

MFG: ZAMPERLA, INC.

NAME: ~~MIXED RIDES~~

INSPECTION Guide

Type: mixed

# ZAMPERLA RIDES

## FIELD REFERENCE MANUAL

REF# 3 JANUARY 1992



**ZAMPERLA®**  
**IN THE USA**

**MANUFACTURER OF  
QUALITY AMUSEMENT RIDES**

January 1992

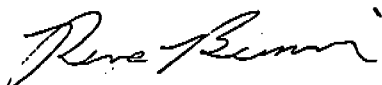
Zamperla Inc. is providing this Field Reference Manual as a guide for anyone involved in the inspection or maintenance of Zamperla rides. This manual contains general technical information covering the Zamperla rides operating in the United States and Canada at this time. Following each specification page will be any Maintenance Bulletins or Technical Updates that have been released pertaining to that ride.

Items classified as Maintenance Bulletins are considered mandatory modifications or service procedures. Technical Updates are issued as a means of providing information regarding parts, inspection, or service procedures we feel will help our customers increase the reliability/performance of their Zamperla rides.

All bulletins released to date are included in this manual. The technical specifications listed in this manual are effective as of their publishing date. These specifications are subject to change without notice.


If there are any questions regarding any of the bulletins or specifications covered in this manual, or a condition is encountered in the field not covered herein, please contact Zamperla's Technical Service Department.

Rene Bernier



Technical Service Manager

ZAMPERLA, INC. ★ P.O. BOX 5545 ★ 49 FANNY ROAD ★ PARSIPPANY, NJ 07054-0598  
PHONE (800) 888-8878 sales ★ (201) 334-8133 service ★ TLX - 642286 ★ FAX - 201 334-6880

MADE BY  A.ZAMPERLA  
VIA M. GRAPPA, 17-36077 ALTAVILLA VIC.NA (VI)-ITALY

RIDE NAME

SERIAL N.

PASSENGER CAPACITY FOR EACH CAR N.

LOADING WEIGHT FOR EACH CAR: lbs. Kg.

RESTRICTION ft cm IF NOT ACCOMPANIED

ROTATION DIRECTION: CLOCKWISE COUNTERCLOCKWISE

RIDE SPEED RPM

POWER: VOLT KW Hz PHASES

LIGHTING: VOLT KW Hz PHASES

OPERATING DIMENSIONS INCLUDING FENCING:

FRONT SIDE

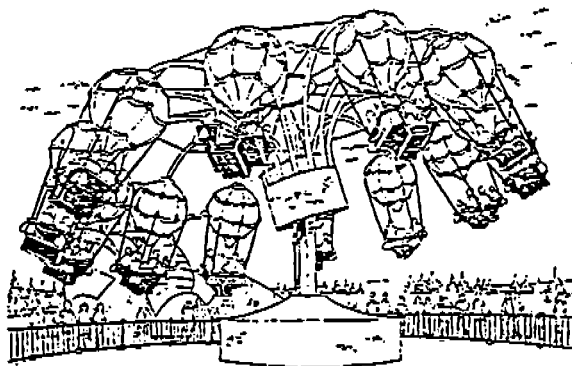
MAXIMOM OPERATING WIND: Mph Km/h

CONTROL: START-Green STOP-RED

ALARM-YELLOW EMERGENCY STOP-RED

All Zamperla manufactured rides are delivered with an identification plate as represented above attached in the vicinity of the electrical cabinet. With the increase in imported equipment operating in the United States this plate verifies that the ride is in fact manufactured by Zamperla. Many of the rides manufactured by the various Italian Ride manufacturers look similar to each other. If there is no I.D. plate attached to a ride you encounter please contact Zamperla Inc. at the address/phone numbers listed on the preceding cover letter to verify the origin of the equipment.

# BALLOON RACE 8



## DESCRIPTION

OUR FAMILY RIDE, BALLOON RACE, PARK MODEL HAS 8 CARS WHICH CARRY 4 ADULTS EACH FOR A TOTAL CAPACITY OF 32 PEOPLE.

THE CARS ARE DESIGNED AS HOT-AIR BALLOONS WITH BRIGHTLY COLORED FIBERGLASS. THE CARS ROTATE WITH AN INCLINATED AND SWINGING MOVEMENT AROUND THE MAIN AXLE.

THE ROTATION IS GIVEN BY AN ELECTROMECHANICAL SYSTEM AND THE LIFTING BY OLEODYNAMIC CYLINDER SYSTEM, REACHING AN INCLINATION OF 15°.

ON THE MAIN COLUMN STRUCTURE ARE ANCHORED THE ARMS FROM WHICH HANG THE BALLOONS. EACH BASKET HAS A SAFETY GATE AND AN EXTERNAL OPENING HANDLE.

THE MOTORIZATION IS MOUNTED ON THE FIXED LIFTING CENTER. THE OLEODYNAMIC SYSTEM AND THE ELECTRIC PANEL ARE GROUND LOCATED UNDER THE RIDE CENTER AND HIDDEN BY A CIRCULAR STRUCTURE COVERED WITH A PVC CANVAS. FENCES AROUND PERIMETER.

THE ELECTRIC PANEL IS INCLUDED. FOUNDATIONS ARE NEEDED FOR CENTRAL COLUMN.

## STANDARD LIGHTING

- EACH BALLOON HAS 160 LIGHTS.
- EACH ARM HAS ONE LIGHTED STRIPE WITH 32 LIGHT-POINTS.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- SECOND ROW OF LIGHTS ON EACH ARM.
- BALLOON RACE SIGN WITH CLOUDS AND LIGHT EFFECTS
- BALLOON RACE TICKET BOX WITH SIGN
- PAINTED AND LIGHTED FIBERGLASS STRUCTURE TO COVER BASE OF RIDE
- PAINTED FIBERGLASS STRUCTURE TO COVER FIXED LIFTING CENTER
- LIGHTS ON FIBERGLASS STRUCTURE COVERING FIXED LIFTING CENTER.
- SPIDER BASEMENT TO AVOID CENTRAL PUNTH

## OTHER VERSION

- TRAILER MODEL WITH BERGISCHE AXIS
- PARK MODEL WITH 12 BALLOONS

## SEATS

|                                    |                                     |
|------------------------------------|-------------------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 32                                  |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 2400 KG.                            |
| MINIMUM PASSENGER HEIGHT           | 105 CM.<br>(UNACCOMPANIED BY ADULT) |
| LOADING                            | ALL SEATS SIMULTANEOUSLY            |
| MAXIMUM UNBALANCE                  | 16 ADULTS (1200 KG.)                |

## PERFORMANCE

|                             |                             |
|-----------------------------|-----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                   |
| RIDE SPEED                  | 9 RPM.                      |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIMER) |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIMER)   |
| HOURLY CAPACITY             | 800                         |
| OPERATOR                    | 1                           |

MAXIMUM RIDE WEIGHT 16 TONS.

DRIVE ELECTRIC

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 42 KW.            |
| DRIVE   | 30 KW.            |
| LIGHTS  | 12 KW.            |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 1x40 O.T.

## LARGEST COMPONENTS

|                       |                             |
|-----------------------|-----------------------------|
| RIDE CENTRE           | 6 MT. x Ø 2 MT. x 8 TONS    |
| ARMS                  | 4 MT. x 0.35 MT. x 220 KG.  |
| NO. 3 STACKED BASKETS | 1.5 MT. x 1.2 MT. x 2.5 MT. |

## ERECTION WORKS

\*NO.1 SUPERVISOR FOR 2-3 DAYS WITH A TEAM OF 5 LOCAL MEN.

\*CRANE: HEIGHT X TONS X LENGTH OF THE ARM X TIME IN HOURS

10 MT. x 15 TONS. x 6 MT. x 8 HOURS.

\*DEPENDS ON SITE CONDITIONS AND WORK FORCE AVAILABLE

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

DATE: 06/91

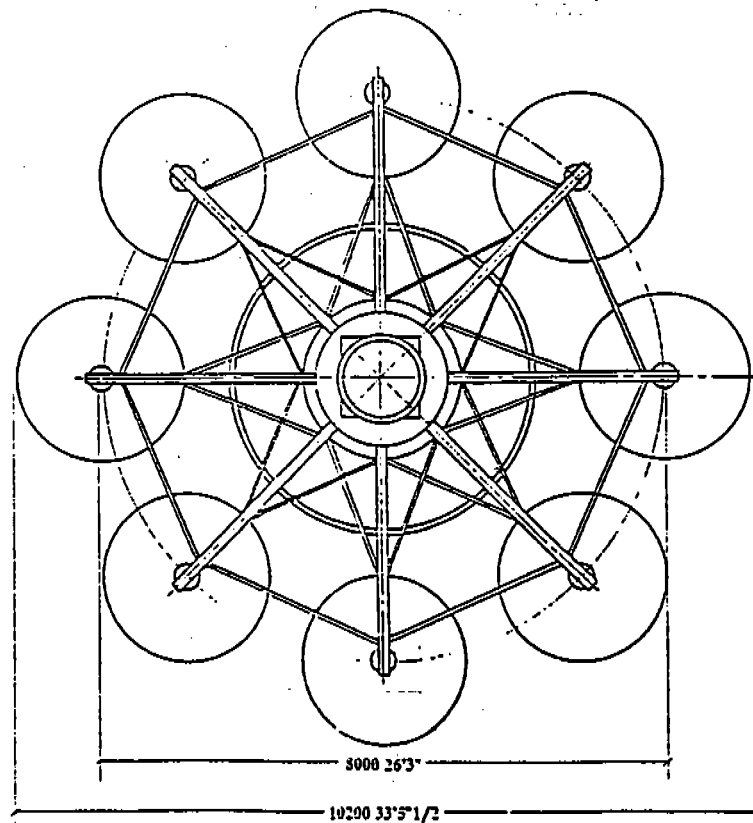
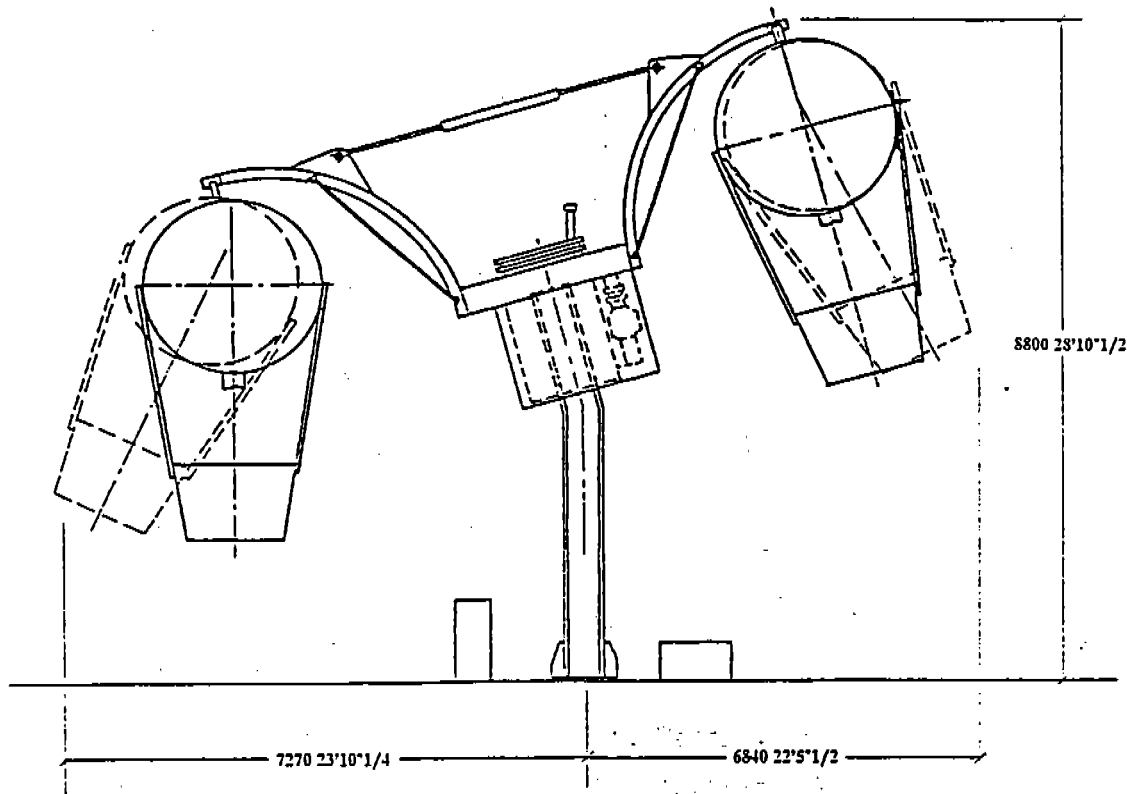
# ZAMPERLA

AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC.(VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



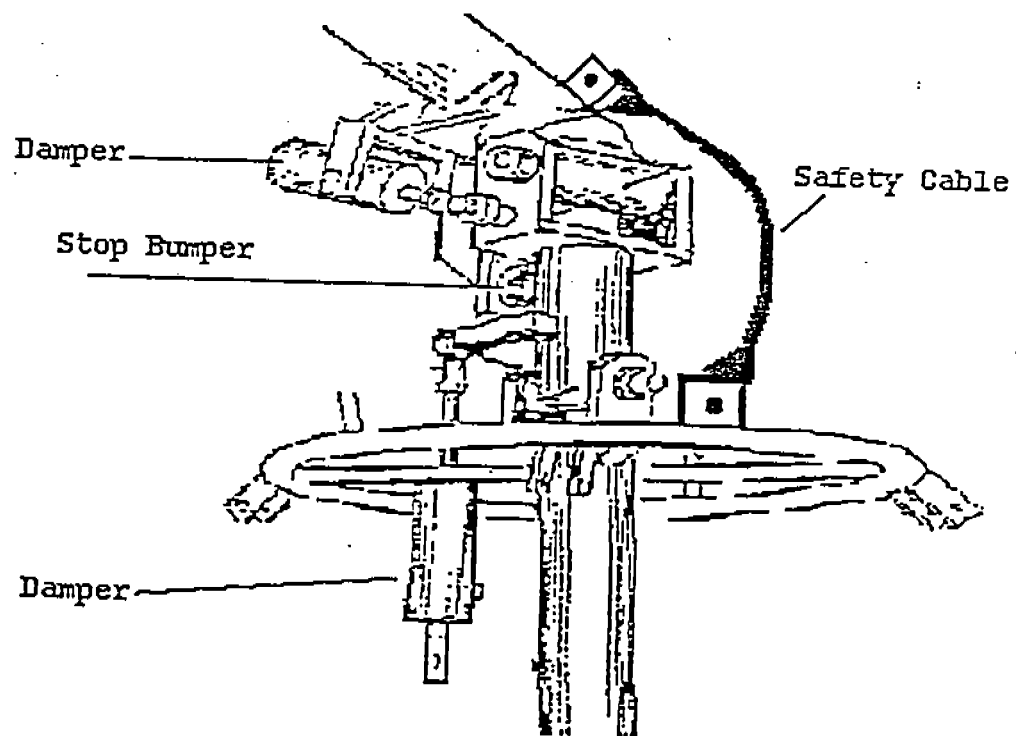
# Zamperla Inc.

## Maintenance Bulletin

February 1990

### RE: Balloon Race Dampers and Stops

Under NO circumstances should any Balloon Race be operated without the hydraulic dampers (shocks) or stop bumpers. Both these devices were installed to limit the action of the gondolas and operation with any of them missing is dangerous to both the passengers and equipment! The hydraulic damper has lost its effectiveness when it takes more than 1 3/4 swings for the gondola to come to rest after being released from a position an average person can swing it out to. The travel should be gauged by the balloon movement not the gondola as there is some movement allowed by the support rods. Below is a pictorial of the damper area showing components.



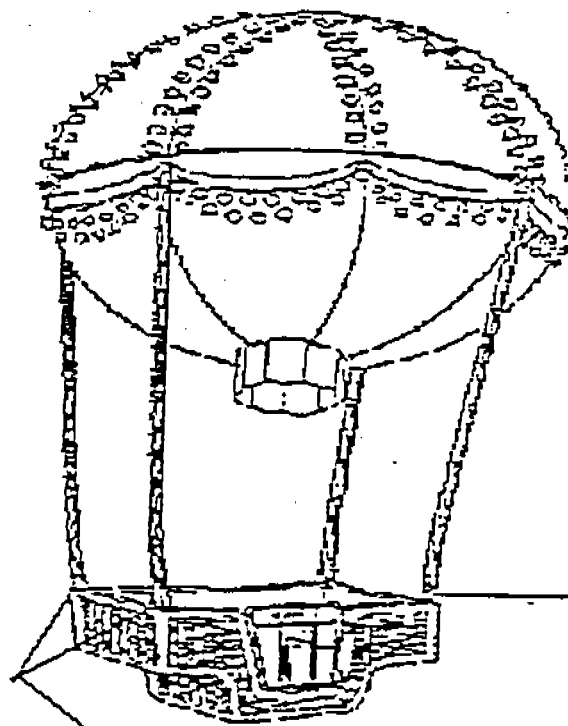
Rene Bernier  
Customer Service Manager

# Zamperla Inc. Maintenance Bulletin

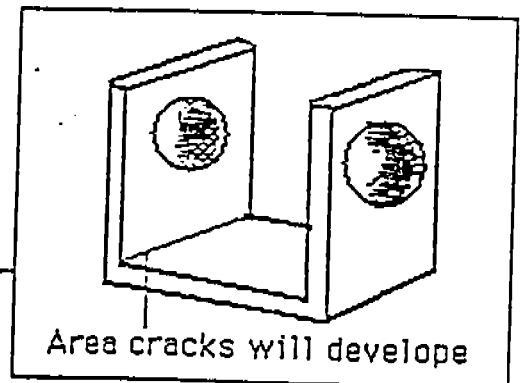
February 199

RE: Balloon Race Gondola Hangers

There has been one Balloon Race ride that developed cracks in the gondola hanger attachments. This was a portable ride, and the cause of the cracks was determined to be the bending of the attachments by overtightening the bolts during set up, then re-straightening the attachments to rack the gondolas for transport. It is important when erecting the Balloon Race to only tighten these attachment bolts enough to engage the nylon of the locknut, and not compress the attachment part. Zamperla Inc. is recommending you inspect these areas for cracks. The correct method of repair is replacement. If any cracks are found please contact our service department.



Do NOT Overtighten Bolts



Rene Bernier  
Customer Service Manager

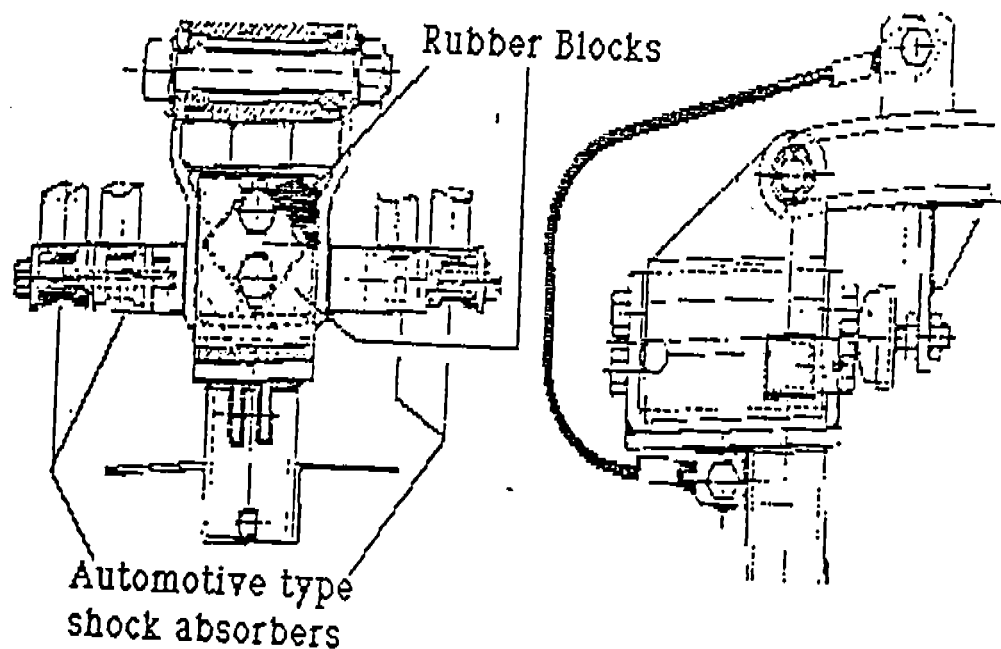
# Zamperla Inc.

## Technical Update

January 1991

RE: Maintenance Bulletin BR-1 February 1990  
Balloon Race Dampers and Stops

There has been a change in the method of attachment and damping of the gondolas on Balloon Race rides delivered in 1990. The bearings and dampers for movement parallel to rotation have been replaced with a captured rubber block coupling which allows movement in this direction as well as damping. The single hydraulic damper for movement perpendicular to rotation has been replaced with 4 automotive type shock absorbers. The parts needed to update earlier rides are available thru our parts department. The method of testing damper effectiveness detailed in the previous bulletin still applies.

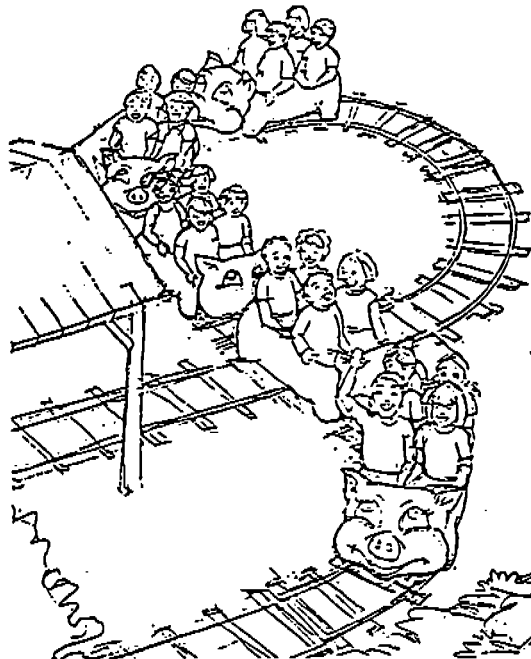


Rene Bernier  
Technical Service Manager





# CHILDREN TRAINS



## DESCRIPTION

OUR RANGE OF CHILDREN TRAINS INCLUDES: EL PASO - TURTLE - CATERPILLAR - PORKIES AND PANDA. ALL THESE 4 DIFFERENT MODELS ARE PROVIDED WITH THE SAME TYPE OF RAIL AND THE SAME DRIVING SYSTEM. THE TRAINS REPRESENT A NICE ROW OF ANIMALS OR A REPRODUCTION OF AN OLD FAR-WEST TRAIN. EACH HEADCAR IS EQUIPPED WITH 4 D.C. MOTOR WHILE THE WAGONS ARE NOT MOTORIZED.

ALL CARS HAVE A CHASSIS WITH 2 WHEELS (ONLY THE HEADCAR HAS 4 CAST IRON WHEELS) TO WHICH IS CONNECTED THE FIBERGLASS BODY. THESE TRAINS RUN ON AN OVAL TRACK OF 30 MT. FORMED BY: 3 MT. LONG RAIL SECTIONS, 6 STRAIGHT AND 4 CURBED (90°) PIECES. THE RAIL IS MADE WITH PAINTED STAINLESS STEEL AND TARRIED WOODEN SLEEPERS.

FENCES ON PERIMETER ARE NOT INCLUDED. THE TRAIN COMES STANDARD WITH A SINGLE PHASE RECTIFIER (WITHOUT MICRO-SWITCH AND TIMER) WHICH ALLOWS THE NEGATIVE AND POSITIVE CONTACT WITH THE RAIL. THE SPEED IS ADJUSTABLE BY CHANGING THE POSITION OF THE OUTPUT CABLE ON THE MAIN TRANSFORMER. FOUNDATIONS ARE NOT REQUIRED.

## OPTIONALS (TO BE QUOTED ON REQUEST)

- RECTIFIER WITH TIMER AND MICRO SWITCH.
- FENCES ON PERIMETER.
- TRAIN STATION SIGN.
- FIBERGLASS DAISY ROOF FOR TURTLE TRAIN OR PVC ROOF FOR ALL OTHER TRAINS WITH STAINLESS STEEL SUPPORTS.
- R.R. CROSSING.
- MUSHROOMS
- ADDITIONAL CAR.
- DIFFERENT TRACK SIZE AVAILABLE ALSO WITH CROSS.

## EL PASO

|                                    |                      |
|------------------------------------|----------------------|
| COMPOSED                           | 1 HEADCAR + 3 WAGONS |
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 26 CHILDREN          |
| MAXIMUM CHILDREN AGE               | 8 YEARS              |
| DIRECTION OF TRAVEL                | CLOCKWISE            |
| MAX. SPEED                         | 5 KM/H.              |
| HOURLY CAPACITY                    | 520                  |
| OPERATOR                           | 1                    |

## DRIVE

ELECTRIC

## INSTALLED POWER

|         |              |
|---------|--------------|
| TOTAL   | 1.5 KW       |
| VOLTAGE | SINGLE PHASE |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

|           |                |
|-----------|----------------|
| CONTAINER | 9 CUBIC METERS |
|-----------|----------------|

## CATERPILLAR

|                                    |                      |
|------------------------------------|----------------------|
| COMPOSED                           | 1 HEADCAR + 4 WAGONS |
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 28 CHILDREN          |
| MAXIMUM CHILDREN AGE               | 8 YEARS              |
| DIRECTION OF TRAVEL                | CLOCKWISE            |
| MAX. SPEED                         | 5 KM/H.              |
| HOURLY CAPACITY                    | 560                  |
| OPERATOR                           | 1                    |

## DRIVE

ELECTRIC

## INSTALLED POWER

|         |              |
|---------|--------------|
| TOTAL   | 1.5 KW       |
| VOLTAGE | SINGLE PHASE |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

|           |                |
|-----------|----------------|
| CONTAINER | 9 CUBIC METERS |
|-----------|----------------|

## TURTLE - PORKIES - PANDA

|                                    |                      |
|------------------------------------|----------------------|
| COMPOSED                           | 1 HEADCAR + 4 WAGONS |
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 20 CHILDREN          |
| MAXIMUM CHILDREN AGE               | 12 YEARS             |
| DIRECTION OF TRAVEL                | CLOCKWISE            |
| MAX. SPEED                         | 5 KM/H.              |
| HOURLY CAPACITY                    | 400                  |
| OPERATOR                           | 1                    |

## DRIVE

ELECTRIC

## INSTALLED POWER

|         |              |
|---------|--------------|
| TOTAL   | 1.5 KW       |
| VOLTAGE | SINGLE PHASE |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

|           |                |
|-----------|----------------|
| CONTAINER | 9 CUBIC METERS |
|-----------|----------------|

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

DATE: 06/91

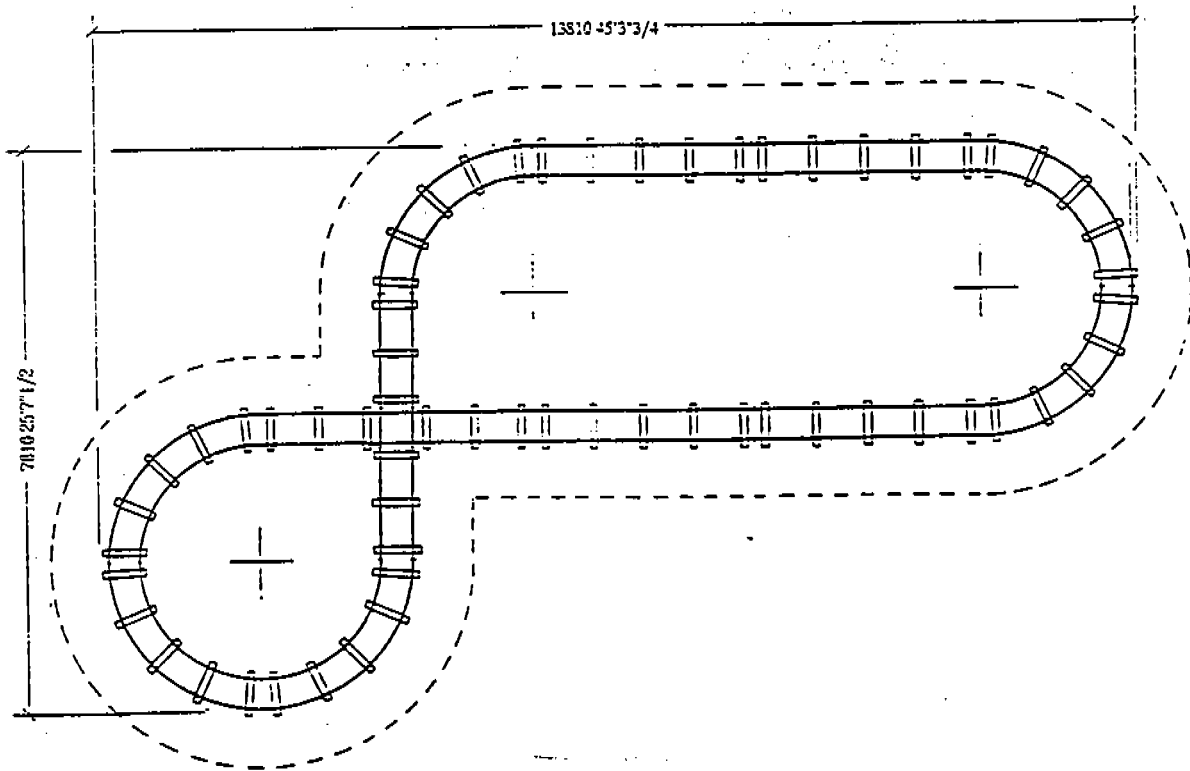
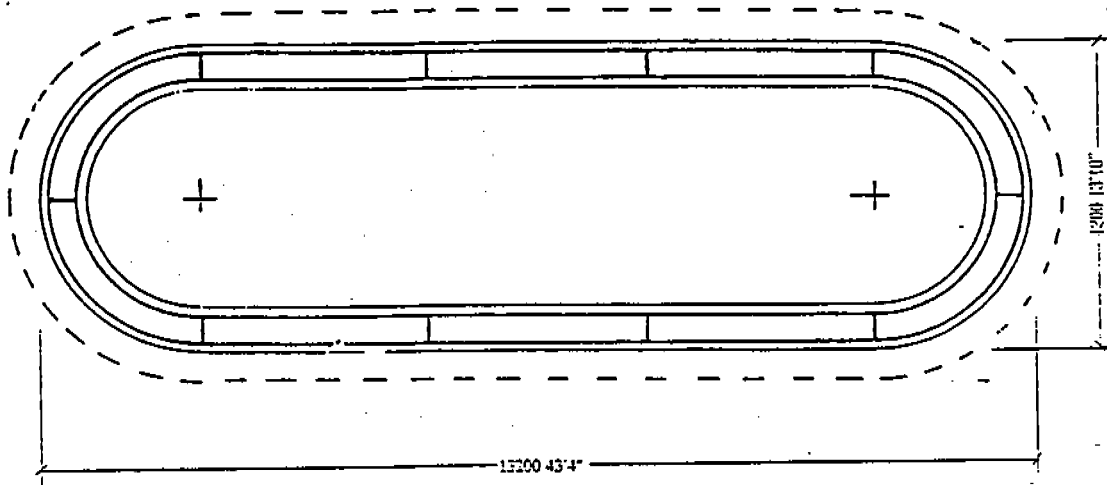
# ZAMPERLA

AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX. 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



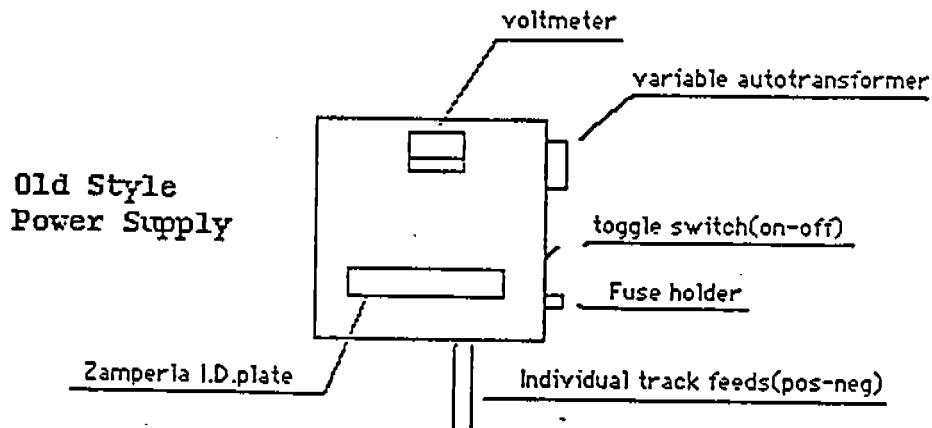
# Zamperla Inc.

## Technical Update

February 1990

RE: Small Train Power Supply

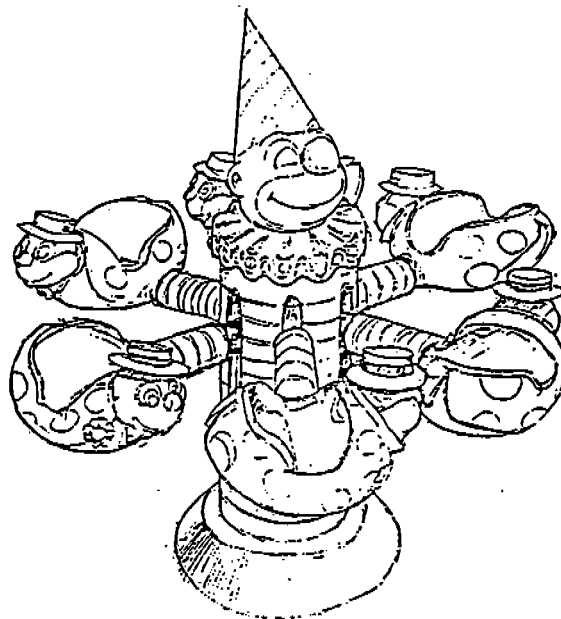
There is the potential to create an electrical shock hazard involving old style small train power boxes. The old style box utilizes a variable auto-transformer for voltage reduction and speed control. There is nothing inherently wrong with the design or construction of the power supply as it was produced. The problem occurs when the 110v line plug is replaced, or the box is plugged into an incorrectly polarized outlet. As with all auto-transformers there is no isolation between primary and secondary windings. Incorrect polarity on the line side will cause a 110v Potential between the track and earth ground. Zamperla is recommending that customers still operating with this old style box, verify the polarity is correct on their line plug. We also recommend they verify the outlet they plug into before beginning operation. A solution approved by Zamperla is the installation of a 1 kva isolation transformer between the line plug and the auto-transformer. This eliminates the need to verify every outlet you plug into. This is NOT considered a manufacturers recommended modification, and the absence of this isolation transformer does not constitute the RED TAGGING of a train operating with this old style box. Below is a diagram to help you identify this power supply. If there is any question regarding this please contact our service department.



Rene Bernier  
Customer Service Manager



# CLOWN AROUND



## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 12                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 900 KG.                  |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |
| MAXIMUM UNBALANCE                  | 6 CHILDREN               |

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                  |
| RISE SPEED                  | 6 RPM.                     |
| RISE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIME) |
| RISE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIME)   |
| HOURLY CAPACITY             | 300                        |
| OPERATOR                    | 1                          |

|                     |           |
|---------------------|-----------|
| MAXIMUM RIDE WEIGHT | 1.3 TONS. |
|---------------------|-----------|

## INSTALLED POWER

|         |                                   |
|---------|-----------------------------------|
| TOTAL   | 3 KW.                             |
| DRIVE   | 2.2 KW.                           |
| LIGHTS  | 0.8 KW.                           |
| VOLTAGE | 3 PHASE + NEUTRAL<br>SINGLE PHASE |

## SHIPPING INFORMATION

|           |           |
|-----------|-----------|
| CONTAINER | 1x20 O.T. |
|-----------|-----------|

## DESCRIPTION

CLOWN AROUND IS A SMALL RIDE SPECIALLY DESIGNED FOR SMALL LOCATIONS, WITH 6.5 MT DIAMETER WITH FENCES.

STANDARD VERSION HAS 3 LADY BUGS AND 3 TURTLES, FOR A TOTAL CAPACITY OF 18 CHILDREN SEATS.

EACH CAR IS PROVIDED WITH SOUND AND LIGHTS. CENTRAL HYDRAULIC SYSTEM WITH SIMULTANEOUS LIFTING OF THE 6 CARS.

CENTRE OF THE RIDE REPRESENTS A CLOWN HEAD, WITH LIGHTS AROUND HIS COLLAR.

FENCES ON PERIMETER, ELECTRIC PANEL AND REMOTE CONTROL ARE INCLUDED.

