



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

NOSE-LANDING-GEAR TORQUE LINK ASSEMBLIES - INSPECTION/CHECK

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to do an inspection on the Nose-Landing-Gear torque link.
- 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).

<i>TASK NUMBER</i>	<i>DESCRIPTION</i>	<i>EFFECTIVITY</i>
32-20-10-200-801-A	NOSE-LANDING-GEAR TORQUE LINK - INSPECTION	ALL



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TASK 32-20-10-200-801-A

EFFECTIVITY: ALL

2. NOSE-LANDING-GEAR TORQUE LINK - INSPECTION

A. General

- (1) This task gives the procedure to do an inspection on the NLG Torque Link.

B. References

REFERENCE	DESIGNATION
AMM MPP 32-20-10/400	- REMOVAL/INSTALLATION
AMM TASK 20-00-00-910-801-A/200	AIRCRAFT SAFE PROCEDURES FOR MAINTENANCE SERVICES - MAINTENANCE PRACTICES
SRM 51-20-01	-

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

I. Preparation

SUBTASK 841-002-A

WARNING: MAKE SURE THAT THE AIRCRAFT IS IN A SAFE CONDITION BEFORE YOU DO THE MAINTENANCE PROCEDURES. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT.

- (1) Do the procedure to make the aircraft safe for maintenance (TASK 20-00-00-910-801-A).
- (2) On the Circuit Breaker Panel, open the ELEC PUMP 1, CMD, IND 1, and IND 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.



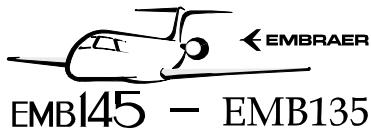
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J. Nose-Landing-Gear Torque Link - Inspection ([Figure 601](#))

SUBTASK 212-002-A

- (1) At zone 711, examine the NLG torque links, as follows:
 - (a) With your hands, push the upper-torque link (2) and the lower-torque link (10) to the left side.
 - (b) Use a feeler gauge to measure the dimension (A) on the joint between the upper-torque link (2) and the steering motor (16). Refer to [Figure 601](#), sheet 2, DET. D.
NOTE: Dimension (A) is the distance (clearance) between the washer (14) and upper-torque link bushing.
 - (c) Make sure that the dimension (A) is 0.250 mm (0.0098 in) (maximum).
 - (d) With your hands, push the upper-torque link (2) and the lower-torque link (10) to the right side.
 - (e) Use a feeler gauge to measure the dimension (B) on the joint between the lower-torque link (10) and sliding tube assembly (13). Refer to [Figure 601](#), sheet 2, DET. F.
NOTE: Dimension (B) is the distance (clearance) between the washer (12) and lower-torque link bushing.
 - (f) Make sure that the dimension (B) is 0.250 mm (0.0098 in) (maximum).
 - (g) If the dimensions (A) and (B) are within the specified limits, go to step J.(2). If not, replace the washers (9), (12) and (14).
NOTE: When you replace the washers (9), (12) and (14), refer to [AMM MPP 32-20-10/400](#).
- (2) Do the procedure to measure the dimension (C), as follows:
 - (a) Keep the lower-torque link (10) to the right side.
 - (b) Manually, push the upper-torque link (2) to the left side.
 - (c) Use a feeler gauge to measure the dimension (C) on the joint between the upper-torque link (2) and lower-torque link (10). Refer to [Figure 601](#), sheet 2, DET. G.
NOTE: Dimension (C) is the distance (clearance) between the washer (9) and upper-torque link bushing.
 - (d) Make sure that the dimension (C) is 0.250 mm (0.0098 in) (maximum).
 - (e) If the dimension (C) is in the specified limit, go to step K. If not, go to step J.(3).
- (3) At zone 711, adjust the NLG torque links, as follows:
 - (a) Remove the cotter pin (3), nut (4), washer (5) and bolt (7).
 - (b) Tighten the nut (6) in a clockwise direction until a hole aligns with the next slot of the nut.



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- (c) Use a feeler gauge to measure the dimension (C) on the joint between the upper-torque link (2) and lower-torque link (10). Refer to [Figure 601](#), sheet 2, DET. G.
- NOTE: Dimension (C) is the distance (clearance) between the washer (9) and upper-torque link bushing.
- (d) Make sure that the dimension (C) is from 0.01 to 0.250 mm (0.0004 to 0.0098 in) (maximum).
- (e) If necessary, continue to tighten the nut (6) in a clockwise direction to the next slot of the nut, until you reach the limit.
- (f) Tighten the nut (6) with your hand and make sure that the bolt (15) can turn.
- (g) Apply a thin layer of corrosion inhibiting compound COR-BAN 27L to the thread of the bolt (7).
- (h) Install the bolt (7) through the nut (6).
- (i) Put the washer (5) on the bolt (7) and install the nut (4).
- (j) Apply a torque of 3 to 4 N.m (26.5 to 35.4 lb.in) to the nut (4).
- (k) Safety the nut (4) with a new cotter pin (3).
- (4) Apply sealant PR1826B2ALO, as follows (SRM 51-20-01):
- On the bolt (7).
 - On the washer (5).
 - On the nuts (4) and (6).
 - On the cotter pin (3).
- CAUTION:
- IT IS NOT PERMITTED TO MIX GREASES OF DIFFERENT SPECIFICATIONS OR MANUFACTURERS. DO NOT MIX GREASES THAT HAVE DIFFERENT DESIGNATIONS. CLEAN ALL APPLICABLE PARTS BEFORE YOU USE A DIFFERENT GREASE.
 - AEROSHELL GREASE 22 MUST NOT BE MIXED WITH AEROSHELL GREASE 33. IF YOU DO NOT OBEY THIS PRECAUTION, THE QUALITY OF THE LUBRICATION WILL DECREASE AND DAMAGE TO THE COMPONENTS CAN OCCUR.
 - BE CAREFUL WHEN YOU CONNECT THE HAND-PUMP GREASE GUN TO THE LUBRICATION FITTINGS. ALSO BE CAREFUL WHEN YOU DISCONNECT THE HAND-PUMP GREASE GUN FROM THE LUBRICATION FITTINGS. IF YOU ARE NOT CAREFUL, THE HAND-PUMP GREASE GUN CAN CAUSE DAMAGE TO THE LUBRICATION FITTINGS.
- (5) Use a grease gun to apply grease AEROSHELL 33 or AEROSHELL GREASE 22 to the grease nipples (1) AND (11) of the torque links.



