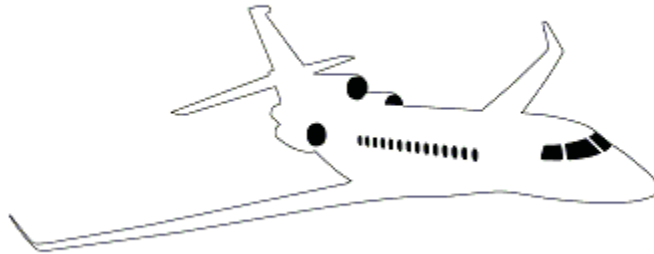


FALCON SERVICE BULLETIN

FALCON 7X FALCON 8X



No 572

OCTOBER 24, 2023

MANDATORY

ATA 36

**PNEUMATIC
BLEED AIR LEAK DETECTION
CHECK OF PYLON BLEED AIR LEAK DETECTORS FOR
INTEGRITY**

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FALCON 7X**7X -572**

**PNEUMATIC
BLEED AIR LEAK DETECTION
CHECK OF PYLON BLEED AIR LEAK DETECTORS FOR INTEGRITY**

Initial issuance

June 26, 2023

List of effective pages:
1 to 12

Erratum

October 03, 2023

List of effective pages:
1 to 13

REASON: Modification of compliance time.

Erratum

October 24, 2023

List of effective pages:
1 to 13

REASON: Modification of the test with the narrow blower nozzle.

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**PNEUMATIC
BLEED AIR LEAK DETECTION
CHECK OF PYLON BLEED AIR LEAK DETECTORS FOR INTEGRITY**

1. PLANNING INFORMATION**A. EFFECTIVITY**

This Service Bulletin is applicable to:

- 7X aircraft with serial numbers 1 thru 289 and 291 thru 293,
- 8X aircraft with serial numbers 401 thru 466, 470, 474 thru 480.

B. REASON

A batch of Bleed Air Leak Detectors (BALD) has been identified with a quality escape that may degrade their operation.

The purpose of this Service Bulletin is to check the four pylon BALDs and to replace any that are defective.

C. DESCRIPTION

The operation consists in:

- checking the correct operation of the four pylon BALD (**L9203HU**), (**L9303HU**) and (**R9203HU**), (**R9303HU**).

NOTE: Two operators are necessary to perform the BALD loop tests.

- replacing the defective BALD loops.

D. COMPLIANCE

Mandatory as prescribed by the Airworthiness Authorities of the country of registration of the aircraft.

Recommended to be performed within 100 months after the date of release of this Service Bulletin, but not exceeding 8780 FH since the aircraft first delivery date, unless otherwise specified in an Airworthiness Directive issued by the country of registration of the aircraft.

E. APPROVAL

The technical content of this document is approved under the authority of the DOA ref. 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 that may be performed on this occasion.

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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.
 Telephone:
 • U.S.A. and CANADA: 1-800-800-4036
 • MEXICO: 001-800-800-4036
 • Other countries: 1-201-541-4809
 Email to: Customer.Care@DassaultFalconJet.com

Other continents: DASSAULT AVIATION
 Falcon Spares
 54, AVENUE MARCEL DASSAULT
 B.P. 24
 33701 MERIGNAC Cedex (FRANCE)
 Telephone: 33 (0)5.56.18.44.44
 Email to: dafsorders@dassault-aviation.com

Price and availability on request.

H. TOOLING

- TOOL BOX (**TO-20-008**)
- refer to § 3.

I. WEIGHT AND BALANCE

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

J. REFERENCES

Aircraft Maintenance Manual:

- GENERAL MAINTENANCE AND SAFETY PRECAUTIONS (Refer to **TASK 20-00-00-910-801**)
- USE OF THE AIRCRAFT MAINTENANCE PROCEDURES (Refer to **TASK 20-00-00-910-803**)
- ENERGIZATION / DE-ENERGIZATION OF THE AIRCRAFT SYSTEMS WITH THE GPU (Refer to **TASK 24-00-00-860-803**)
- PNEUMATIC SYSTEM MAINTENANCE AND SAFETY PRECAUTIONS (Refer to **TASK 36-00-00-910-801**)
- REMOVAL / INSTALLATION OF THE BLEED AIR LEAK DETECTION LOOPS (Refer to **TASK 36-22-05-900-801**)

Fault Isolation Manual

- MAINTENANCE MESSAGES (SECTION 36-11) (Refer to **SDS 36-11-00 (FIM)**)

2. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL INSTRUCTIONS AND SAFETY PRECAUTIONS

- (1) Obey the general maintenance and safety precautions (Refer to [TASK 20-00-00-910-801](#)).
- (2) Obey the pneumatic system maintenance and safety precautions (Refer to [TASK 36-00-00-910-801](#)).

