

Project No: **BDHRN002**Job Card No **0030**

Notif.No.: 10049047

Activity: **1001**

Rev No: 20000622

Model.: F900EX

Sheet 1 of 1

A/C Regn: **D-AHRN**

Serial No.: 096

Type: F900EX

Starting Phase: Inspect

Starting Work Centre: FALCON A/C TEAM

**Job Description: GVI Engine 1 & 3 Nacelles & Pylons**

ETOPS A/C: No

RVSM A/C: No

Warranty: -

ATA: 54

Check Type: 2A CHECK

Work Center	
FALCON A/C	

**Zone: 400****Access Required for this task:**

421AR,423AB,424AT,427AR,427BR

## Corrective Action

0001	<b>Task carried out in accordance with the attached Customer Card that quotes the Operator code detailed below.</b>					  Order: 80069288 Operation: 0010 Phase: Inspect - scheduling activity Work Center:FALCON A/C TEAM
	Accomplished		Inspected			
	Pers. No.	Date	Pers. No.	Date		
	Stamp		Stamp			

Completed & Confirmed on SAP IAW MOE 2.13.

**Defect Card Raised**

## Components Removed/Installed

	Part Number	Part Name	S/N	Location	Comm. Off/On
OFF					
ON					
OFF					
ON					
OFF					
ON					
OFF					
ON					

Occurance Report Raised? YES ☐

Operations Above &amp; Notifications Completed IAW MOE 2.13.



OEM Code: 54-00-00-210-810

Operator Code: 54-00-00-210-810-02

Form No: JA-SAP-MTX-002

Printed by: ADAMOVIC G



Printed: 03.09.2012

13:34:17

Print No: 1

Operator: **HERON AVIATION** Work Card No.: **54.0201**  
 Serial No.: **096** Model: **FALCON 900EX** **PKG # 2 2A INSPECTION**  
 Reg No.: **D-AHRN** Workorder No.: \_\_\_\_\_

	Date	A/C HRS	AFL	APH			
Due At	<b>25-NOV-2012</b>	<b>4410:47</b>					
Accomplished							

TECHNICIAN SIGNATURE: \_\_\_\_\_ KIND OF CERTIFICATE & NO.: \_\_\_\_\_

INSPECTED BY: \_\_\_\_\_ KIND OF CERTIFICATE & NO.: \_\_\_\_\_

TECH	INSP	LABOR-HRS HRS.MINS
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**>54-00-00-210-810- GENERAL VISUAL INSPECTION OF THE NO.3 ENGINE**  
**02 NACELLE AND PYLON**

\_\_\_\_\_

REMARKS : \_\_\_\_\_

AMM 54-00-00-210-810

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

### TASK 54-00-00-210-810

## GENERAL VISUAL INSPECTION OF THE ENGINE 1 AND 3 NACELLES AND PYLONS

**CAUTION:** THE PRESENCE OF A CRACK ENTAILS SYSTEMATIC REPAIR.

- IF A CRACK IS FOUND ON A RIVET LOCATED ON LATERAL ENGINE AIR INTAKE, REFER TO SRM (REFER TO **SRM 54-41-02**). ♦
- IF A CRACK IS FOUND ON THE SKIN, CONTACT THE MANUFACTURER.

### 1. OVERVIEW OF THE JOB

Operation codes:

- 54-00-00-210-810-01 engine 1 (**L4EZ**)
- 54-00-00-210-810-02 engine 3 (**R4EZ**)

### 2. LOGISTICS

#### A. References

##### Reference

- **20-31-00-100-804**
- **20-31-00-350-801**
- **20-50-00-300-801**
- **20-60-00-370-803**
- **23-60-01-900-801**
- **54-11-01-900-802**
- **54-11-13-960-801**

