

CA-1

June 16, 1999

**MODEL A-30 ALTITUDE ENCODER AND MODEL E-01 ELT
CONTINUING AIRWORTHINESS REQUIREMENTS**

Model A-30 Altitude Encoder

The model A-30 Altitude Encoder requires no periodical maintenance as a condition for continued airworthiness. Maintenance should be performed when the equipment no longer properly performs the function for which it is intended.

The above statement is not intended to contradict or modify any requirement of FAR 91.411, or of tests and inspections required by Federal Aviation Regulations.

Model E-01 Emergency Locator Transmitter

The model E-01 ELT must be inspected yearly to insure continued airworthiness. The procedures as described in section 7 (Periodic Maintenance) of the installation and operation manual part number E-01-M (all revision dates) should be followed.

These tests also fulfill the requirements of FAR 91.207. The function test as described in section 8 of the above referenced manual should be performed by the Owner/Operator of the aircraft every three (3) Months

December 12, 2000

Service Bulletin SB E-01.3

Effects model E-01 ELT all serial numbers.

Duracell MX 1300 and PC 1300 batteries are approved for use in our model E-01 ELT.

When installing Duracell batteries with built in test strips make sure to consult our latest installation manual part number E-01M dated 08/12/98.

April 17, 2002

Service Bulletin SB E-01.4

Effects model E-01 ELT Installation and Operation manuals P/N E-01-M with a revision date of 08-12-98 these manuals were supplied with serial numbers 30,406 through 41,673

The data included in these manuals is approved TSO installation data.

A determination has been made by the FAA the supplied installation data contained in these manuals is **NOT** *approved installation data* and further data or approval may be necessary to install this ELT in certified aircraft.

The FAA has asked that we include the following text in our manual.

“The conditions and tests required for TSO authorization of this article are minimum performance standards. It is the responsibility of those desiring to install the article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standards. The article may be installed only when further evaluation by the applicant documents an acceptable installation and is approved by the administrator”.

December 19, 2003

Service Bulletin SB E-01.5

Alternate approved antennas and antenna installation notes

The following antennas are approved for use with the ACK Model E-01 ELT all serial numbers

Model	Type	Rated Speed
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Comant

C1 317	Whip	450 Knots
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C1 319	Blade	600 Knots
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C1 317-1	Whip	450 Knots
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C1 319-1	Blade	600 Knots
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Artex

110-320	Whip	350 Knots
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110-337	Blade	Mach .9
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110-338	Whip	350 Knots
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110-340	Blade	Mach .9
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Dayton-Granger

ELT10-214-2	Whip	Contact Manufacturer
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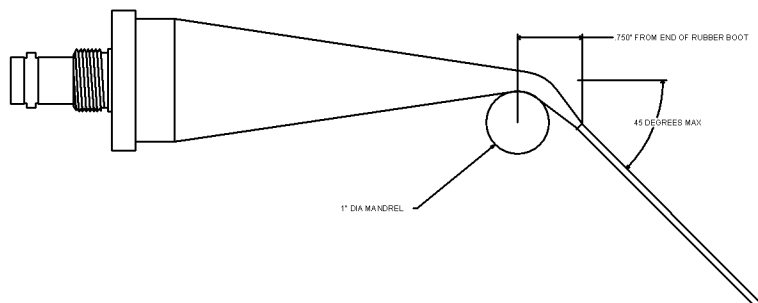
ELT10-209-2	Blade	Contact Manufacturer
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Sensor Systems

S65-8282-406	Blade	Designed for high speed aircraft contact manufacturer
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S65-1231	Blade	Designed for high speed aircraft contact manufacturer
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The Antenna supplied with the Model E-01 ELT part number E0115 is not recommended for use above 250 Knots and should not be used on aircraft certified for known icing. The antenna may be bent as shown below to facilitate installation.



November 11, 2004

Service bulletin SB E-01.6

Affects: Model E-01 Emergency Locator Transmitter all serial numbers.