## ERECTION WORKS

No. 1 PERSON FOR 3 HOURS

## OPTIONAL (TO BE QUOTED ON REQUEST)

- DIFFERENT CARS
- PLATFORMS
- TICKET BOX
- LIGHTS ON ARMS

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

## OTHER VERSION

- MANHATTAN TOUR
- PANDA
- PETER PAUL DRAGON WITH CASTLE CENTRE.

DATE: 06/91

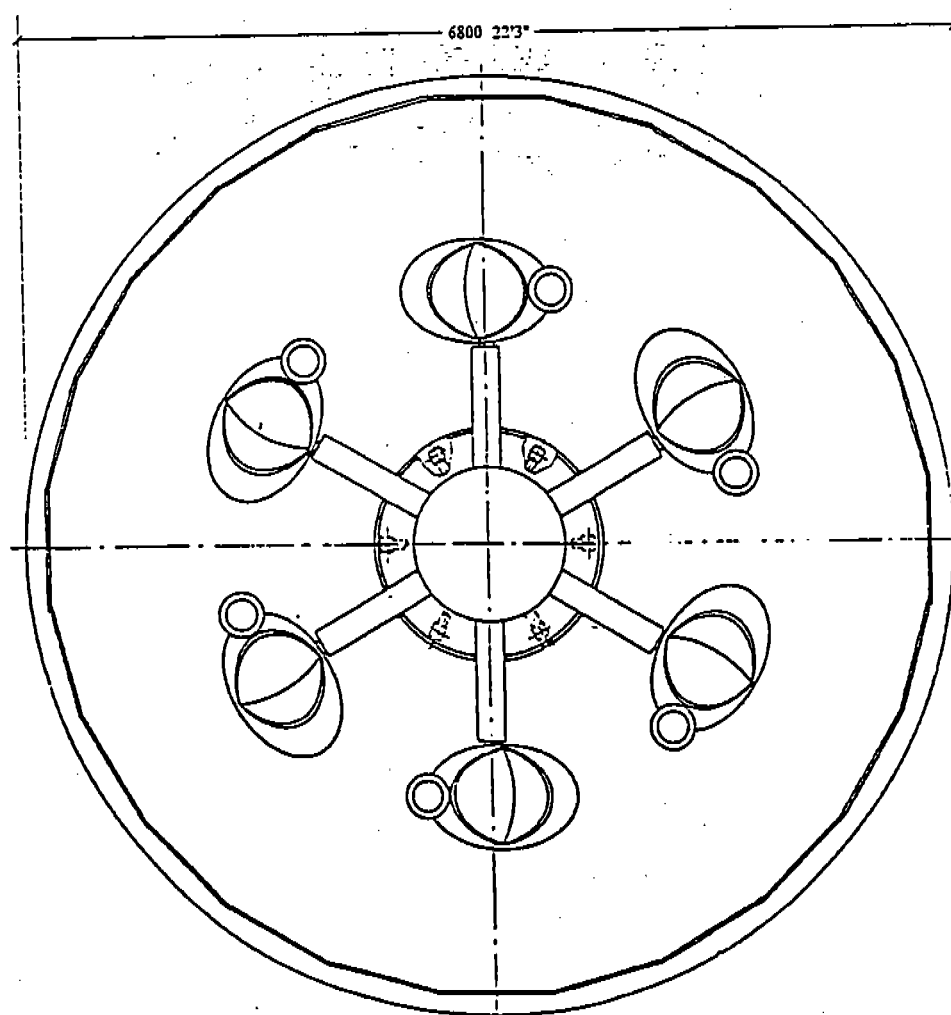
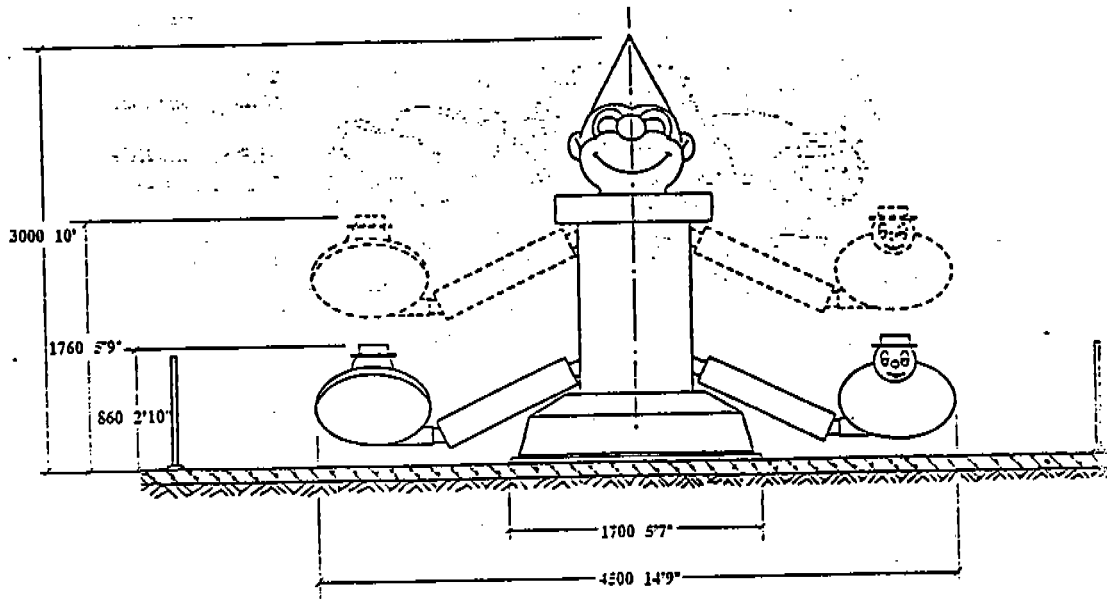


AMUSEMENT RIDES MANUFACTURERS

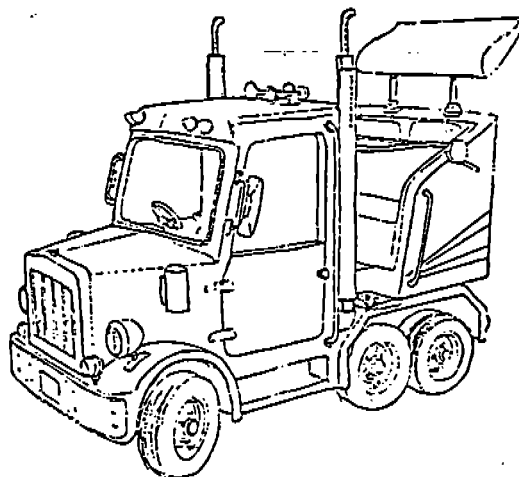
ANTONIO ZAMPERLA S.P.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC.(VI) ITALY  
Via MONTE GRAPPA 15.17  
TEL (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



# CONVOY



## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 24                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 1200 KG.                 |
| MINIMUM PASSENGER HEIGHT           | 105 CM.                  |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |

## PERFORMANCE

|                             |                             |
|-----------------------------|-----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                   |
| RISE SPEED                  | 7 KM./H.                    |
| RISE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIMER) |
| RISE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIMER)   |
| HOURLY CAPACITY             | 720                         |
| OPERATOR                    | 1                           |

## MAXIMUM RIDE WEIGHT

|          |           |
|----------|-----------|
| VEHICLES | 1.8 TONS. |
| GUIDEPPE | 4 KG./MT. |

## DRIVE

ELECTRIC

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 9 KW.             |
| DRIVE   | 9 KW.             |
| LIGHTS  | / KW.             |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## MAXIMUM SLOPE

4/5% FOR MAX. 6 MT. LENGTH

## SHIPPING INFORMATION

|           |           |
|-----------|-----------|
| CONTAINER | 1x20 O.T. |
|-----------|-----------|

## DESCRIPTION

THE PARK MODEL VERSION OF OUR CONVOY KIDIE RIDE HAS 120 MT. OF GUIDE LINE TRACK, POWER PICK-UP AND 6 TRUCKS WHICH RUN INDIVIDUALLY. TOTAL CAPACITY IS 24 (REAR SEATS CAN HOLD 1 ADULT AND 1 CHILD). EACH TRUCK IS PROVIDED WITH: ONE 48 V D.C. MOTOR, POWER PICK-UP TO ALLOW THE CONTACT WITH THE CENTER GUIDE-LINE OF THE TRACK, SAFETY ROPE, LIGHTS, TRUMPETS AND TWIN-WHEELS. PHOTOELECTRIC CELLS TO STOP CARS ON STATION, ELECTRIC PANEL AND RECTIFIER ARE INCLUDED. THE CONCRETE TRACK IS TO BE DONE LOCALLY.

## OPTIONAL

- LOUDSPEAKER WITH TRUCK SOUND
- STANDARD TICKET BOX OR CONVOY TICKET BOX WITH SIGN.
- CONVOY SIGN WITH 2 STARS.
- SAFETY BARS ON REAR SEATS.

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

DATE: 06/91

**ZAMPERLA**

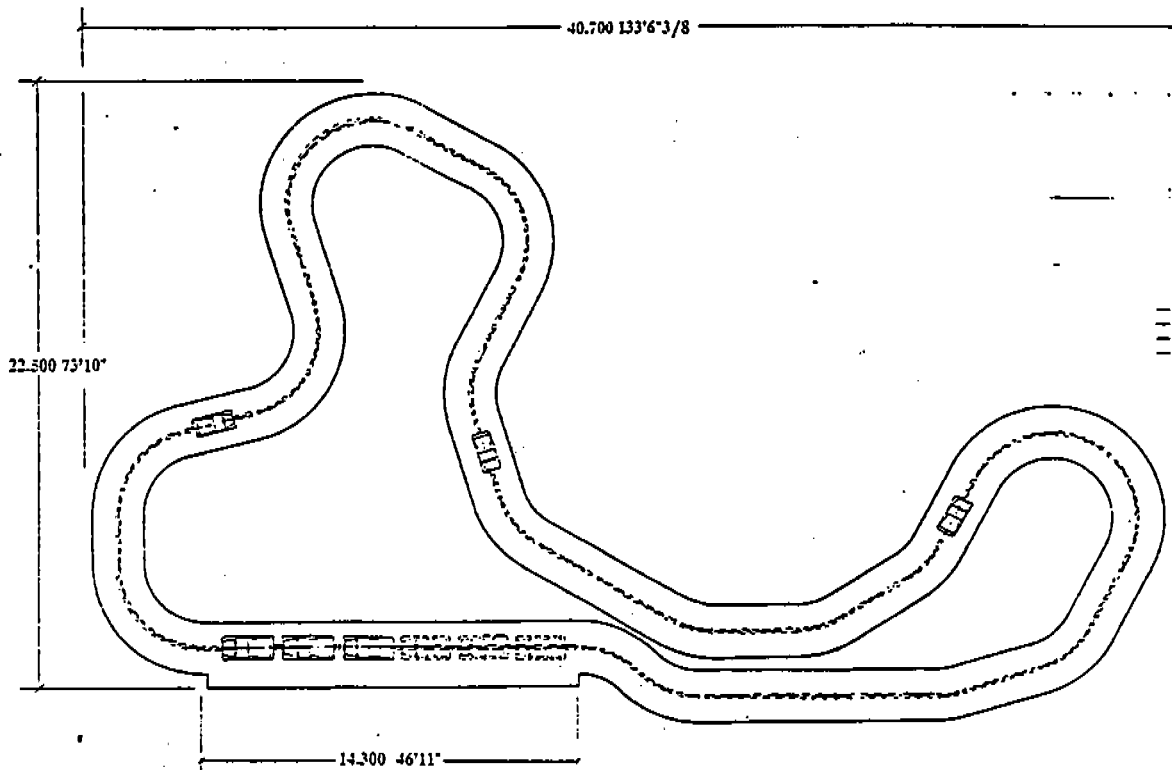
AMUSEMENT RIDES MANUFACTURERS

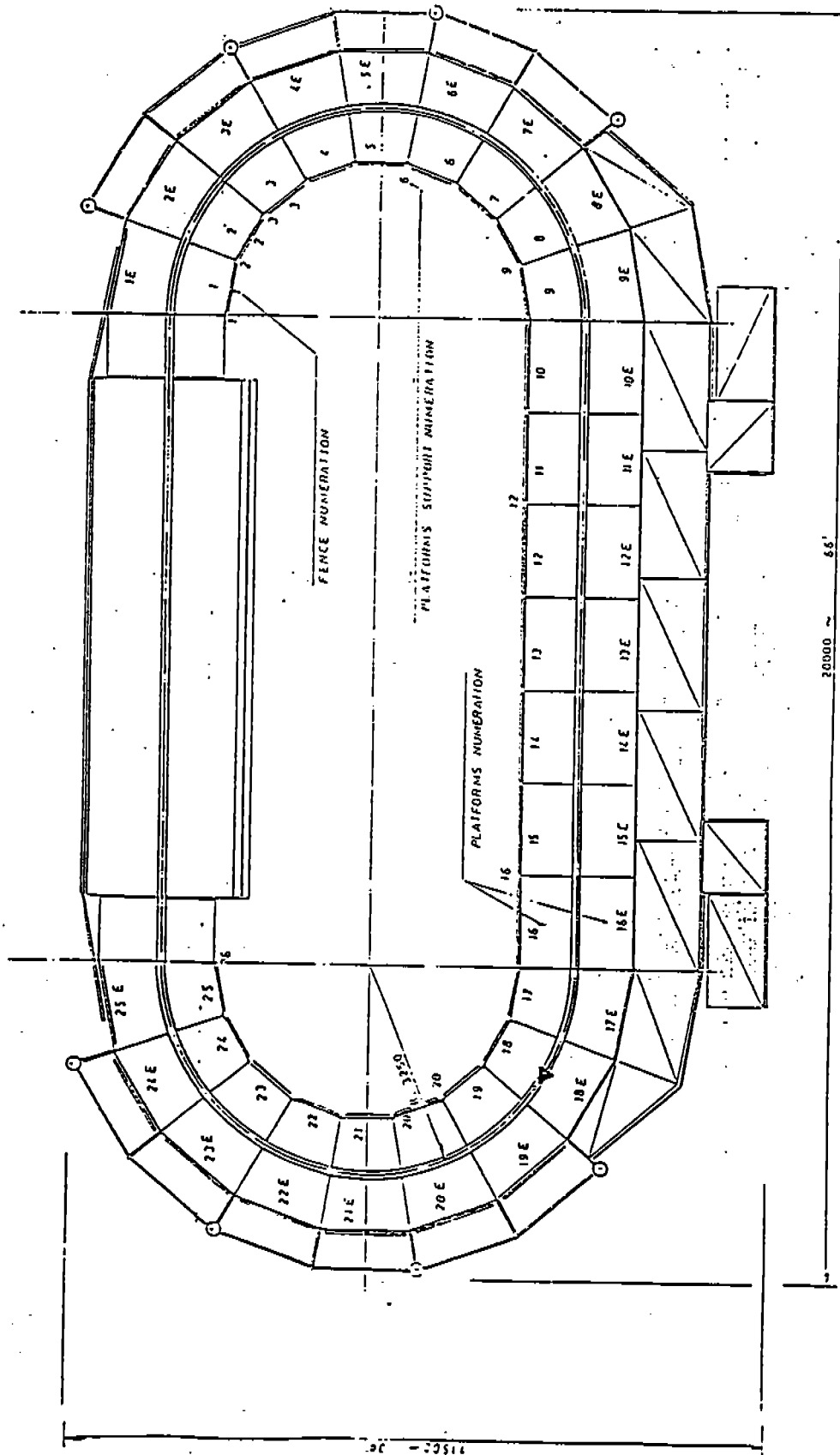
ANTONIO ZAMPERLA S.P.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880



# DIMENSIONS





TRAILER MOUNTED CONVOY/BIG FOOT OPERATING DIMENSIONS

POWER REQUIREMENTS: 9Kw MOTIVE 4Kw LIGHTING

VEHICLE LOADING: 4/VEHICLE 440lbs/VEHICLE MAX

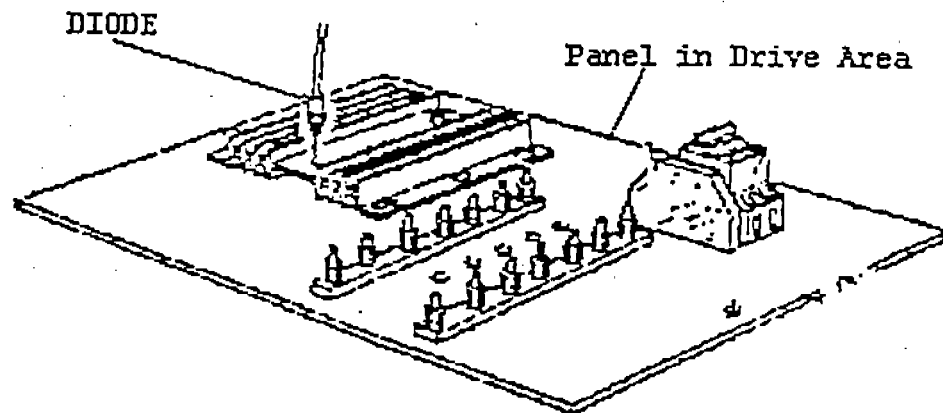
# Zamperla Inc.

## Technical Update

February, 1990

RE:Convoy Truck Derailment

There have been a couple of occasions when Convoy trucks have derailed from the guide track. The location of these derailments has always been on the uphill turn. The cause has always been one or more trucks in the middle of the train losing driving power. The combined action of the front trucks pulling against the resistance of the dead drive train and the rear trucks pushing causes the non driving truck to jack up on its' guide assembly popping the guide rollers off the guide rail. The most obvious reason for loss of drive is a kicked off pickup brush, or disconnected brush wire. In this case the power out is obvious by the loss of lighting on the vehicle. A more subtle and often overlooked reason for loss of drive is the failure of the diode located in the drive area of the truck. The purpose for this diode is to prevent the motors from being powered when the power rail polarity reverses to allow the truck lights to operate during loading and unloading. If this diode blows open the motor will not receive power and the truck lights will still operate. If this diode should fail shorted, the motor will try to pull the other trucks during loading/unloading blowing the fuses for parked truck lighting.



Rene Bernier  
Customer Service Manager

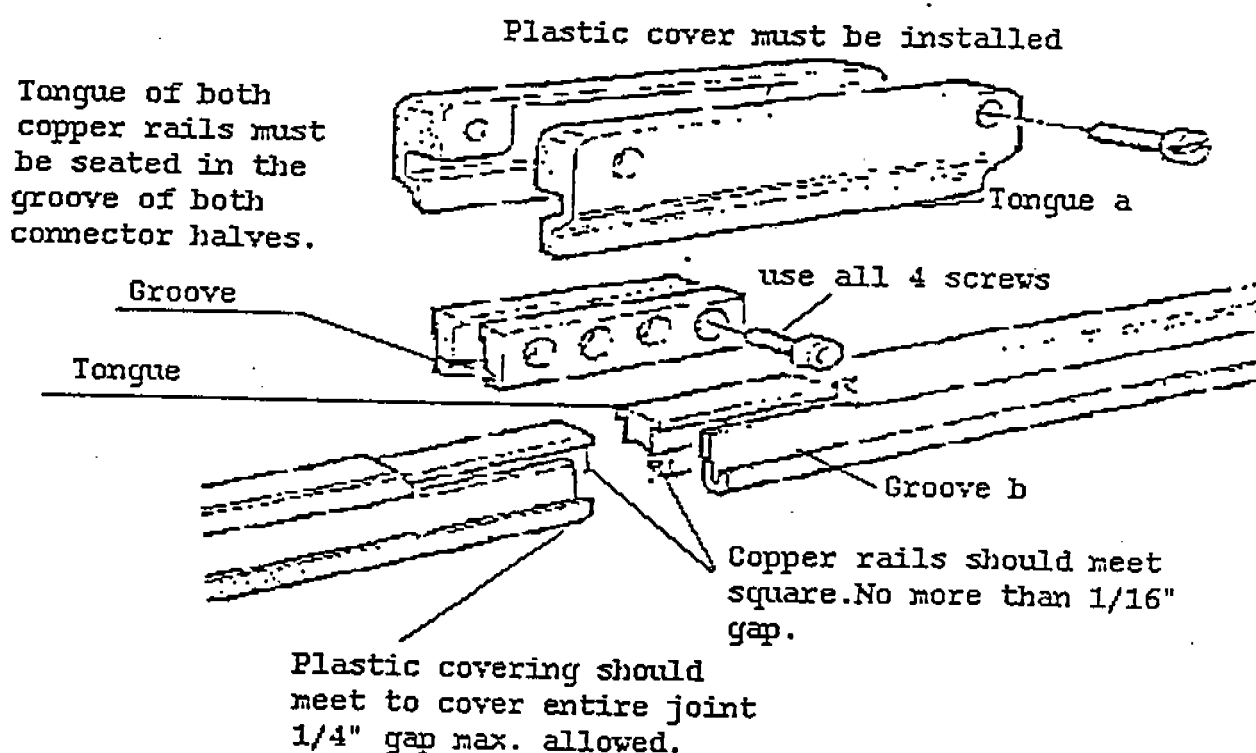
# Zamperla Inc.

## Technical Update

February 1990

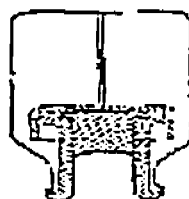
RE: Power Rail Convoy/Dragon/Pony Rodeo

There has been a problem of excessive pickup brush wear reported on some Convoys, Dragon Coasters, and Pony Rodeos. The problem has occurred mostly on portable rides. The cause of this problem is incorrect assembly of the power rail sections. Below is a pictorial of the connector with correct assembly instructions.



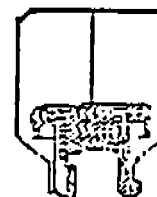
Correct

Cover keeps plastic open at joint



Incorrect

Cover pushing plastic together



When installing cover, tongue a (see above) must fit in groove b on both halves of cover. If cover is not in grooves it will push plastic together causing brushes to kick off as they pass this connection.

Rene Bernier  
Customer Service Manager

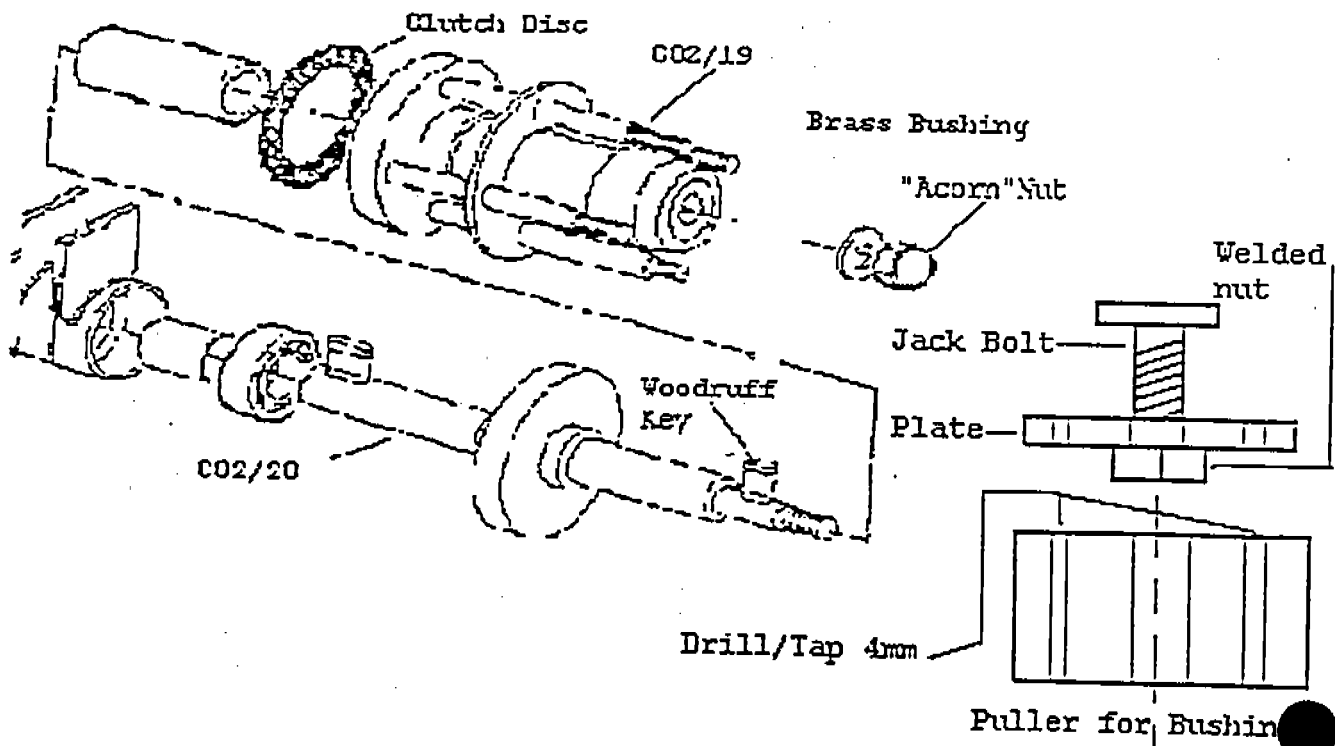
# Zamperla Inc.

## Technical Update

February, 1990

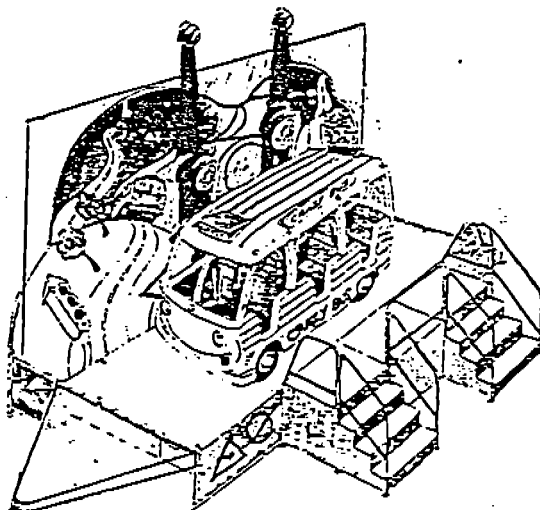
RE:Convoy Drive Axle

The drawing below shows the left(drive) axle assembly on the convoy. Several customers have tried to disassemble this unit unaware that there is a woodruff key in the shaft(C02/20) that must pass thru a notch in the freewheeling hub(C02/19). Any attempt to press these units apart without aligning this key and notch will ruin the shaft(C02/20). The proper way to disassemble these units is to remove the end nut and washer, now you will see the brass bushing that keys onto C02/20. If this unit has not been released to freewheel for some time (as in a permanent location), this bushing may be frozen in place. The easiest way to remove it is to fashion a puller as shown below to remove the frozen bushing. Once the bushing is removed the notch in C02/19 is visible and can be aligned with the woodruff key. the assembly will now slide apart. The Decorative "acorn"nut used to place pressure on this clutch assembly has been changed to a nylon lock nut. The reason for the change is, in some cases the "acorn"nut was bottoming on the shaft before sufficient pressure was placed on the clutch disc, causing slippage and excessive clutch disc wear.



Rene Bernier  
Customer Service Manager

# CRAZY BUS



## DESCRIPTION

OUR FAMILY RIDE CRAZY BUS PARK MODEL IS A MINATURE VERSION OF THE FLYING CARPET. THIS RIDE IS A REAL PROMISE OF EXCITEMENT AND THRILLS. TAKING ITS RIDERS UP TO A MAXIMUM HEIGHT OF 8 MT. THE CRAZY BUS THEN FALLS DOWN; PASSENGERS EXPERIENCE THIS MOVEMENT IN EITHER CLOCKWISE OR COUNTERCLOCKWISE ROTATION, OR BOTH, DEPENDING ON THE OPERATOR. THE RIDE CAN ALSO BE STOPPED IN MID-AIR, WHERE THE RIDERS CAN ENJOY THE VIEW BEFORE BEING BROUGHT BACK DOWN TO THE GROUND.

THE PLATFORM WITH 24 CHILDREN SEATS REPRESENTS A SCHOOL-BUS SUPPORTED BY 2 ROTATING ARMS WITH A COUNTERWEIGHT ON THE OPPOSITE SIDE.

THE CENTER OF THE TWO ROTATING ARMS IS CONNECTED TO 2 SUPPORTING COLUMNS BY DRIVING SYSTEM UNITS.

THE DRIVING IS GIVEN BY D.C. MOTOR CONNECTED TO GEAREXES PLACED ON THE BACK OF THE SUPPORT COLUMNS.

THE SEATS ARE PROVIDED WITH SAFETY BARS CONTROLLED BY AN EXTERNAL PEDAL ACCESSIBLE ONLY BY THE OPERATOR.

PAINTED BACK SCENERY IS INCLUDED. THE BUS AND SCENERY ARE PROVIDED WITH LIGHTS.

ELECTRICAL BOX AND CONTROL PANEL ARE INCLUDED. FOUNDATIONS ARE REQUIRED.

## OTHER VERSION

- TRAILER MODEL WITH SAME CHARACTERISTICS THAN ABOVE.

## SEATS

MAXIMUM TOTAL NUMBER OF PASSENGERS 24  
MAXIMUM TOTAL PASSENGER WEIGHT 1200  
MINIMUM PASSENGER HEIGHT 105 CM.

(UNACCOMPANIED BY ADL)

## LOADING

MAXIMUM UNBALANCE 12 CHILDREN (600 KG.)

## PERFORMANCE

DIRECTION OF TRAVEL CLOCKWISE-COUNTERCLOCK.  
RIDE SPEED 10 RPM.  
RIDE DURATION (MAXIMUM) 2.5 MIN.  
RIDE DURATION (RECOMMENDED) 2 MIN.  
HOUR CAPACITY 480  
OPERATOR 1

MAXIMUM RIDE WEIGHT 7 TONS.

## DRIVE

ELECTRIC

## INSTALLED POWER

TOTAL 16 KW.  
DRIVE 14 KW.  
LIGHTS 2 KW.  
VOLTAGE 3 PHASE + NEUTRAL

(OTHER SOLUTIONS HAVE TO BE CONFIRM)

## SHIPPING INFORMATION

CONTAINER 1 x 40 O.T.

## ERECTION WORKS

NO. 1 SUPERVISOR FOR 1 DAY

CRANE: HEIGHT X TONS. X LENGTH OF THE ARM  
10 MT. X 5 TONS. X 6 MT.

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

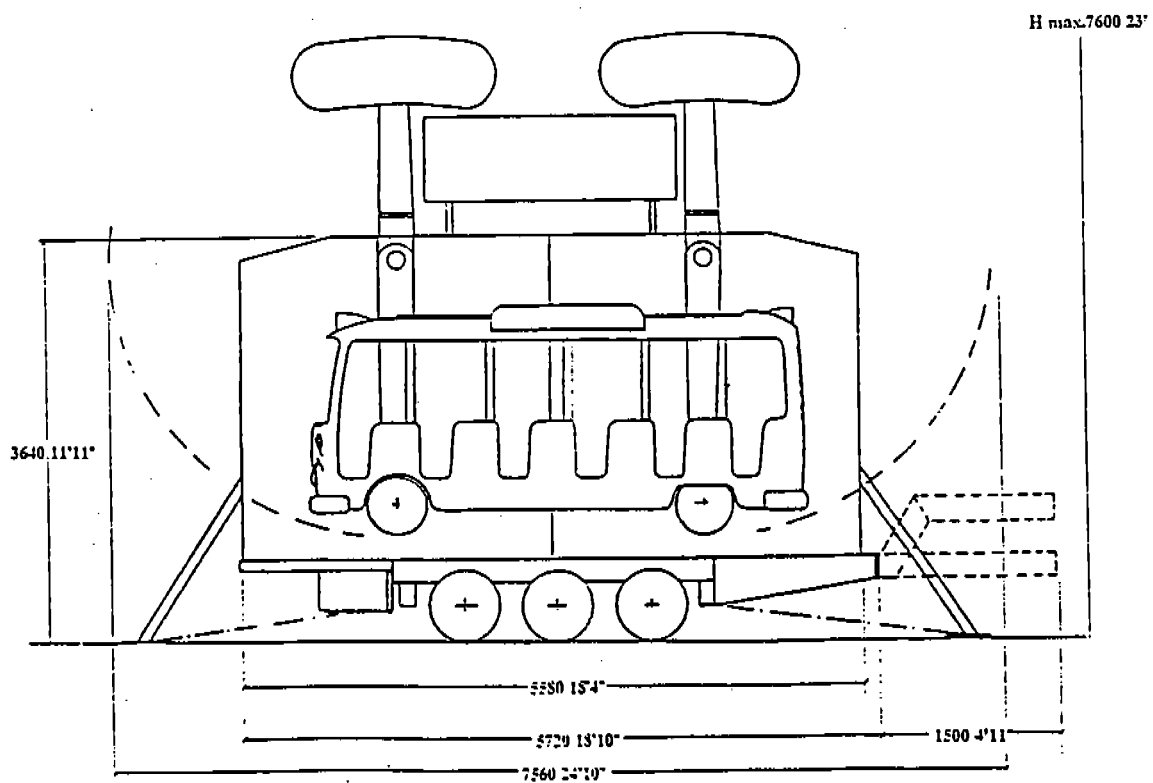
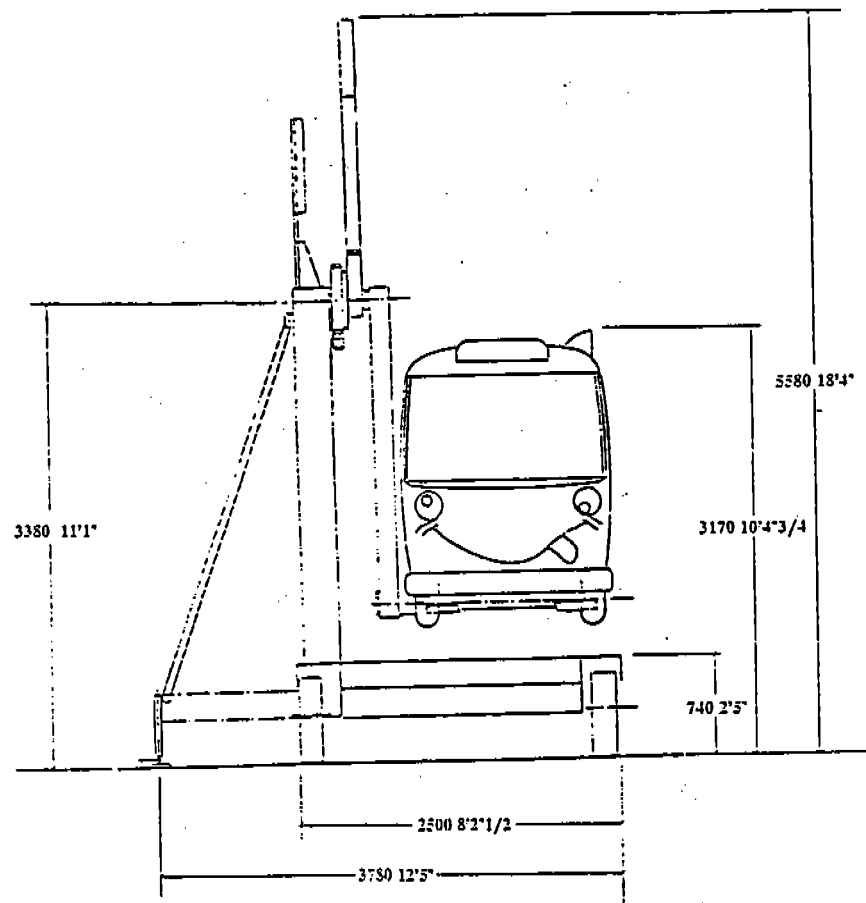
DATE: 06/91

**ZAMPERLA**  
AMUSEMENT RIDES MANUFACTURERS

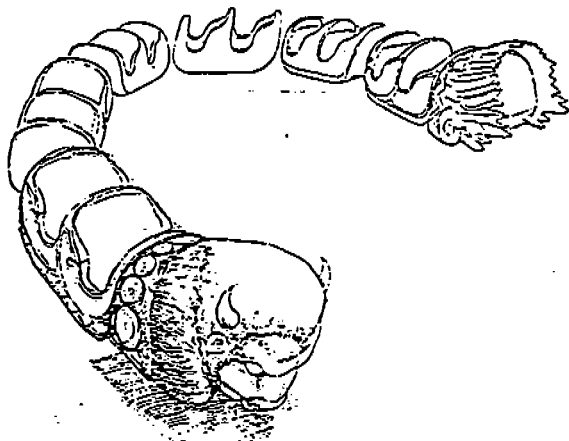
ANTONIO ZAMPERLA S.P.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC.(VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX. 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



# DRAGON ROLLER COASTER 65 m



## DESCRIPTION

Our family ride DRAGON ROLLER COASTER PARK MODEL HAS 5 CARS OF 4 SEATS EACH FOR A TOTAL CAPACITY OF 20 ADULTS.

