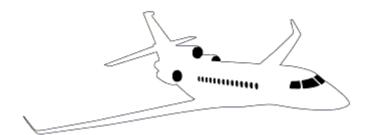
# FALCON SERVICE BULLETIN

# FALCON 7X



# No 176

**FEBRUARY 03, 2016** 

# MANDATORY

ATA 53

### FUSELAGE

# REPLACEMENT OF MGPL RIVETS UNDER THE UMBRELLA

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7X -176

### FUSELAGE

### REPLACEMENT OF MGPL RIVETS UNDER THE UMBRELLA

#### Initial issuance

List of effective pages : 1 to 14

February 03, 2016



7X -176

### FUSELAGE

### REPLACEMENT OF MGPL RIVETS UNDER THE UMBRELLA

#### 1. PLANNING INFORMATION

A. EFFECTIVITY

This Service Bulletin is applicable to FALCON 7X aircraft with serial numbers 15 through 89, 92 through 94, 97 through 101, 105 and 106.

B. REASON

On the cockpit upper skin, the LH and RH stringers #3 have been assembled with MGPL rivets. But it has been noted that in the case of maximum certified bird impact, the cockpit upper skin deformation would lead to interference between the rivet shank and the CMOP.

The purpose of this Service Bulletin is to remove the risk of interference by replacing the MGPL type rivets with solid type rivets.

C. DESCRIPTION

The operation consists in:

- · removing twenty MGPL type rivets located on the cockpit skin panel,
- installing twenty solid type rivets.
- D. COMPLIANCE

Mandatory:

- It is anticipated that this Service Bulletin will be rendered mandatory by an EASA Airworthiness Directive.
- As prescribed by the Airworthiness Authorities of the country of registration of the aircraft.
- E. APPROVAL

The technical content of this document is approved under the authority of DOA nr. EASA.21J.051.

F. LABOR

Estimated labor-hours: Refer to Service Bulletin Commercial Summary

<u>NOTE:</u> These labor-hours only concern the work described in this Service Bulletin and do not include other maintenance work that may be performed on this occasion.

G. MATERIAL - PRICE AND AVAILABILITY

The modification kit may be obtained from either address listed below:

Western hemisphere: DASSAULT FALCON JET CORP. SPARES DISTRIBUTION CENTER 200 RISER ROAD LITTLE FERRY, NJ 07643 U.S.A.



### 7X -176

#### Telephone:

- CANADA and U.S.A.: 1-800-800-4036
- MEXICO: 001-800-800-4036

 MEXICO: 001-800-800-4817 • Other countries: 1-201-440-7021

• Other countries: 1-201-541-4809

#### Fax:

- CANADA and U.S.A.: 1-800-800-4817

DASSAULT AVIATION

Falcon Spares

**BOITE POSTALE N°101** 

AEROPORT DU BOURGET

93350 - LE BOURGET Cedex (FRANCE)

Please contact your Dassault Aviation

Account Representative

Telephone: 33 (0)1.48.35.56.78

Fax: 33 (0)1.48.35.56.00

Price and availability on request.

H. TOOLING - PRICE AND AVAILABILITY

Normal maintenance tooling.

WEIGHT AND BALANCE I.

Change in weight: None.

Change in balance with respect to 25% MAC: None.

REFERENCES J.

Structural Repair Manual:

- DRILLING (Refer to SRM 51-40-03)
- RIVETING (Refer to SRM 51-40-04)

Aircraft Maintenance Manual:

- GENERAL MAINTENANCE AND SAFETY PRECAUTIONS (Refer to TASK 20-00-00-910-801)
- REMOVAL / INSTALLATION OF THE ELECTRICAL BONDING BRAIDS (Refer to TASK 20-20-00-900-801)
- PRINCIPLES AND CHECK OF THE ELECTRICAL BONDING (Refer to TASK 20-20-00-910-801)
- BASIC SEALING METHODS (Refer to TASK 20-32-00-390-801)
- REMOVAL / INSTALLATION OF THE PILOT SEATS(Refer to TASK 25-11-01-900-801)
- REMOVAL / INSTALLATION OF THE THIRD CREW MEMBER SEAT (Refer to TASK 25-12-00-900-801)
- REMOVAL / INSTALLATION OF THE COCKPIT LININGS (Refer to TASK 25-13-13-900-801)
- REMOVAL / INSTALLATION OF THE OVERHEAD PANEL (Refer to TASK 31-11-01-900-801)
- REMOVAL / INSTALLATION OF THE READING LIGHTS (Refer to TASK 33-10-01-900-801)

February 03, 2016

Other continents:



# FALCON 7X

- REMOVAL / INSTALLATION OF THE EMERGENCY POWER SUPPLIES (Refer to TASK 33-50-29-900-801)
- REMOVAL / INSTALLATION OF THE HGS OVERHEAD UNIT (Refer to <u>TASK</u> <u>34-31-01-900-801</u>)
- REMOVAL / INSTALLATION OF THE HGS COMPUTER (Refer to TASK 34-31-09-900-801)
- REPLACEMENT OF THE EDU (Refer to TASK 46-20-02-960-801)



# 7X -176

### 2. ACCOMPLISHMENT INSTRUCTIONS

- A. PRELIMINARY STEPS
  - (1) The aircraft must be in the maintenance configuration (Refer to TASK 20-00-00-910-801).
  - (2) Remove the pilot seats (Refer to TASK 25-11-01-900-801).
  - (3) Remove the LH dome light (L101LC) and RH dome light (R101LC) (Refer to TASK 33-50-29-900-801).
  - (4) Remove the following cockpit linings (Refer to TASK 25-13-13-900-801):
    - cockpit upper lining No.4 (221GZ),
    - cockpit upper lining No.1 (221DZ),
    - central arch window finisher (221CZ),
    - cockpit upper lining No.2 (<u>221EZ</u>),
    - cockpit upper lining No.3 (221FZ),
    - cockpit upper lining No.7 (222EZ),
    - cockpit lateral window finisher (221SZ),
    - cockpit lateral window finisher (222SZ),
    - cockpit lateral lining No.2 (221TZ),
    - cockpit lateral lining No.5 (221XZ),
    - cockpit lateral lining No.2 (222TZ),
    - cockpit lateral lining No.5 (<u>222XZ</u>).
  - (5) Protect the cockpit equipment and the windshields (inside and outside areas) (DETAIL A-fig. 6).
  - (6) Remove the overhead panel (Refer to <u>TASK 31-11-01-900-801</u>), paragraphs "JOB SET-UP" then "REMOVAL".
  - (7) Remove the fasteners and the Tyrap clamps from the harnesses (fig. 1).
  - (8) Disconnect the ground terminal lugs (fig. 2) (Refer to TASK 20-20-00-900-801).
  - (9) Remove the LH and RH spars as follows (fig. 3):
    - Remove the screws a and b.
    - Remove the two screws c.
    - Remove the two screws and the two washers c'.
  - (10) Protect the connectors and the harnesses, latching them outside the work area (DETAIL B-fig. 6).
  - (11) Remove the umbrella as follows (fig. 4) and (fig. 5):
    - remove the fasteners (two screws and two washers by bracket) from the brackets d, d', e, e', f and f',
    - remove the screw and the washer g,
    - remove the screw and the washer h,
    - remove the umbrella.

If equipped, remove optional equipments as:

- EDUs (<u>L7101NS</u>) and (<u>R7101NS</u>) (Refer to <u>TASK 46-20-02-960-801</u>),
- HGS computer (<u>408NS</u>) (Refer to <u>TASK 34-31-09-900-801</u>),
- HGS overhead unit (<u>108NS</u>) (Refer to <u>TASK 34-31-01-900-801</u>),
- third crew member seat (<u>M1001MP</u>) (Refer to <u>TASK 25-12-00-900-801</u>),



# 7X -176

- flashlights (L302ME) and (R302ME),
- another optional equipments shall be remove according to SMM or AMM.

#### B. PROCEDURE

- (1) Remove the twenty MGPL rivets (fig. 7).
- (2) Enlarge the twenty holes for rivets (1-fig. 7) (Refer to SRM 51-40-03), if necessary.
- (3) Apply a coat of <u>interlaying sealant</u> under each rivet head before installing them (Refer to <u>TASK</u> <u>20-32-00-390-801</u>).

<u>CAUTION:</u> TAKE CARE ALL PRECAUTIONS TO PREVENT SKIN PANEL STRUCTURAL YIELDING.

- (4) Install the twenty rivets (1-fig. 7) and their rivet washers (2-fig. 7) (Refer to SRM 51-40-04).
- (5) Inside the aircraft, on the twenty rivets (1-fig. 7) and rivet washers (2-fig. 7) assemblies, apply a bead of <u>covering sealant</u> (Refer to <u>TASK 20-32-00-390-801</u>).

