



AIRCRAFT  
MAINTENANCE MANUAL

**NOSE-LANDING-GEAR DOOR ASSEMBLY - REMOVAL/INSTALLATION**

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the doors of the nose landing gear.
- B. These procedures are applicable to the LH and RH door assemblies.
- C. 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 |
|--------------------|---|-------------|
| 32-20-05-000-801-A | DOOR OF THE NOSE LANDING GEAR -<br>REMOVAL      | ALL         |
| 32-20-05-400-801-A | DOOR OF THE NOSE LANDING GEAR -<br>INSTALLATION | ALL         |



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TASK 32-20-05-000-801-A

EFFECTIVITY: ALL

2. DOOR OF THE NOSE LANDING GEAR - REMOVAL

A. General

(1) This procedure gives the instructions to remove the door assembly of the nose landing gear.

B. References

| REFERENCE                       | DESIGNATION   |
|---------------------------------|---|
| AMM MPP 06-41-01/100            | -   |
| AMM TASK 07-10-00-500-801-A/200 | -   |
| AMM TASK 24-36-01-000-801-A/400 | MAIN BATTERY - REMOVAL  |
| AMM TASK 24-36-02-000-801-A/400 | MAIN BATTERY 1 RELAY BOX - REMOVAL                                    |
| 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 32-33-03-000-801-A/400 | NLG DOOR ACTUATOR - REMOVAL   |
| S.B.145-32-0036                 | -   |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION                          |
|------|------------|-----------------------------------|
| 113  | 113DL      | Battery compartment               |
| 713  | 713LH      | NLG - Compartment LH forward door |
| 714  | 714RH      | NLG - Compartment RH forward door |

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 | At the RH or LH nose landing gear door assembly and at the battery compartment |



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(Continued)

| QTY | FUNCTION                   | PLACE  |
|-----|----------------------------|--|
| 1   | Helps the other technician | At the RH or LH nose landing gear door assembly and at the battery compartment |

