



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

MAIN 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 main landing gear.
- B. These procedures are applicable to the LH and RH Main Landing Gears.
- 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
32-10-05-000-801-A	SPRING ASSEMBLIES OF THE MAIN LANDING GEAR - REMOVAL	ALL
32-10-05-400-801-A	SPRING ASSEMBLIES OF THE MAIN LANDING GEAR - INSTALLATION	ALL



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TASK 32-10-05-000-801-A

EFFECTIVITY: ALL

2. SPRING ASSEMBLIES OF THE MAIN LANDING GEAR - REMOVAL

A. General

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

B. References

REFERENCE	DESIGNATION
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-33-08-000-801-A/400	MAIN LANDING GEAR ACTUATOR - REMOVAL

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

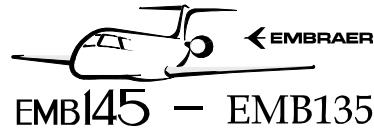
H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	RH or LH MLG leg

I. Preparation

SUBTASK 841-002-A

- (1) On the Circuit Breaker Panel, open the ELEC PUMP 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (2) Make sure that the safety pins of the landing gears are installed ([AMM TASK 32-00-01-910-801-A/200](#)).
- (3) Make sure that the pressure in hydraulic system 1 is fully released.
- (4) Release the pressure of the PAX Door/MLG accumulator ([AMM TASK 32-33-08-000-801-A/400](#) - item I - preparation).
- (5) Install spring mounting tool GSE 097 to the springs. Refer to [Figure 402](#).



