

## NOSE-LANDING-GEAR DOOR ASSEMBLY - ADJUSTMENT/TEST

*EFFECTIVITY: JAA CERTIFIED AIRCRAFT*

### 1. General

- A. This section gives the procedures to do the operational check of the Nose-Landing-Gear Door-Open indication.
- 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
<a href="#">32-20-05-700-801-A</a>	NOSE-LANDING-GEAR DOOR-OPEN INDICATION - OPERATIONAL CHECK	JAA CERTIFIED AIRCRAFT

TASK 32-20-05-700-801-A

*EFFECTIVITY: JAA CERTIFIED AIRCRAFT*

## 2. NOSE-LANDING-GEAR DOOR-OPEN INDICATION - OPERATIONAL CHECK

### A. General

- (1) This task gives the procedures to do the operational check of the Nose-Landing-Gear Door-Open indication.

### B. References

REFERENCE	DESIGNATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 32-63-04-400-801-A/400	NLG DOOR-OPEN PROXIMITY SWITCH - INSTALLATION
AMM TASK 32-63-05-700-801-A/500	PROXIMITY SWITCH (SENSOR) - FUNCTIONAL CHECK
S.B.145-22-0004	-
S.B.145-32-0036	-
S.B.145-32-0073	-
SB145-32-0036	-

### C. Zones and Accesses

Not Applicable

### D. Tools and Equipment

Not Applicable

### E. Auxiliary Items

Not Applicable

### F. Consumable Materials

Not Applicable

### G. Expandable Parts

Not Applicable

### H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Cockpit
1	Helps the other technician	RH and LH Nose landing gear doors

I. Preparation

*SUBTASK 841-002-A*

- (1) On aircraft PRE-MOD [SB145-32-0036](#), make sure that the pressure in hydraulic system No. 1 is totally released ( [AMM TASK 29-10-00-860-802-A/200](#)).
- (2) On aircraft POST-MOD [SB145-32-0036](#), install the safety pin of the NLG door solenoid valve ( [AMM TASK 32-00-02-910-801-A/200](#)).
- (3) Make sure that the landing gear safety pins are installed ( [AMM TASK 32-00-01-910-801-A/200](#)).
- (4) Make sure that the door-open proximity switches are correctly installed ( [AMM TASK 32-63-04-400-801-A/400](#)).
- (5) On the circuit breaker panel, make sure that the LG CMD and DOOR CMD circuit breakers are open. Refer to Figure 501, sheet 1.
- (6) On the circuit breaker panel, make sure that the IND 1 and IND 2 circuit breakers are closed. Refer to Figure 501, sheet 1.
- (7) On the circuit breaker panel, make sure that the AIR/GND A, B, C, D circuit breakers are open. Refer to Figure 501, sheet 1.
- (8) Energize the aircraft with an external DC power supply ( [AMM TASK 20-40-01-860-801-A/200](#)).
- (9) Make sure that all the landing gear indications on the EICAS are green (DN). Refer to Figure 501, sheet 1.
- (10) On the RMU, select the ENGINE-PAGE 2 page and make sure that the LG DN LOCKED message comes into view. Refer to Figure 501, sheet 1.
- (11) (For aircraft PRE-MOD [S.B.145-22-0004](#)) Push the nose-landing-gear door indicator, on the glareshield panel, and make sure that the indicator lights come on ( lamp test). Refer to Figure 501, sheet 1.

J. Operational Check of the Nose-Landing-Gear Door-Open Indication ( [Figure 501](#) )

*SUBTASK 710-002-A*

- (1) Do a check of the nose-landing-gear door-open indication.  
NOTE: When necessary or to find a proximity switch failure, do the special proximity switch test ( [AMM TASK 32-63-05-700-801-A/500](#) ).
  - (a) Push the DN LOCK REL button and, at the same time, set the landing gear control lever to the UP position.  
 Result:
    - 1 Make sure that the color of the landing gear indicators, on the EICAS, changes to amber and after a few seconds, the same indicators, on the EICAS, change to red and the message LG LEVER DISAGREE comes into view on the EICAS.
  - (b) Disconnect connectors P0039 and P0040 from the NOSE DOWN LOCK proximity sensors. Refer to Figure 501, sheet 2.

Result:

- 1 Make sure that the nose-landing-gear indicator changes to the in-transit indication (red) and the message LG DN LOCKED goes out of view on the RMU.