### I. Preparation

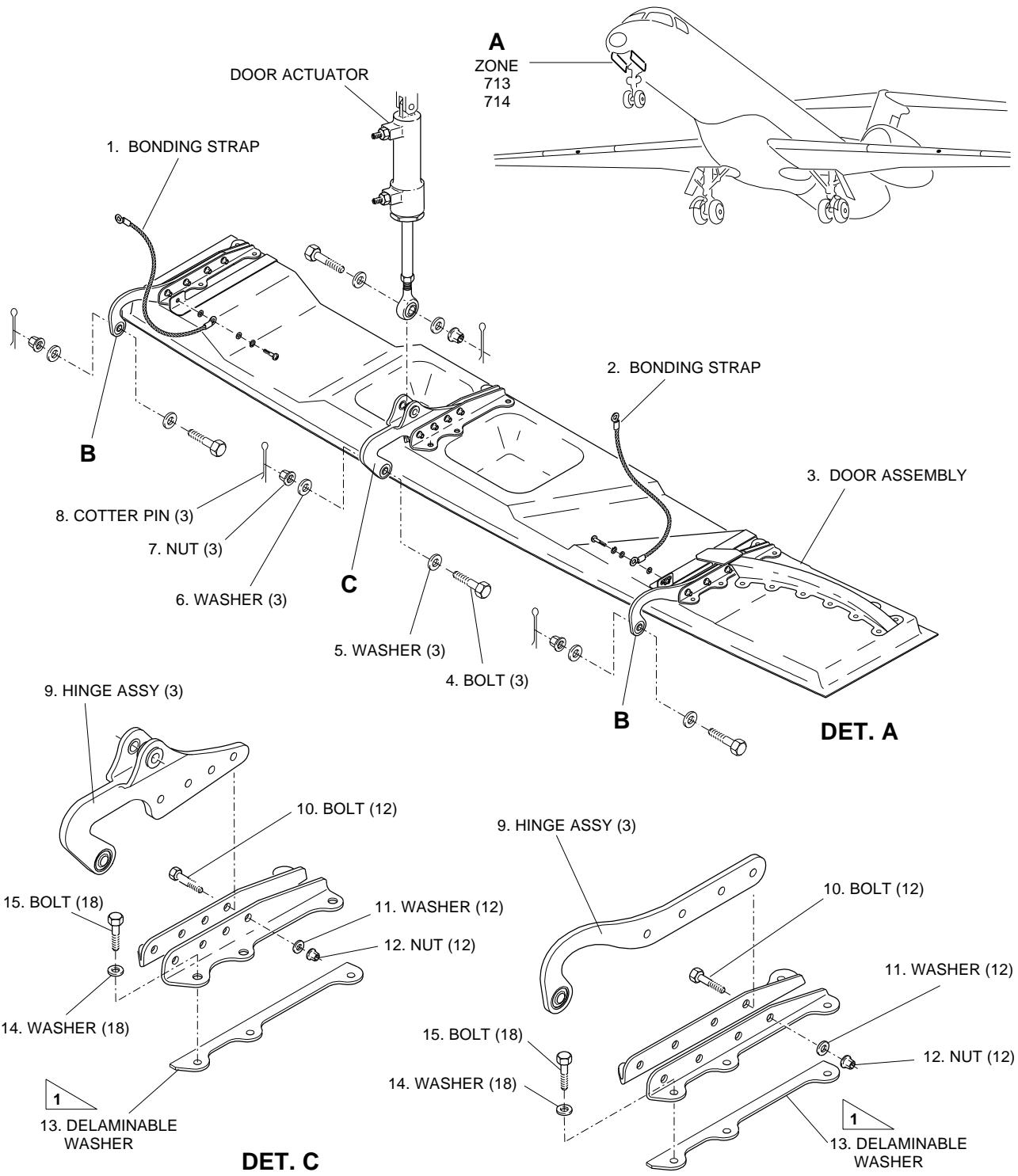
#### SUBTASK 841-002-A

- (1) Lift the aircraft on the jacks (AMM TASK 07-10-00-500-801-A/200).
- (2) For aircraft PRE-MOD. [S.B.145-32-0036](#), make sure that the pressure in hydraulic system No. 1 is fully released ( [AMM TASK 29-10-00-860-802-A/200](#)).
- (3) For aircraft POST-MOD. [S.B.145-32-0036](#), install the safety pin of the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (4) On the circuit breaker panel, open the ELEC PUMP 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (5) On the circuit breaker panel, open the DOOR CMD circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (6) Make sure that the safety pins of the landing gears are installed ( [AMM TASK 32-00-01-910-801-A/200](#)).
- (7) Open access panel 113DL (AMM MPP 06-41-01/100).
- (8) Remove the power connector from the main battery ([AMM TASK 24-36-01-000-801-A/400](#)).
- (9) Remove the battery 1 relay box and its support ( [AMM TASK 24-36-02-000-801-A/400](#)).

