COCKPIT WINDSHIELD RAIN REPELLENT COATING - INSPECTION/CHECK

EFFECTIVITY: AIRCRAFT WITH REPELLENT COATING INSTALLED

1. General

   A. The procedures given in this section are applicable to the inspection of the cockpit windshield rain repellent coating for condition.

   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*
30-41-04-200-801-A ♦	COCKPIT WINDSHIELD RAIN REPELLENT COATING - INSPECTION	AIRCRAFT WITH REPELLENT COATING INSTALLED

TASK 30-41-04-200-801-A
EFFECTIVITY: AIRCRAFT WITH REPELLENT COATING INSTALLED

2. COCKPIT WINDSHIELD RAIN REPELLENT COATING - INSPECTION

A. General

(1) The aircraft must be protected by a hangar with adequate lighting for the inspection of the cockpit windshield.

(2) The ambient temperature must be from 4°C to 32°C (40°F to 90°F) and humidity from 20% to 80%.

(3) Make sure that the cockpit-windshield electrical heat is off.

(4) Obey the instructions that follow to do the check of the cockpit-windshield rain-repellent coating.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 30-41-04-000-801-A/400	SIERRACOTE 302® RAIN-REPELLENT COATING - REMOVAL
AMM TASK 30-41-04-000-802-A/400	NEXT GENERATION SURFACE SEAL® RAIN-REPELLENT COATING - REMOVAL
AMM TASK 30-41-04-400-801-A/400	SIERRACOTE 302® RAIN-REPELLENT COATING - INSTALLATION
AMM TASK 30-41-04-400-802-A/400	NEXT GENERATION SURFACE SEAL® RAIN-REPELLENT COATING - INSTALLATION
AMM TASK 56-10-01-100-801-A/700	COCKPIT WINDSHIELD - CLEANING

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
223		Cockpit windshield
224		Cockpit windshield

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Workstand	To get access to the cockpit windshield from the outside	2
Commercially available	Spray bottle	Drop generation to the cockpit windshield	1

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
Commercially available	Distilled or Deionized water	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Outside the cockpit

I. Preparation

SUBTASK 841-002-A

(1) Put the workstand in position and get access to the cockpit windshield from the outside.

(2) Make sure that the cockpit-windshield electrical heat is off.

CAUTION: DO NOT USE THESE CLEANERS ON THE OUTSIDE OF THE COCKPIT WINDSHIELD: ALIPHATIC NAPHTHA, PLASTIC CLEANER OR PERMATEX 403D. THE USE OF THESE CLEANERS CAN CAUSE THE REMOVAL OF RAIN-REPELLENT COATING.

(3) Fully clean the outside surface of the cockpit windshield, through method I (AMM TASK 56-10-01-100-801-A/700).

J. Inspection/Check (Figure 601) (Figure 602) (Figure 603)

SUBTASK 212-002-A

CAUTION:
- DO NOT TOUCH CLEANED WINDSHIELD SURFACE WITH BARE HANDS TO PREVENT CONTAMINATION WITH SKIN OIL.
- BEFORE THE TEST, REMOVE WRIST WATCH AND JEWELRY TO PREVENT SCRATCHES TO THE WINDSHIELD SURFACE.

(1) Start at the bottom of the windshield to apply a fine spray of deionized or distilled water on all the surface of the windshield (Figure 601).

(2) Continue to apply a fine spray of deionized or distilled water along the top of the windshield until water drops appear at the bottom of the windshield and some water droplets roll freely to the bottom of the windshield.

NOTE: Smaller droplets that crawl through an area should be ignored.

(3) Examine the rain-repellent coating layer as follows:

- The rain-repellent coating layer is in a new condition if:
  The drops stay on the windshield surface and are small and circular in shape.

There is no remaining water in the tracks made after the drops of water go to the bottom of the windshield.

(a) The rain-repellent coating layer is in satisfactory condition if (Figure 602):

1 The drops stay on the windshield surface but the larger drops are less circular in shape compared with the drops found in the new condition.

2 There are small areas of remaining water in the tracks made after the drops of the water go to the bottom of the windshield.

(b) The rain repellent coating layer is not in satisfactory condition if (Figure 603):

1 The drops which stay on the windshield surface are large, less circular and more irregular in shape compared with the drops found in the satisfactory condition.

2 The largest droplets will be elongated in the direction of gravity. Water droplets tracks leave larger droplets in the tracks that are elongated in the direction of gravity and with an irregular shape.

