONCLUSION

It appears that all five mobile Huss Enterprise amusement rides identified in the August 5, 1993, North American Repair, Inc. Customer List have the retrofit kit installed. Only two of the eighteen fixed site rides could be identified as having the retrofit kit. The status of the other sixteen fixed site rides was not provided.

Huss Maschinenfabrik did not comment about the 1/4-inch tolerance for axial play of each car assembly relative to one of the bearing block holders.

Huss Maschinenfabrik did comment that even with an axial play of 1/16-inch, which is greater than the 1/32-inch specified in the ICAP, the ride is sufficiently safe. ESME has no reason to dispute this.

Huss Maschinenfabrik does not agree to the use a safety-chain or safety-cable as a back-up safety device on a gondola. It appears that the requirement for a safety-chain or safety-cable was never implemented due to Huss' objections.

Huss Maschinenfabrik states that turnbuckles should only be tightened handtight because the turnbuckles serve only to eliminate the play between the bolt and the hole.

Huss Maschinenfabrik did not offer any objections to the other paragraphs of the ICAP.

It should be considered that all mobile Huss Enterprise amusement rides have been retrofitted and only the inspection, repair, and record keeping requirements of the ICAP should be continued. This would essentially discontinue the ICAP as the remaining paragraphs should be part of the basic operation that any reasonable operator of a Huss Enterprise should already be doing.

Attachment

cc: Marc Schoem, CECA

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UNITED STATES GOVERNMENT

U.S. CONSUMER PRODUCT
SAFETY COMMISSION
WASHINGTON, D.C. 20207

MEMORANDUM

TO : J. A. DeMarco, CECA
THROUGH : Marc Schoem, CECA
FROM : Thomas E. Caton, ESME
SUBJECT : PSA 8812, CA 930087, Huss Enterprise Amusement Ride Interim Corrective Action Plan
REF : (a) Enterprise Interim Corrective Action Plan, U. S. Consumer Product Safety Commission Staff Document, February 9, 1984
(b) Huss Enterprise Ride - Commission Acceptance of Interim Corrective Action Plan, U. S. Consumer Product Safety Commission Staff Document, March 2, 1984
(c) PSA 8425, CA842854, Huss "Enterprise" Amusement Ride Corrective Action Plan Review, by Thomas E. Caton, ESME, June 23, 1993
(d) Letter dated July 9, 1993, from B. Peter Zwickau, President, North American Repair, Inc. to James A. DeMarco, CECA
(e) PSA 8559, CA842854, Review of State Inspections of Huss Enterprise and Manufacturer's Submission, by Thomas E. Caton, ESME, October 6, 1993

REQUEST

Review "old" Huss files, particularly the 1989 letter from CECA/M. Schoem to Huss and the 1985 Huss objections to Enterprise Interim Corrective Action Plan. Also, review technical documents prepared by past technical officers Kaplan and O'Connor and drawings that may help in the evaluation of the Enterprise Interim Corrective Action Plan.

BACKGROUND

In October 1983, a Huss "Enterprise" amusement ride was involved in a fatal accident at the Dallas, Texas State Fair when a gondola car separated from the ride. Because of this accident, CPSC issued an Enterprise Interim Corrective Action Plan (ICAP). This ICAP was to be in effect for seven years. CECA is now reviewing the status of the ICAP.

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On June 29, 1993, CECA wrote to North American Repair, Inc. (NARI), the Exclusive Agent for Huss Maschinenfabrik (Huss), about the ICAP. In a letter dated July 9, 1993, NARI said that in a letter from Mr. Marc Schoem dated February 11, 1988, they were told that no further monitoring was warranted and that the CPSC was closing the investigation into the Enterprise.

Reference (e) evaluated the NARI's response and identified some questions relating to the backup safety device and Huss' objections to the ICAP. CECA believes that the answers to these questions may be contained in CPSC archived files. CECA had all archived files relating to the Enterprise amusement ride retrieved.

DISCUSSION

The archived files were found to contain documents mainly from 1983 to 1987. The described 1989 letter from CECA/M. Schoem to Huss or Huss' 1985 objections to the ICAP were not in the files, but the files do contain service bulletins, apparently mentioned in Reference (d). The February 11, 1988 letter mentioned in Reference (d) from Marc Schoem to Huss closing the investigation was not found in the received files.

