



## AIRCRAFT MAINTENANCE MANUAL

### NOSE LANDING GEAR SPRING CARTRIDGE - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedures to remove and install the spring assemblies of the nose landing gear.
- 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 |
|--------------------|--|-------------|
| 32-20-04-000-801-A | SPRING ASSEMBLIES OF THE NOSE<br>LANDING GEAR - REMOVAL      | ALL         |
| 32-20-04-400-801-A | SPRING ASSEMBLIES OF THE NOSE<br>LANDING GEAR - INSTALLATION | ALL         |



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 32-20-04-000-801-A

EFFECTIVITY: ALL

2. SPRING ASSEMBLIES OF THE NOSE LANDING GEAR - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the spring assemblies of the nose landing gear.

B. References

| REFERENCE                       | DESIGNATION   |
|---------------------------------|---|
| 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 |
| SB145-32-0036                   | -   |

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

| ITEM    | DESCRIPTION           | PURPOSE              | QTY |
|---------|-----------------------|----------------------|-----|
| GSE 097 | Tool, Spring Mounting | To Remove the Spring |     |

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 | Nose landing gear |

I. Preparation

SUBTASK 841-002-A

- (1) For aircraft PRE-MOD SB145-32-0036, make sure that the pressure in hydraulic system No. 1 is fully released ([AMM TASK 29-10-00-860-802-A/200](#)).
- (2) For 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](#)).



## AIRCRAFT MAINTENANCE MANUAL

- (3) On the circuit breaker panel, open the ELEC PUMP 1 circuit breaker, and attach a DO-NOT-CLOSE tag to it.
- (4) Make sure that the safety pins of the landing gears are installed ([AMM TASK 32-00-01-910-801-A/200](#)).
- (5) Make sure that the pressure in hydraulic system 1 is fully released.
- (6) Install spring mounting tool GSE 097 to the springs.

### J. Removal ([Figure 401](#))

#### SUBTASK 020-002-A

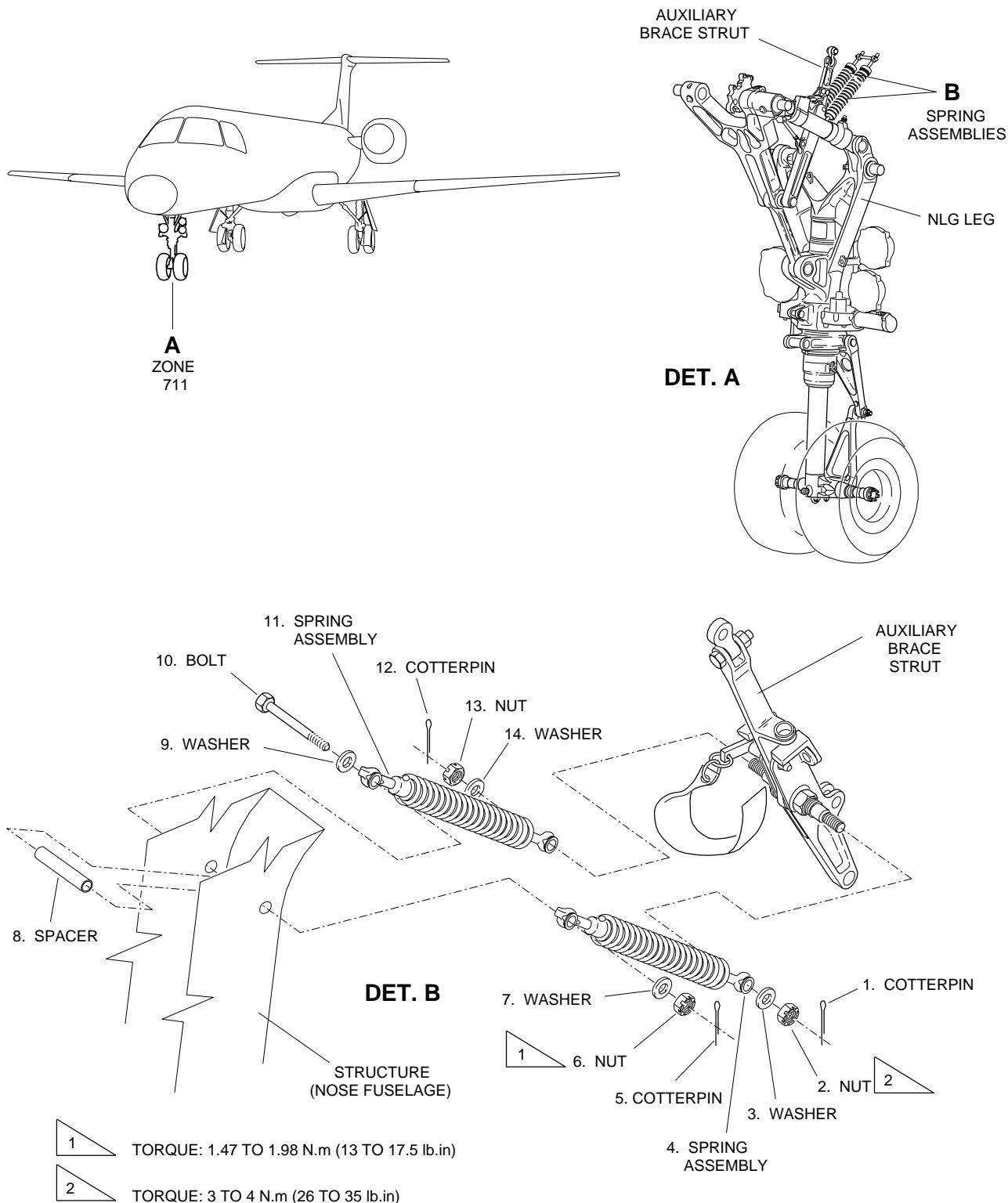
**WARNING: MAKE SURE THAT SPRING MOUNTING TOOL GSE 097 IS CORRECTLY ATTACHED TO THE SPRINGS BEFORE YOU REMOVE THEIR ATTACHING ELEMENTS.**