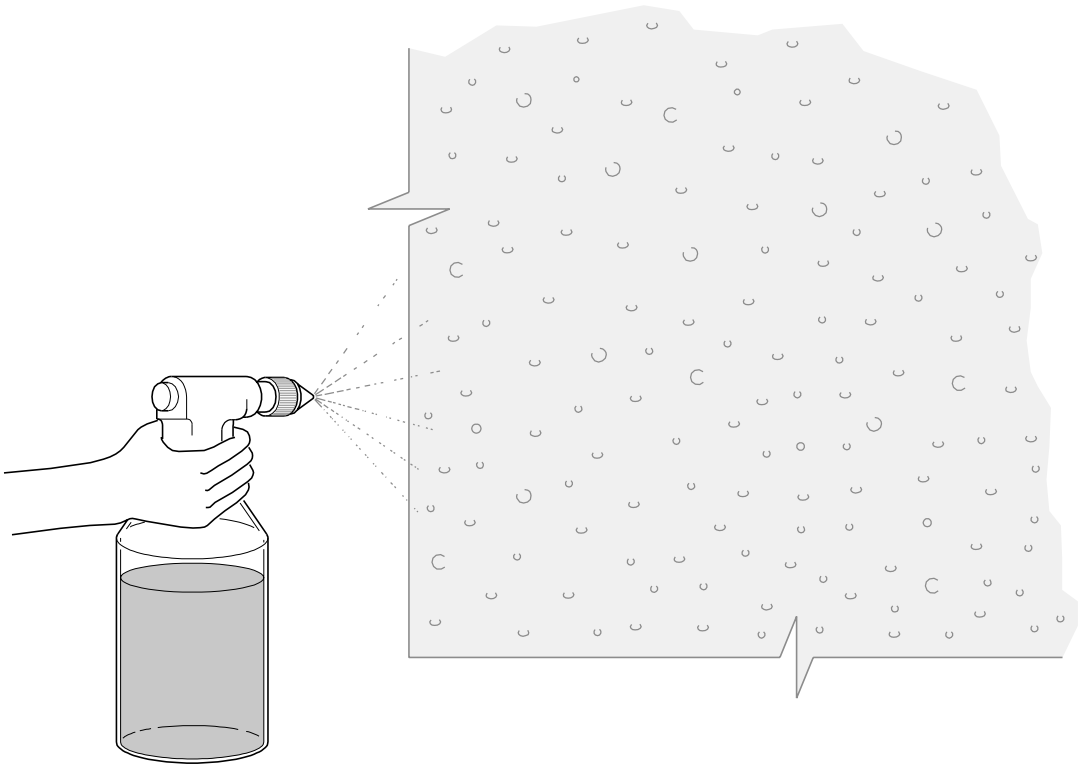
NOTE: If the test results are not satisfactory, you must remove the rain repellent coating, as given in AMM TASK 30-41-04-000-801-A/400 or AMM TASK 30-41-04-000-802-A/400, and apply it again as given in AMM TASK 30-41-04-400-801-A/400 or AMM TASK 30-41-04-400-802-A/400 as applicable.

K. Follow-on

SUBTASK 842-002-A

(1) Remove the workstand from the work area.

EFFECTIVITY: AIRCRAFT WITH RAIN-REPELLENT COATING INSTALLED
Cockpit Windshield Rain Repellent Coating - Inspection/Check
Figure 601



