

# SERVICE BULLETIN



**Service Bulletin No.: DAC1-25-02 Rev 0**

**Date Issued:** 23 November, 2010

**Title:** ME406 ELT installation for Reverse  
Instrument Panel aircraft

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- 1. ATA Code:** 2560
- 2. Effectivity:** All DA20-C1 aircraft with a reverse instrument panel configuration
- 3. General:** This Service Bulletin addresses replacement of the EBC502 ELT with the Artex ME406 ELT.
- 4. Compliance:** Compliance with this Service Bulletin is recommended.
- 5. Approval:** Engineering data referenced or contained in this Service Bulletin is approved as part of the type design.
- 6. Labour:** Approximately 2 ½ hours will be required to accomplish this Service Bulletin. *This estimate is for direct labor performed by a technician and it does not include setup, planning, familiarization, cure time, part fabrication or tool acquisition.*

<b>7. Material:</b>	<b>Part Number</b>	<b>Description</b>	<b>Qty</b>
	22-2563-11-00	ELT Bracket, Support Assembly	1
	22-2563-10-00	ELT Bracket Assembly, Reverse IP	1
	22-2563-12-00	ELT Plate, Support, Assembly	1
	22-2562-40-00	ELT Antenna Cable Assembly	1
	453-6603	ME406 ELT	1
	452-3034	ME406 ELT Mounting Tray	1
	452-6505	Buzzer, ELT	1
	110-773	Antenna, Whip	1
	453-1101	Interface Module	1
	D-436-36	Splice, Red	2
	MS21059-3	Nutplate, Floating	1
	CCR244SS3-03	Rivet	2
	MS3367-4-9	Cable Tie	A/R
	EMS-A-CO	Cable Tie base	2
	MS35206-246	Screw	4
	NAS1149CN816R	Washer	8
	MS21044C08	Nut, Self Locking	4
	AN526C1032R12	Screw	6
	NAS1149C0332R	Washer	6
	AN970-3	Washer	3

The above material may be ordered as kit **DAC1-25-02-AMK0**.

Materials required but not supplied: procure locally.

DP110	Epoxy Adhesive	A/R
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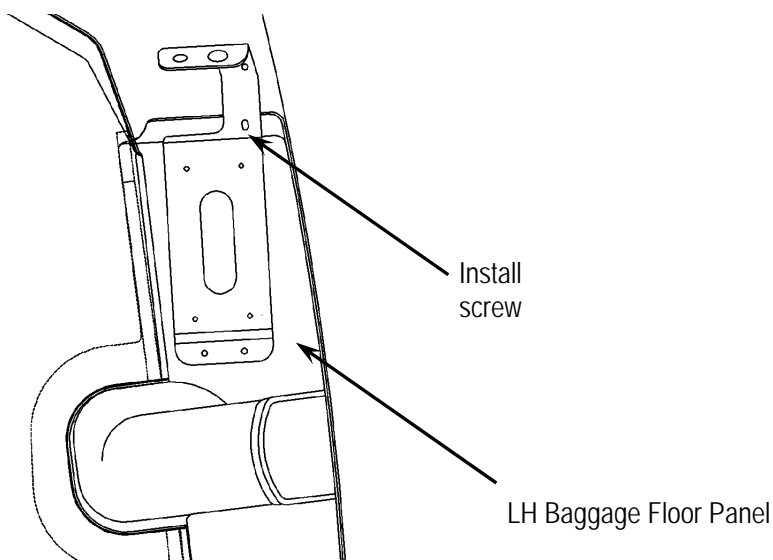
**8. Special Tools:** N/A

**9. References:** AFM - Doc # DA202-C1, AMM - Doc # DA201-C1

## 10. Accomplishment Instructions:

- 10.1** Remove existing EBC502 ELT and ELT tray.  
**Note:** *Before removing ensure ELT switch is in the OFF position.*
- 10.2** Remove AFT attachment screw from LH Baggage Floor Panel and position ELT Bracket Assembly (22-2563-10-00) on LH Baggage Floor Panel as shown on Figure 1. Reinstall screw.