IT IS A TRAIN WITH A DRAGON SHAPE (HEAD AND TAIL) RUNNING, AT ADJUSTABLE SPEED, ON A 65 METERS LONG TRACK WITH ONE SPIRAL.

THE MOTORIZATION IS MADE WITH TWO D.C. MOTORS, ONE IN THE FRONT AND ONE IN THE REAR CAR WITH TRANSMISSION BY RUBBER TYRE ON CENTRAL RAIL SECTION AND POWER PICK-UP UNDER RAIL.

EACH SEAT IS PROVIDED WITH A SAFETY BAR SYSTEM WITH MANUAL CONTROL. THE RAIL IS GALVANIZED, WHILE THE SUPPORTING STRUCTURE AND THE BASE ARE NOT GALVANIZED. FENCES AROUND THE PERIMETER ARE INCLUDED. THE STATION, 10 MT. LONG, IS MADE BY A METALLIC STRUCTURE COVERED BY ALUMINUM SHEETS, STAIRS AND FENCES WHICH FORM ALL TOGETHER THE PODIUM. THE ROOF AND FOUR COLUMNS OF THE STATION ARE COVERED BY PIERGLASS PANELS. APVC CANVAS COVERS THE FRONT, LOWER SPACE UNDER THE PODIUM. CONTROL BOARD AND ELECTRIC PANEL ARE INCLUDED. THE LIGHTING SYSTEM INCLUDES: NEON UNDER STATION ROOF - PLEX INSERTS AND LIGHT STRIP ON STAINLESS STEEL FRAME ON ROOF PERIMETER - "DRAGON" SIGN WITH LIGHT EFFECTS - 4x500 WATT SPOT LIGHTS - 2 "CAUCI", 1 FOUNTAIN, TO LIGHT THE TRACK. FOUNDATIONS ARE REQUIRED FOR STATION AND TRACK.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- DIFFERENCE FOR TORNADO II, RAINDEER OR BUFFALO SHAPED CARS.
- SPECIAL LIGHTED SIGN WITH HEAD AND TAIL.
- OPERATOR TICKET-BOX.

## OTHER VERSION

- TRAILER MODEL WITH SAME CHARACTERISTICS THAN ABOVE, STATION 10 MT. LONG, WITH HYDRAULIC LIFTING AND LEVELLING SYSTEM, SPECIAL SYSTEM TO SET UP RAIL - BERGISCHE AXIS.
- PARK AND TRAILER MODEL WITH 2 SPIRALS, 120 MT. TRACK.
- DIFFERENT TRACK DEVELOPMENT FOR LENGTH AND THEME OF CARS (GOLD MINE, BUFFALO, TORNADO II, CAMEL, RAINDEER).

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 20                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 1500 KG.                 |
| MINIMUM PASSENGER HEIGHT           | 105 CM.                  |
|                                    | (UNACCOMPANIED BY ADULT) |
| LOADING                            | SIMULTANEOUSLY           |

## PERFORMANCE

|                             |                             |
|-----------------------------|-----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                   |
| ADJUSTABLE SPEED            | 16-35 KM/H                  |
| RIDE DURATION (MAXIMUM)     | 3 MIN. (PROGRAMMED TIMER)   |
| RIDE DURATION (RECOMMENDED) | 2.5 MIN. (PROGRAMMED TIMER) |
| HOURLY CAPACITY             | 500                         |
| OPERATOR                    | 1                           |

|                     |                    |
|---------------------|--------------------|
| MAXIMUM RIDE WEIGHT | 9 TONS. (CAR ONLY) |
|---------------------|--------------------|

|       |          |
|-------|----------|
| DRIVE | ELECTRIC |
|-------|----------|

## INSTALLED POWER

|         |  |
|---------|--|
| TOTAL   | 19 KW                                  |
| DRIVE   | 10 KW                                  |
| LIGHTS  | 9 KW                                   |
| VOLTAGE | 3 PHASE + NEUTRAL                      |
|         | (OTHER SOLUTIONS HAVE TO BE CONFIRMED) |

## SHIPPING INFORMATION

|           |             |
|-----------|-------------|
| CONTAINER | 1 x 40 O.T. |
|-----------|-------------|

## ERECTION WORKS

- \* NO. 2 SUPERVISORS FOR 4 DAYS WITH A TEAM OF 2 LOCAL MEN
- \* CRANE: TONS. X LENGTH OF ARM X TIME IN HOURS
- 3 TON. X 8 MT. X 5 HOURS
- \* DEPENDS ON SITE CONDITIONS AND WORK FORCE AVAILABLE.

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

DATE: 06/91

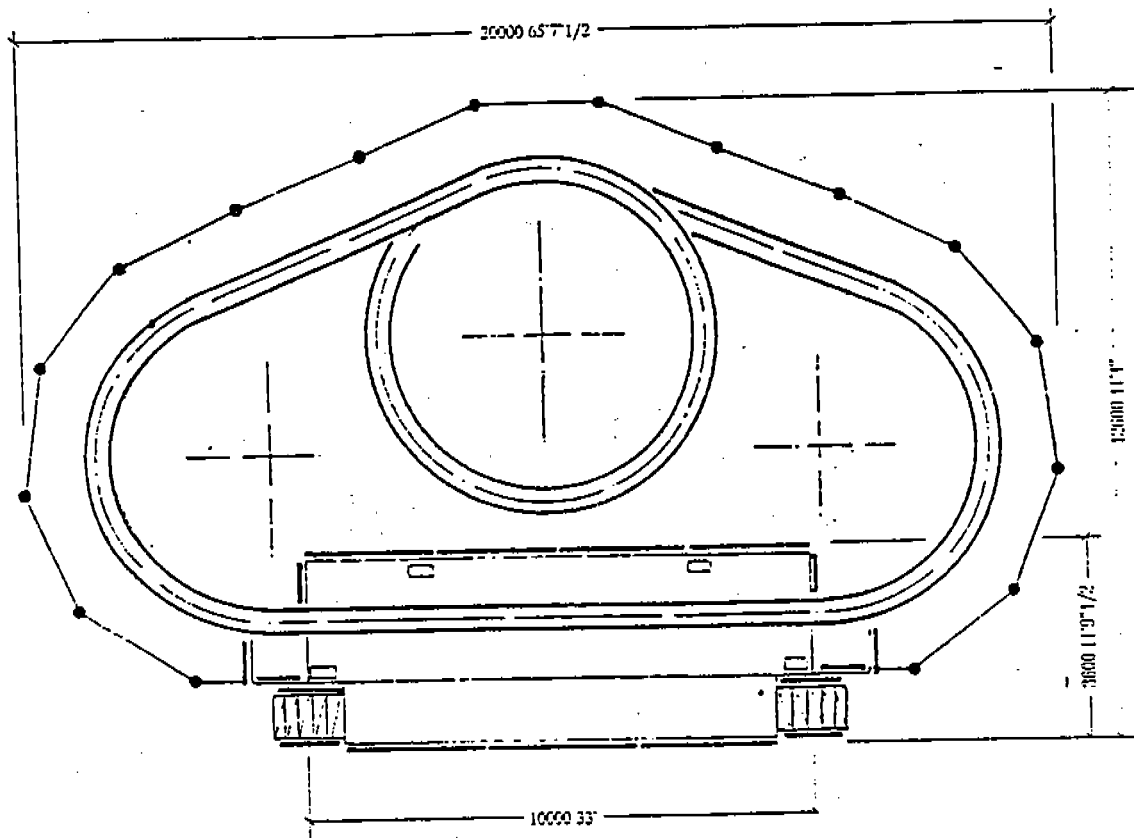
**ZAMPERLA**  
AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX. 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSHIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880



# DIMENSIONS



# Zamperla Inc.

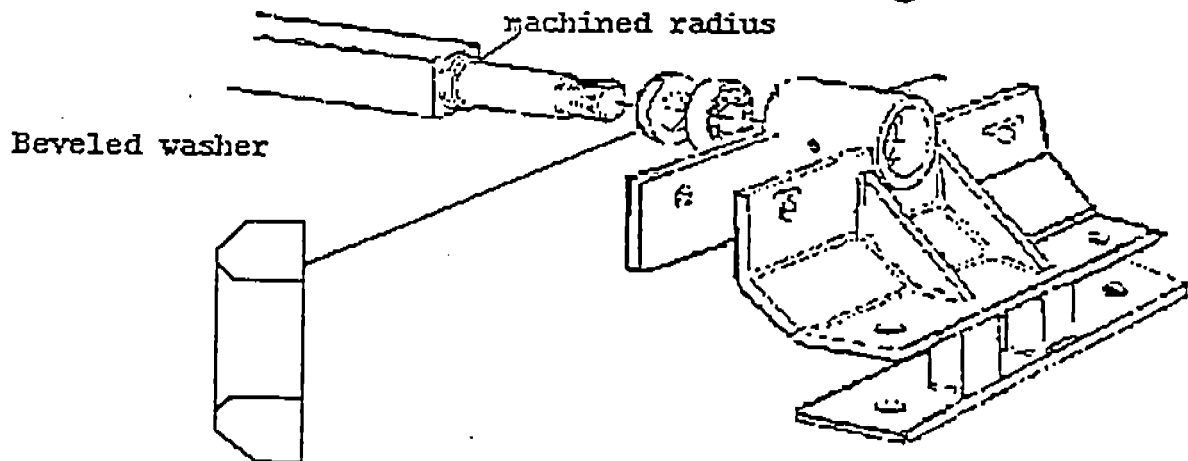
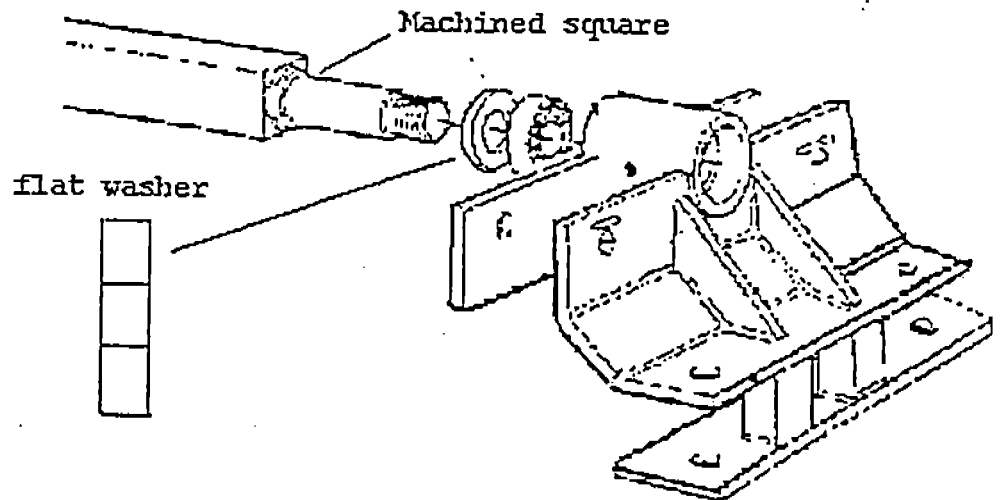
## Maintenance Bulletin

February 1990

RE: Early Dragon coaster axles

The first Dragon coasters delivered in the U.S. experienced failures of the coach axles. This was remedied by a change involving replacement of the entire axle. This change was made by Zamperla personal on all rides in the country. This almost eliminates the possibility of finding any of the old style axles in operation. The following is provided as a safeguard in the event a used ride has entered the country that may have missed this modification. The easiest way to identify these two axles is the beveled washer used on the correct axle.

Original (incorrect) axle



Rene Bernier  
Customer Service Manager

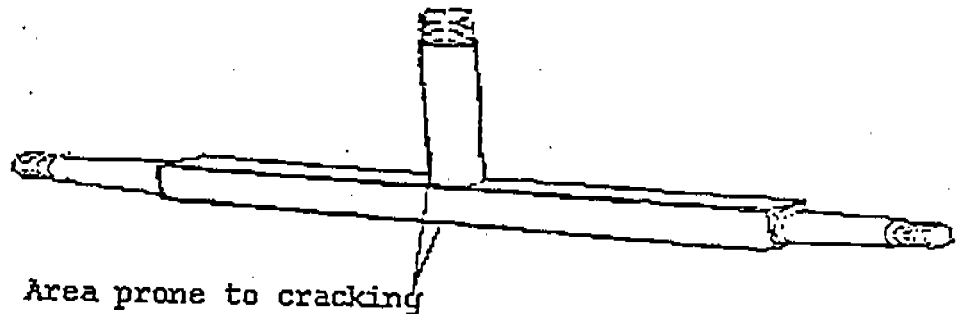
# Zamperla Inc. Maintenance Bulletin

February 1990

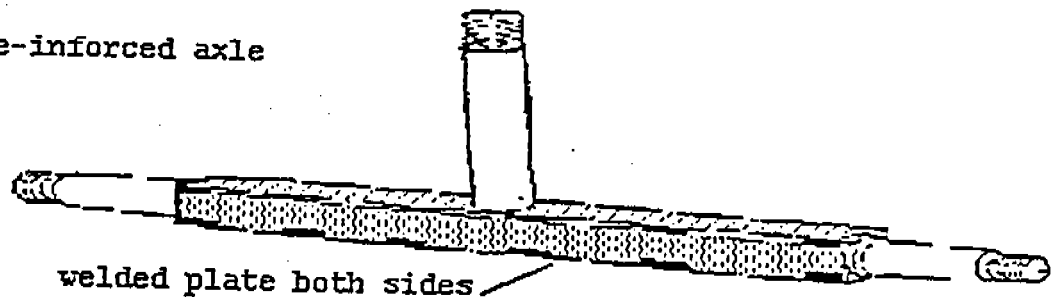
RE:BULLETIN 1/89 Dragon Drive Group Axles

Bulletin 1/89 recommends inspection and possible replacement of the axles related to the drive groups. This is the extreme front and rear axles on the train. The problem area is where the vertical spindle passes thru the axle. The remedy for this problem is the standard replacement axle has been re-inforced in this area. This heavier axle is available at cost. It is suggested that during scheduled maintenance you upgrade to this stronger axle. The absence of this re-inforced axle doesn't imply the ride should be RED TAGGED. As long as there is no evidence of cracking the ride can operate, with daily inspection of this area, until the axles can be replaced. The only recommended repair for cracked axles is replacement.

Original design axle



Re-inforced axle



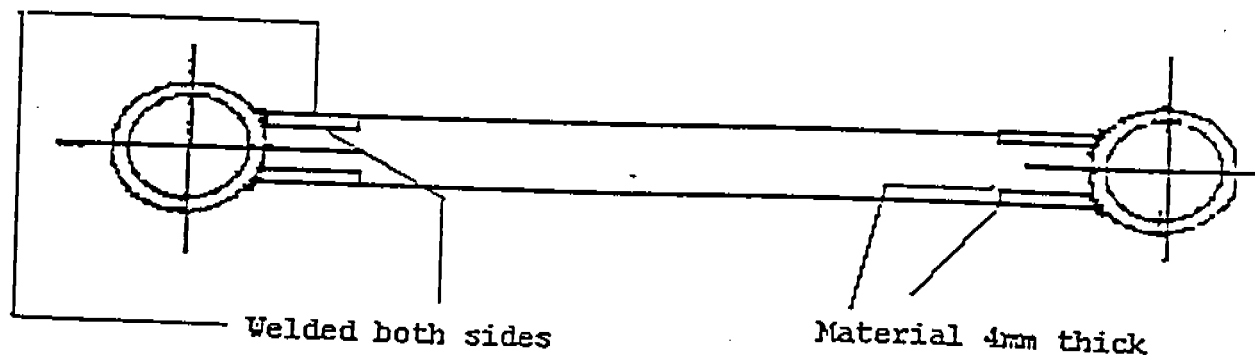
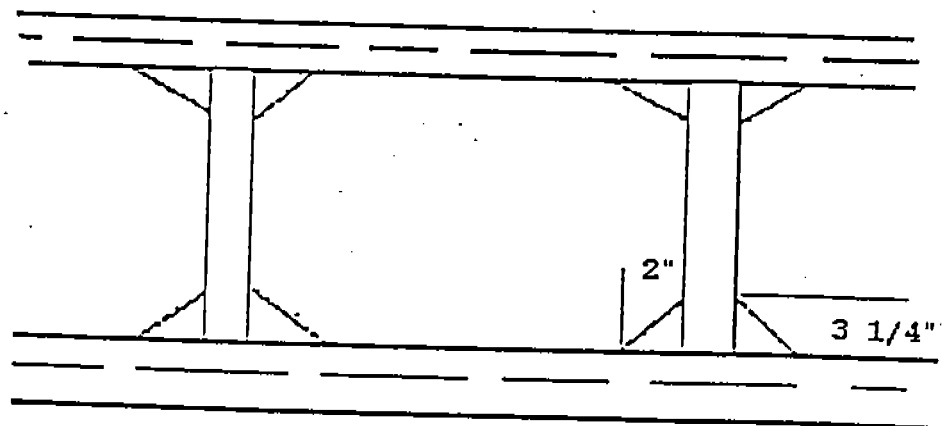
Rene Bernier  
Customer Service Manager

# Zamperla Inc.

## Maintenance Bulletin February 1990

RE: Cracks in cross supports Dragon/Tornado coaster track

This Bulletin was issued after cracks developed in the cross supports on Dragon/Tornado coasters delivered in 1983/84. The area of concern is in the spiral section. Customers were advised to carefully inspect their rides, and a modification was also issued. The needed parts were provided to all customers at no charge. Rides built after these dates have the needed re-inforcements from the factory. This modification was deemed Mandatory by Zamperla.



Rene Bernier  
Customer Service Manager

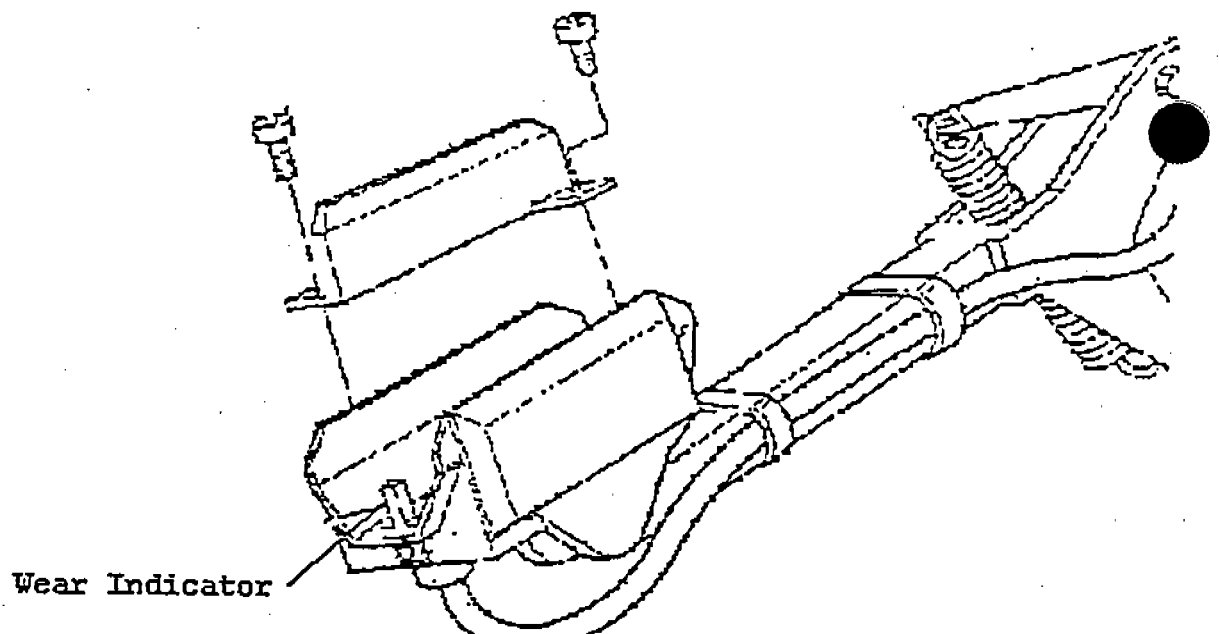
# Zamperla Inc.

## Technical Update

February 1990

RE: Dragon/Tornado Coaster Brush Wear Limits

The intent of this Technical Update is to stress the need to inspect the pickup brushes on the Dragon/Tornado Coasters. Failure to respect the wear limits stated in your Maintenance manual (and below) will lead to an arcing condition that will eventually destroy the power pickup rail. When you reach 1/8" clearance between the wear indicator and copper rail, you should increase the frequency of inspection of the brushes until they are replaced. Under no circumstances should the wear indicator be allowed to approach to within 1/16" from the copper rail.



Rene Bernier  
Customer Service Manager

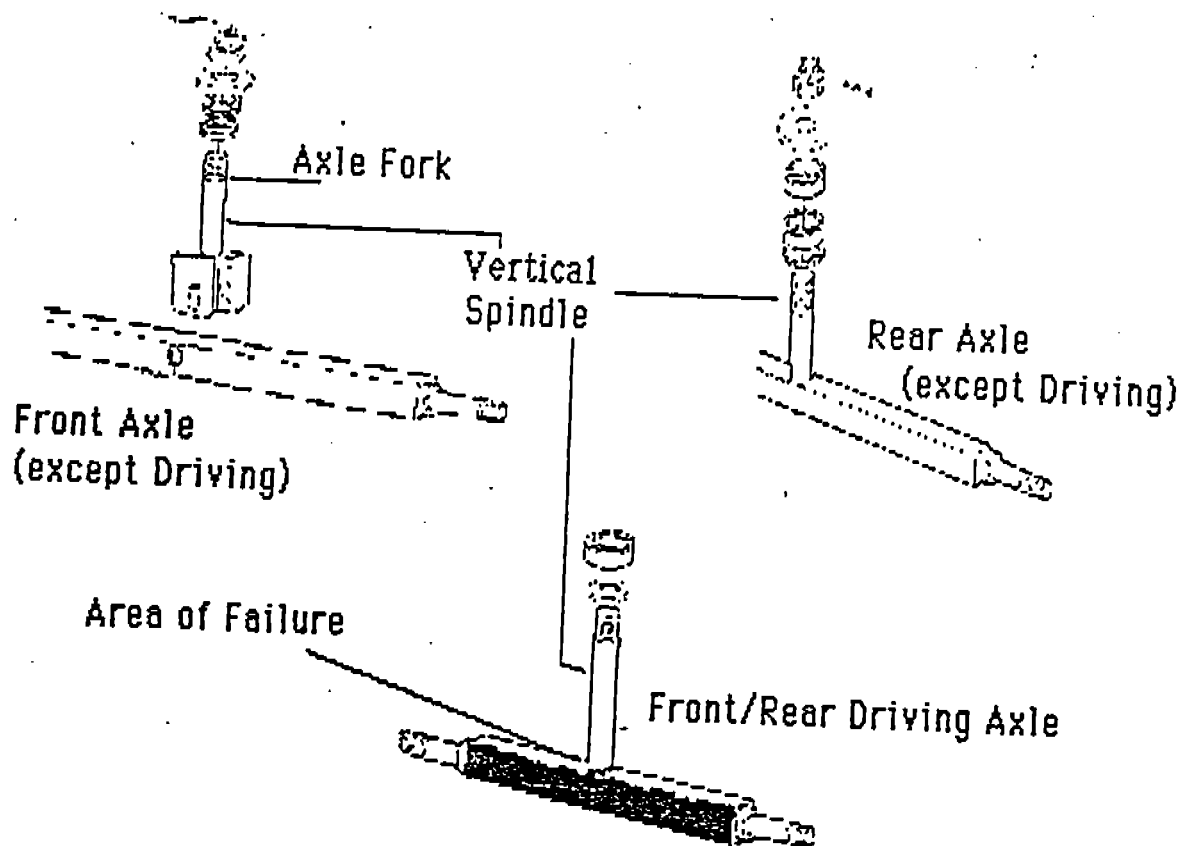
# Zamperla Inc.

## Maintenance Bulletin

January 1991

### RE: Dragon/Tornado Coaster Axle Vertical Spindles

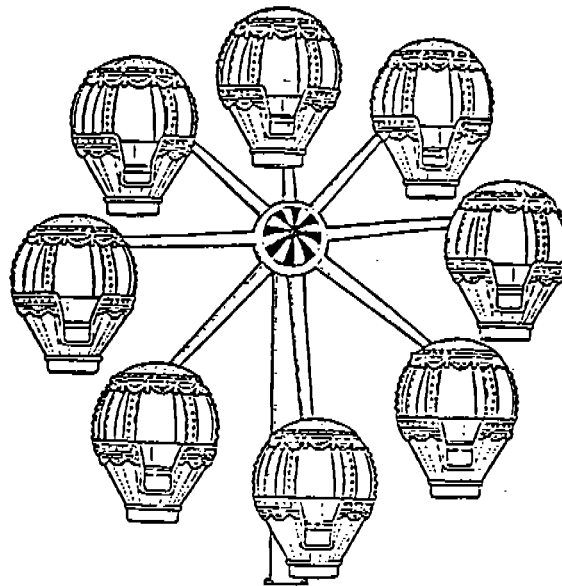
There has been a report of a failure of the vertical spindle on the rear drive axle of a Dragon Coaster. Zamperla has notified all Dragon/Tornado Coaster operators to perform ultrasonic testing on the vertical spindles on "ALL" the axles of their ride. To date this appears to be an isolated incident. The spindles may be tested without removing the axles. The only acceptable repair for indications of cracking is replacement of the axle or axle fork.



Rene Bernier  
Technical Service Manager



# FERRIS WHEEL 8



## DESCRIPTION

OUR FAMILY RIDE FERRIS WHEEL PARK MODEL HAS 8 CARS OF 5 ADULT AND CHILDREN SEATS FOR A TOTAL CAPACITY OF 40 PEOPLE.

ITS CARS HAVE A BEAUTIFUL SHAPE OF HOT-BALLOONS HANGING FROM A UNIQUE AND NEAT SUPPORTING STRUCTURE WHICH ALLOWS TO OFFER AN ALMOST UNDESTRUCTED 360° VIEW OF YOUR PARK.

THIS RIDE ROTATES BY MEANS OF AN HYDRAULIC SYSTEM CONSISTING OF 2 HYDRAULIC MOTORS. ITS MOTORIZATION IS MOUNTED ON A FIXED CENTER, WHILE THE HYDRAULIC UNIT IS LOCATED ON THE GROUND BEHIND THE COLUMN. TO THE COLUMN STRUCTURE ARE ANCHORED THE ARMS FROM WHICH HANG THE BALLOONS. EACH CAR IS PROVIDED WITH A SAFETY GATE WITH EXTERNAL OPENING. THE PLATFORM AREA IS MADE BY A METALLIC STRUCTURE COVERED BY ALUMINIUM SHEETS, STAIRS AND FENCES WHICH FORM ALL TOGETHER THE PODIUM.

THE LOADING AND UNLOADING OPERATION IS MADE FOR TWO CARS AT THE SAME TIME. FENCES ON PERIMETER ARE INCLUDED.

EACH BALLOON IS LIGHTED WITH CAPSON LIGHTS.

FOUNDATIONS ARE NEEDED FOR THE CENTRAL STRUCTURE AND FOR HYDRAULIC UNIT.

## OTHER VERSION

- MODEL WITH 12 CARS 60 SEATS
- MODEL WITH 16 CARS 80 SEATS.
- DIFFERENT THEMES: CHRISTMAS BALL, CHUCK WAGONS, MED E'AL TENTS, DIVING BELLS, COCA COLA.

## SEATS

|                                    |                                     |
|------------------------------------|-------------------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 40                                  |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 3000 KG.                            |
| MINIMUM PASSENGER HEIGHT           | 105 CM.<br>(UNACCOMPANIED BY ADULT) |
| LOADING                            | TWO CARS AT THE SAME TIME           |
| MAXIMUM UNBALANCE                  | 20 ADULTS (1500 KG.)                |

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE-COUNTERCLOCKWISE |
| RIDE SPEED                  | 2.5 RPM.                   |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN.                   |
| RIDE DURATION (RECOMMENDED) | 2 MIN.                     |
| HOURLY CAPACITY             | 960                        |
| OPERATOR                    | 1                          |

MAXIMUM RIDE WEIGHT 13 TONS.

## INSTALLED POWER

|         |   |
|---------|---|
| TOTAL   | 26.5 KW.  |
| DRIVE   | 22 KW.  |
| LIGHTS  | 4.5 KW.   |
| VOLTAGE | 3 PHASE + NEUTRAL<br>(OTHER SOLUTIONS HAVE TO BE CONFIRMED) |

## SHIPPING INFORMATION

CONTAINER 3x40 O.T.

## LARGEST COMPONENTS

|              |                             |
|--------------|-----------------------------|
| COLUMN       | 8 MT.x1.5 MT.x1.8 MT.x 7 T. |
| MOTORIZATION | 2.4 MT.x 2.2 MT.x 2 MT.     |
| CAR          | 2.6 MT.x 2.2 MT.x 350 KG.   |

## ERECTION WORKS

\*No. 1 SUPERVISOR FOR 2-3 DAYS WITH A TEAM OF 4/5 LOCAL MEN

\*CRANE: HEIGHT X TONS. X LENGTH OF THE ARM X TIME IN HOURS

12 MT.x 20 TONS. x 2 DAYS

\*DEPENDS ON SITE CONDITIONS AND WORK FORCE AVAILABLE

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

DATE: 06/91

# ZAMPERLA

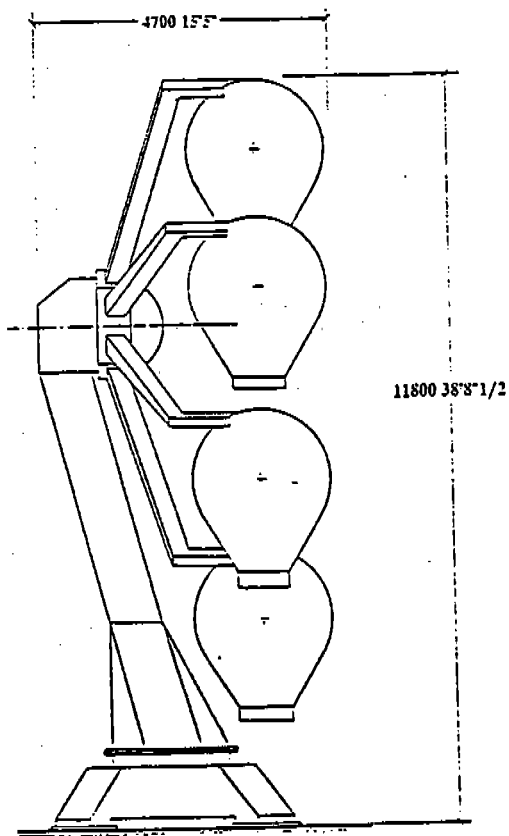
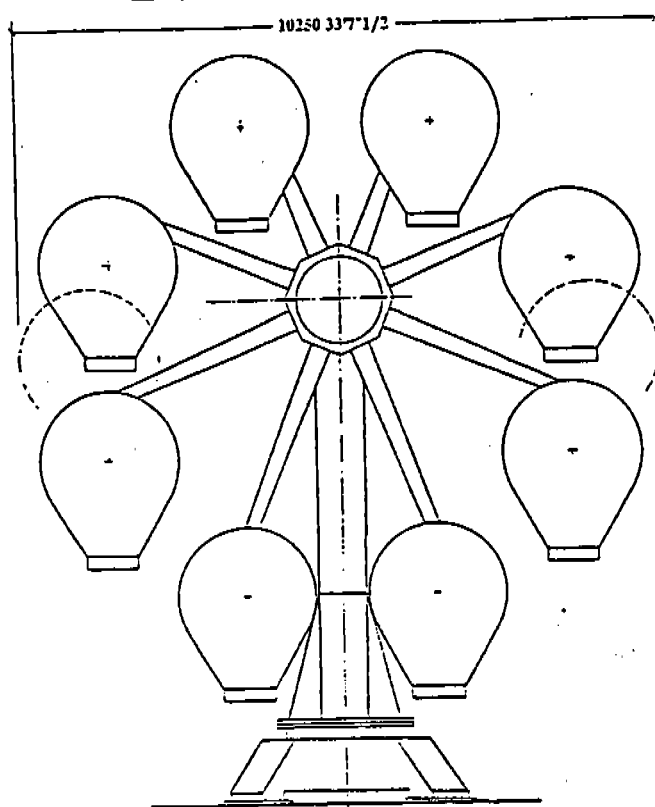
AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.P.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

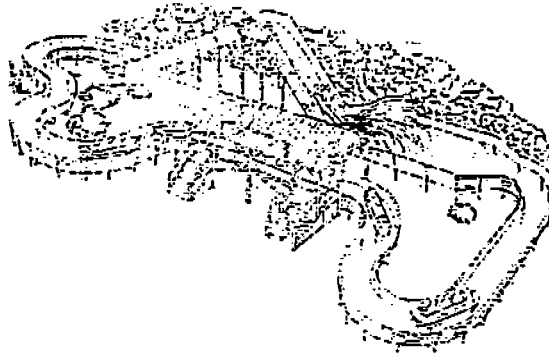
ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880



# DIMENSIONS



# FLUME RIDE 96 mt.



## DESCRIPTION

OUR FAMILY FLUME RIDE PARK MODEL, HAS 6 LOG-CARS OF 4 SEATS EACH FOR A TOTAL CAPACITY OF 24 ADULTS AND CHILDREN; ITS 96 MT. LONG OF OPENCAST CHANNEL HAS A PECULIAR SHAPE AND ONE 5 MT. HIGH RAMP.

THE CHANNEL IS HOT-GALVANIZED AND ITS FIBERGLASS LOGS ARE GUIDED BY WHEELS LOCATED ON THE BOTTOM AND THE SIDES OF THE SAME.

ITS MOVEMENT IS GIVEN BY SUBMERGED PUMPS WHICH MOVE THE WATER WHILE THE ENTRAINMENT OF THE LOGS INTO THE STATION AND THEIR LIFTING UP THE RAMP IS MADE BY CONVEYOR BELTS.

THE SAFETY SYSTEM IS GUARANTEED BY PHOTOELECTRIC CELLS LOCATED ALONG THE CHANNEL, TO CHECK THE WATER LEVEL AND THE TIMED PASSAGE OF LOGS ON CRITICAL POINTS. EACH LOG IS PROVIDED WITH SAFETY HANDLES, TEETH PROTECTION PAD AND CENTER BACK-SUPPORT.

THE 10 MT. LONG STATION IS MADE BY A METALLIC STRUCTURE COVERED WITH ALUMINUM SHEETS AND PROVIDED WITH STAIRS AND FENCES WHICH FORM ALL TOGETHER A PODIUM WITHOUT ROOF.

THE ELECTRIC PANEL AND REMOTE CONTROL BOARD ARE INCLUDED.

FOUNDATIONS ARE NEEDED FOR CHANNEL AND POOL AREA WITH LEVELLED FLAT CONCRETE PLATFORMS.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- COLORADO RIVER OR CANYON RIVER LIGHTED SIGN.
- WOODEN STYLE FIBERGLASS PANELS ON THE STATION ROOF.
- FIBERGLASS CHANNEL WITH STEEL STRUCTURE.
- 16 x 500 WATT HALOGEN SPOT LIGHTS.
- WOODEN STYLE TICKET BOX.
- AIR COMPRESSOR 1.5 KW 100 LT.

## OTHER VERSION

- DIFFERENT CHANNEL SHAPES AND LENGTH WITH ONE OR MORE RAMPS AND ADDITIONAL LOGS.
- TRAILER MODEL WITH THE SAME CHARACTERISTICS THAN ABOVE.

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| NUMBER OF LOGS                     | 6                        |
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 24                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 1800 KG.                 |
| MINIMUM PASSENGER HEIGHT           | 105 CM.                  |
|                                    | (UNACCOMPANIED BY ADULT) |
| LOADING                            | 3 LOGS SIMULTANEOUSLY    |

## PERFORMANCE

|                     |                 |
|---------------------|-----------------|
| DIRECTION OF TRAVEL | CLOCKWISE       |
| MAX. SPEED          | 0.9-1.5 MT/SEC. |
| HOURLY CAPACITY     | 600             |
| OPERATOR            | 1               |

## DRIVE

ELECTRIC

## INSTALLED POWER

|         |  |
|---------|--|
| TOTAL   | 29.5 KW                                |
| DRIVE   | 29.5 KW                                |
| LIGHTS  | / KW                                   |
| VOLTAGE | 3 PHASE + NEUTRAL                      |
|         | (OTHER SOLUTIONS HAVE TO BE CONFIRMED) |

## SHIPPING INFORMATION

|           |             |
|-----------|-------------|
| CONTAINER | 3 x 40 O.T. |
|-----------|-------------|

## ERECTION WORKS

- \* NO. 4 SUPERVISORS FOR 10 DAYS WITH A TEAM OF 6 LOCAL MEN
- \* CRANE: TONS. x LENGTH OF ARM x TIME IN HOURS
- 15 TON. x 10 MT. x 20 HOURS
- \* DEFENDS ON SITE CONDITIONS AND WORK FORCE AVAILABLE.