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

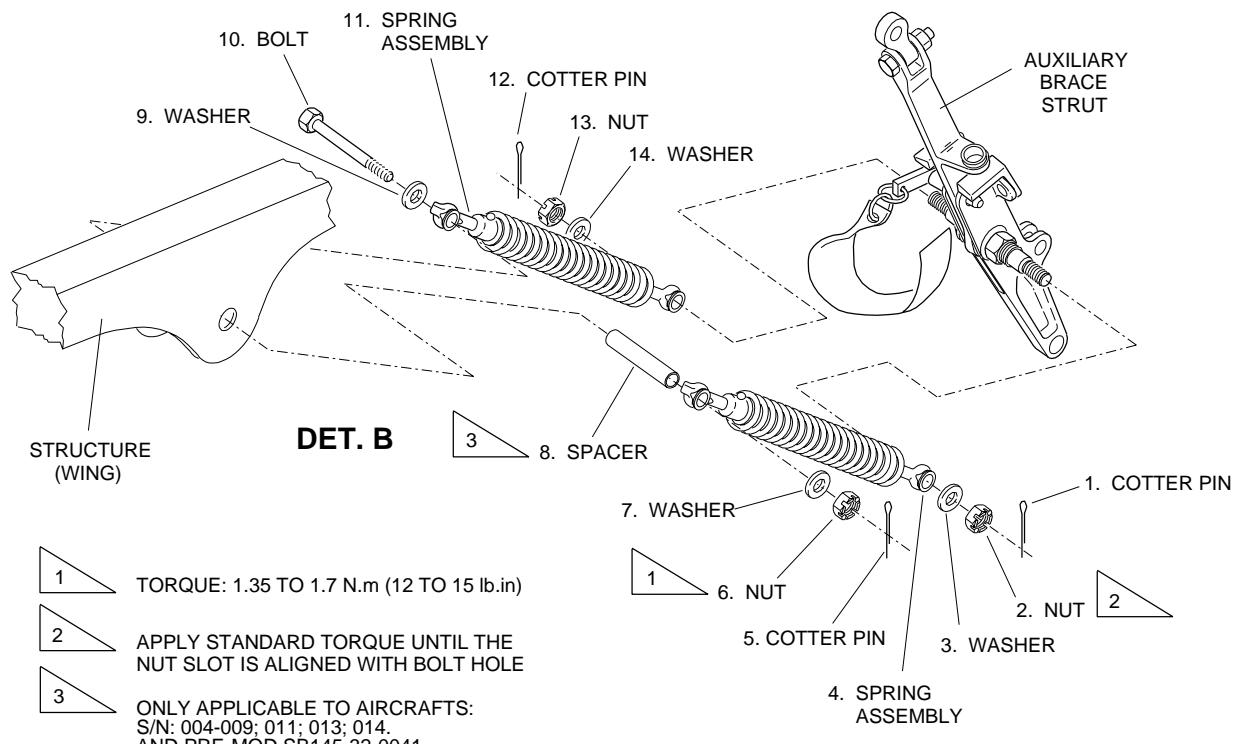
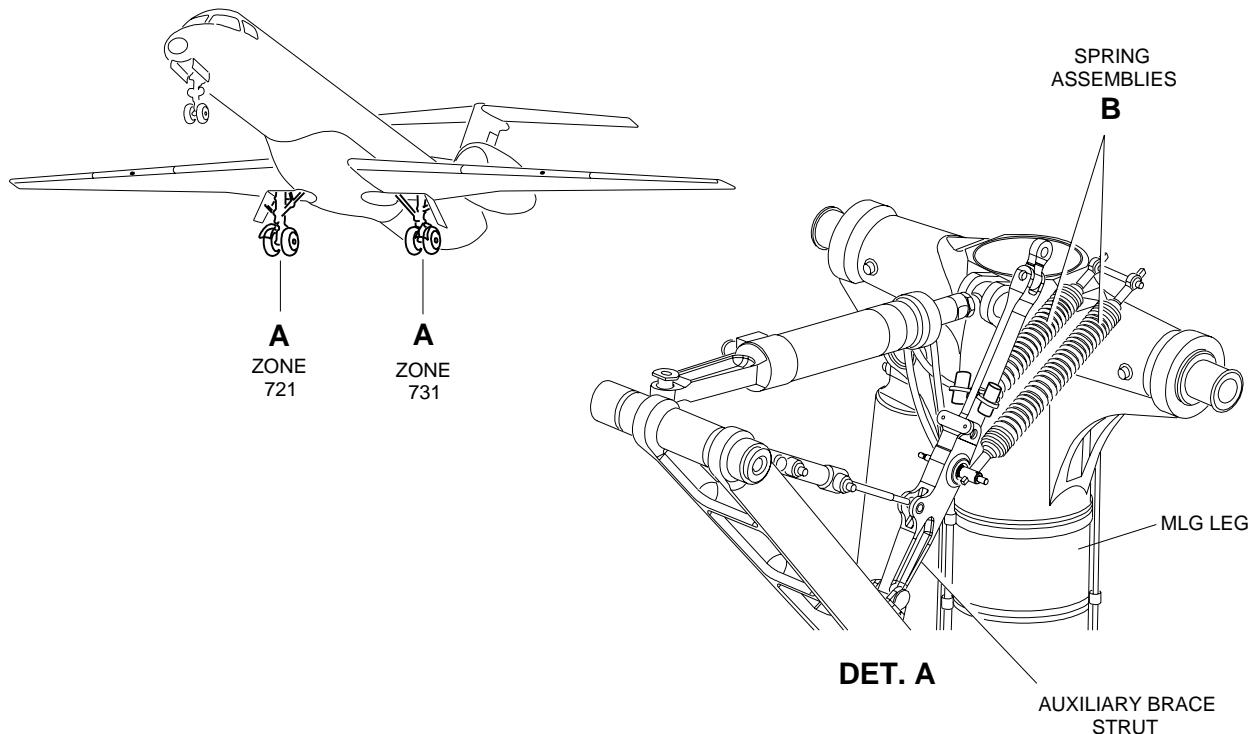
SUBTASK 020-002-A

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).

NOTE: The safety pin of the landing gear MUST NOT be removal when you do this step.