### J. Removal (Figure 401)

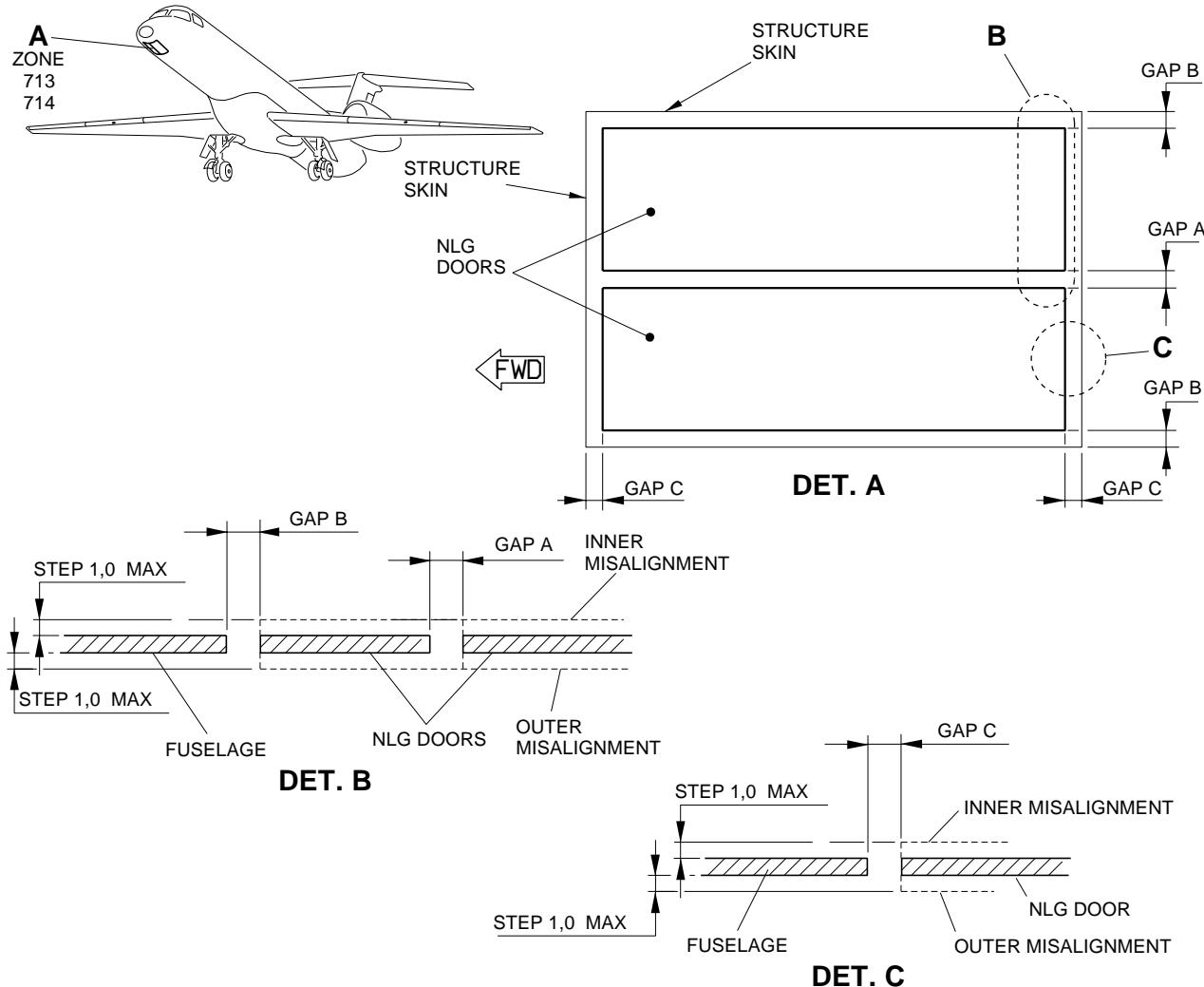
#### SUBTASK 020-002-A

- (1) Disconnect the end of the door actuator from the door assembly ( [AMM TASK 32-33-03-000-801-A/400](#)).
- (2) Disconnect the end of the bonding straps (1) and (2) from the door assembly (3). For this, remove the bolt and washers that attach the bonding straps.
- (3) Remove the cotter pins (8), nuts (7), washers (5) and (6), and bolts (4) (3 positions).
- (4) Remove the door assembly (3).
- (5) Remove the twelve nuts (12), washers (11) and bolts (10).
- (6) Remove the three hinge assemblies (9) from the door assembly (3).
- (7) For aircraft equipped with delaminable washer (13) remove it.

**EFFECTIVITY: ALL**
**Door of the Nose Landing Gear - Removal/Installation**
**Figure 401**


**1** FOR AIRCRAFT EQUIPPED WITH.

**EFFECTIVITY: ALL**

 Clearance Limits - NLG Doors/Structure Skin  
 Figure 402


| DIMENSION   | GAP A                                | GAP B                                 | GAP C                                |
|---|--------------------------------------|---------------------------------------|--------------------------------------|
| S/N 00001; 00002; 00004<br>THRU 00095; 00097; 00098;<br>00801; 00802; AND 00803 | 1.0 to 5.0 mm<br>(0.040 to 0.197 in) | 1.0 to 5.0 mm<br>(0.040 to 0.197 in)  | 1.0 to 5.0 mm<br>(0.040 to 0.197 in) |
| S/N 00003   | 1.0 to 6.0 mm<br>(0.040 to 0.236 in) | 4.0 to 8.0 mm<br>(0.157 to 0.315 in)  | 1.0 to 5.0 mm<br>(0.040 to 0.197 in) |
| 00096, 00099 to 00800<br>and 00804 and on                                       | 1.0 to 6.0 mm<br>(0.040 to 0.236 in) | 6.0 to 10.0 mm<br>(0.236 to 0.394 in) | 1.0 to 5.0 mm<br>(0.040 to 0.197 in) |

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TASK 32-20-05-400-801-A

EFFECTIVITY: ALL

3. DOOR OF THE NOSE LANDING GEAR - INSTALLATION

A. General

(1) This procedure gives the instructions to install the door assembly of the nose landing gear.

