



SAFETY ORDER

DOPPELMAYR DS SERIES DETACHABLE GRIP FIXED JAW FAILURES

No: SO-PR 2012-03

Date of Issue: September 24, 2012

This safety order is issued pursuant to section 31 of the Safety Standards Act. A person affected by this safety order may appeal this order in writing to the Safety Standards Appeal Board within 30 days. The appeal process is set out on the Safety Standards Appeal Board's website at <http://www.housing.gov.bc.ca/ssab/>.

Failure to comply with a safety order is an offence under section 72 of the Safety Standards Act.

Part 1: Details of Regulated Work or Regulated Product

This safety order is being issued in relation to (circle or highlight one):

Regulated Work – General	Regulated Products – General
Regulated Work – Specific Class	Regulated Product – Specific Class
Specific Regulated Work	Specific Regulated Product

This safety order, No: SO-PR 2012-03, applies to all Doppelmayr detachable above surface passenger ropeways that utilize DS Series detachable grips.

An incident where a fixed jaw failed on a Doppelmayr DS108 detachable grip in on an 8 passenger gondola in February 2012 at a resort in BC has prompted the manufacturer to issue a bulletin. It has been determined that a bulletin issued in 1997, identified as Doppelmayr Bulletin D-09, was not complied with on a majority of affected passenger ropeway installations in BC. Doppelmayr bulletin D-09 required action to mitigate these types of failures. The purpose of this Safety Order is to ensure that all affected passenger ropeway contractors in BC have complied with the manufacturers requirements identified in bulletin SB-12-009.

All operators of this equipment should be in receipt of Doppelmayr Service Bulletin SB-12-009 as of September 7,2012. If you are not in receipt of this bulletin it is attached for your reference; however if you did not receive it please notify the manufacturer immediately.

Part 2: Requirement(s) of this safety order

All operators of Doppelmayr detachable above surface ropeways that utilize DS Series grips that are not already in compliance with Doppelmayr bulletin D-09 must complete the following requirements:

1. Complete the visual inspection requirements identified in Doppelmayr Service Bulletin SB-12-009 (see item #1 on page 2 of the bulletin). If the affected passenger ropeway installations at your area were in operation at the time the bulletin was issued this visual inspection should have been implemented immediately. If the affected installations at your area are not in operation but operation for public is planned prior to completing the MT testing identified in the bulletin, then the required visual inspections must take place prior to operation. Any jaws found with crack



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indications must be taken out of service and reported to the manufacturer and BCSA immediately.

2. Complete MT testing of all non-compliant fixed jaws identified in Doppelmayr Service Bulletin SB-12-009 (see item #2 on page 2 of the bulletin) prior to public operation for the 2012/2013 winter season. The testing must be in accordance with Doppelmayr test procedures PSKL0112 and PAMT0020 identified in the bulletin. These test procedures require wet fluorescent magnetic particle inspection. Any rejected fixed jaws must be reported to the manufacturer and BCSA prior to operation for public on the affected installation. This testing must occur every two years on detachable grips that are not in compliance with requirements of Doppelmayr Bulletin D-09.
3. If any affected passenger ropeway installations are in operation for public prior to the required MT testing identified above then a monthly visual inspection is required (see item #3 on page #2 of the bulletin). This applies to affected passenger ropeways that may be in operation for foot passengers leading up to the 2012/2013 winter season. Any jaws found with crack indications must be taken out of service and reported to the manufacturer and BCSA immediately.
4. Repair procedures SPKL0001 and/or SPKL0002 identified in Doppelmayr Service Bulletin SB-12-009 (see item #4 on page 2 of the bulletin) must be started on a minimum of 20% of the detachable grips on the affected passenger ropeway installations at your area prior to the 2013/14 winter season. Ongoing repairs of 20% of the detachable grips will occur each year until all repairs are complete. Maintenance records must reflect actual measurements and the actions taken on each fixed jaw. Maintenance records for these actions must be submitted to BCSA each year until all repairs are complete.

