



The New Piper Aircraft, Inc.
 2926 Piper Drive
 Vero Beach, Florida, U.S.A. 32960

SERVICE No. 1020 BULLETIN

PIPER CONSIDERS COMPLIANCE MANDATORY

DATE: July 10, 1998 (S/M)

SUBJECT:

**Inspection of the ARTEX 110-4 ELT and
 ELT Attachment Bracket**

MODELS AFFECTED:

PA-18-150 Super Cub
 PA-28-161 Cadet
 PA-28-161 Warrior III

 PA-28-181 Archer III

 PA-28-236 Dakota

 PA-28R-201 Arrow
 PA-32R-301 Saratoga II HP

 PA-32R-301T Turbo Saratoga TC
 PA-34-220T Seneca IV

 PA-34-220T Seneca V
 PA-44-180 Seminole

 PA-46-350P Malibu Mirage

SERIAL NUMBERS AFFECTED:

1809083 through 1809084
 2841360 through 2841365
 2816110 through 2816119, 2842001 through
 2842032
 2890197 through 2890199, 2890202 through
 2890231, 2843001 through 2843142
 2811039 through 2811041, 2811044,
 2811047 through 2811050
 2837061, 2844001 through 2844013
 3213079, 3213080, 3213082 through
 3213103, 3246001 through 3246144
 3257001 through 3257039
 3448043 through 3448079 and 3447001
 through 3447029
 3449002 through 3449059
 4495001 through 4495013, 4496001 through
 4496019
 4622157 through 4622161, 4622172 through
 4622200 and 4636001 through 4636153

COMPLIANCE TIME:

To coincide with the next regularly scheduled maintenance inspection but not to exceed the next one-hundred (100) hours time in service.

APPROVAL:

The technical contents of this Service Bulletin have been approved by the Federal Aviation Administration (F.A.A.).

PURPOSE:

Recent reports indicate that the ARTEX 110-4 ELT battery packs may vent and leak acid into the battery case. This condition combined with humidity, may cause the plastic material of the ELT battery case to break down, which could result in severe cracking of the ELT battery case. ARTEX has released Product Advisory Notice No. 2 regarding this condition, which is included with this publication. In addition, should the ELT battery case crack and leak acid, the ELT attachment bracket may corrode and require replacement. Left uncorrected, the possibility exists that the ELT function may become impaired and that the ELT attachment bracket may fail due to corrosion.

This Service Bulletin requires inspection per ARTEX Product Advisory Notice No. 2 to detect cracked and/or leaking ELT battery packs. In addition this Service Bulletin requires inspection of the Piper ELT attachment bracket if battery acid has leaked from the ELT battery case.

(OVER)
 ATA: 2563

INSTRUCTIONS:

1. Gain access to the ELT on your model aircraft. Refer to the applicable Service/Maintenance Manual as required. *Note: If an ARTEX ELT is not installed proceed to instruction 7.*
2. Remove the ARTEX ELT 110-4 . Refer to the instructions contained in the ARTEX Product Advisory Notice No. 2 for inspection and return to service criteria.

NOTE:

New units shipped from Piper in support of this Service Bulletin have been modified to prevent a reoccurrence of the condition described. New units will be identified as "Rev N3" on the data tag.

3. If the ELT battery pack does not pass the criteria as set forth in the ARTEX publication, the ELT battery pack must be replaced with a new ELT Battery Pack, Piper Part Number 758-696. *(See the data tag and corrosion photographs on page 3.)*
4. If the ELT battery pack is not defective, return it to service for use until the expiration date listed on the data tag. *See the data tag photograph on page 3.*
5. If the ELT battery pack has cracked or leaked acid, it will be necessary to inspect the bracket attaching the ELT for corrosion. If other than surface corrosion is found, replace the bracket. If a replacement bracket is required, refer to the applicable Piper Illustrated Parts Catalog to obtain the appropriate part number.
6. Upon successful inspection and re-installation of the ELT, perform an ELT functional check per the latest Federal Aviation Regulation requirements. Close the access noted in instruction 1.
7. Make an appropriate logbook entry of compliance with this Service Bulletin.

MATERIAL REQUIRED:

As required by inspection, one each, ELT Battery Pack, Piper Part Number 758-696 and one each, ELT Attachment Bracket, part number to be determined upon installation.

AVAILABILITY OF PARTS:

Your Piper Field Service Facility.