B. PRELIMINARY STEPS

Refer to **fig. 1**, **fig. 2**, **fig. 3** and **fig. 4**

- (1) The aircraft must be in the maintenance configuration (Refer to [TASK 20-00-00-910-803](#)).
- (2) Remove pylon lower access panels (**432AB**) and (**433AB**) to get access to the LH pylon BALD loops (**L9203HU**) and (**L9303HU**) (**fig. 3**).
- (3) Remove pylon lower access panels (**442AB**) and (**443AB**) to get access to the RH pylon BALD loops (**R9203HU**) and (**R9303HU**) (**fig. 4**).
- (4) Assemble the two hot air guns with their nozzle (refer to § 3.B.), as follows:

NOTE: The two blower nozzles differ in width to match the accessibility of the test points. Changing them requires cooling the gun. To avoid the cooling time when changing blower nozzles, two guns are provided, one per blower nozzle:

- one hot air gun with the interface (**a-fig. 1**), the pipe (**b-fig. 1**) and the wider blower nozzle (**c-fig. 1**),
- one hot air gun with the interface (**a-fig. 2**), the pipe (**b-fig. 2**) and the narrower blower nozzle (**c-fig. 2**).

- (5) Energize the aircraft (Refer to [TASK 24-00-00-860-803](#)).

C. CHECK

Refer to **fig. 1**, **fig. 2**, **fig. 3** and **fig. 4**

- (1) Perform a visual inspection:
 - (a) Inspect the routing of the rear and front BALD loops to check that there is no interference with the aircraft structure between two grommets.
NOTE: An example of the routing area to be inspected between two grommets is shown in figure 4 (**a-fig. 4**).
 - (b) Inspect the surrounding area of each BALD loop for possible overheating or burn marks.
 - (c) If any suspicious traces are found, contact commandcenter@dassault-aviation.com or commandcenter@dassaultfalconjet.com.
 - (d) Inspect the surrounding area of each test point for possible interference between the hot air gun and the temperature sensitive items: piping, harnesses.

NOTE: The test procedure must be performed on the upper and lower BALD loops in the LH and RH pylons, at the following points shown in **fig. 3** and **fig. 4**:

- upper loops: test points 1, 2 and 3,
- lower loops: test points 4, 5 and 6.

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- (e) If required, use heat shields such as protective plates or thermal blankets to be placed between the hot air gun and the equipment to be protected.

WARNING: TAKE CARE NOT TO USE THE HOT AIR GUN NEAR FLAMMABLE LIQUIDS OR IN AN EXPLOSIVE ENVIRONMENT (FUMES, GASES, DUST...).

CAUTION: THE HOT AIR GUN SHOULD BE USED AS CLOSE AS POSSIBLE TO THE TEST AREA (ON A LARGE PLATFORM) AND THE BLOWER NOZZLES SHOULD NOT BE FACING A DRAUGHT. THIS WILL PREVENT ANY VARIATION IN AMBIENT TEMPERATURE THAT WOULD CAUSE A CHANGE IN THE REFERENCE TEMPERATURE.

- (2) Slide the switch (**sh-fig. 1**) of the hot air gun with the wide blower nozzle (**c-fig. 1**) to position "2" to begin heating.

- (3) Adjust the temperature of the hot air gun with wide blower nozzle as follows:

- Set the ventilation to level 3.
- Set the hot air gun set point temperature to a minimum of 400°C (752°F), using the set of buttons (**st-fig. 1**) and LCD displays (**ld-fig. 1**) (refer to the instruction manual delivered with the tool case).
- Using a digital thermometer, increase/decrease the set point temperature in 5°C (41°F) increments, until a temperature of 175°C (+9/-8°C) (347°F (+48.2/-46.4)°F) is measured at the middle of the blower nozzle.

NOTE: The temperature probe must be positioned at the center of the blower nozzle (**c-fig. 1**), as shown on **fig. 1**.

- (4) Test of the BALD loops with the wide blower nozzle:

WARNING: IF THE SYSTEM WAS IN OPERATION, THE ZONE WILL BE HOT. PUT ON THERMAL-RESISTANT GLOVES TO PREVENT BURNS.

WARNING: THE AIR COMING OUT OF THE HOT AIR GUN INTERFACE (A-FIG.1) IS VERY HOT. BE CAREFUL NOT TO POINT THE HOT AIR OUTLETS (E-FIG.1) AT YOUR FACE.