B. References

| REFERENCE                       | DESIGNATION   |
|---------------------------------|---|
| AMM MPP 06-41-01/100            | -   |
| AMM TASK 20-13-21-910-801-A/200 | TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES |
| AMM TASK 24-36-01-400-801-A/400 | MAIN BATTERY - INSTALLATION   |
| AMM TASK 24-36-02-400-801-A/400 | MAIN BATTERY 1 RELAY BOX - INSTALLATION                                   |
| AMM TASK 32-00-02-910-801-A/200 | SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL     |
| AMM TASK 32-20-05-700-801-A/500 | NOSE-LANDING-GEAR DOOR-OPEN INDICATION - OPERATIONAL CHECK                |
| AMM TASK 32-30-00-700-801-A/500 | EXTENSION AND RETRACTION SYSTEM - OPERATIONAL CHECK                       |
| AMM TASK 32-33-03-400-801-A/400 | NLG DOOR ACTUATOR - INSTALLATION  |
| IPC 52-81-00                    | MAIN LANDING GEAR WHEELWELL DOOR  |
| IPC 52-82-00                    | NOSE LANDING GEAR WHEELWELL DOOR  |
| S.B.145-32-0036                 | -   |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION                          |
|------|------------|-----------------------------------|
| 113  | 113DL      | Battery compartment               |
| 713  | 713LH      | NLG - Compartment LH forward door |
| 714  | 714RH      | NLG - Compartment RH forward door |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expendable Parts

| ITEM       | IPC REFERENCE<br>(VENDOR REFERENCE) | QTY |
|------------|-------------------------------------|-----|
| Cotter pin | IPC 52-81-00                        | 3   |

**H. Persons Recommended**

| QTY | FUNCTION                   | PLACE  |
|-----|----------------------------|--|
| 1   | Does the task              | At the RH or LH Nose LG door assembly and at the battery compartment |
| 1   | Helps the other technician | At the RH or LH Nose LG door assembly and at the battery compartment |

**I. Installation (Figure 401) (Figure 402)**

**SUBTASK 420-002-A**

**WARNING: REFER TO IPC 52-82-00 TO MAKE SURE THAT THE P/Ns OF THE NOSE LANDING GEAR DOORS ARE CORRECT FOR USE WITH THE AIRCRAFT NOSE WHEEL STEERING DEFLECTION. THE USE OF THE WRONG P/N CAN CAUSE INTERFERENCE BETWEEN THE NOSE LANDING GEAR AND THE DOOR. IF THIS OCCURS, THE NOSE LANDING GEAR EXTENSION BY FREE FALL WILL NOT BE POSSIBLE.**

- (1) Put the three hinge assemblies (9) in their installation position on the supports at the nose fuselage structure.
- (2) Install the three bolts (4), washers (5) and (6), and nuts (7).
- (3) Install the three cotter pins (8).
- (4) Install the three hinge assemblies (9) in their installation position on the door assembly (3).
- (5) For aircraft equipped with delaminable washer (13), install it with the bolts (15) and washer (14).
- (6) Install the twelve bolts (10), washers (11), and nuts (12).
- (7) Do the retraction of the landing gear ([AMM TASK 32-30-00-700-801-A/500](#)).
- (8) On the circuit breaker panel, open the ELEC PUMP 1 and DOOR CMD circuit breaker and attach a DO-NOT-CLOSE tag to them.
- (9) Manually close the door assembly (3) and, if necessary, adjust the gap with the structure skin as follows:
  - (a) The clearance limits for the adjustment are in (Figure 402).
  - (b) Loosen the bolts (15) and pull/push the door as required to adjust the gaps.
 

NOTE: If necessary, do this step in both doors to adjust gaps A and B.
  - (c) If also necessary, loosen the bolts (10) and pull/push the door as required to adjust the gaps and alignment with the fuselage skin surface.
 

NOTE: If necessary, do this step in both doors.
- (10) Connect the ends of the bonding straps (1) and (2) to the door assembly (3) ([AMM TASK 20-13-21-910-801-A/200](#)).



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- (11) Connect the end of the door actuator to the door assembly (3) and examine the doors alignment with the fuselage skin ( [AMM TASK 32-33-03-400-801-A/400](#)).

J. Follow-on

SUBTASK 842-002-A

- (1) Install the battery 1 relay box and its support ( [AMM TASK 24-36-02-400-801-A/400](#)).
- (2) Install the power connector to the main battery ([AMM TASK 24-36-01-400-801-A/400](#)).
- (3) Close access panel 113DL (AMM MPP 06-41-01/100).
- (4) On the circuit breaker panel, close the DOOR CMD circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (5) On the circuit breaker panel, close the ELEC PUMP 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (6) For aircraft POST-MOD. [S.B.145-32-0036](#), remove the safety pin of the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (7) (For aircraft in JAA configuration only)  
Do an operational test of the nose-landing-gear door-open indication ( [AMM TASK 32-20-05-700-801-A/500](#)).