**Figure 1:**



- 10.3** Verify that the bracket is installed within  $\pm 10^\circ$  to aircraft longitudinal axis.
- 10.4** Transfer/drill mounting hole locations (5 locations) from ELT Bracket Assembly to B-Bulkhead and LH Baggage Floor Panel. See Figure 2.  
**NOTE:** *Do not damage structure behind B-Bulkhead.*

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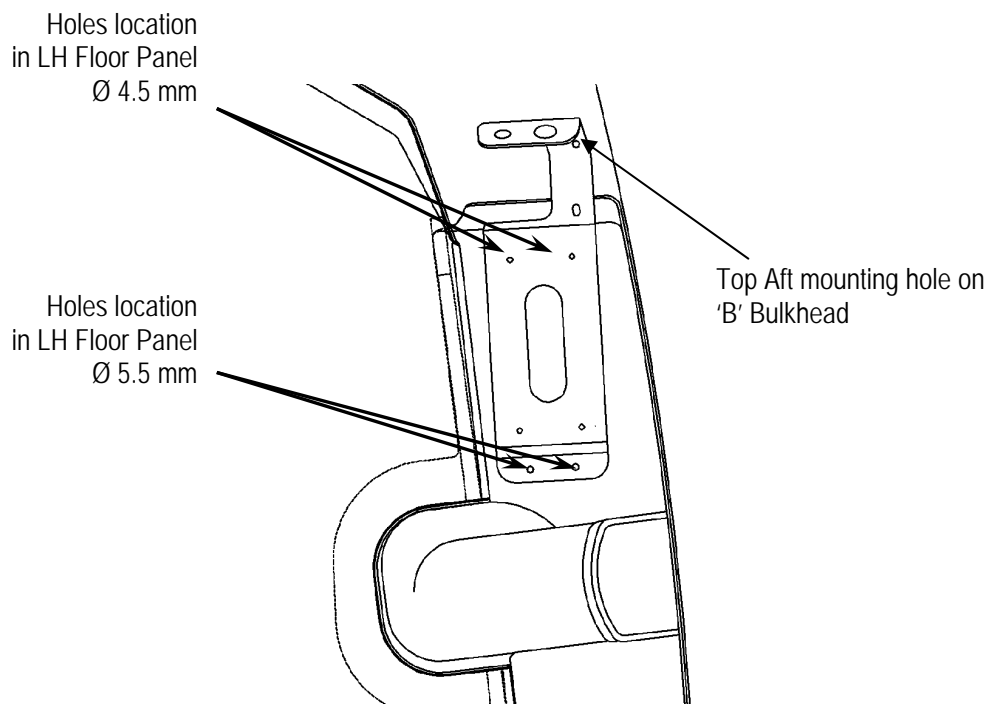
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**Figure 2:**



- 10.5** Remove ELT Bracket Assembly and Baggage Floor (Centre and LH Panels). Refer to DA20-C1 AMM Chapter 25-10 for Baggage Floor removal.
- 10.6** Drill out rivet holes and install nutplate in top aft mounting hole as per Figure 3.