##### Designation

- CLEANING OF THE WING AND AIR INTAKE LEADING EDGES
- POLISHING OF WING AND AIR INTAKE LEADING EDGES
- TREATMENT OF SCRATCHES ON CLADDED SKINS
- APPLICATION OF PU66 CELOMER PAINT SCHEME
- REMOVAL / INSTALLATION OF THE STATIC DISCHARGERS**
- REMOVAL / INSTALLATION OF THE ENGINE 1 AND 3 UPPER AND LOWER COWLINGS
- REPLACEMENT OF THE ENGINE 1 AND 3 COWLING SEALS**

#### B. Tools and Ground Support Equipment

##### Reference

- **F7XC202000008**

##### Designation

TOOL BOX

##### Quantity

#### C. Ingredients and Consumable Products

##### Designation

- **TOP COAT PU66**
- **HIGH TEMPERATURE SEALANT**
- **CLEANER**
- **POLISH**
- OR **WHITE POLISHING PASTE NU-SHINE**

##### Additional designation

MULTIPURPOSE  
AA 59318

#### D. Access

##### Reference

- **411AL**
- **413AB**
- **414AT**

##### Designation

ENGINE 1 AIR INTAKE  
ENGINE 1 LOWER COWLING  
ENGINE 1 UPPER COWLING

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

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- [417AL](#) ENGINE 1 AFTERBODY
- [417BL](#) ENGINE 1 AFTERBODY LOWER ACCESS PANEL
- [421AR](#) ENGINE 3 AIR INTAKE
- [423AB](#) ENGINE 3 LOWER COWLING
- [424AT](#) ENGINE 3 UPPER COWLING
- [427AR](#) ENGINE 3 AFTERBODY
- [427BR](#) ENGINE 3 AFTERBODY LOWER ACCESS PANEL

### E. Miscellaneous

- STEPLADDER (LOCAL PROCUREMENT)



- METAL ROD: 4 MM (0.16 IN) DIAMETER WITH ROUNDED END (LOCAL PROCUREMENT)

### 3. PRELIMINARY STEPS

- A. Remove engine cowls ([413AB](#))/([423AB](#))/([414AT](#))/([424AT](#)) (Refer to [TASK 54-11-01-900-802](#)).

### 4. STRUCTURE

- A. Using the stepladder, check each inspected element for corrosion, shocks, traces of impact, cracks and scratches.

#### B. Nacelles

- (1) On the entire external surface of the nacelles check for:
  - (a) Paint condition.
  - (b) Missing or loose rivets.  
If rivets are found missing or loose, refer to SRM (Refer to [SRM 54-41-02](#)).
- (2) On air intake ([411AL](#))/([421AR](#)) leading edge:
  - (a) Clean with **cleaner** (Refer to [TASK 20-31-00-100-804](#)).
  - (b) Check for erosion or scratches (Refer to [TASK 20-50-00-300-801](#)).
  - (c) Polish with **polish** to restore the protection (Refer to [TASK 20-31-00-350-801](#)).
- (3) On air intake ([411AL](#))/([421AR](#)), check:
  - (a) The inner duct for cleanliness, condition of skin, condition of Pt2 probe ([L4EZ2](#))/([R4EZ2](#)).
    - 1 On the inner skin paint coat:
      - If corrosion is found, refer to SRM (Refer to [SRM 51-10-02](#)).
      - If the protective paint is damaged or after corrosion treatment, renew the **top coat PU66** paint scheme (Refer to [TASK 20-60-00-370-803](#)).
    - 2 Check the inner skin for:
      - Missing or loose rivets.  
If rivets are found missing or loose, refer to SRM (Refer to [SRM 54-41-02](#)).
  - (b) The external skin for:

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

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- anti-icing air exhaust louvers for clogging,
- engine cowling rest straps for condition,
- cracks or impact damage.

(c) **Rear air intake duct under engine cowlings:**

- eight bonding cleats,
- supports for condition (engine cowl attachment, Pt2 probe and generator wiring),
- anti-icing duct connection,
- engine air intake ring for condition and security of attachment.