The review of the files did show that ESME had been provided with only the February 9, 1984 version of the ICAP for the review conducted for References (c) and (e). The archived files did contain a copy of the February 9, 1984 version of the ICAP (Reference (a)) and a revised (Reference (b)) ICAP dated March 2, 1984. References (a) and (b) are similar except that the requirement for the use of a safety-chain or safety cable as a reliable backup safety device contained in the February 9, 1984 version of the ICAP is not included in the revised ICAP dated March 2, 1984. This requirement was never implemented because the Enterprise's manufacturer maintains that it is not needed. However, Reference (b) also said that "... while the staff believes that a backup safety system should be installed on the Huss Enterprise ride as an added measure of safety, we are not in a position to compel the installation of such a backup safety system, at this time." All of these documents previously reviewed by ES show that NARI and Huss have consistently objected since 1984 to the requirement for a safety-chain or safety-cable backup safety system for the Enterprise amusement ride.

The technical documents prepared by the previous technical officers were reviewed and no further comment about those documents is presented.

CONCLUSION

Neither the 1989 letter from CECA/M.Schoem to Huss asking for information nor a copy of Huss' 1985 objections to the ICAP were located in the previously archived files.

The documents do show that NARI and Huss have objected to a requirement for a safety-chain or safety-cable backup safety device since 1984. Furthermore, apparently because of these objections, the backup safety device requirement was not included in the revised version of the ICAP.

In a July 9, 1993 letter, North American Repair, Inc. claims that on February 11, 1988 Marc Schoem, CECA sent a letter to Huss that said that the CPSC was closing the investigation into the Enterprise. A copy of this letter was not found in the examined files.

The technical documents prepared by the previous technical officers were reviewed and no further comment about those documents is presented.

Mike Triplett

From: Richard Osworth <rosworth@dca.state.nj.us>
To: Michael Triplett <mtriplett@dca.state.nj.us>
Sent: Friday, July 07, 2000 9:31 AM
Subject: Fw: Huss - Enterprise

----- Original Message -----

From: Michael W Rinehart <rineham@doacs.state.fl.us>
To: Ron Brooks <brooks@doacs.state.fl.us>; Randy Fleck
 <flecker@doacs.state.fl.us>; Jerry Callahan <callahj@doacs.state.fl.us>;
 Cliff Groscurth <groscuc@doacs.state.fl.us>; Brad Mosher
 <mosherb@doacs.state.fl.us>; Allan Harrison <harrisa@doacs.state.fl.us>;
 Timothy Simpson <simpsot@doacs.state.fl.us>; Carlos Corvo
 <corvoc@doacs.state.fl.us>; Gary Fisher <fisherg@doacs.state.fl.us>; Hunter
 Lyles <lylesh@doacs.state.fl.us>; Jerry Winters <winterj@doacs.state.fl.us>;
 Charlie Stegall <stegalc@doacs.state.fl.us>; Larry Cook
 <cookl@doacs.state.fl.us>; Keith Garner <garmerk@doacs.state.fl.us>; Isadore
 Rommes <rommesi@doacs.state.fl.us>; Carl Dills <carl.dills@kyagr.com>
Sent: Thursday, May 25, 2000 3:22 PM
Subject: Huss - Enterprise

- > Cracks have been found on a Huss - Enterprise where the main lift
- > cylinder attaches to the boom and where the ears attach to the top of
- > the boom. The cracks go from the front down both sides of the boom.
- > These were only found quite by accident, according to Lewis Merz,
- > American Specialty, because the metal cowling, or decorative piece had
- > been removed and he happened to look down at the boom area he saw a
- > bubble form on the paint in the area. Removing the paint with grinding
- > the cracks became apparent with a magnifying glass.
- > Additionally the entire area of the boom was inspected by the Huss
- > representative but no additional cracks were found except those
- > mentioned above that were L shaped 3" down to 2".
- > No mention as to whether Huss would be issuing a bulletin.
- > Also this Enterprise and the previously mentioned Rainbow are both
- > at permanent, fixed, sites. Their ages are not known at this time.
- > Mike Rinehart
- > Florida Fair Rides Inspection
- >
- >
- >