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

DATE: 06/91

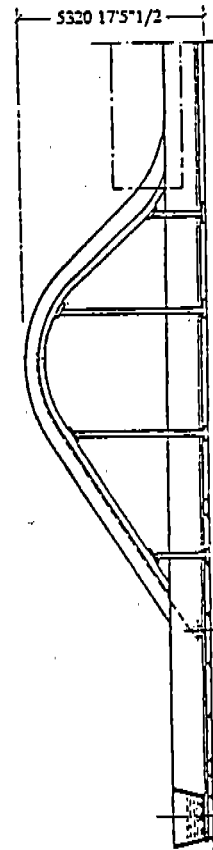
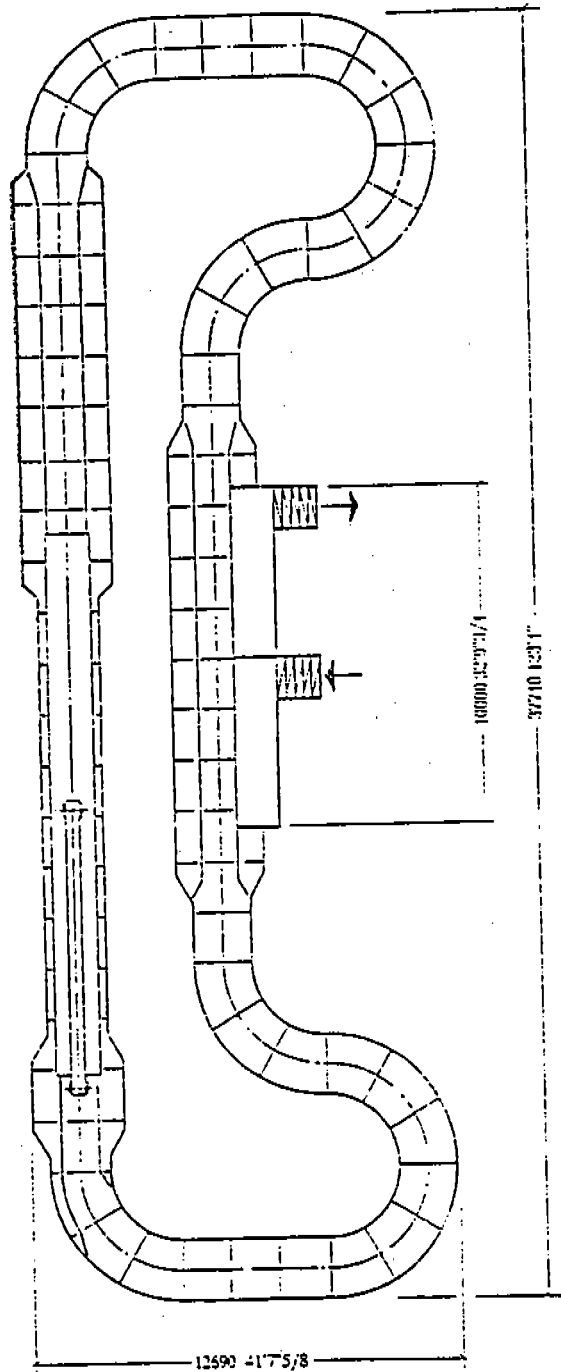
# ZAMPERLA

AMUSEMENT RIDES MANUFACTURERS

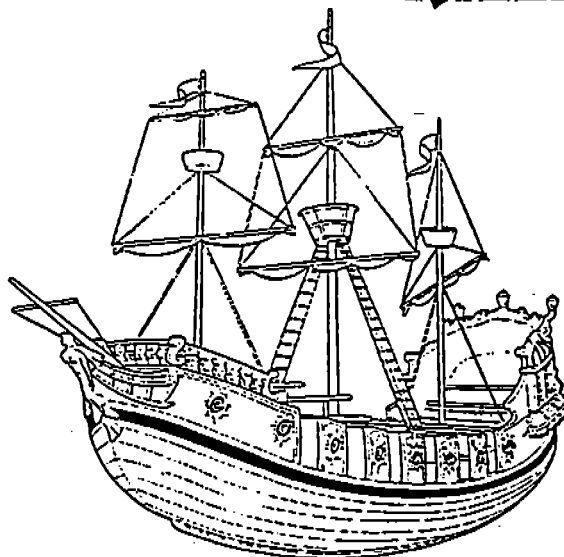
ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15.17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSHIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



# GALLEON 33



## DESCRIPTION

Our FAMILY RIDE GALLEON PARK MODEL IS 12 MT. HIGH WITH 33 ADULT SEATS.

Our BEAUTIFUL SWINGING SHIP REPRODUCES A 15TH CENTURY SPANISH GALLEON, WITH HAND-CRAFTED FINISH AND IMITATION GILDING, LANTERNS AND SAILS.

THE MOTORIZATION IS MADE WITH A D.C. MOTOR AND THE TRANSMISSION IN BOTH SWINGING DIRECTIONS IS GIVEN BY A RUBBER WHEEL LOCATED IN THE LOWER SECTION OF THE BOAT. THE SEATS ARE FINISHED WITH WOOD, AND ARE PROVIDED WITH SAFETY BARS WITH HYDRAULIC CONTROL. THE STRUCTURE IS SUPPORTED BY 4 LEGS AND HAS FENCES ON PERIMETER. THE PLATFORM AREA IS MADE OF METALLIC STRUCTURE COVERED BY ALUMINIUM SHEETS, STAIRS AND FENCES WHICH ALL TOGETHER FORM THE PODIUM. ENTRANCE TO THE RIDE IS FROM THE FRONT SIDE, UNLOADING FROM THE REAR SIDE.

A PVC CANVAS COVERS THE FRONT AND THE REAR SPACE UNDER THE PODIUM. WOODEN STYLE OPERATOR BOX, CONTROL BOARD AND ELECTRIC PANEL ARE INCLUDED. THE LIGHTING SYSTEM IS ON THE FIBERGLASS PANELS COVERING THE 2 FRONT LEGS AND ON THE 2 FRONT SHIP SUPPORTS. "GALLEON", "PIRATE" OR "Viking" FLASHING LIGHT SIGN AND 4x500 WATT SPOT LIGHTS ON THE TOP OF THE RIDE. FOUNDATIONS ARE NEEDED FOR THE CENTRAL DRIVING UNIT AND THE LEGS.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- PAINTED SCENERY
- DECORATIONS WITH FIBERGLASS PIRATE HEAD, BOOTS AND SABRE TO SUPPORT GALLEON SIGN.
- CANNON-SHOT EFFECT MADE BY LIGHTS AND SOUNDS.

## OTHER VERSION

- TRAILER MODEL 33 SEATS ON FIFTH WHEEL 10 MT. HIGH OVERALL.
- GALLEON WITH 42 ADULT SEATS.
- THEME ROMAN BOAT WITH 54 ADULT SEATS.
- GALLEON WITH 33 SEATS 10 MT. HIGH FOR INDOOR LOCATION.

## SEATS

|                                    |                                     |
|------------------------------------|-------------------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 33                                  |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 2475 KG.                            |
| MINIMUM PASSENGER HEIGHT           | 105 CM.<br>(UNACCOMPANIED BY ADULT) |
| LOADING                            | ALL SEATS SIMULTANEOUSLY            |

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | SWINGING                   |
| MAX. SPEED                  | 45 KM/H                    |
| MAX. ANGLE OF CLIMB         | 75°                        |
| RISE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIME) |
| RISE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIME)   |
| HOURLY CAPACITY             | 900                        |
| OPERATOR                    | 1                          |

## MAXIMUM RIDE WEIGHT

12 TONS

## DRIVE

ELECTRIC

## INSTALLED POWER

|  |                   |
|--|-------------------|
| TOTAL                                  | 63.5 KW           |
| DRIVE                                  | 51.5 KW           |
| LIGHTS                                 | 12 KW             |
| VOLTAGE                                | 3 PHASE + NEUTRAL |
| (OTHER SOLUTIONS HAVE TO BE CONFIRMED) |                   |

## SHIPPING INFORMATION

|           |             |
|-----------|-------------|
| CONTAINER | 2 x 40 O.T. |
|-----------|-------------|

## LARGEST COMPONENTS

|              |                            |
|--------------|----------------------------|
| BOAT         | 9 MT. x 2.2 MT. x 2.2 MT.  |
| SUPPORTS     | 12 MT. x 0.3 MT. x 0.3 MT. |
| MOTORIZATION | 8 MT. x 1.2 MT. x 2.2 MT.  |

## ERECTION WORKS

- \*NO. 2 SUPERVISORS FOR 3 DAYS
- \*CRANE: HEIGHT x TONS x LENGTH OF THE ARM  
16 MT. x 20 TONS x 6 MT.
- \*CRANE: HEIGHT x TONS x LENGTH OF THE ARM  
10 MT. x 10 TONS x 6 MT.
- \*DEPENDS ON SITE CONDITIONS AND WORK FORCE AVAILABLE

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

DATE: 06/91

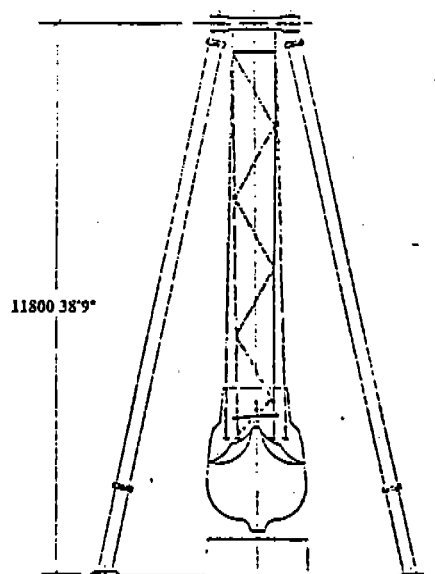
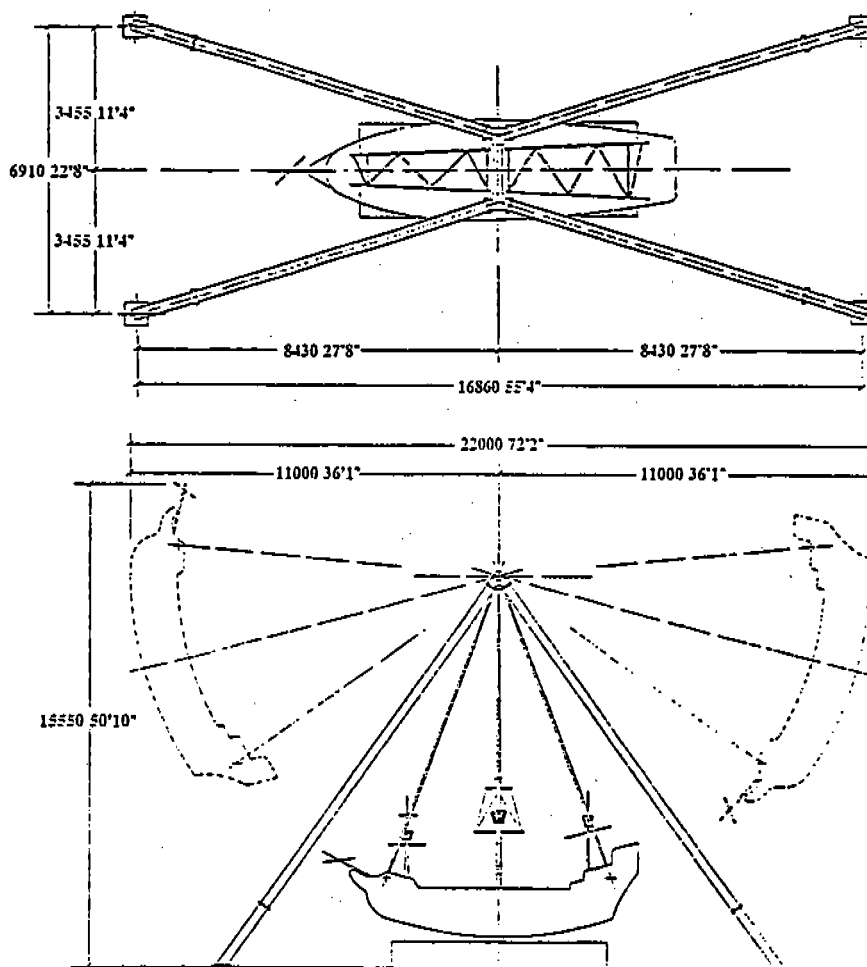


AMUSEMENT RIDES MANUFACTURERS

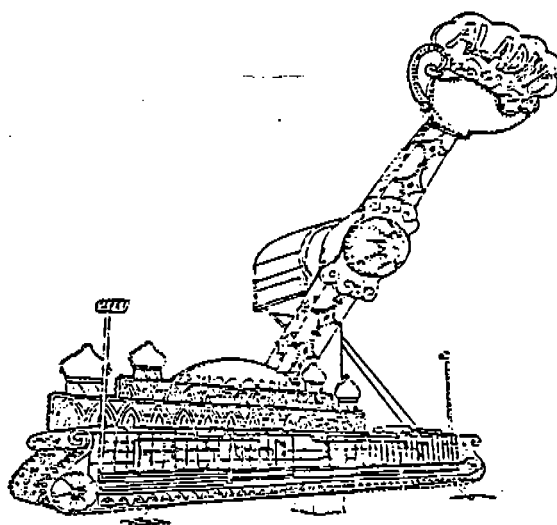
ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 Fanny Road, P.O. Box 5545  
Paramus, N.J. 07654-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



# JOKER



## DESCRIPTION

THE ADULT RIDE JOKER PARK MODEL IS OUR VERSION OF FLYING CARPET WITH ONLY ONE COLUMN FOR SUPPORT AND A PLATFORM WITH 34 ADULT SEATS, REACHING THE HEIGHT OF 21 MT.

THIS RIDE IS A REAL PROMISE OF EXCITEMENT AND THRILLS. TAKING ITS RIDERS UP TO A MAXIMUM HEIGHT OF 21 MT. THE JOKER THEN FALLS DOWN; PASSENGERS EXPERIENCE THIS MOVEMENT IN EITHER CLOCKWISE OR COUNTERCLOCKWISE ROTATION, OR BOTH DEPENDING ON THE OPERATOR.

THE RIDE CAN ALSO BE STOPPED IN MID-AIR, WHERE THE RIDERS CAN ENJOY THE VIEW BEFORE BEING BROUGHT BACK DOWN TO THE GROUND.

THE TRANSMISSION IS MADE BY 3 D.C. MOTORS COMPLETE WITH A GEAR BOX. THE SEATS ARE PROVIDED WITH SAFETY BARS CONTROLLED BY AN HYDRAULIC SYSTEM.

FENCES ON PERIMETER ARE INCLUDED. THE PLATFORM AREA IS MADE BY A METALLIC STRUCTURE COVERED BY ALUMINIUM SHEETS, STAIRS AND FENCES WHICH ALL TOGETHER FORM THE PODIUM.

PAINTED PANELS COVER THE FRONT, LOWER SPACE UNDER THE PODIUM. THEMED TICKET BOX, CONTROL BOARD AND ELECTRIC PANEL ARE INCLUDED.

THE RIDE IS LIT BY 8 STARS AND A ROW OF LIGHTS ON THE BACK SCENERY. CAPSON LIGHTS DECORATE THE ARMS, THE PLATFORM AND JOKER SIGN.

FOUNDATIONS ARE NEEDED FOR CENTRAL COLUMN SUPPORTS.

## OTHER VERSION

- TRAILER MODEL COMES ON 2 TRAILERS WITH A HYDRAULIC DRIVE SYSTEM THE JOKER HAS THE SAME CHARACTERISTICS AS ABOVE, EXCEPT IT IS 19 MT. HIGH.
- DIFFERENT THEMED MODELS ARE NIAGARA, EAGLE, MONKEY AND ALADINO.

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 34                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 2550 KG.                 |
| MINIMUM PASSENGER HEIGHT           | 105 CM.                  |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |
| MAXIMUM UNBALANCE                  | 17 ADULTS (1275 KG.)     |

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE-COUNTERCLOCKWISE |
| RIDE SPEED                  | 10 RPM.                    |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED)      |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED)        |
| HOURLY CAPACITY             | 700                        |
| OPERATOR                    | 1                          |

MAXIMUM RIDE WEIGHT 30 TONS.

DRIVE ELECTRIC

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 183 KW.           |
| DRIVE   | 166 KW.           |
| LIGHTS  | 17 KW.            |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 3x40 O.T.

## LARGEST COMPONENTS

|                   |                           |
|-------------------|---------------------------|
| PLATFORM 2 PIECES | 8 MT. x 2 MT. x 1.2 MT.   |
| CENTER            | 3 MT. x 2.5 MT. x 2.2 MT. |
| ARMS              | 7 MT. x 1.5 MT. x 0.8 MT. |
| COLUMN            | 8.6 MTS x 1 MT. x 1       |
| BALANCE WEIGHT    | 1 MT. x 2.2 MT. x 1.2 MT. |

## ERECTION WORKS

- \*NO. 2 SUPERVISORS FOR 5 DAYS WITH A TEAM OF 2 LOCAL MEN
- \*CRANE: HEIGHT x TONS x LENGTH OF THE ARM
- 20 MT. x 60 TONS. x 6 MT.
- \*DEPEND ON SITE CONDITIONS AND WORK FORCE AVAILABLE

DATE: 06/91

**ZAMPERLA**

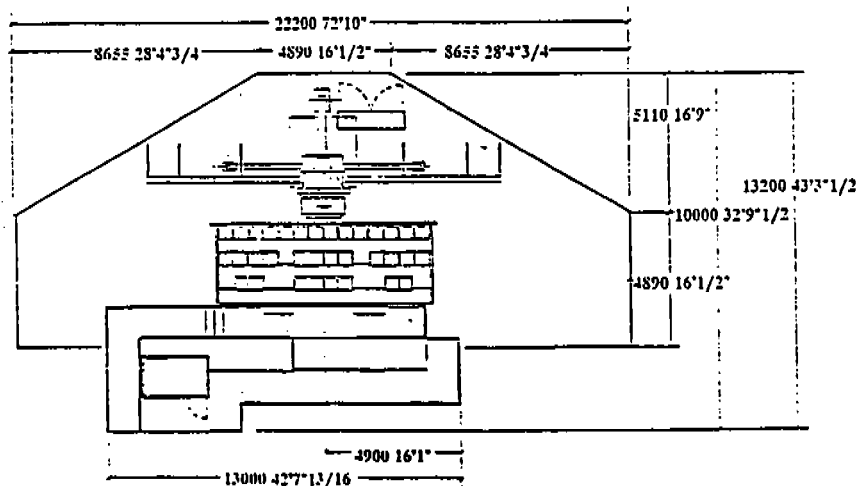
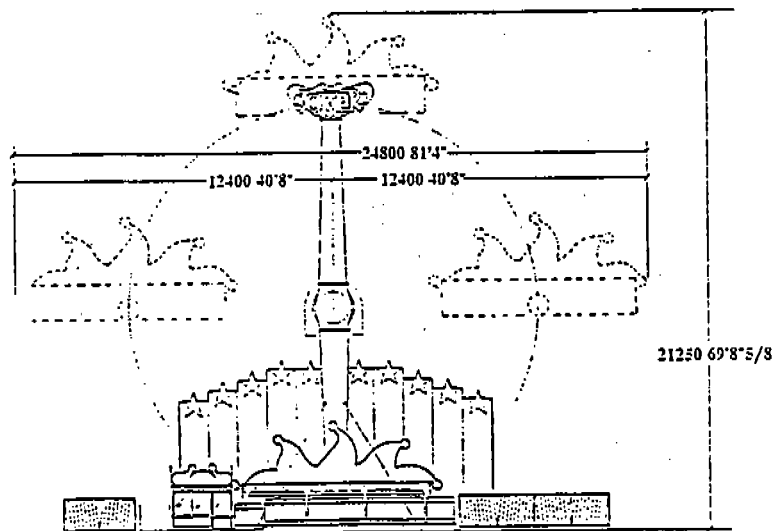
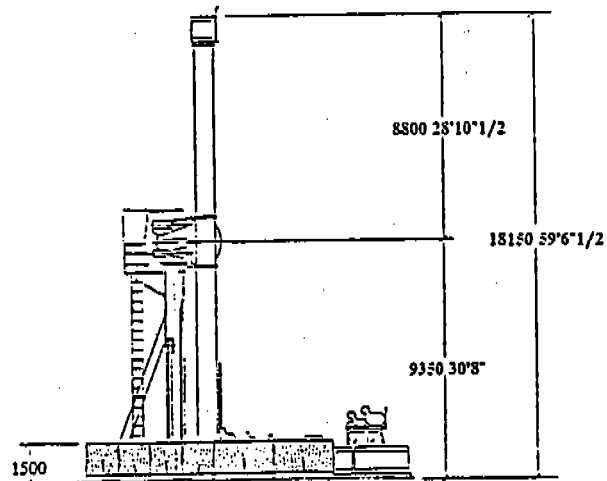
AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC.(VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

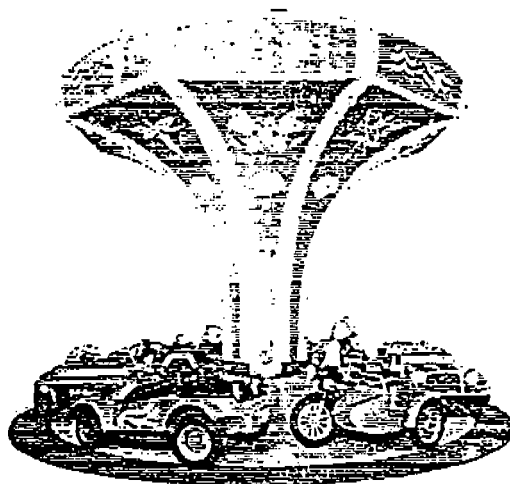
ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

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

# DIMENSIONS



# MAGIC RING



## DESCRIPTION

OUR CHILDREN RIDE MAGIC RING PARK MODEL HAS 8 BIG AND 8 SMALL HORSES, FOR A TOTAL CAPACITY OF 16 CHILDREN. THIS IS A SMALL DIAMETER RIDE, SUITABLE FOR INDOOR AMUSEMENT PARKS AND SHOPPING CENTRES. ITS CENTRAL STRUCTURE IS COVERED BY FIBERGLASS PANELS WITH DECORATIONS AND LIGHTS ON THE JUNCTIONS.

THE FLOOR IS COVERED WITH WOOD BOARDS AND THE ROOF WITH A COLOURED PVC CANVAS.

THE CENTRAL STRUCTURE AND THE PLATFORM ROTATE ALL TOGETHER IN A CLOCKWISE DIRECTION.

THE DRIVE SYSTEM IS MADE OF A A.C. MOTOR COUPLED WITH A GEAR BOX AND THE ROTATION IS GIVEN BY A SERIES OF WHEELS LOCATED UNDER THE PLATFORM.

THE HORSES HAVE A ROCKING MOVEMENT ON RUBBER BUFFER.

ELECTRIC PANEL AND REMOTE CONTROL ARE INCLUDED.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- FENCES ON PERIMETER.
- TICKET BOX.

## OTHER VERSION

- MODEL WITH 6 CARS: 1 DUNE BUGGY, 1 SPITFIRE, 1 BUGATTI, 1 JEEP, 2 SIDECARS FOR A TOTAL CAPACITY OF 22 CHILDREN. FIXED PLATFORM. CARS JOINED TO THE ROTATING CENTER BY A SMALL ARM.
- TRAILER MODEL.

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 16                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 600 KG.                  |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |

## PERFORMANCE

|                             |           |
|-----------------------------|-----------|
| DIRECTION OF TRAVEL         | CLOCKWISE |
| RIDE SPEED                  | 6 RPM.    |
| RIDE DURATION (MAXIMUM)     | 3 MIN.    |
| RIDE DURATION (RECOMMENDED) | 2.5 MIN.  |
| HOURLY CAPACITY             | 400       |
| OPERATOR                    | 1         |

MAXIMUM RIDE WEIGHT 3.3 TONS.

DRIVE ELECTRIC

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 3 KW.             |
| DRIVE   | 1 KW.             |
| LIGHTS  | 2 KW.             |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 1x20 O.T.

## ERECTION WORKS

\*No. 1 SUPERVISOR FOR 1 DAY

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

DATE: 06/91



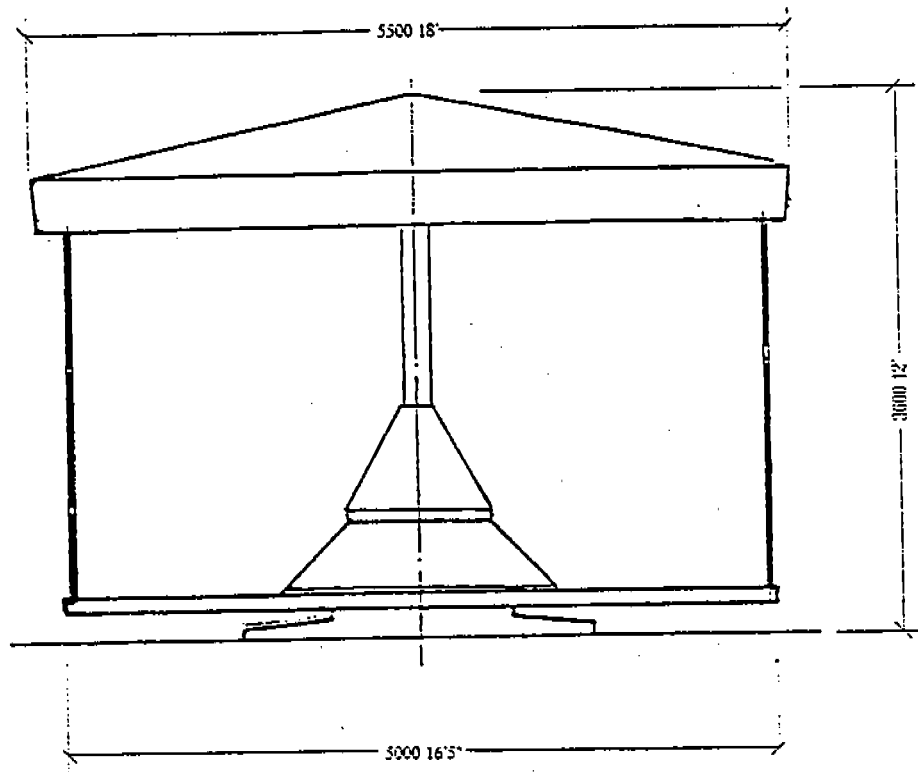
AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

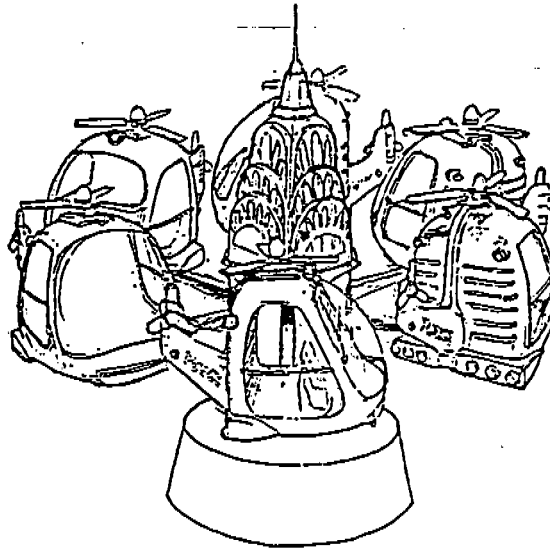
ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880



# DIMENSIONS



# MANHATTAN TOUR



## DESCRIPTION

MANHATTAN TOUR IS A SMALL RIDE SPECIALLY DESIGNED FOR SMALL LOCATIONS WITH 6.5 MT. DIAMETER WITH FENCES.

THE STANDARD VERSION HAS 6 HELICOPTERS FOR A TOTAL CAPACITY OF 24 CHILDREN SEATS.

EACH CAR IS PROVIDED WITH SOUND AND LIGHTS AND ONE STRIP OF LIGHTS ON EACH ARM. CENTRAL HYDRAULIC SYSTEM WITH SIMULTANEOUS LIFTING OF 6 CARS.

CENTRE OF THE RIDE REPRESENTS THE EMPIRE STATE BUILDING.

FENCES AROUND PERIMETER, ELECTRIC PANEL AND REMOTE CONTROL ARE INCLUDED.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- DIFFERENT CARS
- PLATFORMS.
- TICKET BOX.

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 24                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 1800 KG.                 |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |
| MAXIMUM UNBALANCE                  | 12 CHILDREN              |

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                  |
| RIDE SPEED                  | 6 RPM.                     |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIME) |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIME)   |
| HOURLY CAPACITY             | 600                        |
| OPERATOR                    | 1                          |

MAXIMUM RIDE WEIGHT 1.3 TONS.

## INSTALLED POWER

|         |                                   |
|---------|-----------------------------------|
| TOTAL   | 3 KW.                             |
| DRIVE   | 2.2 KW.                           |
| LIGHTS  | 0.8 KW.                           |
| VOLTAGE | 3 PHASE + NEUTRAL<br>SINGLE PHASE |

## SHIPPING INFORMATION

CONTAINER 1x20 O.T.

## ERECTION WORKS

NO. 1 PERSON FOR 3 HOURS.

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

DATE: 06/91



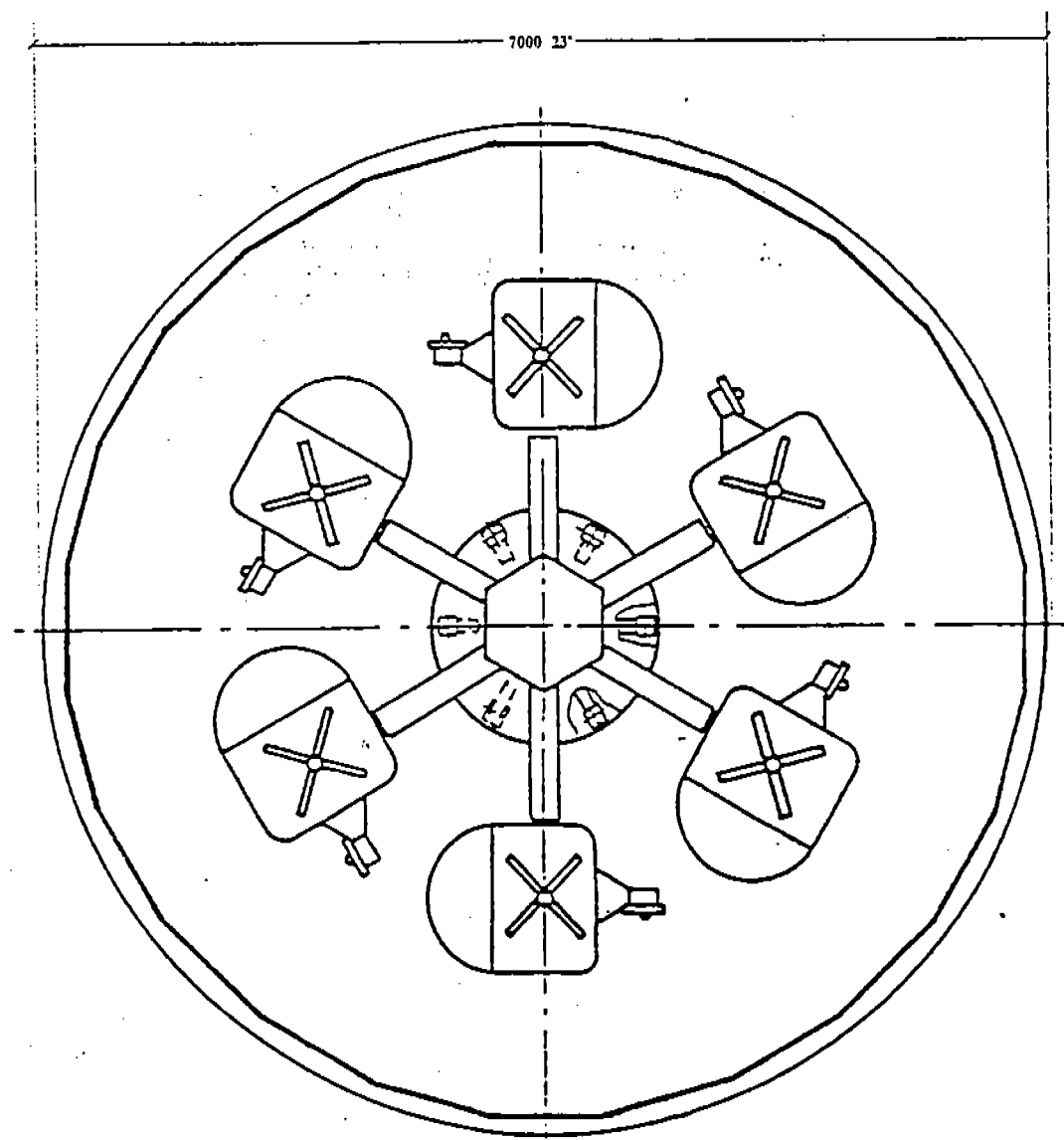
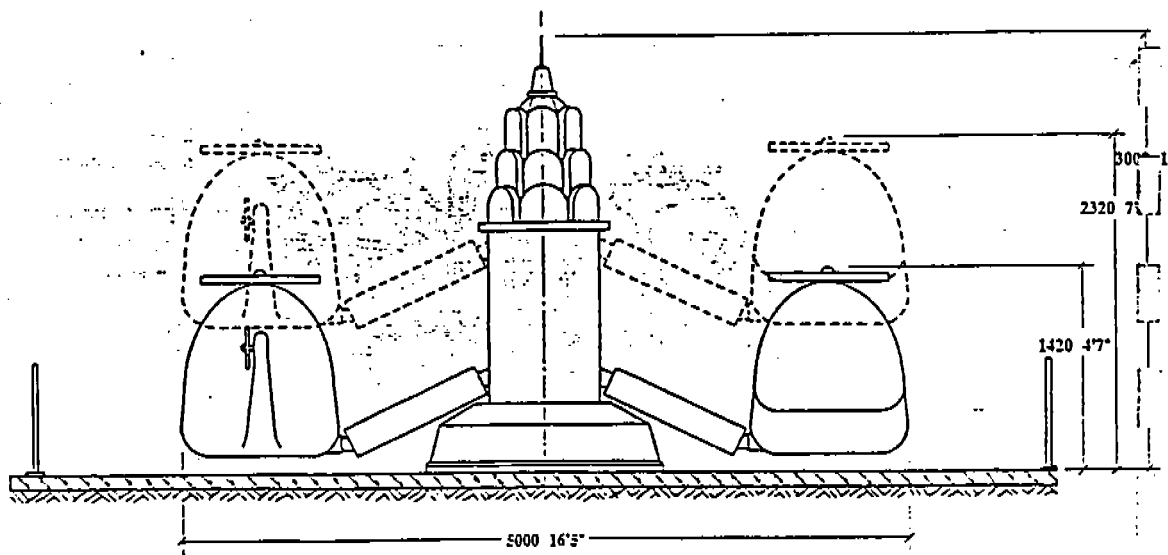
# ZAMPERLA

AMUSEMENT RIDES MANUFACTURERS

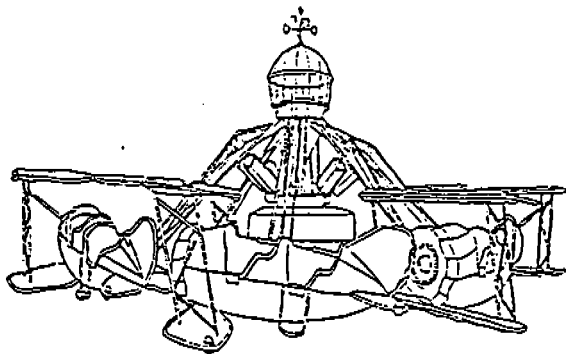
ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15.17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



# MINI JET 6 RED BARON



## DESCRIPTION

OUR CHILDREN RIDE MINI JET 6 RED BARON PARK MODEL COMES STANDARD WITH 6 RED BARON AIRPLANES OF 3 SEATS EACH FOR A TOTAL CAPACITY OF 18 CHILDREN.

THE RIDE ROTATES BY MEANS OF A A.C. MOTOR COUPLED WITH A GEAR BOX AND THE ARMS ARE LIFTED BY A PNEUMATIC SYSTEM.