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K. Follow on

SUBTASK 842-002-A

- (1) Put the aircraft back to its initial condition:
 - (a) On the circuit breaker panel, close the ELEC PUMP 1, CMD, IND 1, and IND 2 circuit breaker and remove the DO-NOT-CLOSE tag from them.
 - (b) Do the procedure to restore the aircraft after the maintenance ([AMM TASK 20-00-00-910-801-A/200](#)).

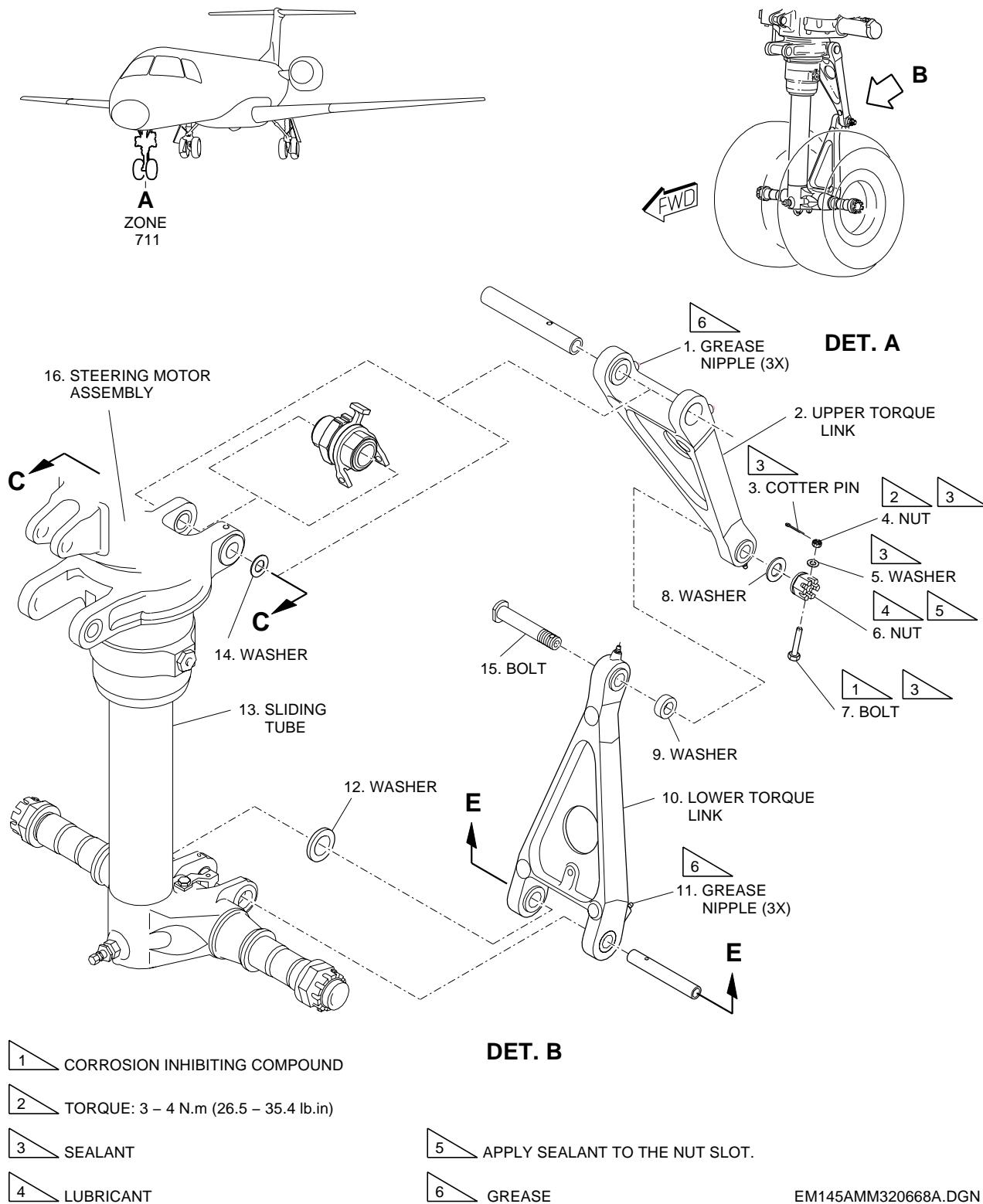
CAUTION: EXAMINE ALL THE WORK AREAS TO MAKE SURE THAT YOU REMOVED ALL TOOLS AND EQUIPMENT AFTER YOU COMPLETED THE WORK. IF YOU DO NOT OBEY THIS PROCEDURE, DAMAGE TO THE AIRCRAFT CAN OCCUR.

- (c) Remove all tools, equipment, and unwanted materials from the work area.

EFFECTIVITY: ALL

Nose-Landing-Gear Torque Links - Inspection

Figure 601 - Sheet 1



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EFFECTIVITY: ALL

Nose-Landing-Gear Torque Links - Inspection

Figure 601 - Sheet 2

