

## Falcon 2000S AIRCRAFT MAINTENANCE MANUAL

### TASK 20-31-00-100-801 CLEANING OF THE AIRCRAFT EXTERIOR

**WARNING:** SERIOUS INJURY TO PERSONNEL CAN RESULT FROM OPERATIONS PERFORMED ON ACTIVE FLIGHT CONTROLS IF THE FOLLOWING INSTRUCTIONS ARE NOT OBSERVED:

- THE FLIGHT CONTROLS MANEUVERING SPACES MUST BE UNOBSTRUCTED,
- APPROPRIATE SAFETY FENCES AND WARNING LIGHTS MUST BE INSTALLED AROUND THE AIRCRAFT,
- THE PERSONNEL INSIDE THE FENCED AREA MUST BE AWARE OF THE ONGOING OPERATIONS AND ASSOCIATED HAZARDS.

#### 1. OVERVIEW OF THE JOB

This procedure is part of the aircraft exterior maintenance plan. For a complete view of this plan, refer to the standard practices for maintenance of exterior paint (Refer to SDS 20-60-03).

**NOTE:** Do not wash the aircraft exterior in the following conditions:

- in cold weather,
- in hot weather and particularly under direct sunlight,
- in very windy weather.

Aircraft cleaning will prevent deterioration of the paint finish and keep the risk of corrosion to a minimum. When possible, it is recommended to clean the aircraft exterior before inspection or lubrication operations.

Cleaning the aircraft exterior includes:

- cleaning the fuselage, wings, engine cowlings and empennages,
- cleaning the windshields and windows,
- cleaning the landing lights transparencies and navigation lights transparencies,
- application of CIC TYPE IA and/or CIC TYPE II,
- brightening the slats and engine air intakes.

There are two methods to clean the aircraft exterior:

#### A. WET CLEANING

The aircraft exterior can be cleaned using:

- conventional equipment such as a washing apparatus, with a rinsing water hose nozzle delivering a pressure  $\leq 3$  bar (43.5 psi), or brushes and washing products.

Cleaning the aircraft exterior with conventional equipment is time-consuming and several operators may be necessary to do the task.

OR

- high-pressure equipment such as washing equipment with a pressurization/heating system (equipped, if appropriate, with a foam gun and a rotating brush) and washing products.

Cleaning the aircraft exterior with high-pressure equipment cleans the aircraft quickly, dislodging then dispersing dirt, grease or any other form of contamination. It enables the aircraft to be cleaned in less time, with fewer operators, and uses less water.

However, many components requiring lubrication are located in exposed areas (landing gear well, lower surface) which attract dirt.

When these areas are cleaned, the pressure of the jet can drive out grease from bearings and cause impurities to enter actuator seals, electrical connections, and other equipment.

Breaking the grease film on the actuator rods or on the shock absorbers can have an adverse effect on the performance of the seals.

The risk of infiltration of the cleaning product between surfaces in contact or structural seals can cause corrosion to develop if unsuitable washing products are used.

Improper use of pressure washing (excessive pressure, minimum distance between nozzle and aircraft not observed, cleaning of landing gear wells, etc.) may have serious adverse effects on aircraft components and

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on the structure.

Consequently, if you want to clean the aircraft exterior with high-pressure equipment, limit cleaning to the fuselage in the zones where equipment is not directly exposed to the water jet.

#### **B. DRY CLEANING**

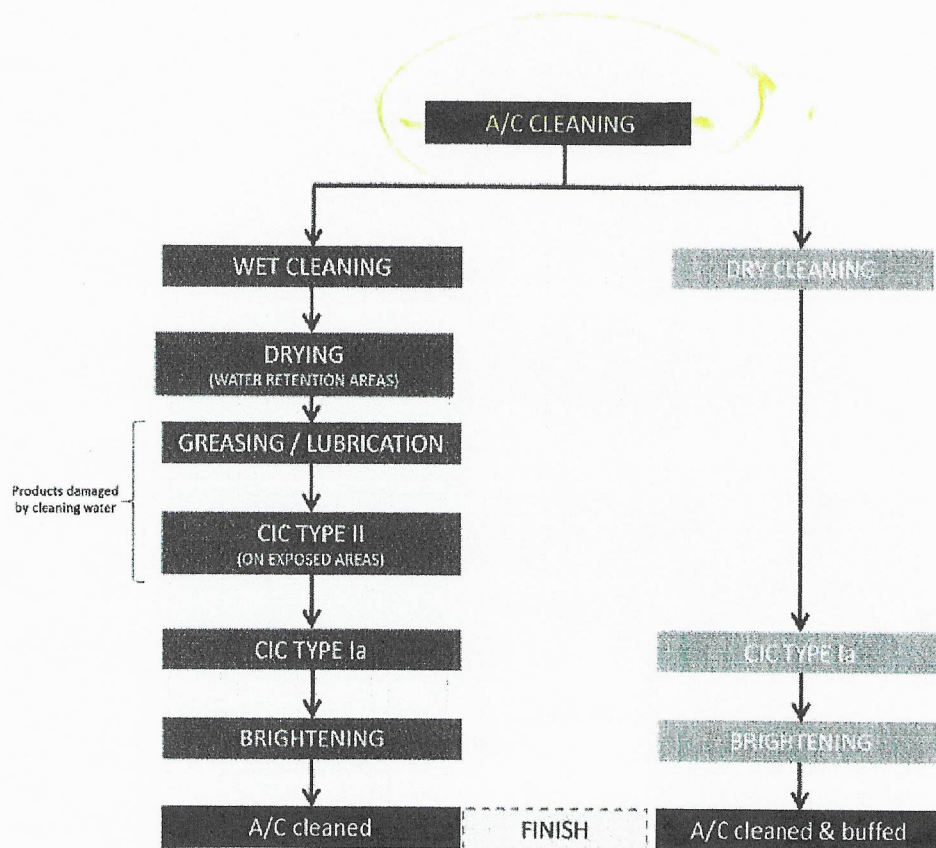
The aircraft exterior can also be cleaned using dry cleaning products.

Dry cleaning products increase paint durability thanks to their buffing properties (Refer to **TASK 20-60-00-370-830**).

**NOTE 1:** Dry cleaning products are suitable to remove any de-icing fluid.  
When an A/C has been cleaned and protected regularly with dry cleaning products, the de-icing fluid tends to be less aggressive. This is because the pores of the skin have been filled with dry cleaning product, thus preventing the de-icing fluid from adhering to the skin. The same phenomenon occurs during icing.

**NOTE 2:** Compared to wet cleaning, dry cleaning eliminates the need for drying, greasing/lubricating and **CIC TYPE II** on-condition application (that could be damaged by water).

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**Figure 1: CLEANING OF THE AIRCRAFT EXTERIOR**

## 2. LOGISTICS

### A. References



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Reference	Designation
• <u>10-10-00-910-801</u>	PARKING THE AIRCRAFT
• <u>20-31-00-100-803</u>	CLEANING OF THE AIRCRAFT EXTERIOR USING HIGH PRESSURE EQUIPMENT
• <u>20-31-00-350-801</u>	BRIGHTENING/POLISHING OF THE WING AND AIR INTAKE LEADING EDGES
• <u>20-31-00-910-801</u>	ON-GROUND DE-ICING AND ANTI-ICING TREATMENT
• <u>20-60-03 (SDS)</u>	MAINTENANCE OF THE AIRCRAFT EXTERIOR PAINT
• <u>20-60-10-370-801</u>	GENERAL RULES FOR APPLICATION OF CORROSION INHIBITOR COMPOUND
• <u>20-60-00-370-830</u>	REACTIVE POLYMER TREATMENT FOR EXTERNAL SURFACES
• <u>27-00-00-910-801</u>	FLIGHT CONTROL SYSTEM MAINTENANCE AND SAFETY PRECAUTIONS
• <u>27-50-00-860-802</u>	EXTENSION / RETRACTION OF THE SLATS / FLAPS FOR MAINTENANCE
• <u>27-53-01-220-801</u>	CLEANING / CHECK OF THE FLAP SCREW JACK ACTUATING SCREW
• <u>27-60-00-860-801</u>	EXTENSION / RETRACTION OF THE AIRBRAKES FOR MAINTENANCE
• <u>32-10-00-640-801</u>	LUBRICATION OF THE MAIN LANDING GEARS (MLG) AND MLG DOORS
• <u>32-10-00-860-801</u>	MANUAL OPENING / CLOSING OF THE MLG DOORS
• <u>32-20-00-640-801</u>	LUBRICATION OF THE NOSE LANDING GEAR (NLG) AND NLG DOORS
• <u>34-32-01-100-802</u>	CLEANING OF THE EVS CAMERA WINDOW (A/C with FalconEye EVS (M-OPT61))
• <u>34-32-05-100-801</u>	CLEANING OF THE INFRARED WINDOW (IRW) (A/C with COLLINS EVS)
• <u>53-00-00-370-801</u>	APPLICATION OF CORROSION INHIBITOR COMPOUND IN FUSELAGE AREAS
• <u>54-11-00-610-801</u>	SERVICING OF THE ENGINE COWLINGS
• <u>55-20-03-640-802</u>	LUBRICATION OF THE ELEVATOR CONTROL SURFACE HINGES
• <u>55-40-05-640-802</u>	LUBRICATION OF THE RUDDER CONTROL SURFACE HINGES
• <u>56-00-00-100-801</u>	CLEANING OF WINDSHIELD, WINDOWS AND TRANSPARENT FAIRINGS
• <u>57-00-00-370-801</u>	APPLICATION OF CORROSION INHIBITOR COMPOUND IN WING AREAS
• <u>57-41-13-640-801</u>	LUBRICATION OF THE SLAT MECHANISMS
• <u>57-55-13-640-801</u>	GREASING / LUBRICATION OF FLAP ROLLERS AND TRACKS
• <u>57-60-05-640-802</u>	LUBRICATION OF THE AILERON CONTROL SURFACE HINGES
• <u>57-70-03-640-801</u>	LUBRICATION OF THE AIRBRAKE HINGES

