



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

STROBE LIGHTS - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the functional check of the Strobe Lights.
- B. The strobe lights give proximity reference from one aircraft to other aircraft in flight.
- C. There are three white strobe lamps installed each inside a transparent cover assembly. There is one strobe light at each wing tip and other at the vertical/horizontal empennage fairing (tail boom).
- D. 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
33-47-03-700-801-A ♦	STROBE LIGHTS - FUNCTIONAL CHECK	ALL



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TASK 33-47-03-700-801-A

EFFECTIVITY: ALL

2. STROBE LIGHTS - FUNCTIONAL CHECK

A. General

- (1) This task gives the procedures to do the functional check of the Strobe Lights.
- (2) This is a check of the luminous intensity of each strobe light.
- (3) To do the correct luminous intensity check, it is important to keep the measuring instrument at the same distance and azimuth from the strobe light.
- (4) For these procedures, equipment GSE 207 or GSE 300 must be used.
- (5) Both equipment GSE 207 and GSE 300 are Flash Measuring Guns, the difference between them is the input power.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 33-47-03-000-801-A/400	STROBE LIGHTS - REMOVAL
AMM TASK 33-47-03-400-801-A/400	STROBE LIGHTS - INSTALLATION

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
561		Wing tip
661		Wing tip
321		Vertical/horizontal empennage fairing (tail boom)

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 207	Flash Measuring Gun	To measure the strobe-light luminous intensity	
GSE 300	Flash Measuring Gun	To measure the strobe-light luminous intensity	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Takes the measure	Wing tips, vertical/horizontal empennage fairing (tail boom), and cockpit
1	Turn on/off the strobe light	cockpit

I. Preparation
SUBTASK 841-002-A

- (1) Energize the aircraft with the external DC power supply ([AMM TASK 20-40-01-860-801-A/200](#)).
- (2) On the circuit breaker panel, make sure that the STROBE circuit breaker is closed (Location Tip: DC BUS 1/LIGHTS/STROBE).

J. Functionally Check White Strobe Lighting System ([Figure 501](#)) ([Figure 502](#)) ([Figure 503](#)) ([Figure 504](#))
SUBTASK 720-002-A

- (1) To do the functional check of the wing tip Strobe Light, start this procedure at item (a) and skip item (b). To do the functional check of the tail boom Strobe Light, start this procedure at item (b).

WARNING: DO NOT LOOK DIRECTLY AT THE STROBE LIGHT AT CLOSE RANGE. DAMAGE TO VISION CAN OCCUR.

- (a) Do this step to do a check of the wing-tip strobe light.

Result:

- 1 Release one of the lower screws (3) of the wing tip lens (2) nearest to the strobe light (1).
- 2 Attach the swivel hook (4) to the screw (3).

NOTE: The swivel hook must be at the center line of the strobe bulb within ± 1.0 inch.

- (b) Do this step to do a check of the fin-tip strobe light.

Result:

- 1 Attach the swivel hook (2) in the drain hole (3) under the tail boom lens (4).

CAUTION: DO NOT USE THE TRIGGER IN CONJUNCTION WITH CABLE OPERATION.

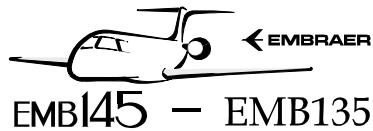
NOTE: The swivel hook must be at the center line of the strobe bulb within ± 1.0 inch.

- (c) Keep tension on the flash measuring gun cable and back away from the strobe light (1) until the cable is fully extended (92.5 inches from front of flash measuring gun).

Result:

- 1 The flash measuring gun (5) automatically comes on.

NOTE: If the cable can be loosened, the flash measuring gun (5) automatically goes off.



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WARNING: DO NOT LOOK DIRECTLY AT STROBE LIGHT WHILE YOU DO THE TEST. IT CAN CAUSE INJURY TO PERSONS. LOOK AT THE TESTER READOUT ONLY.

- (d) On the overhead panel, set the STROBE switch to the ON position.

Result:

- 1 All the three strobe lights come on and flash.

NOTE: For the correct reading, you must point the sensor directly to the strobe within $\pm 5^\circ$ of the strobe horizontal plane.