(4) For engine upper cowl (**414AT**)/(**424AT**), check the following:

- (a) Inner and outer skin (condition of the two attachment holes and of the bonding strips, delamination, burn marks). Recondition the inner skin paint coat if blistered (Refer to **TASK 20-60-00-370-803**).
- (b) Both latching pawls.
- (c) Pylon side tie rods.
- (d) Hinge fittings.
- (e) Forward and aft bonding lugs for condition.
- (f) Engine equipment ventilation louvers, no obstruction.
- (g) Drain duct for condition and attachment clamp.
- (h) Metalized bonding seal, if damaged (Refer to **TASK 54-11-13-960-801**).

(5) For engine lower cowl (**413AB**)/(**423AB**), check the following:

- (a) Inner and outer skin (condition of bonding strips and angles, delamination, burn marks). Recondition the inner skin paint coat if blistered (Refer to **TASK 20-60-00-370-803**).
- (b) Inside of goose necks.
- (c) Pylon side locks.
- (d) Open position holding rod, for operation and condition of latching mechanism (pip pin and retaining bead).
- (e) Metalized bonding seal, if damaged (Refer to **TASK 54-11-13-960-801**).
- (f) No obstruction of:
  - engine equipment ventilation louvers,
  - starter-generator ventilation air outlet,
  - oil breather,
  - drain duct.

(6) On afterbody (**417AL**)/(**427AR**), check the following:

- (a) External skin for delamination.
- (b) Check doors (**417BL**) / (**427BR**) giving access to ignitor plugs.
- (c) Opening cowling rest flange.

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

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- (d) Forward frame:
    - attachment ring on engine,
    - eight bonding cleats,
    - junction of starter-generator ventilation duct,
    - latching pawls receptacle of the engine upper cowling.
  - (e) Inner duct skin, for condition.
- If you find corrosion, refer to SRM (Refer to **SRM 54-13-05**) for acceptance criteria.

### C. On each pylon, check the following:

- (1) Upper surface: skin, riveting, fuselage linking brackets, inspection door.
- (2) Lower surface: skin, riveting, junction angles on fuselage, inspection door.
- (3) Leading edge and ram air inlet, on the LH side only.
- (4) Trailing edge.
- (5) Static dischargers (**L505RD**) / (**R505RD**) for condition and security of attachment. If damaged, (Refer to **TASK 23-60-01-900-801**)
- (6) Engine air intake anti-icing duct coupling.
- (7) Engine cowling upper and lower bonding braids.

### D. Engine compartment

- (1) Inspect the front bulkhead:
  - (a) Condition of front edge, cowling seating surface.
  - (b) Condition and security of attachment of mounts.
- (2) Check the engine for security of attachments.
- (3) Check the pylon-to-nacelle connecting seals.
  - (a) Check the attachment and condition of the upper and lower surface pylon-to-nacelle connecting seals (absence of damage or tear).
  - (b) Record the defective seal(s) for replacement at next engine removal.
- (4) Inspect the rear bulkhead:
  - (a) Condition of rear edge, cowling seating surface.
  - (b) Condition of attachment of afterbody to engine.

## 5. ELECTRICAL CIRCUITS

### A. Inspect starter-generators (**L1PA**) / (**R1PA**):

- (1) Attachment and condition of the intake ventilation duct .
- (2) Attachment and condition of the outlet ventilation duct and seal, pegs in position.

## **FALCON 900EX AIRCRAFT MAINTENANCE MANUAL**

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- (3) Attachment and condition of the brushes protection strap.
- (4) Attaching clamp on accessory gearbox safetying.
- (5) Condition of starter generator terminal block cover. Move the cover aside and check that the wiring runs parallele with the generator body.
- (6) Generator wiring for condition and grounding connection cable to the structure for attachment.