Huss Maschinenfabrik GMBH
& CO. KG
P.O. Box 110206
Bremen Germany

Phone: +49 421 499 0000
Fax: +49 421 499 0040

www.hussrides.com
e-mail: service@hussrides.com

Bulletin No: Enterprise
Service Letter 2
Release Date: August 15,
2002
Effective Date: August 15,
2002
Supercedes:
Completion Date: August 15,
2002

Page 1 of 2

Service Bulletin

Ride Manufacturer: Huss Maschinenfabrik
Ride Name: Enterprise
Model Number All

Affected Production Dates: All
Affected Serial #: All

Abstract of Issue:

The bolt used to hold Enterprise gondola bearing blocks to the ride structure are specially manufactured and should only be replaced with factory authorized bolts.

Reason for Release:

Recently an incident occurred where a gondola bolt broke and the rear bearing block disengaged from the ride structure while the ride was running. The bolts used on this particular ride were not factory authorized bolts and were not provide by Huss. No injuries occurred as a result of the incident, but this incident did highlight the risk of using non-factory replacement parts on amusement rides.

Action to be Taken:

(Inspection, modification, replacement, etc)

All gondola bear block bolts must be inspected to ensure that they have been purchased from Huss Maschinenfabrik GmbH & Co. KG or an authorized supplier. Proper bolts will be Class 10.9 - M16 bolts, 160 mm long and will have been installed with two washers and 295 Nm of torque and a cotter pin.

According to our records you are the owner/operator of a HUSS amusement ride. If this is no longer the case, please return this letter to us together with the name, address and contact information of the current owner.



Huss Maschinenfabrik GMBH
& CO. KG
P.O. Box 110206
Bremen Germany

Phone: +49 421 499 0000
Fax: +49 421 499 0040

www.hussrides.com
e-mail: service@hussrides.com

Bulletin No: Enterprise
Service Letter 2
Release Date: August 15,
2002
Effective Date: August 15,
2002
Supercedes:
Completion Date: August 15,
2002

Page 2 of 2

We recommend that Enterprise rides which are torn-down and moved frequently, such as those used by carnival operators should replace these gondola bearing bolts annually. Stationary rides should replace these bolts every three (3) years.

Detail of Issue:

(Text, drawing, Schematic, etc)

See Drawing B1-5.8.

Should you have any questions regarding the above or if you would like to order the spare parts, please contact the Huss Service department in Bremen Germany at +49 (421) 499-0000. Additional service bulletins and service information can also be found at our service web site www.husservice.com.

In North America you can also order spare parts through North American Parts Inc. at (716) 839-4791.

In Asia, you can also order spare parts through Melcher's GMBH & Co at +65 (3559) 272

Best regards

HUSS Maschinenfabrik GmbH & Co. KG
- Department for technical services -

According to our records you are the owner/operator of a HUSS amusement ride. If this is no longer the case, please return this letter to us together with the name, address and contact information of the current owner.

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MEMORANDUM

September 30, 1993

TO : J. A. DeMarco, CECA
THROUGH: Frank Brauer, EXCE
James I. Price, Director, ESME
FROM : Thomas E. Caton, ESME *Thomas E. Caton*
SUBJECT: PSA 8607, Huss Enterprise Ride Failure at Camden Park
REF : (a) SAE standard J517, "Hydraulic Hose", June 1980
(b) Status Report - Huss Enterprise Amusement Ride
Investigation, 13 February 1984

REQUEST

Perform on-site examination of Huss Enterprise amusement ride at Camden Park in Huntington, West Virginia with state inspectors from West Virginia and Kentucky. Determine cause of ride's failure and if it was related to the CPSC Interim Corrective Action Plan (ICAP) stipulations.

BACKGROUND

In 1992, Camden Park, an amusement park in Huntington, West Virginia, purchased a used 1978 park model Huss Enterprise amusement ride (serial number 35-200) from a used equipment broker. On July 31, 1993, while this ride was operating, the ride's raised wheel and gondolas suddenly dropped onto the loading platform. Eighteen passengers received injuries ranging from minor to major (a reported broken back). This ride reportedly remained untouched until August 4, 1993, when inspectors from CPSC, West Virginia, and Kentucky examined the ride.

