

Pacific Scientific shoulder harness retraction reels **AWB** 25-008 **Issue :** 1
Date : 21 October 2005

1. **Applicability**

Pacific Scientific Inertial reels, identified in Pacific Scientific Alert Service Bulletin A25-1124A, fitted to a wide range of aeroplanes and helicopters including transport category and various light aircraft.

2. **Purpose**

To alert aircraft operators and maintainers to the possibility of in-service failures of certain Pacific Scientific shoulder harness retraction reels.

3. **Background**

A defect report detailed a badly worn shoulder harness retraction reel shaft. The shaft was so badly worn, that it broke during reel refurbishment. This shaft carries the loads of the upper torso, and could have failed to provide the intended restraint for the occupant under emergency conditions.

The manufacturer has issued Alert Service Bulletin A25-1124A, which requires inspection of all shoulder strap harnesses that were manufactured before June 1992. Shoulder harness reels, which were manufactured by Pacific Scientific prior to June 1992, contain an aluminium take-up shaft in the inertia reel that could, after extensive use, experience excessive wear or breaking. Harness reels manufactured after this date contained a stainless steel shaft, and some reels have been fitted with the stainless steel shaft at refurbishment. This corrected the problem.

4. **Recommendation**

Action in accordance with Pacific Scientific Alert Service Bulletin A25-1124A, which includes removing affected harnesses from service for refurbishment. A copy of the Alert Service Bulletin A25-1124A, is attached.

5. **Enquiries**

Enquiries with regard to the content of this Airworthiness Bulletins should be made via the direct link e-mail address: AirworthinessBulletin@casa.gov.au

Or in writing, to:

Manufacturing, Certification and
New Technologies Office,
GPO Box 2005, Canberra, ACT, 2601

ALERT SERVICE BULLETIN

RESTRAINT SYSTEMS - OPERATORS OF AIRCRAFT WITH PACIFIC
SCIENTIFIC COMPANY, HTL/KIN-TECH DIVISION
RESTRAINTS INSTALLED

1. PLANNING INFORMATION

A. EFFECTIVITY

Restraint systems installed with the part numbers listed in Section C, below, for aircraft models:
Lockheed L1011-385-1, -385-1-14, -385-1-15, -385-3,
Boeing 737-200, -300, -400, -500, Boeing 757-200,
Boeing 767-200, -300,
Douglas DC-9-31, -32, -32F, -34, -51, -81, -82, -83, -87,
MD-88, MD-90-30, MD-11,
Piper Aircraft Company, Beechcraft, BAe Jetstream 4101,
Sikorsky model S-76, Bell Helicopters, and perhaps various other General Aviation Aircraft.

B. REASON

Parts manufactured prior to June 1992 contain a shoulder strap inertia reel that could, after extensive use, experience excessive wear or breaking of the Aluminum webbing take-up shaft (part number 1106220-03) on reels 1106117-** (-1 thru -51), and 1106130-** (-10 thru -63).

Parts manufactured after June 1992 contained a steel shaft which corrected this problem.

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C. DESCRIPTION

This Service Bulletin requires the inspection of reel and restraint assemblies for the following listing of part numbers, and verification of manufacturing dates as follows:

1. Check the part number and date of manufacture. If the part number is listed below and manufactured after June 1992, or the part number is not listed in this Service Bulletin, no further action is required.
2. If part numbers installed are shown on the listing below, and they were manufactured prior to June 1992, return the assembly for rework/repair/replacement.

Component Maintenance Manuals require inspection of this shaft during overhaul/rewebbing and contain replacement instructions if worn. Pacific Scientific Company, HTL/Kin-Tech Division Product Support facilities routinely change the reel shaft when overhaul/rewebbing is accomplished on these part numbers.

Inspected assemblies found with the manufacturing dates prior to June 1992 are to be removed and returned to:

Pacific Scientific Company, HTL/Kin-Tech Division
11700 N.W. 102nd Road
Suite 6
Miami, Florida 33178
Telephone: (305) 477-4711
FAX: (305) 477-9799
or
Pacific Scientific Limited
Howarth Road
Maidenhead
Berkshire SL61AP
Telephone: 44 1628 682200
FAX: 44 1628 682250

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Part numbers of affected parts are:

0107116-9	1107090-03	1107141-99	1107582-11
0107119-03	1107091-03	1107146-01	1107582-15
0107119-55	1107095-01	1107199-07	1107582-19
0107121-07	1107095-03	1107319-01	1117028-01
0107121-09	1107095-07	1107319-03	1117028-03
0107134-03	1107095-17	1107319-13	1117028-23
0107150-05	1107095-19	1107319-29	1117028-25
0107151-SPEC	1107095-SPEC	1107319-31	1117028-101
1106130-01	1107125-05	1107319-99	1117028-103
1106130-17	1107125-07	1107447-01	1117028-123
1106130-33	1107125-09	1107447-05	1117028-125
1106130-35	1107125-11	1107447-13	1117028-127
1106130-39	1107125-13	1107452-01	1117041-01
1106130-43	1107125-15	1107452-03	1117041-03
1106130-45	1107125-21	1107486-05	1117043-01
1106130-51	1107126-01	1107573-03	1117053-01
1106166-01	1107126-05	1107573-04	1117065-01
1106363-03	1107129-01	1107581-01	1117081-01
1106385-07	1107129-03	1107581-03	1117105-01
1106395-01	1107129-05	1107581-05	1117105-03
1106396-01	1107133-23	1107581-19	1117113-05
1107002-09	1107133-27	1107582-01	1117323-01
1107022-01	1107133-31	1107582-03	
1107090-01	1107141-01	1107582-09	

D. APPROVAL

This service bulletin has been reviewed by the Federal Aviation Administration (FAA) and complies with the applicable Federal Aviation Regulations (FARs).