It is vitally important that the battery installation procedures described in our installation and operation Manual P/N E-01-m Rev. 05/07/2002 be followed when installing batteries in the Model E-01 ELT. Failure to follow these procedures can result in battery shorting and overheating. The following instructions expand upon these procedures

1. When installing the bottom four batteries in the battery case always lubricate the outside of the batteries with a light coat of paste wax, mild soap solution or silicon vacuum grease. Also lubricate the "O" ring at this time.
2. Install all four of the bottom batteries at the same time to the same depth. (see Fig 1)
3. Do not install three of the batteries to full depth and force the fourth battery into place as this can cause tearing of the battery insulating cover (See Fig 2)
4. Push the bottom four batteries down into position at the same time using the top four batteries (See Fig 3)
5. Place the "O" ring into position and position the transmitter section of the ELT on the bench top with the RCPI cable at the edge of the bench top and push down as far as possible. Install the four battery retaining screws and evenly tighten them until the battery case is snug against the transmitter assembly. Torque the screws to 3.5 – 4.0 in/lbs do not over tighten. (See Fig 4)



Figure 1



Figure 2



Figure 3

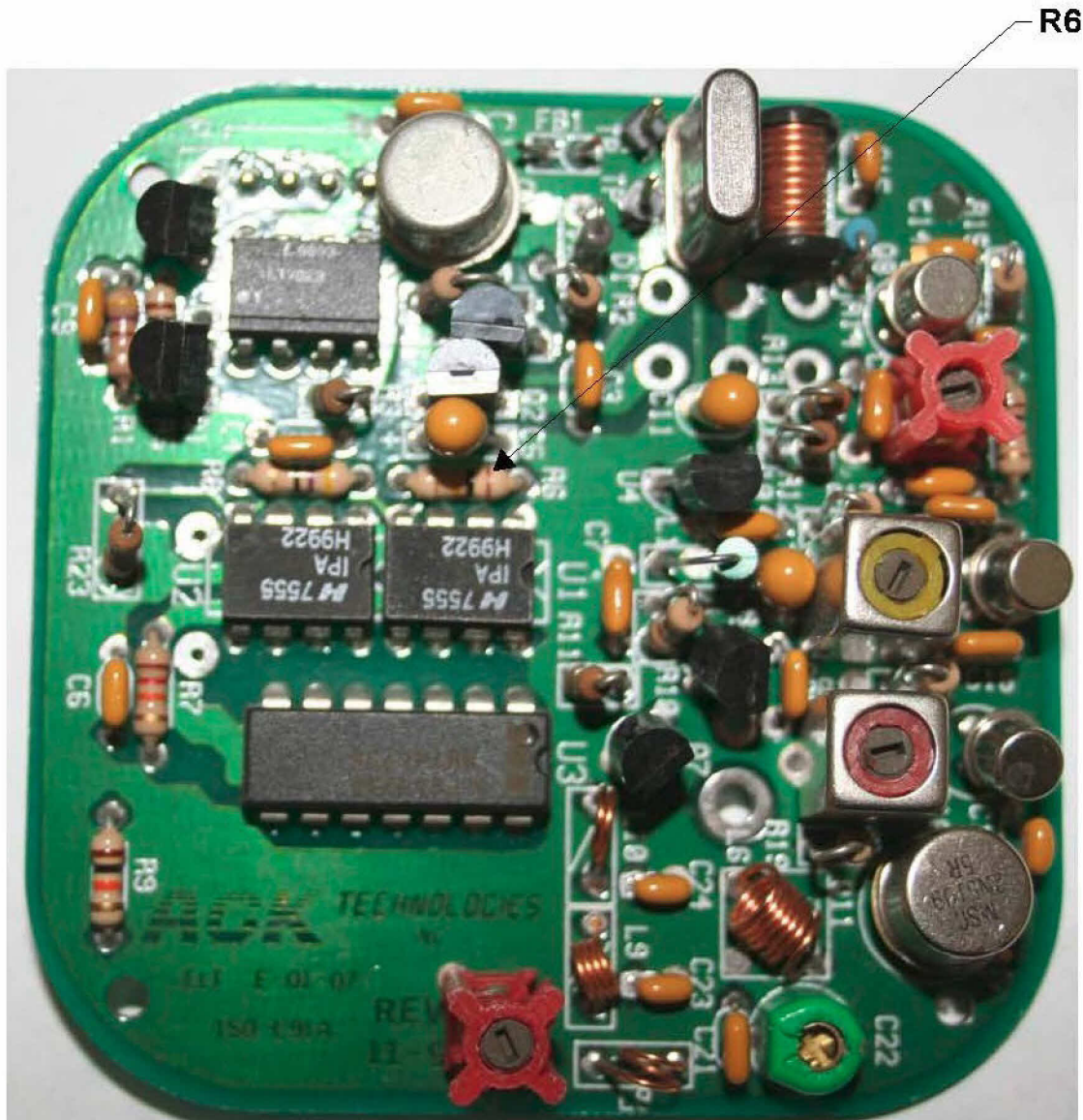


Figure 4

January 24, 2013

Service bulletin SB E-01.7

The acceptable sweep rate for the model E-01 ELT is 2 to 4 Hz. If the sweep rate falls below the 2 Hz rate replace resistor R6 with a 80 ohm resistor and re-test.