DISCUSSION

The Huss Enterprise is a rotational ride consisting of 20 passenger gondolas mounted on the perimeter of a wheel. Each gondola can hold two adults or three children. Each gondola has a weight limit of 150 kg. The wheel's axle is mounted on a hydraulically operated central sweep.

The ride begins with the wheel rotating in the horizontal plane. As the rotational speed increases, the gondolas swing outward on pivots. Meanwhile, the central sweep is slowly raised by the hydraulic system until the wheel and gondolas are whirling in an almost vertical plane. At this moment, the gondolas in the top position of the vertical plane can be upside down. Then, the wheel is lowered back to the horizontal position as the rotational speed is reduced and the gondolas are stopped in their original plane.

The examination found that one hydraulic hose had burst with an approximately 3-inch long breach which opened toward the ride's structure (Figure 1). This burst hose is embossed with: "AEROQUIP FC136-24 EXCEEDS SAE 100R12 MSHA 2G-9C/1 1086". According to reference (a), SAE 100R12 designates a heavy duty, high impulse, 4-spiral wire reinforced, rubber cover hydraulic hose. The last four digits (1086) indicate the probable date of manufacture is the 108th day of 1986. The ride's other hydraulic hoses (Figure 1) are similarly marked. Huss Maschinenfabrik's September 10, 1987, Service Letter EN-10 states that hydraulic hoses should be replaced after 4000 hours of operation. The hours of operation on the burst hose was not provided.

Figure 2 is a photograph of the burst hose. This hose was radiographed. The Kentucky state inspector examined the radiograph and said that the breach was due to wear and tear from flexing during use but that overall the hose appeared sound.

There are two indications that the burst hose, the filter body, and the adjacent hose may have been added to the ride after the ride's manufacture. These indications are:

- o Camden Park's maintenance director said that these two hoses are not on any drawings that Camden Park possessed; and
- o the burst hydraulic hose and adjacent hose, both attached to a filter body, each pass through a flame cut hole in the ride's structure (Figure 3).

Huss Maschinenfabrik's September 10, 1987, Service Letter EN-11 advises that a built-in pipe break valve prevents "...the drop of the wheel in case of a burst hose, etc." and that the pipe break valve "...should be visually checked at the annual inspection." The visual check method is not described.

Camden Park personnel removed the pipe break valve from the ride (Figure 4). Figure 5 shows that the spring, screw, and nut of the pipe break valve are damaged and appear to have been damaged prior to the incident. This damage was sufficient to prevent proper functioning of the valve during the incident.

The ICAP retrofit kit (Reference b) was installed on the Camden Park Huss Enterprise. The retrofit kit apparently performed properly as the gondolas did not detach. The hydraulic hose and pipe break valve failures are not a subject of the ICAP stipulations.

CONCLUSION

A hydraulic hose burst on the Camden Park Huss Enterprise amusement ride prior to the abrupt dropping of the passenger gondolas. A radiograph of the burst hydraulic hose indicates

Page 3

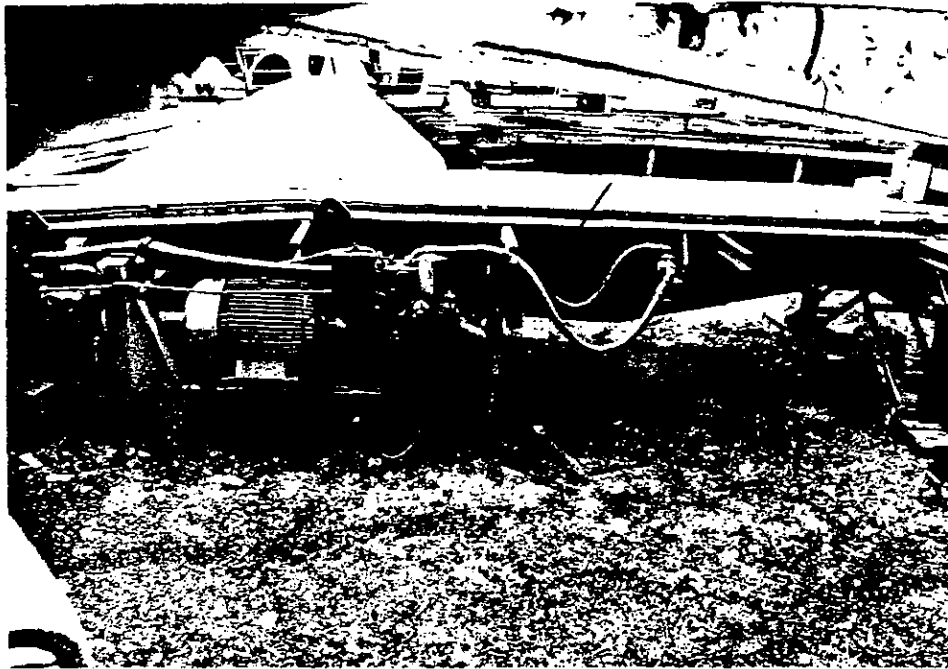
that the burst hose was probably due to wear and tear. Huss Maschinenfabrik recommends that the hydraulic hoses on Huss Enterprises should be replaced after 4000 hours. The total use hours on the burst hydraulic hose was not provided.

