



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

NOSE-LANDING-GEAR SLIDING TUBE - REPAIR

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to repair the surfaces of the NLG wheel axle.
- 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
32-20-08-300-801-A	NLG WHEEL AXLE - REPAIR	ALL



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TASK 32-20-08-300-801-A

EFFECTIVITY: ALL

2. NLG WHEEL AXLE - REPAIR

A. General

- (1) This task gives the procedures to repair the chromium plating surfaces of the NLG wheel axle.
- (2) This procedure must only be done after an inspection according to [AMM TASK 32-20-08-200-801-A/600](#).

B. References

REFERENCE	DESIGNATION
AMM TASK 32-20-01-000-801-A/400	NOSE LANDING-GEAR LEG - REMOVAL
AMM TASK 32-20-01-400-801-A/400	NOSE LANDING-GEAR LEG - INSTALLATION
AMM TASK 32-20-08-000-801-A/400	SLIDING TUBE OF THE NOSE LANDING GEAR - REMOVAL
AMM TASK 32-20-08-200-801-A/600	NLG WHEEL AXLE - INSPECTION
AMM TASK 32-20-08-400-801-A/400	SLIDING TUBE OF THE NOSE LANDING GEAR - INSTALLATION
AMM TASK 32-49-05-000-801-A/400	WHEEL ASSEMBLY OF THE NOSE LANDING GEAR - REMOVAL
AMM TASK 32-49-05-400-801-A/400	WHEEL ASSEMBLY OF THE NOSE LANDING GEAR - INSTALLATION

C. Zones and Accesses

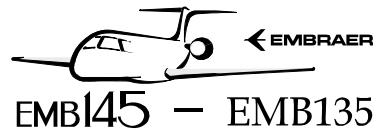
ZONE	PANEL/DOOR	LOCATION
711		NLG

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Safety Goggles	Eye Protection	1
Commercially available	Paper Respirator	Respiratory Tract Protection	1
Commercially available	Rubber Gloves	Skin Protection	1
Commercially available	Wiper Cloth, Lint-Free	Cleaning	1



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F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MEP 13-073	RHODIASOLVE E-23	AR
-	500 or 600-Grit Sandpaper	AR
MIL-P-233776	EPOXY primer	AR
MIL-C-83286	Polyurethane Enamel Paint	AR

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) Use personal protection equipment while you do the tasks.
- (2) All related persons must know the correct solvent handling procedures.
- (3) Do these tasks in an area with a good flow of air, where solvent vapors cannot collect and with no pieces of equipment which can cause flames or sparks.
- (4) A fire extinguisher with a minimum of 25 kg of carbon dioxide or equivalent must be available.
- (5) On the circuit breaker panel, open the ELEC PUMP 1, CMD, IND 1, and IND 2 circuit breakers and attach DO-NOT-CLOSE tags to them.
- (6) Remove the nose wheels from the axle. Refer to [AMM TASK 32-49-05-000-801-A/400](#).

J. Repair ([Figure 801](#))

SUBTASK 370-002-A

- (1) Remove the sleeves (1) from the wheel axle (2).

WARNING: ALWAYS OBEY THE MANUFACTURER'S HEALTH AND SAFETY PRECAUTIONS WHEN YOU USE SEALANTS OR SOLVENTS. USE SEALANTS OR SOLVENTS ONLY IN AREAS WHERE THERE IS A GOOD AIRFLOW. DO NOT BREATHE THE FUMES OF THESE MATERIALS AND DO NOT GET THEM ON YOUR SKIN, IN YOUR EYES OR MOUTH. PUT ON APPROVED PROTECTIVE CLOTHING AND GOGGLES. SEALANTS AND SOLVENTS ARE DANGEROUS AND, IF YOU DO NOT OBEY THESE PRECAUTIONS, INJURY CAN OCCUR.

- (2) Clean the external surface of the wheel axle (2) with solvent RHODIASOLVE E-23.
- (3) Repair the damage or scratches, in the chrome-plated surface of the wheel axle (2), as follows:

NOTE: The chrome plating of the wheel axle has a nominal thickness of 100 µm (4000 µin) and must have a thickness of 50 µm (2000 µin) or more to give sufficient corrosion protection to the axle.

- (a) Apply a 500 or 600-grit sandpaper and smooth out scratch or score. Keep the repair area as small as possible.

NOTE: Be careful. Do not remove 50 µm (2000 µin) or more of the chromium.

- (b) Measure the depth of the damaged spot in the chrome-plated area of the wheel axle (2) that you have made smooth.

NOTE: Make sure that the thickness of the chromium plating did not decrease more than 50 µm (2000 µin).

- (c) If the thickness of the chromium plating decreased more than 50 µm (2000 µin), replace the sliding tube assembly. For this, refer to [AMM TASK 32-20-08-000-801-A/400](#) for removal and [AMM TASK 32-20-08-400-801-A/400](#) for installation.

NOTE: As an alternative, you can replace the nose landing gear leg. Refer then to [AMM TASK 32-20-01-000-801-A/400](#) for removal and [AMM TASK 32-20-01-400-801-A/400](#) for installation.