- (e) When the instrument starts to show readings, adjust the aim lightly until you get a maximum reading. It can be necessary to move the tester up and down, or right and left, to get optimum reading.

Result:

- 1 Record the maximum readout in the correct records. The readout is in equivalent candelas.

- (f) On the overhead panel, set the STROBE switch to the OFF position.

- (g) The readings must be equal to or more than 400 candelas at an angle from 0° to 5° .

- (h) If the reading is less than the limit specified, remove the strobe light [AMM TASK 33-47-03-000-801-A/400](#) and install [AMM TASK 33-47-03-400-801-A/400](#) other.

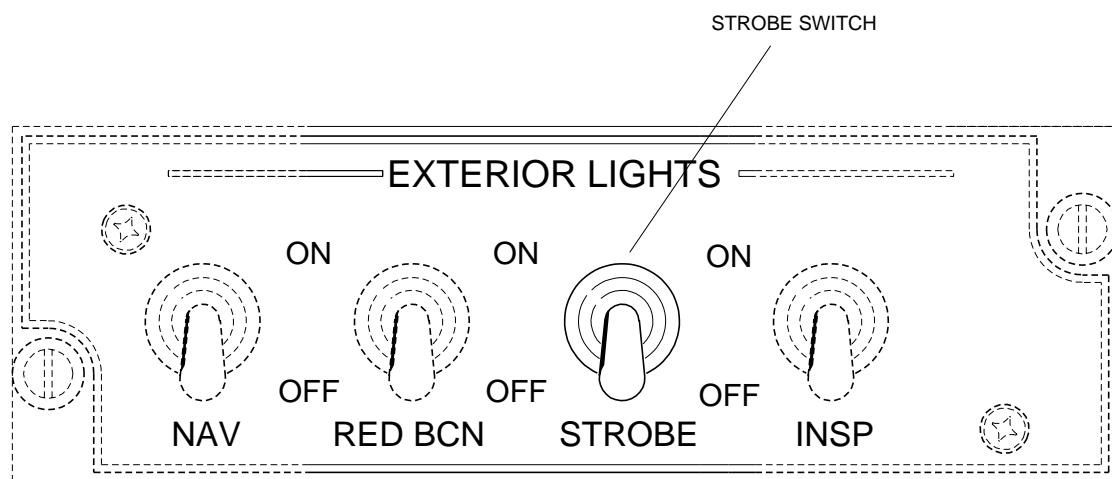
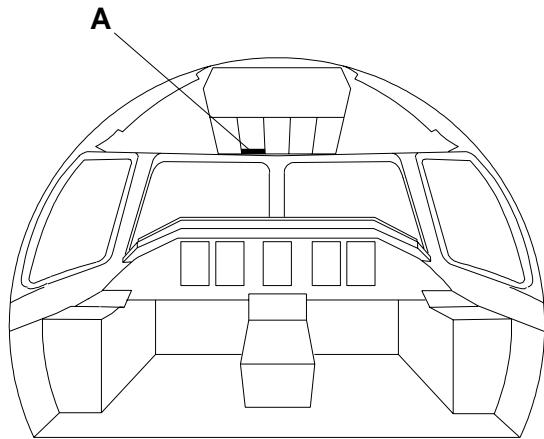
- (i) If the strobe light was replaced measure and record the intensity of the strobe light again.

