

## **SERVICE BULLETIN**

- TO:** Owner/Operators of Pacific Scientific Company Restraint Systems using Buckle Assembly Part Numbers 1111430-XX and 1111475-XX.
- SUBJECT:** Information regarding the potential failure of the Guarded Rotary Buckle plastic handle.
- PURPOSE:** This Service Bulletin (SB) identifies suspect Buckle Assemblies and advises operators to return them to Pacific Scientific for exchange/replacement.

1. **INTRODUCTION**

Pacific Scientific has recently received field reports of several instances of cracking on the guarded rotary buckle plastic handle. The buckle assemblies returned to and examined by Pacific Scientific had large, readily apparent cracks throughout the plastic buckle handle. Pacific Scientific is investigating the cause of these cracks.

Preliminary testing performed by Pacific Scientific on buckle assemblies with cracked plastic handles indicates that in some circumstances when a load is placed on the restraint system, the straps may not release as intended when the buckle is rotated. Pacific Scientific therefore recommends the mandatory, immediate replacement of the affected buckle assemblies.

**Figure 1**

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**Part Number  
1111430-XX or 1111475-XX.**

## **SERVICE BULLETIN**

3. **SCOPE**

This SB only involves Buckle Assemblies 1111430-XX and 1111475-XX with a date of manufacture between November 2004 and May 2007. These buckle part numbers are integral to Restraint Systems assemblies listed in Appendix 1, (see pg 7) .

This Service Bulletin does not affect other types of Pacific Scientific plastic buckle handles or metal handle rotary buckles.

4. **REFERENCE**

ACMM 25-11-59 "Restraint Systems".

See; <http://www.pacscimiami.com/2004RestraintInspectionData.pdf>

5. **COMPLIANCE**

Mandatory for guarded rotary buckles which contain suspect handles. Replacement parts will be made available at no charge to owners and operators for a period of six months from the date of issue of this document. Thereafter, normal R&O charges will apply.

6. **SAFETY**

No special safety precautions in performing this SB.

6. **TOOLING**

No special tools or fixtures are required. A simple shim to release the fixed position strap fitting from the buckle is required. (See Figure 3)

7. **MANPOWER**

Inspection and replacement of buckle from system should take one person approximately 0.1 hour. A Video clip of the process is posted at [www.pacscimiami.com](http://www.pacscimiami.com)

8. **INSPECTION**

Suspect handles may be identified by checking the PN on the reverse side of the buckle assembly against the part numbers listed in Appendix 1 of this service bulletin.

Suspect handles may also be identified by measuring the thickness of the handle vane. Measurement to determine suspect handles will be accomplished in accordance with Figure 3.

**ACCEPTABLE PARTS** will have a vane dimension **LESS** than **.125 INCH**

**SUSPECT PARTS** will have a vane dimension **GREATER** than **.130 INCH**

A GOLD center logo plus oversize vanes are indicators of suspect parts. Handles that have been reworked are marked with a BLUE logo on the center button. (See figure 4). These handles are acceptable and do not require replacement.

In case of question or doubt of the status of the restraint in question, please contact us via email at [sb@pacscimiami.com](mailto:sb@pacscimiami.com) or (626) 228 8841