CAUTION: TAKE CARE NOT TO PUSH THE BALD LOOPS WITH THE BLOWER NOZZLE. THE NOZZLE MUST BE BROUGHT GENTLY INTO CONTACT WITH THE TUBES.

CAUTION: WHEN HEATING THE BALD LOOPS, THE BLOWER NOZZLE MUST BE POSITIONED SO THAT HEAT IS APPLIED AT A DISTANCE OF MORE THAN 2.5 CM (1 IN) FROM THE SENSOR GROMMETS AND MORE THAN 10 CM (4 IN) FROM THE BALD LOOP CONNECTORS.

NOTE: Each of the following points must be tested:

- LH upper loop (**L9203HU**): test points 1 and 2 (**fig. 3**),
- LH lower loop (**L9303HU**): test points 4, 5 and 6 (**fig. 3**),
- RH upper loop (**R9203HU**): test point 3 (**fig. 4**),
- RH lower loop (**R9303HU**): test points 4, 5 and 6 (**fig. 4**).

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- (a) Position the wide blower nozzle of the hot air gun over the BALD loop (**L9203HU**), (**R9203HU**), (**L9303HU**) and/or (**R9303HU**) at the first test point, using a heat shield to protect the surrounding equipment, if required.
NOTE 1: For each point tested, the BALD loop must be as close as possible to the center of the nozzle airflow, as shown on **fig. 1**.
NOTE 2: Example of use of a heat shield (**b-fig. 3**) to protect a wiring.
- (b) Heat the test point for a minimum of 60 seconds and a maximum of 120 seconds (use a chronometer).
NOTE: If the heated impedance triggers the CAS message before 60 seconds, the test can be stopped.
- (c) Make sure that the amber "**BLEED: PYLON 1 HI TEMP**" or "**BLEED: PYLON 3 HI TEMP**" CAS message shows on a Primary Display Unit LH PDU (**L101FD**)/RH PDU (**R101FD**).
- (d) Remove the hot air gun from the test point as soon as the CAS message is triggered or when the maximum heating time of 120 seconds is reached.
- (e) If the CAS message does not show before the 120 seconds time-out, tag the failed BALD loop which will be replaced when all the other BALD loops have been tested (refer to step 2.D.).
- (f) If the CAS message shows during the test, the BALD loop is OK. Go to the next step.
- (g) Let the tested BALD loop cool for at least 6 minutes before starting a test on another point.
- (h) Make sure that the amber "**BLEED: PYLON 1 HI TEMP**" or "**BLEED: PYLON 3 HI TEMP**" CAS message is no longer shown on the PDUs.
- (i) If the CAS message does not disappear when the BALD loop has returned to ambient temperature, troubleshoot the bleed air leak detection system (Refer to **SDS 36-11-00 (FIM)**).
- (j) Inspect the test area for any burns that may have been caused by the hot air gun.
- (k) If any suspicious traces are found, contact commandcenter@dassault-aviation.com or commandcenter@falconjet.com.
- (5) Adjust the hot air gun temperature and test all the other test points (refer to steps 2.C.(3) and 2.C.(4)).
- (6) Once all the test points that require the wide blower nozzle have been checked, slide the switch (**sh-fig. 1**) to the OFF position and stow the hot air gun in a safe location to cool down.
- (7) Slide the switch (**sh-fig. 2**) of the hot air gun with the narrow blower nozzle (**c-fig. 2**) to position "2" to begin heating.
- (8) Adjust the temperature of the hot air gun with narrow blower nozzle as follows:
 - (a) Set the ventilation to level 3.
 - (b) Set the hot air gun set point temperature to a minimum of 400°C (752°F), using the set of buttons (**st-fig. 2**) and LCD displays (**ld-fig. 2**) (refer to the instruction manual delivered with the tool case).

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- (c) Using a digital thermometer, increase/decrease the set point temperature in 5°C (41°F) increments, until a temperature of 175°C (+9/-8°C) (347°F (+48.2/-46.4)°F) is measured at the middle of the blower nozzle.

NOTE: The temperature probe must be positioned at the center of the blower nozzle (**c-fig. 2**), as shown on **fig. 2**.

- (9) Test of the BALD loops with the narrow blower nozzle:

WARNING: IF THE SYSTEM WAS IN OPERATION, THE ZONE WILL BE HOT. PUT ON THERMAL-RESISTANT GLOVES TO PREVENT BURNS.

WARNING: THE AIR COMING OUT OF THE HOT AIR GUN INTERFACE (A-FIG.2) IS VERY HOT. BE CAREFUL NOT TO POINT THE HOT AIR OUTLETS (E-FIG.2) AT YOUR FACE.