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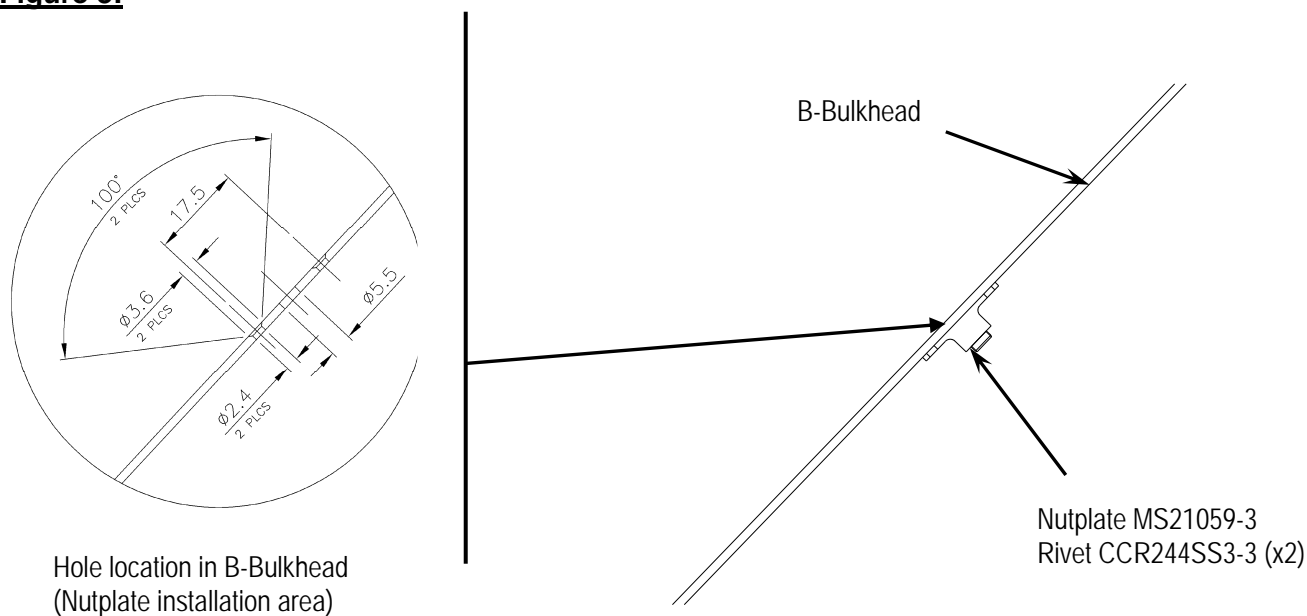
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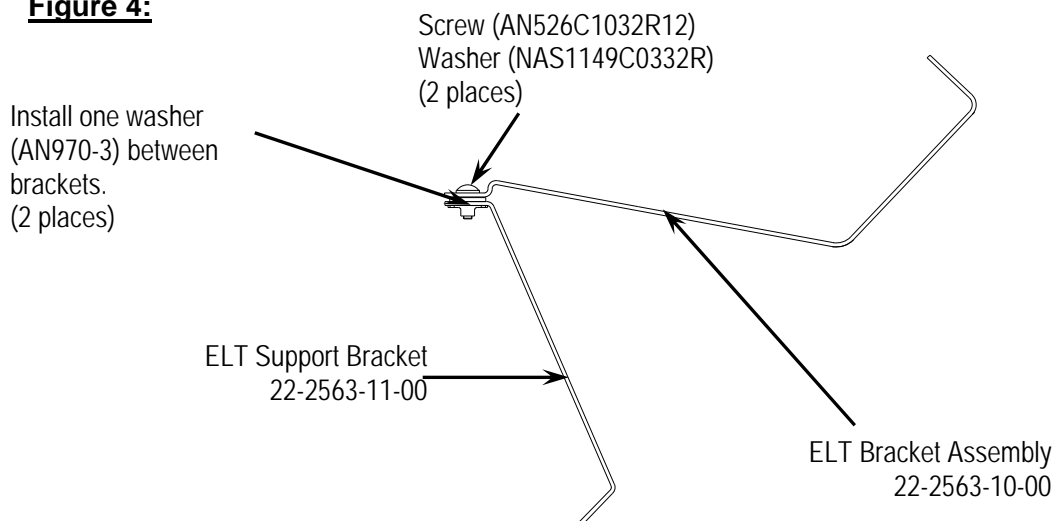
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**Figure 3:**



- 10.7** Assemble ELT Bracket Assembly (22-2563-10-00) with ELT Support Bracket Assembly (22-2563-11-00). Use hardware specified in Figure 4. Install a washer (AN970-3) between ELT Bracket Assembly and ELT Support bracket to compensate for Baggage Floor Panel thickness.

