	KMG International BV Parallelweg 35 7161 AE Neede The Netherlands		Bulletin No:	FRB16-SB002
			Release Date:	2020, October 21 st
			Effective Date:	2020, October 21 st
JO KMG			Supersedes:	none
PROJECT PLANNING		-	Completion Date:	See text
	Tel: +31-545-294545 Info@kmgrides.com	Fax: +31-545-291306 www.kmgrides.com	Page:	1 of 7

SAFETY ALERT

Ride Mfg:	KMG International BV	Affected Production Dates:	All			
Ride Name:	Freak-Out	Affected Serial Numbers:	01 through 51			
Model Number:	FRB16					
Abstract of Issue:	Immediate NDT inspection on gondola sweep hub					

Reason for release:

KMG International BV has become aware on a sweep hub failure on a KMG Freak Out (FRB16), which is 16passenger transportable ride. The FRB16 sweep hub has 16 lug ears where each of the four gondola arms connect to the sweep hub by two shafts (one permanently installed, and one removable for transporting the ride).

After investigation it was determined that the following series of events lead to the failure of the lug ear:

- The lug ear of the hinge sleeve was not adequately greased, causing one of the hinge shafts to get seized in the lug ear.
- Severe play between the lug ears, shafts and gondola arm sleeves caused excessive movement in the full gondola arm assembly when the amusement ride was operated.
- Excessive movement in the gondola arm assembly during operation created a high stress point in the lug ear with seized shaft, finally overloading and failing the lug ear.

KMG considers this to be a singular incident resulting from above series of events. The Freak Out is a time proven structure that will operate with little or no issues if properly maintained. KMG has therefore issued this bulletin to provide a detailed and immediate inspection of the sweep hub to ensure the safety of the Freak Out rides. This inspection was already part of the annual structural inspection of the Freak Out ride.

All above mentioned Freak Out rides are not to be operated until all inspections and procedures described in this bulletin are satisfactorily completed.

		KMG International BV Parallelweg 35 7161 AE Neede The Netherlands		Bulletin No:	FRB16-SB002
				Release Date:	2020, October 21 st
				Effective Date:	2020, October 21 st
				Supersedes:	none
F PROJECT PLA				Completion Date:	See text
		Tel: +31-545-294545 Info@kmgrides.com	Fax: +31-545-291306 www.kmgrides.com	Page:	2 of 7
Ride Mfg:	Ride Mfg: KMG International BV		Affected Product	ion Dates: All	
Ride Name:	ide Name: Freak-Out		Affected Serial N	umbers: 01 th	nrough 51
Model Number:	FRB16				
Abstract of Issue:	Immediat	e NDT inspection o			

Action to be taken:

All owners of the above mentioned Freak Out rides are required to cease operation until all procedures in this bulletin are completed.

- If any rejected result is found in procedure A OR B: Contact KMG International BV immediately. Do NOT operate the ride.
- If both procedures A and B have an accepted result: The ride can be taken into normal operation.

Detail of issue

Procedure A

Requirements

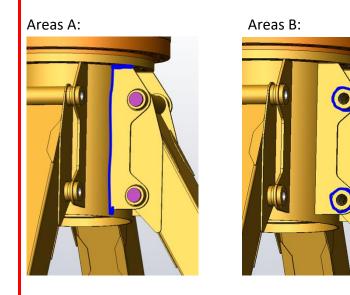
Inspection is to be carried out on the Gondola hub of the Freak out ride. All results shall be documented to the manufacturer. Inspections are to be carried out by KMG approved inspectors or inspection companies, certified in the field of testing materials.

A level 2 inspector acc. ISO 9712 is required. Inspector shall have knowledge about the parts to inspect. All tests shall be performed under the responsibility of one company. All reports have to be send to KMG to validate or a level 3 inspector shall validate the results and proper procedure.

Procedure

- 1. The sweep arm hub is to be cleaned and all loose parts are to be removed, until the exterior surface of sweep hub can be inspected.
- 2. Visually inspect the weld and especially the corners of the sweep hub where the support plate joins the round tube (Areas A), looking for visible cracks. The sweep hub has 8 of these areas, inspect both sides of the areas.
- Visually inspect the round thickening plates of the sweep hub where it joins to the support plate (Areas B), looking for visible cracks. The sweep hub has 16 of these areas, inspect both sides of the areas.

PROJECT PLANNING		KMG International BV Parallelweg 35 7161 AE Neede The Netherlands		Bulletin No:	FRB16-SB002
				Release Date:	2020, October 21 st
				Effective Date:	2020, October 21 st
				Supersedes:	none
, PROJECT PLA	P PROJECT PLANNING				See text
			Fax: +31-545-291306 www.kmgrides.com	Page:	3 of 7
Ride Mfg:	Ride Mfg: KMG International BV		Affected Product	ion Dates: All	
Ride Name:	Ride Name: Freak-Out		Affected Serial N	umbers: 01 th	nrough 51
Model Number:	FRB16				
Abstract of Issue:	Immediate NDT inspection on gondola hub				



- Accepted: No cracks or indications are visible under normal vision. Repeat the visual inspections on a weekly basis, until Procedure B has been completed.
- Rejected: Cracks or indications are visible under normal vision. Do not attempt to repair. **Do NOT operate the ride.** Contact KMG International BV

KMG		KMG International BV Parallelweg 35 7161 AE Neede The Netherlands		Bulletin No:	FRB16-SB002
				Release Date:	2020, October 21 st
				Effective Date:	2020, October 21 st
				Supersedes:	none
PROJECT PLA				Completion Da	te: See text
			Fax: +31-545-291306 www.kmgrides.com	Page:	4 of 7
Ride Mfg:	KMG Inter	rnational BV	Affected Product	ion Dates:	All
Ride Name: Freak-Out		Affected Serial N	umbers: (01 through 51	
Model Number:	FRB16				
Abstract of Issue:	Immediate NDT inspection on gondola hub				