The pipe burst valve, which is meant to handle a sudden hydraulic pressure loss, was damaged at some unknown time prior to the incident and did not function properly during the incident. Huss Maschinenfabrik advises a visual pipe break valve check during the annual inspection, but they do not state how this is to be done. It is recommended that the visual check procedure be clarified by Huss Maschinenfabrik in a Service Letter.

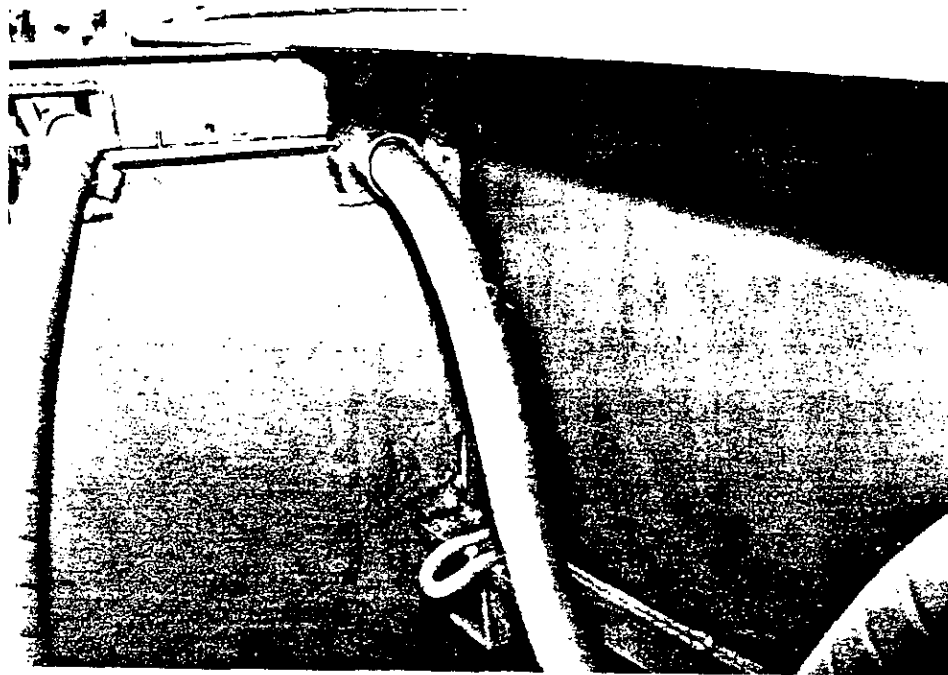
The burst hydraulic hose and the pipe break valve are not a subject of the ICAP stipulations.

Attachments

cc: Marc Schoem, CECA



a) Overall view hydraulic hoses (the inner hose in the right center of the photograph is the one that burst).



b) View of burst hose showing location of hose breach.

Figure 1 Location of the burst hydraulic hose.



Figure 2 Photograph of the burst hydraulic hose showing the breach from the burst.