SUMMARY:

Applicable Factory Participation is limited to new aircraft in warranty at the time of compliance. Factory Participation will remain in effect for a period of time **not to exceed 180 days** from the date of this Service Bulletin.

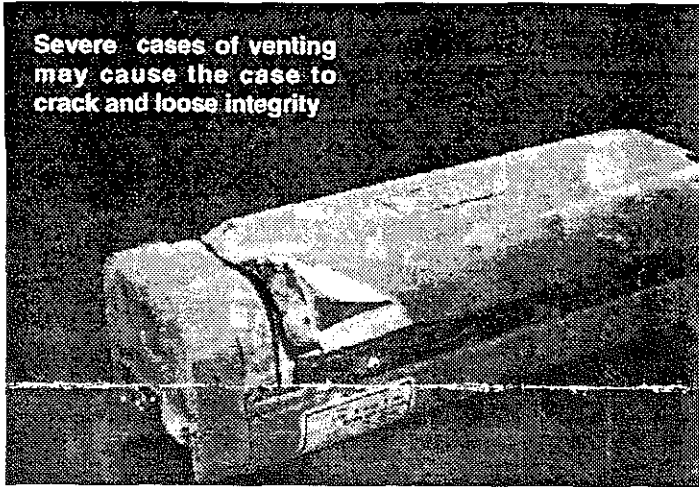
Please contact your factory authorized Piper Field Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the compliance time indicated, and to obtain additional information concerning any applicable factory participation.

NOTE: If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify the factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

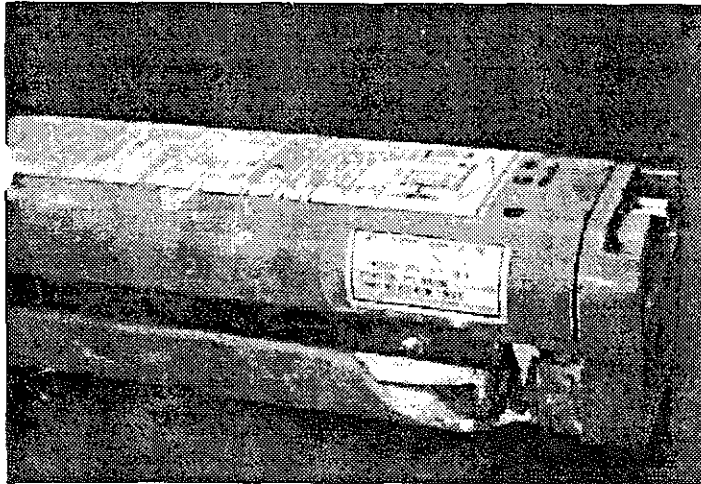
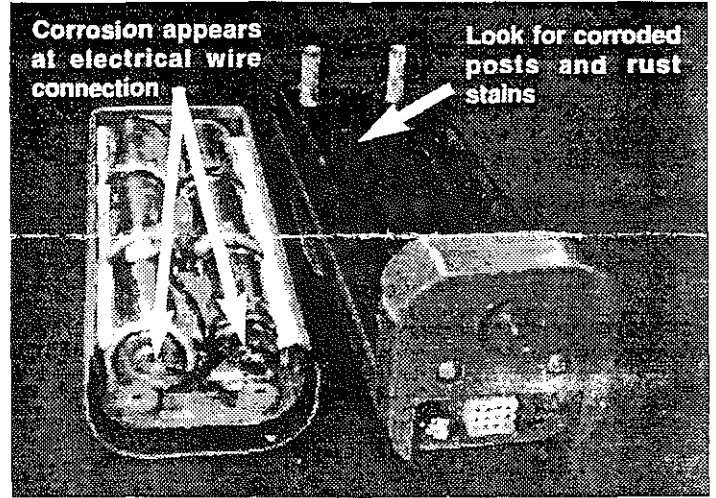
Corrections/Changes should be directed to:

The New Piper Aircraft, Inc.
ATTN: Customer Services
2926 Piper Drive
Vero Beach, FL 32960