K. Follow-on

SUBTASK 842-002-A

- (1) Deenergize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

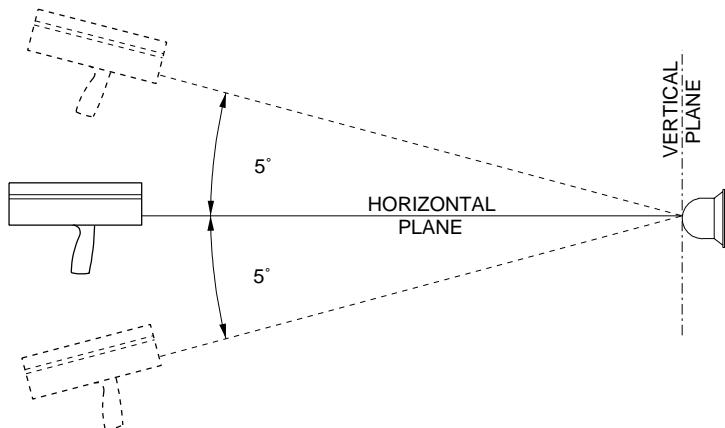
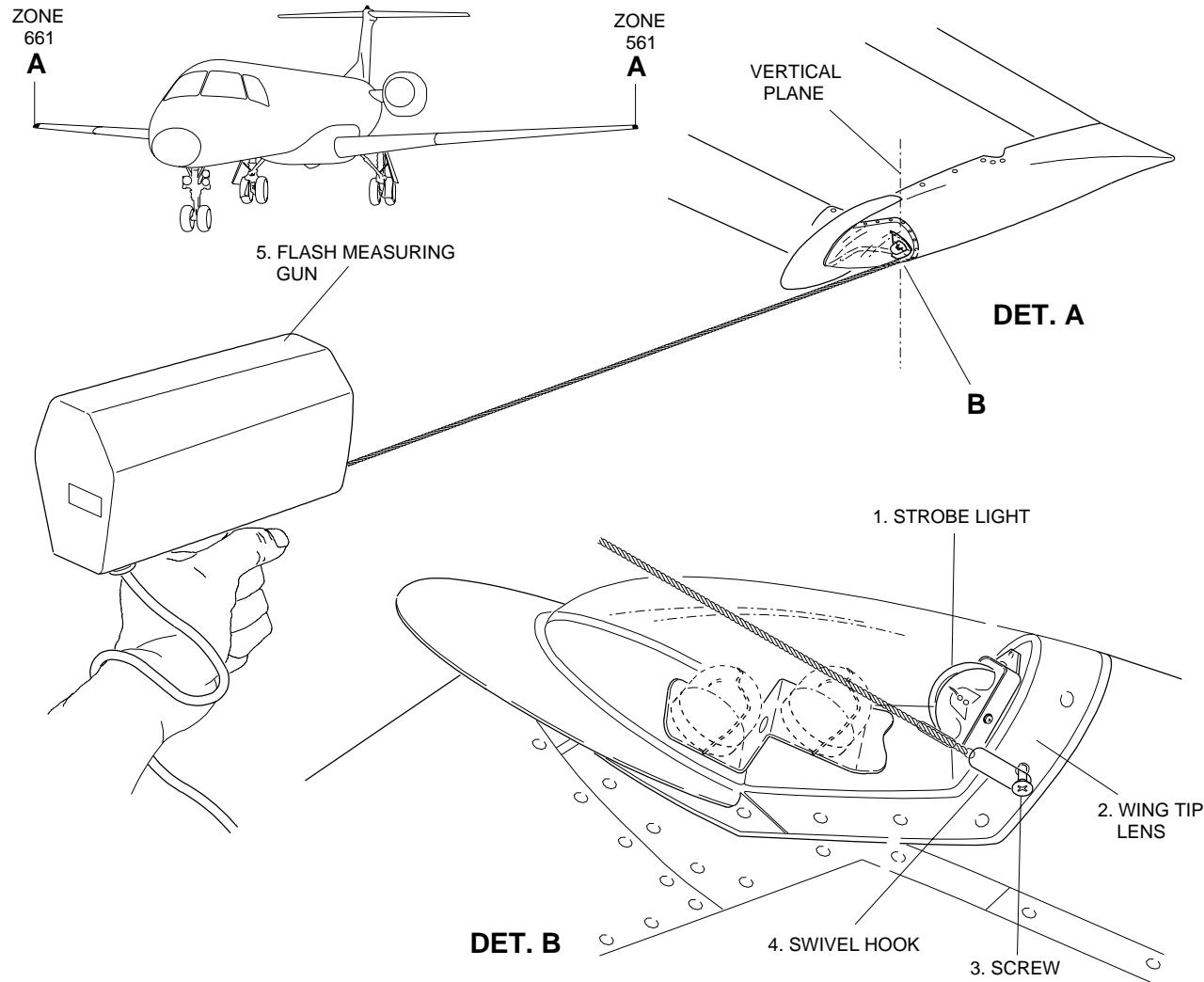
EFFECTIVITY: ALL
Anticollision Light Switches
Figure 501



