



2141 ICON Way, Suite 100, Vacaville, CA 95688 - Tel: 707.564.4000 – www.iconaircraft.com

SERVICE BULLETIN

SB-021425-A

ID NUMBER & REVISION: SB-021425-A
SUBJECT: (Mandatory) ELT Antenna Cracking
RELEASE DATE: 04 April 2025
EFFECTIVE DATE: 04 April 2025
SUPERSEDES NOTICE: N/A
AIRCRAFT AFFECTED: **MAKE & MODEL:** ICON A5
SERIAL NUMBERS: 00001, 00003-00224
REQUIRED ACTION: Inspect for signs of damage to the base and/or whip of the ELT antenna. **The inspection portion of this Service Bulletin is mandatory.** If damage is identified, replace the antenna with the RAMI AV-300 Rod Antenna.
TIME OF COMPLIANCE: **Initial Inspection:** Within 40 flight hours, or at next condition (100-hr/annual) inspection, whichever comes first.
Recurring Inspection: At each condition inspection, until repair is completed.
REVISION HISTORY: **A** Initial Release

LEVEL OF CERTIFICATION ☐ Pilot/Owner ☒ A & P
REQUIRED (any level checked ☐ LSA Repairman – Inspection ☒ Certified Repair Station
can perform task): ☒ LSA Repairman – Maintenance ☒ Manufacturer

PURPOSE:

ICON has received reports of cracked or broken ELT antennas. Damage may be isolated to the base of the antenna or may result in departure of a portion of the antenna whip, which may cause damage to the propeller and/or fuselage. Additionally, damage or loss of the whip may inhibit emergency location transmission.

ICON has identified a suitable replacement antenna, the RAMI AV-300 Rod Antenna. It is recommended to install this antenna at the next suitable service opportunity, but no later than the identification of any sign of damage. Until the antenna is replaced, regular inspections are required to support informed decision-making.

WARRANTY INFORMATION:

- For aircraft that are currently within their warranty period (1 year from transfer of ownership), ICON will cover the contents of this Mandatory Service Bulletin in its entirety as long as all aspects of the Service Bulletin are adhered to during the aircraft warranty period. Failure to adhere to the entirety of the Service Bulletin can and likely will lead to owner-incurred costs. Please note that completion of the repair does not extend the warranty period.
- For aircraft outside their warranty period, ICON will cover the Mandatory Inspection portion of this Service Bulletin, limited to the initial inspection.



2141 ICON Way, Suite 100, Vacaville, CA 95688 - Tel: 707.564.4000 – www.iconaircraft.com

SERVICE BULLETIN

SB-021425-A

- Please submit an invoice for warranty reimbursement for labor upon completion, referencing Service Bulletin number SB-021425-A.
 - Inspection: 1 Labor Hours
 - Repair: 3 Labor Hours

PARTS AND CONSUMABLES:

If Repair is not required:

PART NUMBER	DESCRIPTION	QUANTITY	ALTERNATE	
			PART NUMBER	DESCRIPTION
MS35333-78	WASHER, LOCK, INTERNAL STAR, 1/2	1		

If Repair is required:

PART NUMBER	DESCRIPTION	QUANTITY	ALTERNATE	
			PART NUMBER	DESCRIPTION
ICA016244	ANTENNA, ELT, FIBERGLASS ROD, RAMI AV-300	1		
ICA016246	GROUND PLANE, ELT AV-300 ANTENNA, 11.0 & 3.125	2		
ICA016247	GROUND PLANE, ELT AV-300 ANTENNA, 11.0	2		
10F62MTF3/100	SCREW, MACH FLH, 6LOBE, 10-32X.625, CRES	3		
MS21043-3	NUT, SLFLKG, RDC HEX, CRES, 10-32	3		
NAS1515-H3L	WASHER, NYLON PLASTIC, NUMBER 10 SCREW SIZE	3		
NAS1149C0332R	WASHER, FLAT, CRES, .203X.032, PSVT	3		
CB200	ADHESIVE, ACRYLIC STRUCTURAL, 2 PART, CLICK BOND, 3.5 GRAM PACKET	As Needed (2-3 Packets)		
ICA012078	LUBRICANT, GENERAL PURPOSE	As Needed		
ICA012218	ADHESIVE SEALANT, WHITE	As Needed		
ICA012983	GREASE, DIELECTRIC, DC4	As Needed		
ICA013211	WAX, CARNAUBA	As Needed	Or Equivalent	
TT-I-735A	ISOPROPYL ALCOHOL	As Needed	Or Equivalent	

