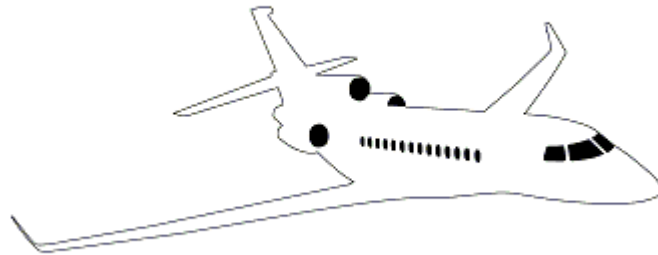


FALCON SERVICE BULLETIN

FALCON 7X



No 337-R1

NOVEMBER 24, 2014

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ELECTRICAL POWER

REPLACEMENT OF BATTERY 1 NEGATIVE FEEDER

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FALCON 7X

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ELECTRICAL POWER

REPLACEMENT OF BATTERY 1 NEGATIVE FEEDER

Initial issuance

May 27, 2014

List of effective pages :
1 to 8

Revision 1

November 24, 2014

List of effective pages :
1 to 9
List of modified pages :
2, 3, 4, 5, 6 and 9

REASON:To add the part number of the bracket to be changed in case it is found damaged.
This revision is not applicable to aircraft already modified per the initial issuance of this Service Bulletin.

ELECTRICAL POWER

REPLACEMENT OF BATTERY 1 NEGATIVE FEEDER

1. PLANNING INFORMATION

A. EFFECTIVITY

This Service Bulletin is applicable to FALCON 7X aircraft with serial numbers 2 and subsequent which have not previously implemented DASSAULT AVIATION modification FALCON 7X M1446.

B. REASON

Evidence of overheat on the negative feeder terminal of battery 1 has been reported in service. This overheat may lead to disconnection of battery 1.

The purpose of this Service Bulletin is to improve the reliability of the connection by increasing the contact surface.

C. DESCRIPTION

The operation consists in:

- Replacing the negative feeder of battery 1 with a new feeder which includes a terminal lug with a larger contact surface on the A/C bracket side.
- Cleaning up the A/C bracket by milling.

D. COMPLIANCE

If you choose to comply with this Service Bulletin, accomplishment is to be performed during the next "1A" inspection.

E. APPROVAL

This Service Bulletin covers DASSAULT AVIATION modification FALCON 7X M1446 which has been approved under the authority of DOA nr. EASA.21J.051.

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.

NOTE: These labor-hours only concern the work described in this Service Bulletin and do not include other maintenance work which 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.

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Telephone:

- CANADA and U.S.A.: 1-800-800-4036
- MEXICO: 001-800-800-4036
- Other countries: 1-201-541-4809

Fax:

- CANADA and U.S.A.: 1-800-800-4817
- MEXICO: 001-800-800-4817
- Other countries: 1-201-440-7021

Other continents:

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
E/H dafsorder@dassault-aviation.com

Price and availability on request.

H. TOOLING - PRICE AND AVAILABILITY

Normal maintenance tooling.

NOTE: It is necessary to use a short drill for the modification of the bracket (as example-fig. 3).

I. WEIGHT AND BALANCE

Change in weight: None.

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

J. REFERENCES

Illustrated Parts Catalog:

- BATTERY INSTALLATION (Refer to [IPC fig. 24-32-20-10](#))
- BATTERY CONNECTOR LH (Refer to [IPC fig. 24-32-10-20](#))

Aircraft Maintenance Manual:

- GENERAL MAINTENANCE AND SAFETY PRECAUTIONS (Refer to [TASK 20-00-00-910-801](#))
- **BASIC SEALING METHODS** (Refer to [TASK 20-32-00-390-801](#))
- REMOVAL / INSTALLATION OF THE MAIN BATTERIES (Refer to [TASK 24-32-01-900-801](#))

Structural Repair Manual

- CLAMPING (Refer to [SRM 51-40-02](#))
- DRILLING (Refer to [SRM 51-40-03](#))

2. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL ELECTRICAL INSTRUCTIONS

- (1) When mechanical retrofit and/or modification operations are performed on the aircraft, take special care to protect the wiring in order to prevent metal chips (or burrs) from penetrating into the wire bundles, since they could eventually damage the insulation sheathing of the wires. Whenever possible, it is recommended that the wiring be removed from the work area. If that is not possible, it is absolutely necessary to protect the wiring.
- (2) Check that all connections are properly protected to ensure proper insulation and that markings are visible and appropriate.
- (3) Visually inspect the work area for particles or debris, then vacuum-clean. The blowing of compressed air is prohibited since it could move metal chips to inaccessible areas.