**Figure 4:**



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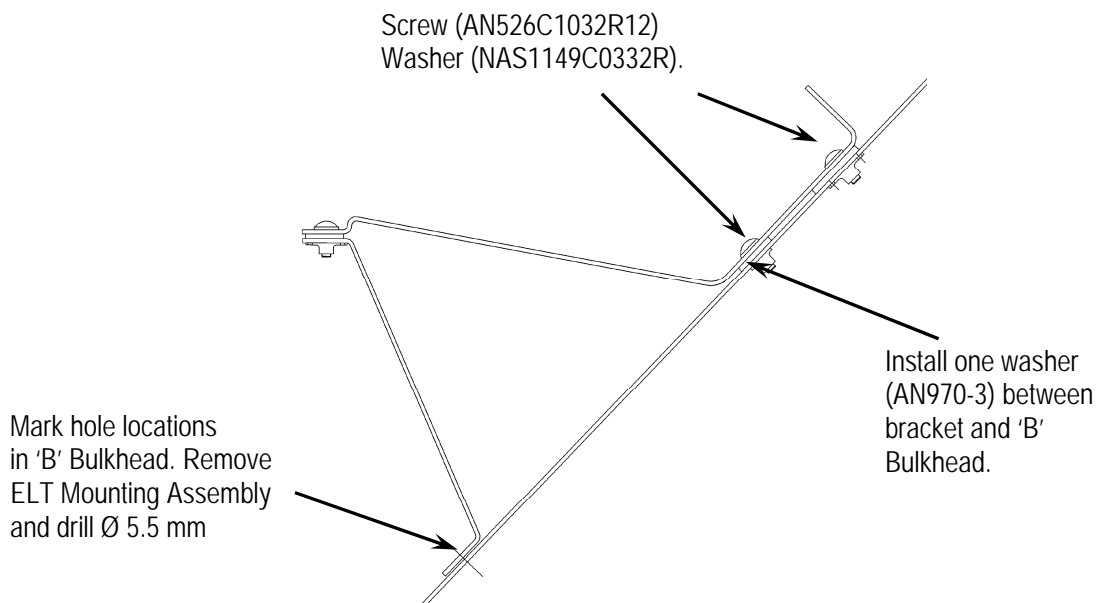
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- 10.8** Install ELT Mounting Assembly (ELT Bracket Assembly and Support Bracket) on B-Bulkhead with two aft mounting screws. Install Washer (AN970-3) in lower aft mounting location between ELT Bracket Assembly and B-Bulkhead to compensate for Baggage Floor Panel thickness. See Figure 5.
- 10.9** Temporarily reinstall Centre Baggage Floor Panel on aircraft and verify that forward flange on ELT Bracket Assembly (22-2563-10-00) is in line with Centre Baggage Floor Panel surface. Mark location of bottom mounting holes of Support Bracket Assembly (22-2563-11-00) on B-Bulkhead.
- 10.10** Remove and disassemble ELT Mounting Assembly (discard AN970-3 washers). Remove Centre Baggage Floor Panel.
- 10.11** Drill marked mounting holes in B-Bulkhead. See Figure 5.  
**NOTE: Care should be taken not damage structure behind B-Bulkhead.**

