


Author <i>Auteur</i>	Release date <i>Date émission</i>	Doc. no. <i>No. de doc.</i>	
MB/FC	03-30-2007	SB-07-005	

**SERVICE BULLETIN / BULLETIN DE SERVICE**

Lift manufacturer / <i>Fabricant</i> : Doppelmayr	Fab. Group / <i>Groupe de fabrication</i> : 220
Lift type / <i>Type de remontée</i> : 4CLF / 4CLD	Effective date / <i>Date en vigueur</i> : 03-30-2007
Supersedes / <i>Remplace</i> : SB-06-015	

**Title: DOPPELMAYR QUAD CHAIRS MODEL E/EC – CHAIR BAIL**

**1. General**

Following the bulletins **SA-06-005** and **SB-06-015** concerning the transverse cracks found in **Area C** of chair bails tubes of Doppelmayr quad chairs model E/EC (see **sketch page 3**), please find our final statement.

**2. Scope**

All quad chair bails, E/EC models, (see **sketch page 3**) **manufactured until 2006** are concerned. Please note that **E95 & E98** chair bails provided by Doppelmayr Austria, and without a welded gusset, are not concerned.

**3. Action to be taken and completion date**

The following actions are to be completed prior to **November 2007**. For lifts in operation during this period, these actions shall be completed within **90** days of the effective date of this bulletin. **All inspections and results must be documented in a permanent log.**

**3.1 Fixed grip chair lifts**

**Every Year** : Perform a magnetic particle examination in **area C** as per **section 4**, of **20 %** of the chair bails, with a minimum of 10 bails.

If one bail or more of the sample does not meet the acceptance criteria mentioned in **section 4**, perform a magnetic particle examination in **area C** on **100 %** of the bails of the ropeway.


**Every Year** : All bails shall have a **thorough visual inspection in area C** by an experienced technician. If a defect is suspected, perform a magnetic particle examination to determine whether the bail is acceptable or not as per **section 4**.

**3.2 Detachable grip chair lifts**

All bails considered as **“conforming”** regarding the bail width (see **page 3**) shall be treated the same way as for a fixed grip chair lift.

All bails considered as **“deformed”** regarding the bail width (see **page 3**) shall be treated as follows;

- **Every year**, perform the magnetic particle examination in **area C** of **100 %** of the **“deformed”** chair bails as per **section 4**.
- **When performing periodic visual inspections**, pay special attention to the **area C** of the chair bails.

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### 4. Inspection Procedure and Acceptance Criteria

#### 4.1 Visual Inspection Procedure

The area to be inspected must be free of dirt, grease or other contaminant. Adequate lighting of all surfaces to be inspected must be provided. A magnifier (3 X and more) may be used.

#### 4.2 Magnetic Particle Testing Inspection Procedure

In addition to our standard NDT procedure for chairs (**PSFB0107**), the followings shall be respected;

- The **AC Wet Continuous** (Fluorescent or Non fluorescent) Magnetic Particle method is mandatory.
- The portable yoke poles' spacing is between **4 and 6 inches**.
- The duration of magnetization shall be longer than **4 seconds**.

#### Proof of Magnetization

Magnetization must be proven regularly prior to testing and at the latest after its completion (at least once a day) by one of the following methods:

- a) by measuring the tangential magnetic field strength as closely as possible to the surface of the specimen being tested. Field strength must be between **2 kA/m and 6 kA/m**;
- b) by using a "Magnetic Particle Field Indicator" (Pie gauge field indicator).

**Notes:** In case of doubt during the examination, the zinc coating must be removed. A smooth sanding to investigate an indication is permitted as long as the finish surface has no grinding marks and no significant base material is removed (less than 0.2 mm or 0.01").

#### 4.3 Acceptance Criteria

##### For Visual Examination :

Any linear indication in the transverse direction of the main axis of the bail tube shall be investigated with a magnetic particle examination.

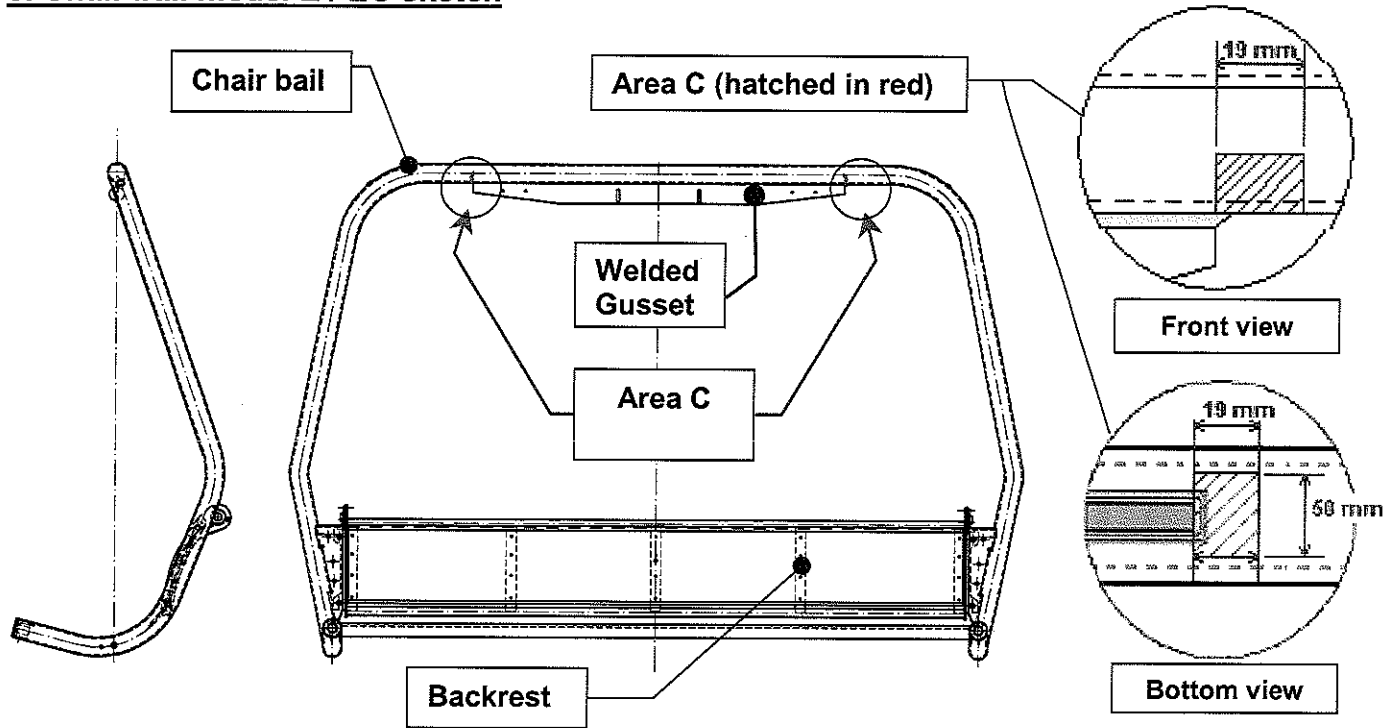
##### For Magnetic Particle Examination :

