



AIRCRAFT MAINTENANCE MANUAL

FDR UNDERWATER LOCATOR BEACON - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do a operational test in the FDR underwater locator beacon (ULB).
- B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
31-31-02-700-801-A ♦	FDR UNDERWATER LOCATOR BEACON - OPERATIONAL TEST	ALL



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 31-31-02-700-801-A

EFFECTIVITY: ALL

2. FDR UNDERWATER LOCATOR BEACON - OPERATIONAL TEST

A. General

- (1) This task gives the procedures to test the underwater locator beacon (ULB).
- (2) (AIRCRAFT WITH HONEYWELL FDR) Data related to this operational test and alternative procedures are available on Honeywell CMM 31-30-40.
- (3) (AIRCRAFT WITH L3 FDR) Data related to this operational test and alternative procedures are available on L3 CMM 31-30-03.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 31-31-02-000-801-A/400	FDR UNDERWATER LOCATOR BEACON - REMOVAL
AMM TASK 31-31-02-400-801-A/400	FDR UNDERWATER LOCATOR BEACON - INSTALLATION
Honeywell CMM 31-30-40	-
L3 CMM 31-30-03	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272DR	Fuselage rear section I - Right side

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 036	Platform - Hydraulic, Aircraft	To get access to the rear electronic compartment	
GSE 050	Digital Multimeter	To measure the ULB battery voltage	
GSE 605	Ultrasonic Test Set	To test the ULB	

E. Auxiliary Items

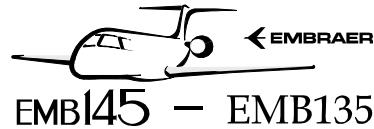
Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable



AIRCRAFT MAINTENANCE MANUAL

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Rear electronic compartment

I. Preparation

SUBTASK 841-002-A

- (1) Put up the hydraulic platform (GSE 036) at the necessary height.
- (2) Open access door 272DR AMM MPP 06-41-01/100.
- (3) Remove the underwater locator beacon ([AMM TASK 31-31-02-000-801-A/400](#)).

NOTE: • (AIRCRAFT WITH HONEYWELL FDR) If the date marked on the ULB is expired or almost expired, send the ULB back to the manufacturer for servicing. Refer to the last revision of Honeywell CMM 31-30-40.
• (AIRCRAFT WITH L3 FDR) If the date marked on the ULB is expired or almost expired, send the ULB back to the manufacturer for servicing. Refer to the last revision of L3 CMM 31-30-03.

- (4) Make sure the ULB is clean and dry.

J. FDR ULB - Operational Test ([Figure 501](#)) ([Figure 502](#))

SUBTASK 710-002-A

- (1) Do the test of the ULB battery as follows: ([Figure 501](#))
 - (a) With a multimeter (GSE 050) (3), measure the voltage between the ULB case (1) and the water activation switch (2). If the battery voltage is below 2.97 V, replace the ULB (1) with a serviceable unit.
- (2) Do the operational test of the ULB (1) as follows: ([Figure 502](#))
 - (a) Configure the Ultrasonic Test Set (GSE 605) (5) as follows:
 1. Turn the GAIN knob (4) fully clockwise to turn the Ultrasonic Test Set (GSE 605) (5) on and to select the maximum gain.
 2. Turn the TUNING knob (7) to a setting between 35 and 40 kHz.
 3. If available on the Ultrasonic Test Set model, set the INPUT switch to INT.
 - (b) Use an electric lead (3) to establish a short-circuit between the ULB case (1) and the water activation switch (2).
 - (c) Put the Ultrasonic Test Set (GSE 605) (5) next to the ULB (1).

Result:

- 1 The Ultrasonic Test Set (GSE 605) (5) receives, through its microphone (8), the inaudible ultrasonic waves emitted by the ULB (1) and reproduces the signal as repetitive beeps through its speaker (6).

NOTE: • In a setting between 35 and 40 kHz, adjust the TUNNING knob (7) as necessary to have the best signal.
• Adjust the GAIN knob (4) as necessary for a comfortable listening level.