CAUTION: TAKE CARE NOT TO PUSH THE BALD LOOPS WITH THE BLOWER NOZZLE. THE NOZZLE MUST BE BROUGHT GENTLY INTO CONTACT WITH THE TUBES.

CAUTION: WHEN HEATING THE BALD LOOPS, THE BLOWER NOZZLE MUST BE POSITIONED SO THAT HEAT IS APPLIED AT A DISTANCE OF MORE THAN 2.5 CM (1 IN) FROM THE SENSOR GROMMETS AND MORE THAN 10 cm (4 in) FROM THE BALD LOOP CONNECTORS.

NOTE: Each of the following points must be tested:

- LH upper loop (**L9203HU**), test point 3 (**fig. 3**),
- RH upper loop (**R9203HU**), test points 1 and 2 (**fig. 4**).

- (a) Position the narrow blower nozzle of hot air gun over the BALD loop (**L9203HU**) and/or, (**R9203HU**) at the first test point, using a heat shield to protect the surrounding equipment, if required.

NOTE 1: For each point tested, the BALD loop must be as close as possible to the center of the nozzle airflow, as shown on **fig. 2**.

NOTE 2: Example of use of a heat shield (**b-fig. 3**) to protect a wiring.

- (b) Heat the test point for a minimum of 60 seconds and a maximum of 120 seconds (use a chronometer).

NOTE: If the heated impedance triggers the CAS message before 60 seconds, the test can be stopped.

- (c) Make sure that the amber "**BLEED: PYLON 1 HI TEMP**" or "**BLEED: PYLON 3 HI TEMP**" CAS message shows on a Primary Display Unit LH PDU (**L101FD**)/RH PDU (**R101FD**).

- (d) Remove the hot air gun from the test point as soon as the CAS message is triggered or when the maximum heating time of 120 seconds is reached.

- (e) If the CAS message does not show before the 120 seconds time-out, remove the equipment to get access to the BALD loop area with the wide blower nozzle.

- (f) Test the point previously tested failed with hot air gun equipped with the wide blower nozzle by positioning the nozzle over the BALD loop using a heat shield to protect the surrounding equipment, if required.

- (g) If the CAS message still does not show after this new test, tag the failed BALD loop which will be replaced when all the other BALD loops have been tested (refer to step 2.D.).

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- (h) If the CAS message shows during the test, the BALD loop is OK. Go to the next step.
 - (i) Let the tested BALD loop cool for at least 6 minutes before starting a test on another point.
 - (j) Make sure that the amber "**BLEED: PYLON 1 HI TEMP**" or "**BLEED: PYLON 3 HI TEMP**" CAS message is no longer shown on the PDUs.
 - (k) If the CAS message does not disappear when the BALD loop has returned to ambient temperature, troubleshoot the bleed air leak detection system (Refer to [SDS 36-11-00 \(FIM\)](#)).
 - (l) Inspect the test area for any burns that may have been caused by the hot air gun.
 - (m) If any suspicious traces are found, contact commandcenter@dassault-aviation.com or commandcenter@falconjet.com.
- (10) Adjust the hot air gun temperature and test all the other test points (refer to steps 2.C.(8) and 2.C.(9)).
- (11) Once all the test points that require the narrow blower nozzle have been checked, slide the switch (**sh-fig. 2**) to the OFF position and stow the hot air gun in a safe location to cool down.

D. REPLACEMENT OF A BALD LOOP

WARNING: LET THE FAILED BALD LOOP COOL TO AMBIENT TEMPERATURE BEFORE TOUCHING IT. THERE IS A RISK OF BURNS.

CAUTION: MAKE SURE THAT THE REPLACEMENT BALD LOOP IS SERVICEABLE (MANUFACTURED AFTER FEBRUARY 1ST 2021).

CAUTION: MAKE THE REMOVED BALD LOOP(S) UNSERVICEABLE.

- (1) De-energize the aircraft systems (Refer to [TASK 24-00-00-860-803](#)).
- (2) Let the BALD loop cool for at least 6 minutes before replacing it.
- (3) Replace the failed BALD loop ([L9203HU](#))/([R9203HU](#))/([L9303HU](#))/([R9303HU](#)) with a serviceable one (Refer to [TASK 36-22-05-900-801](#)).
- (4) Make the removed BALD loop(s) unserviceable.

