



## AIRCRAFT MAINTENANCE MANUAL

### COCKPIT WINDSHIELD - INSPECTION/CHECK

EFFECTIVITY: ALL

#### 1. General

- A. The procedures given in this section are applicable to the inspection of the cockpit windshield for scratches, delaminations, and sealing 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
56-10-01-200-801-A	COCKPIT WINDSHIELD - INSPECTION/ CHECK	ALL



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TASK 56-10-01-200-801-A

EFFECTIVITY: ALL

2. COCKPIT WINDSHIELD - INSPECTION/CHECK

A. General

- (1) Delamination is a condition that occurs when there is a separation of the interlayer from the glass. The structural integrity of the heated glass windshield is not at risk because the face ply is not a structural ply.
- (2) When moisture or solvent goes into the interlayer, it shows a cloudy or milky condition. This type of delamination is usually caused by no maintenance of the weather sealant along the windshield between the glass face ply and the retainer.
- (3) Usually, a delamination with a clear, i.e., not cloudy and smooth edge boundary is caused by stresses in the glass, which are released when the delamination occurs.
- (4) Delamination with an irregular or rough boundary shows that the separation of the vinyl and glass is not constant. Such condition can cause the vinyl to pull chips from the inner glass surface which could cause failure of the glass.
- (5) Obey the instructions below to do the check of the cockpit windshield.

B. References

REFERENCE	DESIGNATION
AMM TASK 30-42-00-700-801-A/500	WINDSHIELD HEATING - OPERATIONAL CHECK
AMM TASK 56-10-01-100-801-A/700	COCKPIT WINDSHIELD - CLEANING
AMM TASK 56-10-01-400-801-A/400	COCKPIT WINDSHIELD - INSTALLATION
AMM TASK 56-10-01-400-802-A/400	COCKPIT WINDSHIELD - INSTALLATION
CMM 56-10-01	-
CMM 56-10-03	-

C. Zones and Accesses

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

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Optical micrometer	To measure scratches	
Commercially available	Optical micrometer	To determine delamination layer/depth	



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## E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the cockpit windshield from the outside	

## F. Consumable Materials

Not Applicable

## G. Expandable Parts

Not Applicable

## H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Outside and inside the cockpit

## I. Preparation

## SUBTASK 841-002-A

- (1) Put the workstand into position and get access to the cockpit windshield from the outside.
- (2) Clean the windshield surface ([AMM TASK 56-10-01-100-801-A/700](#)).

## J. Inspection/Check (Figure 601)

## SUBTASK 212-002-A

**CAUTION:** DO NOT TRY TO REMOVE THE SCRATCHES OR STREAKS FROM THE GLASS SURFACES WITH A POLISHING PROCEDURE. POLISHING CAN REMOVE THE ANTI-STATIC COAT AND CAUSE OPTICAL DISTORTIONS.

- (1) Do an inspection of the windshield for scratches:
  - (a) Do an inspection of the windshield for scratches on the external glass surface.  
Result:
    - 1 Scratches on the external glass surface must be limited only to the point when they make vision more difficult.  
**NOTE:** There is no acceptable field repair for scratches on the external glass surface.
  - (b) Do an inspection on the windshield for scratches on the internal glass surface.  
Result:
    - 1 Scratches on this surface must not be more than 0.05 mm (0.002 in.) in depth.  
**NOTE:** No scratch length limit is specified for this ply if the pilot's field of view is satisfactory and depth is not more than the permitted limit.
- (2) Do the inspection of the windshield for delaminations:
  - (a) Do an inspection on the windshield for delaminations.

Result:

- 1 Delamination limits are given by the CMM 56-10-03 (Sierracin) or CMM 56-10-01 (PPG), as applicable.
- 2 For PPG windshield, the delamination is permitted in 50.8 mm (2 in) width all around the windshield, and 101.6 mm (4 in) in the corners.
- 3 For Sierracin windshield, there are no defined limits (the only limitation is to not impair the pilot's vision).
- 4 For only the Sierracin windshield, the delamination between mainly to mainly interlayer is not allowed.
- 5 If the delamination is more than the specified, replace the windshield window. Refer to [AMM TASK 56-10-01-400-801-A/400](#) or [AMM TASK 56-10-01-400-802-A/400](#), as applicable

(3) Do an inspection of the windshield for sealing:

- (a) Do an inspection on the sealant that protects the transparency/retainer boundary from damage.