#### B. Ingredients and Consumable Products

Designation	Additional designation
• <u>EXTERNAL AIRCRAFT CLEANER</u>	
• <u>CIC TYPE II</u>	
• <u>CIC TYPE IA</u>	
• <u>P-D-680B</u>	WHITE SPIRIT
• <u>HYDRAULIC FLUID</u>	MIL-PRF-5606
• <u>LUBRICATING OIL</u>	
• <u>ADHESIVE TAPE 2230</u>	
• <u>ETHYL ALCOHOL</u>	O E 760/D
• <u>DRY CLEANING PRODUCT</u>	

#### C. Access

Reference	Designation
• <u>731AB</u>	LH MLG MAIN DOOR



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- **741AB** RH MLG MAIN DOOR

#### D. Miscellaneous

- LINT-FREE CLOTHS
- PLASTIC FILM
- WASHING APPARATUS
- STEPLADDERS
- BRUSHES
- WATER HOSE NOZZLE, PRESSURE  $\leq 3$  BAR (43.5 PSI)
- SOURCE OF COMPRESSED AIR, 2.76 TO 3.45 BAR (40 - 50 PSI)
- CONTAINER (AS NECESSARY)
- STIRRING ROD (AS NECESSARY)
- COVERS
- SPECIAL CLOTHING (JACKET, TROUSERS)
- GLOVES
- GOGGLES
- BOOTS
- FRESH WATER

### 3. JOB SET-UP

- A. Park the aircraft (Refer to **TASK 10-10-00-910-801**).
- B. Obey the flight control system maintenance and safety precautions (Refer to **TASK 27-00-00-910-801**).
- C. Extend the slats/flaps for maintenance (Refer to **TASK 27-50-00-860-802**).
- D. Inhibit slats/flaps deflection (Refer to **TASK 27-50-00-860-802**).
- E. Extend the airbrakes for maintenance (Refer to **TASK 27-60-00-860-801**).
- F. Inhibit airbrake deflection (Refer to **TASK 27-60-00-860-801**).
- G. Protect the tires and brake units with covers.
- H. Make sure that the MLG main doors (**731AB**) and (**741AB**) are closed.  
 If not, manually close the doors (**731AB**) and (**741AB**) (Refer to **TASK 32-10-00-860-801**, paragraph "Unsafetying and manual closing of the MLG main doors.")
- I. Cover the transparent fairings with a plastic film, attached to the fuselage skin with **ADHESIVE TAPE 2230**.

### 4. WET CLEANING OF THE AIRCRAFT

**CAUTION:** CLEAN WATER (INCLUDING POTABLE WATER) IS SUITABLE FOR USE ON THE AIRCRAFT.

**CAUTION:** DO NOT USE SALINE OR CONTAMINATED WATER. THE WATER USED FOR CLEANING MUST IMPERATIVELY HAVE THE FOLLOWING SPECIFIC CHARACTERISTICS:

- PH:  $7.3 \pm 0.4$  AT  $20^{\circ}\text{C}$  ( $68^{\circ}\text{F}$ ),
- ELECTRICAL CONDUCTIVITY:  $< 800 \mu\text{S/cm}$ .

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**CAUTION:** DO NOT USE ABRASIVE MATERIALS ON MAT PAINT.

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**NOTE:** It is recommended to clean the aircraft exterior before performing inspection or lubrication tasks scheduled at the same date.

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- A. If available water does not meet with the characteristics above, or in airports that do not authorize aircraft rinsing, perform a dry cleaning of the aircraft (refer to paragraph 7.).
- B. Cleaning the fuselage, wings and empennage.

(1) Prepare the washing emulsion as follows:

(a) Preparation for a painted aircraft

- 1 If it is possible to introduce compressed air into the container of the spraying device to make the washing emulsion, pour the following into the container of the spraying device, in this order:
  - 10% of **EXTERNAL AIRCRAFT CLEANER**,
  - 10% of **P-D-680B**,
  - 80% of water,
- or
  - 10 to 20% of **EXTERNAL AIRCRAFT CLEANER**,
  - 80 to 90% of water.

- 2 Introduce the compressed air into the container of the spraying device to make the washing emulsion. The mixture must be perfectly homogeneous.

**NOTE:** If this method cannot be used, prepare the mixture in a separate container, observing the proportions and mixing order indicated above; form the emulsion using a stirring rod; then pour the emulsion into the container of the spraying device.

(b) Preparation for an unpainted aircraft

PRODUCT	DILUTION			REMARKS FOR UNPAINTED SURFACES
	VOLUME PRODUCT	VOLUME WHITE SPIRIT	VOLUME WATER	
NETAL AC2✓	1	1	20	Frequent cleaning
	1	1		Persistent soiling or contamination (engine exhaust area)
	1	4 to 6	1	Light soiling or contamination
ARDROX 6025✓	1	1 to 3		Persistent soiling or contamination (burnt oil for instance)
	1		3 to 8	Light soiling or contamination Periodic cleaning

(2) Washing the fuselage, wings and empennage

**CAUTION:** THE FOLLOWING INSTRUCTIONS MUST BE STRICTLY OBEYED:

- DO NOT CLEAN THE BRAKE UNITS.
- DO NOT CLEAN THE AIR DATA PROBES AND MAKE SURE THAT THEY HAVE THEIR PROTECTIVE COVERS.





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GENERIC DESIGNATION	ADDITIONAL DESIGNATION	SPECIFICATION	VENDOR	P/N	REMARKS
		AMS 1527A	CHEMETALL TRAITEMENTS DE SURFACE S.A.S.	ARDROX 6412M	Cleaning with 1200RTV before application.
		SAE-AMS 2644 QPL-1	CHEMETALL	ARDROX 6465	
			CHEMETALL TRAITEMENTS DE SURFACE S.A.S.	ARDROX 6465	
disinfectant	Oxygen		DASSAULT FALCON JET CORP	San 50	Used for disinfecting oxygen masks.
			EROS	San 50	Used for oxygen masks disinfection.
			ZODIAC AEROSPACE	San 50	Used for oxygen masks disinfection.
dry abrasive paper			Local procurement	dry abrasive paper	
dry-coat catalyst			DASSAULT FALCON JET CORP	SPSDC2-0-3G	Used when applying dry-coat treatment on windshields. Part of kit SPSPDC2-0-3.
			St GOBAIN	SPSDC2-0-3G	Used when applying dry-coat treatment on windshields. Part of kit SPSPDC2-0-3.
dry-coat treatment			DASSAULT FALCON JET CORP	SPSDC2-0-3F	Dry-coat treatment for application on windshields. Part of kit SPSPDC2-0-3.
			St GOBAIN	SPSDC2-0-3F	Dry-coat treatment for application on windshields. Part of kit SPSPDC2-0-3.
		AIR3655	Local procurement	Alcool ethylique denature	Denatured ethyl alcohol.
ethyl alcohol	O E 760/D	O E 760/D	DASSAULT FALCON JET CORP	Denatured ethyl alcohol	Denatured ethyl alcohol.
			Local procurement	Denatured ethyl alcohol	Denatured ethyl alcohol.
			MEGUIARS	M135	
external aircraft cleaner			ZEP INDUSTRIES	Exterior Aircraft Gel	
		AMS 1526	HENKEL SURFACE TECHNOLOGIE	Magnus 149X Aero	Used for external aircraft cleaning.
		AMS 1530	ZEP INDUSTRIES	CIC Solv	Cleaner (liquid) with solvent for external aircraft cleaning.