B. PRELIMINARY STEPS

- (1) The aircraft must be in the maintenance configuration (Refer to [TASK 20-00-00-910-801](#)).
- (2) Place a warning placard "WARNING: DO NOT APPLY ELECTRICAL POWER" adjacent to the ground power receptacle.
- (3) Open the servicing compartment door ([MSD](#)).
- (4) Remove battery 1 ([L1000PC](#)) (Refer to [TASK 24-32-01-900-801](#)).

CAUTION: NOTE THE ROUTING OF THE DIFFERENT WIRE BUNDLES THROUGH THE LH BATTERY BRACKET ASSEMBLY BEFORE BEGINNING THE REMOVAL.

- (5) Remove the LH screws (items 20 and 30) and the LH washers (items 40 and 50) (Refer to [IPC fig. 24-32-20-10](#)).
- (6) Remove the two clamps securing the negative and positive feeders to the bracket (b-c-fig. 2).
- (7) Remove the two screws (a-fig. 1).
- (8) Disassemble all the wiring under the battery bracket assembly (a-fig. 3).
- (9) Remove the LH battery bracket assembly (Refer to [IPC fig. 24-32-20-10](#) , item 10).
- (10) Remove the clamp attaching the feeders under the battery bracket assembly (d-fig. 2).

C. PROCEDURE

- (1) Removal of the BAT 1 negative feeder.
 - (a) Remove and discard the bolt/nut/washers of the LH negative feeder L1000PCT1.
 - (b) Open the battery plug, remove and discard the LH negative feeder and the washer.
- (2) Inspection of the LH negative feeder bracket (6-fig. 3)
 - (a) Inspect the LH negative feeder for signs of arcing or deterioration.
 - (b) If the bracket is damaged, replace it according to paragraph 4.
- (3) Installation of the new BAT 1 negative feeder (4-fig. 3)

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- (a) In the plug (Refer to **IPC fig. 24-32-10-20**) item 10, install the nut with a new washer and tighten to a torque of 77.9 lb.in ± 7.7 lb.in (0.88 m.daN ± 0.08 m.daN).
- (b) Apply red **torque seal** and close the battery plug.
- (c) On the existing bracket, or on bracket P/N F7XC53555557A1, increase the hole diameter from 8.5 mm to 10.5 mm (0.335 in to 0.414 in) (use the short drill).

CAUTION: PROTECT THE FEEDER DURING DRILLING (C-FIG. 3).

- (d) Clean up the bonding area connected to the feeder lug (b-fig. 3).

NOTE: The bracket will be cleaned up by milling around the hole, on the two faces (diameter 24mm (0.945 in)) and on all the contact surface of the lug.

After milling, the feeder connection shall be achieved in less than 1 hour in order to avoid oxydation.

- (e) Install the lug with the new bolt/washers/nut assembly (1-2-3-fig. 3) on its bracket as follows:

Bolt / 1 washer / lug / bracket / 1 washer / nut

CAUTION: RESPECT THE ORDER OF ASSEMBLY OF THE UNIT.

CAUTION: MAKE SURE THAT THE CLEARANCE BETWEEN THE NEGATIVE FEEDER AND THE STRUCTURE OR SURROUNDING ELEMENTS IS GREATER THAN 12 MM (0.47 IN)

- (f) Torque the feeder to 130 lb.in ± 13 lb in (1.47 m.daN ± 0.14 m.daN),
- (g) apply red **torque seal** on the nut/washer/bracket assembly,
- (h) apply **vinyl varnish** on all the surface to be protected.

D. FINAL STEPS

- (1) Install the clamp attaching the feeders under the battery bracket assembly (d-fig. 2).
- (2) Position the LH battery bracket assembly (Refer to **IPC fig. 24-32-20-10** , item 10).
- (3) Install the two screws (a-fig. 1).
- (4) Install the LH screws (items 20 and 30) and the LH washers (items 40 and 50) (Refer to **IPC fig. 24-32-20-10**).
- (5) Install the two clamps securing the negative and positive feeders to the bracket (b-c-fig. 2).
- (6) Assemble all the wire bundles under the battery bracket assembly (a-fig. 3).
- (7) Install battery 1 (**L1000PC**) and perform a test (Refer to **TASK 24-32-01-900-801**).
- (8) Remove the warning placard "WARNING: DO NOT APPLY ELECTRICAL POWER".
- (9) Close the servicing compartment door (**MSD**).