**Figure 5:**



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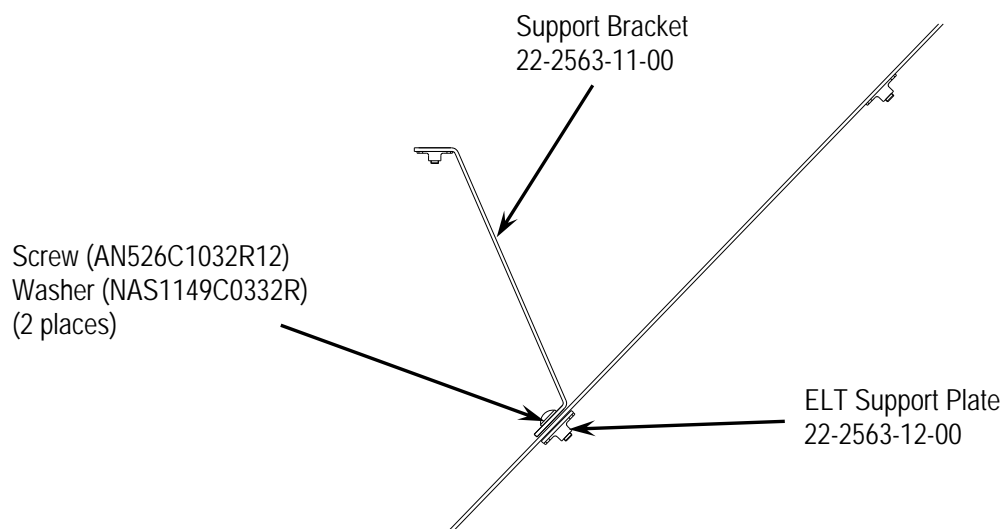
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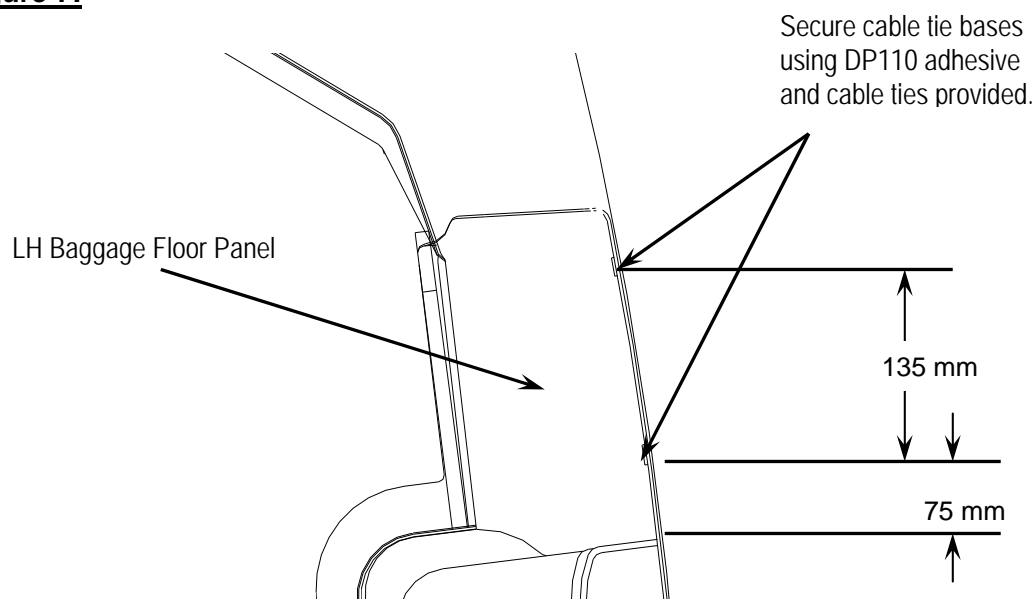
- 10.12** Install Support Bracket (22-2563-11-00) and ELT Support plate (22-2563-12-00) on B-Bulkhead as shown on Figure 6 with hardware provided.

**Figure 6:**



- 10.13** Bond two Cable Tie Bases to LH Baggage Floor Panel outboard flange using DP110 adhesive. See Figure 7.

**Figure 7:**



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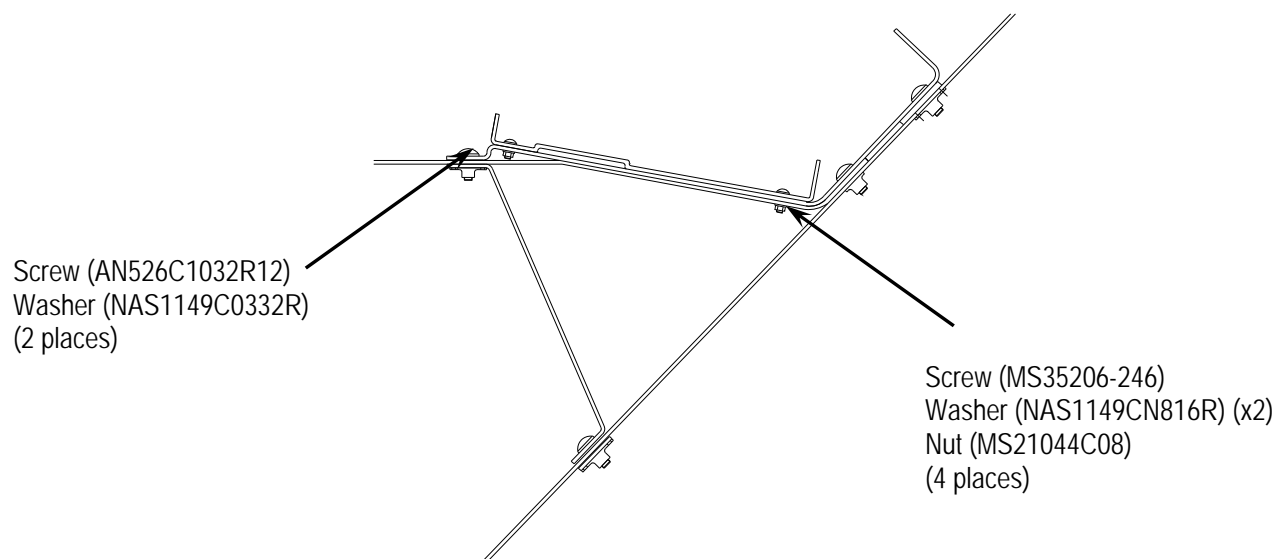
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- 10.14** Install ELT Bracket Assembly (22-2563-10-00) and ELT Mounting Tray (452-3034) on LH Baggage Floor Panel using supplied hardware (MS35206-246 screw, NAS1149CN816R washer and MS21044C08 nut). See Figure 8.