SERVICE BULLETIN SB E-01.8
July 9, 2005
MODEL E-01 ELT AFFECTS ALL SERIAL NUMBERS

The manufacturer of the G switch used in the model E-01 ELT has recommended that switches that have been in service five years or longer be replaced or a more frequent switch testing program be developed to insure proper function of the switch.

The switch manufacturer has found that switches that have been in service for various periods of time can deteriorate the gold plating in the inside of the barrel and ball forming a powder like residue which can cause the G switch to momentarily stick. This phenomena is most often found in switches that have been in aircraft that are subject to higher levels of shock and vibration and have been in service 5 years and longer.

Based upon these recommendations the following procedures should be followed

ELT's that have been in service between 5 and 7 years

Replace the G switch or perform the G switch test as described in Appendix A paragraph 4 of our Installation and Operation manual every four (4) months

ELT'S that have been in service between 7 and 9 years

Replace the G switch or perform the G switch test as described in Appendix A paragraph 4 of our Installation and Operation manual every three (3) months

ELT'S that have been in service 10 or more years

Replace the G switch

To replace the G switch, the ELT must be returned to our facility, or replaced in compliance with SB E-01.9

The Installation and Operation manual can be downloaded from our web site www.ackavionics.com

SERVICE BULLETIN SB E-01.9
December 12, 2006
MODEL E-01 ELT AFFECTS ALL SERIAL NUMBERS

ACK Technologies, Inc. model E-01 ELT G-switch replacement, can now be performed by appropriately rated service facilities utilizing instructional information found in SB E-01.9. The following steps will properly instruct approved technicians on safe removal and replacement procedures for E-01 G-switches.

- 1.) Remove the 4 silicone compound plugs from the top of ELT transmitter housing.
- 2.) Remove the 4 allen head screws allowing separation of ELT head, from the mid-case, and battery case.
- 3.) Remove power connector from mid-case to main board. (Note wire colors and relative position)
- 4.) Unscrew knurled nut from on/off toggle switch, by rotating metallic switch base counter clockwise.
- 5.) Remove the 4 small Philips head screws in each corner of the circuit board.
- 6.) Locate and heat B&C connector and ground (Figure 1, Example A) while pushing on/off toggle switch to remove circuit board from component housing.
- 7.) De-solder B&C connector ground wire, and replace with new 3in. 20-22 gauge tinned copper wire.
- 8.) Remove 4 wire plug.
- 9.) De-solder G-switch noting lead positions. (Figure 1. Example B)
- 10.) Insert new G-switch leads into circuit board, and replace in housing with on/off toggle switch washer aligned, and 4 wire plug reconnected.
- 11.) Replace the 4 corner screws in circuit board.
- 12.) Replace knurled nut for on/off toggle switch.
- 13.) Solder B&C connector and ground, as well as G-switch leads and remove excessive wire.
- 14.) Replace power connector with black wire towards housing edge.
- 15.) Re-assemble head unit aligning "Final" stamp (Figure 2, Example C) on each half of the casing, and place long brass index nut as positioned in Figure 2, Example D.

Figure 1

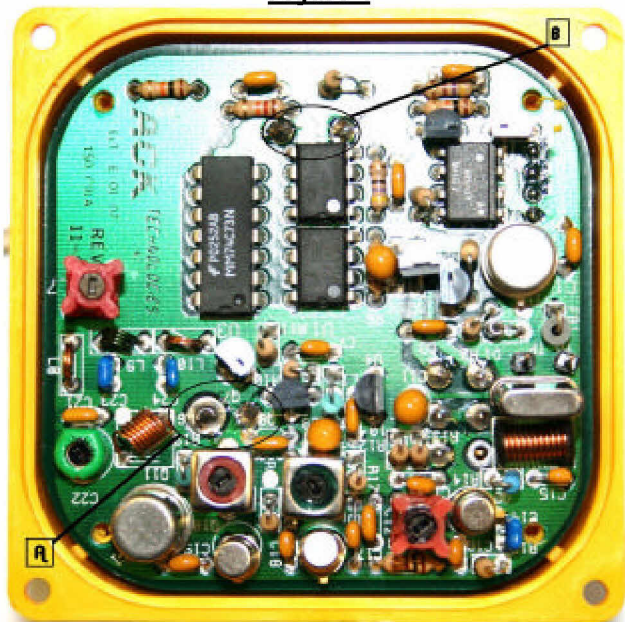


Figure 2