E. FINAL STEPS

Refer to **fig. 3** and **fig. 4**

- (1) As applicable, de-energize the aircraft systems (Refer to [TASK 24-00-00-860-803](#)).
- (2) Remove any heat shields and other foreign components from the pylons.
- (3) Install pylon lower access panels ([432AB](#)) and ([433AB](#)) (**fig. 3**).
- (4) Install pylon lower access panels ([442AB](#)) and ([443AB](#)) (**fig. 4**).

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

Fill out the electronic Service Bulletin reply form accessible from the "Service Bulletin" page on the Falcon portal or register SB implementation at Sbconfiguration@dassault-aviation.com, providing all useful information for aircraft identification:

- aircraft type and serial number,
- SB compliance: complete or section(s) applied,
- remarks,
- compliance date,
- service center.

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3. MATERIAL INFORMATION
A. EQUIPMENT

LOCATION		P/N	KEY WORD
LH SIDE	FRONT pylon BALD loop	04-90022-9100C	LH pylon bleed air leak detector (L9203HU)
	REAR pylon BALD loop	04-90022-9250C	LH pylon bleed air leak detector (L9303HU)
RH SIDE	FRONT pylon BALD loop	04-90022-9100C	RH pylon bleed air leak detector (R9203HU)
	REAR pylon BALD loop	04-90022-9250C	RH pylon bleed air leak detector (R9303HU)

CAUTION: MAKE THE REMOVED BALD LOOP(S) UNSERVICEABLE.

NOTE: The quantity of BALD loops to be ordered will depend on the number detected as faulty during the checks.

B. RENTAL TOOL

NEW P/N	QTY	KEY WORD
F7XC202059057A1	1	Reflector nozzle for hot air gun (TO-20-057) (Tool case with two hot air guns and their nozzle)

C. LOCAL PROCUREMENT
(1) Personal Protective Equipment:

- Thermal-resistant gloves.

(2) Tools:

- Digital thermometer: 200 (-16/+0)°C (392 (-60.8/+0)°F),
or
Digital thermocouple type K.
- Heat shields.