- (c) Push the hook of the nose landing gear UP LOCK box to simulate gear up and locked.

Result:

- 1 Make sure that the nose-landing-gear indicator shows in-transit indication (red).

- 2 (For aircraft PRE-MOD [S.B.145-22-0004](#)) Make sure that the NLG UP - DOOR OPN indicator, on the glareshield, comes on.

(For aircraft POST-MOD [S.B.145-22-0004](#)) Make sure that the EICAS display show the "NLG UP/DOOR OPN" message.

- (d) Put a metallic target in front of the left door sensor. Refer to Figure 501, sheet 3.

Result:

- 1 (For aircraft PRE-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows in-transit condition (red) and that the glareshield indicator is on.

(For aircraft POST-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows in-transit condition (red) and that the EICAS display show the "NLG UP/DOOR OPN" message.

- (e) Put a metallic target in front of the right door sensor. Refer to Figure 501, sheet 3.

Result:

- 1 (For aircraft PRE-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows UP (white) and that the glareshield indicator goes off.

(For aircraft POST-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows UP (white) and on the EICAS display, the message "NLG UP/DOOR OPN" go out of view.

- (f) Remove the metallic target from the left door sensor.

Result:

- 1 (For aircraft PRE-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows in-transit (red) condition and that the glareshield indicator comes on.

(For aircraft POST-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows in-transit (red) condition and the EICAS display show the "NLG UP/DOOR OPN" message.

- (g) Put the metallic target again in front of the left door sensor.

Result:

- 1 (For aircraft PRE-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows UP (white) and the glareshield indicator goes off.

(For aircraft POST-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows UP (white) and on the EICAS display, the message "NLG UP/DOOR OPN" go out of view.

- (h) Set the landing gear selector lever to the DOWN position.

Result:

- 1 Make sure that the nose-landing-gear indicator shows UP (red).

- (i) Remove the metallic targets from the door sensors.

Result:

- 1 (For aircraft PRE-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows in-transit (red) condition and the glareshield indicator comes on.

(For aircraft POST-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows in-transit (red) condition and the EICAS display show the "NLG UP/DOOR OPN" message.

- (j) Use the free-fall lever to put the uplock hook at the unlocked position.

Result:

- 1 Make sure that the nose-landing-gear door indicator remains in-transit (red) condition.

- (k) Connect again the connectors disconnected at action (b).

Result:

- 1 Make sure that the nose-landing-gear door indicator shows DN (green) and the message LG DN LOCKED, on the RMU, comes into view.
- 2 On the EICAS display, the messages "LG/LEVER DISAGREE" goes out of view

- (l) Push the DN LOCK REL button and, at the same time, set the landing gear control lever to the UP position.

- (m) Do actions (c), (d), (e), (f) and (g).

- (n) Remove the metallic targets from the door sensors.

- (o) Remove the connectors from the nose-landing-gear door sensors. Refer to Figure 501, sheet 3.

- (p) Put a jumper between pins B and C on the two connectors.

Result:

- 1 (For aircraft PRE-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows UP (white) and the nose-landing-gear door indicator, on the glareshield, goes off.

(For aircraft POST-MOD [S.B.145-22-0004](#)) Make sure that the nose-landing-gear indicator shows UP (white) and on the EICAS display, the message "NLG UP/DOOR OPN" go out of view.

- (q) On the circuit breaker panel, open the IND 1 circuit breaker.

Result:

- 1 (For aircraft PRE-MOD [S.B.145-32-0073](#)) Make sure that the nose-landing-gear indicator shows UP (white) and the nose-landing-gear door indicator, on the glareshield, is off.

(For aircraft POST-MOD [S.B.145-32-0073](#)) Make sure that the three landing gear indicators shows in-transit (red) and the EICAS display show the "NLG UP/DOOR OPN" message.

- (r) On the circuit breaker panel, open the IND 2 circuit breaker and, at the same time, close the LDG GEAR IND 1 and LDG GEAR IND 2 circuit breakers. Then open the IND 2 circuit breaker.

Result:

- 1 (For aircraft PRE-MOD [S.B.145-32-0073](#)) Make sure that the nose-landing-gear indicator shows UP (white) and the nose-landing-gear door indicator, on the glareshield, is off.