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GENERIC DESIGNATION	ADDITIONAL DESIGNATION	SPECIFICATION	VENDOR	P/N	REMARKS
brightening compound		MIL-C-87936	ABAX INDUSTRIE	Netal AC-2	
			CHEMETALL		
			TRAITEMENTS DE SURFACE S.A.S.	Ardrox 6025	
			DASSAULT		
			FALCON JET CORP	Economia R50	
			DASSAULT		
			FALCON JET CORP	Netal AC-2	
			DASSAULT		
			FALCON JET CORP	Syndair A2	
			ROCHEX	Economia R50	
			SOCOMOR	Syndair A2	
			ZIPCHEM	ZIP STRIP 125	
			ABAX INDUSTRIE	Netal AC-461	Color yellow.
			BEAULIET. LITZER	Bolit-707	
			NUVITE CHEMICAL COMPOUNDS CORPORATION	NU-SHINE 2 Grade S PC2202	
carpet cleaner			ZEP INDUSTRIES	Assist	
			ZEP INDUSTRIES	D 1000 S	Carpet cleaner for shampoo machine.
cleaner	Multipurpose		DASSAULT	Diestone S	
			FALCON JET CORP		
			Local procurement	Toluene	
			SOCOMOR	Diestone S	
			CHEMSEARCH	AR19	
			HENKEL SURFACE TECHNOLOGIE	Ind 400	
			DASSAULT		
			FALCON JET CORP	Diestone D or DLS	
			DASSAULT		
			FALCON JET CORP	Ind 400	
			SOCOMOR	Diestone D or DLS	
			WASH WAX ALL	WASH WAX ALL CLEANER	Can be used for dry cleaning.
			WASH WAX ALL	777Q	Can be used for dry cleaning.

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- DO NOT CLEAN THE LANDING GEAR WELLS.
- IN CASE OF USE OF HIGH-PRESSURE EQUIPMENT, OBEY THE SPECIFIC INSTRUCTIONS (Refer to **TASK 20-31-00-100-803**).

**CAUTION:** DO NOT USE WAX OR HIGH PRESSURE CLEANER ON TIRES. TIRES ARE MADE OF RUBBER WHICH CAN DETERIORATE, THUS FACILITATING OZONE CRACKING PROPAGATION. TIRES SHOULD BE COVERED TO PREVENT CONTAMINATION FROM CLEANING FLUIDS.

**CAUTION:** DO NOT USE A BRUSH ON MAT PAINT. USE CLEAN, NON-ABRASIVE LINT-FREE CLOTHS.

**NOTE:** If aircraft cleaning is subsequent to an anti-icing/de-icing treatment, the anti-icing product that was sprayed on the aircraft must be thoroughly washed off.

- (a) Wear special clothing: boots, jacket, trousers, gloves and goggles.
- (b) Spray the washing emulsion as follows:
  - from top to bottom and from front to rear for the fuselage and empennage,
  - from wing root to wing tip and from leading edge to trailing edge for the wings.
- (c) Brush the fuselage, wings and empennage (same direction as for spraying).
- (d) Rinse with clear water (same direction as for spraying and brushing).

**NOTE:** This method requires at least three operators to be effective.  
Follow the order and direction of the washing operations so that the dirt will spread onto a clean and wet surface, and will not stick.

- (e) If a brushing touch-up is necessary, do it without delay. Then rinse again.

**NOTE:** Effective rinsing depends more on the volume of water used than on the water pressure, often more harmful than effective.

- (f) Allow the aircraft to dry in the open air.
- (g) Dry the water traps.

**CAUTION:** MAKE SURE WATER RETENTION AREAS ARE TOTALLY DRY.

- C. (A/C with COLLINS EVS) Clean the infrared window (IRW) (Refer to **TASK 34-32-05-100-801**).
- D. (A/C with FalconEye EVS (M-OPT61)) Clean the EVS Camera window (Refer to **TASK 34-32-01-100-802**).
- E. Cleaning the windshields, windows and transparent fairings
  - (1) Remove the **ADHESIVE TAPE 2230** and the plastic film protecting the transparent fairings.
  - (2) Clean the windshields, windows and transparent fairings (Refer to **TASK 56-00-00-100-801**).

#### 5. **GREASING/LUBRICATION AFTER WET CLEANING**

Refer to **fig. 2** and **fig. 3**

##### A. Wings

**NOTE:** Greasing/lubrication should be done after wet cleaning, to prevent any removal of grease by the cleaning water.

- (1) Lubricate the aileron hinges (Refer to **TASK 57-60-05-640-802**).
- (2) Lubricate the airbrake hinges (Refer to **TASK 57-70-03-640-801**).
- (3) Grease/lubricate the slat mechanisms (Refer to **TASK 57-41-13-640-801**).
- (4) Grease the flap rollers and lubricate the flap tracks (Refer to **TASK 57-55-13-640-801**).
- (5) Clean the flap screw jacks (Refer to **TASK 27-53-01-220-801**, paragraph "Cleaning of actuating screw of flap screw jack").
- (6) Using a dry and clean lint-free cloth, clean the control cables (1-fig. 2) and the cable lugs (2-fig. 2) of the



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flap position potentiometers (**80CF**) and (**85CF**).

(7) Lubrication of the airbrake actuator sliding rods:

- (a) With a dry and clean lint-free cloth, clean the airbrake actuator sliding rods (1-fig. 3).
- (b) Lubricate the airbrake actuator sliding rods (1-fig. 3) with a cloth moistened with **HYDRAULIC FLUID**.

B. Landing gear

(1) Nose Landing Gear (NLG)

- (a) Lubricate the NLG and the NLG doors (Refer to **TASK 32-20-00-640-801**).
- (b) Clean with a dry lint-free cloth, then apply a thin coat of **HYDRAULIC FLUID** on the following parts:
  - the sliding tube of the NLG shock absorber,
  - the sliding tube of the NLG telescopic strut.

(2) Main Landing Gear (MLG)

- (a) Lubricate the MLG and the MLG doors (Refer to **TASK 32-10-00-640-801**).
- (b) Clean with a dry lint-free cloth, then apply a thin coat of **HYDRAULIC FLUID** on the following parts:
  - the sliding tubes of the MLG shock absorbers,
  - the sliding tubes of the MLG strut actuators,
  - the sliding tubes of the MLG door actuators.

C. Doors

- (1) Lubricate all the door hinges and the spring latches which protrude from the aircraft profile with **LUBRICATING OIL**.

D. Stabilizers

- (1) Lubricate the elevator hinges (Refer to **TASK 55-20-03-640-802**).
- (2) Lubricate the rudder hinges (Refer to **TASK 55-40-05-640-802**).

E. Engine cowlings

- (1) Lubricate the upper and lower engine cowlings (Refer to **TASK 54-11-00-610-801**).

#### 6. **INSPECTION OF CIC TYPE II AFTER WET CLEANING**

**NOTE:** In the following exposed areas, **CIC TYPE II** shall be applied as required after wet cleaning (on-condition application), in cases where the CIC was removed by the cleaning water:

- NLG and MLG bays (Refer to **TASK 53-00-00-370-801**).
- wing trailing edge box structure (Refer to **TASK 57-00-00-370-801**).

A. (CIC applied on the area) Do a General Visual Inspection (GVI) of the existing anti-corrosion protection for condition in this area (Refer to **TASK 20-60-10-370-801**, paragraph "Maintenance of CIC").

B. (CIC applied on the area) If the anti-corrosion protection is damaged, apply **CIC TYPE II** by local touch-up or if necessary, do a full renewal.

#### 7. **DRY CLEANING**

**CAUTION:** BECAUSE DRY CLEANING PRODUCTS CAN AFFECT HOLDOVER TIME (HOT) IN DE-ICING OPERATIONS, THE OPERATOR MUST ENSURE THAT THE DRY CLEANING PRODUCT DOES NOT INTERFERE WITH SAFE OPERATION OF THE AIRCRAFT (Refer to **TASK 20-31-00-910-801**).

A. Use lint-free cloths and **DRY CLEANING PRODUCT** according to product supplier's instructions.

**NOTE 1:** Dry cleaning products have two functions: **cleaning and protection of surfaces** (Refer to **TASK 20-60-00-370-830**).

