RIBLET
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Service Bulletin #2000-135

Applicability: All operators of Riblet and other chairlifts and tramways equipped with Riblet Insert Chair Clips.

Subject: Periodic inspection and testing of Riblet Insert Chair Clips.

Compliance: Preventive maintenance. (Place copy in maintenance manual)

This service bulletin furnishes procedures for non-destructive testing (NDT) of Riblet Insert Chair Clips, in accordance with the requirements of ANSI B77.1-1999, CAN/CSA-Z98-96, and other known Standards for aerial passenger tramways. This testing procedure is adequate to detect faulty materials and to detect damage incurred during service.

This Bulletin supercedes, replaces, and combines the following Riblet Service Bulletins:

1984-105 Periodic inspection and testing of Riblet Insert Chair Clips….

1984-107 Chair clip serial numbering….

1988-118 Compliance with 1988 Colorado Standard, supplement to RTCo. Service Bulletins 1984-105 and 1984-106.

A. Frequency of Inspection:

1) B77.1 Requirements:

A rotating sample of 10 chair clips, or 10% of the chair clips on each lift, whichever is greater, shall be tested each year. Alternatively, all clips may be tested every 6 years or 6000 hours, whichever comes first.

2) CAN/CSA-Z98-96 Requirements:

A rotating sample of 10 chair clips, or 20% of the chair clips on each lift, whichever is greater, shall be tested each year, so that none of these components shall be in service for more than five years without being tested.

3) Alternative Riblet Recommendation:

Subject to approval of the Authority Having Jurisdiction, a rotating sample of 10 chair clips, or 20% of the chair clips on each lift, whichever is greater, shall be tested every two years.

B. Testing Method:

Riblet Insert Chair Clips shall be tested only by the Magnetic Particle Method, at the Riblet factory or by a qualified and experienced laboratory or individual. Only a magnetizing coil is needed; direct conduction, or "head shot", is not needed, as most disqualifying cracks will be transverse, or perpendicular to the axis of the clip shank. Clips shall be cleaned prior to testing, and demagnetized afterwards. The testing lab shall determine the type of equipment and particle required.

In Colorado, testing personnel shall be certified to ASNT Level II, or the clips may be sent to the Riblet factory for testing.

C. Rejection Criteria:

Please refer to the attached sketch. Any transverse cracks in the critical areas shall be grounds for rejection. However, the upsets caused by the wires in the wire rope can sometimes show apparent surface cracks. These are acceptable if they can be completely removed by three or four strokes of a fine round file.

Any longitudinal cracks more than ¼ inch in length in the critical areas shall be grounds for rejection, except that in the small area marked "A", longitudinal cracks of up to 3/8" in length on the centerline of the clip are acceptable.

Forging folds, and unopened cracks of no more than ¼" in length outside of the critical areas are acceptable.

Reject clips may be sent to Riblet for further examination, if the owner so desires. Otherwise, rejects should be destroyed to prevent inadvertent use.

D. Allowable Rejection Rate:

The allowable rejection rate for a statistical (10% or 20%) sample is 0 (zero). If any one clip in a 10% or 20% sample is rejected, all clips on the lift must be tested. Exception: Rejection of a chair clip for an apparent initial manufacturing defect, obvious accidental damage, or shank wear may not require the NDT of all clips on the lift. Clips may be sent to Riblet for re-test in the event of any question.

If significant numbers of chair clips in a statistical or 100% sample are rejected, please contact Riblet Tramway Company.

E. Record Keeping:

Chair clip history and inspection records shall be kept in three places:

1. On each chair clip.

2. In the owner's chairlift logs.

3. In the Riblet Tramway Company's files.

Please see Page 4 for the location and type of marking to be stamped on each chair clip during inspection. Use steel stamps, 1/8" or 3/16" high, to make these marks on the vertical sides of the clip.

The inspecting lab, if not Riblet, shall make a distinctive mark on the end of the shank, and shall record this mark on the inspection records sent to the Owner and to Riblet.

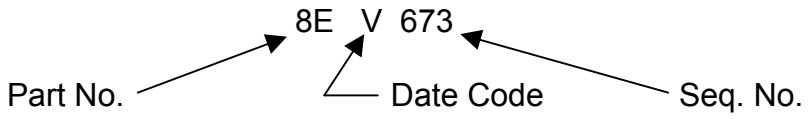
F. Slip Testing:

No periodic slip test is required, nor is painting of the rope at each clip location, as Riblet Insert Chair Clips can neither slip nor migrate.