(For aircraft POST-MOD [S.B.145-32-0073](#)) Make sure that the nose-landing-gear indicator shows UP (white) and on the EICAS display, the message "NLG UP/DOOR OPN" go out of view.

K. Follow-on

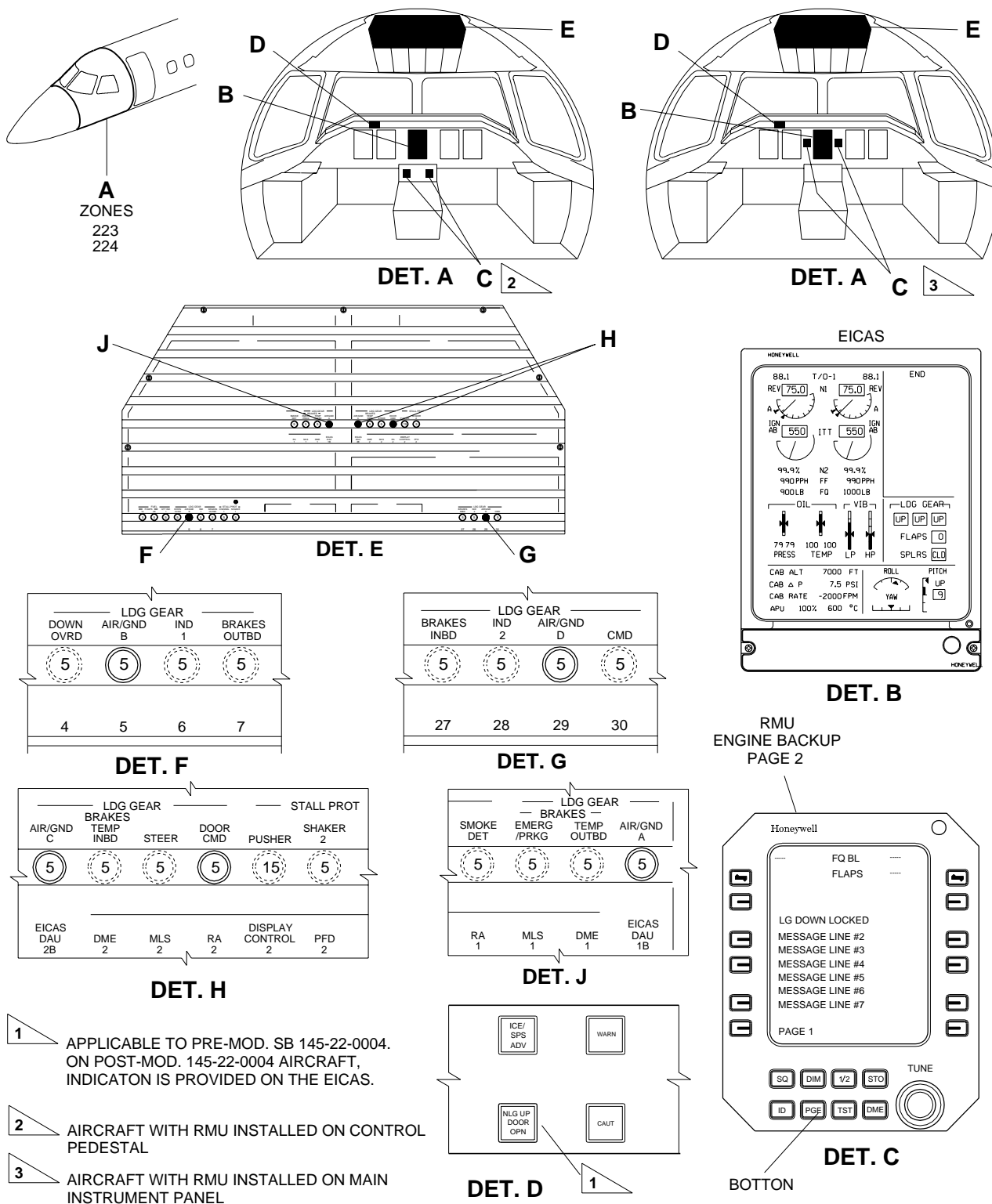
*SUBTASK 842-002-A*

- (1) On the circuit breaker panel, close the IND 2 circuit breaker.
- (2) Remove the jumper from between pins B and C of the two connectors.
- (3) Connect the connectors from the NLG door sensor. Refer to Figure 501, sheet 3.
- (4) Set the landing gear selector lever to the DOWN position.
- (5) Use the free-fall lever to put the uplock hook at the unlocked position.
- (6) On aircraft POST-MOD [S.B.145-32-0036](#), remove the safety pin from the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (7) Deenergize the aircraft.