APPLY A FINE SPRAY OF DEIONIZED OR DISTILLED
WATER ON ALL THE SURFACE OF WIND SHIELD

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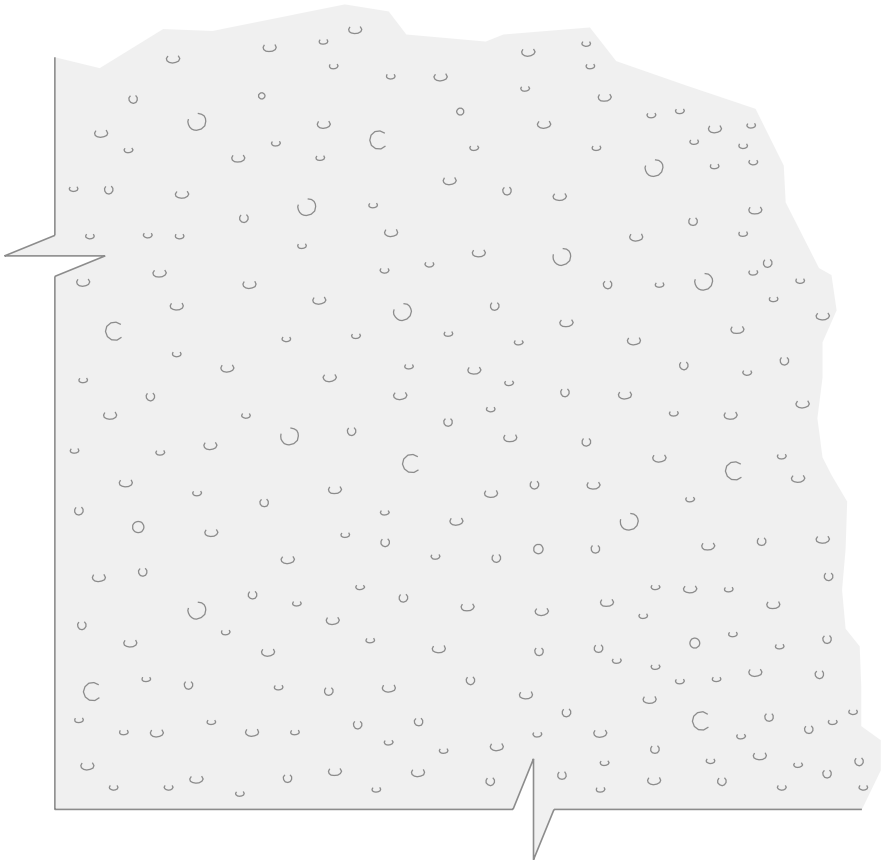
EFFECTIVITY: AIRCRAFT WITH RAIN-REPELLENT COATING INSTALLED
Cockpit Windshield Rain Repellent Coating - Satisfactory Condition
Figure 602



THE RAIN−REPELLENT COATING IN SATISFACTORY CONDITION

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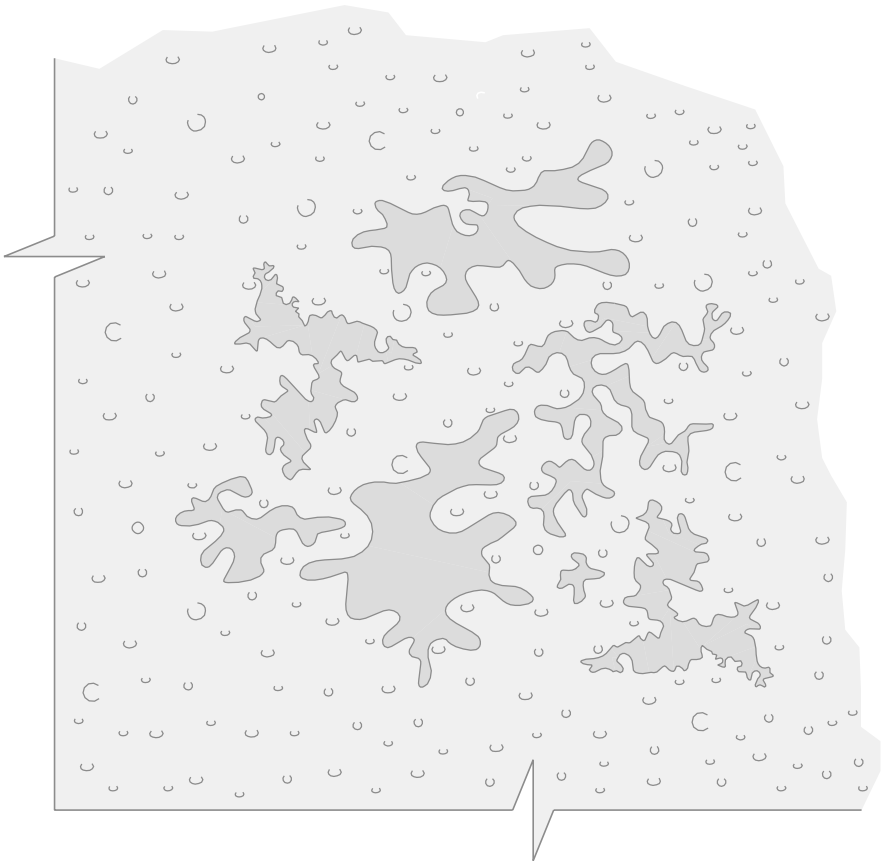
EFFECTIVITY: AIRCRAFT WITH RAIN-REPELLENT COATING INSTALLED
Cockpit Windshield Rain Repellent Coating - Unsatisfactory Condition
Figure 603



THE RAIN−REPELLENT COATING IN AN UNSATISFACTORY CONDITION

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