

PACIFIC SCIENTIFIC

SERVICE BULLETIN

FLIGHT COMPARTMENT

**PASSENGER / CREW 45° RELEASE
LAP BELT BUCKLE ASSEMBLY**

SERVICE BULLETIN NUMBER
1108435-25-01

ISSUED BY :

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Subject: REPAIR OR REPLACEMENT OF PACIFIC SCIENTIFIC LAP BELTS
AND RESTRAINT SYSTEMS WHICH INCORPORATE THE 1108435
45° RELEASE LIFT LEVER BUCKLE ASSEMBLY

ORIGINALLY ISSUED: APRIL 28/94

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DATE: April 28/94

RECORD OF REVISIONS

Rev No.	Page(s) Effected	Date Issued	Date Inserted	Inserted By
(Basic)	1-7	4/28/94	N/A	WRS

1) PLANNING INFORMATION

A. Effectivity

This Service Bulletin affects all restraint systems or lap belt assemblies that incorporate a Pacific Scientific lift lever buckle part number 1108435.

The following is a list of those Pacific Scientific products which have the 1108435 buckle installed as a sub-component, and are there by affected by this Service Bulletin:

PART NUMBERS	DESCRIPTION
1108084-01	RESTRAINT SYSTEM
1108085-01-046, -138	RESTRAINT SYSTEM
1108130-01	RESTRAINT SYSTEM
1108453-001, -002, -008, -010 -013, -014, -019, -020, -026, -027, -031, -037, -038, -039, -042, -044, -050, -055, -057, -058, -059, -060, -061, -062, -063, -99 & -SPEC	LAP BELT ASSEMBLY
1108485-03, -05, -012, -050, -057, -061, -99	EXTENDER BELT ASSEMBLY
1108540-001-085, -134, -138& -163 1108540-002-134, -138 & -163	LAP BELT ASSEMBLY LAP BELT ASSEMBLY
1117143-01-001, -048, -069, -084, -086 & -123 1117143-02-001, -048, -069, -084, -086 & -123, 1117143-03-006 & -048 1117143-04-006 & -048	RESTRAINT SYSTEM RESTRAINT SYSTEM RESTRAINT SYSTEM RESTRAINT SYSTEM
1117386-01	LAP BELT AND SHOULDER HARNESS
1106177-01	RESTRAINT SYSTEM

B. Reason

The National Transportation Safety Board (NTSB) has issued a safety recommendation (dated March 14, 1994) related to an aviation accident which occurred on January 7, 1994 at Port Columbus International Airport in Gahanna, Ohio. Surviving passengers of the accident reported difficulty in releasing their lap belts while egressing from the aircraft.

Pacific Scientific Company in cooperation with the Federal Aviation Administration (FAA) and the NTSB, have completed an investigation related to the release action of the 1108435 buckle design. The investigation has revealed that conditions may arise in crash situation, or under extreme loading conditions, in which an occupant may experience difficulty in releasing the 1108435 buckle. With the highest regard for the flying public and those crew members utilizing Pacific Scientific safety equipment, Pacific Scientific issues this mandatory Service Bulletin for the repair or replacement of all 1108435 lift lever buckle assemblies. The rework or replacement of the affected buckles shall be on a no charge basis.

C. Description

This Service Bulletin provides instructions for identifying (visually inspecting) the 1108435 buckle assembly, and the action items for returning the affected restraint system or lap belt to Pacific Scientific's Product Support Group in Yorba Linda, CA for repair or replacement.

D. Approval

This Service Bulletin has been approved by Pacific Scientific and the FAA, and is considered mandatory.

The buckle retrofit is considered a product improvement to those lap belts or restraint systems affected by this Service Bulletin. The proper TSO approval, related to the buckle design change, has been completed and approved by the FAA.

E. Manpower

The estimated time for removal of the restraint system or lap belt will vary depending on configuration, but is estimated to be less than 30 minutes (per installation).

F. Material-Cost and Availability

Availability for replacement buckles and or components is immediate.

Customers affected by this Service Bulletin shall contact Pacific Scientific for coordination of product return to Pacific Scientific's Product Support Group in Yorba Linda, CA.

Contact:

Pacific Scientific Co.
HTL/Kin-Tech Division
Product Support Group
22715 Savi Ranch Parkway
Yorba Linda, Ca 92687
USA
Telephone Number: (714) 283-0283
Fax Number: (714) 283-4722

OR

Pacific Scientific Co. LTD
Product Support Group
Seven Center
Bourne End
Buckinghamshire SL8 5YS
England
Telephone Number: 0628-810252
Fax Number: 0628-810124
SITA Code: LHR PSCR

G. Tooling-Price and Availability

Standard hand tools

H. Weight and Balance

Total net weight change does not exceed +/- .1 pounds.

I. Electrical Load Data

None

J. Software Accomplishment Summary

None

K. References

Federal Aviation Regulation (FAR) Part 21, Subpart 0, Technical Standard Order (TSO) C22f.