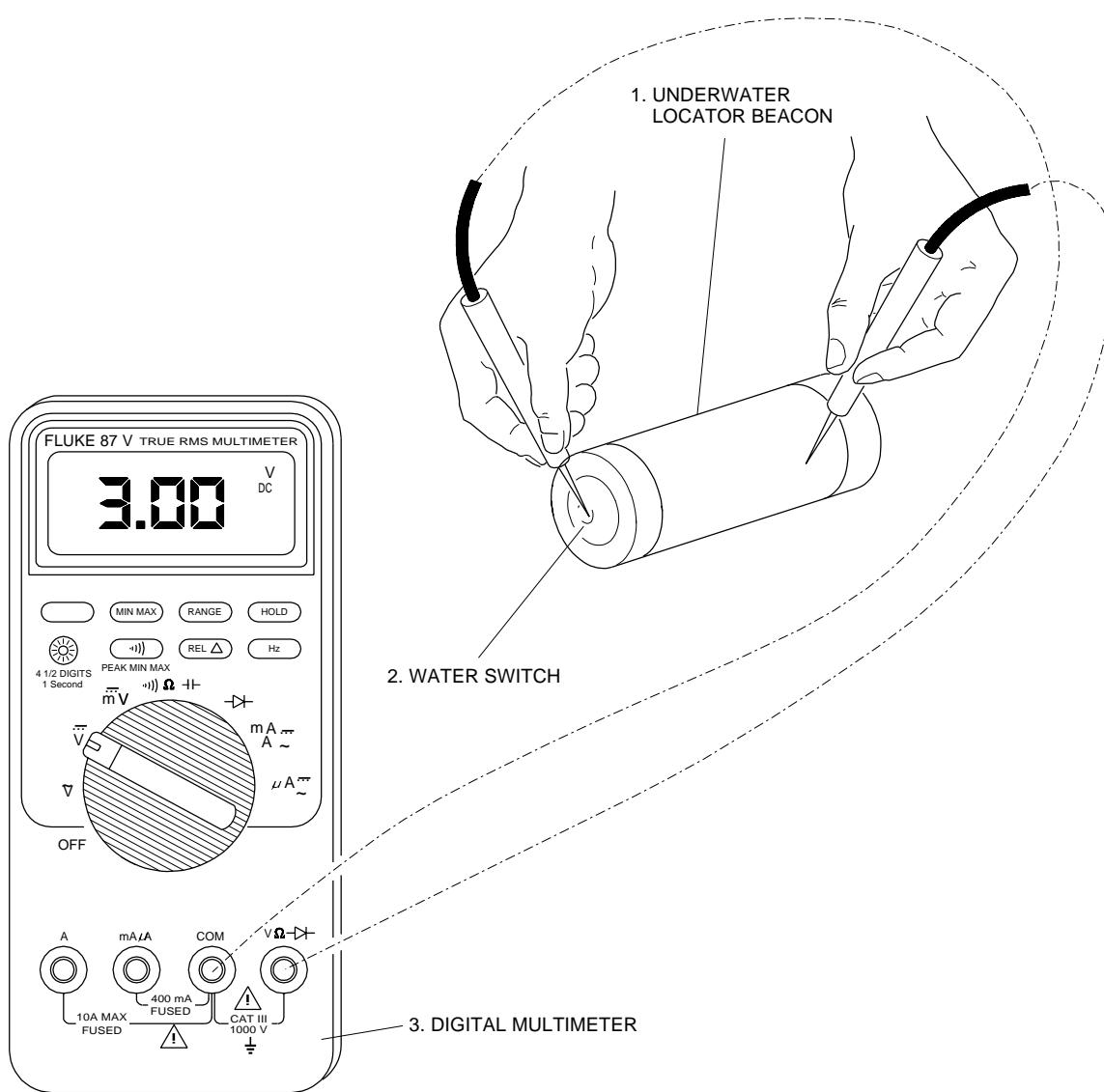
- (d) Remove the electric lead (3) to stop the short-circuit in the ULB (1).
- (e) Turn the GAIN knob (4) fully counterclockwise to turn the Ultrasonic Test Set (GSE 605) (5) off.

NOTE: • (AIRCRAFT WITH HONEYWELL FDR) If the test results are not satisfactory, send the ULB back to the manufacturer for servicing. Refer to the last revision of Honeywell CMM 31-30-40.
• (AIRCRAFT WITH L3 FDR) If the test results are not satisfactory, send the ULB back to the manufacturer for servicing. Refer to the last revision of L3 CMM 31-30-03.