G. Serial Numbering:

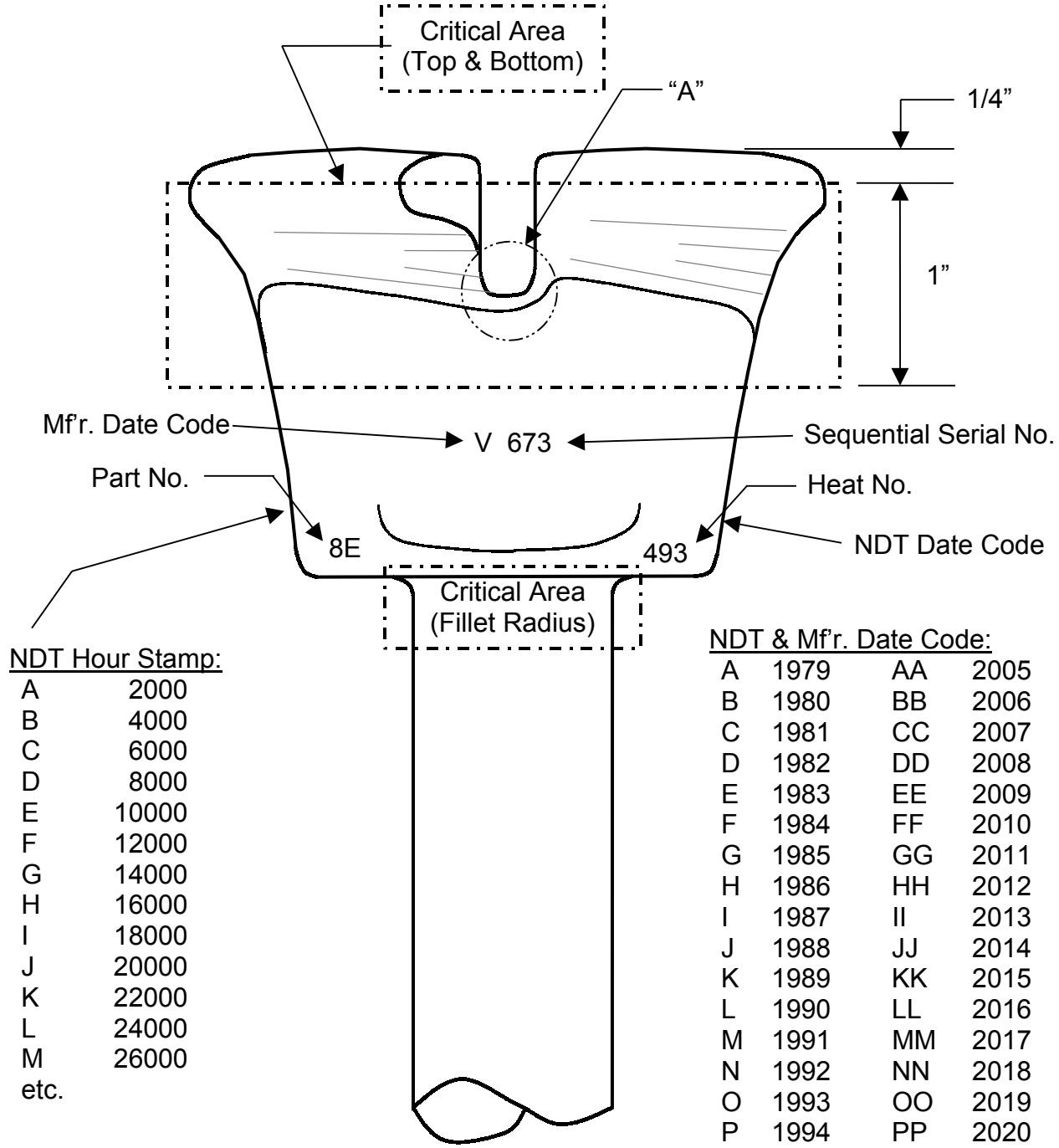
Beginning in 1982, the B77.1 Standard required a "unit identification and size marking" on each chair clip or grip. We assume that virtually all chair clips in existence at this time have been serial numbered.

The Riblet serial number for new clips consists of the part number ("6F", "8E", "10", etc.), a letter date code ("V" for 2000), and a sequential number, applied to each clip immediately prior to shipment. So, for the 673'rd size 8E clip shipped in the year 2000, the complete serial number is:



Note that there could also be a clip numbered 6F V 673, the 673'rd. size 6F clip shipped in 2000. The sequential numbers for all sizes re-start at 1 on the first of a new year.

The attached sketch shows the location of the Riblet-applied serial number; if you need more information and suggestions on serial numbering of vintage chair clips, please request Service Bulletin 1984-107.



NDT Hour Stamp:

A	2000
B	4000
C	6000
D	8000
E	10000
F	12000
G	14000
H	16000
I	18000
J	20000
K	22000
L	24000
M	26000
etc.	

NDT & Mf'r. Date Code:

A	1979	AA	2005
B	1980	BB	2006
C	1981	CC	2007
D	1982	DD	2008
E	1983	EE	2009
F	1984	FF	2010
G	1985	GG	2011
H	1986	HH	2012
I	1987	II	2013
J	1988	JJ	2014
K	1989	KK	2015
L	1990	LL	2016
M	1991	MM	2017
N	1992	NN	2018
O	1993	OO	2019
P	1994	PP	2020
Q	1995	QQ	2021
R	1996	RR	2022
S	1997	SS	2023
T	1998	TT	2024
U	1999	UU	2025
V	2000	VV	2026
W	2001	WW	2027
X	2002	XX	2028
Y	2003	YY	2029
Z	2004	ZZ	2030