#### C. FINAL STEPS

- (1) Install the umbrella as follows (fig. 4) and (fig. 5):
  - position the umbrella.
  - install the fasteners (two screws and two washers by bracket) on the brackets d, d', e, e', f and f',
  - install the screw and the washer g,
  - install the screw and the washer h.
- (2) Remove the protection from the connectors and the harnesses (DETAIL B-fig. 6).
- (3) Install the LH and RH spars as follows (fig. 3):
  - Install the screws a and b.
  - Install the two screws c.
  - · Remove the two screws and the two washers c'.
- (4) Install the fasteners and the Tyrap clamps that attaches the harnesses (fig. 1).
- (5) Connect the ground terminal lugs (fig. 2) (Refer to TASK 20-20-00-900-801).
- (6) Perform a measurement of the electrical bonding of the harness terminal lugs 5000PMT1, 5000PMT4, 5000PMT5, 200WZ1, 200WZ2, 200WZ3 (fig. 2) (Refer to <u>TASK 20-20-00-910-801</u>).
- (7) Install the overhead panel (Refer to <u>TASK 31-11-01-900-801</u>), paragraphs "PREPARATION BEFORE INSTALLATION" then "INSTALLATION".
- (8) Remove the protection from the cockpit equipment and the windshields.
- (9) Perform the tests of the overhead panel (Refer to TASK 31-11-01-900-801), paragraph "TESTS".
- (10) Install the following cockpit linings (Refer to TASK 25-13-13-900-801):
  - cockpit upper lining No.4 (221GZ),
  - cockpit upper lining No.1 (221DZ),
  - central arch window finisher (221CZ),
  - cockpit upper lining No.2 (<u>221EZ</u>),
  - cockpit upper lining No.3 (221FZ),
  - cockpit upper lining No.7 (<u>222EZ</u>),



### FALCON 7X

# 7X -176

- cockpit lateral window finisher (221SZ),
- cockpit lateral window finisher (222SZ),
- cockpit lateral lining No.2 (221TZ),
- cockpit lateral lining No.5 (221XZ),
- cockpit lateral lining No.2 (<u>222TZ</u>),
- cockpit lateral lining No.5 (<u>222XZ</u>).
- (11) Install the LH dome light (<u>L101LC</u>) and RH dome light (<u>R101LC</u>) and perform an operational test of them (Refer to <u>TASK 33-50-29-900-801</u>).

If equipped, install optional equipments as:

- EDUs (L7101NS) and (R7101NS) (Refer to TASK 46-20-02-960-801),
- HGS computer (408NS) (Refer to TASK 34-31-09-900-801),
- HGS overhead unit (108NS) (Refer to TASK 34-31-01-900-801),
- third crew member seat (M1001MP) (Refer to TASK 25-12-00-900-801),
- flashlights (<u>L302ME</u>) and (<u>R302ME</u>),
- another optional equipments shall be remove according to SMM or AMM.
- (12) Perform an operational test of the reading light (Refer to TASK 33-10-01-900-801).

(13) Install the pilot seats and perform a test of them (Refer to TASK 25-11-01-900-801).

### D. RECORDING

Record compliance with this Service Bulletin in the appropriate aircraft documents.

Fill out the electronic Service Bulletin reply form located in the "Service Bulletin" page on the Falcon portal.



7X -176

### 3. MATERIAL INFORMATION

#### A. MODIFICATION KIT

Kit P/N SBF7X0176A

NEW P/N	Q T Y	KEY WORD	ITEM FIG
21218TB4013AS	26	Rivet	Refer to (1-fig. 7)
35110BC040LE	20	Washer	Refer to (2-fig. 7)
78750-02	100	Tyrap clamp	

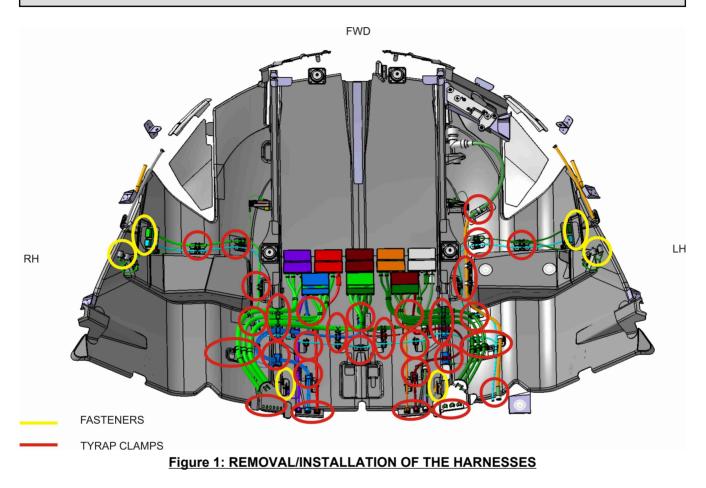
### B. LOCAL PROCUREMENT

As indicated in Consumable Products Manual (CPM):