All passenger ropeway contractors must submit the attached response form for each affected passenger ropeway installation prior to the 2012/13 winter season. The response form must be completed in its entirety.

Part 3: Details of Issue

This safety order is being issued to the following: All passenger ropeway contractors operating Doppelmayr passenger ropeways utilizing DS 104/108 detachable grips.

Part 4: Details of Ordering Safety Manager or Safety Officer – Please read following page

I certify that I am authorized to issue this safety order in accordance with section 15 (d) of the Safety Standards Act or that I have been delegated this power under section 15 (g) of the Safety Standards Act.



Jason Gill
Provincial Safety Manager –
Passenger Ropeways and Amusement Devices

Date: September 24, 2012



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Safety Standards Act:

Safety Orders

- 31
- (1) To prevent, avoid or reduce risk of personal injury or damage to property, a provincial safety manager may, in writing, issue a safety order.
 - (2) A safety order may be issued to any person in relation to any of the following:
 - (a) regulated work or regulated products generally;
 - (b) a specific class of regulated product or regulated work;
 - (c) a specific regulated product or regulated work.
 - (3) For certainty, a safety order issued under this section may apply to
 - (a) regulated work that meets the requirements under this Act,
 - (b) regulated work that previously met the requirements under this Act or a former Act but does not meet the current requirements under this Act,
 - (c) regulated products that meet the requirements under this Act, or
 - (d) regulated products that previously met the requirements under this Act or a former Act but do not meet the current requirements under this Act, including a regulated product that bears a certification mark.
 - (4) A safety order may specify any requirement that is intended to prevent, avoid or reduce the risk of personal injury or damage to property and may include any of the following orders:
 - (a) that an existing regulated work or regulated product must be made safe in compliance with the safety order;
 - (b) that a regulated product must be
 - (i) disconnected from a power source,
 - (ii) uninstalled, or
 - (iii) modified before continued use;
 - (c) that a regulated product must be operated, installed, manufactured or disposed of only as specified or that a regulated product must not be moved;
 - (d) that current or future regulated work or a regulated product must conform to the terms or conditions of the order;
 - (e) that a person take or refrain from taking any action that a safety manager considers necessary to prevent, avoid or reduce a risk of personal injury to persons or damage to property;
 - (f) that the manufacturer make reasonable efforts to recall the regulated product.
 - (5) The provincial safety manager must give written notice of the safety order to the following persons:
 - (a) the manufacturer of the regulated product;
 - (b) an owner of the regulated product if the identity of the owner is known to the provincial safety manager;
 - (c) the person in charge of the regulated work.
 - (6) The notice must state the reasons for the decision and that the person has the right to appeal the decision to the appeal board.
 - (7) Despite section 54, a safety order may not be stayed during an appeal.

References:

Safety Standards Act

For more information on the British Columbia Safety Authority, please visit our website at:

www.safetyauthority.ca

Author	Release date	Doc. no.	
KEL	2012-09-07	SB-12-009	

SERVICE BULLETIN

Lift manufacturer :	Doppelmayr	Fabrication Group :	225 - GRIPS
Lift type :	Fixed and Detachable	Effective date :	2012-09-07
Supersedes :			

For non-compliant jaws, or where status is unknown, the following actions are mandatory:

- 1) Prior to public operation, all fixed jaws shall to be subjected to visual inspection. The jaws shall be inspected (by a competent person at sufficient brightness) at the rope channel as well as at the outer surface, especially around the radii R (see Figure 2). At smallest crack indications the respective jaw shall be rejected. Inform your Doppelmayr Service Provider of any rejections.