**NOTE 2:** If A/C cleaning is done at least every 4 months, and always by dry cleaning method, protection of painted surfaces by buffing is not necessary (Refer to **SDS 20-60-03**, paragraph "Protection of painted surfaces by buffing").



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**NOTE 3:** **P-D-680B** can be used for cleaning if dry cleaning products are not available. However, **P-D-680B** is less efficient and does not protect surfaces in the same way as specific.

- B. Clean all the aircraft exterior painted parts.

#### 8. APPLICATION OF CIC TYPE IA

- A. On the whole aircraft, apply **CIC TYPE IA** in zones where paint is crazed or chipped-off, especially screw heads, rivets and panel edges (Refer to **TASK 20-60-10-370-801**).
- B. Apply **CIC TYPE IA** on:
- the visible part of the trailing edge foil at the end of the wing lower skin panel (Refer to **TASK 57-00-00-370-801**).
  - the edge of the rear wing upper panel (Refer to **TASK 57-00-00-370-801**).

#### 9. BRIGHTENING

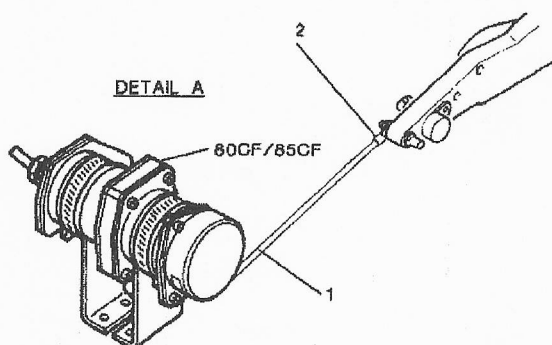
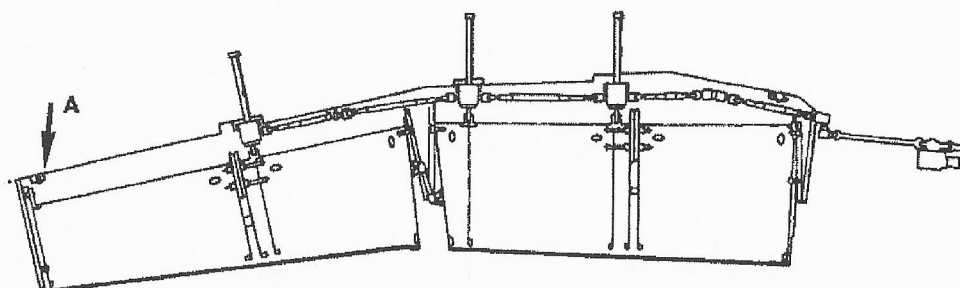
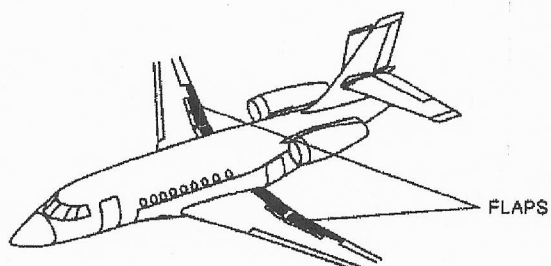
- A. Brighten the slats (Refer to **TASK 20-31-00-350-801**).
- B. Brighten the engine air intake leading edges (Refer to **TASK 20-31-00-350-801**).

#### 10. CLOSE-UP

- A. Remove the aircraft parking equipment (Refer to **TASK 10-10-00-910-801**).
- B. Remove the covers from the tires and the brake units.
- C. If the tires are contaminated by hydrocarbon or fuel:
- (1) First wash the contaminated area with **ETHYL ALCOHOL**.
  - (2) Rinse with a soap and water solution.
- D. Enable airbrake deflection (Refer to **TASK 27-60-00-860-801**).
- E. Retract the airbrakes (Refer to **TASK 27-60-00-860-801**).
- F. Enable slats/flaps deflection (Refer to **TASK 27-50-00-860-802**).
- G. Retract the slats/flaps (Refer to **TASK 27-50-00-860-802**).

**NOTE:** After cleaning, protection of painted surfaces increases paint durability (Refer to **SDS 20-60-03**).

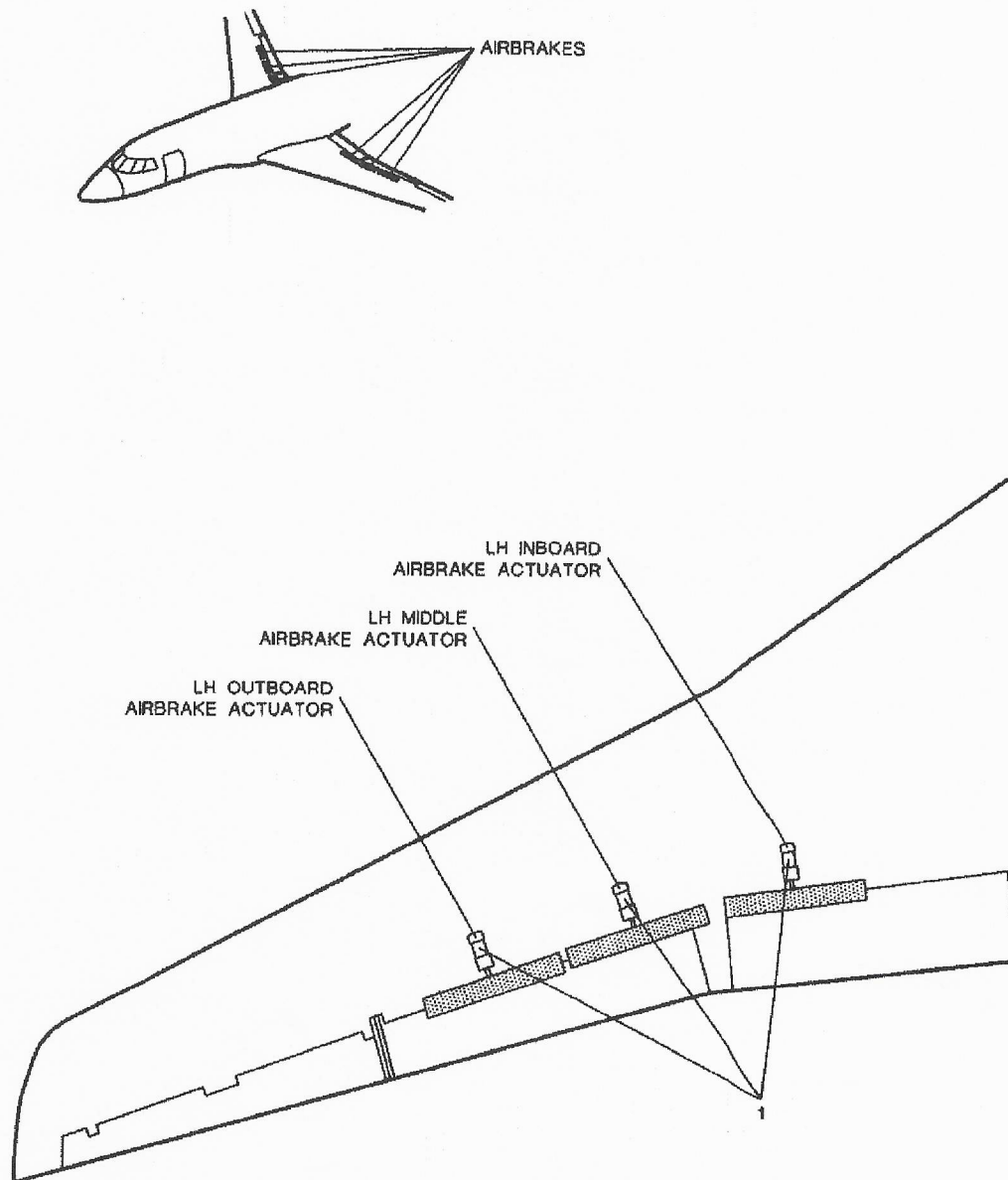
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**NOTE:** LH WING ONLY IS ILLUSTRATED (SAME FOR RH WING)

**Figure 2: CONTROL CABLES AND CABLE LUGS OF FLAP POSITION POTENTIOMETERS - CLEANING**

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**Figure 3: AIRBRAKE ACTUATORS - LOCATION**



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TASK 20-60-00-370-830

### REACTIVE POLYMER TREATMENT FOR EXTERNAL SURFACES

*→ 20-60-00-370-830*

**CAUTION:** REACTIVE POLYMER TREATMENT MUST BE APPLIED EITHER BY HAND OR WITH AN ORBITAL POLISHER, BUT NOT ALL PRODUCTS ARE COMPATIBLE WITH BOTH METHODS (E.G. ORBITAL POLISHERS ARE NOT RECOMMENDED FOR USE WITH XZILON).