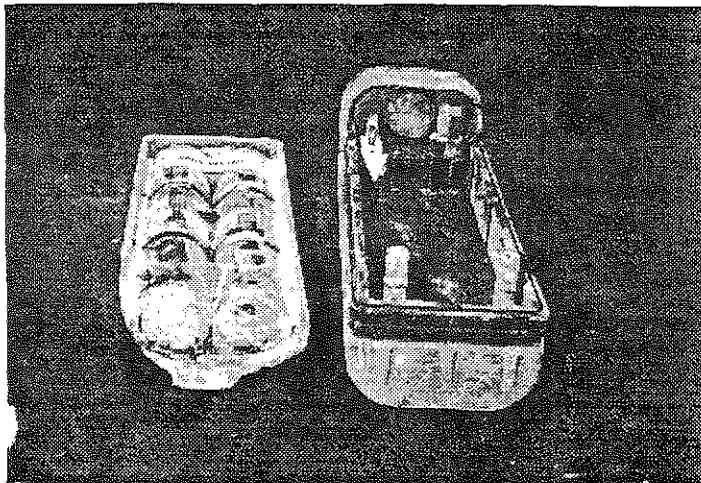
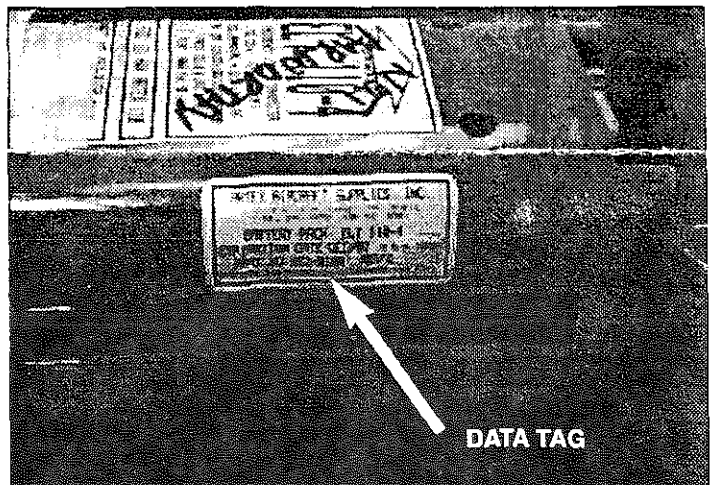
**ELT Battery Pack
(Severe Damage from Battery Venting)
REPLACE UNIT**



**ELT Battery Pack
(Light Damage from Battery Venting)
REPLACE UNIT**



**ELT Battery Pack with Data Tag
(Identifies Unit and shows Expiration Date)
If Beyond Expiration Date REPLACE UNIT**





Product Advisory Notice #0002 Battery Pack Part #452-0130

Date: 4/3/98

Models: ELT110-4

Part Number: 452-0130 (ELT110-4 Battery Pack)

Applicability: ELT110-4's shipped to Piper Aircraft Company

Problem: Exposure to humid environment causes the Battery Pack Cells to corrode and in extreme cases to vent.

Instructions: Remove the ELT from the aircraft:

- Loosen the thumbscrews on the End Cap and pull the End Cap away from the ELT.
- Remove all interconnections to the ELT unit and ELT antenna.
- Remove the ELT from its Mounting Frame by lifting up from the connector end.
- Inspect the mounting hardware is free of cracks or other obvious damage (a vented battery may cause the case to crack).

Remove and Inspect Battery Pack:

- Lay the ELT, product label side-down
- Carefully lift the battery pack away from the ELT and lay along side the ELT unit.
- Carefully disconnect the harness from the connector in the black plastic housing. It is best to use flat blade screwdriver to pry the connector out of its mating plug.
- Inspect the Battery Pack Cells for signs of corrosion. Corrosion is evident if the ends of the Cells have a powdery residue on it, corrosion may appear as if the Cell ends are rusty.
- Inspect the Battery Packs Cells for signs of venting. A cell is vented if the cell ends are covered with a gray or rust colored powdery substance that in most cases covers the entire end of the cell.

If corroded cells are found, and the aircraft is still within the New Piper Aircraft, Inc. Limited Warranty period, return the Batter Pack to your nearest Piper Distributor for warranty Consideration. Battery Packs sent directly to the Piper factory will not be accepted. If corroded cells are found, and the aircraft is not within The New Piper Aircraft, Inc. Limited Warranty period, return the Battery Pack directly to ARTEX.

Conditions: The returned Battery Pack must be within the terms and conditions of either the ARTEX or Piper Limited Warranties to be eligible for replacement at no charge. No consideration will be given for Batter Packs that have exceeded their Expiration date.