

MAIN DOOR STEPS - CLEANING/PAINTING

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to restore the anti-slip paint on the main door steps.
- 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 |
|--------------------|----------------------------|-------------|
| 52-10-03-370-801-A | MAIN DOOR STEPS - PAINTING | ALL |

TASK 52-10-03-370-801-A

EFFECTIVITY: ALL

2. MAIN DOOR STEPS - PAINTING

A. General

- (1) This procedure gives the instructions to restore the anti-slip paint on the main door steps. We recommend that you use the process if damage to the external paint is such that permits you to see the composite material below.

NOTE: Damage to the composite material must be repaired first. Refer to SRM 51-72 or SRM 51-73. Then, repair the paint.

- (2) Obey the instructions below to repair the composite material parts.

B. References

| REFERENCE | DESIGNATION |
|---------------------------------|--|
| AMM SDS 52-10-00/1 | |
| AMM TASK 51-21-02-100-801-A/700 | COMPOSITE MATERIAL PARTS - PAINTING REPAIR PROCESS |
| AMM TASK 52-10-02-000-801-A/400 | MAIN-DOOR STEP-TREAD LINING PANEL - REMOVAL |
| AMM TASK 52-10-02-400-801-A/400 | MAIN-DOOR STEP-TREAD LINING PANEL - INSTALLATION |
| SRM 51-72 | - |
| SRM 51-73 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|----------------|
| 811 | | Airstairs door |

D. Tools and Equipment

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|------------------------------|-----------------------|-----|
| Commercially available | Filter of the organdy fabric | To filter the mixture | |
| Commercially available | Spray gun | To spray the mixture | |
| Commercially available | Roller foam | To apply the mixture | |

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|-------------|-------------------|-----|
| Commercially available | Soft cloth | To clean surfaces | AR |

F. Consumable Materials

| <i>SPECIFICATION (BRAND)</i> | <i>DESCRIPTION</i> | <i>QTY</i> |
|----------------------------------|--|------------|
| ASTM-D-740 | Methyl-Ethyl-Ketone (MEK) | AR |
| MIL-P-17667 | Neutral Kraft Paper | AR |
| Commercially available | Aluminum Oxide Sandpaper #320 | AR |
| Commercially available | Aluminum Oxide Sandpaper #150 | AR |
| MEP 10-085 | Non-Slipping Epoxy Coating | AR |
| MEP 02-005 | Aluminum, Granulated | AR |
| MIL-C-22750 | Paint, Epoxi, Gray-Glossy, FS595 16492 | AR |
| MMM-A-132 | Type 1, Class 2, Adhesive (EA9320) | AR |
| MEP 22-008 | Resin (LY8047) | AR |

G. Expandable Parts

Not Applicable

H. Persons Recommended

| <i>QTY</i> | <i>FUNCTION</i> | <i>PLACE</i> |
|------------|----------------------------|----------------------|
| 1 | Does the task | Outside the aircraft |
| 1 | Helps the other technician | Outside the aircraft |

I. Preparation

SUBTASK 841-002-A

- (1) Open the main door. Refer to [AMM SDS 52-10-00/1](#).
- (2) Remove the main door steps. Refer to [AMM TASK 52-10-02-000-801-A/400](#).
- (3) Place the steps on a workbench.
- (4) Remove the old surface anti-slip of the steps as follow:

- WARNING:**
- **CLEANING PRODUCTS ARE TOXIC AND FLAMMABLE. A GOOD FLOW OF AIR MUST BE AVAILABLE WHEN THE WORK IS DONE IN CLOSED AREAS.**
 - **BE CAREFUL WHEN USING SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING WHEN HANDLING THEM. DO NOT BREATHE THEIR GASES AND WORK IN A WELL VENTILATED AREA.**

- CAUTION:**
- DO NOT PERMIT THE CLEANING PRODUCTS (SOLVENTS) TO TOUCH, PLASTICS OR SEALANT FILLET TO PREVENT DAMAGE TO THEM.
 - DO NOT PUT THE REMAINING CLEANING MATERIAL BACK INTO THE ORIGINAL CONTAINERS TO PREVENT CONTAMINATION.
 - DO NOT POUR CLEANING PRODUCT DIRECTLY ON THE SURFACE TO BE CLEANED.
 - DO NOT PERMIT THE CLEANING PRODUCT TO EVAPORATE BEFORE IT IS DRIED WITH THE SOFT CLOTH.
 - DO NOT WEAR CLOTHES WITH ZIPPER, NOR USE METAL OBJECTS (SUCH AS WATCHES, BRACELETS, AND RINGS) OR METAL TOOLS WHEN YOU CLEAN THE SURFACE.
- (a) Clean up the area with a soft cloth and methyl-ethyl-ketone (MEK) or similar (ASTM-D-740).
 - (b) Sand the surface to be repaired with aluminum oxide sandpaper #320. Be careful not to damage the composite fibers.
 - (c) Clean up the area again with a soft cloth soaked with methyl-ethyl-ketone (MEK) or similar (ASTM-D-740) and before the solvent evaporation, dry the surface with a clean and dry cloth.
 - (d) Afterwards, the surface shall be smoothly abraded with aluminum oxide sandpaper #150 to remove gloss to increase adherence.
 - (e) Clean the surface with methyl-ethyl-ketone (MEK) or similar (ASTM-D-740) until eliminate any dust trace.
 - (f) Isolate the adjacent area to be repaired with Neutral Kraft paper which obeys the MIL-P-17667 specification.
- (5) Re-apply the epoxy primer. Refer to [AMM TASK 51-21-02-100-801-A/700](#).