**CAUTION:** BECAUSE REACTIVE POLYMER TREATMENT CAN AFFECT HOLDOVER TIME (HOT) DURING DE-ICING OPERATIONS, THE OPERATOR MUST ENSURE THAT THE REACTIVE POLYMER TREATMENT DOES NOT INTERFERE WITH SAFE OPERATION OF THE AIRCRAFT (Refer to **TASK 20-31-00-910-801**).

**CAUTION:** ONLY TRAINED PERSONNEL MAY APPLY THESE PRODUCTS. IF THIS TRAINING HAS NOT YET BEEN SET UP, CONTACT THE APPROVED SUPPLIER.

#### 1. OVERVIEW OF THE JOB

This procedure must be performed whenever reactive polymer treatment (Silane-based reactive polymer, also called paint sealant or reactive polymer product) is necessary or required to improve the durability of painted surfaces.

The authorized products are listed below, according to their characteristics: paste or liquid. Some of the liquid products have cleaning properties. Not all products can be applied on polished surfaces such as leading edges and air intakes. The table below gives the necessary consumable products depending on the chosen surface protection product:

	Reactive polymer treatment reference	Authorized surfaces to be treated	Cleaning properties	Miscellaneous
Paste sealant	<b>PERMAGARD 5000</b> <b>STEP2 PROTECT</b>	Painted surfaces and polished surfaces (leading edges and air intakes)	NO	COTTON BONNETS 1700 RPM ORBITAL POLISHER MICROFIBER BONNETS
Liquid sealant <i>2.9</i>	<b>XZILON3</b>	Painted surfaces and polished surfaces (leading edges and air intakes)	NO	refer to NOTE 1. DEDICATED MICROFIBER TOWEL
	<b>SKYWASH SK310</b> <b>A-GLAZE</b>		YES	
	<b>SKYWASH 11304</b>	Painted surfaces		

**NOTE 1:** For **XZILON3**, complementary Xzilon products are available: **XZILON SPRAY**, **XZILON CLAY BAR**, **XZILON CLAY BAR**, **XZILON WIPE**.

**NOTE 2:** All products listed in the table are suitable to remove de-icing fluid. When an A/C has been cleaned and protected regularly with all these buffing products, the de-icing fluid tends to be less aggressive. This is because the pores of the skin have been filled with these products, thus preventing the de-icing fluid from adhering to the skin. The same phenomenon occurs during icing.

Two application methods are recommended: the orbital polisher method for paste sealants (refer to paragraph 5.)

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GENERIC DESIGNATION	ADDITIONAL DESIGNATION	SPECIFICATION	VENDOR	P/N	REMARKS
		AMS 1526	CHEMETALL	ARDROX 6412M	Cleaner for exterior aircraft surfaces.
		SAE-AMS 2644 QPL-1	CHEMETALL	ARDROX 6465	
diester biofuel			Local procurement	diester biofuel	
disinfectant	Oxygen		DASSAULT FALCON JET CORP	San 50	Used for disinfecting oxygen masks.
			ZODIAC AEROSPACE	San 50	Used for oxygen masks disinfection.
dry abrasive paper			Local procurement	dry abrasive paper	
dry cleaning product			A-GLAZE	A-GLAZE	Used for dry cleaning and buffing. Can be applied on painted surfaces and polished surfaces.
			SKYWASH	SK310	Used for dry cleaning and buffing. Can be applied on painted surfaces, polished surfaces and transparencies.
			SKYWASH	11304	Used for dry cleaning and buffing. Can be applied only on painted surfaces.
dry-coat catalyst			DASSAULT FALCON JET CORP	SPSDC2-0-3G	Used when applying dry-coat treatment on windshields. Part of kit SPSDC2-0-3.
			St GOBAIN	SPSDC2-0-3G	Used when applying dry-coat treatment on windshields. Part of kit SPSDC2-0-3.
dry-coat treatment			DASSAULT FALCON JET CORP	SPSDC2-0-3F	Dry-coat treatment for application on windshields. Part of kit SPSDC2-0-3.
			St GOBAIN	SPSDC2-0-3F	Dry-coat treatment for application on windshields. Part of kit SPSDC2-0-3.
ethyl alcohol	O E 760/D	AIR3655	Local procurement	Alcool ethylique denature	Denatured ethyl alcohol.
		O E 760/D	DASSAULT FALCON JET CORP	Denatured ethyl alcohol	Denatured ethyl alcohol.
			Local procurement	Denatured ethyl alcohol	Denatured ethyl alcohol.

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### AIRCRAFT MAINTENANCE MANUAL

or application by hand for liquid sealants (refer to paragraph 6. for Xzilon and refer to paragraph 7. for other liquid products). Refer to the supplier instructions for reactive polymer treatment.

## 2. LOGISTICS

### A. References

Reference	Designation
• <u>20-31-00-100-801</u>	CLEANING OF THE AIRCRAFT EXTERIOR
• <u>20-31-00-910-801</u>	ON-GROUND DE-ICING AND ANTI-ICING TREATMENT
• <u>20-60-00-370-802</u>	GENERAL PAINTING INSTRUCTIONS

### B. Ingredients and Consumable Products

Designation	Additional designation
• <u>A-GLAZE</u>	
• <u>PERMAGARD 5000</u>	
• <u>SKYWASH SK310</u>	
• <u>SKYWASH 11304</u>	
• <u>STEP2 PROTECT</u>	
• <u>XZILON CLAY BAR</u>	
• <u>XZILON HARD SURFACE CLEANER</u>	
• <u>XZILON3</u>	
• <u>XZILON SPRAY</u>	
• <u>XZILON WIPE</u>	

### C. Miscellaneous

- COTTON BONNETS
- 1700 RPM ORBITAL POLISHER
- MICROFIBER BONNETS
- MICROFIBER TOWEL
- LINT FREE-CLOTHS
- SOFT BRUSH

## 3. AMBIENT CONDITIONS FOR TREATMENT

- A. Comply with specified workshop ambient conditions (Refer to TASK 20-60-00-370-802, paragraph "Workshop ambient conditions").

## 4. SURFACE PREPARATION

NOTE: This paragraph applies only to products without cleaning properties (refer to paragraph "OVERVIEW OF THE JOB").

- A. Make sure that the surface to be treated is clean and free of dust, fuel, grease, salt, wax or silicone residues.

NOTE: Reactive polymer treatment is not a polishing paste and does not remove microscratches or swirls.

- B. If necessary, clean the surface to be treated (Refer to TASK 20-31-00-100-801).

NOTE: If using Xzilon, complementary Xzilon products such as XZILON SPRAY, XZILON CLAY BAR, XZILON HARD SURFACE CLEANER can also be used in accordance with supplier instructions.



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### AIRCRAFT MAINTENANCE MANUAL

#### **5. APPLICATION OF REACTIVE POLYMER TREATMENT WITH ORBITAL POLISHER**

**CAUTION:** DO NOT APPLY REACTIVE POLYMER TREATMENT ON WINDSHIELDS OR WINDOWS.

- A. Refer to the supplier instructions for reactive polymer treatment.
- B. Shake the product before applying. Check for product homogeneity: settling or two-phase products should be rejected.

**CAUTION:** THE PRODUCT MUST BE USED PROMPTLY AFTER OPENING.

**CAUTION:** POLISHER ROTATION SPEED MUST NOT CAUSE ANY BROWNISH COLORATION DUE TO HEATING.

- C. Use an orbital polisher fitted with a cotton bonnet to apply the reactive polymer treatment in successive coats covering approximately 100 cm x 100 cm (3 ft x 3 ft) at a time.
- D. Polish the treated surface immediately to obtain a smooth and glossy appearance.

**NOTE:** The curing process begins as soon as the orbital polisher starts polishing.

- E. Treat all applicable surfaces step by step and change the bonnet whenever necessary.
- F. Remove all excess or residues of reactive polymer treatment with a microfiber bonnet (manually or with the orbital polisher).
- G. If necessary, apply more than one coat.
- H. Refer to the technical data sheet or the user instructions for the minimum drying time of the reactive polymer (paint sealant) before the aircraft returns to service.

#### **6. APPLICATION BY HAND OF REACTIVE POLYMER TREATMENT FOR LIQUID SEALANT WITHOUT CLEANING PROPERTIES**

**CAUTION:** DO NOT APPLY REACTIVE POLYMER TREATMENT ON WINDSHIELDS OR WINDOWS.

**NOTE:** This paragraph applies only to products without cleaning properties (refer to paragraph "OVERVIEW OF THE JOB").