- (1) Remove the cotter pins (1) and (12), nuts (2) and (13), and washers (3) and (14).
- (2) Remove the cotter pin (5), nut (6), washers (7) and (9), bolt (10), and spacer (8).
- (3) Remove the spring assemblies (4) and (11).

**EFFECTIVITY: ALL**

Spring Assemblies of the Nose Landing Gear - Removal/Installation

Figure 401



145AMM320127.MCE B



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 32-20-04-400-801-A

EFFECTIVITY: ALL

3. SPRING ASSEMBLIES OF THE NOSE LANDING GEAR - INSTALLATION

## A. General

- (1) This procedure gives the instructions to install the spring assemblies of the nose landing gear.

## B. References

| REFERENCE                       | DESIGNATION   |
|---------------------------------|---|
| AMM TASK 32-00-02-910-801-A/200 | SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL |
| MS24665-153                     | -   |
| SB145-32-0036                   | -   |

## C. Zones and Accesses

Not Applicable

## D. Tools and Equipment

| ITEM    | DESCRIPTION                   | PURPOSE               | QTY |
|---------|-------------------------------|-----------------------|-----|
| GSE 097 | Tool, Spring Mounting NLG/MLG | To Install the Spring |     |

## E. Auxiliary Items

Not Applicable

## F. Consumable Materials

Not Applicable

## G. Expendable Parts

| ITEM       | IPC REFERENCE<br>(VENDOR REFERENCE) | QTY |
|------------|-------------------------------------|-----|
| Cotter pin | MS24665-153                         | 3   |

## H. Persons Recommended

| QTY | FUNCTION      | PLACE             |
|-----|---------------|-------------------|
| 1   | Does the task | Nose landing gear |

## I. Installation (Figure 401)

## SUBTASK 420-002-A

- (1) Install spring mounting tool GSE 097 to the spring assemblies (4) and (11).
- (2) Put the spring assemblies (4) and (11) in their installation position between the auxiliary brace strut and the support at the aircraft structure.



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

- (3) Install the washers (3) and (14) and nuts (2) and (13). Torque to 3 to 4 N.m (26 to 35 lb.in).
- (4) Install the spacer (8), bolt (10), washers (7) and (9), and nut (6). Torque to 1.47 to 1.98 N.m (13 to 17.5 lb.in).
- (5) Install the cotter pins (1), (5), and (12).

J. Follow-on

SUBTASK 842-002-A

- (1) Remove spring mounting tool GSE 097.
- (2) On the circuit breaker panel, close the ELEC PUMP 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (3) For aircraft POST-MOD SB145-32-0036, remove the safety pin of the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).