_

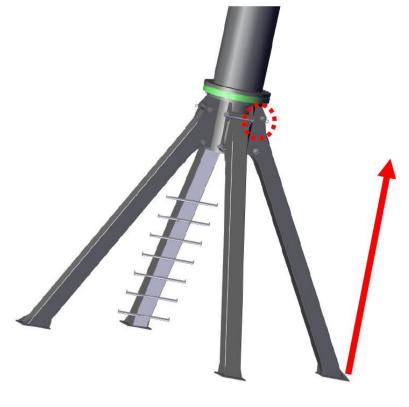
Procedure B

Required tools:

- Dial Indicator (i.e. Mitutoyo 1003B)
- Chain hoist 500kg

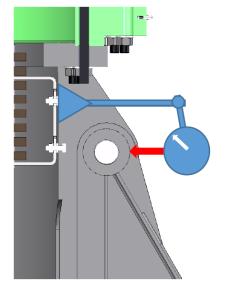
This procedure is used to determine the play between sweep hub and gondola arms using a chain hoist and dial indicator. The procedure must be carried out with the ride being buildup and gondolas and gondola connection bars removed.

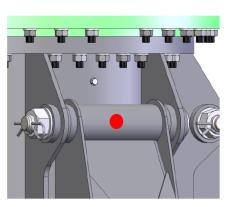
1. Use chain hoist or ride winch to lift the gondola arm.



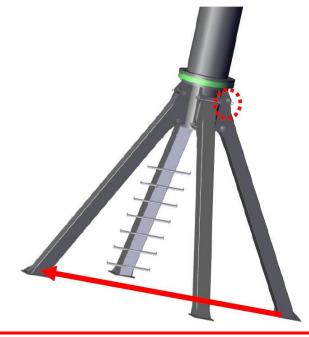
PROJECT PLANNING		KMG Interna	tional BV	Bulletin No:	FRB16-SB002
		Parallelweg 35 7161 AE Neede The Netherlands		Release Date:	2020, October 21 st
				Effective Date:	2020, October 21 st
				Supersedes:	none
, PROJECT PLA	P PROJECT PLANNING				See text
			Fax: +31-545-291306 www.kmgrides.com	Page:	5 of 7
Ride Mfg:	Ride Mfg: KMG International BV		Affected Product	ion Dates: All	
Ride Name: Freak-Out		Affected Serial N	umbers: 01 th	rough 51	
Model Number:	FRB16				
Abstract of Issue:	Immediate NDT inspection on gondola hub				

2. Install dial indicator between sweep hub and gondola arm on top of sweep hub:



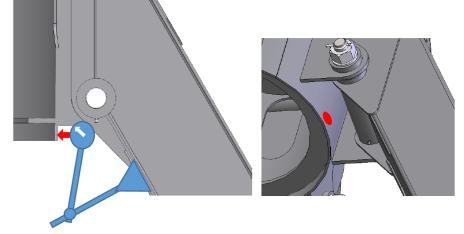


3. Lower gondola arm and use the chain hoist to pull the gondola arm to the opposite gondola arm

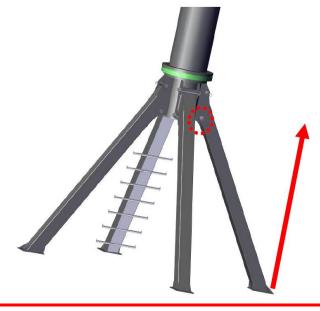


		KMG International BV		Bulletin No:	FRB16-SB002
		Parallelweg 35		Release Date:	2020, October 21 st
	SO KMG		7161 AE Neede		2020, October 21 st
PROJECT PLANNING		The Netherlands		Supersedes:	none
F PROJECT PLA	NNING			Completion Date:	See text
		Tel: +31-545-294545 Info@kmgrides.com	Fax: +31-545-291306 www.kmgrides.com	Page:	6 of 7
Ride Mfg:	KMG Inter	rnational BV	Affected Product	ion Dates: All	
Ride Name:	Ride Name: Freak-Out		Affected Serial N	umbers: 01 th	nrough 51
Model Number:	FRB16				
Abstract of Issue:	Immediat	e NDT inspection o	n gondola hub		

- 4. Read out play indicator at the dial indicator; this is measurement A.
- 5. Keep chain hoist of step 3 in place.
- 6. Remove dial indicator from top and install indicator between sweep hub and gondola rm on bottom side of sweep hub:



7. Remove chain hoist from opposite arm and lift gondola arm with chain hoist or ride trailer winch:



		KMG Interna	tional BV	Bulletin No:	FRB16-SB002
		Parallelweg 35 7161 AE Neede The Netherlands		Release Date:	2020, October 21 st
				Effective Date:	2020, October 21 st
				Supersedes:	none
PROJECT PLA	P PROJECT PLANNING				See text
			Fax: +31-545-291306 www.kmgrides.com	Page:	7 of 7
Ride Mfg:	Ride Mfg: KMG International BV		Affected Product	ion Dates: All	
Ride Name: Freak-Out		Affected Serial N	umbers: 01 th	rough 51	
Model Number:	FRB16				
Abstract of Issue:	Immediate NDT inspection on gondola hub				

- 8. Read out play indicator at the dial indicator; this is measurement B.
- 9. Repeat steps 1 through 7 for all four gondola arms.
- Accepted: Measurements A and B are smaller than 0.5mm.

Rejected: Any measurement A or measurement B larger than 0.5mm.

Do NOT operate the ride.

Contact KMG International BV.