- (7) Inspect the electrical wiring:
  - (a) Check the electrical cables for appearance, cleanliness, routing, attachment and marking.
  - (b) Make sure that there is no contact between the electrical cables and the structure.
  - (c) Check the connectors for correct connection.

### **6. HYDRAULIC SYSTEMS**

- A. Check the supply and return lines between pumps and flexible lines for interference.
- B. Check each hydraulic coupling for leaks.

### **7. ENGINE FIRE PROTECTION SYSTEMS**

- A. On fire detector (**L2WG**)/(**R2WG**), check:
  - (1) The connector to the responder body, for safetying.
  - (2) The routing and security of attachment of detector by means of isolating sleeves.
  - (3) The detector body, for contact with the structure.
  - (4) The detector does not include sharp bends (minimum bending radius 10 mm (0.4 in.)).
  - (5) The detector is neither crushed nor damaged.
  - (6) The responder body does not show any traces of crushing.
- B. Check the fire extinguishing lines:
  - (1) For crushing,orientation and damage.
  - (2) For condition and security of attachment.
  - (3) For condition and tightness of couplings.

### **8. FUEL SYSTEM**

- A. Check the engine fuel supply lines for condition, attachment, and routing.
  - (1) Absence of leaks or crushing.
  - (2) Protections, marking.

## **FALCON 900EX AIRCRAFT MAINTENANCE MANUAL**

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### **9. OIL PRESSURE SYSTEM**

- A. Check the oil reservoir pressurization valve drain seal for condition. If the seal is separate, even partially, remove grease and bond using **high temperature sealant**.

### **10. AIR INTAKE ANTI-ICING SYSTEM**

- A. Check the anti-icing lines for security of attachment, condition and routing.
  - (1) Check for leaks and crushing.
  - (2) Condition, tightening of expansion sleeves and attaching clamps.
- B. Check LP anti-icing pressure switch (**L6HA**)/(**R6HA**) and HP anti-icing pressure switch (**L12HA**)/(**R12HA**), for condition and security of attachment.
  - (1) Electrical connector, for correct connection.
  - (2) Attaching clamps, for tightening.
  - (3) Marking.
- C. Check electrical valve (**L3HA**)/(**R3HA**) for condition and security of attachment.
  - (1) Electrical connector, for correct connection.
  - (2) Attaching clamps, for tightening.
  - (3) Marking.

### **11. ENGINE CONTROLS**

- A. Check the TELEFLEX control cables of each engine for condition, routing, abnormal condition (crushing).

### **12. ENGINE EQUIPMENT AND ENGINE DRAINAGE SYSTEM**

- A. Check the drain lines (attachment and condition) in zone 1.
  - (1) Starter-generator drive.
  - (2) Hydraulic pump drive.
  - (3) Hydraulic pump.
  - (4) Fuel pump drive.
  - (5) FCU drive.
  - (6) Rilsan drain of the louvers of LH upper cowling (**414AT**) and RH upper cowling (**424AT**).
- B. Check the Pt2 circuit engine computer decanting bowl, for water, and inspect the line.

### **13. NACELLE AND PYLON DRAIN HOLES**

Refer to **fig. 1**

- A. Check nacelle and pylon drain holes.