- A. Refer to the supplier instructions for reactive polymer treatment.
- B. Apply a small amount of reactive polymer treatment using a lint-free cloth.

**CAUTION:** DO NOT ALLOW THE REACTIVE POLYMER TREATMENT TO DRY: THE PRODUCT MUST BE USED PROMPTLY.

- C. Use a sweeping movement to apply a thin film of reactive polymer treatment over an area of approximately 100 cm x 100 cm (3 ft x 3 ft).
- D. Immediately wipe the treated area with a clean and dedicated microfiber towel.
- E. Change the microfiber towels as soon as they become saturated.

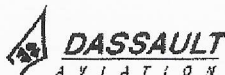
**CAUTION:** WAIT 20 TO 35 MINUTES BETWEEN THE APPLICATION OF EACH COAT.

- F. If necessary, apply more than one coat.
- G. Refer to the technical data sheet or the user instructions for the minimum drying time of the reactive polymer (paint sealant) before the aircraft returns to service.

#### **7. APPLICATION BY HAND OF REACTIVE POLYMER TREATMENT FOR LIQUID SEALANT WITH CLEANING PROPERTIES**

**CAUTION:** DO NOT APPLY REACTIVE POLYMER TREATMENT ON WINDSHIELDS OR WINDOWS, EXCEPT **SKYWASH SK310**.

**CAUTION:** DRY-WASHING SHOULD BE PERFORMED IN A HANGAR OR IN THE SHADE.



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### AIRCRAFT MAINTENANCE MANUAL

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**NOTE:** This paragraph applies only to products with cleaning properties (refer to paragraph "OVERVIEW OF THE JOB").

- A. Refer to the supplier instructions for paint sealant.
- B. Apply the cleaning solution directly on the aircraft surface.

**CAUTION:** DO NOT ALLOW THE REACTIVE POLYMER TREATMENT TO DRY. THE PRODUCT MUST BE USED PROMPTLY.

- C. Spray the product onto the dry surface to be treated or apply it with a clean dry cloth. Apply to small sections at a time using a firm circular motion. Spread over the treatment zone, keeping the surface wet, but do not allow the product to run.
- D. Wet a clean cotton or microfiber towel with the product and use this towel immediately to wipe off any excess or stains, leaving only a thin film to dry.
- E. When stubborn stains require a second application, repeat the application and use a soft brush to remove the stains.
- F. Allow a thin film of dry-wash solution to dry to a soft haze. Moving on to new zones and allowing sufficient drying time reduces the time and effort necessary in the removal phase.

**CAUTION:** THE SURFACE MUST BE COMPLETELY DRY AFTER WIPING OFF THE RESIDUAL HAZE. THIS PROCESS LEAVES A HIGH SHINE. IF THE SURFACE IS ALLOWED TO REMAIN DAMP (OR MOIST) AFTER THIS PROCESS, THE RESIDUAL HAZE WILL RE-APPEAR WHEN THE SURFACE FINALLY DRIES.

- G. Use a clean, slightly moist or dry microfiber or cotton mop head to remove any excess dry-wash agent. Buff or wipe the surface with even strokes in a back and forth, up and down motion until the surface is dry and free of any residual haze after the cleaning phase.





## FALCON 2000EX AIRCRAFT MAINTENANCE MANUAL

### TASK 20-31-00-350-801 BRIGHTENING/POLISHING OF THE WING AND AIR INTAKE LEADING EDGES

**WARNING:** THE BRIGHTENING / POLISHING OF CLADDED ALUMINUM SURFACES OR STAINLESS STEEL SURFACES MUST BE PERFORMED IN ACCORDANCE WITH THE CURRENT REGULATIONS OF THE COUNTRY WHERE THE WORK IS DONE. WHEN BRIGHTENING / POLISHING SURFACES, TAKE ALL REQUIRED PRECAUTIONS TO PREVENT A POSSIBLE HEALTH HAZARD, I.E.:

- WEAR A PROTECTIVE MASK, GLOVES, GOGGLES AND APPROPRIATE COVERALLS.
- INSTALL AND OPERATE AN APPROPRIATE EXHAUST SYSTEM IN THE WORK AREA.
- DISPOSE OF ALL THE TWISTED-WOOL PADS OR COTTON CLOTHS USED AND OTHER ITEMS THAT MAY HAVE COME INTO CONTACT WITH THE COMPOUNDS IN ACCORDANCE WITH THE CURRENT REGULATIONS OF THE COUNTRY WHERE THE WORK IS DONE.

**WARNING:** PERSONAL INJURIES CAN RESULT FROM ANY OPERATION PERFORMED ON FLIGHT CONTROL SYSTEM EQUIPMENT. HYDRAULIC AND ELECTRICAL POWER SUPPLIES ARE PROHIBITED DURING MAINTENANCE OPERATIONS.

#### 1. OVERVIEW OF THE JOB

Operation codes:

- 20-31-00-350-801-01                      Brightening
- 20-31-00-350-801-02                      Polishing

This procedure provides instructions and the appropriate logistics to brighten/polish cladded aluminum surfaces or stainless steel surfaces.

The original surface finish of cladded aluminum surfaces or stainless steel surfaces is the minimum acceptable surface condition for a correct protection against corrosion. This surface condition is to be restored at the first signs of degradation.

It is recommended to wax the surface after brightening. A uniform and waterproof coat of wax improves the protection of the surface against corrosion or any other aggression.

If any deep scratches with burrs are found, they must be removed before brightening (Refer to **TASK 20-50-00-300-801**).

#### 2. LOGISTICS

##### A. References

Reference	Designation
• <b>51-00-06 (RPI)</b>	DAMAGE REPORT AND MAPPING
• <b>20-31-00-100-804</b>	CLEANING OF THE WING AND AIR INTAKE LEADING EDGES
• <b>20-50-00-300-801</b>	TREATMENT OF SCRATCHES ON BRIGHTENED SURFACES
• <b>20-60-00-370-830</b>	PAINT SEALANT FOR EXTERNAL SURFACES
◆	
• <b>27-50-00-860-802</b>	EXTENSION / RETRACTION OF THE SLATS / FLAPS FOR MAINTENANCE

##### B. Ingredients and Consumable Products

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### Designation

- ADHESIVE TAPE 5F
- BRIGHTENING COMPOUND
- POLISHING COMPOUND

### Additional designation

### C. Miscellaneous

- STEPLADDER (LOCAL PROCUREMENT)
- POLISHER (LOCAL PROCUREMENT)
- PAD-HOLDER (LOCAL PROCUREMENT)
- TWISTED-WOOL PADS (LOCAL PROCUREMENT)
- OR
- CLEAN, WHITE, LINT-FREE COTTON CLOTHS (LOCAL PROCUREMENT)

## 3. PRELIMINARY STEPS

Refer to fig. 1

- A. For brightening or polishing of the wing leading edges, fully extend the slats (Refer to TASK 27-50-00-860-802).
- B. Clean the surfaces (Refer to TASK 20-31-00-100-804).
- C. Inspect the surfaces for condition: (fig. 1)
  - appearance,
  - defects.

If any deep scratches with burrs are found, remove them (Refer to TASK 20-50-00-300-801).

## 4. RECOMMENDATIONS FOR BRIGHTENING AND POLISHING

- A. Thoroughly mix the compound before use.

**CAUTION:** REPLACE THE TWISTED-WOOL PAD OR THE COTTON CLOTH WHEN IT BECOMES OVER-IMPREGNATED WITH COMPOUND OR WHEN IT IS DIRTY.

**CAUTION:** MOVE THE POLISHER GENTLY AND CONTINUOUSLY ON THE SURFACE TO PREVENT OVERHEATING. DO NOT ALLOW IT TO STAY STATIONARY ON A SURFACE.

- B. Apply the compound either using a polisher fitted with a pad-holder and a twisted-wool pad , or manually with a clean, white, lint-free cotton cloth .

**NOTE:** The principle of this operation is to minimize the amount of material removed from the surface.

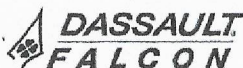
## 5. BRIGHTENING



- A. Apply brightening compound on the surface until:
  - the surface finish is visually satisfactory, and
  - there is no brightening compound left on the surface and around the rivets. If necessary, remove any remaining brightening compound with clean, white, lint-free cotton cloths.

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- B. As brightening improves the protection of the surface against corrosion, it is recommended to wax the surface after brightening (Refer to TASK 20-60-00-370-830) ♦ .