Any crack, regardless of the length, which has propagated into the base metal of the chair bail tube **and away from the weld**, is a cause for rejection. The chair bail shall be removed from service – no repair allowed. If the indication is confined in the weld seam and has not propagated into the base metal of the tube, the chair may stay in service

**All inspections and results must be documented in a permanent log.**

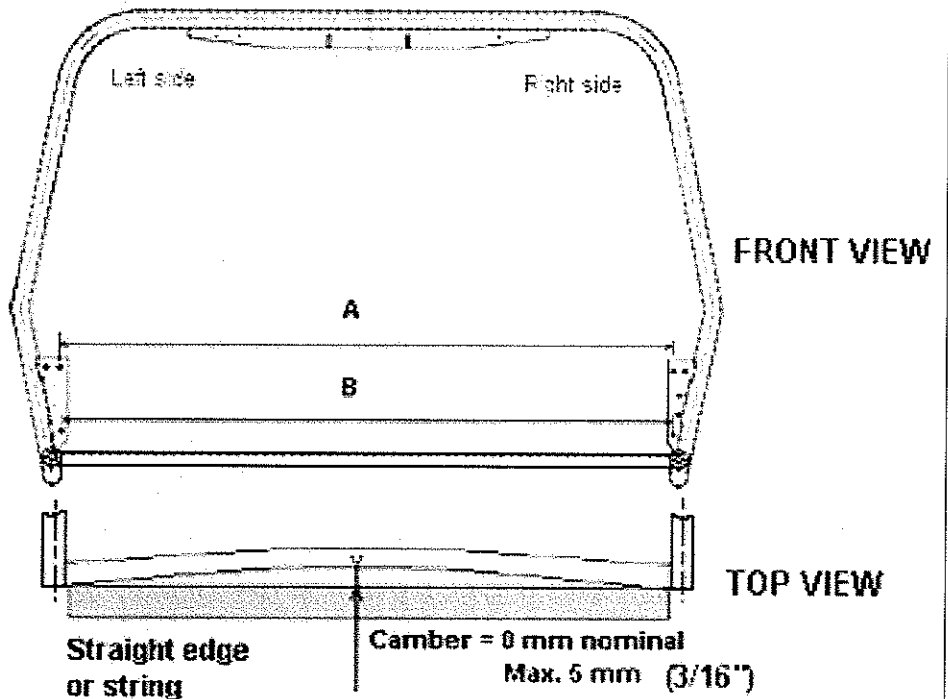
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**5. Chair bail model E / EC sketch**



**To determine if the chair bail is deformed :**

- Measure the camber of the angle bar in the front. If the camber is less than or equal to **5 mm (3/16")** the chair bail is considered to be "conforming"
- If the camber exceeds **5 mm (3/16")** remove the seat back and measure the dimensions **A** and **B**.
- If dimensions **A** or **B** are less than **2002 mm**, the bail is considered as "deformed"
- If dimensions **A** or **B** are equal or greater than **2002 mm**, the bail is considered as "conforming".



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**6. Chair bail replacement.**

For people who need to replace a bail, Doppelmayr CTEC will provide a discount from the normal selling price for bails less than 10 years old according to the following schedule based on the in-service date (initial public operation) and Mars 2006:

Less than 2 years old	Free replacement
2-5 years old	\$513.19 CAD/ ea (50% discount)
5-10 years old	\$718.45 CAD/ ea (30% discount)
Greater than 10 years old	\$1026.37 CAD/ ea (100 and more \$925.00 CAD / ea)

The ID number for an upgraded replacement bail kit is **50017477 ( Kit includes the bail and the new 19 mm seat pins and hardware)**. The prices above are valid for a period of 30 days. After this period, Doppelmayr CTEC can modify these prices without further notice.

The above discount will only apply to bails that have an indication that has propagated in the base metal of the chair bail tube (away from the weld).

Based on the results of the previous inspections that were performed in 2006, **it is not expected that a significant quantity of bails will require** replacement. Please complete the inspections as soon as possible to assure timely delivery of replacement bails. All orders will be shipped on a first-come-first-served basis.

**Note :** Due to the high number of safety bars configurations and some width limitations for the proper installation of the seats, the possibility for a retrofit of the backrest **with** a narrower one is no **longer** an option offered.

Doppelmayr CTEC

Customer service