- (2) Remove the cotter pin (5), nut (6), washers (7) and (9) if applicable (see flag - 4), bolt (10), and spacer (8) if applicable (see flag - 3).
- (3) Remove the spring assemblies (4) and (11), once at a time, together with the GSE 097.

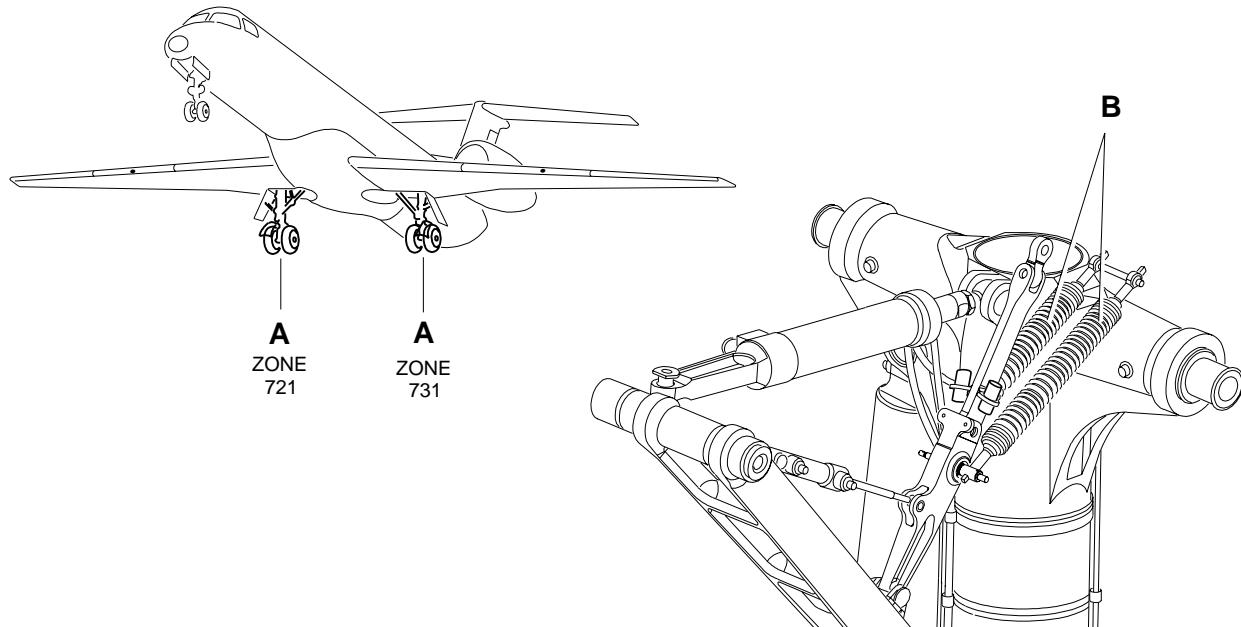
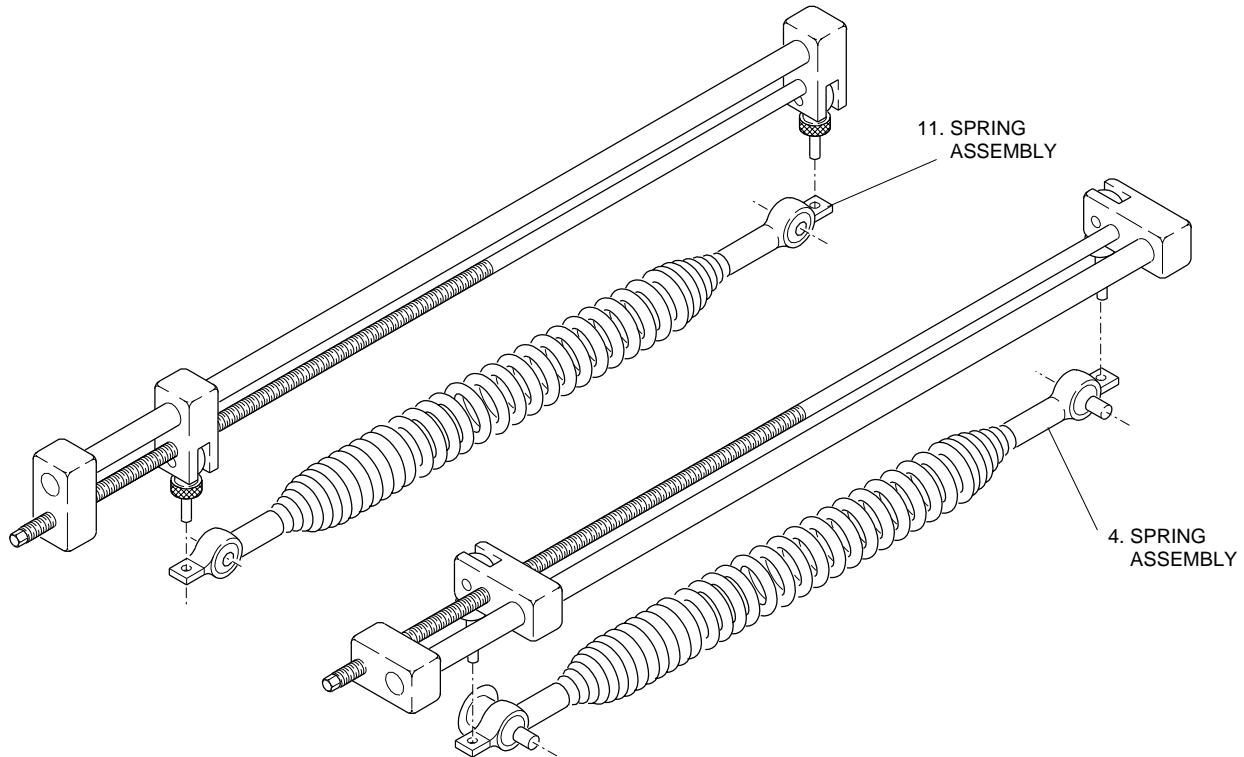
EFFECTIVITY: ALL
Spring Assemblies of the Main Landing Gear - Removal/Installation
Figure 401