E. 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.

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3. MATERIAL INFORMATION
A. MODIFICATION KIT

Kit P/N SBF7X0337A

Spare parts

NEW P/N	QTY	KEY WORD	FIG
NAS1801-6-12	1	Screw	Refer to (1-fig. 3)
520801-24	1	Washer (inside battery plug)	Refer to (5-fig. 3)
521001-24	2	Washer	Refer to (2-fig. 3)
AN315-6R	1	Nut	Refer to (3-fig. 3)
78750-02	10	Cable clamp	

Electrical part

NEW P/N	QTY	KEY WORD	FIG
F7XC691243106A4	1	Negative feeder (L1000PC)	Refer to (4-fig. 3)

B. LOCAL PROCUREMENT

- In case of LH negative feeder bracket replacement:

- LH negative feeder bracket P/N F7XC53555557A1 or A2, qty : 1
- Screw p/N 22201BE052010LE, qty: 6
- Nut P/N 5RH8035M, qty: 6
- **interlaying sealant**
- **covering sealant**
- **bead sealant**

- As indicated in Consumable Products Manual (CPM):

- **vinyl varnish**
- **torque seal**
- **cleaner**

4. APPENDIX: REPLACEMENT OF LH NEGATIVE FEEDER BRACKET (6-fig. 3)

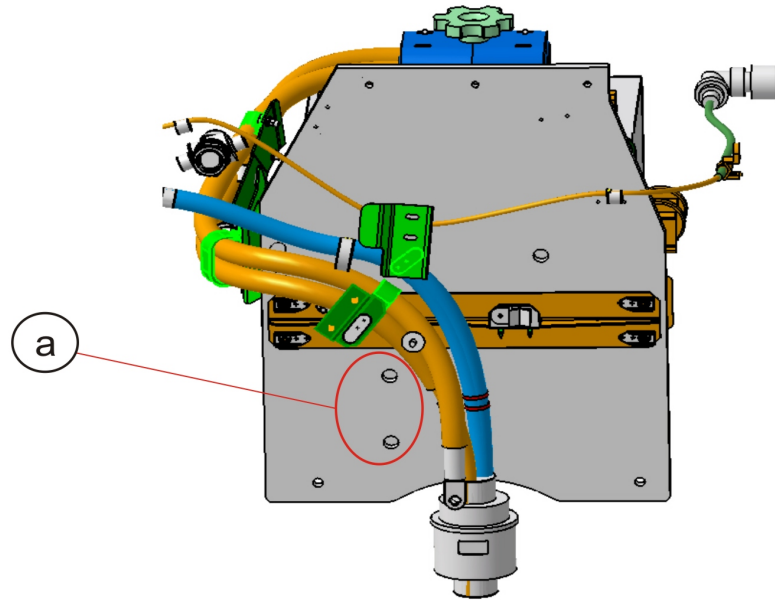
A. Removal of the existing LH negative feeder bracket

- (1) Unscrew the 6 attachment screws and nuts.
- (2) Remove the LH negative feeder bracket.
- (3) Remove the sealant with a Plexiglas spatula and **cleaner** (Refer to **TASK 20-32-00-390-801**).
- (4) Thoroughly degrease the fitting contact surfaces on Fr 41 angle floor and the screw holes using **cleaner**.

B. Installation of the new LH negative feeder bracket.

- (1) If new bracket P/N F7XC53555557A1, increase the hole diameter to 10.5 mm (0.414 in).
- (2) Make sure that the new LH negative feeder bracket is spotfaced (face in contact with frame 41).
- (3) Spot the face in contact with the feeder lug (refer to paragraph 2.C.(3)(d)).
- (4) Rim the new LH negative feeder bracket using the 6 pre-drilled holes diameter 2.5 mm (Refer to **SRM 51-40-02**).
- (5) Check that the feeder bracket is in position on unpainted surface of frame 41.
- (6) Counterdrill the 6 holes to 5 mm diameter (Refer to **SRM 51-40-03**).
- (7) Enlarge holes to 5 mm (0.196 in).
- (8) Pin holes previously enlarged.
- (9) Ream the holes:
 - Remove one pin from a hole,
 - Ream the hole to 5.2 mm (0.2 in) (Refer to **SRM 51-40-03** , paragraph 7.D. ST38150 class of fit (S) "U9".)
 - Pin the hole.
 - Repeat the same operations for the other holes.
- (10) Install the 6 screws with **interlaying sealant** under the head.
- (11) Apply a double layer of **covering sealant** on the screw heads.
- (12) Apply **bead sealant** all around the fitting and a layer of **covering sealant** (covering totally the visible unpainted surface) (Refer to **TASK 20-32-00-390-801**).