K. Follow-on

SUBTASK 842-002-A

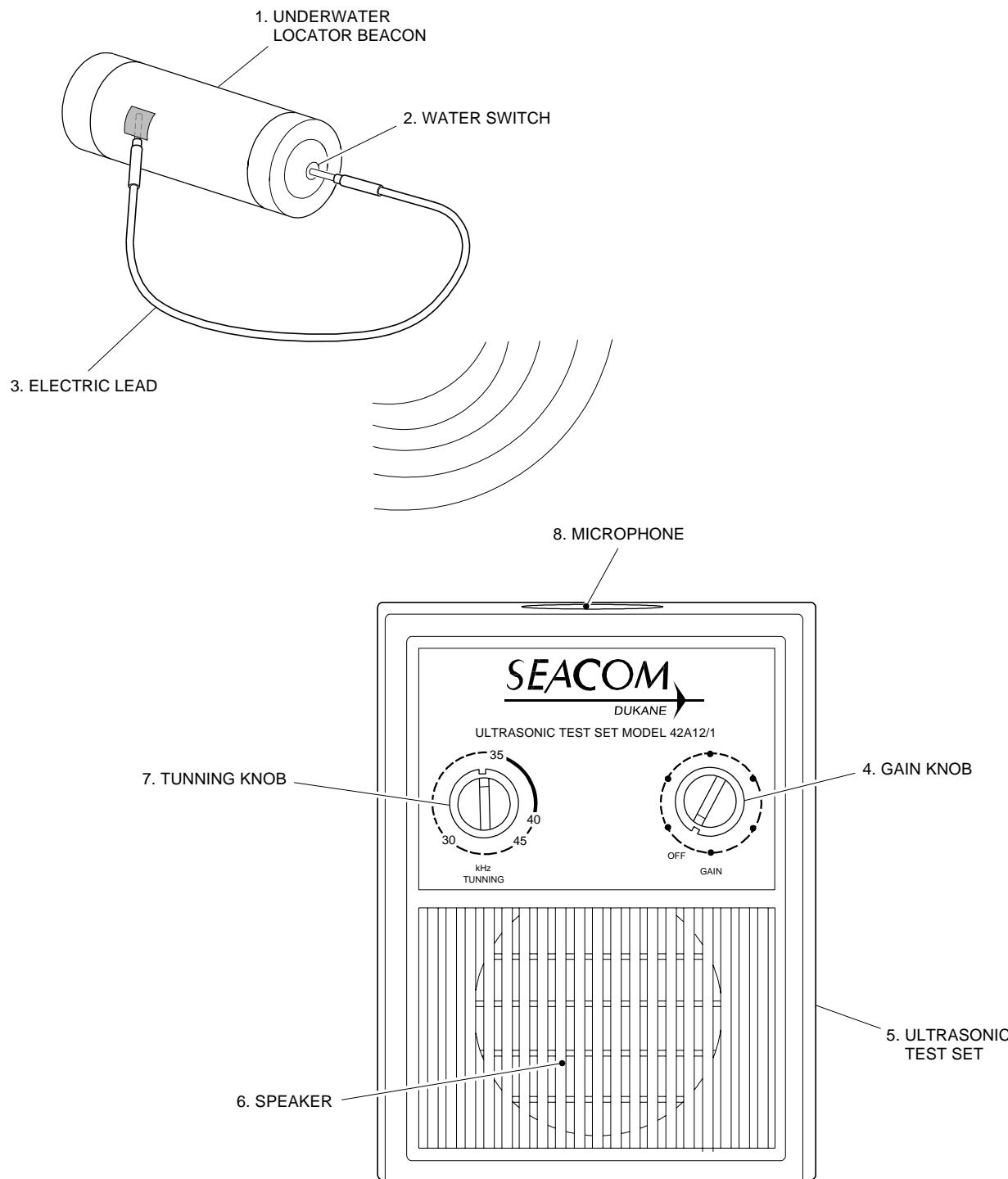
- (1) Install the ULB ([AMM TASK 31-31-02-400-801-A/400](#)).
- (2) Close access door 272DR AMM MPP 06-41-01/100.
- (3) Remove the hydraulic platform (GSE 036).

EFFECTIVITY: ALL
FDR UNDERWATER LOCATOR BEACON - BATTERY TEST
Figure 501

EM145AMM231523A.DGN

EFFECTIVITY: ALL

FDR UNDERWATER LOCATOR BEACON - OPERATIONAL TEST

Figure 502



EM145AMM231524A.DGN