THE STRUCTURE IS VARNISHED AND THE ARMS ARE ZINC-COATED.

THE RIDE COMES STANDARD WITHOUT PLATFORMS AND POST BEACONS BUT WITH FENCES ON THE PERIMETER.

EACH AIRPLANE IS EQUIPPED WITH SOUND, INDIVIDUAL LIFTING CONTROL HANDLES IN FRONT AND REAR SEAT AND A MACHINE-GUN.

CONTROL BOARD AND ELECTRIC PANEL ARE INCLUDED.

EACH ARM IS PROVIDED WITH A LIGHT STRIP, THE CENTER BOWL HAS A LIGHTED CAPSON DECORATION AND EACH CAR IS PROVIDED WITH LIGHTS.

FOUNDATIONS ARE NOT REQUIRED.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- DIFFERENT CARS CAN SUBSTITUTE THE ABOVE MENTIONED:
- 2 SEATS: DRAGON PETER PAUL, BEE, ELEPHANT, LADY BUG
- 3 SEATS: SPACE SHUTTLE
- 4 SEATS: HELICOPTER, TURTLE, SHADO, GOLDRAKE, AIRPLANE, UFO.
- TICKET BOX
- MINI JET SIGN
- PLATFORMS WITH POST BEACON.

## OTHER VERSION

- TRAILER MODEL WITH SAME CHARACTERISTICS AS ABOVE
- SHORT SWEEP MODEL FOR SHOPPING CENTERS.
- MINI JET 8 RED BARON.
- MINI AWO 10 RED BARON

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 18                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 600 KG.                  |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |
| MAXIMUM UNBALANCE                  | 9 CHILDREN               |

## PERFORMANCE

|                             |                             |
|-----------------------------|-----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                   |
| RIDE SPEED                  | 6.5 RPM.                    |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIMER) |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIMER)   |
| HOURLY CAPACITY             | 360                         |
| OPERATOR                    | 1                           |

MAXIMUM RIDE WEIGHT 3,6 TONS.

DRIVE ELECTRIC

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 6.5 KW.           |
| DRIVE   | 5 KW.             |
| LIGHTS  | 1.5 KW.           |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 1 x 20 O.T.

## ERECTION WORKS

NO. 1 PERSON FOR 4 HOURS

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

DATE: 06/91

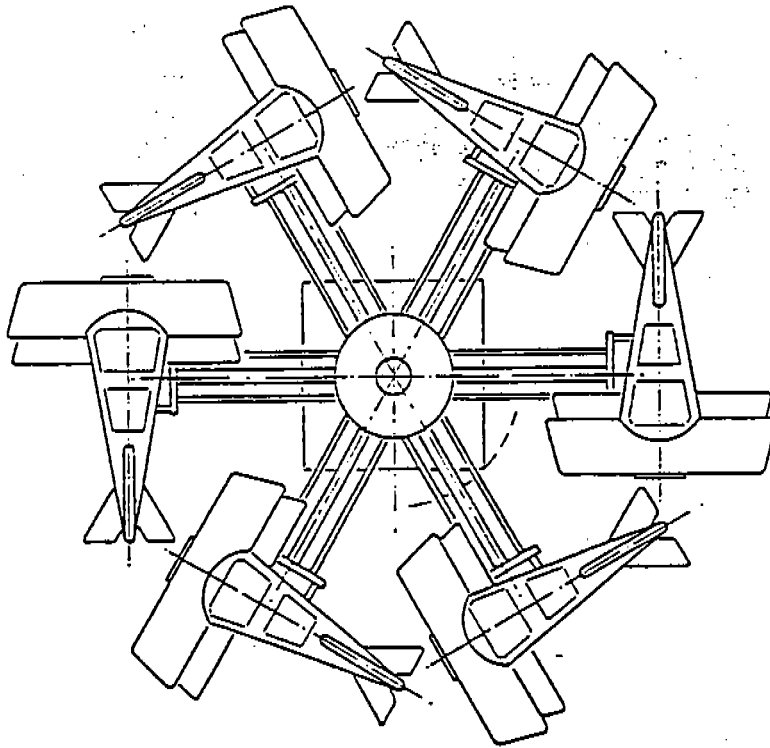
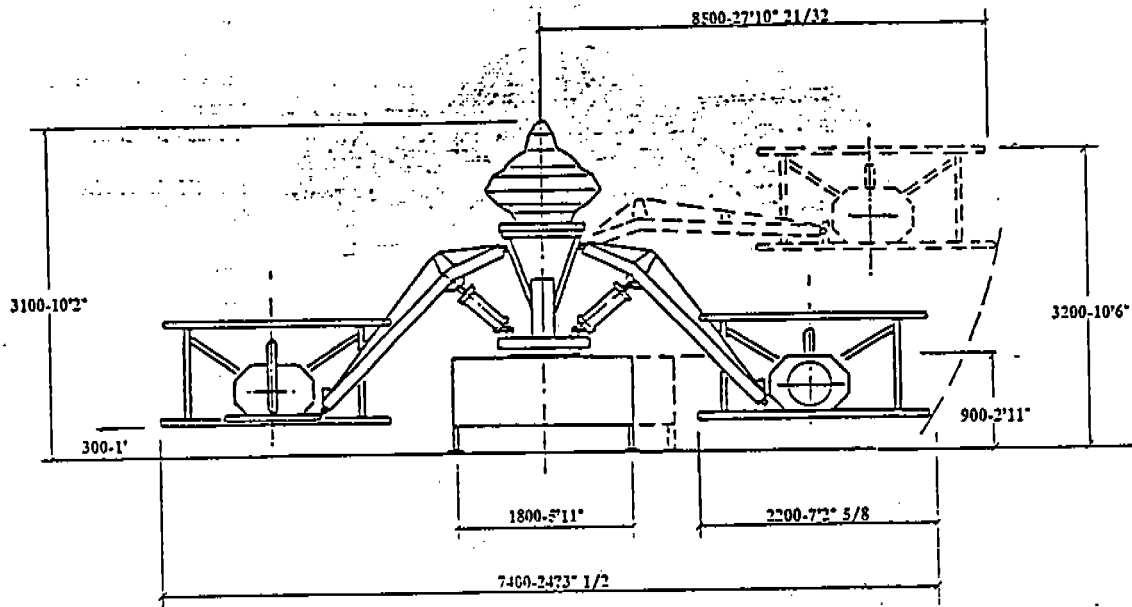
**ZAMPERLA**

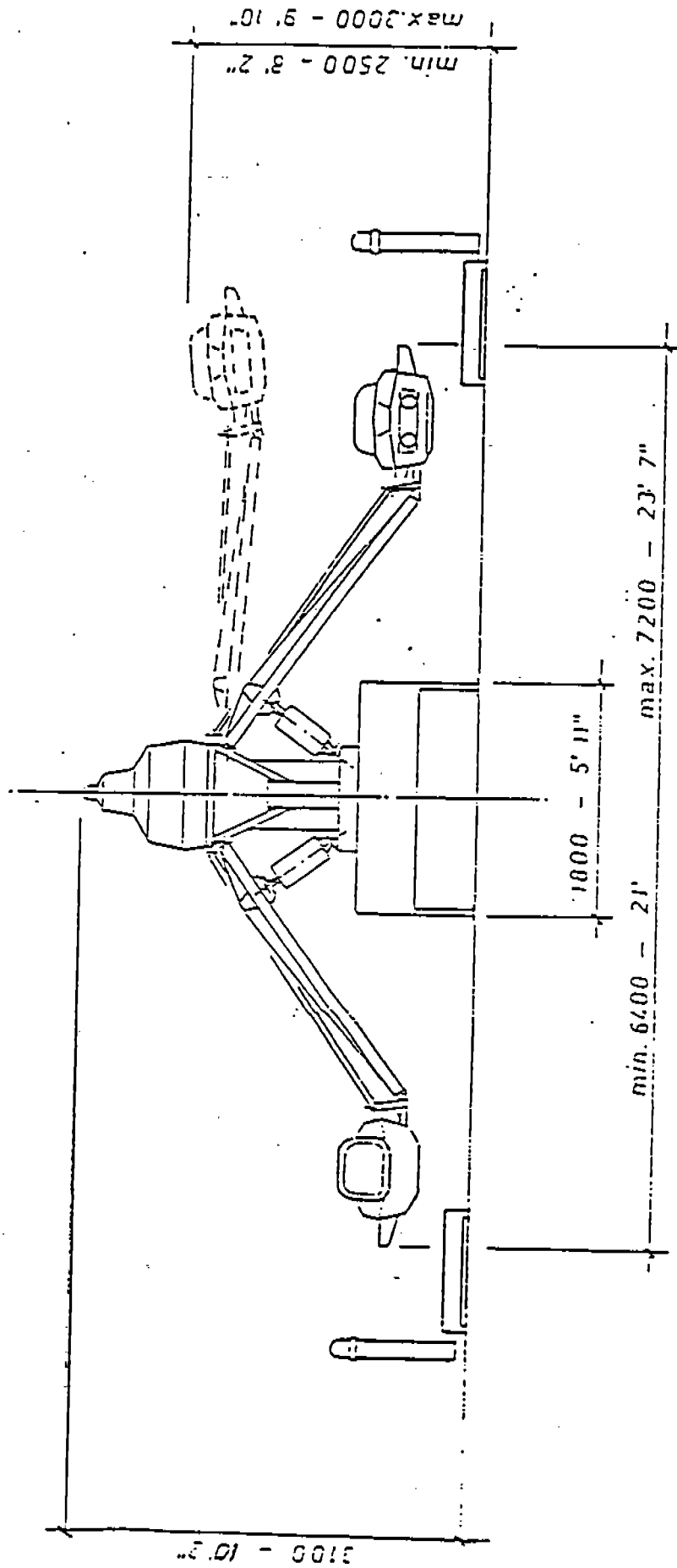
AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX. 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSHIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS





MINI-JET WITH UFO's/PETER PAUL DRAGONS/ELEPHANTS/OR SHADOW CARS

POWER REQUIREMENTS: 5 Kw MOTIVE 2 Kw LIGHTING

VEHICLE LOADING: 2/4 children/ VEHICLE 330lbs./VEHICLE

# Zamperla Inc.

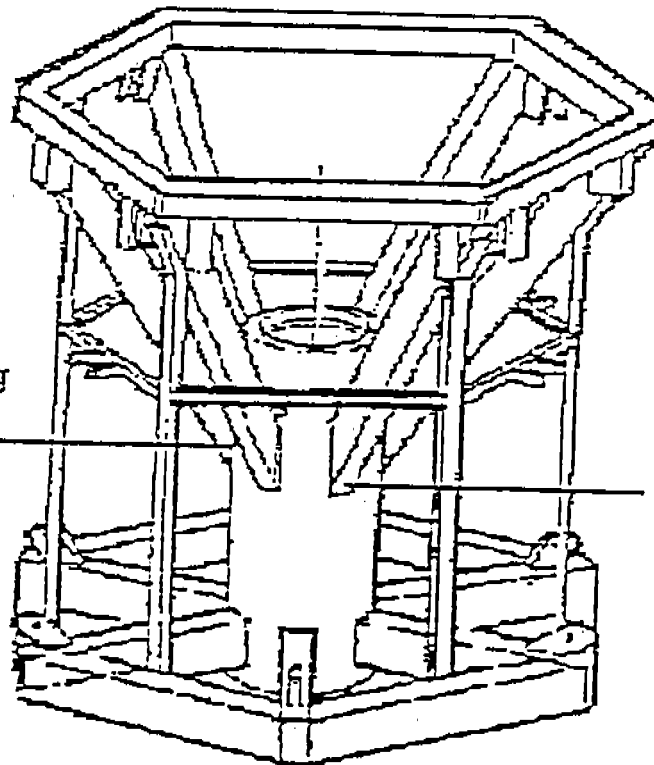
## Maintenance Bulletin

February 1990

RE: Freeze Damage Mini-Jet Center

Several Mini-Jet centers have experienced freeze damage when water has collected in the vertical rectangular tubing and frozen. Please inspect your Mini-Jet center piece for this condition. If your ride doesn't have weep holes in this area drill a 1/4" hole as shown in each rectangular tube. If there is damage to the tubing, the only recommended repair is replacement of the tube. There is no danger from swelling of the tube as long as there is no cracking present. Swollen tubes should be replaced as soon as possible, (do not attempt to heat and straighten swollen tubes) cracked tubing must be replaced before operating the ride.

Tubes experiencing  
freeze damage



Drill 1/4"  
hole in lowest  
point of each  
tube

Rene Bernier  
Customer Service Manager

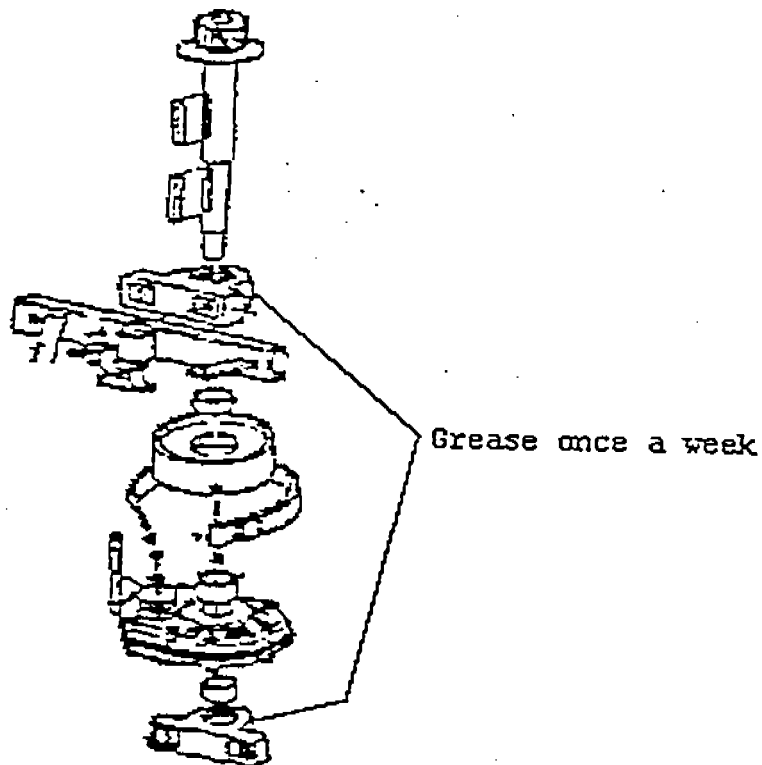
# Zamperla Inc.

## Technical Update

February 1990

### RE:Greasing Mini-Jet Pinion Shaft Bearings

The Maintenance section of the Mini-Jet owners manual does not include instructions for lubricating the drive unit. There are two pillow block bearings that support the pinion gear / gearbox unit. These bearings should be greased once a week with a medium consistency wheel bearing grease. The grease fittings are accessible from under the ride.



Rene Bernier  
Customer Service Manager

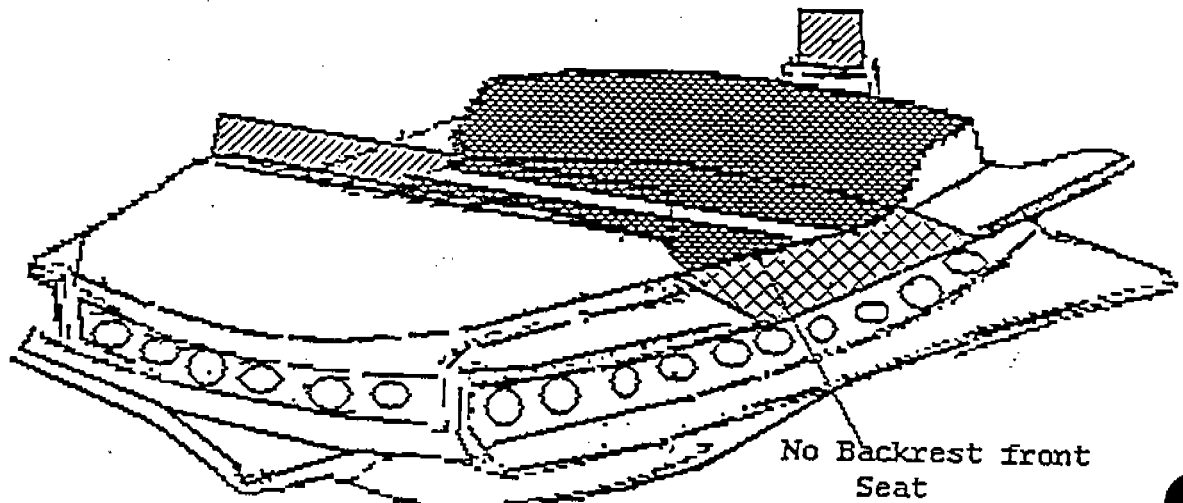


# Zamperla Inc.

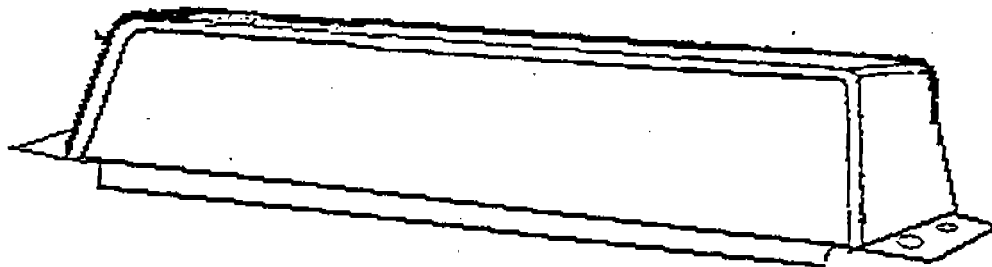
## Technical Update

February 1990

RE:UFO Mini-Jet Vehicle Seat Backrest



Add on Backrest for Mini-Jet UFO Vehicle



Zamperla now has available an add on seat back for the UFO vehicle. This is the direct result of a few state inspectors RED TAGGING this particular vehicle. We offer this seat back to our customers at cost plus shipping. This is not considered a mandatory modification by Zamperla. If you operate this style of vehicle on your ride, and would like to purchase this option, please contact our parts department. Allow 60 days for delivery please.

Rene Bernier  
Customer Service Manager

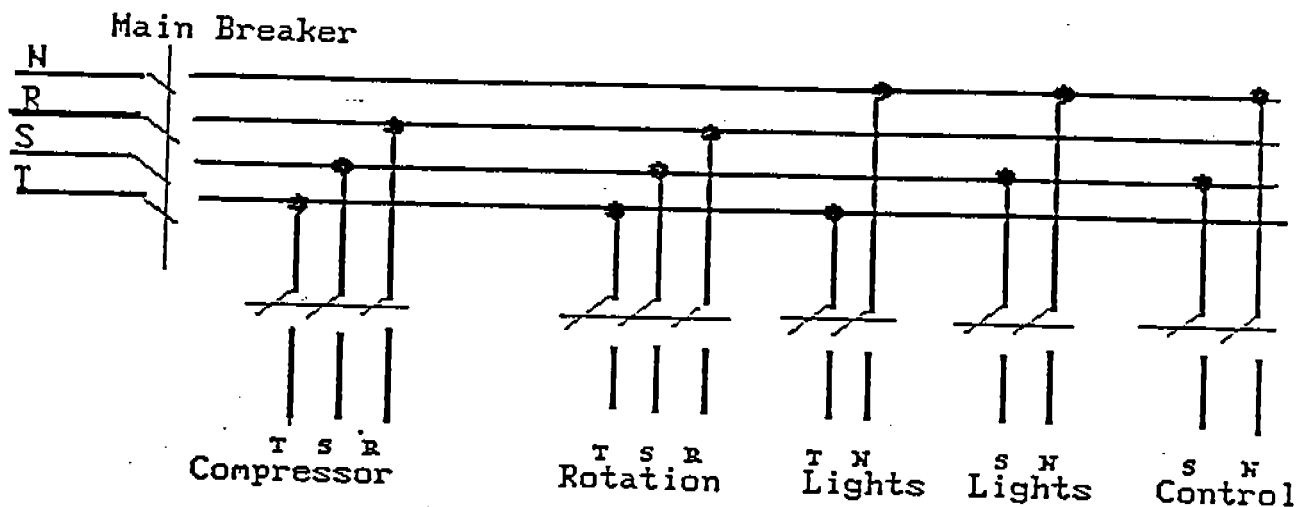
# Zamperla Inc.

## Maintenance Bulletin February 1990

RE: Bulletin 1/89 Mini-Jet Power Connection (HIGH LEG)

The Mini-Jet Owners/operators manual specifies the S phase as the proper location for the High LEG if one is encountered. During 1988 we delivered 2 rides that were wired in such a way that this was incorrect. As a result of this we are asking all Mini-Jet operators to verify the correct connection before operating with a high leg. Failure to do so will result in excessive voltage in one of the lighting circuits the control circuit or both.

To identify the correct location examine the line side of the circuit breakers. The rotation and compressor breakers will have all three phases present. The lighting and control breakers will have a combination of TWO of the THREE phases. The one phase that DOESN'T show up at the lighting or control breakers is where you can safely attach the "HOT LEG".



In this example R would be the correct place to attach a "HOT LEG".

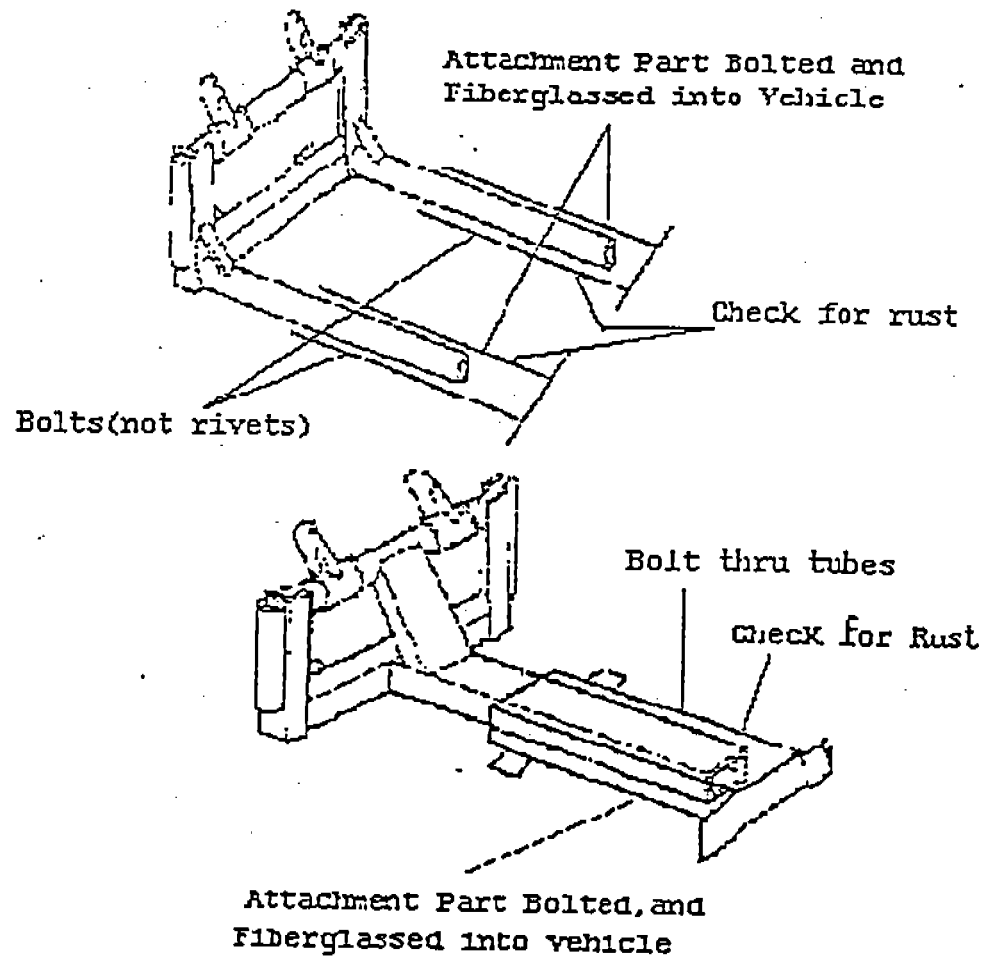
Rene Bernier  
Customer Service Manager

# Zamperla Inc.

## Maintenance Bulletin February 1990

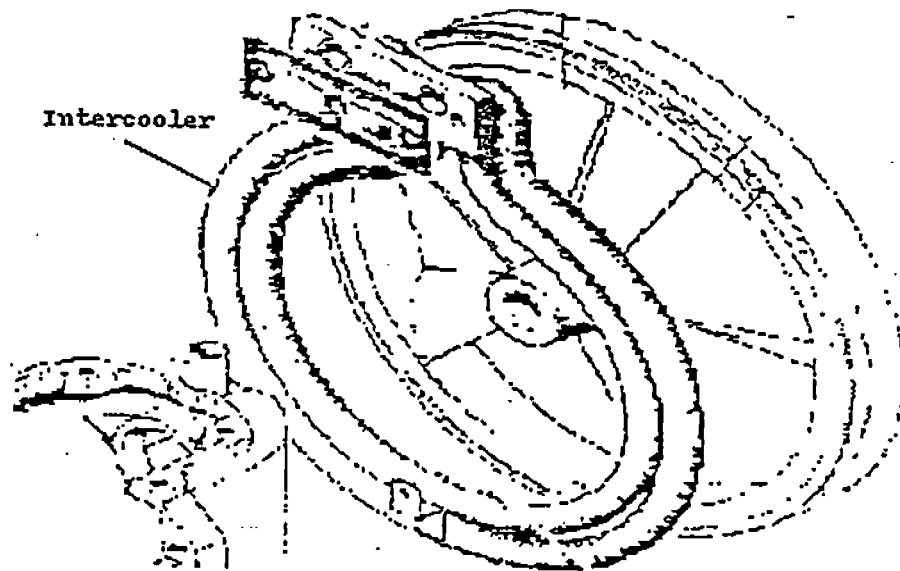
RE: Bulletin 1/87 Mini-Jet/Mini-Telecombat Vehicle attachment

During the fall of 1986 we were alerted by a customer of improper attachment of a vehicle on a Mini-Jet. The Vehicle was riveted to the support frame rather than bolted. A Maintenance Bulletin was issued at that time, and no other incidences have been reported. Of more importance at this time is the issue of the outer tube (fiberglassed and bolted into the vehicle) which the support frame slides into rusting. Inspection of this tube should be performed on a yearly basis. Most vehicles will require the removal of the floor plate to facilitate this inspection. The only approved method of repair is replacement of the tube. Please contact our service department for instructions on how to make this repair, and to order replacement components.



Rene Bernier  
Customer Service Manager

Zamperla Inc.  
Technical Update February 1990  
RE:Mini-Jet Compressor



The original Mini Jet Compressor Has Been Discontinued by the Manufacturer. This compressor can be identified by the Intercooler located behind the flywheel. The original has only two rings. The NEW style (original equipment on Mini Jet Red Baron+Mini Jet 8) Has a Three Ring intercooler. Some MODIFICATION is required to the original compressor mount.

Service parts will only be available while supplies last. If you anticipate problems with your original 2 ring compressor I strongly urge you to contact Zamperla concerning supplies of parts or replacement compressors.

Rene Bernier  
Customer Service Manager

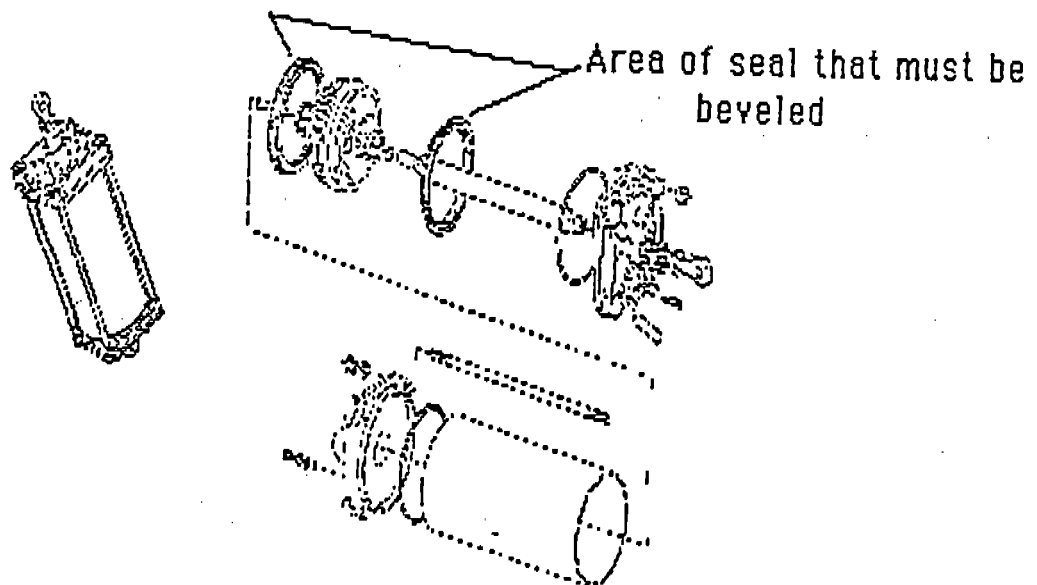
# Zamperla Inc.

## Technical Update

January 1991

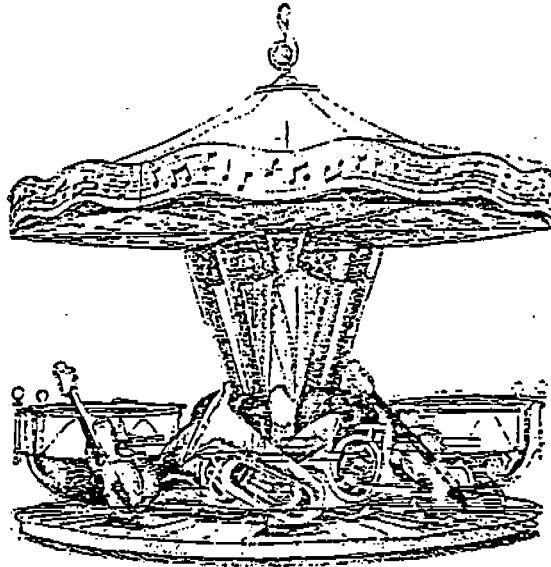
### RE: Mini-Jet Air Cylinders (Noise)

Several Mini-Jet rides delivered during 1990 have developed a groaning noise accompanied by a vibration during operation. The cause has been found to be an error in the molding of the piston seals. The edge of the seal that contacts the cylinder wall is supposed to have a  $1/16"$  45 degree bevel. The incorrectly molded seals have a knife edge that scrapes the lubrication off the cylinder wall causing the piston to bind as well as produce the noise. The condition may be corrected by disassembling the cylinder and carefully beveling the edge of the seal with a medium pitch file. The cylinder should be reassembled using SAE 90 gear oil as an assembly lubricant.



Rene Bernier  
Technical Service Manager

# MINUETTO



## DESCRIPTION

OUR CHILDREN RIDE MINI MUSICAL RIDE PARK MODEL HAS A 5 MT. DIAMETER PLATFORM WITH TOTAL CAPACITY OF 18 SEATS.

THIS RIDE REPRODUCES A PIANO KEYBOARD WITH 10 SHINING MUSICAL INSTRUMENTS AS CARS. ITS BEAUTIFUL FINISH, SOUND AND LIGHT EFFECTS MAKE THIS RIDE ONE OF THE BEST AMONG OUR THEMED CHILDREN RIDE PRODUCTION.

THE DRIVE SYSTEM IS MADE OF A A.C. MOTOR COUPLED WITH A GEAR BOX AND THE ROTATION IS GIVEN BY A SERIES OF WHEELS LOCATED UNDER THE PLATFORM. THE PLATFORM IS COVERED WITH FIBERGLASS PANELS REPRODUCING A PIANO KEYBOARD, THE CENTRAL COLUMN IS DECORATED WITH MIRRORS AND GIANT MUSICAL NOTES IN FIBERGLASS.

THE ROOF IS COVERED WITH A PVC CANVAS. FIBERGLASS DECORATED PANELS ON THE CEILING AND ON ROOF PERIMETER LIGHTED WITH TWO ROWS OF CAPSON LIGHTS.

THE 10 CARS ARE THE FOLLOWING: 2 DRUMS - 5 SEATS EACH / 4 VIOLAS - 1 SEAT EACH / 2 TUBAS - 1 SEAT EACH / 2 HORNS - 1 SEAT EACH.

ALL CARS ARE BUFFER-ROCKING, EXCEPT FOR THE DRUMS WHICH TURN BY MEANS OF A MANUAL CENTRAL STEERING WHEEL. THE STANDARD VERSION OF THIS RIDE INCLUDES 6 LOUDSPEAKERS CONNECTED TO A DIGITAL MUSIC SYSTEM.

THE RIDE IS PROVIDED WITH ELECTRIC PANEL AND CONTROL SCARD.

A CONCRETE PLATFORM IS SUGGESTED AS FOUNDATIONS.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- STANDARD OR THEMED TICKET BOX WITH SIGN.
- FENCES ON PERIMETER.
- PLATFORM ON PERIMETER.
- 6 ADDITIONAL LOUDSPEAKERS, EACH WITH ITS OWN RECORDING PROGRAMMED BY A COMPUTER TO ALLOW EACH INSTRUMENT TO PLAY ITS OWN MUSIC AND CREATE A REAL ORCHESTRA EFFECT.

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 18                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 1350 KG.                 |
| MINIMUM PASSENGER HEIGHT           | 105 CM.                  |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |

## PERFORMANCE

|                             |                             |
|-----------------------------|-----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                   |
| RIDE SPEED                  | 5 RPM                       |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIMER) |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIMER)   |
| HOURLY CAPACITY             | 360                         |
| OPERATOR                    | 1                           |

MAXIMUM RIDE WEIGHT 3.2 TONS

DRIVE ELECTRIC

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 3 KW              |
| DRIVE   | 1.5 KW            |
| LIGHTS  | 1.5 KW            |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 1 x 20 O.T.