Result:

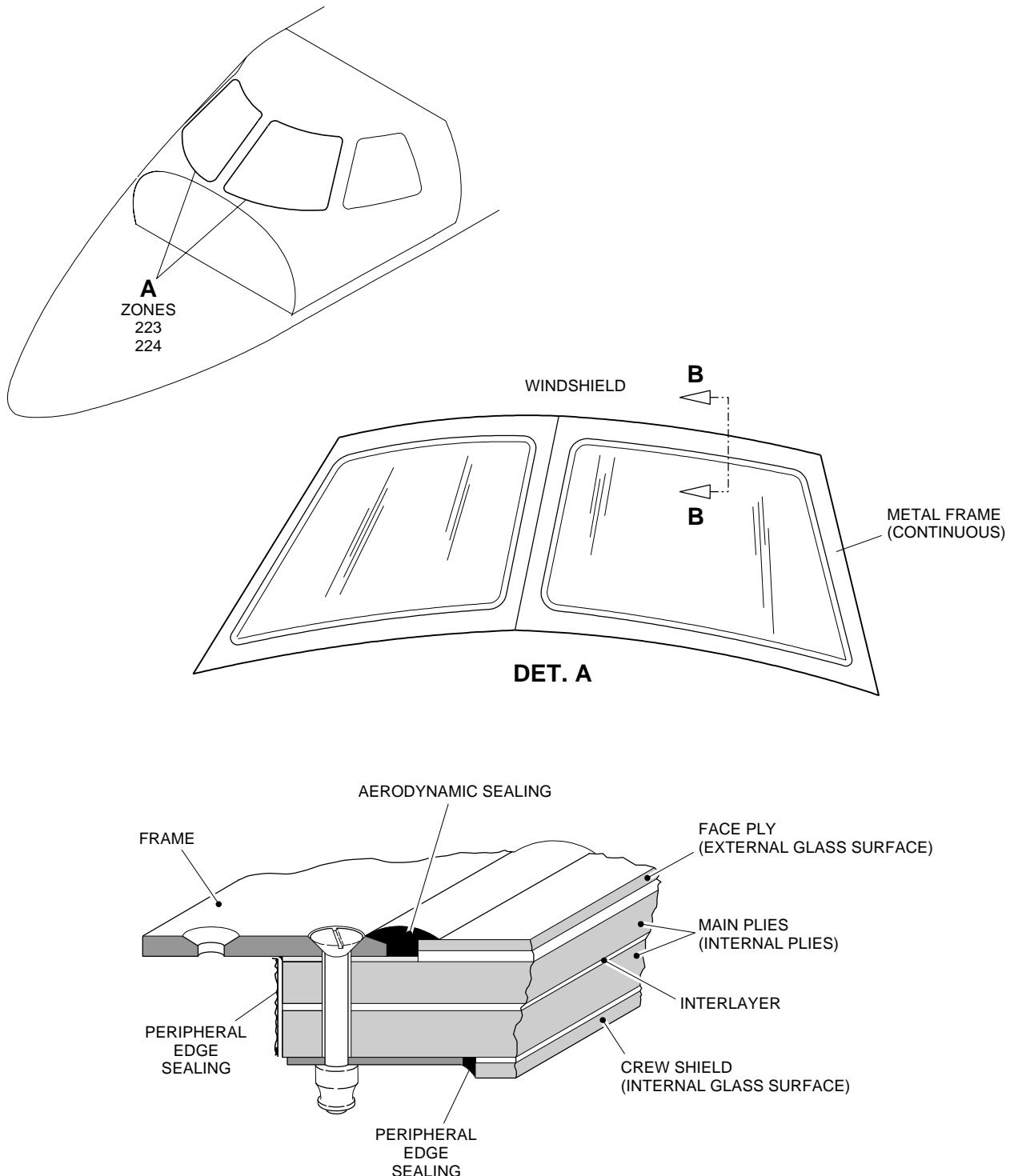
- 1 Erosion is permitted if it does not expose the peripheral edges of the glass or metal to their overlaps, or extends to a depth greater than 0.76 mm (0.032 in) from the outer surface of the frame.
- 2 Cracks are permitted if they do not extend to a depth greater than 2.03 mm (0.080 in.) from below the outer surface of the glass face ply (no limit on crack length).
- 3 If necessary, seal again (refer to the last revision of the Component Maintenance Manual).