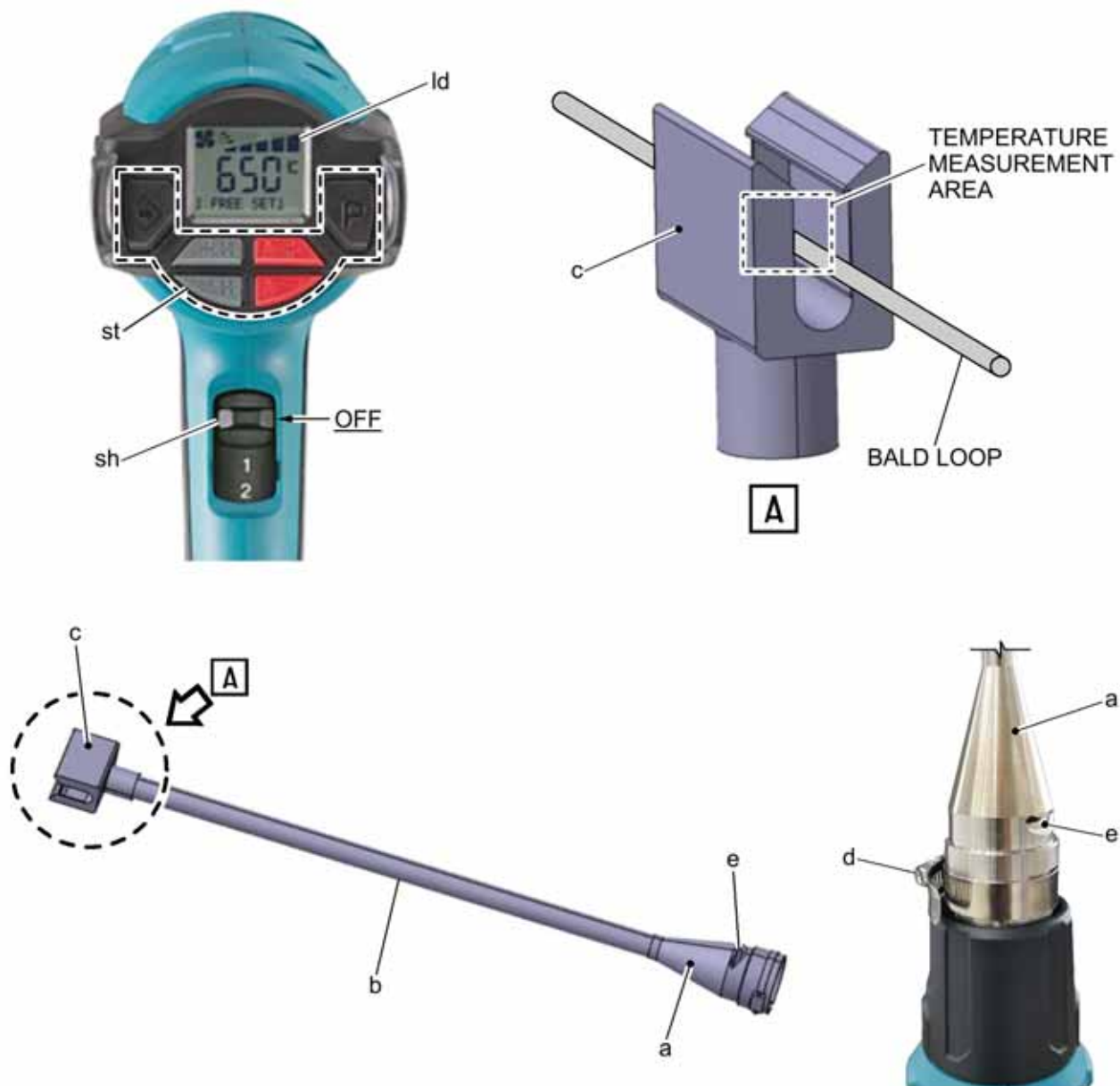


Figure 1: USE OF HOT AIR GUN WITH WIDE BLOWER NOZZLE

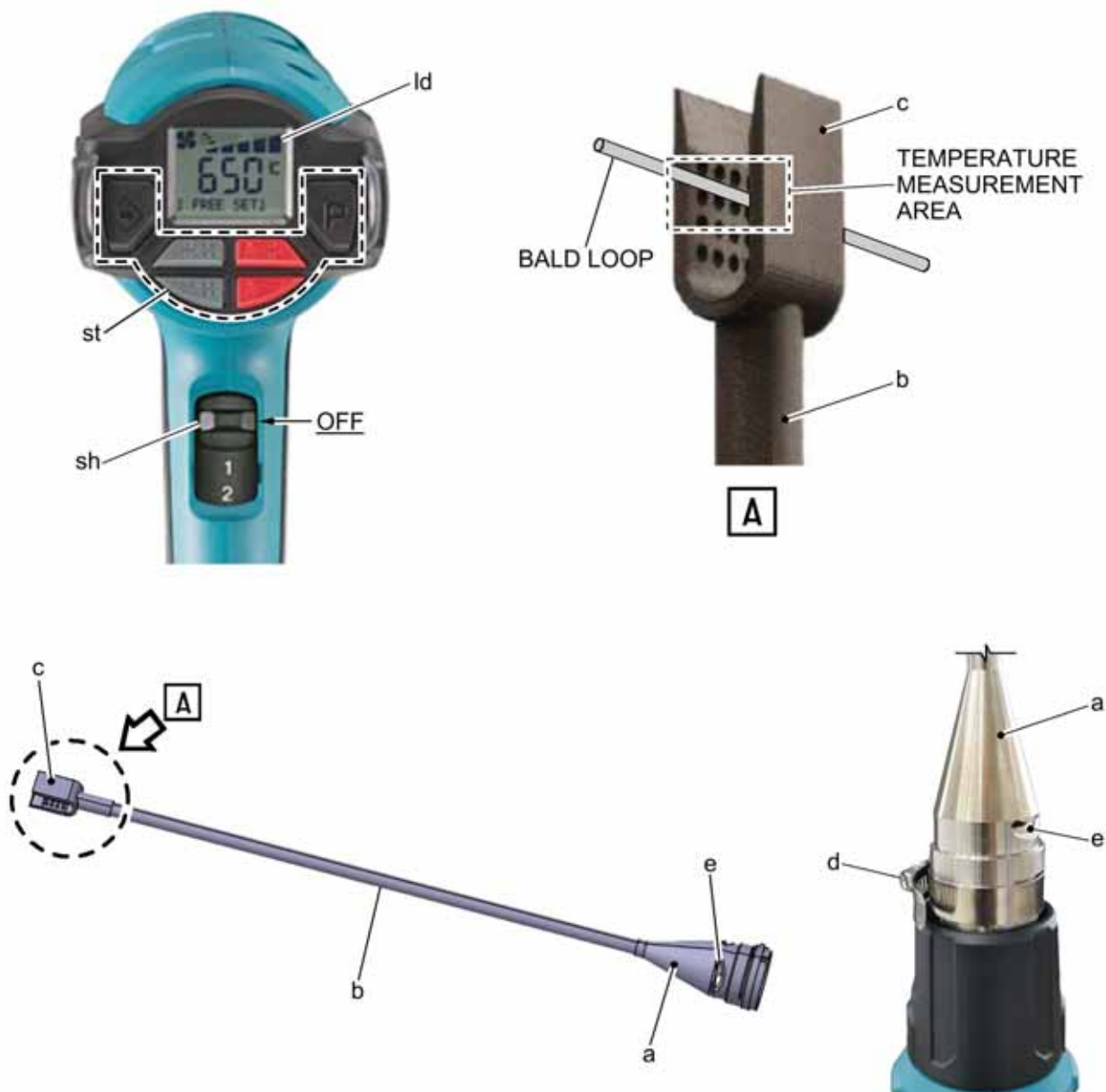