### 6. POLISHING

NOTE: A local polishing is to be performed to remove defects that cannot be removed by brightening. These defects may be, for example, deep scratches, oxidation, tarnishing, pitting, etc.

- A. Delimit the area to be polished with adhesive tape 5F.
- B. Locally apply polishing compound to smooth out the defect, beginning with the less abrasive grade (NU-SHINE2 grade C, then using -NUSHINE2 grade G6).

NOTE: Polishing is performed by increasing the polishing compound grade, from the less abrasive to the most abrasive grade. However, a skilled operator can choose to begin with a higher grade according to the severity of the defect.

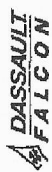
- C. If the defect remains visible, continue polishing using a higher polishing compound grade (NU-SHINE2 grade F7 or TURCO 1495 LH).
- D. If NU-SHINE2 grade F7 is not sufficient to remove the defect, NU-SHINE2 grade F9 can be used, but with care, since it is the highest abrasive grade.
- E. If the defect cannot be removed whatever the abrasive grade used, the next step is to report the defect to the manufacturer as structural damage (Refer to RPI 51-00-06).
- F. Once the defects have been removed by polishing, brighten the surface (Refer to paragraph 5).

### 7. FINAL STEPS

- A. In case of brightening or polishing of the wing leading edges, fully retract the slats (Refer to TASK 27-50-00-860-802).
- B. Apply wax to the treated area (Refer to TASK 20-60-00-370-830) ♦

NOTE: Application of wax is recommended for better protection.

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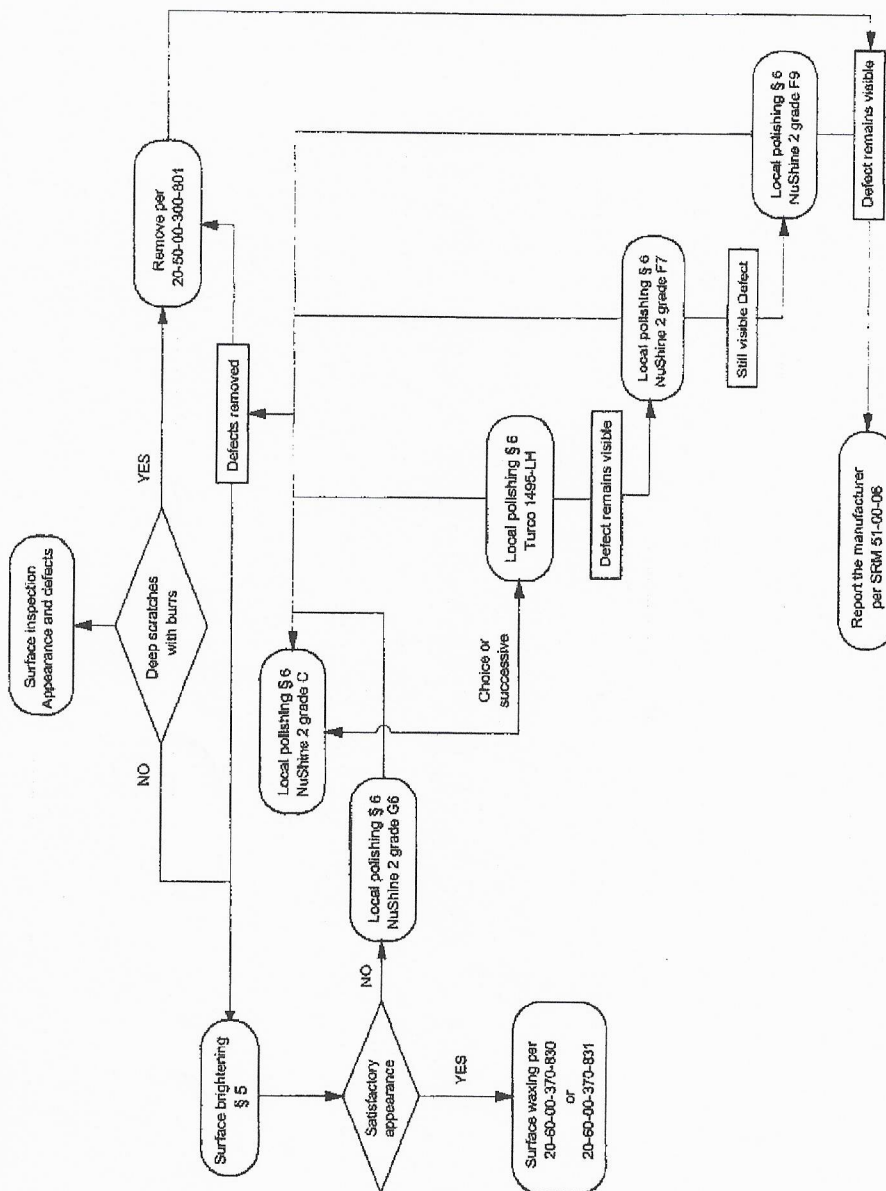


Figure 1: SURFACE INSPECTION AND TREATMENT PROCESS

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กรมช่างอากาศ  
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เรื่อง ขอเชิญชวนให้เสนอราคา

เรียน กรรมการผู้จัดการ บริษัท อุตสาหกรรมการบิน จำกัด

สิ่งที่ส่งมาด้วย เอกสารการซื้อโดยวิธีเฉพาะเจาะจง เลขที่.....๒๖/๖๒.ณ.....จำนวน.....๑.....ชุด

ด้วย กรมช่างอากาศ มีความประสงค์จะซื้อชิ้นอะไหล่สำหรับเครื่องบินขับไล่แบบที่ ๑๙/ก (F-16A/B) จำนวน ๑๒ รายการ โดยวิธีเฉพาะเจาะจง โดยมีข้อแนะนำและข้อกำหนดในการซื้อตามเอกสารการซื้อโดยวิธีเฉพาะเจาะจง เลขที่ ๒๖/๖๒ ณ รายละเอียดตามสิ่งที่ส่งมาด้วย

คณะกรรมการซื้อโดยวิธีเฉพาะเจาะจง จึงขอเชิญท่านยื่นข้อเสนอราคา โดยกรอกข้อความราคาที่เสนอ และลงชื่อในใบเสนอราคาของท่าน ใส่ซองปิดผนึกให้เรียบร้อย นำไปยื่นต่อคณะกรรมการซื้อโดยวิธีเฉพาะเจาะจง พร้อมด้วยหลักฐานประกอบการเสนอราคา โดยยื่นซองเสนอราคาด้วยตนเอง หรือผู้แทนที่ได้รับมอบอำนาจ และการยื่นซองเสนอราคาให้ยื่น ณ แผนกจัดหา กองพัสดุช่างอากาศ กรมช่างอากาศ ถนนประดิพัทธ์ แขวงถนนนครไชยศรี เขตดุสิต กรุงเทพมหานคร ในวันที่ ๑๗ กันยายน ๒๕๖๒ ระหว่างเวลา ๐๙.๓๐ น. ถึง ๑๐.๐๐ น.

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

นาวาอากาศโท.....

(ชัยวัฒน์ คงเทียม)

ประธานกรรมการซื้อโดยวิธีเฉพาะเจาะจง

กองพัสดุช่างอากาศ

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## Falcon 2000S

### AIRCRAFT MAINTENANCE MANUAL

**TASK 20-60-00-370-830**

### REACTIVE POLYMER TREATMENT FOR EXTERNAL SURFACES

**CAUTION:** REACTIVE POLYMER TREATMENT MUST BE APPLIED EITHER BY HAND OR WITH AN ORBITAL POLISHER, BUT NOT ALL PRODUCTS ARE COMPATIBLE WITH BOTH METHODS (E.G. ORBITAL POLISHERS ARE NOT RECOMMENDED FOR USE WITH XZILON).

**CAUTION:** BECAUSE REACTIVE POLYMER TREATMENT CAN AFFECT HOLDOVER TIME (HOT) DURING DE-ICING OPERATIONS, THE OPERATOR MUST ENSURE THAT THE REACTIVE POLYMER TREATMENT DOES NOT INTERFERE WITH SAFE OPERATION OF THE AIRCRAFT (Refer to **TASK 20-31-00-910-801**).

**CAUTION:** ONLY TRAINED PERSONNEL MAY APPLY THESE PRODUCTS. IF THIS TRAINING HAS NOT YET BEEN SET UP, CONTACT THE APPROVED SUPPLIER.

#### 1. OVERVIEW OF THE JOB

This procedure must be performed whenever reactive polymer treatment (Silane-based reactive polymer, also called paint sealant or reactive polymer product) is necessary or required to improve the durability of painted surfaces.

