



AIRCRAFT
MAINTENANCE MANUAL

LANDING GEAR DOWNLOCK PROXIMITY SWITCH - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures for the removal/installation and deactivation/reactivation of the downlock proximity switches of the landing gear system.
- B. This procedure is applicable to the six downlock proximity switches.
- C. The downlock proximity switches are installed on the auxiliary brace strut of the main (LH and RH) and nose landing gears. Each landing gear has two downlock proximity switches.
- D. 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
32-61-02-000-801-A	DOWNLOCK PROXIMITY SWITCH - REMOVAL	ALL
32-61-02-400-801-A	DOWNLOCK PROXIMITY SWITCH - INSTALLATION	ALL
32-61-02-040-801-A	DOWNLOCK PROXIMITY SWITCH - DE-ACTIVATION PROCEDURE	ALL
32-61-02-440-801-A	DOWNLOCK PROXIMITY SWITCH - RE-ACTIVATION PROCEDURE	ALL



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TASK 32-61-02-000-801-A

EFFECTIVITY: ALL

2. DOWNLOCK PROXIMITY SWITCH - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the downlock proximity switches of the landing gear system.
- (2) If the electrical connector (1) presents signs of damage, contamination or corrosion, do the maintenance procedures on the electrical connector as follows:

To clean the electrical connector, refer to WM 20-50-00/201.

To replace the electrical connector, use the repair kit. Refer to IPC 32-61-00. Obey the instructions of the applicable Wiring Manual, Chapter WM 20-50-00/201, Standard Practices.

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
AMM TASK 32-60-00-910-801-A/200	LANDING GEAR PROXIMITY SWITCH AND HARNESS ELECTRICAL CONNECTORS - RESTORATION AND PROTECTION
IPC 32-61-00	LDG INDICATION
SB145-32-0036	-
WM 20-50-00/201	-

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	Nose or RH or LH landing gear



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I. Preparation

SUBTASK 841-002-A

- (1) On 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) On aircraft POST-MOD [SB145-32-0036](#), install safety pin of the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (3) On the circuit breaker panel, open the IND 1 and IND 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (4) Make sure that the safety pins of the landing gears are installed ([AMM TASK 32-00-01-910-801-A/200](#)).
- (5) Identify the proximity switch to remove.

J. Removal ([Figure 401](#)) ([Figure 402](#))

SUBTASK 020-002-A

NOTE: This procedure can be applicable to the downlock proximity switch of the main landing gear ([Figure 401](#)) or nose landing gear ([Figure 402](#)).