INSPECTION INSTRUCTIONS:



2141 ICON Way, Suite 100, Vacaville, CA 95688 - Tel: 707.564.4000 – www.iconaircraft.com

SERVICE BULLETIN

SB-021425-A

1. Remove the Top Engine Cowl in accordance with the Aircraft Maintenance Manual, task 100497.
2. Remove the ELT Antenna in accordance with the Aircraft Maintenance Manual, task 100141.
 - a. Discard the star washer.
3. Inspect the Cowl around the ELT Antenna connector hole. If any cracks or damage are found on the Cowl, stop and contact ICON.
4. Inspect the entire ELT Antenna, including the plastic base and the wire whip, for any cracks or signs of damage, including corrosion. Cracks at the base of the Antenna may or may not be visible from the side.
 - a. If any damage is found, proceed to Repair Instructions.

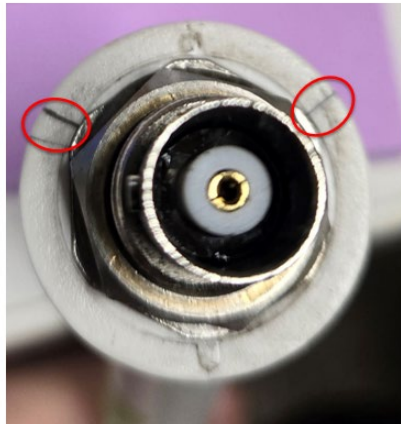


Figure 1. Examples of Cracks in Antenna Base

5. If no damage is found, reinstall Antenna (with a new star washer MS35333-78) in accordance with the Aircraft Maintenance Manual, task 100141.
 - a. To prevent damage, use only water or a mild soap solution to clean the plastic portion of the Antenna. Refer to [ACK Maintenance Advisory MA E-04.2](#) for more information.



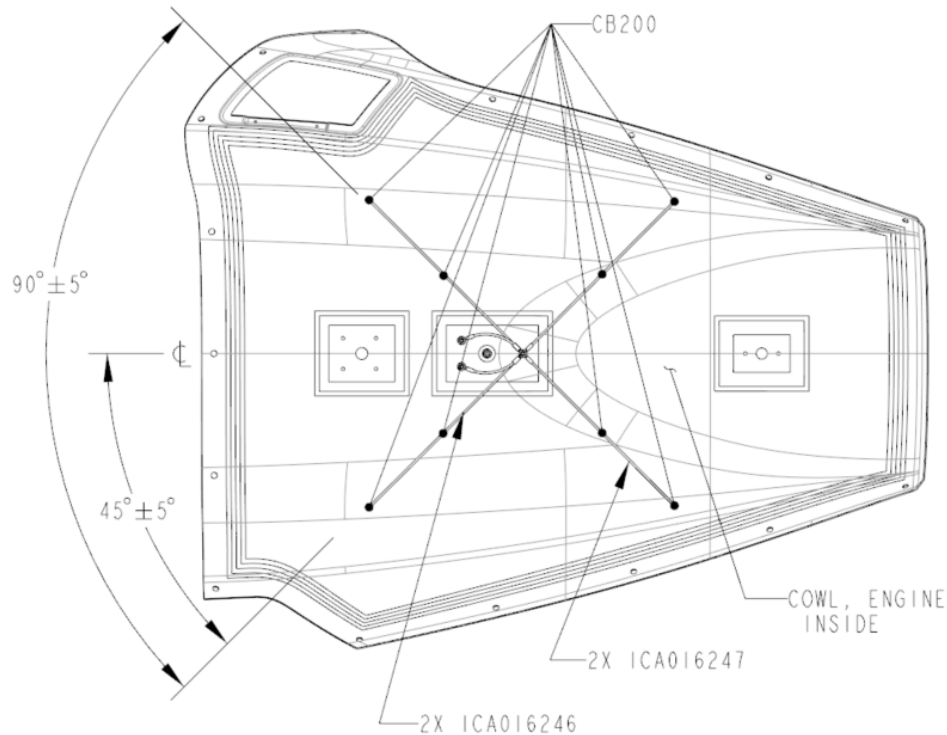
2141 ICON Way, Suite 100, Vacaville, CA 95688 - Tel: 707.564.4000 – www.iconaircraft.com