K. Follow-on

**SUBTASK 842-002-A**

- (1) Remove the workstand from the work area.
- (2) If necessary, do the operational test of the windshield heating ([AMM TASK 30-42-00-700-801-A/500](#)).

**EFFECTIVITY: AIRCRAFT WITH SIERRACIN - MADE WINDSHIELD**  
**Cockpit Windshield - Inspection/Check**  
**Figure 601**



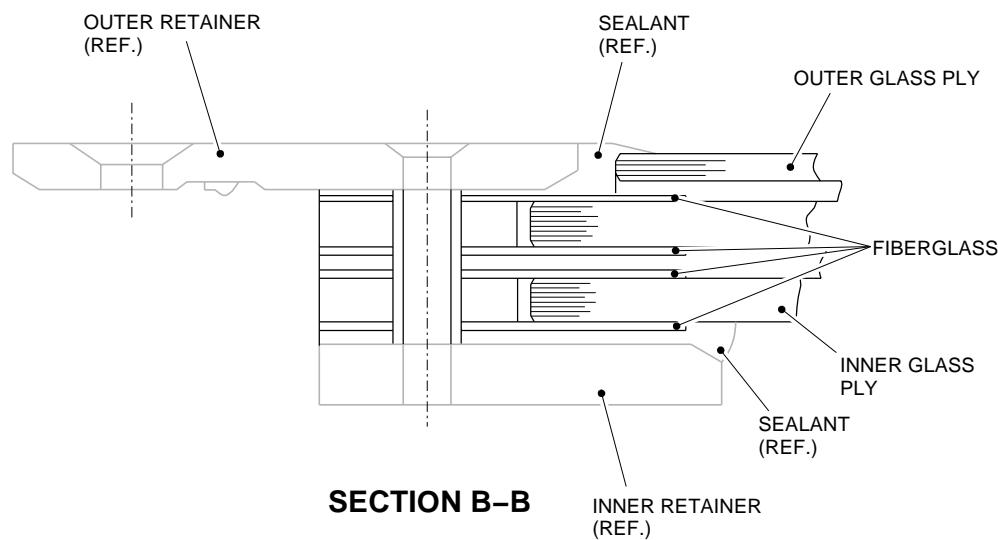
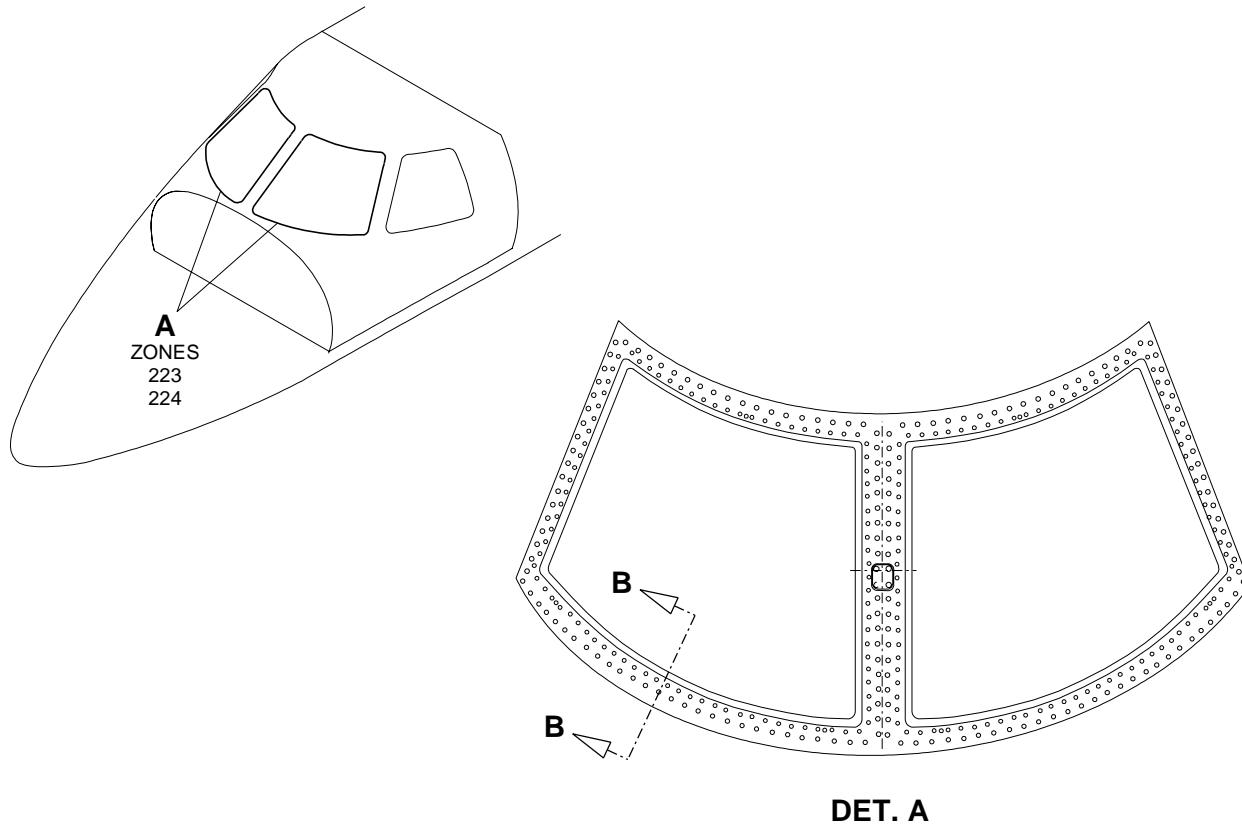
**SECTION B-B**

