

PAINTED SURFACE - POLISHING - CLEANING/PAINTING

EFFECTIVITY: ALL

1. General

- A. This section gives the polishing procedures for painted surface (aluminum-sheet skin and composite material parts).
- B. The procedures in this section are given in the sequence below. The tasks identified with (◆) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
51-21-03-100-801-A	PAINTED SURFACE - POLISHING	ALL

TASK 51-21-03-100-801-A

EFFECTIVITY: ALL

2. PAINTED SURFACE - POLISHING

A. General

(1) The function of the polishing process is to remove surface defects with material removal.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Polishing Machine 1500 to 3000 RPM	To polish painted surface	
Commercially available	Workstand	To get access to the aircraft surface	

D. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Soft lint-free cloth (100% cotton, inter-woven pattern flannel)	To clean painted surface	AR
Commercially available	Brush for polishing machine	To polish painted surface	AR

E. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Commercially available	Isopropyl Alcohol	AR
NUSHINE II-S	Initial Polish Paste	AR
NUSHINE G 6	Finish Polish Paste	AR
ToughGuard Nano	ToughGuard Paint Sealant	AR

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Outside the aircraft

H. Preparation

SUBTASK 841-002-A

(1) Put the workstand in position and get access to the aircraft.

(2) Wash the surface you will polish.

I. Polishing of Painted Surface (Figure 701)

SUBTASK 110-002-A

WARNING: • **USE INDIVIDUAL PROTECTION EQUIPMENT DURING ALL OPERATIONS OF THIS PROCESS.**

- **BE CAREFUL WHEN YOU USE SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING WHEN YOU HANDLE THEM. DO NOT BREATHE THEIR GASES AND WORK IN A WELL VENTILATED AREA.**

CAUTION: • **MAKE SURE THAT THE SURFACE IS DRY AND CLEAN. WATER CAN DISSOLVE THE POLISH PASTE AND DECREASE ITS POLISHING PROPERTY. DIRT CAN CAUSE SCRATCHES TO PAINT.**

- **DO NOT DO THIS PROCEDURE UNDER SUNSHINE OR ON HEATED SURFACE.**
- **REMOVE OLD POLISH PASTE BEFORE YOU START THE PROCEDURE. USE ISOPROPYL ALCOHOL.**
- **PREVENT THE CONTACT OF THE MATERIAL WITH PLASTIC SURFACES OR RUBBER. USE A CLEANING CLOTH MOIST IN ISOPROPYL ALCOHOL IF CONTACT OCCURS.**

- (1) If necessary, polish the surface with a 1500- or 2000-grit crocus cloth. Do not use a crocus cloth that is more abrasive than this grit. If you sand dry paint with an orbital sander, use discs in the 1200- and 1500-grit sequence.

If sanding is not necessary (if the painting is new, for example), use a polishing machine with speed between 1500 and 2500 rpm with a soft brush.

- (2) With your hands, apply polishing paste to the surface you will polish. Use a quantity sufficient to work in the area of approximately 500 x 500 mm (20 x 20 in).

NOTE: Use initial polishing product to remove the defect. Then do the process again with finish polishing paste.

NOTE: Use a little amount of water with the ATG-402 to remove the defect or stains.

- (3) Spread the product over the surface with the polishing machine turned off.
- (4) Turn the machine on and polish with moderate pressure and circular motions on all the damaged area.
- (5) After removal of the defect, decrease the pressure and continue for a few seconds to remove defects caused by superheating and stains.

NOTE: If it is necessary to increase the brightness level, decrease a little the pressure and increase the speed of the equipment up to 3000 RPM.