Figure 2: USE OF HOT AIR GUN WITH NARROW BLOWER NOZZLE

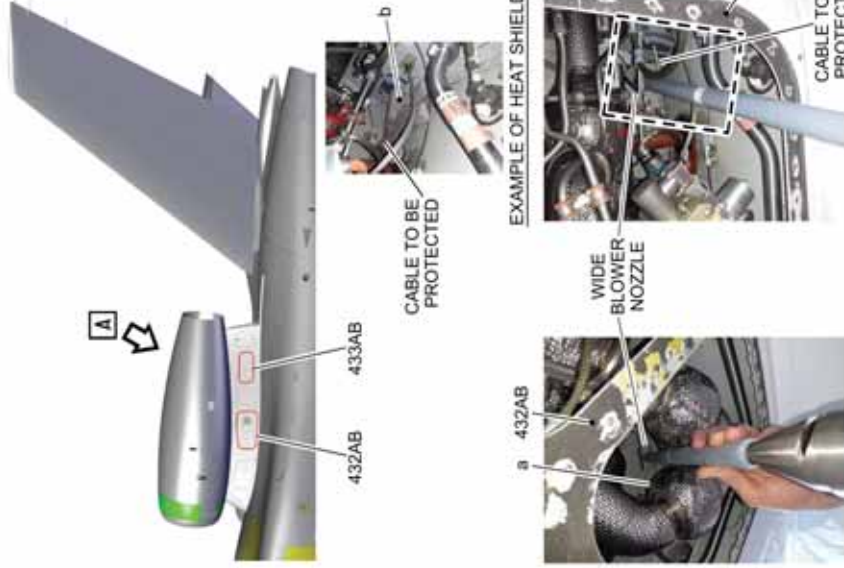
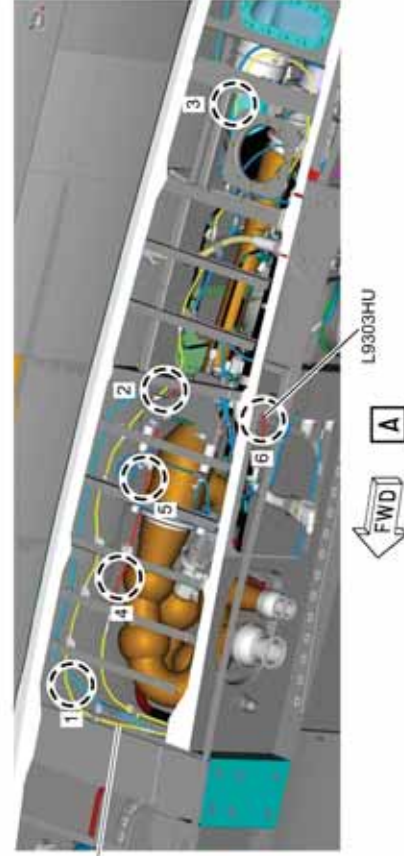
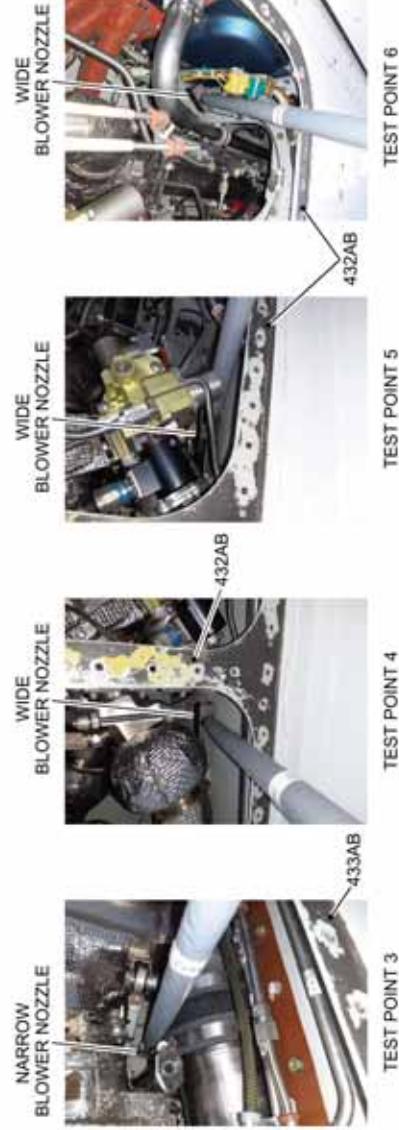