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**EFFECTIVITY: AIRCRAFT WITH PPG - MADE WINDSHIELD**

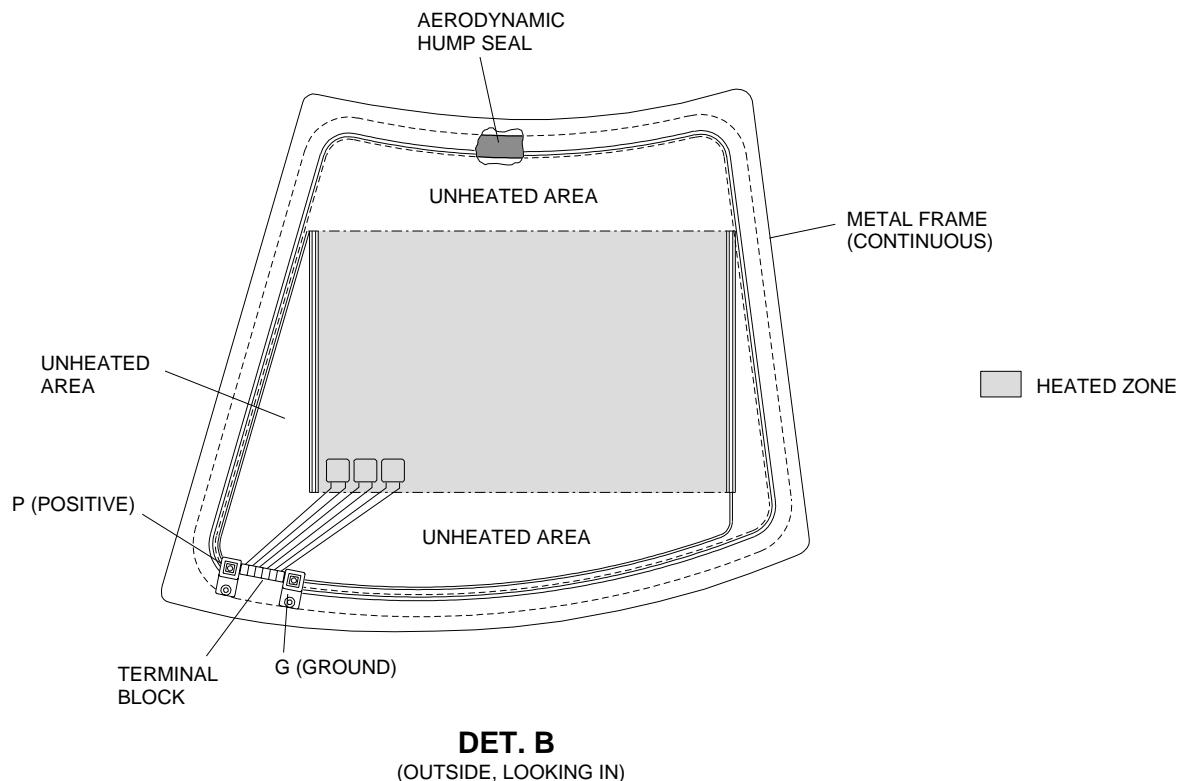
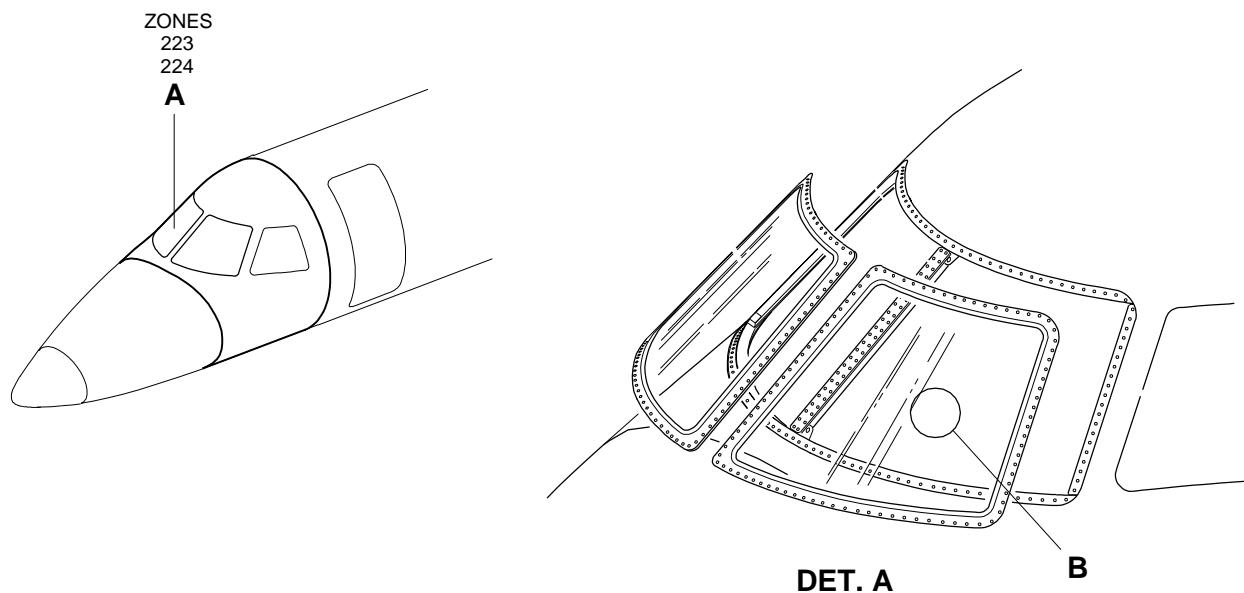
Cockpit Windshield - Inspection/Check

Figure 602



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**EFFECTIVITY: ALL**  
Deicing Heated Zone  
Figure 603



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