DET. A

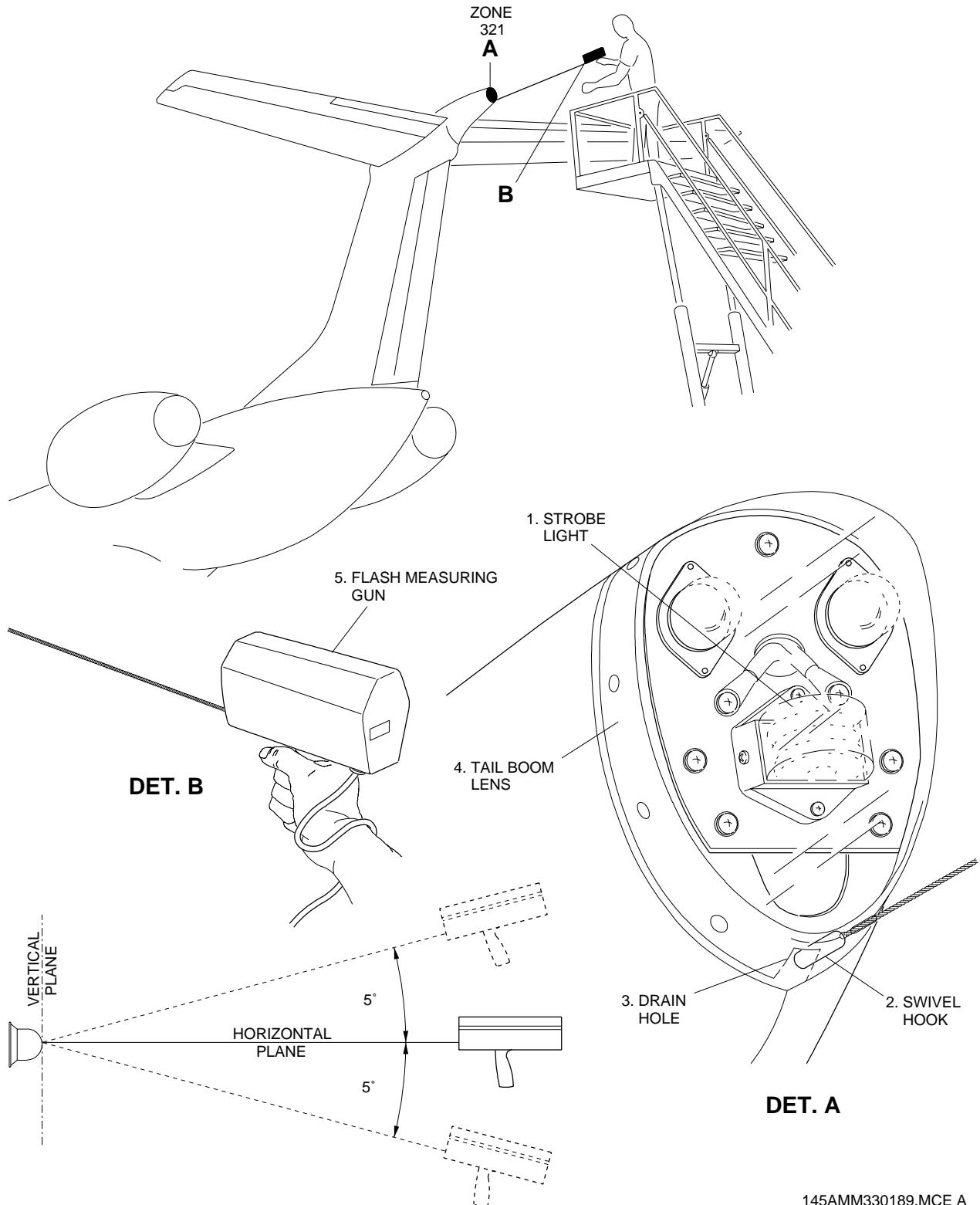
145AMM330044.MCE B

EFFECTIVITY: ALL
Wing Tip Strobe Lights
Figure 502



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EFFECTIVITY: FOR AIRCRAFT WITHOUT STANDBY TAIL NAVIGATION LIGHTS
Tail-Boom Strobe Light
Figure 503

