

MAIN LANDING GEAR UPLOCK BOX - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to remove/install the main landing gear (MLG) uplock box.
- B. The access to the MLG uplock box is got through the MLG compartment.
- 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 |
|--------------------|-------------------------------|-------------|
| 32-33-10-000-801-A | MLG UPLOCK BOX - REMOVAL | ALL |
| 32-33-10-400-801-A | MLG UPLOCK BOX - INSTALLATION | ALL |

TASK 32-33-10-000-801-A

EFFECTIVITY: ALL

2. MLG UPLOCK BOX - REMOVAL

A. General

(1) This task gives the procedures to remove the MLG uplock box.

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 |

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 |
| Commercially available | Drip Pan | To collect the hydraulic fluid when you disconnect the hydraulic line | 1 |

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|-----------------|
| 1 | Does the task | MLG compartment |

I. Preparation

SUBTASK 841-002-A

- (1) Make sure that the landing gear safety pins 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 tag to them.

- (3) Make sure that the pressure in hydraulic system No. 1 is fully released ([AMM TASK 29-10-00-860-802-A/200](#)).
- (4) Disconnect the electrical connectors from the LG uplock proximity switches.
- (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](#))

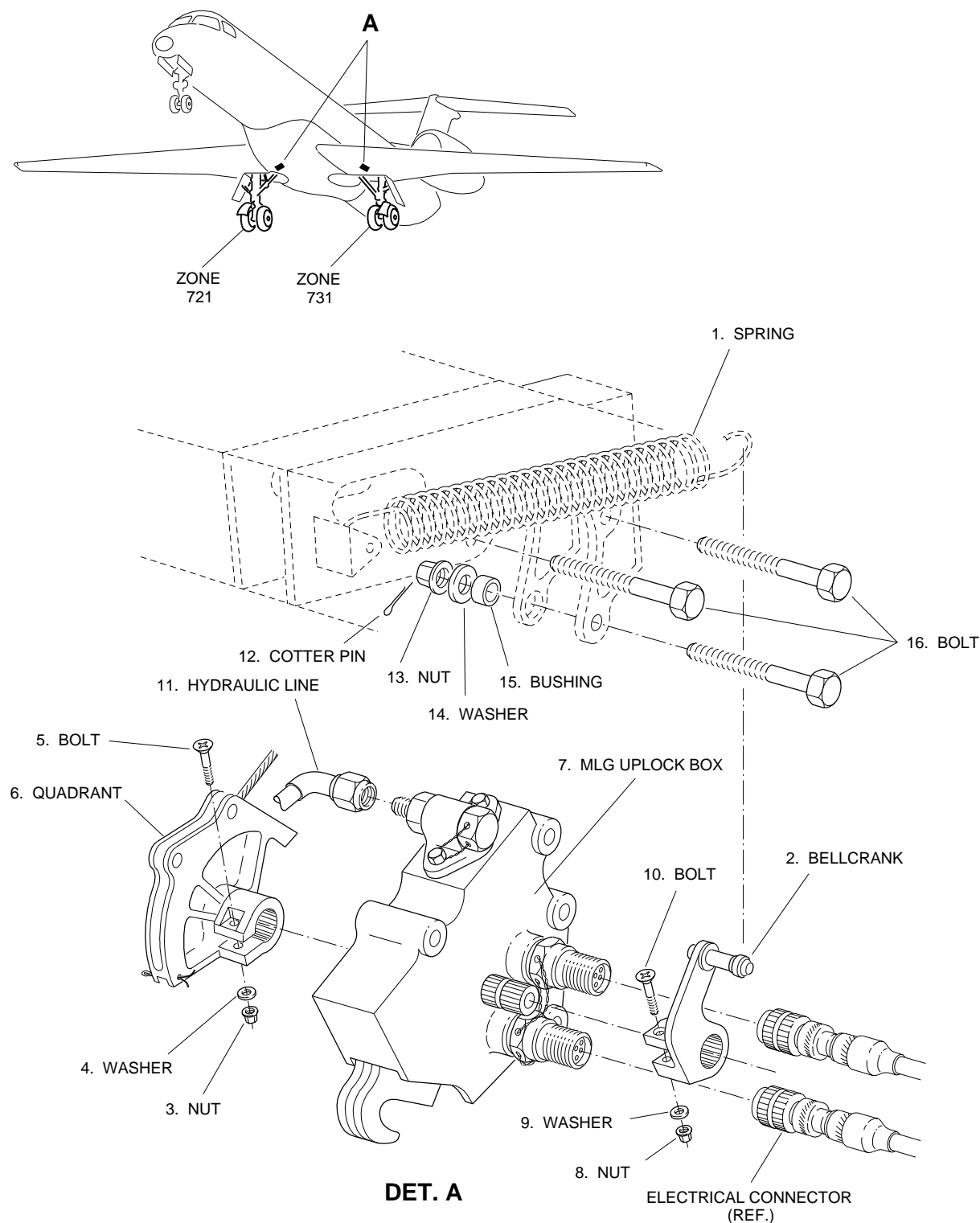
SUBTASK 020-002-A

- (1) Release the spring (1) from the bellcrank (2).
- (2) Remove the nut (3), washer (4), and bolt (5) from the quadrant (6).
- (3) Remove the quadrant (6) from the MLG uplock box (7).
- (4) Remove the nut (8), washer (9), and bolt (10) from the bellcrank (2).
- (5) Remove the bellcrank (2) from the MLG uplock box (7).
- (6) Disconnect the hydraulic line (11).
- (7) Remove the cotter pin (12), nuts (13), washers (14), bushing (15), and bolts (16) from the MLG uplock box (7).
- (8) Remove the MLG uplock box (7).

EFFECTIVITY: ALL

MLG Uplock Box - Removal/Installation

Figure 401

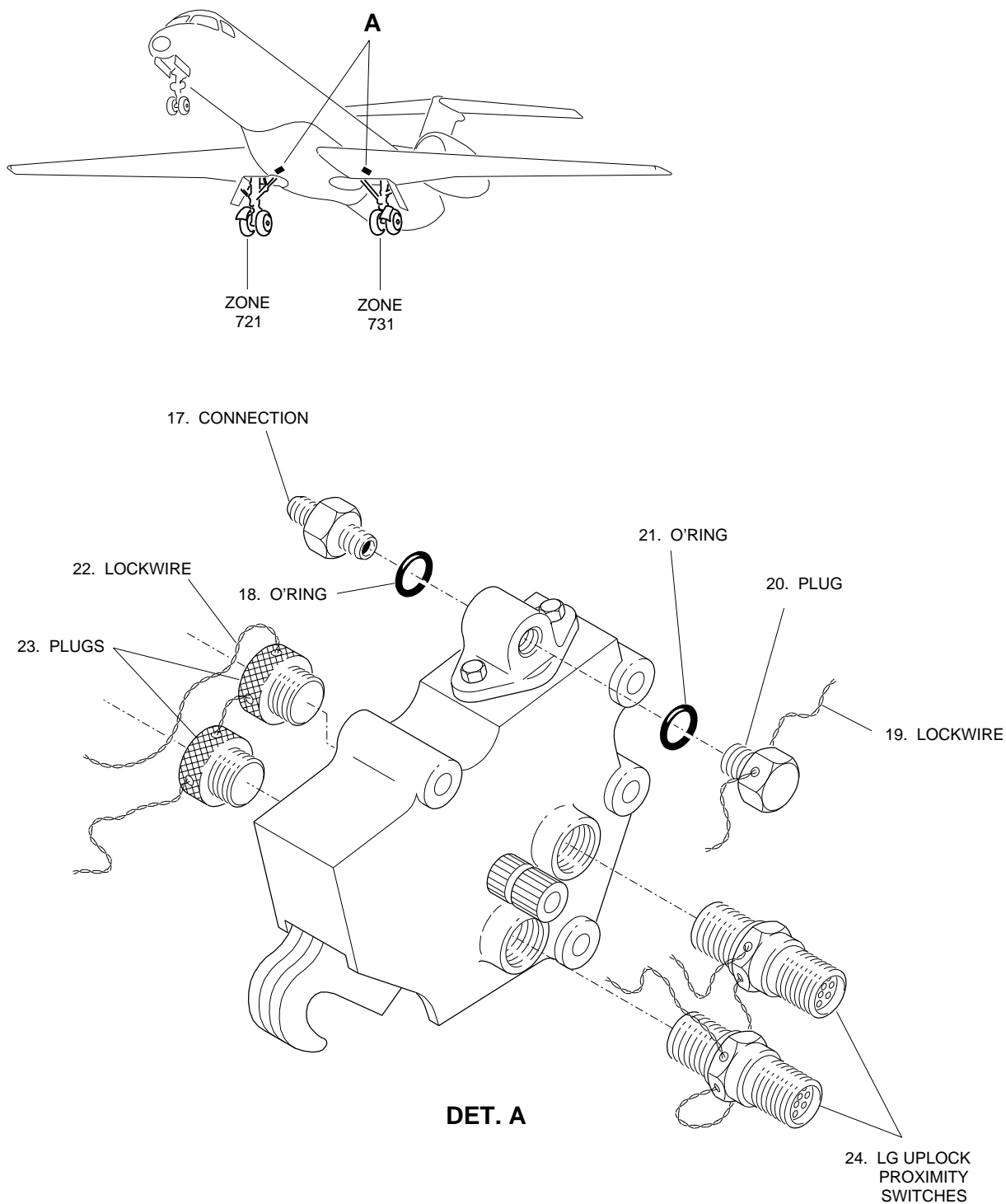


145AMM320030.MCE A

EFFECTIVITY: ALL

Connections of the MLG Uplock Box - Removal/Installation

Figure 402



145AMM320029.MCE A

TASK 32-33-10-400-801-A

EFFECTIVITY: ALL

3. MLG UPLOCK BOX - INSTALLATION

A. General

(1) This task gives the procedures for installation of the MLG uplock box.