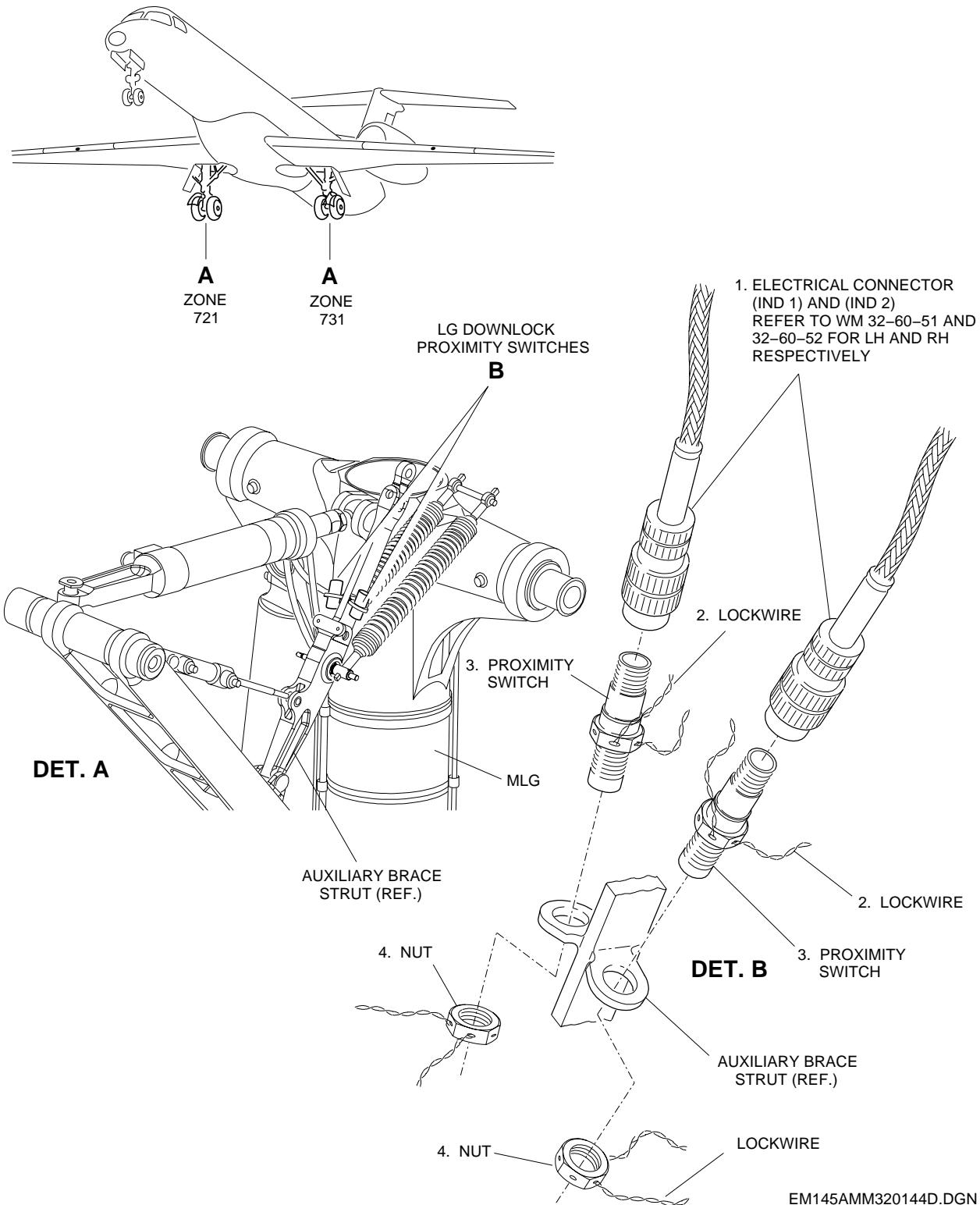
CAUTION: BE CAREFUL WHEN YOU REMOVE THE HEAT-SHRINKABLE BOOT TO PREVENT DAMAGE TO THE ELECTRICAL CABLE AND ITS CONNECTOR.

- (1) For connector that already has heat-shrinkable boot, remove it with a cutting tool.
- (2) Cut the lock wire (2).
- (3) Disconnect the electrical connector (1).
- (4) If the electrical connector (1) presents signs of damage, contamination or corrosion, do the maintenance procedures on the electrical connector. Refer to [AMM TASK 32-60-00-910-801-A/200](#).
- (5) Remove the nut (4).
- (6) Remove the proximity switch (3).