**Figure 8:**



- 10.15** Clean up work area and remove all foreign objects from aircraft.
- 10.16** Install LH Baggage Floor Panel on aircraft in accordance with DA20-C1 AMM Chapter 25-10 and Figure 8.
- 10.17** Install Centre Baggage Floor Panel on aircraft in accordance with DA20-C1 AMM Chapter 25-10.
- 10.18** Splice Artex ELT Interface module to Artex ELT buzzer using splices provided. See Figure 9.

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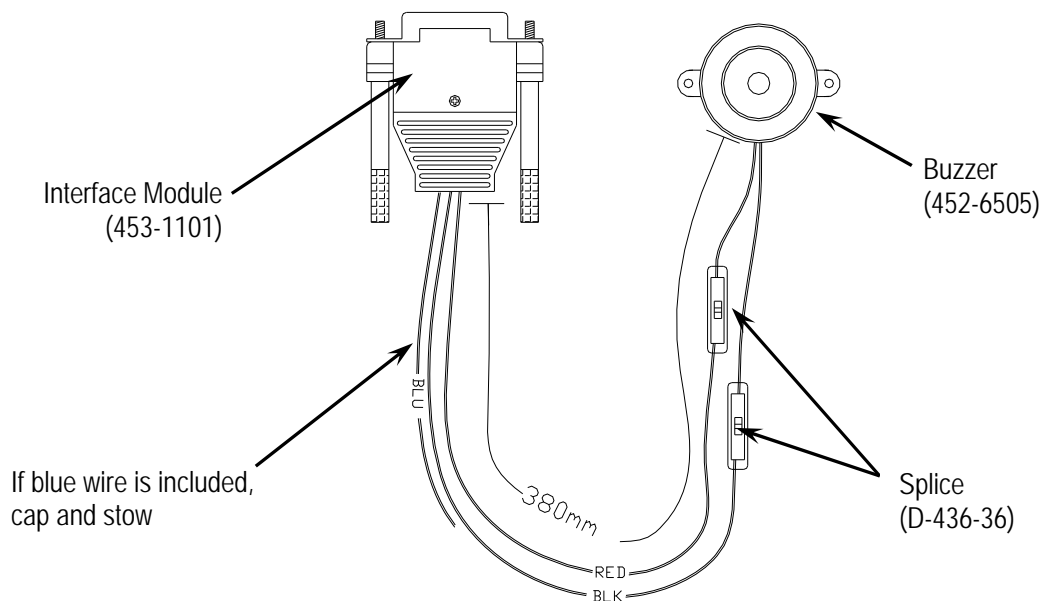
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**Figure 9:**



- 10.19** Install Buzzer onto ELT Bracket Assembly (22-2563-10-00) as shown in Figure 10. Route and secure ELT Coax Assembly and Interface module/buzzer by securing them to cable tie bases on LH flange of Baggage floor panel. 90° fitting on ELT Coax Assembly connects to antenna.
- 10.20** Install ELT Antenna (110-773) onto ELT Bracket Assembly (22-2563-10-00) as shown in Figure 10 and connect 90° fitting of ELT Coax Assembly (22-2562-40-00) to it.