**SERVICE BULLETIN**

Figure 2



Figure 3

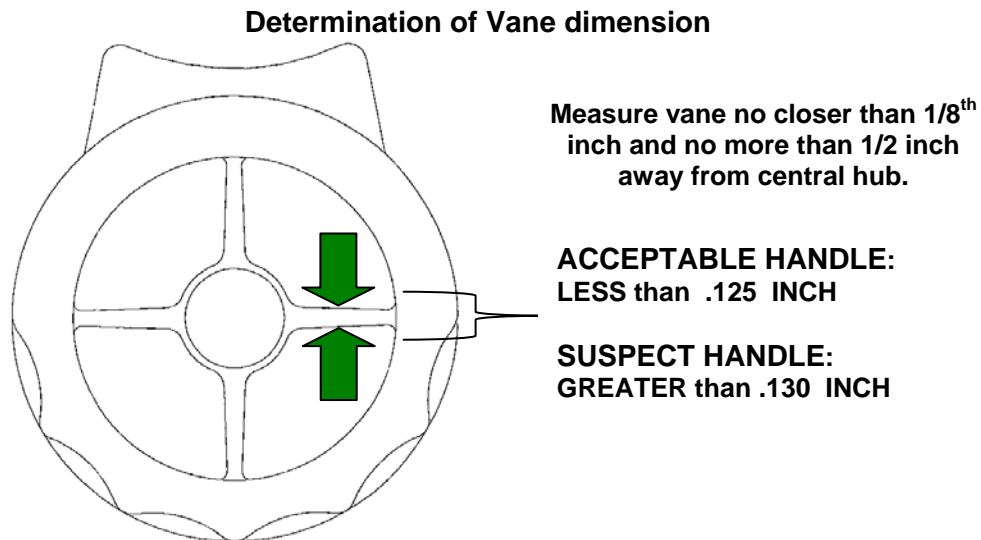


Figure 4



**REWORKED HANDLE HAS  
BLUE LOGO BUTTON : ACCEPTABLE**

## **SERVICE BULLETIN**

### 9. PROCEDURES

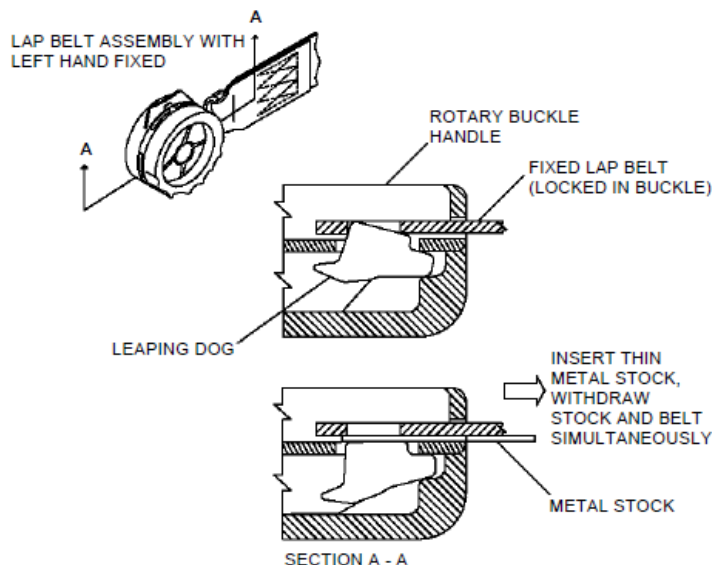
All suspect buckle assemblies (buckle assembly only) shall be removed from service for return to Pacific Scientific for exchange/replacement.

Remove suspect buckle from fixed lap belt by sliding a shim between the fixed belt fitting and back of buckle assembly;

- 1) Insert a piece of thin metal stock into the slot of the rotary buckle and push inward between the fitting and the buckle locking mechanism (see Figure 5)
- 2) Pull the strap from the buckle
- 3) Remove the buckle pad as necessary.

A Video clip of removal process is available at [www.pacscimiami.com](http://www.pacscimiami.com)

**Figure 5**



To reassemble with acceptable buckle, insert lap belt into new buckle. Fixed strap location is indicated by appropriate marking on buckle housing. Additional detailed instructions are available in ACMM 25-11-59 should they be required.

### 10. MATERIAL OR SERVICE

Special contact points have been established in order to manage this Service Bulletin.

Contact one of the following for instructions, replacement parts and technical questions:

[sb@pacscimiami.com](mailto:sb@pacscimiami.com) or 1 (626) 228-8841

## **SERVICE BULLETIN**

### Standard Contacts

Pacific Scientific Aviation Services  
11700 N.W. 102<sup>nd</sup> Rd. # 6  
Miami, Florida 33178  
United States  
Ph: 305-477-4711  
Fax: 305-477-9799  
Contact: Edel Mena

Pacific Scientific UK Ltd.  
Howarth Road, Maidenhead  
Berkshire SL6 1AP  
United Kingdom  
Ph: 44-1628 68-2200  
Fax: 44-1628-68 2250  
Contact: Ross Hamilton

Pacific Scientific Germany  
Unit 6 Hagen Park  
Miramstrasse 74  
34123 Kassel  
Germany  
Tel: + 49 (0) 561 57981 0  
Fax: + 49 (0) 561 57981 25  
Contact: Holger Laue

### 11. **EQUIPMENT ORDERING PROCEDURES**

In order to maintain unit traceability, please return all suspect parts (buckle only) to your local Pacific Scientific facility with your company's no-charge repair purchase order. Units will be repaired or replaced in a timely manner and returned with FAA 8130-3 or EASA Part 145 Form 1 tags.