EFFECTIVITY: ALL

Downlock Proximity Switch of MLG - Removal/Installation

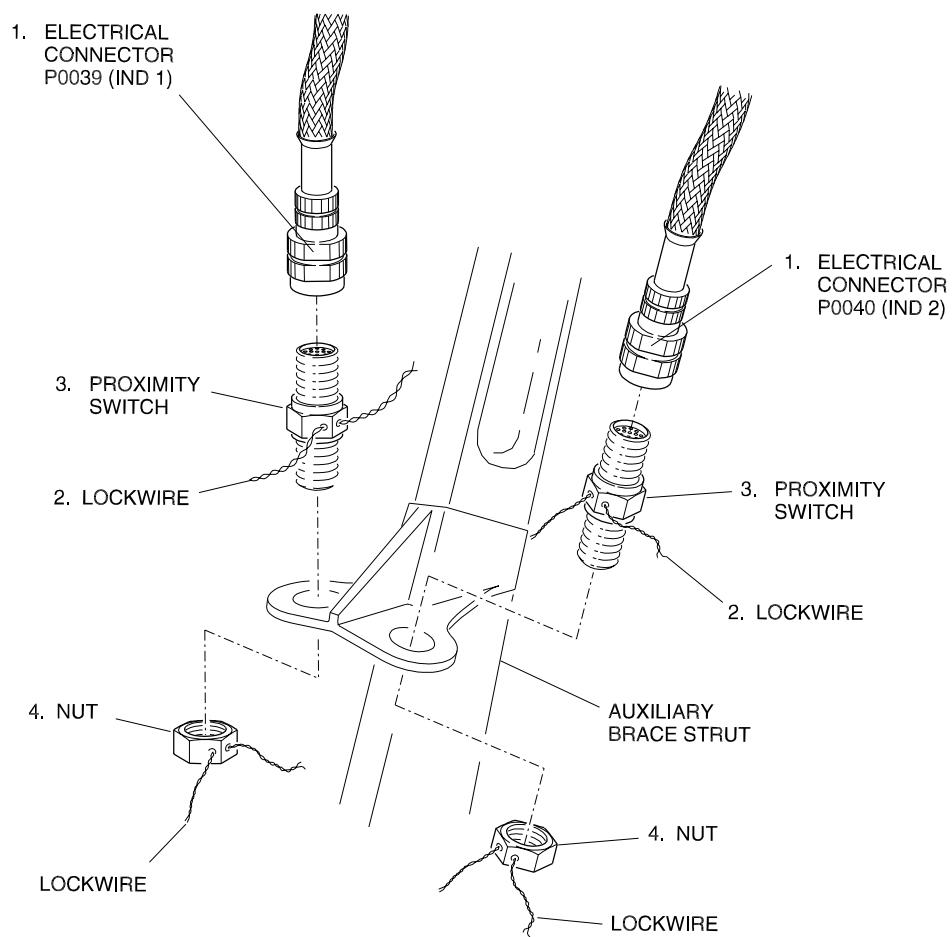
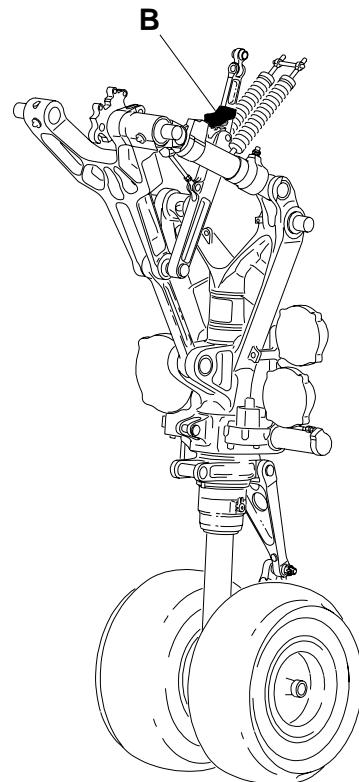
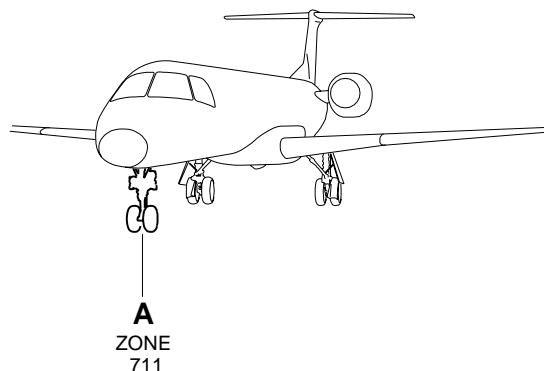
Figure 401



EFFECTIVITY: ALL

Downlock Proximity Switch of NLG - Removal/Installation

Figure 402



DET. A

145AMM320141C.MCE

TASK 32-61-02-400-801-A
EFFECTIVITY: ALL
3. DOWNLOCK PROXIMITY SWITCH - INSTALLATION
A. General

- (1) This procedure gives the instructions to install the downlock proximity switch of the landing gear system.

B. References

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 32-60-00-910-801-A/200	LANDING GEAR PROXIMITY SWITCH AND HARNESS ELECTRICAL CONNECTORS - RESTORATION AND PROTECTION
AMM TASK 32-63-05-700-801-A/500	PROXIMITY SWITCH (SENSOR) - FUNCTIONAL CHECK
AMM TASK 32-63-05-700-802-A/500	PROXIMITY SWITCH (SENSOR) - FUNCTIONAL CHECK - ALTERNATIVE PROCEDURE
IPC 32-61-02	DOWNLOCK PROXIMITY SENSORS
SB145-32-0036	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

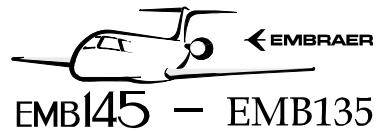
Not Applicable

E. Auxiliary Items

<i>ITEM</i>	<i>DESCRIPTION</i>	<i>PURPOSE</i>	<i>QTY</i>
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	Protection for Eyes	1
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	Protection for Hands	1

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
MIL-L-87177	Lektro-Tech Super Corr-A	As necessary



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G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Lockwire	IPC 32-61-02	AR
Lockwire	IPC 32-61-02	AR

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Nose or RH or LH landing gear

I. Installation (Figure 401) (Figure 402)

SUBTASK 420-002-A

NOTE: This procedure can be applicable to the downlock proximity switch of the main landing gear (Figure 401) or nose landing gear (Figure 402).