- 2) As soon as practicable, preferably prior to public operation, MT testing of all fixed jaws shall be carried out in accordance with PSKL0112 and PAMT0020. Inform your Doppelmayr Service Provider of any rejections. This MT testing shall be carried out not later than 3 months following receipt of this bulletin. This MT testing shall be repeated at two (2) year intervals on all non-compliant jaws, until the relevant measurement, stretching and machining procedures have been carried out, and documented, for all jaws. This MT testing may be carried out in the terminals and does not require disassembly of the grips.

- 3) Until the MT testing is achieved, a monthly visual inspection of each non-compliant jaw is necessary.

- 4) Repair Procedures SPKL0001 and/or SPKL0002 as applicable shall be carried out as soon as practicable. These procedures shall be performed on not less than 20% of fixed jaws per year until all non-compliant jaws have undergone the repair procedures.

- 5) Once all fixed jaws have undergone repair procedures SPKL0001 and/or SPKL0002 as applicable, or replaced by new, then the standard inspection sample of 20% per year can be resumed according to procedure PSKL0112.

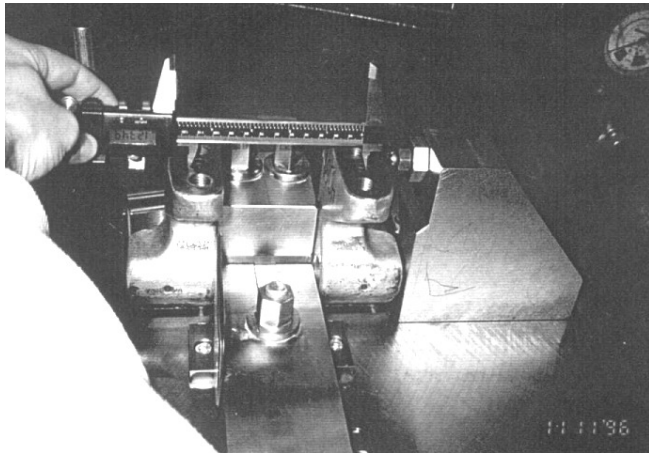
Author	Release date	Doc. no.	
KEL	2012-09-07	SB-12-009	

SERVICE BULLETIN

Lift manufacturer :	Doppelmayr	Fabrication Group :	225 - GRIPS
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Supersedes :			

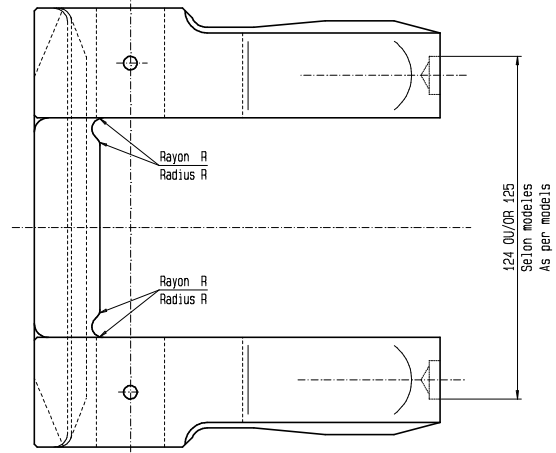
3.1 Additional Information

Figure 1



Critical measurement tolerance is measured from outside – outside of dowel pin holes

Figure 2



Note the critical measurement tolerances when carrying out the stretching procedure for DS104 is 124 mm \pm 0.2 mm and for DS108 is 125 mm +0.0 mm/-0.2 mm. **Note these tolerances are new and different than mentioned in the procedures and drawings below.**

Jaws that originally measured greater than the maximum critical measurement tolerance (i.e. DS104 124.2 mm DS108 125.0 mm) require no further action, except for radii rework. The stretching procedure is only necessary for jaws that measure less than the minimum critical measurement tolerance (i.e. DS104 123.8 mm DS108 124.8 mm).

Use extreme care when carrying out the stretching procedure. If the maximum critical measurement tolerance is exceeded, it is not permitted to compress the jaws back within tolerance.