SERVICE BULLETIN

SB-021425-A

REPAIR INSTRUCTIONS:

1. Remove the Top Engine Cowl in accordance with the Aircraft Maintenance Manual, task 100497.
2. Remove the ELT Antenna and grounding wires from the Cowl in accordance with the Aircraft Maintenance Manual, task 100141.
3. Add antenna mounting holes in Cowl:
 - a. Using the template provided at the end of this document in Figure 4, center the template and transfer (3) new mounting holes (.219" +.006" / -.010"). Use a grinder/Dremel to enlarge the coax connector pass through hole to .875", keeping the hole as far forward as possible (as shown).
 - b. After printing the template, measure the 3.25 and 1.375 dimensions to verify the template was printed to scale.
4. Installation of Ground Plane:
 - a. Install Ground Plane wire assemblies 2X (ICA016246) and 2X (ICA016247) per Figure 2.
 - b. Locate the Ground Plane wires on the inside of the engine Cowl by temporarily installing the mounting Screw(s) to secure the wire ring terminals and stretch wires along the surface of the Cowl and tape in place.
 - c. Locate the eight bonding locations in the middle and end of the wires.
 - d. Mask surrounding area as required.
 - e. Wipe bonding surface with Isopropyl Alcohol.
 - f. Lightly abrade the .5 inch diameter bonding surface using 120-180 grit sandpaper to remove surface gloss. Do not abrade more than .25 inch beyond bond area.
 - g. Blast surface with clean shop air and wipe with Isopropyl Alcohol to remove any remaining particulate residues.
 - h. Bond Ground Plane wires 8X with a .5 inch dollop of CB200 and cure per manufactures recommendations.
 - i. Remove tape and screws after cure.

SERVICE BULLETIN**SB-021425-A***Figure 2. Ground Plane*

5. Electrically bond the Antenna to Ground Plane:
 - a. Burnishing the Antenna (ICA016244) mounting holes to remove paint by twisting the head of the three Screws into the mounting holes.
6. Prep Antenna and Top Cowl for installation with Sealant:
 - a. Apply Carnuba Wax (ICA013211) onto mating surfaces of Antenna and Cowl. Do not wax the middle, recessed area of the Antenna and coax connector.
 - b. Allow 5 minute for the Wax to flash off.
 - c. Wipe Wax off using a lint free cloth to leave thin film of residue on the mating surfaces.
 - d. Repeat steps 6.a. - 6.c. twice, for a total of three layers.
7. Sealant Application:
 - a. Apply Sealant (ICA012218) around the 3X mounting holes and the perimeter of the Antenna. Apply enough sealant to fill gap between Antenna and Cowl.
 - b. Do not apply Sealant to the middle, recessed area of the Antenna and coax connector.
8. Antenna Installation:
 - a. Assemble Antenna, Screws (10F62MTF3/100), nylon Washers (NAS1515H3L), Ground Planes (ICA016246 and ICA016247), Washers (NAS1149C0332R), and Nuts (MS21043-3) per Figure 3.
 - b. Apply Dielectric Grease (ICA012983) to the head of the Screws and Antenna mounting holes.