E. MANPOWER

Inspection, and removal if required, should take one person not greater than 30 minutes.

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F. MATERIAL COST AND AVAILABILITY

Reel assemblies returned to Pacific Scientific Company, HTL/Kin-Tech Division, 11700 N.W. 102nd Road, Suite 6, Miami, FL 33178, or to Pacific Scientific Ltd., Howarth Road, Maidenhead, Berkshire SL61AP, United Kingdom, will be reworked, rewebbed, or replaced as follows:

Shoulder Harness/Reel Assemblies overhaul cost.....\$205.00 each.

Restraint System reweb or replacement..... please call for quotation.

Lead time will be 30 days after receipt of order.

G. TOOLING - PRICE AND AVAILABILITY

Not applicable

H. WEIGHT AND BALANCE

Not applicable

I. ELECTRICAL LOAD DATA

Not applicable

J. REFERENCES

None

K. OTHER PUBLICATIONS AFFECTED

None

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2. ACCOMPLISHMENT INSTRUCTIONS

A. INSPECTION

On reels installed on seat backs, pull the webbing to its fully extended length. At the fully extended end of the belt is a sewn label with part numbers and a date (e.g., 6/89)* printed on the label, or an ink stamp date on the belt material (e.g., June 1989)*. Following the inspection, you must report the discrepant unit(s) by fax to Pacific Scientific Company, HTL/Kin-Tech Division, Miami, FL, FAX 305-477-9799, or Pacific Scientific Ltd, England, FAX 44 1628 682250. Please provide part number and quantity.

*In the example above, the assembly should be removed and returned to one of the Pacific Scientific Company, HTL/Kin-Tech Division locations as the reel is older than 6/92.

B. MARKING OF REFURBISHED PARTS

Parts serviced or refurbished will be ink stamped with the date and an “S” on the back of the frame. This stamp will indicate the Aluminum shaft has been replaced with the Steel shaft. (See Figure 1.)

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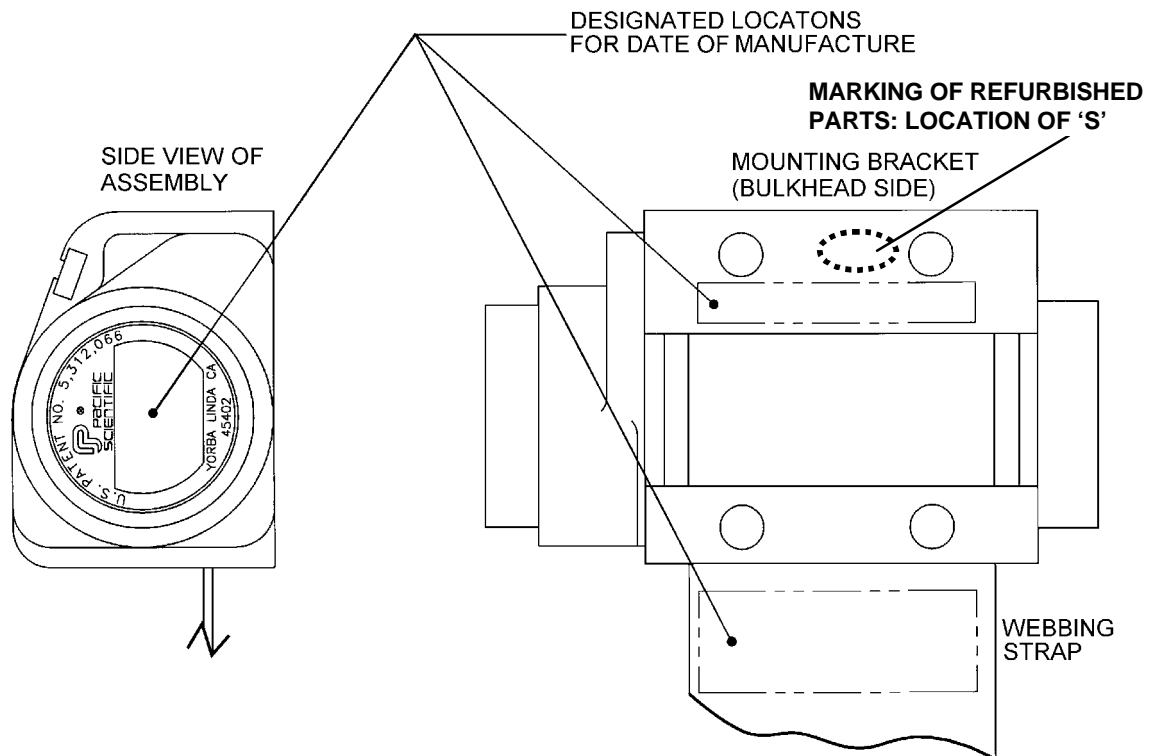


Figure 1. Location of Manufacturer's Date and Marking of Refurbished Parts