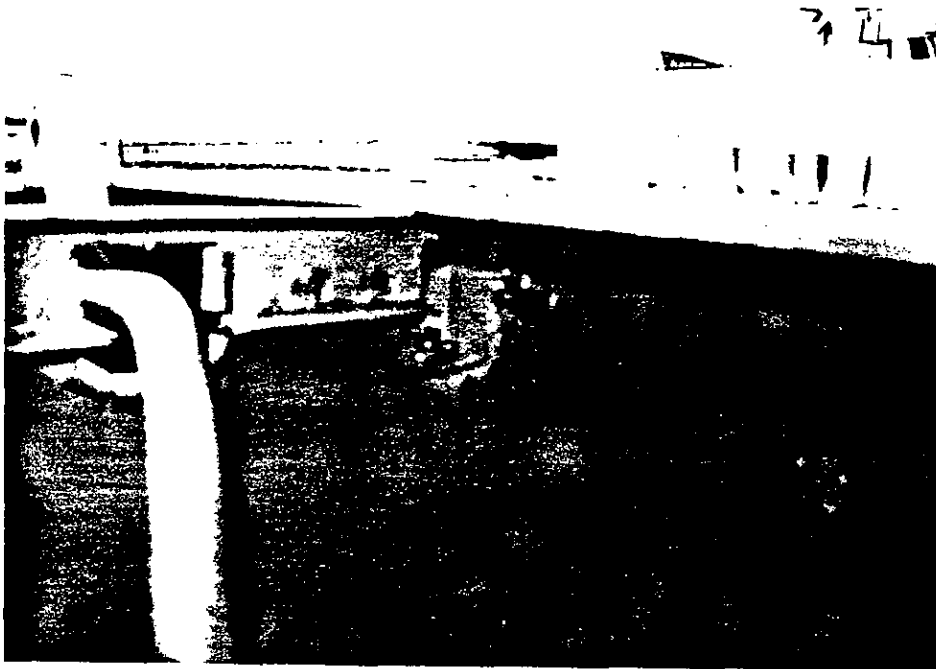
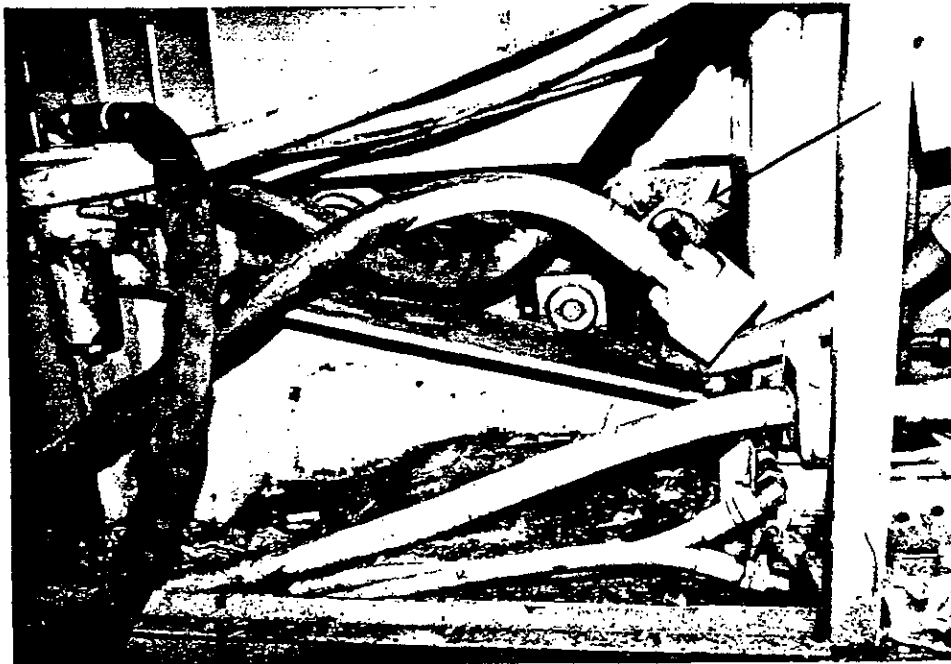


Figure 3 The flame cut holes in the ride's structure.



a) Covering over pipe burst valve.