J. Anti-Slip Surface - Epoxy Coating Preparation and Application (Figure 701)

SUBTASK 370-002-A

- (1) Prepare the anti-slip epoxy coating (MEP 10-085) according to the Manufacture's instructions.
- (2) Apply the anti-slip epoxy coating on the main door steps as follows:
 - (a) The anti-slip epoxy coating shall be applied with roller foam in order to maintain all surfaces with a continuous and uniform coating.
 - (b) The pot-life of this admixed material is 4 h at temperature of 18 - 26 °C (64.4 - 78.8 °F).

NOTE: The anti-slip epoxy coating shall be applied within 4 h after the components mixture.

- (c) The tack-free is 24 h at temperature of 10 - 38 °C (50 - 100 °F) and total curing time is 168 h.
- (d) The anti-slip surface appearance shall be uniformity over the entire surface.
- (e) The granulated aluminum shall not be loose when touched.

K. Anti-Slip Surface - Alternative Method I

SUBTASK 370-003-A

- (1) Apply simultaneous the finishing paint and granulated aluminum on the main door steps as follow:
 - (a) Apply one coat of finishing paint (Epoxi,Gray-Glossy,FS595 16492) to the step.
 - (b) Apply one coat of granulated aluminum, taking the following cares:
 - 1. The granulated aluminum should be applied in a continuous operation over the finishing paint (Epoxi,Gray-Glossy,FS595 16492).
 - 2. Time intervals between the application of the finishing paint and the granulated aluminum should be as short as possible, to permit its penetration and adherence to the finishing paint;
 - 3. The granulated aluminum coat shall be spread evenly on surface and, after 10 min approximately, remove the excess of granulated aluminum shaking the piece;
 - 4. The quantity of granulated aluminum on each coat should be approximately 300 g/m².

NOTE: In case of repair to short areas, it is permitted to mix the granulated aluminum with the prepared finishing paint in the ratio of 50 g of granulated aluminum to 100 g of finishing paint. Apply two crossed coats of this mixture over the surface with the painting foam roller.

- (c) Apply a second coat of finishing paint (Epoxi,Gray-Glossy,FS595 16492) to the step.
- (2) The total curing time is 72 h at temperature of 22.2 °C (72 °F).
- (3) The anti-slip surface appearance should be uniform with the entire surface.
- (4) The granulated aluminum should not loose it is when touched.

L. Anti-Slip Surface - Alternative Method II

SUBTASK 370-004-A

- (1) Apply granulated aluminum with adhesive and resin to the main door steps.
- (2) The granulated aluminum should be bonded with EA9320 adhesive and covered with LY8047 resin as follows:
 - (a) Prepare the EA9320 adhesive as follows:

- 1 Mix a proportion of 100 parts in weight of component "A" to 19 parts in weight of component "B".

(b) Apply a thin and homogeneous layer of the EA9320 adhesive to the surface.

- (3) Use a sieve to spread the granulated aluminum on the surface.

NOTE: The excess granulated adhesive should be removed by shaking the part.

- (4) Cure the EA9320 adhesive in an oven, during 20 min at a temperature of 50 - 80 °C (122 - 176 °F).

NOTE: After the curing, the part should be removed from the oven and cooled.

- (5) Apply a thin layer of LY8047 resin over the granulated aluminum layer, as follows:

(a) Prepare the LY8047 resin as follows:

- 1 Mix the LY8047 resin in the proportion of 10% in weight of catalizer (HY950).

NOTE: An adequate quantity should be prepared to be utilized within the correct time of 30 min, in order to avoid exothermic reaction.

(b) Use a foam roller to apply the prepared LY8047 resin.

- (6) Cure the LY8047 resin in oven during 60 min at a temperature of 50 - 80 °C (122 - 176 °F).

NOTE: After the curing, the part should be removed from the oven and cooled.

- (7) Apply the finishing paint.
- (8) The anti-slip surface appearance should present uniformity over the entire surface.
- (9) The granulated aluminum should not loose when it is touched.

M. Follow-on

SUBTASK 842-002-A

- (1) Remove the Neutral Kraft paper from the adjacent area.
- (2) Install the main door steps. Refer to [AMM TASK 52-10-02-400-801-A/400](#).