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SERVICE BULLETIN

SB-021425-A

- c. Apply Lubricant (ICA012078) to the threads of Screws.
- d. With Screws in the Antenna mounting holes, guide through holes on Cowl and mate Antenna to Cowl, allowing Sealant to fill gaps.
9. Sealant Cure:
 - a. Torque hardware to 2-5 inlbs
 - b. Ensure Antenna is square and aligned straight to Cowl.
 - c. Ensure squeeze out of Sealant and clean up perimeter after initial torque.
 - d. Let sealant cure for at least 24 hrs.
10. Final Torque:
 - a. After Sealant cure, torque hardware to 13-15 inlbs
 - b. Assure Ground Plane ring terminals are per Figure 2. and not twisted from final torque.
 - c. Trim excess sealant squeeze-out and as needed and clean area.
11. Continuity Test:
 - a. After final torque, preform continuity check from the outside of the Antenna's coax cable connection to the end of the four Ground Plane wires. If continuity test fails, repeat **REPAIR INSTRUCTIONS**: steps 5, 8, 10 and 11.

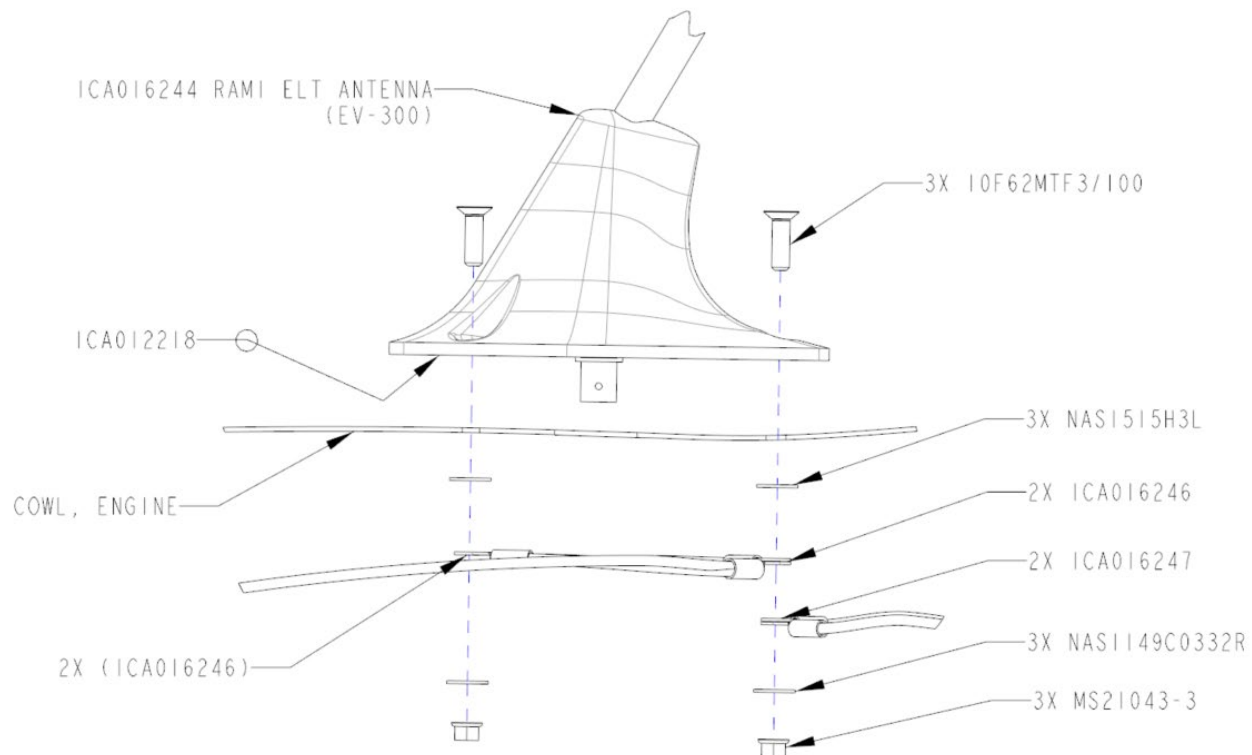


Figure. 3 Antenna Installation Stack-Up

12. After continuity test passes, reinstall Engine Cowl in accordance with the Aircraft Maintenance Manual, task 100335.