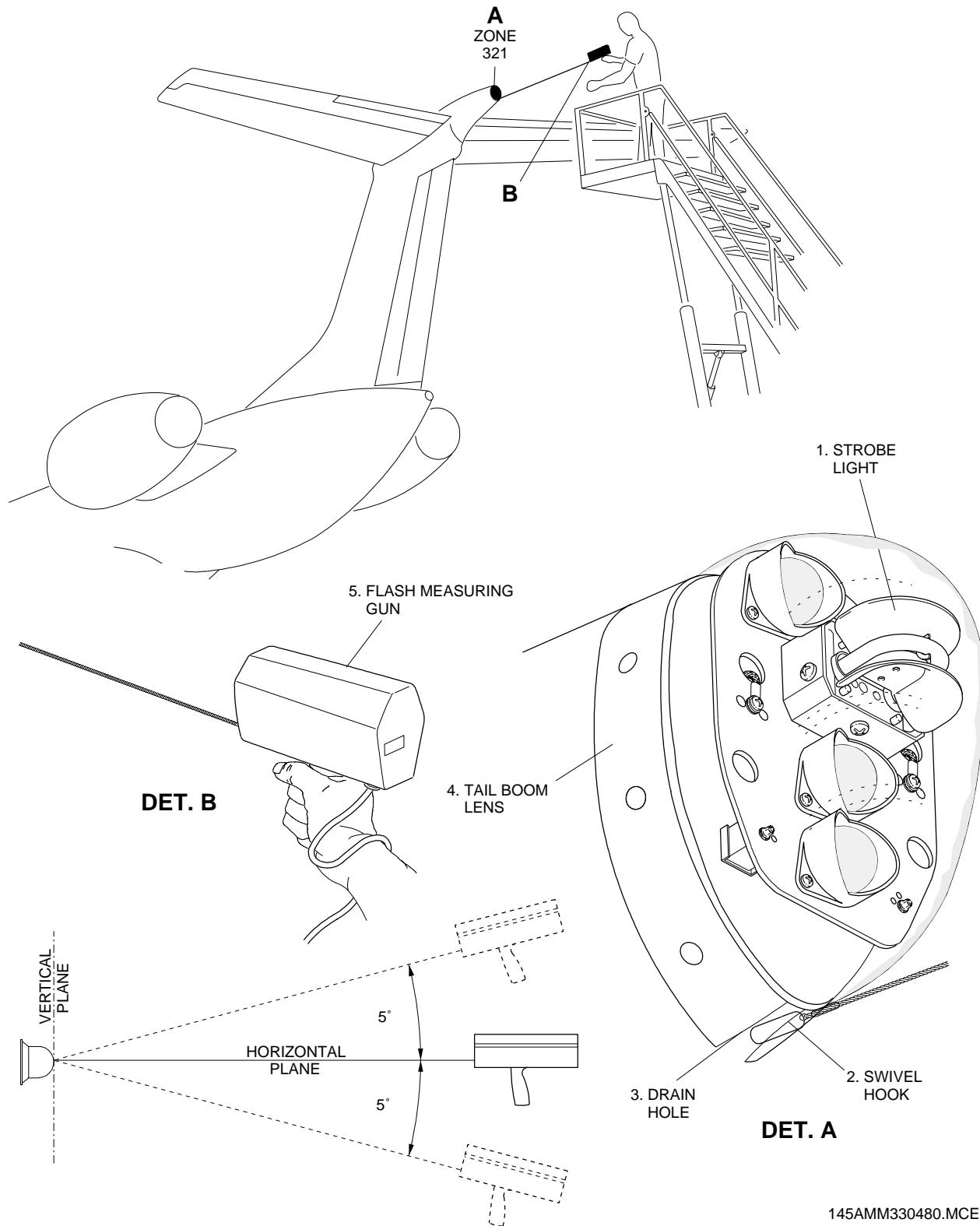


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EFFECTIVITY: FOR AIRCRAFT WITH STANDBY TAIL NAVIGATION LIGHTS

Tail-Boom Strobe Light

Figure 504



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