VIEW B



LH

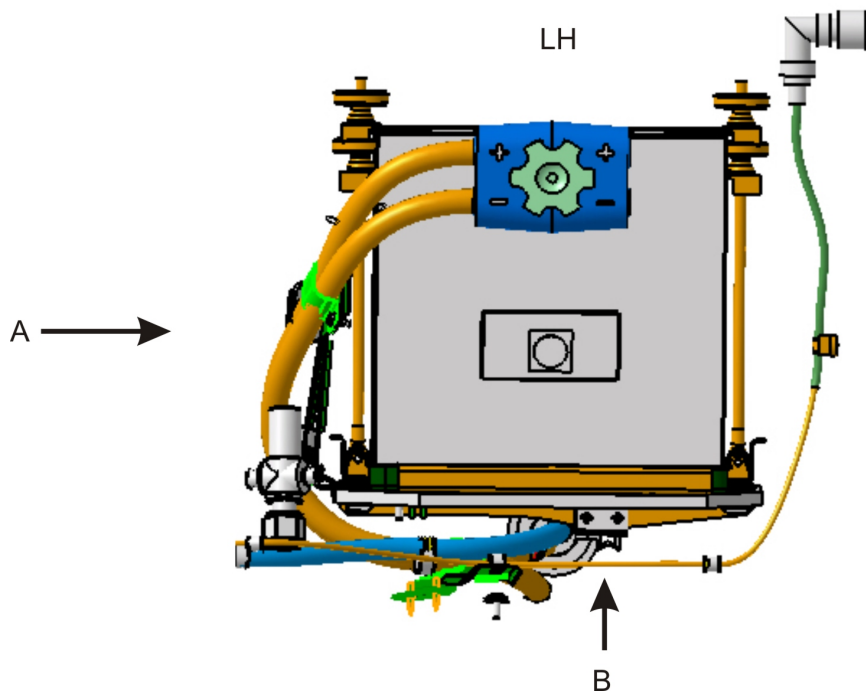
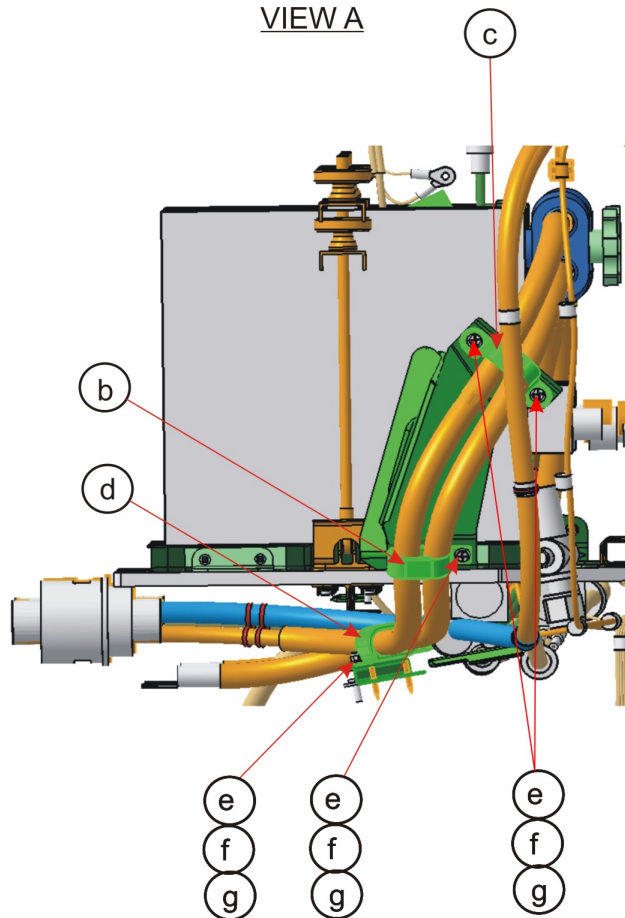