B. References

| REFERENCE | DESIGNATION |
|---------------------------------|--|
| AMM TASK 29-10-00-860-803-A/200 | HYDRAULIC SYSTEM - BLEED OF AIR |
| AMM TASK 32-30-00-700-801-A/500 | EXTENSION AND RETRACTION SYSTEM - OPERATIONAL CHECK |
| AMM TASK 32-34-00-700-801-A/500 | LG EMERGENCY EXTENSION - OPERATIONAL AND FUNCTIONAL CHECKS |
| AMM TASK 32-34-03-700-801-A/500 | FREE-FALL CONTROL CABLES - CHECK |
| AMM TASK 32-44-02-600-801-A/300 | EMERGENCY/PARKING BRAKE ACCUMULATOR - CHARGE |
| AMM TASK 32-61-01-000-801-A/400 | UPLOCK PROXIMITY SWITCH - REMOVAL |
| AMM TASK 32-61-01-400-801-A/400 | UPLOCK PROXIMITY SWITCH - INSTALLATION |
| IPC 32-33-10 | MLG UPLOCK BOX |

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

| SPECIFICATION (BRAND) | DESCRIPTION | QTY |
|-----------------------|--------------------------------|--------------|
| MIL-L-87177 | Lektro-Tech Super Corr-B-12350 | As necessary |

G. Expendable Parts

| ITEM | IPC REFERENCE (VENDOR REFERENCE) | QTY |
|---------|----------------------------------|-------|
| O-rings | IPC 32-33-10 | 2/LRU |

(Continued)

| <i>ITEM</i> | <i>IPC REFERENCE (VENDOR REFERENCE)</i> | <i>QTY</i> |
|-------------|---|------------|
| Lockwire | IPC 32-33-10 | AR |
| Cotter pin | IPC 32-33-10 | 3/LRU |

H. Persons Recommended

| <i>QTY</i> | <i>FUNCTION</i> | <i>PLACE</i> |
|------------|-----------------|-----------------|
| 1 | Does the task | MLG compartment |

I. Preparation (Figure 402)

SUBTASK 841-003-A

- (1) Remove the connection (17) with the related O-ring (18) from the used MLG uplock box.
- (2) Remove the lockwire (19) and plug (20) with the related O-ring (21) from the used MLG uplock box.
- (3) Discard the O-rings removed in steps (1) and (2).
- (4) Remove the lockwire (22) and plugs (23) from the used MLG uplock box.
- (5) Install the connection (17) with the related new O-rings (18) in the position where you will connect the hydraulic line.
- (6) Install the plug (20) with the related new O-rings (21).
- (7) Safety the plug (20).
- (8) Remove the LG uplock proximity switches (24) from the used MLG uplock box. Then install them in the position where you will connect the electrical connectors ([AMM TASK 32-61-01-000-801-A/400](#)) and ([AMM TASK 32-61-01-400-801-A/400](#)).
- (9) Install the plugs (23). Then safety them.

J. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Put the MLG uplock box (7) on its support.
- (2) Install the bolts (16), bushing (15), washers (14), nuts (13), and cotter pin (12).
- (3) Put the spring actuation bellcrank (2) on the shaft of the MLG uplock box (7).
- (4) Install the bolt (10), washer (9), and nut (8).
- (5) Put the quadrant (6) on the shaft of the MLG uplock box (7).
- (6) Install the bolt (5), washer (4), and nut (3).
- (7) Connect the hydraulic line (11).

- (8) Connect the spring (1) to the bellcrank (2).

K. Follow-on

SUBTASK 842-002-A

- (1) Connect the electrical connectors to the LG uplock proximity switches.

NOTE: Before the installation of the connector, apply the Lektro-Tech Super Corr-B-12350 into the plug connector to prevent corrosion and to clean the contacts.

- (2) Check the tension of the cable ([AMM TASK 32-34-03-700-801-A/500](#)).
- (3) Pressurize the Emergency/Parking brake accumulator ([AMM TASK 32-44-02-600-801-A/300](#)).
- (4) On the circuit breaker panel, close the ELEC PUMP 1 and CMD circuit breakers and remove the DO-NOT-CLOSE tag from them.
- (5) Do the bleed of air from the hydraulic system lines ([AMM TASK 29-10-00-860-803-A/200](#)).
- (6) Do the functional check of the LDG emergency extension ([AMM TASK 32-34-00-700-801-A/500](#)).
- (7) Do the operational check of the landing gear (extension/retraction cycle). Make sure that there are no leaks in the MLG uplock box ([AMM TASK 32-30-00-700-801-A/500](#)).
- (8) Make sure that there is no “LG NOSE UP PROXIMITY SW FAIL” message on the CMC.