- (1) Put the proximity switch (3) in its installation position on the auxiliary brace strut.
- (2) Install the nut (4).

WARNING: DO NOT GET LUBRICANT AND ANTICORROSION FILM PN LEKTRO-TECH SUPER CORR-A IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE LUBRICANT AND ANTICORROSION FILM PN LEKTRO-TECH SUPER CORR-A. KEEP LUBRICANT AND ANTICORROSION FILM PN LEKTRO-TECH SUPER CORR-A AWAY FROM SPARKS, FLAME, AND HEAT. LUBRICANT AND ANTICORROSION FILM PN LEKTRO-TECH SUPER CORR-A IS A POISONOUS AND FLAMMABLE SUBSTANCE.

- (3) Connect the electrical connector (1).

NOTE: Before the connection of the connector, apply the Lektro-Tech Super Corr-A into the plug connector to prevent corrosion and to clean the contacts.

- (4) Safety the proximity switch (3) and the nut (4).
- (5) Do the protection of the proximity switch (3) and the electrical connector (1) against corrosion. Refer to [AMM TASK 32-60-00-910-801-A/200](#).

J. Follow-on

SUBTASK 842-002-A

- (1) Do the specific test of the proximity switch. Refer to [AMM TASK 32-63-05-700-801-A/500](#) or [AMM TASK 32-63-05-700-802-A/500](#).
- (2) On the circuit breaker panel, close the IND 1 and IND 2 circuit breakers and remove the DO-NOT-CLOSE tags from them.
- (3) Energize the aircraft. Refer to [AMM TASK 20-40-01-860-801-A/200](#).



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- (4) Monitor the EICAS to make sure that the “DN” indication for the related landing gear leg comes into view.
- (5) De-energize the aircraft. Refer to [AMM TASK 20-40-01-860-801-A/200](#).
- (6) On 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](#)).



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TASK 32-61-02-040-801-A

EFFECTIVITY: ALL

4. DOWNLOCK PROXIMITY SWITCH - DEACTIVATION PROCEDURE

A. General

- (1) This task refers to item 32-60-00 Landing Gear Proximity Switch of the DDPM.
- (2) It is permitted to dispatch the airplane with one uplock proximity switch and one down lock proximity switch inoperative in each landing gear leg if the remaining proximity switches operate correctly.

B. References

REFERENCE	DESIGNATION
AMM TASK 32-63-05-700-801-A/500	PROXIMITY SWITCH (SENSOR) - FUNCTIONAL CHECK

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	Nose landing gear or RH or LH MLG compartment

I. Deactivation Procedure

SUBTASK 040-002-A

- (1) Do the check of the proximity switch. Refer to [AMM TASK 32-63-05-700-801-A/500](#).
- (2) Write in the aircraft technical logbook that you did the deactivation procedure for the landing gear downlock proximity switch.



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TASK 32-61-02-440-801-A

EFFECTIVITY: ALL

5. DOWNLOCK PROXIMITY SWITCH - REACTIVATION PROCEDURE

A. General

- (1) This task refers to item 32-60-00 Landing Gear Proximity Switch of the DDPM.

B. References

REFERENCE	DESIGNATION
AMM TASK 32-61-02-000-801-A/400	DOWNLOCK PROXIMITY SWITCH - REMOVAL
AMM TASK 32-61-02-400-801-A/400	DOWNLOCK PROXIMITY SWITCH - INSTALLATION

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	Nose landing gear or RH or LH MLG compartment

I. Reactivation Procedure

SUBTASK 440-002-A

- (1) Remove the unserviceable proximity switch. Refer to [AMM TASK 32-61-02-000-801-A/400](#).
- (2) Install a serviceable proximity switch. Refer to [AMM TASK 32-61-02-400-801-A/400](#)
- (3) Write in the aircraft technical logbook that you did the reactivation procedure for the landing gear downlock proximity switch.