The authorized products are listed below, according to their characteristics: paste or liquid. Some of the liquid products have cleaning properties. Not all products can be applied on polished surfaces such as leading edges and air intakes. The table below gives the necessary consumable products depending on the chosen surface protection product:

	Reactive polymer treatment reference	Authorized surfaces to be treated	Cleaning properties	Miscellaneous
Paste sealant	<b>PERMAGARD 5000 STEP2 PROTECT</b>	Painted surfaces and polished surfaces (leading edges and air intakes)	NO	COTTON BONNETS 1700 RPM ORBITAL POLISHER MICROFIBER BONNETS
Liquid sealant	<b>XZILON3</b>	Painted surfaces and polished surfaces (leading edges and air intakes)	NO	refer to NOTE 1. DEDICATED MICROFIBER TOWEL
	<b>SKYWASH SK310 A-GLAZE</b>		YES	
	<b>SKYWASH 11304</b>	Painted surfaces		

**NOTE 1:** For **XZILON3**, complementary Xzilon products are available: **XZILON SPRAY**, **XZILON CLAY BAR**, **XZILON WIPE**.

**NOTE 2:** All products listed in the table are suitable to remove de-icing fluid. When an A/C has been cleaned and protected regularly with all these buffing products, the de-icing fluid tends to be less aggressive. This is because the pores of the skin have been filled with these products, thus preventing the de-icing fluid from adhering to the skin. The same phenomenon occurs during icing.

Two application methods are recommended: the orbital polisher method for paste sealants (refer to paragraph 5.)



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### AIRCRAFT MAINTENANCE MANUAL

or application by hand for liquid sealants (refer to paragraph 6. for Xzilon and refer to paragraph 7. for other liquid products). Refer to the supplier instructions for reactive polymer treatment.

## 2. LOGISTICS

### A. References

Reference	Designation
• <u>20-31-00-100-801</u>	CLEANING OF THE AIRCRAFT EXTERIOR
• <u>20-31-00-910-801</u>	ON-GROUND DE-ICING AND ANTI-ICING TREATMENT
• <u>20-60-00-370-802</u>	GENERAL PAINTING INSTRUCTIONS

### B. Ingredients and Consumable Products

Designation	Additional designation
• <u>A-GLAZE</u>	
• <u>PERMAGARD 5000</u>	
• <u>SKYWASH SK310</u>	
• <u>SKYWASH 11304</u>	
• <u>STEP2 PROTECT</u>	
• <u>XZILON CLAY BAR</u>	
• <u>XZILON HARD SURFACE CLEANER</u>	
• <u>XZILON3</u>	
• <u>XZILON SPRAY</u>	
• <u>XZILON WIPE</u>	

### C. Miscellaneous

- COTTON BONNETS
- 1700 RPM ORBITAL POLISHER
- MICROFIBER BONNETS
- MICROFIBER TOWEL
- LINT FREE-CLOTHS
- SOFT BRUSH

## 3. AMBIENT CONDITIONS FOR TREATMENT

- A. Comply with specified workshop ambient conditions (Refer to TASK 20-60-00-370-802, paragraph "Workshop ambient conditions").

## 4. SURFACE PREPARATION

NOTE: This paragraph applies only to products without cleaning properties (refer to paragraph "OVERVIEW OF THE JOB").

- A. Make sure that the surface to be treated is clean and free of dust, fuel, grease, salt, wax or silicone residues.

NOTE: Reactive polymer treatment is not a polishing paste and does not remove microscratches or swirls.

- B. If necessary, clean the surface to be treated (Refer to TASK 20-31-00-100-801).

NOTE: If using Xzilon, complementary Xzilon products such as XZILON SPRAY, XZILON CLAY BAR, XZILON HARD SURFACE CLEANER can also be used in accordance with supplier instructions.

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### AIRCRAFT MAINTENANCE MANUAL

#### **5. APPLICATION OF REACTIVE POLYMER TREATMENT WITH ORBITAL POLISHER**

**CAUTION:** DO NOT APPLY REACTIVE POLYMER TREATMENT ON WINDSHIELDS OR WINDOWS.

- A. Refer to the supplier instructions for reactive polymer treatment.
- B. Shake the product before applying. Check for product homogeneity: settling or two-phase products should be rejected.

**CAUTION:** THE PRODUCT MUST BE USED PROMPTLY AFTER OPENING.

**CAUTION:** POLISHER ROTATION SPEED MUST NOT CAUSE ANY BROWNISH COLORATION DUE TO HEATING.

- C. Use an orbital polisher fitted with a cotton bonnet to apply the reactive polymer treatment in successive coats covering approximately 100 cm x 100 cm (3 ft x 3 ft) at a time.
- D. Polish the treated surface immediately to obtain a smooth and glossy appearance.

**NOTE:** The curing process begins as soon as the orbital polisher starts polishing.

- E. Treat all applicable surfaces step by step and change the bonnet whenever necessary.
- F. Remove all excess or residues of reactive polymer treatment with a microfiber bonnet (manually or with the orbital polisher).
- G. If necessary, apply more than one coat.
- H. Refer to the technical data sheet or the user instructions for the minimum drying time of the reactive polymer (paint sealant) before the aircraft returns to service.

#### **6. APPLICATION BY HAND OF REACTIVE POLYMER TREATMENT FOR LIQUID SEALANT WITHOUT CLEANING PROPERTIES**

**CAUTION:** DO NOT APPLY REACTIVE POLYMER TREATMENT ON WINDSHIELDS OR WINDOWS.

**NOTE:** This paragraph applies only to products without cleaning properties (refer to paragraph "OVERVIEW OF THE JOB").

- A. Refer to the supplier instructions for reactive polymer treatment.
- B. Apply a small amount of reactive polymer treatment using a lint-free cloth.

**CAUTION:** DO NOT ALLOW THE REACTIVE POLYMER TREATMENT TO DRY: THE PRODUCT MUST BE USED PROMPTLY.

- C. Use a sweeping movement to apply a thin film of reactive polymer treatment over an area of approximately 100 cm x 100 cm (3 ft x 3 ft).
- D. Immediately wipe the treated area with a clean and dedicated microfiber towel.
- E. Change the microfiber towels as soon as they become saturated.

**CAUTION:** WAIT 20 TO 35 MINUTES BETWEEN THE APPLICATION OF EACH COAT.

- F. If necessary, apply more than one coat.
- G. Refer to the technical data sheet or the user instructions for the minimum drying time of the reactive polymer (paint sealant) before the aircraft returns to service.

#### **7. APPLICATION BY HAND OF REACTIVE POLYMER TREATMENT FOR LIQUID SEALANT WITH CLEANING PROPERTIES**

**CAUTION:** DO NOT APPLY REACTIVE POLYMER TREATMENT ON WINDSHIELDS OR WINDOWS, EXCEPT **SKYWASH SK310**.

**CAUTION:** DRY-WASHING SHOULD BE PERFORMED IN A HANGAR OR IN THE SHADE.



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**NOTE:** This paragraph applies only to products with cleaning properties (refer to paragraph "OVERVIEW OF THE JOB").

- A. Refer to the supplier instructions for paint sealant.
- B. Apply the cleaning solution directly on the aircraft surface.

**CAUTION:** DO NOT ALLOW THE REACTIVE POLYMER TREATMENT TO DRY. THE PRODUCT MUST BE USED PROMPTLY.

- C. Spray the product onto the dry surface to be treated or apply it with a clean dry cloth. Apply to small sections at a time using a firm circular motion. Spread over the treatment zone, keeping the surface wet, but do not allow the product to run.
- D. Wet a clean cotton or microfiber towel with the product and use this towel immediately to wipe off any excess or stains, leaving only a thin film to dry.
- E. When stubborn stains require a second application, repeat the application and use a soft brush to remove the stains.
- F. Allow a thin film of dry-wash solution to dry to a soft haze. Moving on to new zones and allowing sufficient drying time reduces the time and effort necessary in the removal phase.

**CAUTION:** THE SURFACE MUST BE COMPLETELY DRY AFTER WIPING OFF THE RESIDUAL HAZE. THIS PROCESS LEAVES A HIGH SHINE. IF THE SURFACE IS ALLOWED TO REMAIN DAMP (OR MOIST) AFTER THIS PROCESS, THE RESIDUAL HAZE WILL RE-APPEAR WHEN THE SURFACE FINALLY DRIES.

- G. Use a clean, slightly moist or dry microfiber or cotton mop head to remove any excess dry-wash agent. Buff or wipe the surface with even strokes in a back and forth, up and down motion until the surface is dry and free of any residual haze after the cleaning phase.