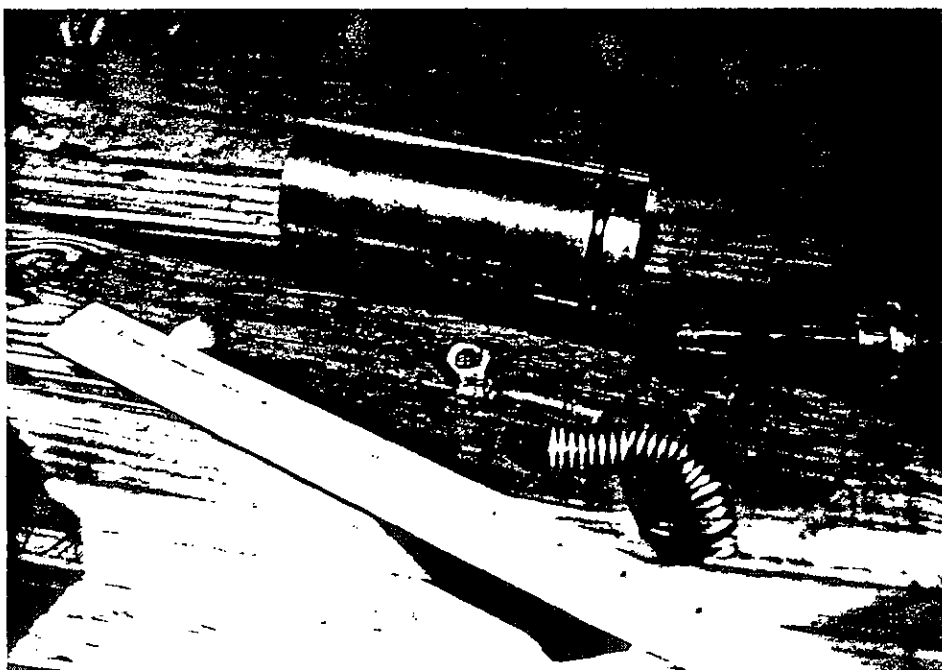


b) Covering over pipe burst valve removed.

Figure 4 Photograph of pipe break valve location.



a) Pipe break valve as-removed from the ride.



b) Disassembled pipe break valve.

Figure 5 Photograph of damaged spring, cap screw, and nut removed from disassembled pipe break valve.



MASCHINENFABRIK

Huss Maschinenfabrik GmbH & Co. KG - Postfach 110206, D-2800 Bremen

Stresemannstr. 56 · Telex 245 180 huss d
☎ (04 21) 499000 · Telefax 4 990040

RETURN RECEIPT
REQUESTED

TO: ALL ENTERPRISE CUSTOMERS

Ihre Zeichen/Nachricht

Unser Zeichen
dr

Telefon-Durchwahl / Kommission / Tag
October 1, 1993

SERVICE LETTER EN-15

RE: Enterprise/Inspection of
Pipe Break Valve & Delay Valve

Because of the importance of the proper functioning of the pipe break valve, we strongly recommend that all Enterprise owners order an inspection of the pipe break valve by a Huss factory technician.

During this inspection the Huss technician will replace the pipe break valve with a new adjusted and certified one, under an exchange program.

The delay valve of the emergency system must be synchronized with the new pipe break valve. Therefore, during this inspection the Huss technician will also test the delay valve, and if necessary the delay valve will be repaired or replaced.

Huss Maschinenfabrik
GmbH & CO. KG.

O. Dreier
Service Department

SERVICE LETTER 1

Dear Sirs,

According to our records you are the owner/operator of a HUSS ENTERPRISE amusement ride. If this is no longer the case, please return this letter to us together with the name, address and contact information of the current owner.

An Enterprise attraction was recently involved in an incident where a rear pivot block bolt failed on an attraction vehicle and the pivot block disengaged from the spokes of the attraction. Fortunately the front pivot block was able to hold the vehicle while the attraction was lowered to the loading position. No guests were seriously injured in this incident.

The bolts used to secure the pivot blocks on the attraction, including the one that failed were not factory components. We strongly recommend that non-factory parts not be used for replacement parts and that facility staff not exceed the torque specifications for fasteners. Should you have any questions regarding this or any service issue please contact the Service Department in Bremen, Germany at 011 49 421 499 0051 or Mr. Ray Dubois in North America at (604) 763-4503.