145AMM320126.MCE B

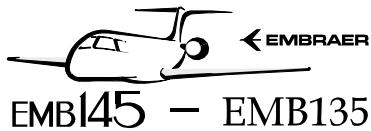
EFFECTIVITY: ALL

Spring Assemblies - GSE Installation

Figure 402


DET. A

DET. B

145AMM320241.MCE A



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TASK 32-10-05-400-801-A

EFFECTIVITY: ALL

3. SPRING ASSEMBLIES OF THE MAIN LANDING GEAR - INSTALLATION

A. General

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

B. References

REFERENCE	DESIGNATION
AMM TASK 12-13-06-600-801-A/300	LANDING GEAR AND MAIN DOOR ACCUMULATOR - CHARGE
MS24665-153	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 097	Tool, Spring Mounting	To Install the Spring	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Cotter pin	MS24665-153	3

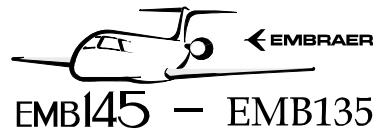
H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	RH or LH MLG leg

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Install spring mounting tool GSE 097 to the spring assemblies (4) and (11). Refer to Figure 402.
- (2) Put the spring assemblies (4) and (11) in their installation position between the auxiliary brace strut and the support at the aircraft structure.
- (3) Install the washers (3) and (14), nuts (2) and (13) and tighten.



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- (4) Install the spacer (8) if applicable (see flag - 3), bolt (10), washers (7) and (9) if applicable (see flag - 4), and nut (6). Torque to 1.35 to 1.7 N.m (12 to 15 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) Pressurize the PAX Door/MLG accumulator ([AMM TASK 12-13-06-600-801-A/300](#)).
- (3) On the Circuit Breaker Panel, close the ELEC PUMP 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.