EFFECTIVITY: JAA CERTIFIED AIRCRAFT

Nose-Landing-Gear Door-Open Indication - Operational Test

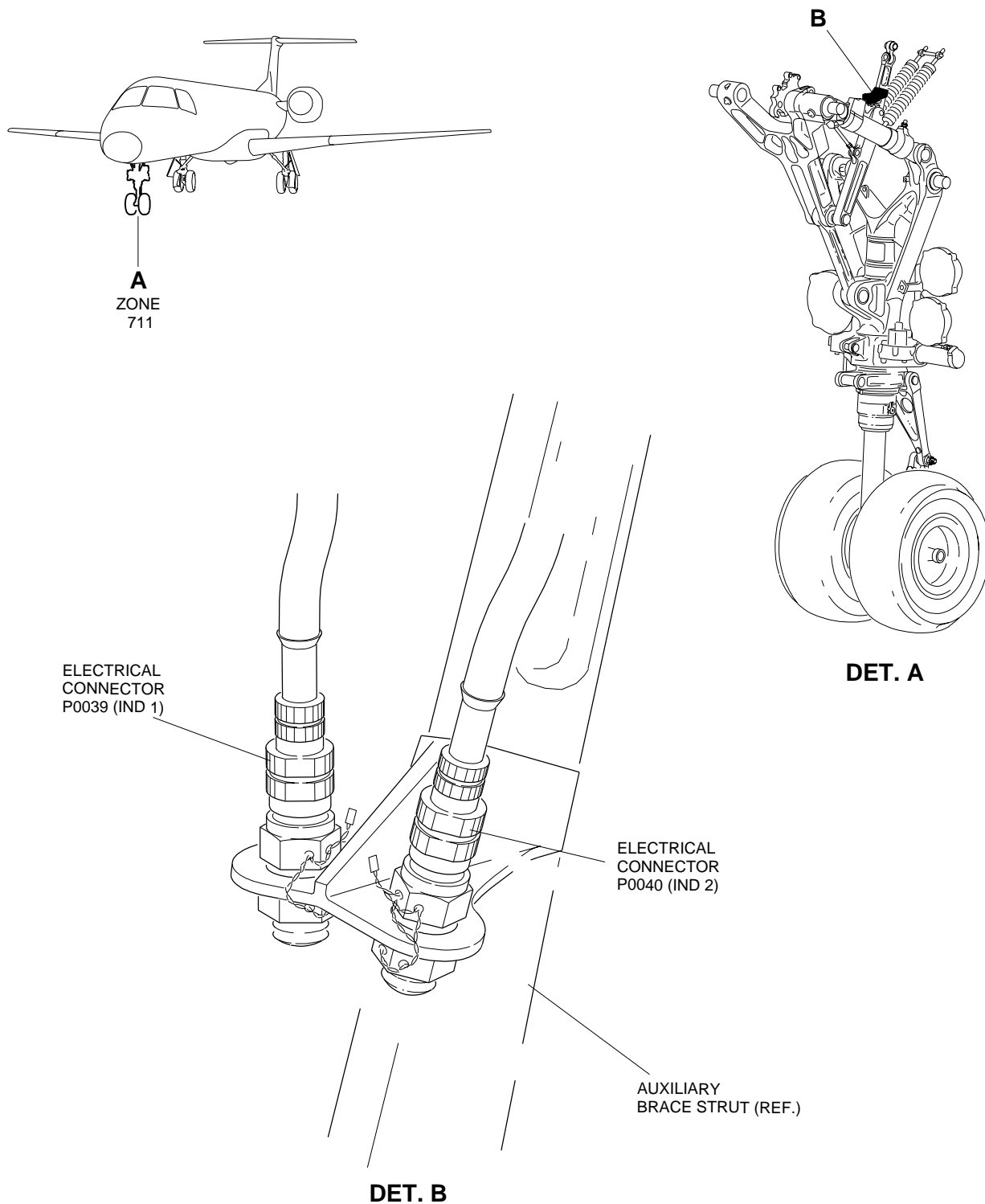
Figure 501 - Sheet 1



EFFECTIVITY: JAA CERTIFIED AIRCRAFT

Nose-Landing-Gear Door-Open Indication - Operational Test