Figure 1: LH BRACKET BATTERY ASSEMBLY 1/2



With SB7X-326
or 7X M1199

Without SB7X-326
or 7X M1199

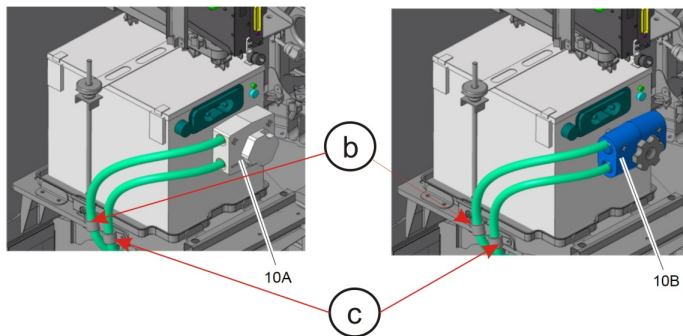


Figure 2: LH BRACKET BATTERY ASSEMBLY 2/2

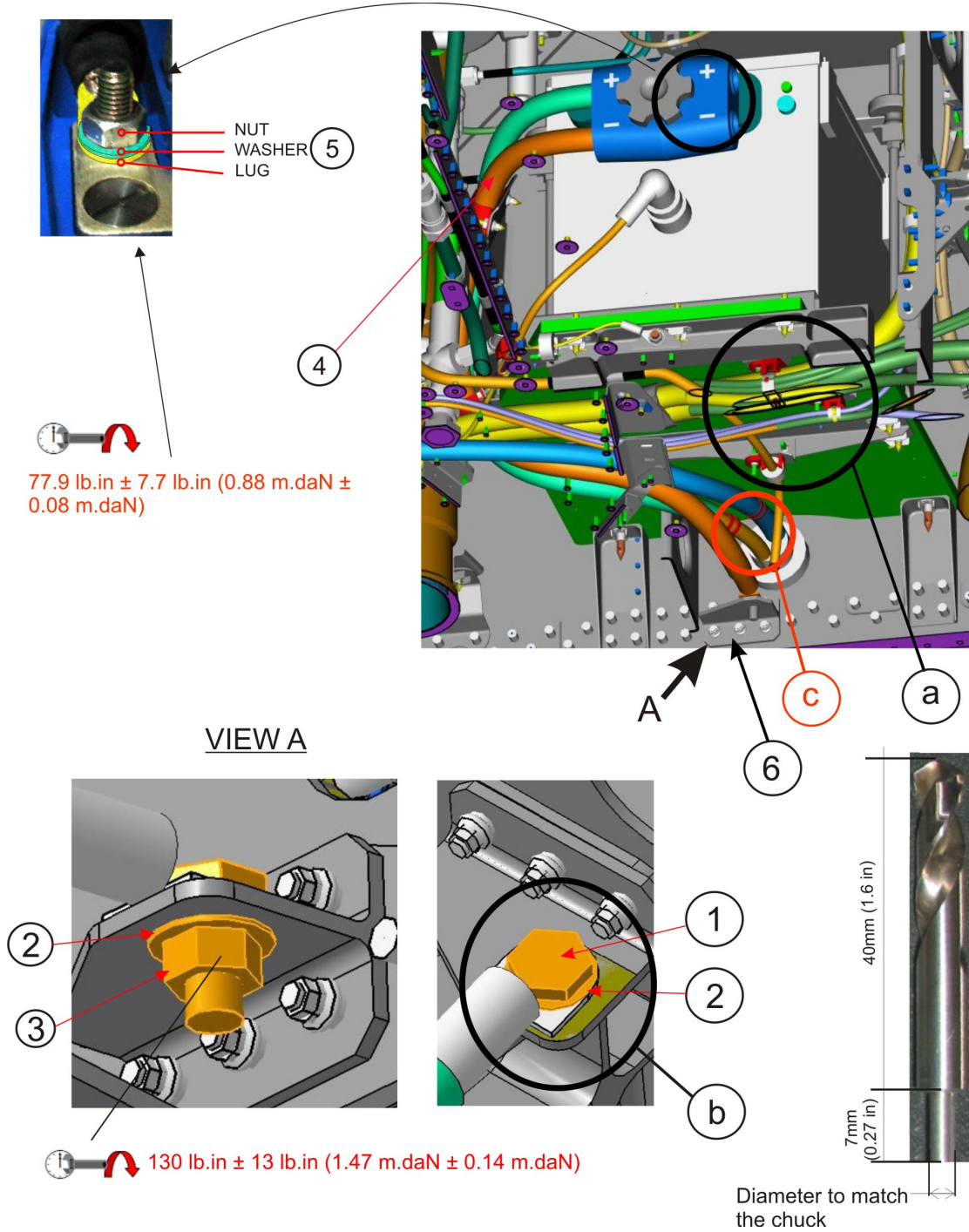


Figure 3: INSTALLATION OF LH NEGATIVE FEEDER