



AIRCRAFT MAINTENANCE MANUAL

NOSE LANDING GEAR ACTUATOR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the nose landing gear (NLG) actuator.
- 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
32-33-05-000-801-A	NOSE LANDING GEAR ACTUATOR - RE- MOVAL	ALL
32-33-05-400-801-A	NOSE LANDING GEAR ACTUATOR - IN- STALLATION	ALL



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 32-33-05-000-801-A

EFFECTIVITY: ALL

2. NOSE LANDING GEAR ACTUATOR - REMOVAL

A. General

- (1) This task gives the procedures to remove the NLG actuator.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
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 32-33-12-000-801-A/400	RESTRICTOR VALVE - REMOVAL
SB145-32-0036	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	Protection for the hands	1
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	Protection for the eyes	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	NLG wheelwell

I. Preparation

SUBTASK 841-002-A

- (1) Make sure that the safety pins of the landing gears are installed ([AMM TASK 32-00-01-910-801-A/200](#)).

- (2) On the circuit breaker panel, open the ELEC PUMP 1 and CMD circuit breakers and attach a DO-NOT-CLOSE tags to them.
- (3) 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](#)).
- (4) Make sure that pressure in hydraulic system No. 1 is fully released ([AMM TASK 29-10-00-860-802-A/200](#)).
- (5) Control the ailerons up and down, or the rudder to the left and to the right, until the pressure of the hydraulic system shows zero PSI on the EICAS.
- (6) Open access door 114CR of the nose hydraulic compartment (AMM MPP 06-41-01/100).
- (7) Release the pressure from the pax door/landing gear accumulator, installed in the nose hydraulic compartment. For this, open the discharge valve and monitor the pressure gage until it shows the nitrogen precharge.