Figure 501 - Sheet 2

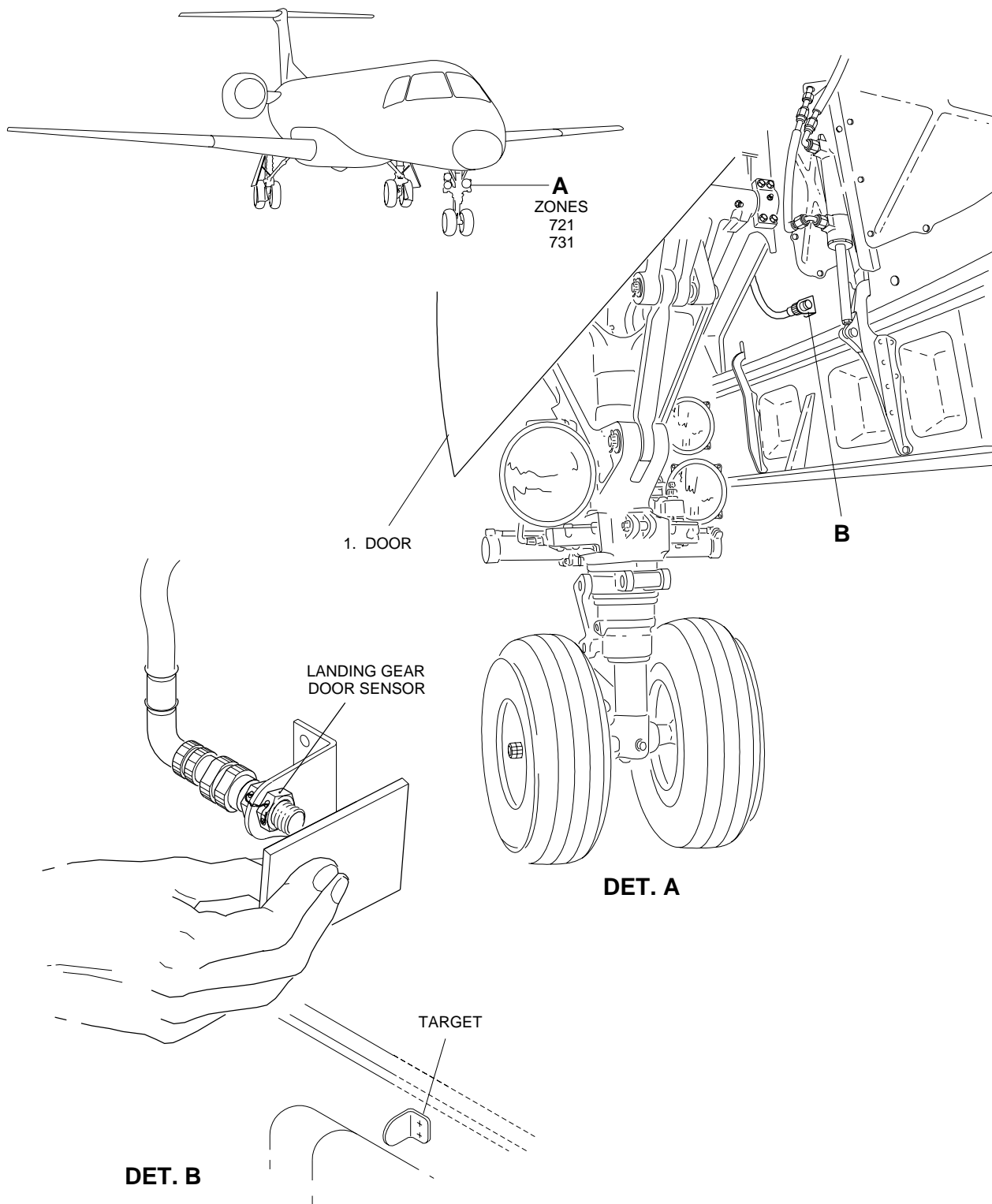


145AMM320315.MCE B

EFFECTIVITY: JAA CERTIFIED AIRCRAFT

Nose-Landing-Gear Door-Open Indication - Operational Test

Figure 501 - Sheet 3



145AMM320321.MCE A