L. Other Publications Affected

None

2) ACCOMPLISHMENT INSTRUCTIONS

A. INSPECTION AND REPLACEMENT INSTRUCTIONS

- 1) Inspect the crew restraint system or the lap belt assembly in which an 1108435 buckle is installed. The buckle can be easily identified by the lift

lever characteristic, but more so by the composite plastic components which enclose the metal load carrying members of the buckle. The existing buckle design, which must be replaced, has a total of five lightening holes in the bottom frame surface. The replacement buckle will only have two lightening holes (towards the back portion of the frame, opposite from where the plug-in connector inserts into the buckle). The replacement buckle will also have an identification marking indent stamped on the bottom surface, which represents the frame detail part number 1108556. See Figure 1 and 2 for reference.

- 2) The restraint system or the affected lap belt shall be removed from the aircraft in accordance with the applicable maintenance manual.
- 3) Return the restraint system or affected lap belt to Pacific Scientific for rework or replacement of the buckle. The required replacement or repair of the buckle shall only be performed by Pacific Scientific Company.
- 4) Re-install the replacement lap belt or restraint system in accordance with the applicable maintenance manual.

NOTE: *For purposes of inspection and future reference, the markings on the bottom surface of the buckle (1108556) and the reduction in the number of lightening holes (two towards the back of the frame) shall be the method of identification for compliance with this Service Bulletin. In addition to the buckle identification, the identification label of each lap belt assembly incorporating a lift lever buckle, shall have an "M" included in the basic part number.*

3) MATERIAL INFORMATION

Contact Pacific Scientific for coordination of lap belt or restraint system returns.

In the future, customers should be aware of the part number changes when ordering lap belt assemblies. The existing lap belt basic part number will now include an "M", i.e., 1108453-001 will now be 1108453M-001. Those lap belts or restraint systems returned to Pacific Scientific in accordance with this Service Bulletin, will be supplied back to the customer with the upgraded part number on the lap belt.

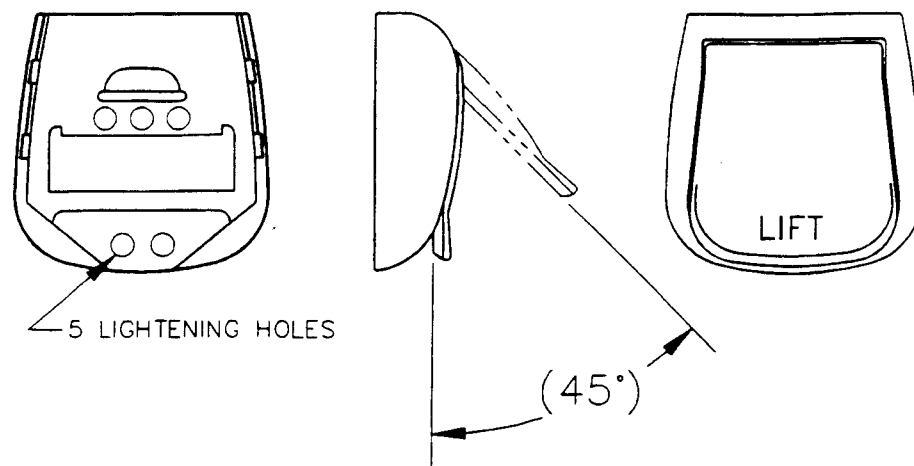


FIGURE 1

IDENTIFY EXISTING 1108435 BUCKLES BY COUNTING THE FIVE LIGHTENING HOLES IN BOTTOM SURFACE OF FRAME

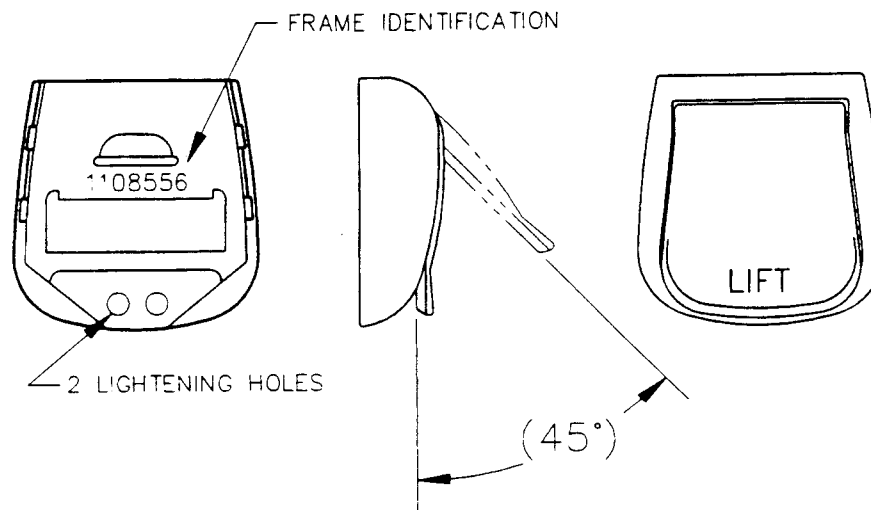


FIGURE 2

UPGRADED 1108435M BUCKLE DESIGN HAS AN IDENTIFICATION MARKING AND TWO LIGHTENING HOLES IN THE BOTTOM SURFACE OF FRAME