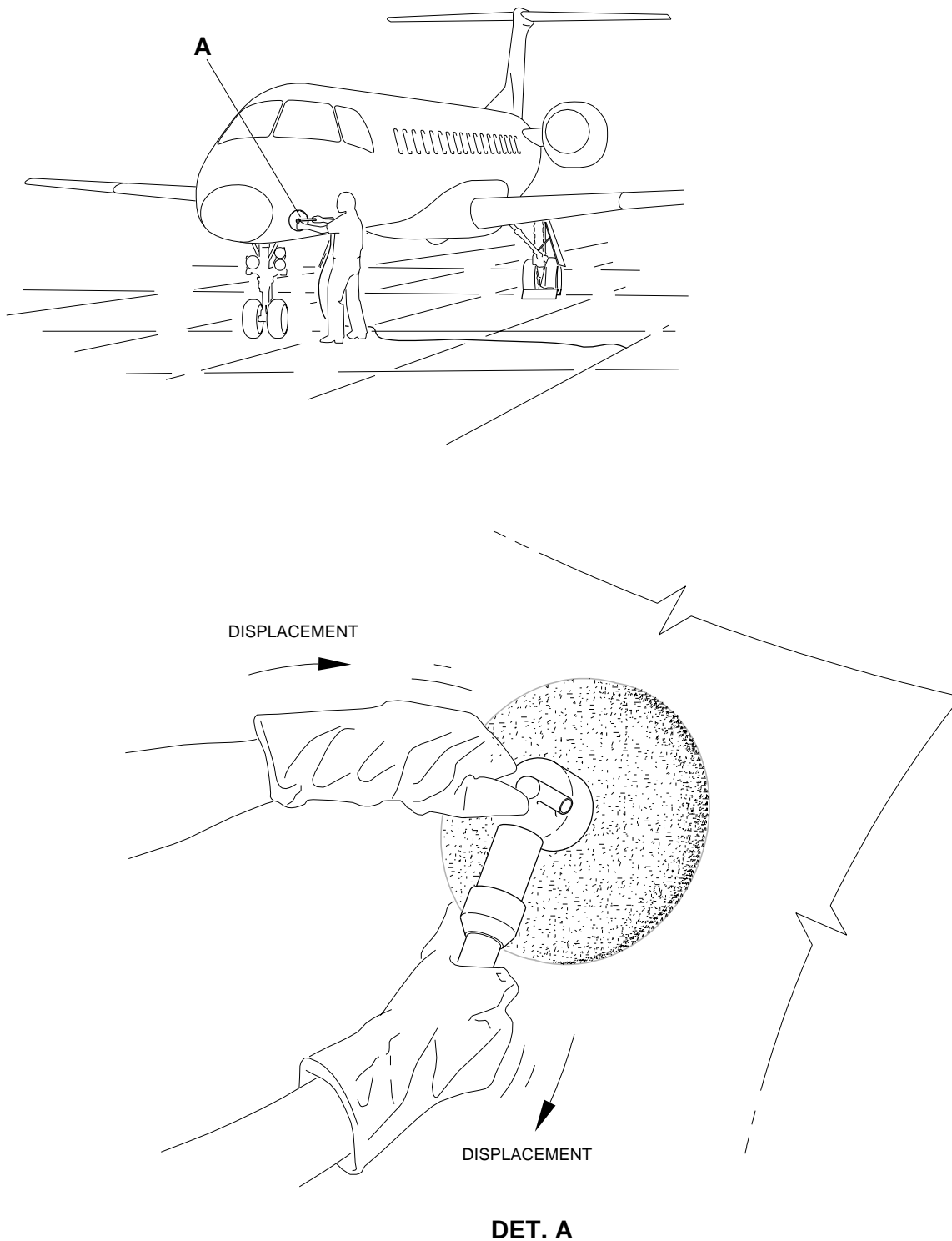
- (6) Remove the residues of material with a dry cleaning cloth or moist with isopropyl alcohol.
- (7) Do the process again if the defect stays on the surface.

J. Follow-on

SUBTASK 842-002-A

- (1) Remove the workstand from the work area.

EFFECTIVITY: ALL
Polishing of Painted Surface
Figure 701



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