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- (d) Clean the external surface of the wheel axle (2) with solvent RHODIASOLVE E-23.
- (e) Apply epoxy primer MIL-P-23377 and then polyurethane Enamel paint MIL-83286 to the repaired area.
- (f) Remove the excess paint.

- (4) Install the sleeves (1) from the wheel axle (2).

K. Follow-on

SUBTASK 842-002-A

- (1) Install the nose wheels to the axle. Refer to [AMM TASK 32-49-05-400-801-A/400](#).
- (2) On the circuit breaker panel, close the ELEC PUMP, CMD, IND 1, and IND 2 circuit breakers and remove the DO-NOT-CLOSE tags from them.

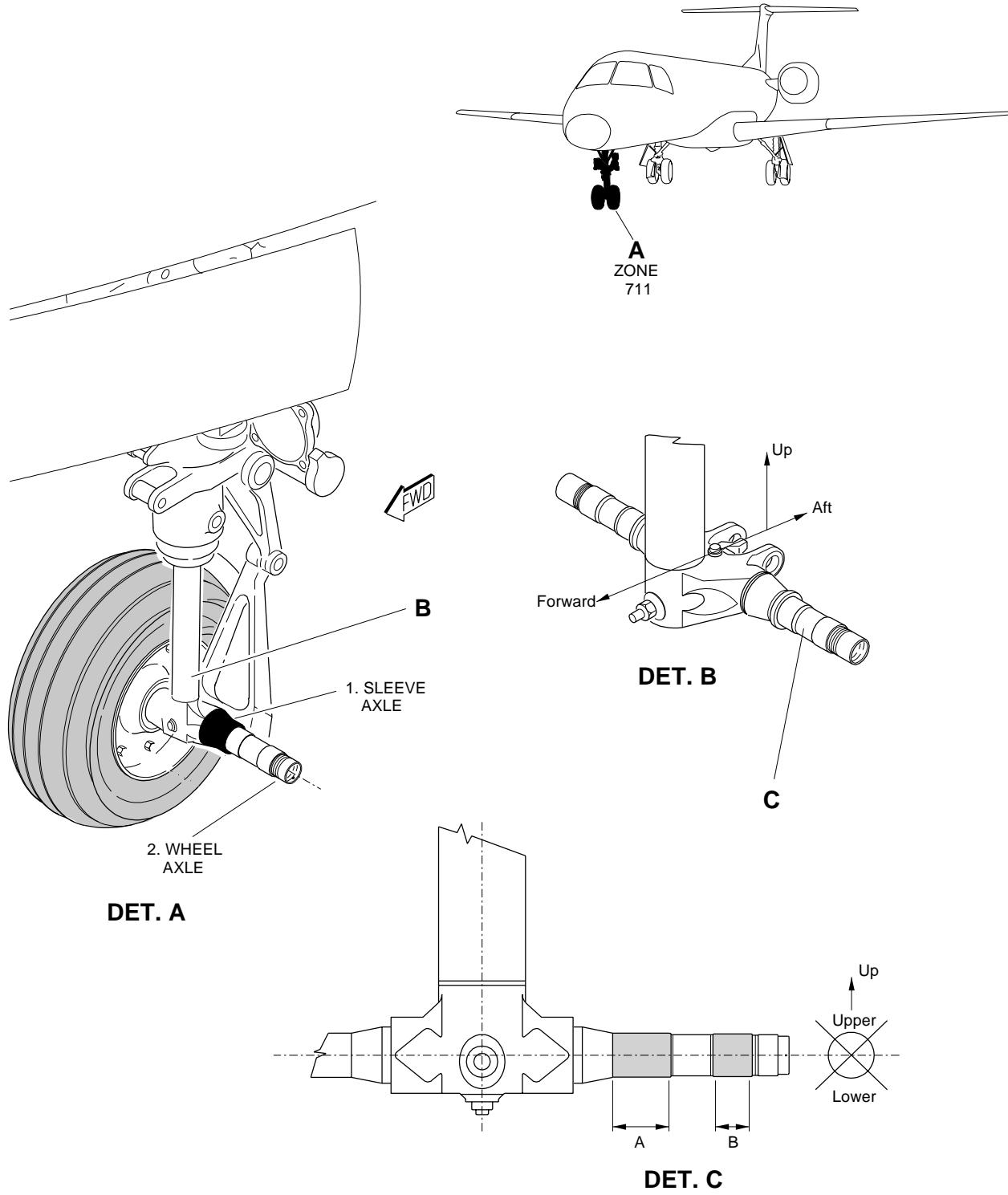


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- (3) Enter a note in the equipment Log Card to ask for an inspection in the area at the next "A check". For inspection, refer to [AMM TASK 32-20-08-200-801-A/600](#).

NOTE: Inform EMBRAER if a discrepancy is found.

EFFECTIVITY: ALL
NLG Wheel Axle - Repair
Figure 801



A AND B = CHROME PLATED AREA

EM145AMM320404.DGN