## **FALCON 900EX AIRCRAFT MAINTENANCE MANUAL**

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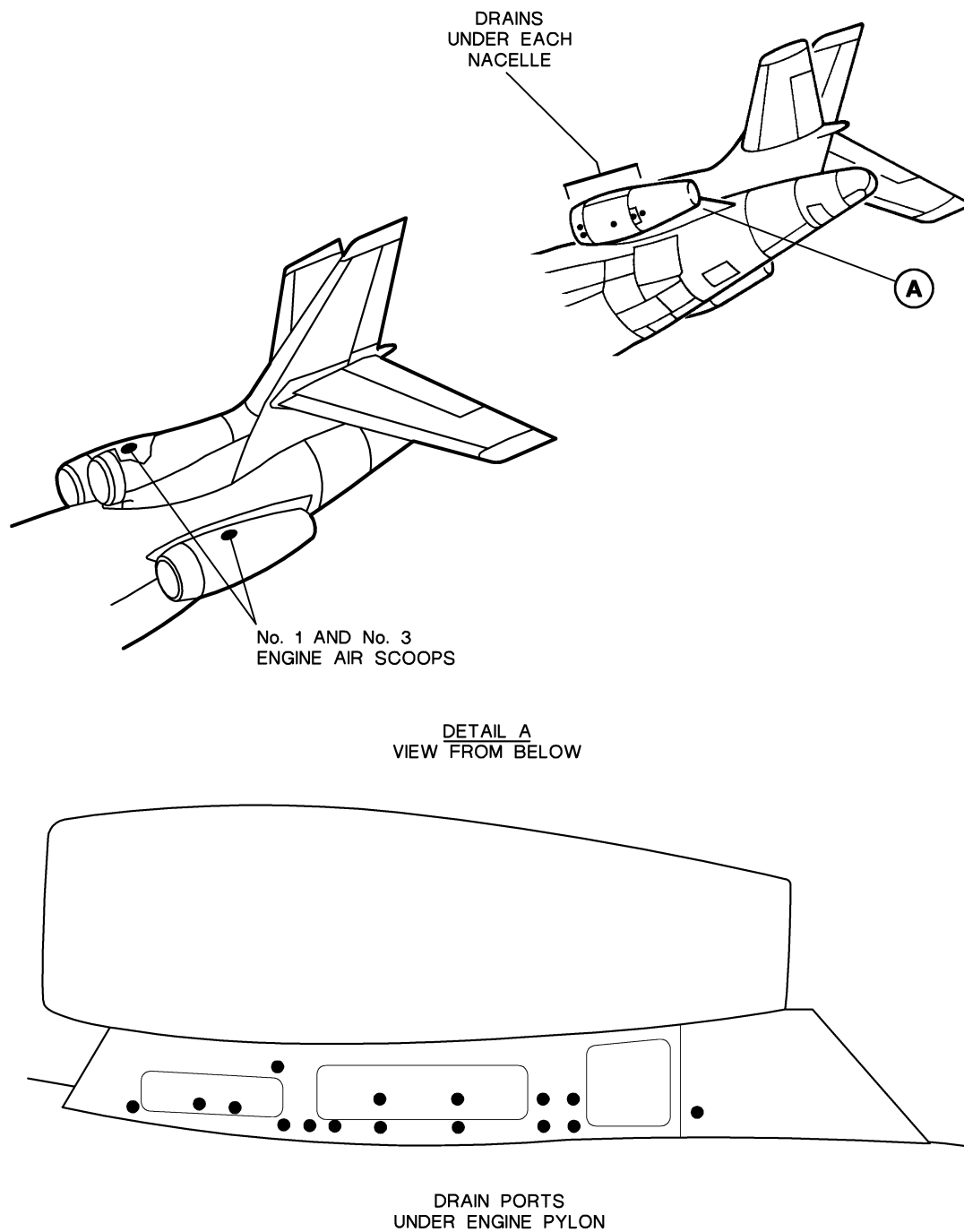
Check that the drain ports are not clogged, visually or using a 4 mm (0.16 in) diameter metal rod with a rounded end.

- (1) Under lateral engine pylons.
- (2) Under lateral engine nacelles:
  - at air intake external skin,
  - at engine lower cowl,
  - at after body doors (**417BL**) / (**427BR**).
  - under each bowl under lateral engine cowling upper air scoops.

### **14. FINAL STEPS**

- A. Make sure that the work area is clean and clear of tools or other items.
- B. Install cowlings (**413AB**)/(**414AT**)/(**423AB**)/(**424AT**) (Refer to **TASK 54-11-01-900-802**).

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL



**Figure 1: NACELLE AND PYLON DRAIN HOLES**