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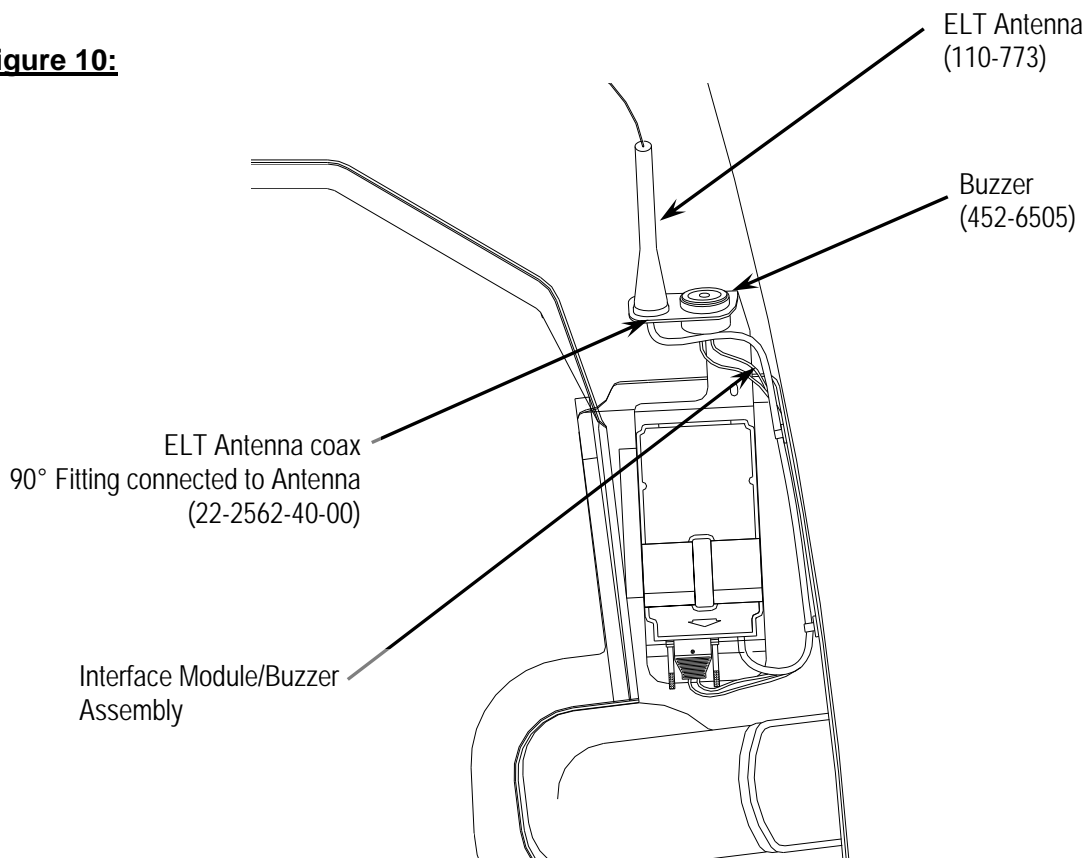
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**Figure 10:**



- 10.21** Install Artex ELT Unit onto ELT Tray with Velcro strap.

**NOTE:** Ensure ELT unit is switched to the OFF position when handling and installing.

- 10.22** Connect ELT Coax Assembly and Interface module/buzzer to ELT Unit.

- 10.23** Clean up work area and remove all foreign objects from aircraft.

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**10.24**      On the hour, and up to 5 minutes past, conduct the ELT Transmitter Test as follows:

- Tune the aircraft com receiver to 121.5MHz and enable aircrafts speaker.
- Turn the ELT unit to the "ON" position, for about 1 second, then back to the "ARM" position. Ensure the receiver sounds 3 audio sweeps and the ELT unit, after turning it to the "ARM" position, displays 1 flash.

**NOTE: If more than 1 flash is observed refer to the Artex Installation manual: 570-1600.**

**10.25**      Make a log book entry that this Service Bulletin has been incorporated.

## 11. Weight and Balance:

Make the following adjustments to weight and balance:

<i>Item</i>	<i>Weight (kg)</i>	<i>Arm (m)</i>
EBC 502 ELT	-1.270	+1.140
Artex ME406 ELT	+1.5095	+1.023

**12. Register:**      Register the ELT with the appropriate flight authority in accordance with the Artex ME406 Manual.

**13. Availability:**      Contact Diamond Aircraft.

*To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft Industries Inc. cannot be responsible for the quality of work performed in accomplishing the requirements of this service bulletin. Diamond Aircraft reserves the right to void continued warranty coverage in the area affected by this Service Bulletin if it is not incorporated.*

*If you no longer own the aircraft to which this service bulletin applies, please forward it to the current owner and send the name of the current owner to Diamond Aircraft Industries, Inc., at the address below.*

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