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SERVICE BULLETIN

SB-021425-A

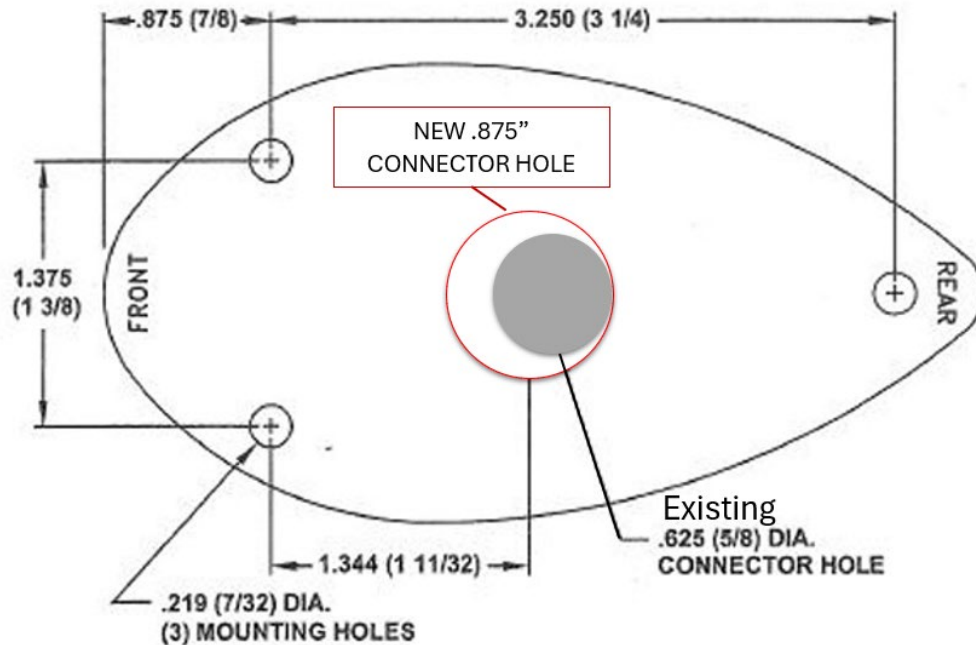


Figure 4. Template

Make the appropriate logbook entry:

If Repair was NOT completed:

“The inspection portion of Mandatory Service Bulletin SB-021425-A (ELT Antenna Cracking) has been completed. The repair has been deferred – re-inspection is required at the next condition inspection (ref. FAA Exemption 10829D)”.

If Repair was completed:

“The inspection and repair of Mandatory Service Bulletin SB-021425-A (ELT Antenna Cracking) have been complied with (ref. FAA Exemption 10829D)”.

For aircraft registered outside the U.S., omit “(ref. FAA Exemption 10829D)” as applicable.

If you have questions, comments, or concerns about this Service Bulletin and/or if you are no longer owner/operator of this aircraft, please forward this information to the present owner/operator and notify ICON Aircraft at:

ICON Aircraft
2141 ICON Way, Suite 100
Vacaville, CA 95688
(707) 564-4000

support@iconaircraft.com

Please include the aircraft registration number, serial number, your name, and if known the contact information of the new owner/operator.