Figure 3: TEST POINTS IN LH PYLON



UPPER LOOP:
WIDE NOZZLE: TEST POINTS 1-2
NARROW NOZZLE: TEST POINT 3
LOWER LOOP:
WIDE NOZZLE: TEST POINTS 4-5-6
VIEWS OF ACCESSES TO TEST
POINTS THROUGH LOWER
DOORS OF THE LH PYLON



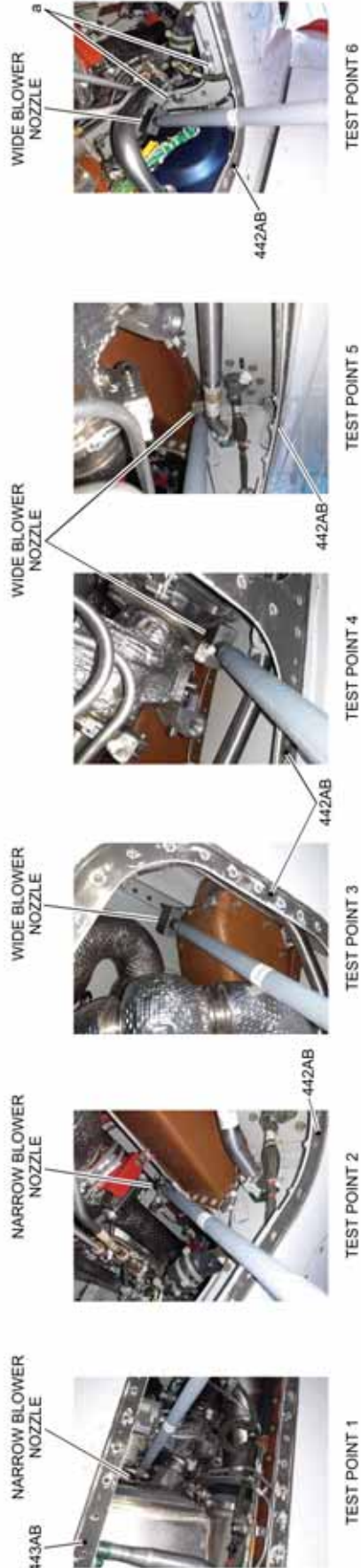
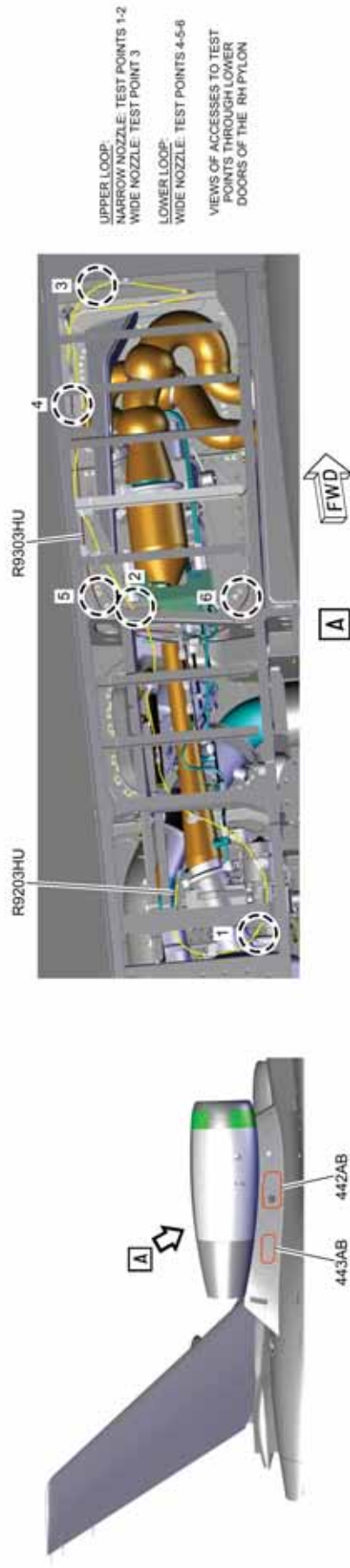


Figure 4: TEST POINTS IN RH PYLON