## LARGEST COMPONENTS

|        |                     |
|--------|---------------------|
| CENTER | Ø 1 MT. x 3 MT.     |
| DRUM   | Ø 1.4 MT. x 1.4 MT. |

## ERECTION WORKS

NO.1 SUPERVISOR FOR 1 DAY

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

DATE: 06/91

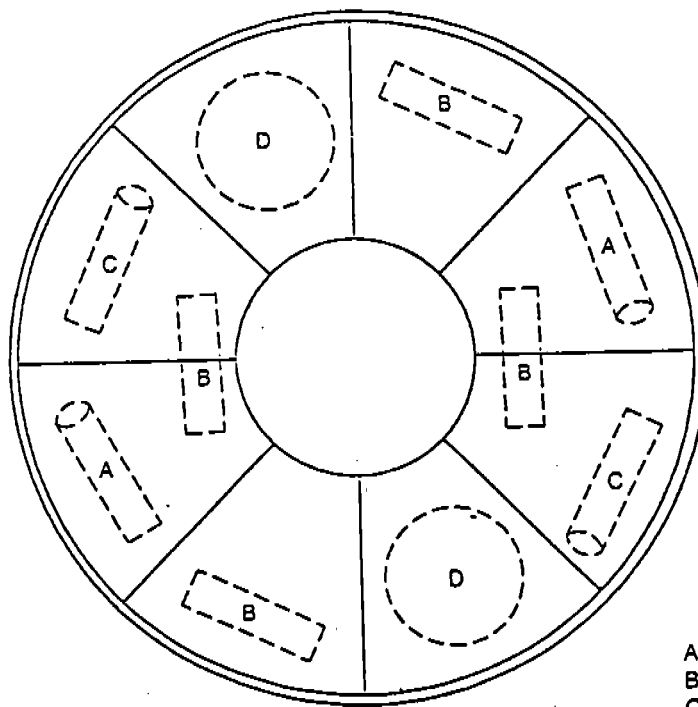
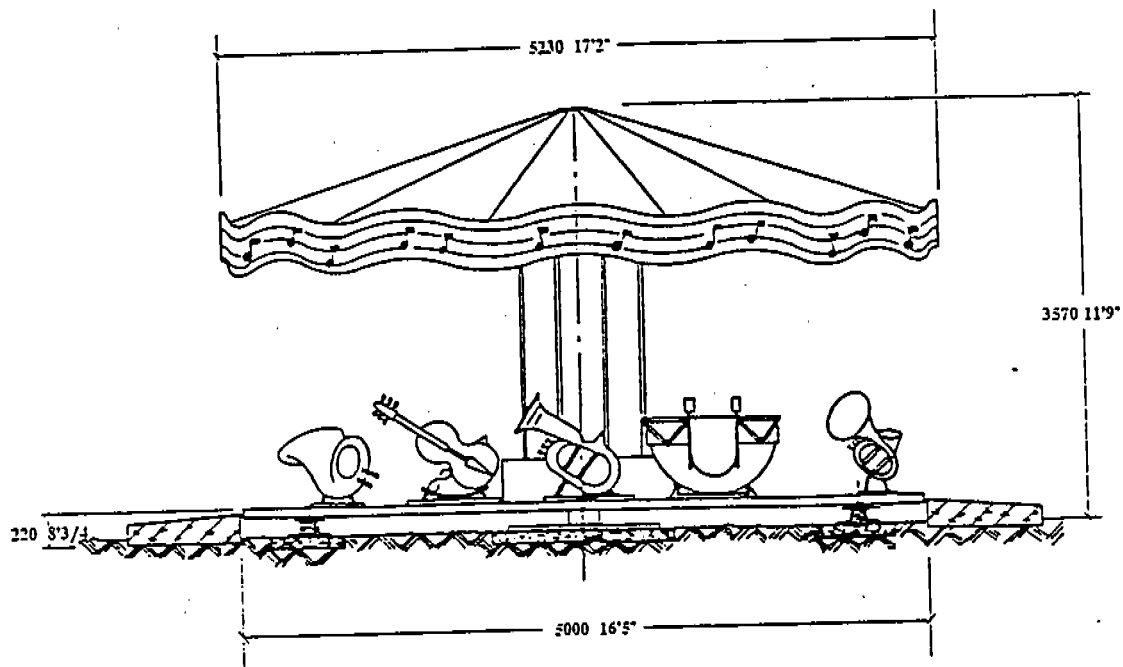


AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC.(VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL.(0444) 573133 FAX.573720  
TELEX 481499 ZAMPER I

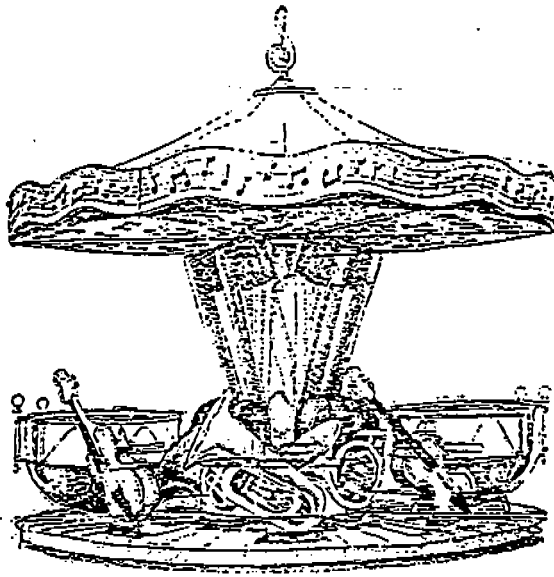
ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. BOX 5545  
PARSIPPANY N.J. 07054-0598  
PH.(201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



A = TUBAS  
 B = VIOLONS  
 C = CORS DE CHASSE  
 D = TAMBOURS

# MUSICAL CAROUSEL



## DESCRIPTION

OUR CHILDREN RIDE MUSICAL CAROUSEL PARK MODEL HAS A 8 MT. DIAMETER PLATFORM WITH TOTAL CAPACITY OF 28 SEATS.

THIS RIDE REPRODUCES A PIANO KEYBOARD WITH 20 SHINING MUSICAL INSTRUMENTS AS CARS. ITS BEAUTIFUL FINISH, SOUND AND LIGHT EFFECTS MAKE THIS RIDE ONE OF THE BEST AMONG OUR THEMED CHILDREN RIDE PRODUCTION.

THE DRIVE SYSTEM IS MADE OF A A.C. MOTOR COUPLED WITH A GEAR BOX AND THE ROTATION IS GIVEN BY A SERIES OF WHEELS LOCATED UNDER THE PLATFORM. THE PLATFORM IS COVERED WITH FIBERGLASS PANELS REPRODUCING A PIANO KEYBOARD, THE CENTRAL COLUMN IS DECORATED WITH MIRRORS AND GIANT MUSICAL NOTES IN FIBERGLASS.

THE ROOF IS COVERED WITH A PVC CANVAS. FIBERGLASS DECORATED PANELS ON THE CEILING AND ON ROOF PERIMETER LIGHTED WITH TWO ROWS OF CAPSON LIGHTS.

THE 20 CARS ARE THE FOLLOWING: 2 DRUMS- 5 SEATS EACH / 6 VIOLAS- 1 SEAT EACH / 6 TUBAS- 1 SEAT EACH / 6 HORNS- 1 SEAT EACH.

ALL CARS ARE BUFFER-ROCKING, EXCEPT FOR THE DRUMS WHICH TURN BY MEANS OF A MANUAL CENTRAL STEERING WHEEL. THE STANDARD VERSION OF THIS RIDE INCLUDES 12 LOUDSPEAKERS CONNECTED TO A DIGITAL MUSIC SYSTEM.

THE RIDE IS PROVIDED WITH ELECTRIC PANEL AND CONTROL BOARD.

A CONCRETE PLATFORM IS SUGGESTED AS FOUNDATIONS.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- STANDARD OR THEMED TICKET BOX WITH SIGN.
- FENCES ON PERIMETER.
- PLATFORM ON PERIMETER.
- 12 ADDITIONAL LOUDSPEAKERS, EACH WITH ITS OWN RECORDING PROGRAMMED BY A COMPUTER TO ALLOW EACH INSTRUMENT TO PLAY ITS OWN MUSIC AND CREATE A REAL ORCHESTRA EFFECT.

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 28                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 2100 KG.                 |
| MINIMUM PASSENGER HEIGHT           | 105 CM.                  |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                  |
| RIDE SPEED                  | 5 RPM                      |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIME) |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIME)   |
| HOURLY CAPACITY             | 700                        |
| OPERATOR                    | 1                          |

|                     |          |
|---------------------|----------|
| MAXIMUM RIDE WEIGHT | 6.8 TONS |
|---------------------|----------|

|       |          |
|-------|----------|
| DRIVE | ELECTRIC |
|-------|----------|

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 8.4 KW            |
| DRIVE   | 4 KW              |
| LIGHTS  | 4.4 KW            |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

|           |             |
|-----------|-------------|
| CONTAINER | 1 x 40 O.T. |
|-----------|-------------|

## LARGEST COMPONENTS

|        |                     |
|--------|---------------------|
| CENTER | Ø 1 MT. x 3 MT.     |
| DRUM   | Ø 1.4 MT. x 1.4 MT. |

## ERECTION WORKS

NO. 1 SUPERVISOR FOR 3 DAYS

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

DATE: 06/91

**ZAMPERLA**

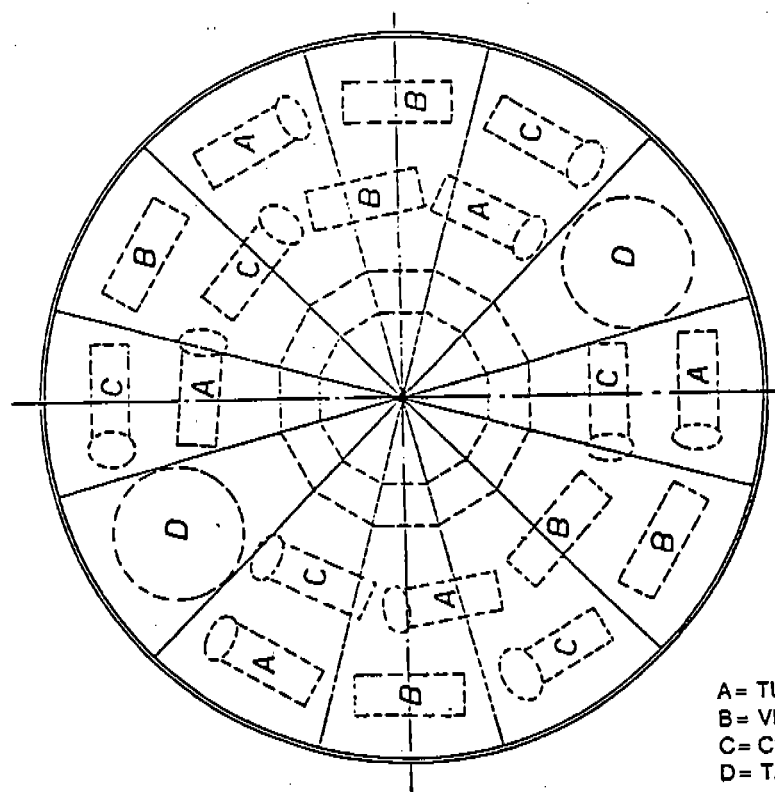
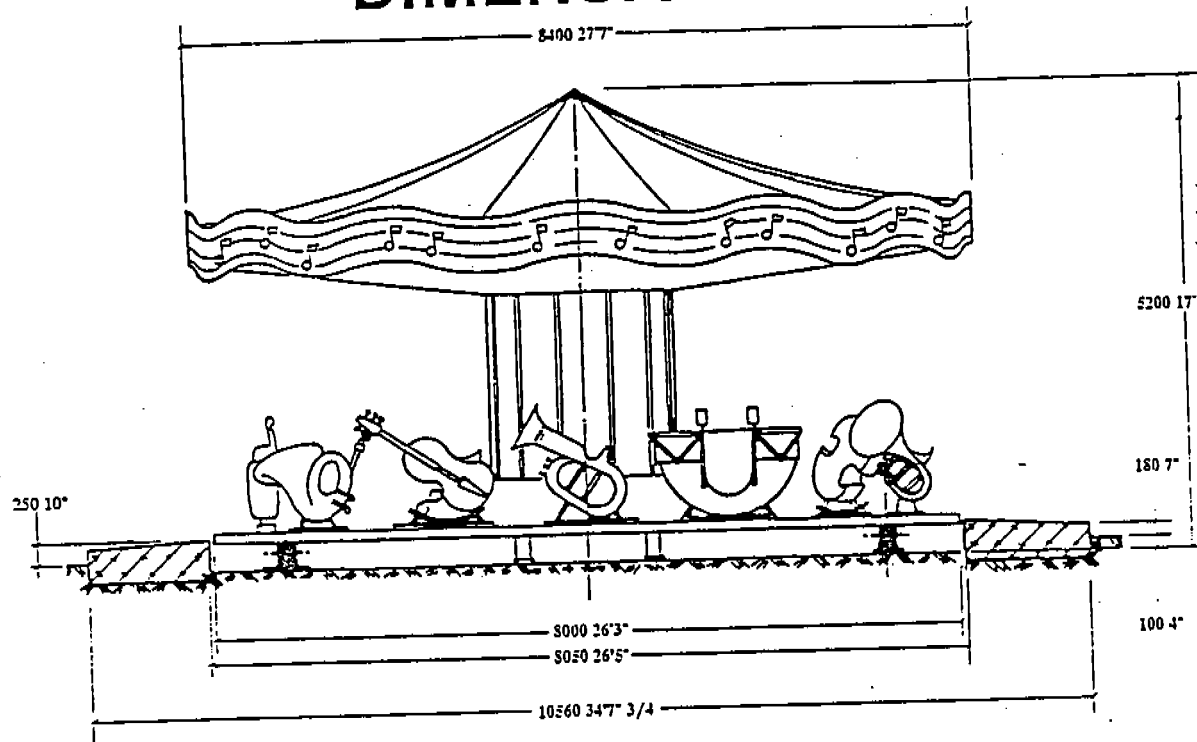
AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX. 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARISIPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

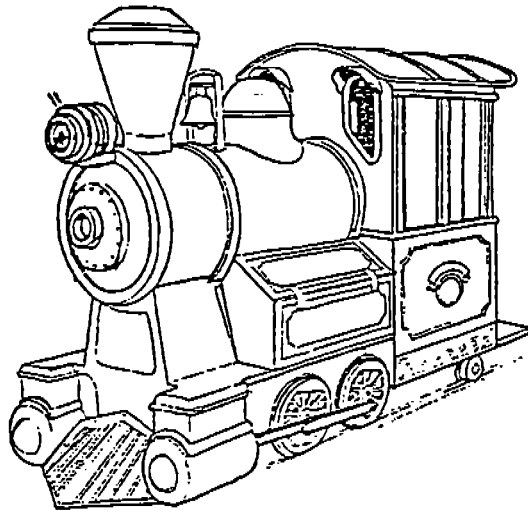


# DIMENSIONS



A = TUBAS  
 B = VIOLONS  
 C = CORS DE CHASSE  
 D = TAMBOURS

# RIO GRANDE



|                                    |   |
|------------------------------------|---|
| COMPOSED                           | 1 HEADCAR + 1 TENDER WAGON<br>1 PASSENGER + 1 GOODS WAGON |
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 25 CHILDREN   |
| DIRECTION OF TRAVEL                | CLOCKWISE   |
| MAX. SPEED                         | 7 KM/H  |
| HOURLY CAPACITY                    | 625   |
| OPERATOR                           | 1   |
| DRIVE                              | ELECTRIC  |
| INSTALLED POWER                    |   |
| TOTAL                              | 3 KW  |
| VOLTAGE                            | SINGLE PHASE  |
|                                    | (OTHER SOLUTION HAVE TO BE CONFIRM)                       |

## DESCRIPTION

OUR RANGE OF CHILDREN TRAINS INCLUDES THE RIO GRANDE, AN INTERMEDIATE SIZE TRAIN (ADULTS CAN RIDE WITH THEIR CHILDREN) WITH A NICE SEQUENCE OF DIFFERENT WAGONS PULLED BY AN OLD TIME HEADCAR, FOR A TOTAL CAPACITY OF 25 CHILDREN.

IT IS AVAILABLE WITH A TRACK DEVELOPMENT OF 44 MT. OF RAIL. THE TRAIN IS FORMED BY ONE HEADCAR - ONE TENDER WAGON - ONE PASSENGER - ONE GOODS WAGON, ALL EQUIPPED WITH 2 D.C. MOTORS EXCEPT THE HEADCAR WHICH HAS AN EXTRA MOTOR IN ORDER TO MOVE ITS IDLE WHEELS. ALL CARS HAVE A CHASSIS WITH 4 CAST IRON WHEELS TO WHICH IS CONNECTED THE FIBERGLASS BODY. THE TRACK IS FORMED BY 3 MT.- LONG STRAIGHT AND CURVED RAIL SECTIONS. THE RAIL IS MADE WITH PAINTED STEEL AND TARRED WOODEN SLEEPERS. EACH SEAT IS PROVIDED WITH A SAFETY BELT. FENCES ON PERIMETER ARE NOT INCLUDED. THE TRAIN COMES STANDARD WITH A SINGLE PHASE RECTIFIER WITH TIMER AND MICRO SWITCH WHICH ALLOWS THE NEGATIVE AND POSITIVE CONTACT WITH THE RAIL.

SPEED CAN BE ADJUSTED BY CHANGING THE POSITION OF THE OUTPUT CABLE ON THE MAIN TRANSFORMER.

## OPTIONALS (TO BE QUOTED ON REQUEST)

- SPACE TRAIN AND TYPE 501
- FENCES ON PERIMETER.
- TRAIN STATION SIGN.
- R.R. CROSSING.
- MUSHROOMS.
- ADDITIONAL WAGON/CABOOSE (PLUS 0.8 KW)
  - TENDER
  - GOODS WAGON
  - PASSENGER WAGON
  - CABOOSE
- ADDITIONAL RAIL, (3MT. EACH PIECE)

## SHIPPING INFORMATION

CONTAINER 1/3 of 40' O.T.

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

DATE: 06/91

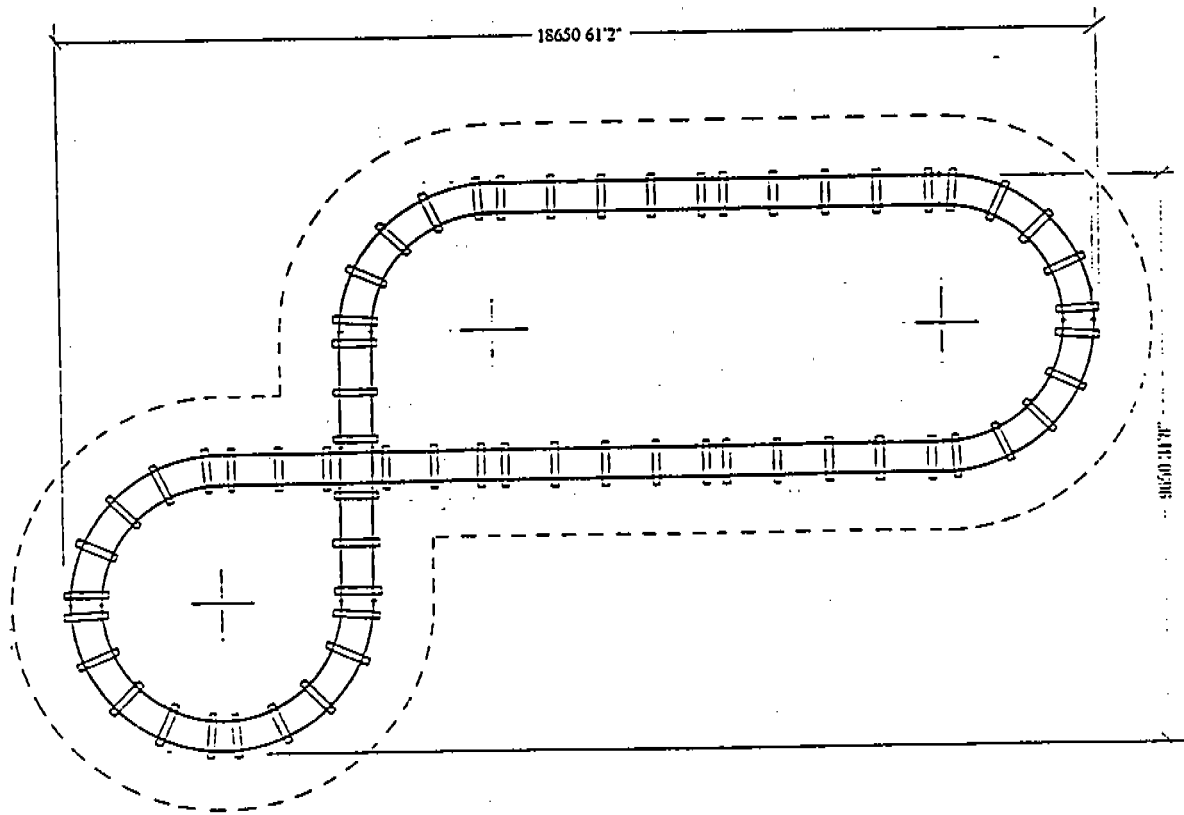
**ZAMPERLA**

AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSHIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS

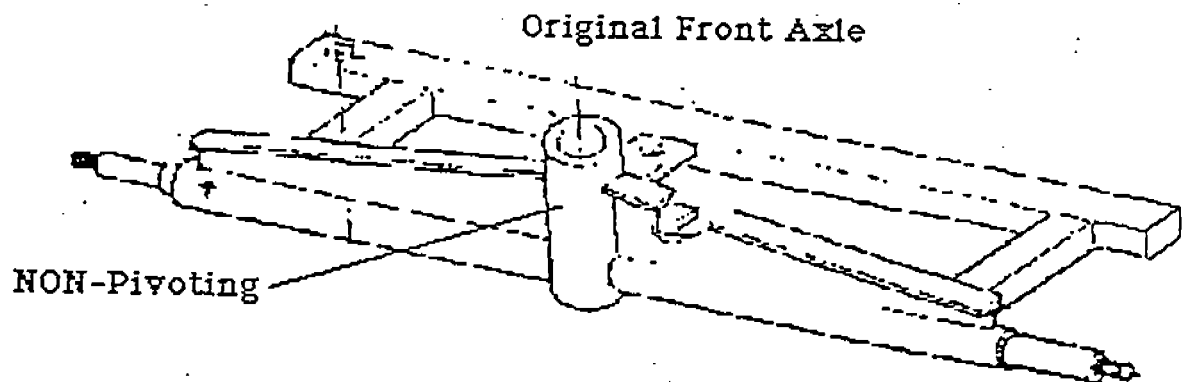


# Zamperla Inc.

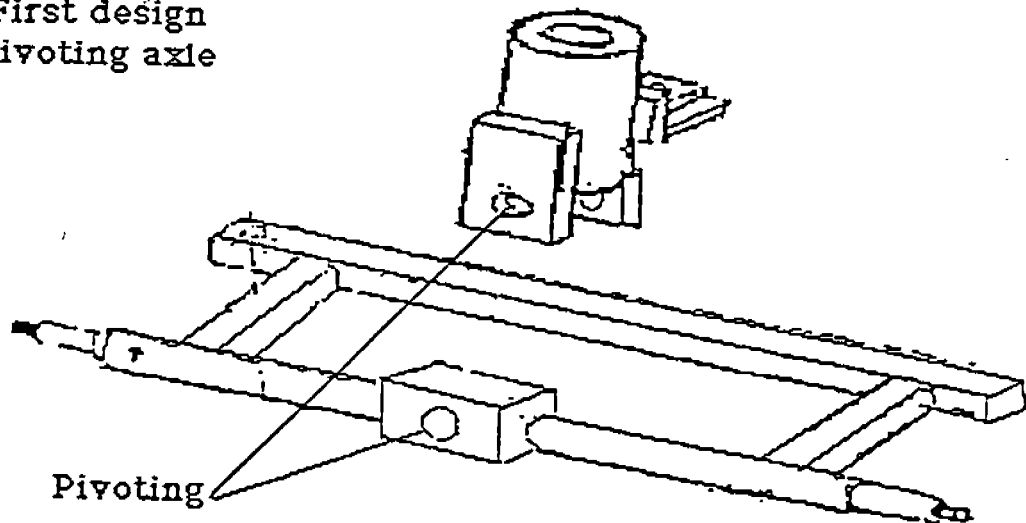
## Technical Update February 1990

RE: Bulletin 2/88 Rio Grande Train

A bulletin was issued in 1988 addressing the derailment problem experienced by some Rio Grande trains. The problem was originally believed to be improper leveling of the track. A new style pivoting axle was designed for the front of the train cars. This combined with attention to guide roller placement during roller service has corrected the problem. The following drawings show the original, intermediate, and final design front axles. These modifications were never deemed mandatory. If you are experiencing a problem of repeated derailments, check to see if you have the latest design axle, as well as the correct components and placement of the guide rollers.



First design  
Pivoting axle

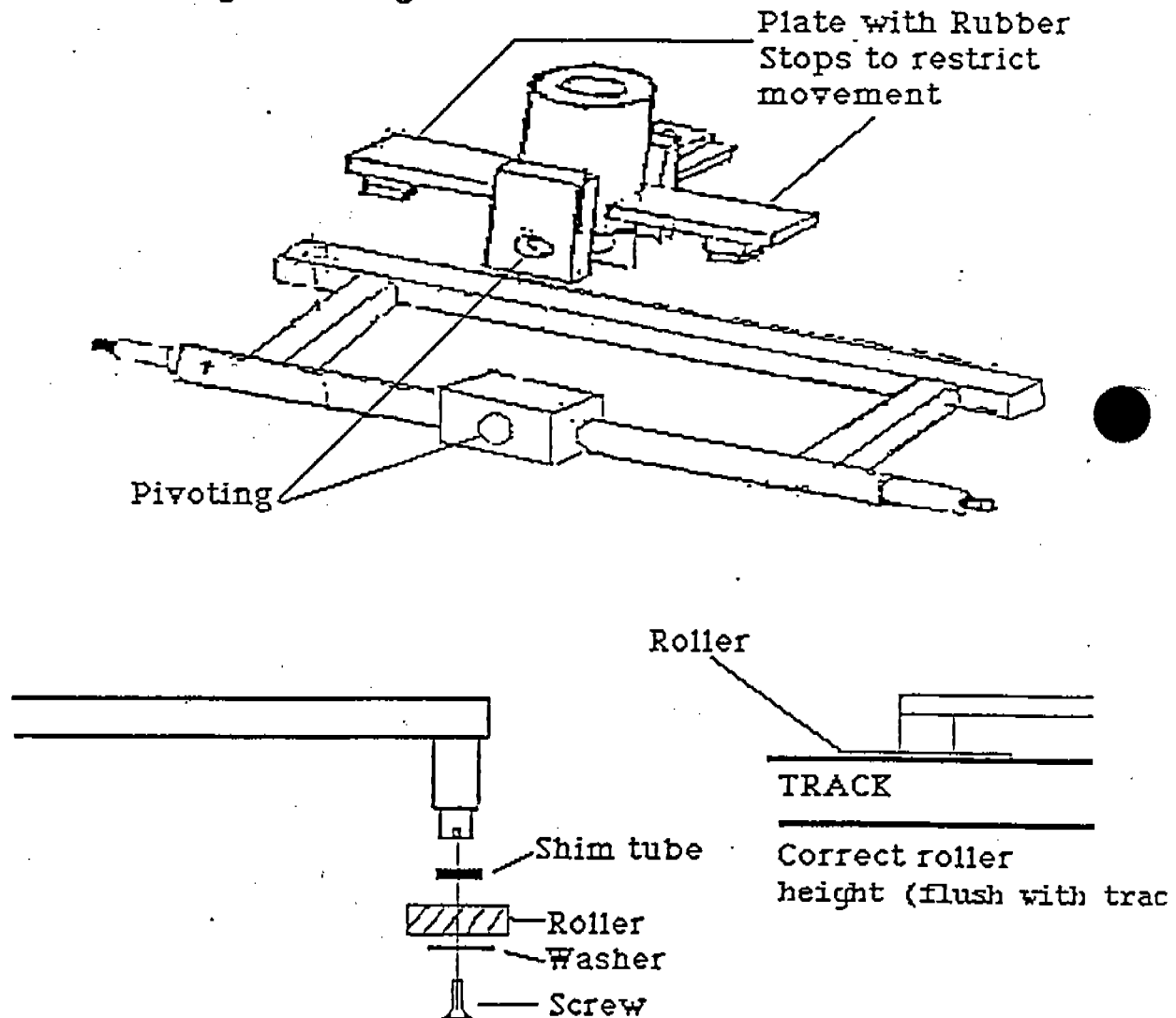


# Zamperla Inc.

## Technical Update February 1990

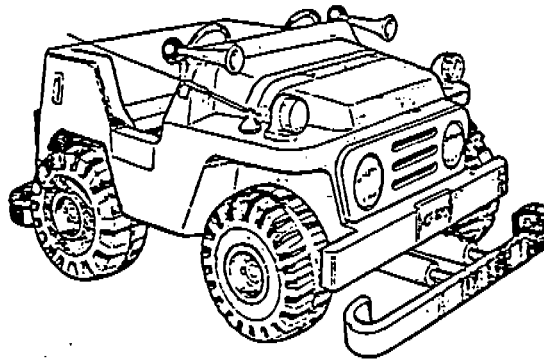
### Rio Grande Continued

#### Second Design Pivoting Axle



Rene Bernier  
Customer Service Manager

# SAFARI ADVENTURE



## DESCRIPTION

OUR CHILDREN RIDE SAFARI ADVENTURE PARK MODEL HAS 6 TWO-SEATER JEEPS, FOR A TOTAL CAPACITY OF 12 CHILDREN. THE JEEPS ARE EQUIPPED WITH D.C. MOTORS, STEERING WHEELS AND SOUND. STANDARD TRACK DEVELOPMENT IS 30 MT. LONG WITH ONE LITTLE CLIMB. POSITIVE AND NEGATIVE POWER PICK-UP ON THE TWO RAILS. THE JEEPS RUN INDEPENDENTLY (NOT HOOKED). ELECTRIC PANEL AND REMOTE CONTROL ARE INCLUDED.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- PAINTED PANELS AS DECORATION.
- FENCES ON PERIMETER.
- LONGER TRACK.
- TICKET BOX.
- DIFFERENT CAR MODELS: OLD TIMES, ZEBRA, MILITARY.

## OTHER VERSION

- TRAILER MODEL.

## SEATS

MAXIMUM TOTAL NUMBER OF PASSENGERS 12  
MAXIMUM TOTAL PASSENGER WEIGHT 450 KG.  
LOADING ALL SEATS SIMULTANEOUSLY

## PERFORMANCE

DIRECTION OF TRAVEL CLOCKWISE  
RIDE SPEED 5 KM/H  
RIDE DURATION (MAXIMUM) 3 MIN.  
RIDE DURATION (RECOMMENDED) 2.5 MIN.  
HOURLY CAPACITY 300  
OPERATOR 1

MAXIMUM RIDE WEIGHT 1.4 TONS.

DRIVE ELECTRIC

## INSTALLED POWER

TOTAL 2.5 KW.  
DRIVE 2.5 KW.  
LIGHTS / KW.  
VOLTAGE SINGLE-PHASE  
(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 4 MT. OF 1x20 O.T.

## ERECTION WORKS

\*NO. 1 SUPERVISOR FOR 4 HOURS

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

DATE: 06/91

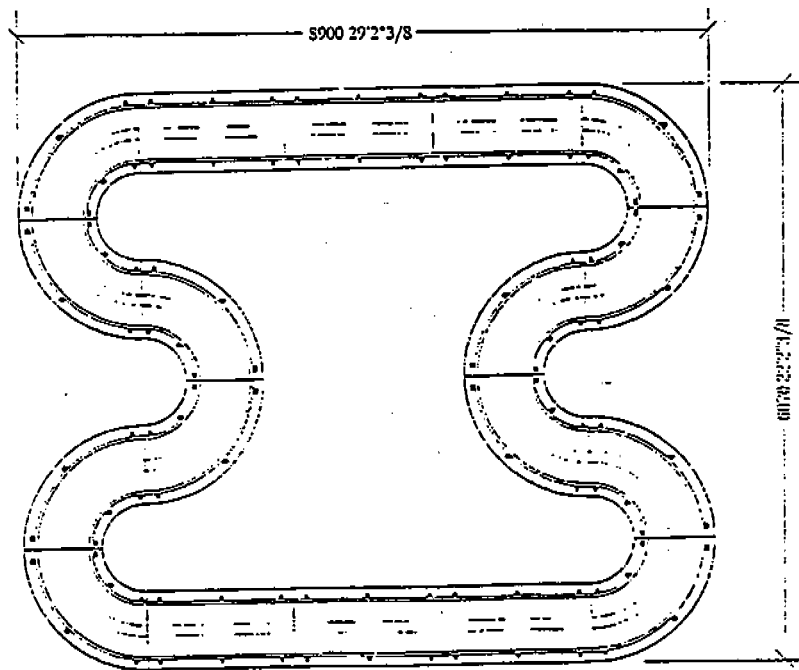


AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.P.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARISPRANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEX FAX (201) 334-6880

# DIMENSIONS



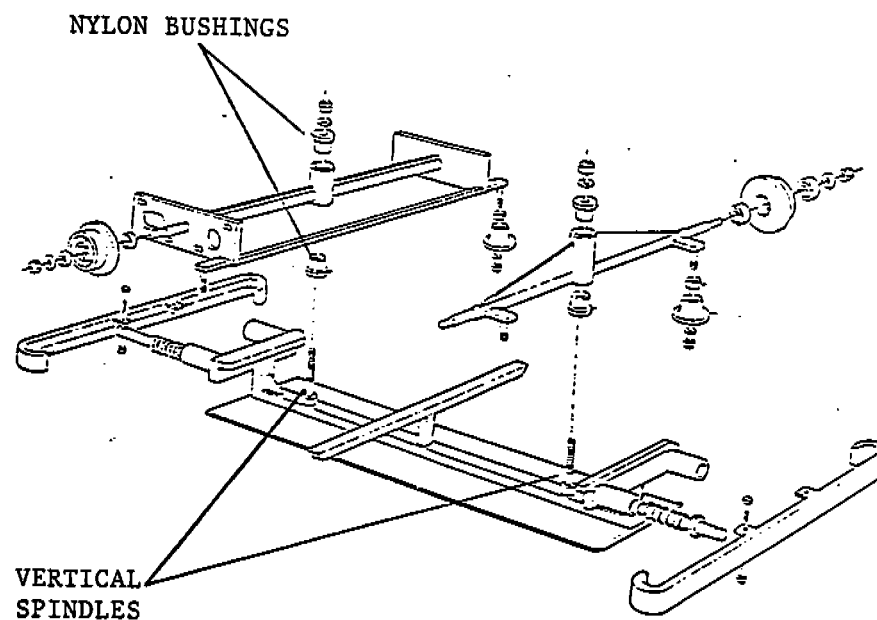
# Zamperla Inc.

## Technical Update

January 1991

RE: Safari Adventure Track (excessive wear)

Several Safari Adventure owners have experienced excessive track rail wear. The wear has been greatest on the outside rail of the right turns. The cause has been found to be binding of the nylon bushings on the axle vertical spindle. The corrective action is to disassemble the axle and ream the nylon bushings to obtain free movement of the axle in both directions.

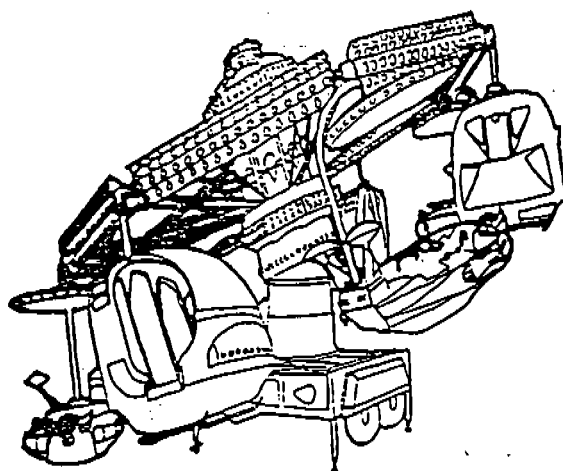


Rene Bernier  
Technical Service Manager





# SAMBA



## DESCRIPTION

OUR CHILDREN RIDE SAMBA PARK MODEL HAS 4 GOLDRAKE AND 4 HELICOPTER CARS FOR A TOTAL CAPACITY OF 32 SEATS.

THIS RIDE HAS A DOUBLE ROTATION MOVEMENT, AN HYDRAULIC LIFTING LIKE A TRAMONTANA AND A RIDE AXLE INCLINATION OF 15°.

ITS MOTORIZATION IS MADE WITH TWO MOTORS COUPLED WITH MOTO-REDUCER, PINION AND MAIN BEARING TRANSMISSION SYSTEM. THE HYDRAULIC LIFTING OF THE TELESCOPIC COLUMN IS MADE BY TWO HYDRODYNAMIC CYLINDERS.

THE RIDE COMES STANDARD WITHOUT PLATFORMS AND POST BEACONS BUT WITH ROOF ON CARS AND FENCES ON PERIMETER. THE ELECTRIC PANEL AND CONTROL BOARD ARE INCLUDED.

EACH CAR IS PROVIDED WITH STEERING WHEEL, SOUND AND LIGHTS.

ITS IS PROVIDED WITH A SPECIAL FLASHING LIGHTING ON ITS OUTSIDE PERIMETER, MOUNTED ON STAINLESS STEEL SUPPORTS.

FOUNDATIONS ARE NOT REQUIRED.

## OPTIONALS ( TO BE QUOTED ON REQUEST )

- ALUMINIUM PLATFORM AND TICKET BOX
- DIFFERENT CAR MODELS CAN REPLACE THE ABOVE MENTIONED:  
PETER PAUL DRAGON, ELEPHANT, LADY BUG : 2 SEATS EACH  
SPACE SHUTTLE : 3 SEATS EACH  
TURTLE, HELICOPTER : 4 SEATS EACH

## OTHER VERSION

- SAMBA TRAILER MODEL, SAME CHARACTERISTICS AS ABOVE BUT ON ALKO AXES

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 32                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 2400 KG.                 |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |
| MAXIMUM UNBALANCE                  | 16 CHILDREN              |

## PERFORMANCE

|                             |                             |
|-----------------------------|-----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                   |
| RIDE SPEED                  | 6 RPM.                      |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIMER) |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIMER)   |
| HOURLY CAPACITY             | 640                         |
| OPERATOR                    | 1                           |

MAXIMUM RIDE WEIGHT 4.5 TONS.

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 15 KW.            |
| DRIVE   | 5.3 KW.           |
| LIGHTS  | 9.7 KW.           |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 1x40 O.T.