- covering sealant
- interlaying sealant

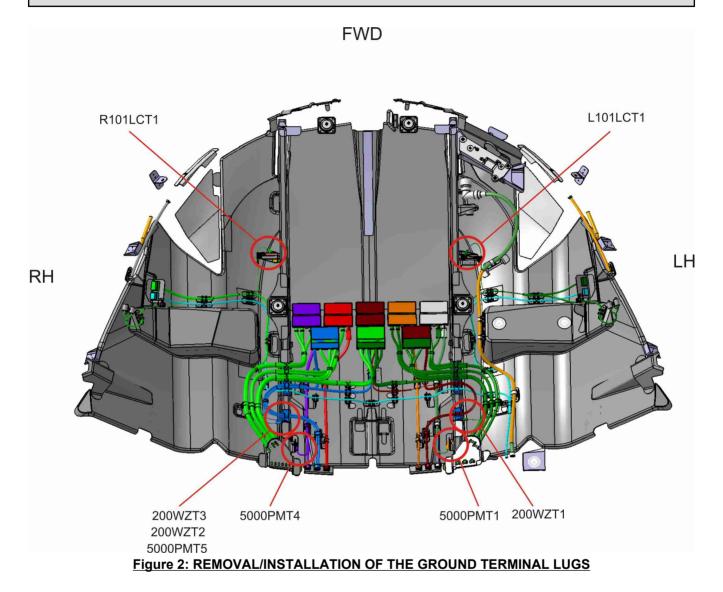








FALCON 7X





# FALCON 7X

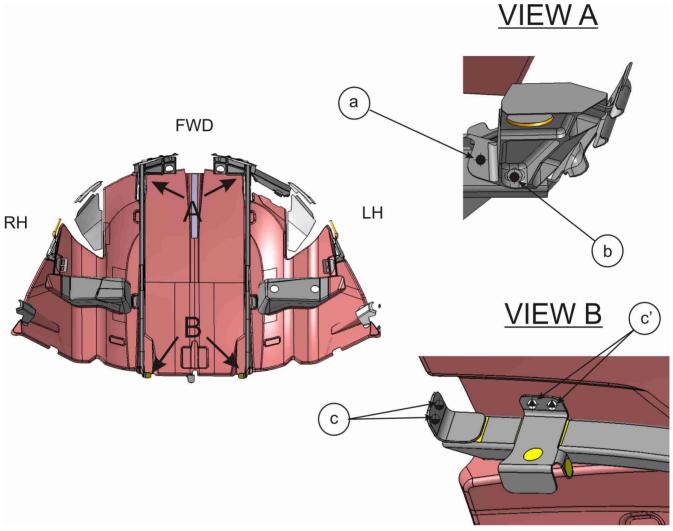
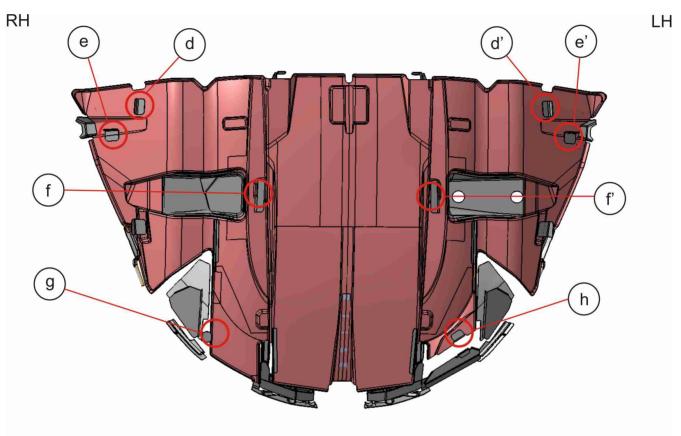


Figure 3: REMOVAL/INSTALLATION OF THE LH AND RH SPARS



7X -176

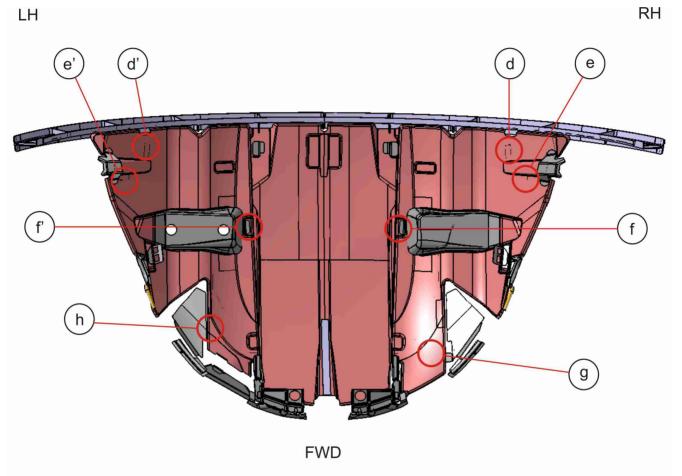


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UPPER VIEW Figure 4: REMOVAL/INSTALLATION OF THE UMBRELLA (1/2)



7X -176



LOWER VIEW Figure 5: REMOVAL/INSTALLATION OF THE UMBRELLA (2/2)



# FALCON 7X

# 7X -176

### <u>DETAIL A</u>



DETAIL B



Figure 6: PROTECTION OF THE COCKPIT



# FALCON 7X