Should you require replacement parts in advance of removal, please identify the specific buckle part numbers and quantities that you will require, and contact your local Pacific Scientific repair center for instructions

Additional details and instructions are available at [www.pacscimiami.com](http://www.pacscimiami.com)

## SERVICE BULLETIN

### 12. FAQ Frequently Asked Questions

- Q1: Are any other Pacific Scientific restraint Affected by this SB?  
A: No other types of restraints or restraint components are affected by this condition or SB.
- Q2: Do I remove my entire system and send it in?  
A: No, follow instructions in this bulletin and remove the buckle only. The straps need not be returned.
- Q3: Can I remove the handle and do the repair myself?  
A: No, repairs other than by Pacific Scientific are not authorized. Return to service tags must be issued by Pacific Scientific.
- Q4: How soon should I send in my buckle?  
A: The buckle must be immediately removed from service if the handle shows visible cracks. Handles which do not show visible cracks should be replaced as soon as possible. Replacement parts will be made available at no charge for a period of six months. Thereafter, normal R&O charges will apply.
- Q5: Will I receive a new or repair buckle?  
A: Repaired buckles will be sent to operators.
- Q6: How long does it take to fix the unit?  
A: Pacific Scientific currently estimates a turn around time of four days.
- Q7: How much will the rework cost?  
A: All exchange/replacements will be Free of Charge within 6 months from the date of this document.
- Q8: Where do I send my unit?  
A: Issue your standard no charge repair order referencing this SB and forward to Pacific Scientific's Miami, London, or Kassel, Germany repair center per the SB instructions.
- Q9: What should I do if my buckle handle is cracked?  
A: The buckle assembly should be immediately removed from service. Contact Pacific Scientific for exchange/replacement.
- Q10: What can happen if the buckle handle is cracked?  
A: Under some circumstances, testing has shown that the straps might not release when the handle is rotated. There have been no reports of this happening in the field. Pacific Scientific is replacing the buckle handles as a precaution.
- Q11: Who should I contact with questions?  
A: Contact any of the following;
- o 1 (626) 228 8841
  - o [SB@pacscimiami.com](mailto:SB@pacscimiami.com)
  - o Miami; Contact : Edel Mena 305-477-4711
  - o UK; Contact: Ross Hamilton 44-1628 68-2200
  - o Germany; Contact: Holger Laue 49 (0) 561 57981 0
  - o [www.pacscimiami.com](http://www.pacscimiami.com) [www.pacsciurope.com](http://www.pacsciurope.com)

## SERVICE BULLETIN

### APPENDIX 1

Restraint system part numbers potentially affected.

1	0108084-05	30	1111432-01	59	2000014-83
2	0108084-07	31	1111460-01	60	2000021-05-001
3	0108092-01	32	1111460-03	61	2000029-01
4	0108092-03	33	1111475-XX	62	2000029-03
5	0108904-01	34	1117119-01	63	2000029-101
6	0108904-03	35	1117119-03	64	2000029-121
7	0108904-05	36	1117119-05	65	2000029-55
8	0108904-301	37	1117119-07	66	2000029-71
9	0108904-303	38	1117148-01	67	2000029-73
10	0108904-53	39	1117148-03	68	2000037-05
11	0108904-55	40	1117148-05	69	2000067-01
12	0108904-91	41	1117148-07	70	2000091-05-001
13	0108904-93	42	1117148-09	71	2000104-23-226
14	0118013-01	43	1117148-11	72	2000104-43-226
15	0118026-05	44	1117148-133	73	2000108-01-001
16	0118030-07	45	1117148-15	74	2000108-03-001
17	0118037-01-001	46	1117148-17	75	2000111-01
18	0118037-03-001	47	1117148-27	76	2000111-03
19	0118038-01	48	1117148-29	77	2000114-03-001
20	1106193-03	49	1117148-33	78	2000115-101
21	1106193-13	50	1117148-35	79	2100011-03
22	1106193-53	51	1117181-01	80	2100023-15-001
23	1109012-03-001	52	1117433-21	81	2100025-01-001
24	1109026-01-001	53	1117433-23	82	2100025-01-066
25	1109026-11-001	54	2000013-01-001	83	2100025-01-104
26	1109026-31-001	55	2000013-03-001	84	2100025-01-243
27	1111131-03	56	2000014-01	85	2100025-03-066
28	1111147-01-001	57	2000014-03	86	2100025-03-104
29	1111430-XX	58	2000014-81	87	2100025-03-243

END