## ERECTION WORKS

No. 1 PERSON FOR 1 DAY

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

DATE: 06/91

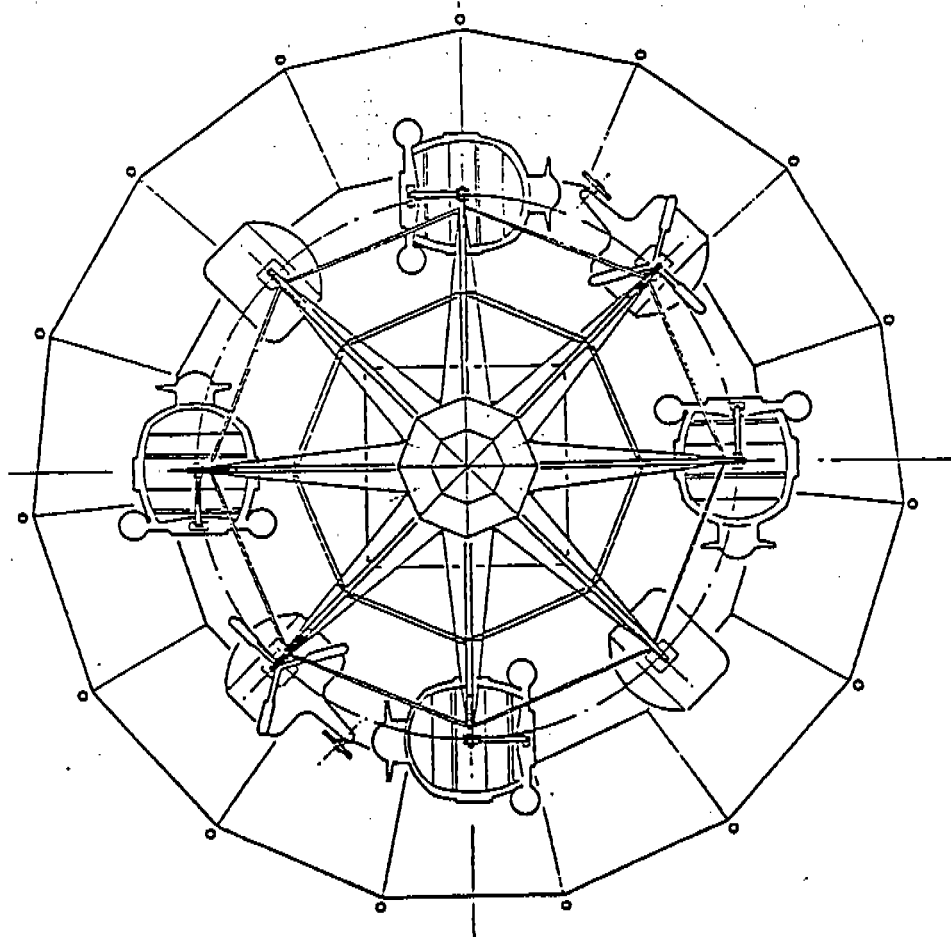
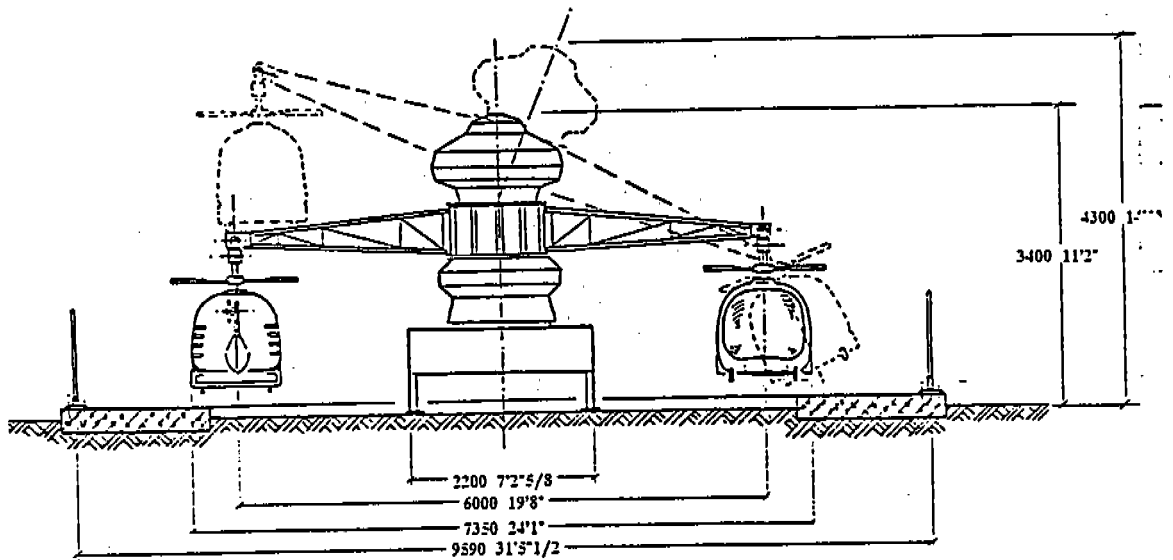
# ZAMPERLA

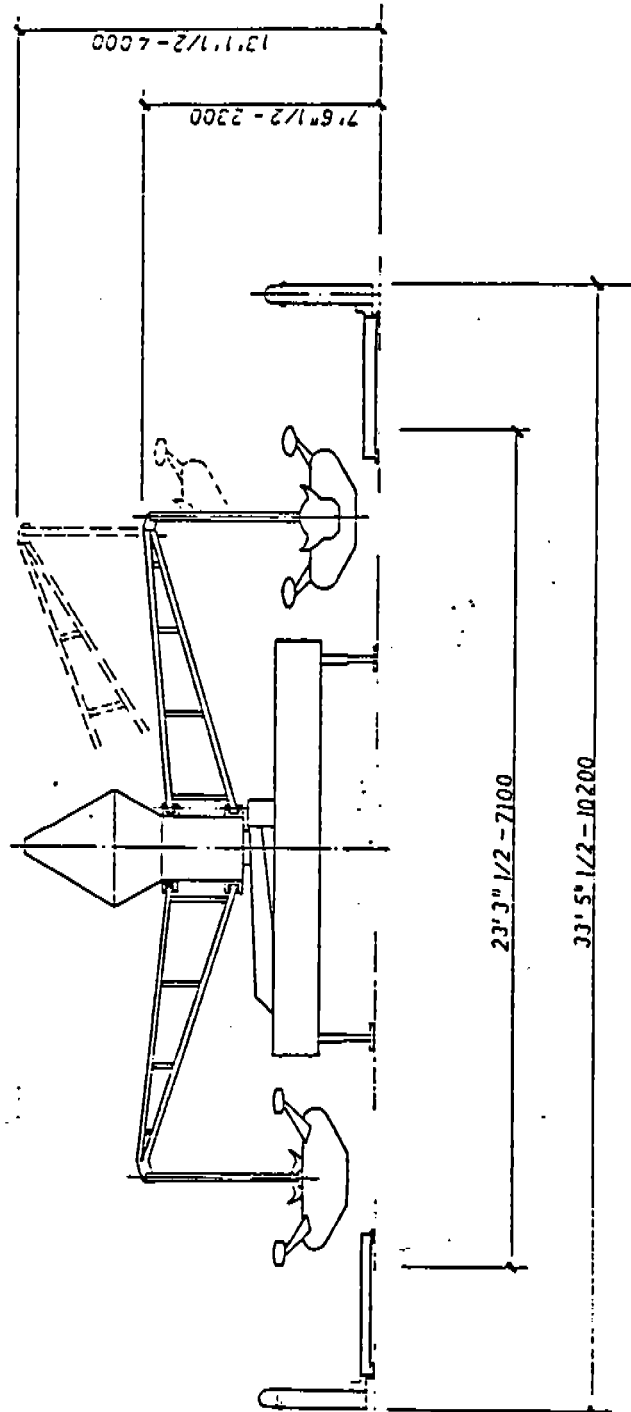
AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
VIA MONTE GRAPPA 15.17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. BOX 5545  
PARLIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS





MINI-ENTERPRISE OPERATING DIMENSIONS

POWER REQUIREMENTS: 6.5Kw MOTIVE 9Kw LIGHTING

VEHICLE LOADING: 4 CHILDREN/VEHICLE 330lbs. MAX/VEHICLE

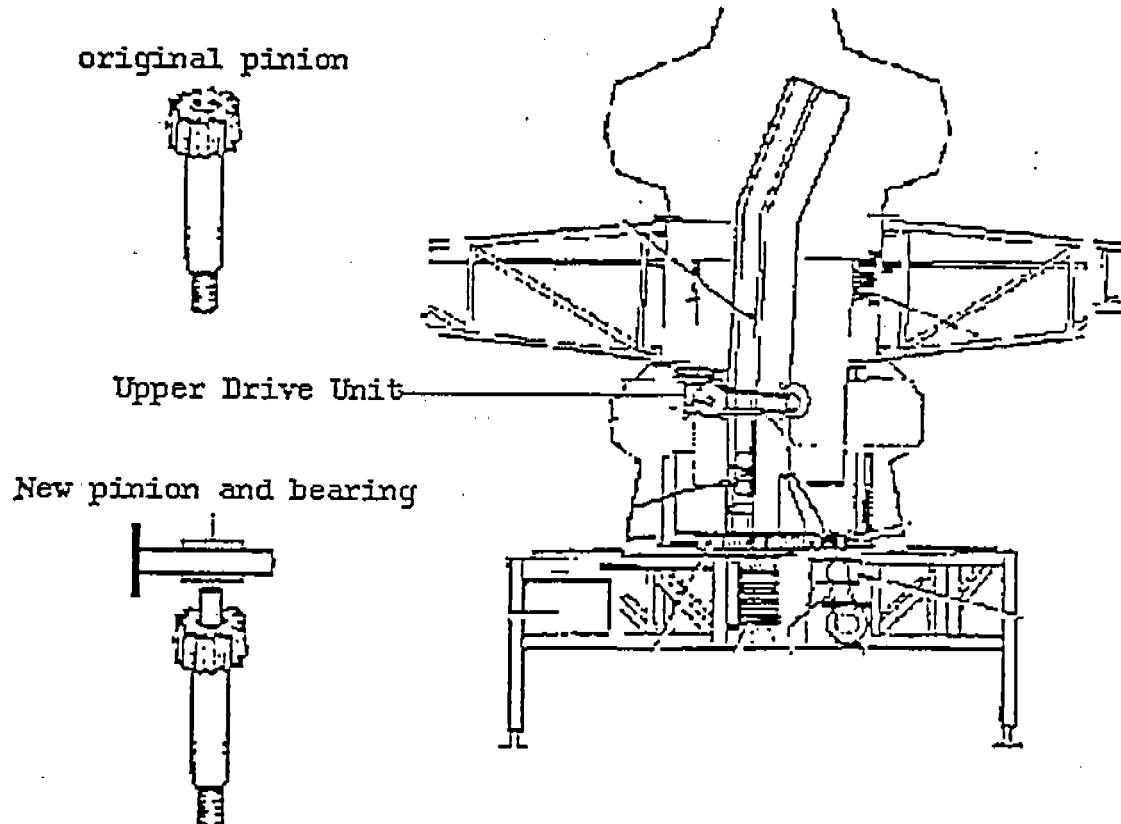
# Zamperla Inc.

## Technical Update

February 1990

### RE:Improved Samba Pinion Support

There has been a tendency for the upper gear reducer case on the Samba ride to crack. The cause is inadequate support of the drive pinion. As a remedy for this Zamperla is offering a redesigned pinion gear with bearing and mounts as a kit. This kit requires a bracket to be welded in the upper drive area. Please contact our service department for full details on the installation of this kit.



Rene Bernier  
Customer Service Manager

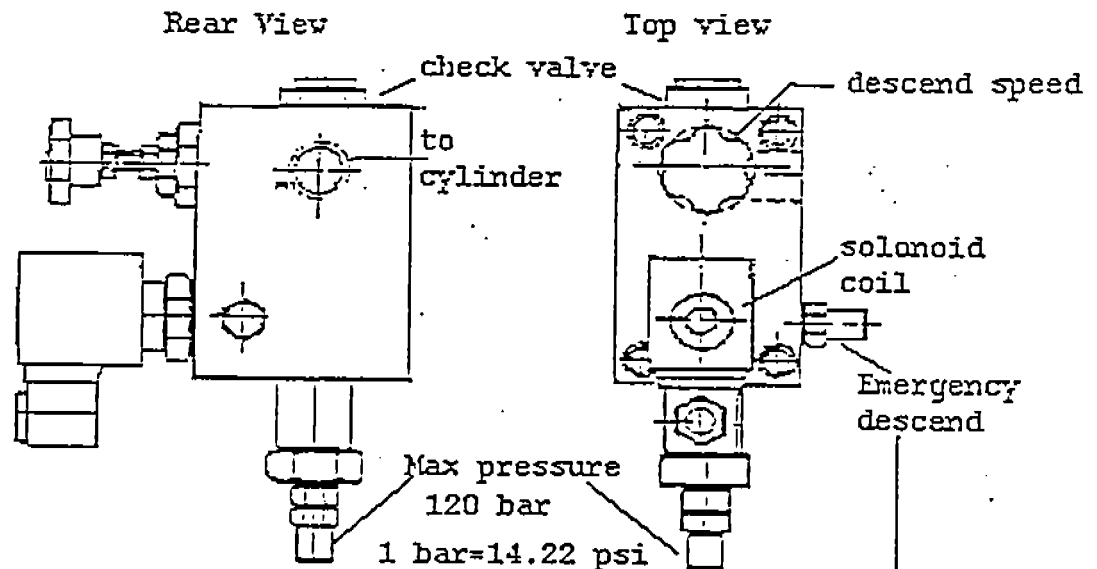
# Zamperla Inc.

## Technical Update

February 1990

RE:Mini-Enterprise hydraulic control valve

There has been some confusion as to the function of the control valve on the Mini-Enterprise. Below is a pictorial of the control valve with the components labeled.



To lower ride in the event of power failure: remove hex cap and slowly unscrew allen setscrew until ride begins to lower.

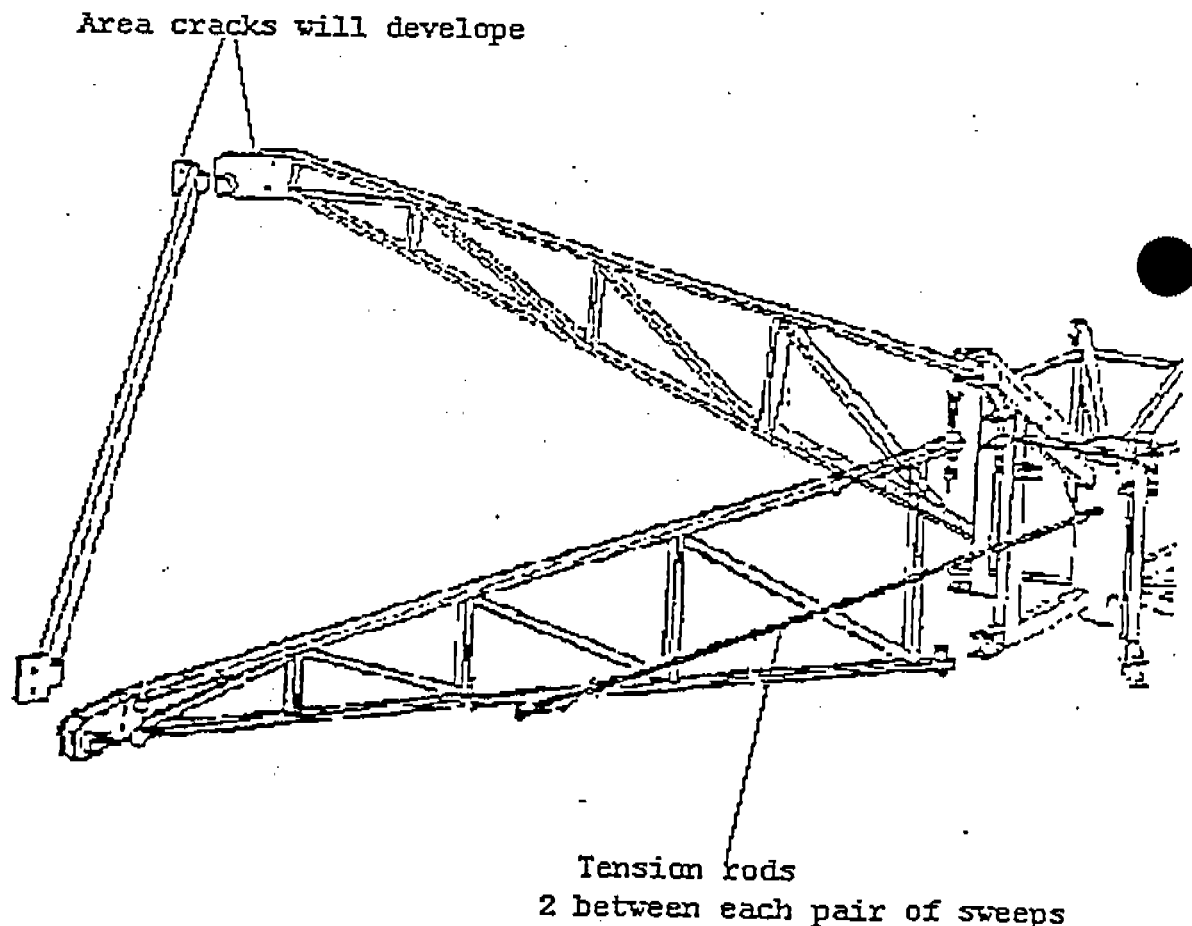
Rene Bernier  
Customer Service Manager

# Zamperla Inc.

## Maintenance Bulletin February 1990

RE:Tension Rods Mini-Enterprise/Samba

There have been questions regarding the need to use all the tension rods in the center of the Mini-enterprise/Samba. There is a pair of rods, that form cross bracing between each pair of sweeps. These rods must all be installed. Failure to do so will lead to cracking in the outer end of the sweeps where the spreader/light bars bolt to the sweep.



Rene Bernier  
Customer Service Manager

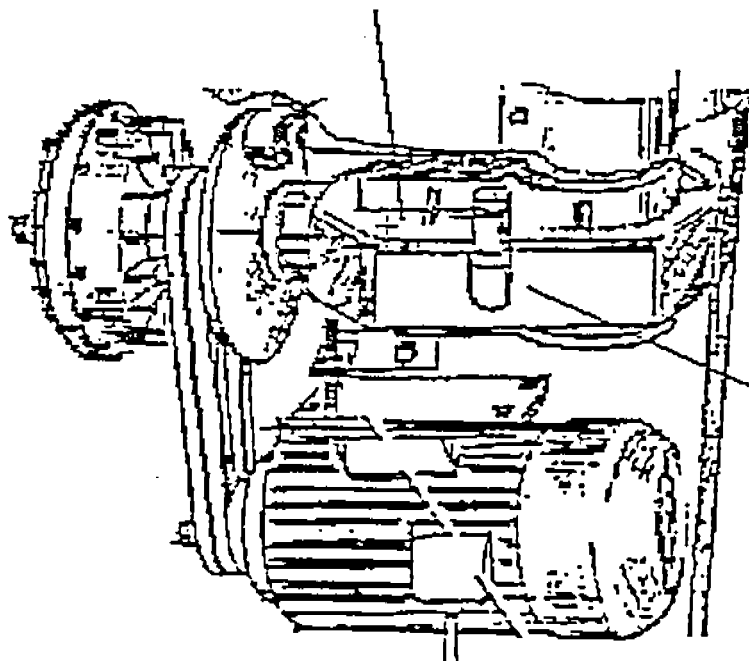
# Zamperla Inc.

## Technical Update February 1990

RE: Mini-Enterprise/Samba Gear Reducers  
Top Pinion Bearing Failure

There has been a high failure rate of the upper bearing in the Samba and Mini-enterprise gear reducers. The cause appears to be lack of lubrication. Zamperla is recommending a new oil fill level, as well as breather unit for these units. The following drawing shows the modification to be made. Parts may be obtained thru Zamperla Inc. This modification requires the disassembly of the gear reducer. It is also recommended to check the gear oil for the presence of water on a regular basis, and replace the oil if any water is present. 90/140w gear oil is sufficient. Some customers have reported satisfactory results from a clinging type gear oil sold by many lubrication distributors.

Drill and tap case here for new  
fill plug/breather



Existing fill tube  
to be removed, and  
opening plugged

NOTE\* There is also a modification regarding the pinion on the upper Samba gear unit covered in the Samba section.

Rene Bernier  
Customer Service Manager

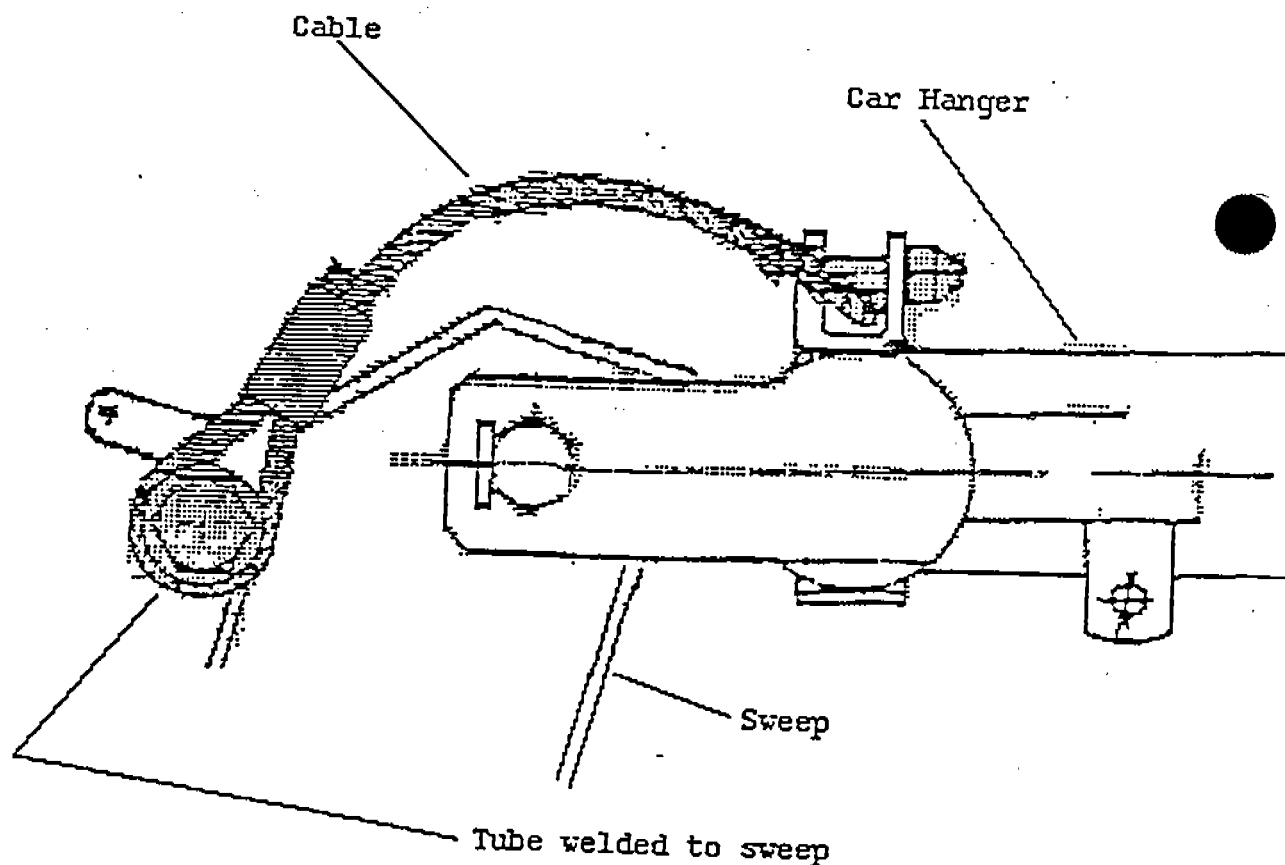


# Zamperla Inc.

## Maintenance Bulletin February 1990

RE: Bulletin 4/86 Safety Cables Car Attachment  
Mini-Enterprise/Samba

Bulletin 4/86 concerns a safety cable protecting the attachment of the car hanger to sweep on the Mini-enterprise/Samba rides. The hit consists of a Tube to be welded to the sweep, an attachment point to be welded to the car hanger, and a cable with hardware to be attached between the car hanger and sweep. All Mini-Enterprise and Samba rides Must have these cables.



Rene Bernier  
Customer Service Manager

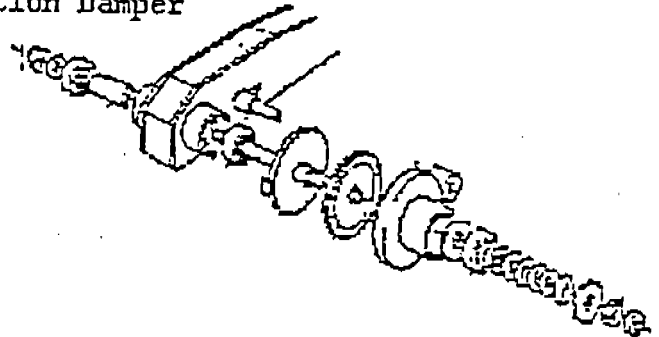
# Zamperla Inc.

## Technical Update February 1990

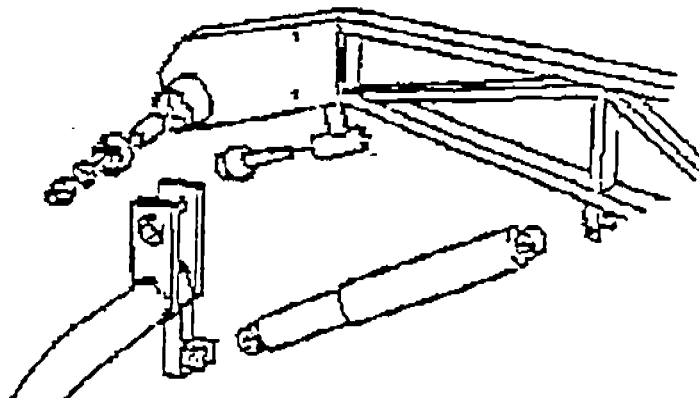
RE: Bulletin 7/86 Attachment and Damper Mini-enterprise/Samba

Bulletin 7/86 was issued to address the attachment parts and dampers used on the Mini-Enterprise and Samba. This optional upgrade was intended to eliminate the wear caused on the pivot shaft of the original design by improper maintenance. If the clutch type damper was not adjusted properly, the excessive motion of the vehicle combined with the action of the clutch disc itself would cause excessive wear to the pivot shaft. At the time this Bulletin was issued, owners were advised to inspect this area, and were encouraged to upgrade to the new system utilizing Hydraulic dampers (shock absorbers) if their original components were severely worn. This was never considered a mandatory modification, and there are still several properly maintained rides operating with the old system with no problems.

Original Design Friction Damper



Present Design Hydraulic Damper



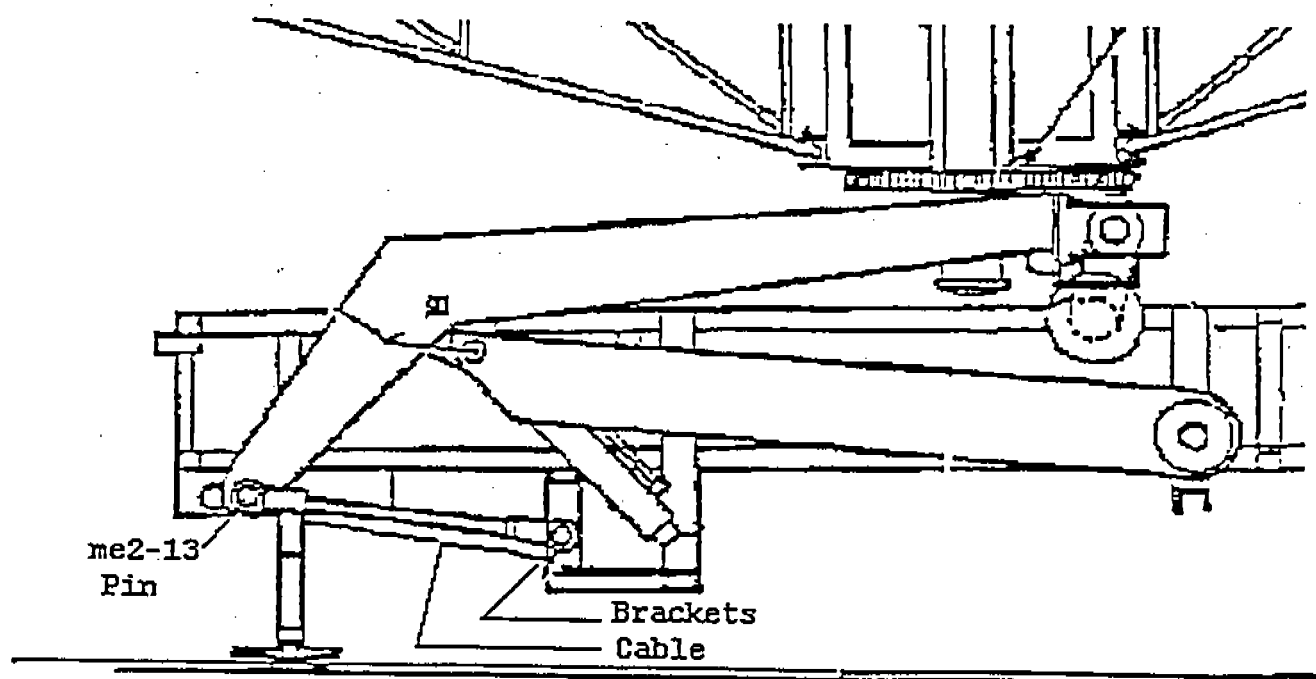
Rene Bernier  
Customer Service Manager

# Zamperla Inc.

## Maintenance Bulletin February 1990

RE:Bulletin 8/86 Mini-Enterprise Boom Safety Cables

The following drawing shows the Tension Rod area of the lift boom on the Mini-Enterprise ride. All Mini-Enterprises MUST have the safety cables installed to prevent the boom from dropping in the event of a failure of the tension rod. A bulletin was sent to all Mini-Enterprise owners in December 1986. These cables were then provided at no cost to all owners. Mini-enterprises manufactured since that time are equipped with these cables from the factory. The safety kit consists of: 2 cables (me2-10), pin (me 2-13) and brackets. If for any reason you do not have these cables on your ride, contact our service department IMMEDIATELY!



Rene Bernier  
Customer Service Manager

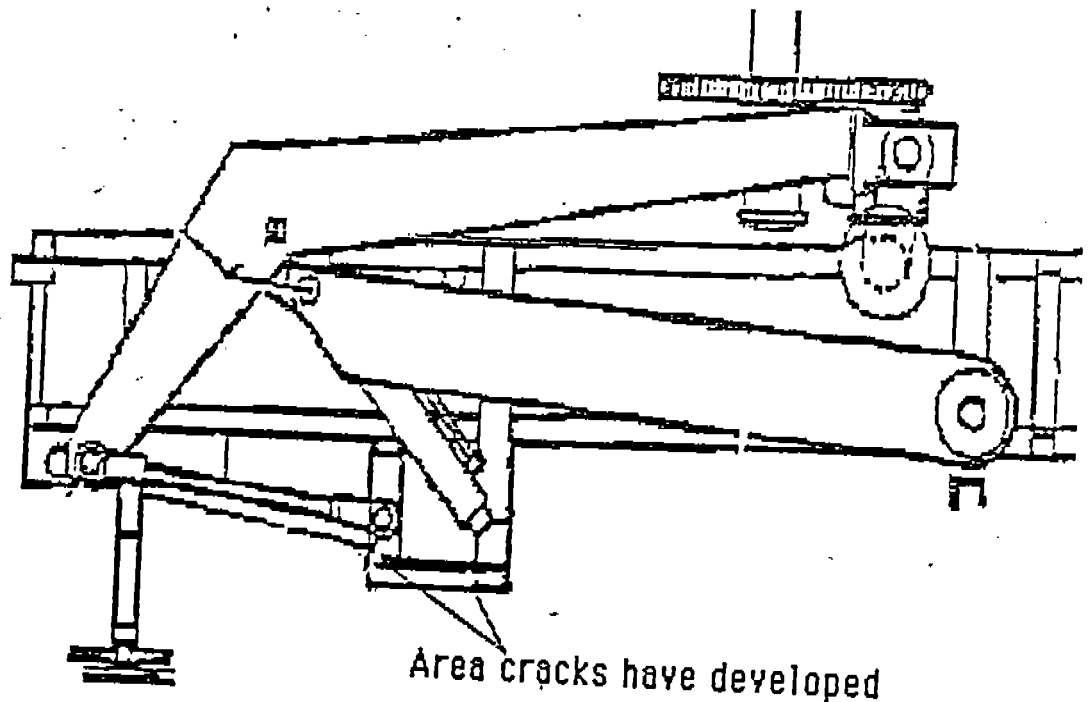
# Zamperla Inc.

## Maintenance Bulletin

January 1991

### RE: Mini-Enterprise Tension Rod Attachment

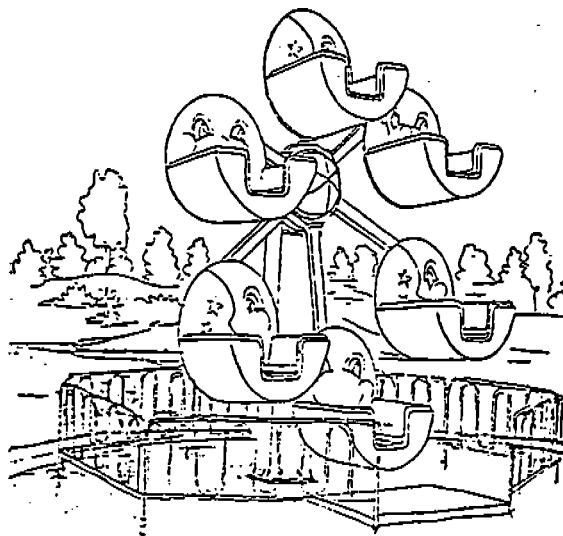
A customer has reported the development of fractures in the structure that attaches the tension rod to the frame on the Mini-Enterprise ride. The cracks developed in the welds, and spread into the parent metal in one area. This ride is approaching 10 years of service. We are advising all Mini-Enterprise owners to visually inspect this area of their ride. Any indications of cracking should be reported to our technical service department and subjected to magnetic particle testing to determine the extent of the damage.



Rene Bernier  
Technical Service Manager



# SUN & MOON



## SEATS

|                                    |                   |
|------------------------------------|-------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 24                |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 1800 KG.          |
| LOADING                            | 1 CAR AT THE TIME |
| MAXIMUM UNBALANCE                  | 12 CHILDREN       |

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                  |
| RISE SPEED                  | 5 RPM.                     |
| RISE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIME) |
| RISE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIME)   |
| HOURLY CAPACITY             | 480                        |
| OPERATOR                    | 1                          |

|                     |           |
|---------------------|-----------|
| MAXIMUM RIDE WEIGHT | 2.5 TONS. |
|---------------------|-----------|

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 6.5 KW.           |
| DRIVE   | 5.5 KW.           |
| LIGHTS  | 1 KW.             |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## DESCRIPTION

SUN AND MOON IS OUR PROPOSAL FOR A CHILDREN FERRIS WHEEL.  
THE RIDE CONSISTS OF A CENTRAL COLUMN WITH HYDRAULIC MOTOR AND ONE SUPPORT FOR EACH GONDOLA.  
3 SUN AND 3 MOON-SHAPED CARS FOR A TOTAL CAPACITY OF 24 CHILDREN SEATS.  
ARMS ARE PROVIDED WITH LIGHTS.  
FENCES ON PERIMETER, ELECTRIC PANEL AND REMOTE CONTROL ARE INCLUDED.