The tools referenced in the procedures necessary to perform the stretching procedure are available in limited supply from your Doppelmayr Service Provider.

Author	Release date	Doc. no.	
KEL	2012-09-07	SB-12-009	

SERVICE BULLETIN

Lift manufacturer :	Doppelmayr	Fabrication Group :	225 - GRIPS
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Supersedes :			

Where jaws were previously reworked to improve the radii R (see Figure 2) , but where this rework fails to comply with the rework specifications herein, then this rework shall be reviewed for compliance and corrected as necessary.

⚠ Warning! Failure to comply with the requirements of this Bulletin may present a risk of serious injury to passengers and/or result in damage to the equipment.

4. Detail of issue

Text, drawings, schematics

See procedures, drawings and related documents:

- Bulletin D-09 – Fixed Jaws on Detachable Carriers with DS Series Grip
- SPKL0001e 2000-09-20 – Modification/Repair Specification for DS108 Fixed Grip Jaw, Corner Zone between Rope Channel and Side Piece
- SPKL0002e 2000-09-20 - Modification/Repair Specification for DS104 and DS118 Fixed Grip Jaw, Corner Zone between Rope Channel and Side Piece
- SPKL0004e 2000-09-20 – Dismantling the Fixed Grip Jaw
- SPKL0005e 2000-09-20 – Recessing the Grip Jaws
- PAMT0020 2000-10-03 – Test Instruction to Check for Surface Flaws by means of Magnetic Particle Testing (MT) to DIN 54130/31
- PDKL0104e 2000-10-20 – Test Report Results
- PSKL0112 2009-05-04 – NDT Procedure – Detachable DS Series Grips

These procedures and drawings are available for download to registered users of the Doppelmayr Customer Service Portal at www.doppelmayr.com/service under the menu *Manuals & NDT Standards*. New User Registration to the Portal is a simple process completed by following the information presented on the Portal home page.



www.doppelmayr.com/service
North American Service Portal



505 - 6th Street, Suite 200,
New Westminster, BC, V3L 0E1

Local Phone: 778-396-2000
Fax: 778-396-2174
Toll Free: 1-866-566-SAFE (7233)
Fax: 1-888-660-3508

www.safetyauthority.ca

SAFETY ORDER RESPONSE FORM

The information on this form is collected to administer the provisions of the BC Safety Standards Act and section 26 of the Freedom of Information and Protection of Privacy Act. If you have any questions about the collection, use, or disclosure of this information, contact the Records, Information and Privacy Analyst for the BC Safety Authority at 1-866-566-7233.

The company and/or designated representative in receipt of a safety order must fill out and submit this form to the British Columbia Safety Authority within the timeframe stipulated on the safety order.

Safety Order No: SO-PR 2012-03

Operating Company:

Passenger Ropeway Registration # (One Form for Each Ropeway):

I acknowledge that the following requirements identified in Safety Order SO-PR 2012-03 have been completed (please check the box to indicate completion):

Safety Order Requirement #1 – Visual Inspections **N/A (Not in Operation)**

Safety Order Requirement #2 – MT Testing

Safety Order requirement #3 – Monthly Visual Inspection **N/A (Not in operation)**

I acknowledge that I have taken the following action with respect to requirement #4 identified in Safety Order SO-PR 2012-03:

Required repair program will be started prior to the 2013/14 winter season

Required repair program has already been started and copies of maintenance records that document the work completed to date are attached.

All required repairs are complete and copies of maintenance records that document this work are attached. (Requirements 1 to 3 do not require action if this is the case)

Person signifying completion of safety order requirement/s: _____
(PRINT clearly)

Position Title: _____

Signature: _____

Completion Date: _____
Month / Day / Year

Return this form to:

Attention: Tina Wong
tina.wong@safetyauthority.ca

505 - 6th Street, Suite 200, New Westminster, British Columbia, Canada V3L 0E1
Tel: 778-396-2044 Fax: 778-396-2035