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

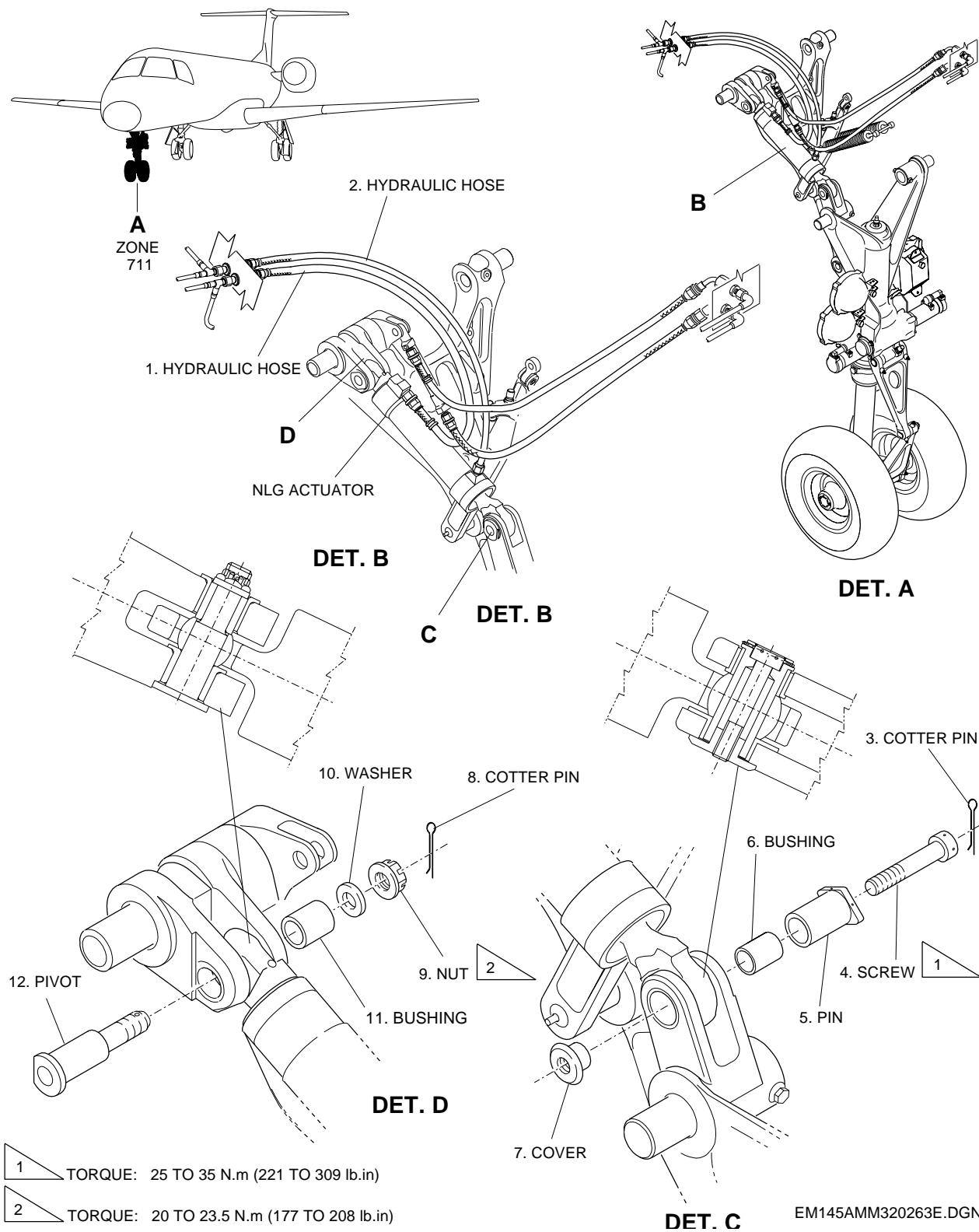
SUBTASK 020-002-A

- (1) Disconnect the hydraulic hoses (1) and (2) from the NLG actuator.
NOTE: Use a drip pan to collect the remaining hydraulic fluid.
- (2) To disassemble the lower joint of the NLG actuator (detail C):
 - (a) Remove the cotter pin (3).
 - (b) Remove the screw (4).
 - (c) Remove the cover (7).
 - (d) Remove the pin (5).
 - (e) Remove the bushing (6).
- (3) To disassemble the upper joint of the NLG actuator (detail D):
 - (a) Remove the cotter pin (8).
 - (b) Remove the nut (9).
 - (c) Remove the washer (10).
 - (d) Remove the pivot (12).
 - (e) Remove the bushing (11).
- (4) Remove the NLG actuator.
- (5) Remove the restrictor valve ([AMM TASK 32-33-12-000-801-A/400](#)).

EFFECTIVITY: ALL

Nose Landing Gear Actuator - Removal/Installation

Figure 401





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TASK 32-33-05-400-801-A

EFFECTIVITY: ALL

3. NOSE LANDING GEAR ACTUATOR - INSTALLATION

A. General

- (1) This task gives the procedures to install the nose landing gear actuator.

B. References

REFERENCE	DESIGNATION
AMM TASK 29-10-00-860-803-A/200	HYDRAULIC SYSTEM - BLEED OF AIR
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 32-30-00-700-801-A/500	EXTENSION AND RETRACTION SYSTEM - OPERA- TIONAL CHECK
AMM TASK 32-33-12-400-801-A/400	RESTRICTOR VALVE - INSTALLATION
AMM TASK 32-34-00-600-801-A/300	MLG AND NLG - LUBRICATION
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	NLG wheelwell

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Install the restrictor valve (AMM TASK 32-33-12-400-801-A/400).
- (2) Install the NLG actuator.
- (3) To assemble the upper joint of the NLG actuator (detail D):
 - (a) Install the bushing (11)
 - (b) Install the pivot (12).

- (c) Install the washer (10).
 - (d) Install the nut (9) and apply a torque of 20 to 23.5 N.m (177 to 208 lb.in).
 - (e) Install the cotter pin (8).
- (4) To assemble the lower joint of the NLG actuator (detail C):
- (a) Install the bushing (6).
 - (b) Install the pivot (5).
 - (c) Install the cover (7).
 - (d) Install the screw (4) and apply a torque of 25 to 35 N.m (221 to 309 lb.in).
 - (e) Install the cotter pin (3).
- (5) Connect the hydraulic hoses (2) and (1) to the NLG actuator.

J. Follow-on

SUBTASK 842-002-A

- (1) Lubricate the actuator at the points shown ([AMM TASK 32-34-00-600-801-A/300](#)).
- (2) On the circuit breaker panel, close the ELEC PUMP and CMD circuit breakers below and remove the DO-NOT-CLOSE tags from them.
- (3) Bleed the air from the hydraulic system lines ([AMM TASK 29-10-00-860-803-A/200](#)).
- (4) 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](#)).
- (5) Do an operational test of the NLG ([AMM TASK 32-30-00-700-801-A/500](#)).