## OPTIONALS (TO BE QUOTED ON REQUEST)

- TICKET BOX
- DECORATION
- ALUMINIUM PLATFORM FOR LOADING/UNLOADING AREA

## SHIPPING INFORMATION

|           |           |
|-----------|-----------|
| CONTAINER | 1x20 O.T. |
|-----------|-----------|

## ERECTION WORKS

NO. 1 PERSON FOR 6 HOURS  
FORK LIFT

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

DATE: 06/91

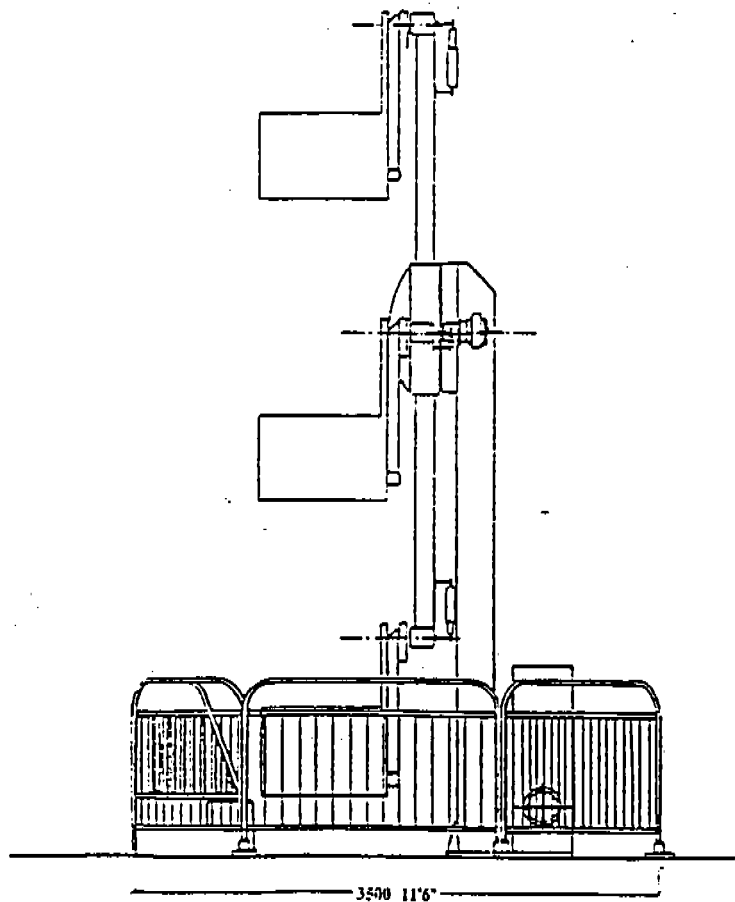
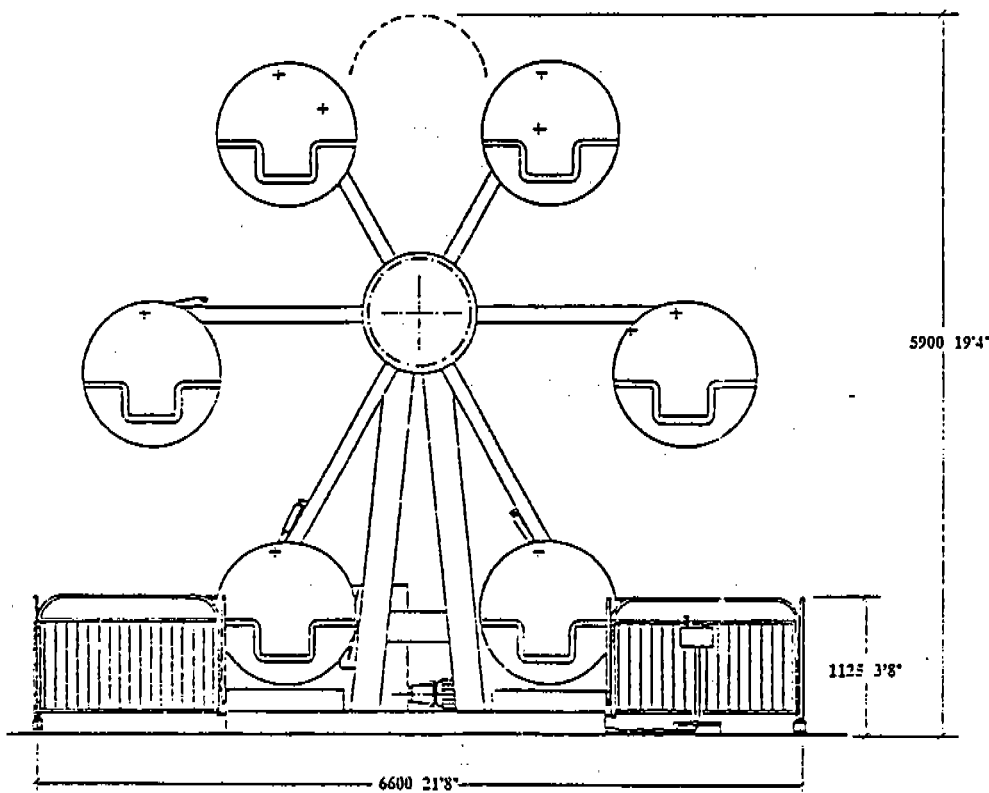


AMUSEMENT RIDES MANUFACTURERS

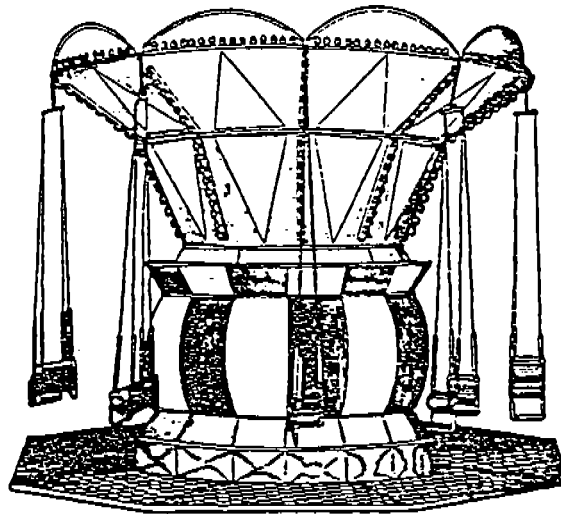
ANTONIO ZAMPERLA S.P.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15.17  
TEL. (0444) 573133 FAX 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. BOX 5545  
PARSONS N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



# SWING RIDE 20



## DESCRIPTION

SWING RIDE 20 COMES STANDARD WITH FIBERGLASS PANELS COVERING CENTRAL STRUCTURE, WITH LIGHTS ON PANEL JUNCTIONS, FOR A CAPACITY OF 20 CHILDREN SEATS HANGING ON 4 CHAINS.

ALUMINIUM PLATFORMS, FENCES, CONTROL BOARD AND REMOTE CONTROL ARE INCLUDED.

## SEATS

|                                    |                |
|------------------------------------|----------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 200            |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 750 KG.        |
| LOADING                            | SIMULTANEOUSLY |

## PERFORMANCE

|                     |           |
|---------------------|-----------|
| DIRECTION OF TRAVEL | CLOCKWISE |
| SPEED               | 10 RPM.   |
| HOURLY CAPACITY     | 480       |
| OPERATOR            | 1         |

MAXIMUM RIDE WEIGHT 1 TONS

DRIVE ELECTRIC

## INSTALLED POWER

|         |                   |
|---------|-------------------|
| TOTAL   | 3 KW              |
| DRIVE   | 0.5 KW            |
| LIGHTS  | 2.5 KW            |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 1 x 40 O.T.

## ERECTION WORKS

\* NO. 1 SUPERVISORS FOR 2 DAYS  
 \* CRANE: TONS. x LENGTH OF ARM x TIME IN HOURS  
 5 TON. x 10 MT. x 4 HOURS  
 \* DEPENDS ON SITE CONDITIONS AND WORK FORCE AVAILABLE.

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

DATE: 06/91

**ZAMPERLA**

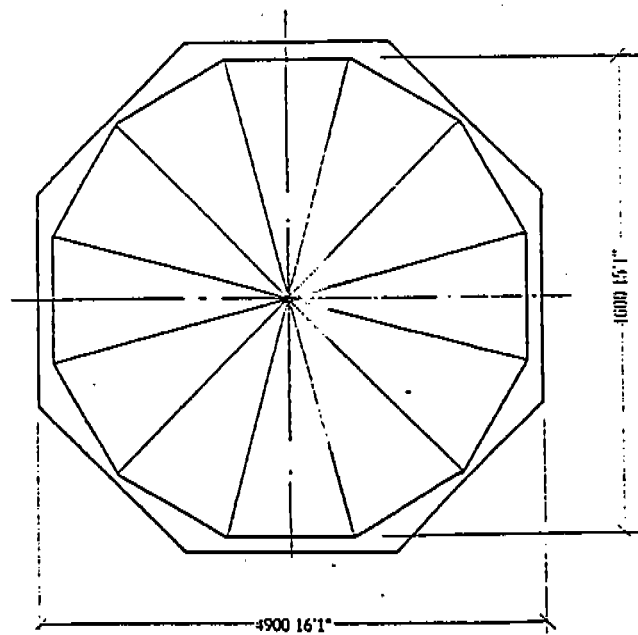
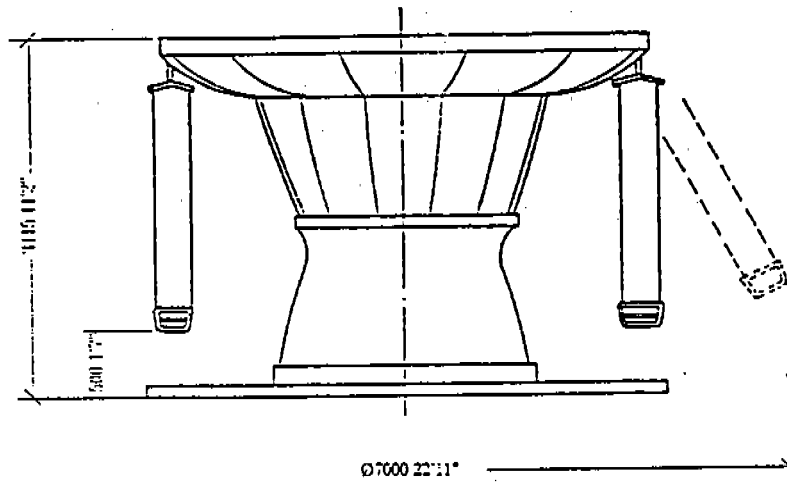
AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.P.A.  
 (HOME OFFICE FACTORY)  
 36077 ALTAVILLA VIC. (VI) ITALY  
 Via MONTE GRAPPA 15-17  
 TEL. (0444) 573133 FAX 573720  
 TELEX 481499 ZAMPER I

ZAMPERLA INC.  
 (U.S.A. SALES/SERVICE OFFICE)  
 49 FANNY ROAD, P.O. BOX 5545  
 PARSONS N.J. 07054-0598  
 PH. (201) 334-8133 (800) 888-8878  
 TELEFAX (201) 334-6880



# DIMENSIONS



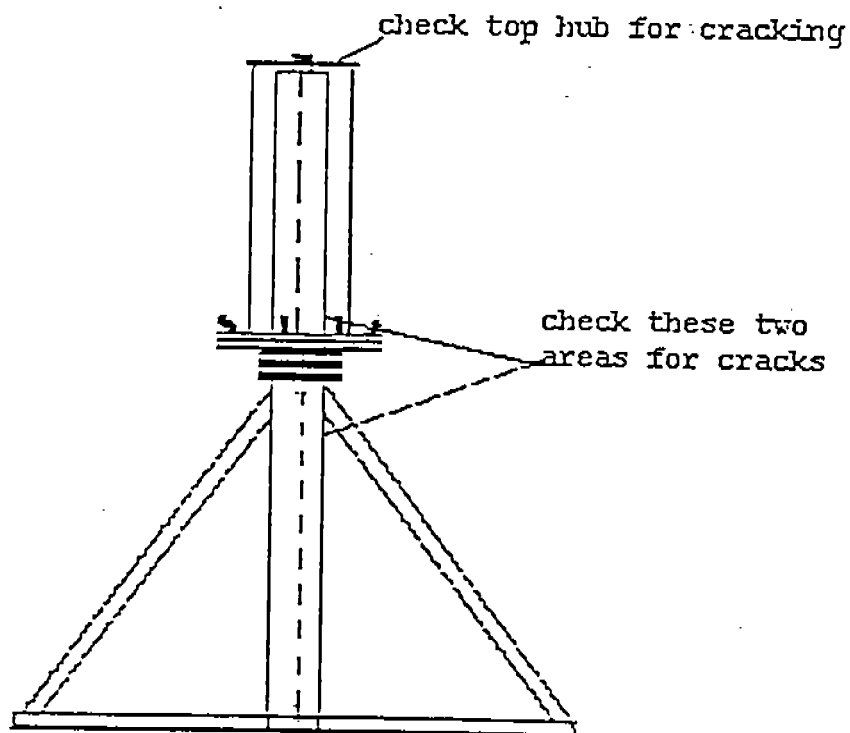
# Zamperla Inc.

## Maintenance Bulletin

February 1990

RE: Bulletin 5/86 Swing Ride 20 center pole

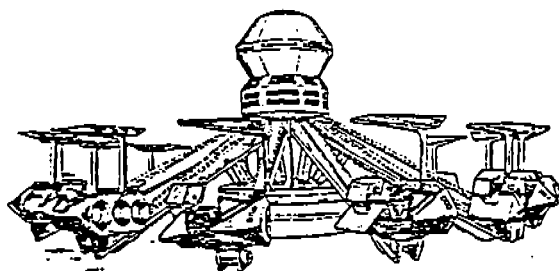
Below is a drawing of the center pole on the Swing Ride 20. Bulletin 5/86 recommends routine inspection of the areas marked (below the point where the brace poles meet the center column, and above the sweep hub) for cracks. If any cracking occurs in these areas please contact our service department. As an update to this bulletin, also inspect the top hub where the sweep support rods attach.



Rene Bernier  
Customer Service Manager



# TOP JET TELECOMBAT



## DESCRIPTION

OUR ADULT PARK MODEL RIDE TOP JET TELECOMBAT IS PROVIDED WITH 14 PLANES OF TWO SEATS EACH FOR A TOTAL CAPACITY OF 28 ADULTS. ITS MOTORIZATION IS MOUNTED ON A FIXED LIFTING CENTER WHILE ITS CLEODYNAMIC AND PNEUMATIC SYSTEM WITH RELATIVE AIR-TANKS ARE LOCATED ON THE GROUND UNDER THE RIDE CENTER. THE AIR-COMPRESSOR AND CONTROL BOARD ARE SET UP AT A DISTANCE. IF REQUIRED, THE WHOLE SYSTEM CAN BE LOCATED FAR FROM THE RIDE CENTER. THE ROTATION IS DONE BY AN ELECTRIC SYSTEM.

THE ARMS AND THE CARS LIFTING OF 3.5 MT. IS DONE BY A PNEUMATIC SYSTEM WHILE THE FURTHER 2.5 MT. LIFTING OF THE ROTATING CENTER IS DONE BY AN CLEODYNAMIC SYSTEM.

THE ROTATION OF THE CAR IS MADE BY A MANUAL STEERING WHEEL PLACED IN THE CAR AND ITS UP/DOWN MOVEMENT BY A JOYSTICK CONTROLLED BY PASSENGERS WHO CAN SHOOT DOWN OTHER CARS PUSHING THE BUTTON ON TOP OF THE JOYSTICK. EACH CAR IS PROVIDED WITH SAFETY BELT.

THE CENTER BASEMENT OF THE RIDE IS COVERED BY A CIRCULAR STRUCTURE HIDDEN BY A PVC CANVAS.

THE RIDE IS SUPPLIED WITH ELECTRIC PANEL AND REMOTE CONTROL BOARD. IT HAS A CENTRAL LIGHTED FIBERGLASS BOWL AND 3 LIGHT STRIPS ON EACH ARM. FOUNDATIONS ARE REQUIRED FOR THE CENTRAL COLUMN.

## OPTIONAL

- TOP JET SIGN WITH SUPPORT AND FLASHING LIGHTS.
- STANDARD MODEL TICKET BOX.
- PLATFORMS AROUND PERIMETER.
- TENOSTRUCTURE TO COVER THE RIDE IF WITHOUT HYDRAULIC LIFTING.
- SPIDER BASEMENT TO AVOID CENTRAL FOUNDATION PUNTH.

## SEATS

|                                   |          |
|-----------------------------------|----------|
| NUMBER OF SEATS                   | 14       |
| MAXIMUM PASSENGERS PER SEAT       | 2 ADULTS |
| MAXIMUM TOTAL WEIGHT PER SEAT     | 150 KG.  |
| MAXIMUM TOTAL NUMBER OF PASSENGER | 28       |
| MAXIMUM TOTAL PASSENGER WEIGHT    | 2100 KG. |
| MINIMUM PASSENGER HEIGHT          | 105 CM.  |

(UNACCOMPANIED BY ADUL

## LOADING

ALL SEATS SIMULTANEOUSLY

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                  |
| RIDE SPEED                  | 6 RPM.                     |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIME) |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIMER)  |
| HOURLY CAPACITY             | 700                        |
| OPERATOR                    | 1                          |

## MAXIMUM RIDE WEIGHT

15 TONS.

## DRIVE

ELECTRIC

## INSTALLED POWER (VERSION WITH LIFTING OF THE CENTER)

|         |                   |
|---------|-------------------|
| TOTAL   | 58 KW (80 KW)     |
| DRIVE   | 45 KW (67 KW)     |
| LIGHT   | 13 KW (13 KW)     |
| VOLTAGE | 3 PHASE + NEUTRAL |

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

|           |             |
|-----------|-------------|
| CONTAINER | 2 x 40 O.T. |
|-----------|-------------|

## LARGEST COMPONENTS

|        |                           |
|--------|---------------------------|
| CENTER | 2.2 MT. x 2.2 MT. x 8 MT. |
| ARM    | 0.3 MT. x 0.3 MT. x 6 MT. |
| CAR    | 2 MT. x 1.8 MT. x 0.9 MT. |

## ERECTION WORKS

- \*NO. 2 SUPERVISORS FOR 3 DAYS
- \*CRANE: HEIGHT X TONS X LENGTH OF THE ARM X TIME IN HOURS
- 10 MT. x 10 TONS x 6 MT. x 4 HOURS
- \*DEPENDS ON SITE CONDITIONS AND WORK FORCE AVAILABLE

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

DATE: 06/91

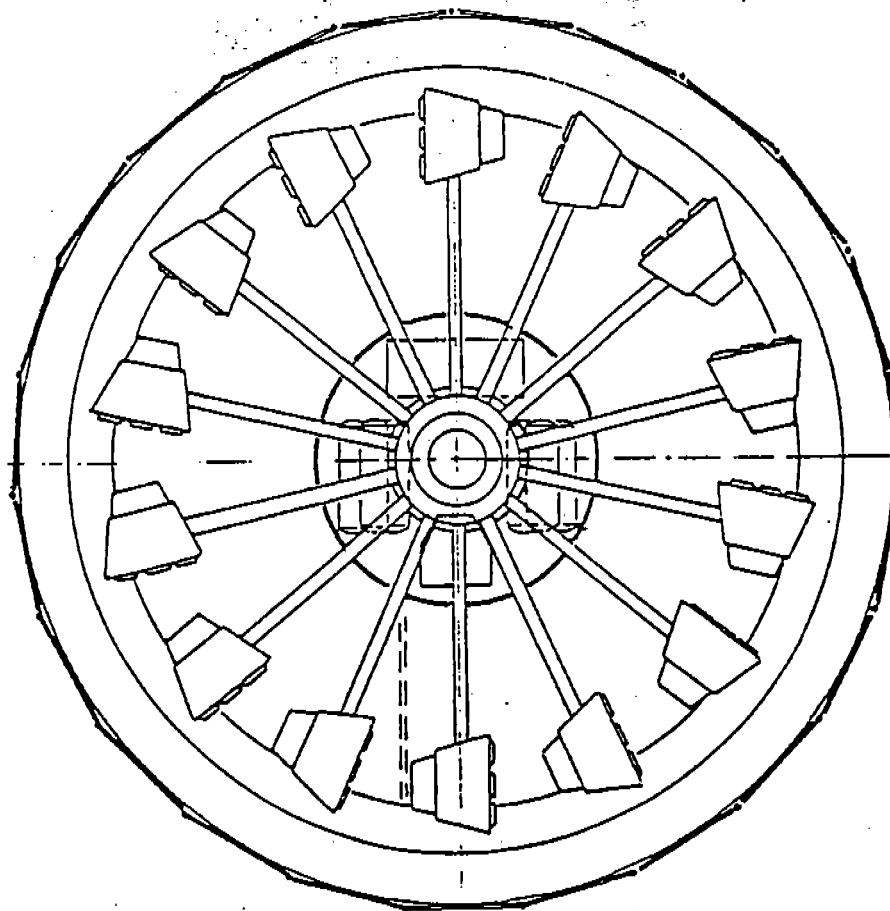
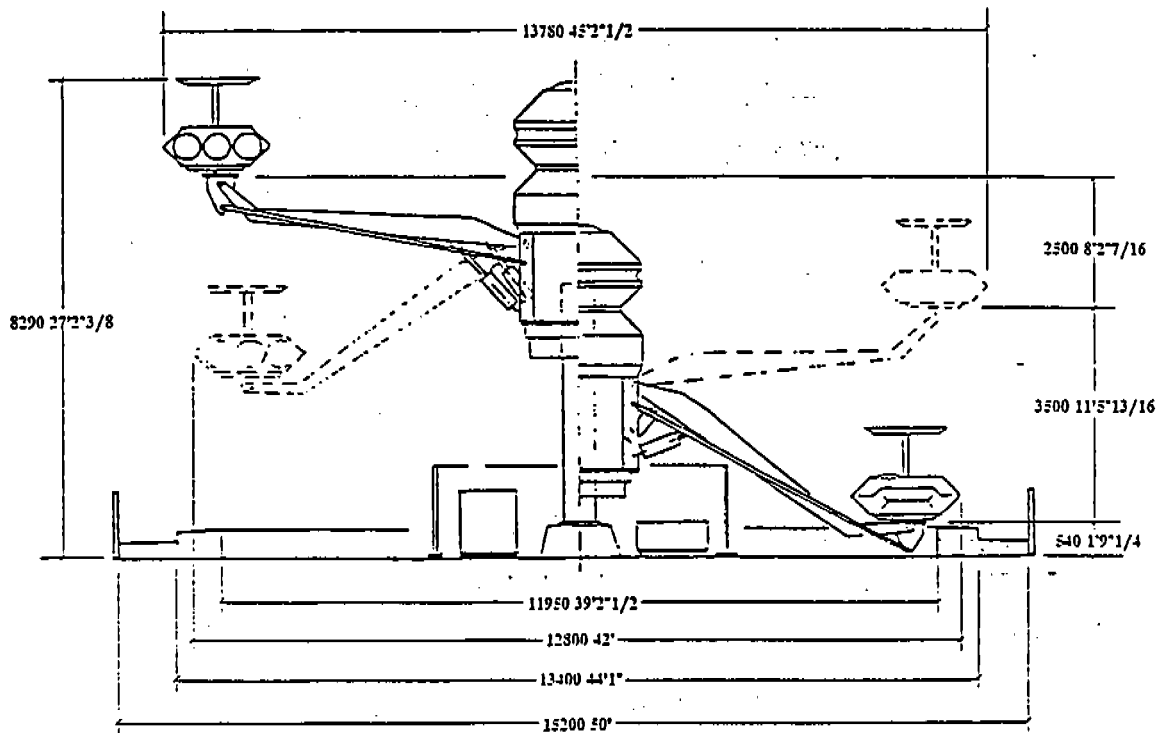
# ZAMPERLA

AMUSEMENT RIDES MANUFACTURERS

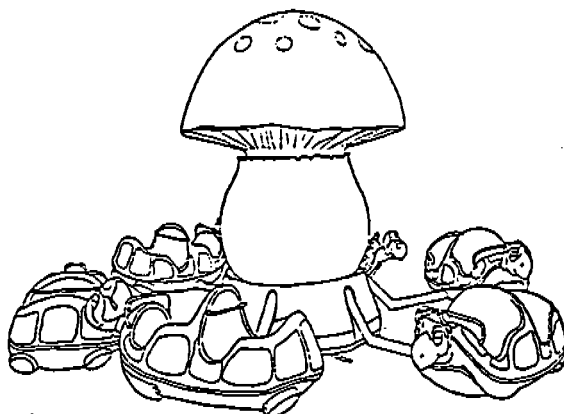
ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX. 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



# TURTLE PARADE



## DESCRIPTION

TURTLE PARADE IS AN ATTRACTIVE CHILDREN RIDE SPECIALLY DESIGNED FOR SMALL LOCATIONS WITH 6.5 MT. DIAMETER WITH FENCES.

THE RIDE CONSISTS IN 6 ROTATING TURTLES AND A BIG CENTRAL FIBERGLASS COLOURED MUSHROOM. EACH CAR HAS 4 SEATS FOR A TOTAL CAPACITY OF 24 CHILDREN SEATS.

EACH CAR IS PROVIDED WITH SOUND AND LIGHTS.

FENCES ON PERIMETER, ELECTRIC PANEL AND REMOTE CONTROL ARE INCLUDED.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- TOP PART OF CENTER LIGHTED
- PLATFORM
- TURTLE PARADE SIGN
- TICKET BOX

## SEATS

|                                    |                          |
|------------------------------------|--------------------------|
| MAXIMUM TOTAL NUMBER OF PASSENGERS | 24                       |
| MAXIMUM TOTAL PASSENGER WEIGHT     | 1800 KG.                 |
| LOADING                            | ALL SEATS SIMULTANEOUSLY |
| MAXIMUM UNBALANCE                  | 12 CHILDREN              |

## PERFORMANCE

|                             |                            |
|-----------------------------|----------------------------|
| DIRECTION OF TRAVEL         | CLOCKWISE                  |
| RIDE SPEED                  | 6 RPM.                     |
| RIDE DURATION (MAXIMUM)     | 2.5 MIN. (PROGRAMMED TIME) |
| RIDE DURATION (RECOMMENDED) | 2 MIN. (PROGRAMMED TIMER)  |
| HOURLY CAPACITY             | 600                        |
| OPERATOR                    | 1                          |

## MAXIMUM RIDE WEIGHT

1 TONS.

## INSTALLED POWER

|         |                                   |
|---------|-----------------------------------|
| TOTAL   | 1.6 KW.                           |
| DRIVE   | 1.1 KW.                           |
| LIGHTS  | 0.5 KW.                           |
| VOLTAGE | 3 PHASE + NEUTRAL<br>SINGLE PHASE |

## SHIPPING INFORMATION

|           |           |
|-----------|-----------|
| CONTAINER | 1x20 O.T. |
|-----------|-----------|

## ERECTION WORKS

NO. 1 PERSON FOR 3 HOURS

Specifications are effective as published on date. Because we try to improve every ZAMPERLA product, these specifications are subject to change without notice.

DATE: 06/91



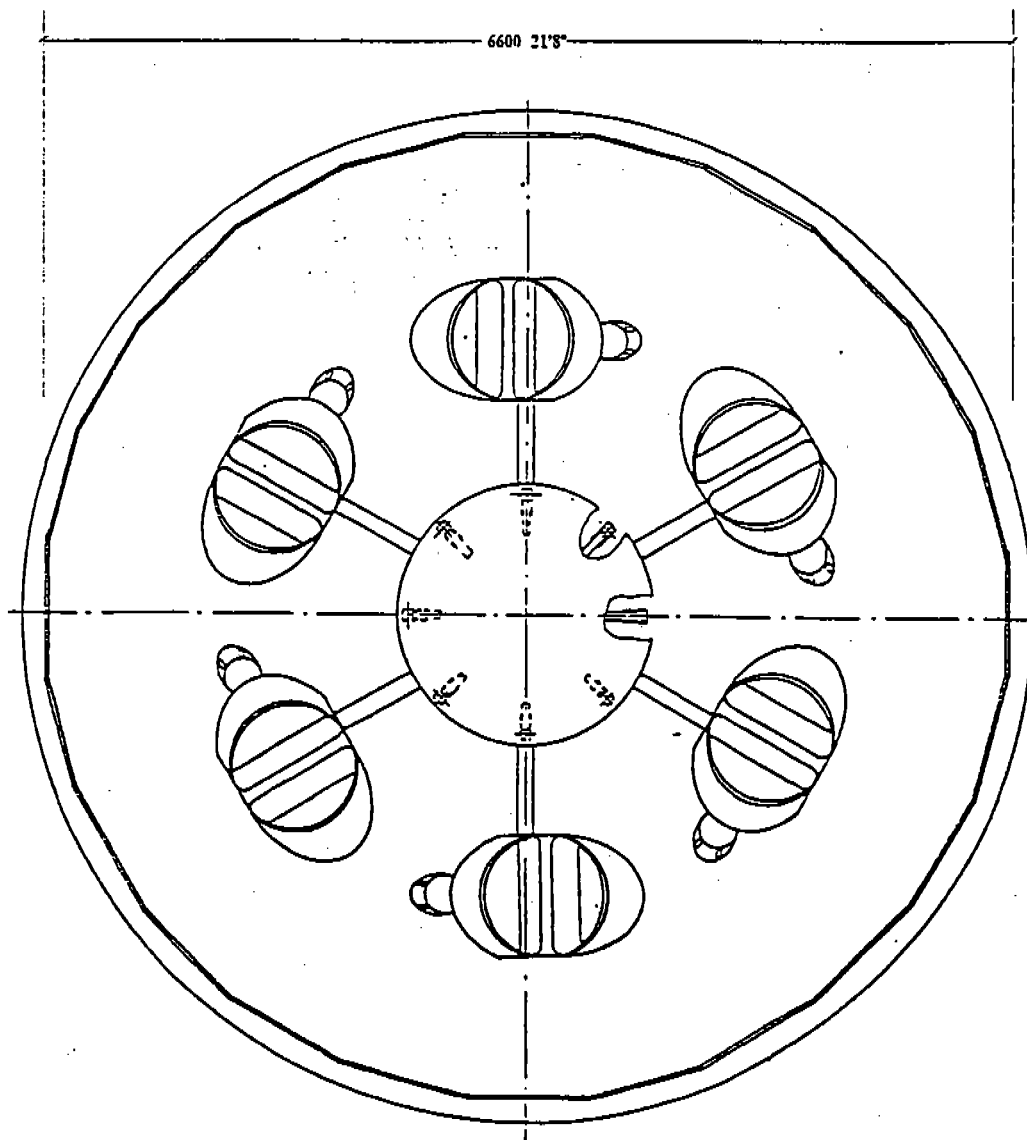
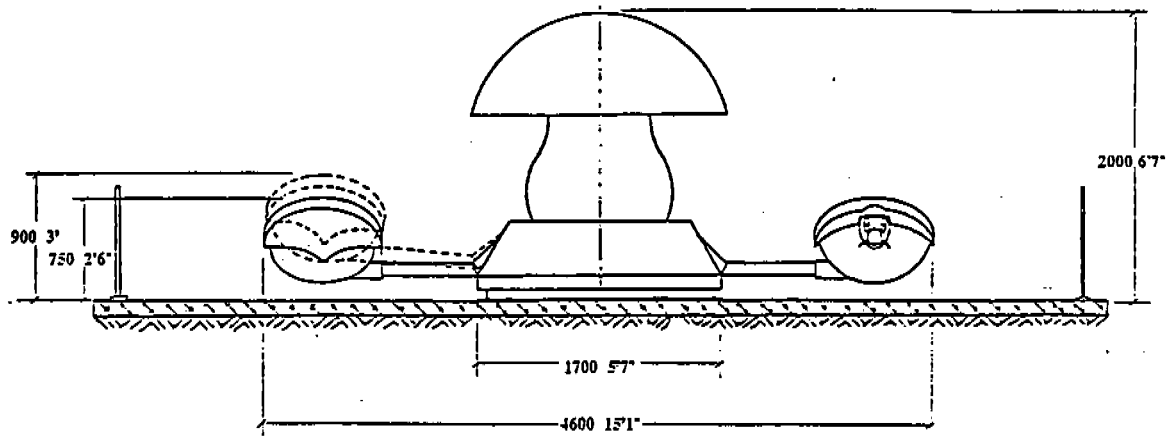
# ZAMPERLA

AMUSEMENT RIDES MANUFACTURERS

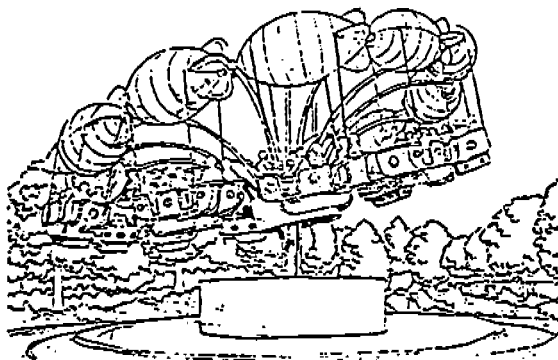
ANTONIO ZAMPERLA S.P.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15.17  
TEL. (0444) 573133 FAX. 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. Box 5545  
PARIS SPRING N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880

# DIMENSIONS



# ZEPPELIN



## DESCRIPTION

OUR FAMILY RIDE ZEPPELIN PARK MODEL HAS 8 CARS OF 8 ADULT SEATS EACH FOR A TOTAL CAPACITY OF 64 PEOPLE. GIVEN A VERY HIGH HOURLY CAPACITY THE RIDE CAN BE CONSIDERED VERY PROFITABLE.

THE CARS REPRESENT DIRIGIBLES WITH BASKETS HANGING FROM THE BRIGHTLY COLOURED FIBERGLASS BALLOONS ALL ROTATING WITH AN INCLINATED AND OSCILLATING MOVEMENT AROUND THE MAIN AXLE.

THE RIDE ROTATION IS GIVEN BY AN ELECTROMECHANICAL SYSTEM AND THE LIFTING BY CLEODYNAMIC CYLINDER SYSTEM, REACHING AN INCLINATION OF 15°. ON THE MAIN COLUMN STRUCTURE ARE ANCHORED THE ARMS FROM WHICH HANG THE BALLOONS. EACH BASKET HAS A SAFETY GATE AND AN EXTERNAL OPENING HANDLE.

THE MOTORIZATION IS MOUNTED ON A FIXED LIFTING CENTER. PAINTED OR GALVANIZED FENCES ON PERIMETER ARE INCLUDED.

THE CLEODYNAMIC SYSTEM AND THE ELECTRIC PANEL ARE GROUND LOCATED UNDER THE RIDE CENTER AND ARE HIDDEN BY A CIRCULAR COLORED STRUCTURE IN FIBERGLASS. THE ELECTRIC PANEL IS INCLUDED.

EACH BOWL IS LIGHTED BY FOUR STRIPS FOR A TOTAL OF 140 LIGHTS AND EACH ARM BY TWO LIGHTED STRIPS.

FOUNDATIONS ARE NEEDED FOR THE CENTRAL COLUMN.

## OPTIONAL (TO BE QUOTED ON REQUEST)

- ZEPPELIN TICKET BOX WITH SIGN.
- DECORATIONS AND LIGHTS ON FIBERGLASS GROUND STRUCTURE.
- PAINTED AND LIGHTED STRUCTURE TO COVER FIXED LIFTING CENTER.
- SPIDER BASEMENT TO AVOID CENTRAL PUNTH.
- PLATFORM ON PERIMETER.

## SEATS

MAXIMUM TOTAL NUMBER OF PASSENGERS 64

MAXIMUM TOTAL PASSENGER WEIGHT 4800 KG.

MINIMUM PASSENGER HEIGHT 105 CM.

(UNACCOMPANIED BY ADULT)

LOADING

ALL SEATS SIMULTANEOUSLY

MAXIMUM UNBALANCE

32 ADULTS (2400 KG.)

## PERFORMANCE

DIRECTION OF TRAVEL CLOCKWISE

RIDE SPEED 8.5 RPM.

RIDE DURATION (MAXIMUM) 2.5 MIN. (PROGRAMMED TIMER)

RIDE DURATION (RECOMMENDED) 2 MIN. (PROGRAMMED TIMER)

HOURLY CAPACITY 1280

OPERATOR 1

MAXIMUM RIDE WEIGHT 22 TONS.

DRIVE ELECTRIC

## INSTALLED POWER

TOTAL 59 KW.

DRIVE 45.5 KW.

LIGHTS 13.5 KW.

VOLTAGE 3 PHASE + NEUTRAL

(OTHER SOLUTIONS HAVE TO BE CONFIRMED)

## SHIPPING INFORMATION

CONTAINER 3x40 + 1x20 O.T.

## LARGEST COMPONENTS

CENTER 2.8 MT. x 2.2 MT. x 8 MT.

BASKET 2.2 MT. x 1.2 MT. x 1.2 MT.

ARM 4.5 MT. x 0.6 MT. x 0.4 MT.

## ERECTION WORKS

\*NO. 2 SUPERVISORS FOR 3 DAYS

\*CRANE: HEIGHT X TONS. X LENGTH OF THE ARM X TIME IN HOURS

10 MT. x 18 TONS. x 6 MT. x 10 HOURS.

\*DEPENDS ON SITE CONDITIONS AND WORK FORCE AVAILABLE

Specifications are effective as published on date. Because we try to improve every ZAMPERLA product, these specifications are subject to change without notice.

DATE: 06/91



# ZAMPERLA

AMUSEMENT RIDES MANUFACTURERS

ANTONIO ZAMPERLA S.p.A.  
(HOME OFFICE FACTORY)  
36077 ALTAVILLA VIC. (VI) ITALY  
Via MONTE GRAPPA 15-17  
TEL. (0444) 573133 FAX. 573720  
TELEX 481499 ZAMPER I

ZAMPERLA INC.  
(U.S.A. SALES/SERVICE OFFICE)  
49 FANNY ROAD, P.O. BOX 5545  
PARSIPPANY N.J. 07054-0598  
PH. (201) 334-8133 (800) 888-8878  
TELEFAX (201) 334-6880



# DIMENSIONS

