

# 56 Windows



**BEECHCRAFT  
DUKE 60 SERIES  
MAINTENANCE MANUAL**

**CHAPTER 56**

*LIST OF PAGE EFFECTIVITY*

CHAPTER SECTION SUBJECT	PAGE	DATE
56-EFFECTIVITY/CONTENTS	1	May 30/75
56-00-00	201	Nov 2/73
56-10-00	201 202	Nov 2/73 May 30/75
56-20-00	201	May 30/75

**CHAPTER 56 - WINDOWS**

*TABLE OF CONTENTS*

SUBJECT	CHAPTER SECTION SUBJECT	PAGE
GENERAL	56-00-00	201
Maintenance Practices		201
Cleaning Plastic Windows		201
FLIGHT COMPARTMENT	56-10-00	201
Maintenance Practices		201
Windshield Removal		201
Windshield Installation		201
Storm Window Latch Removal		201
Storm Window Latch Installation		201
Storm Window Hinge Removal		201
Storm Window Hinge Installation		202
Flight Compartment Side Window Removal		202
Flight Compartment Side Window Installation		202
CABIN	56-20-00	201
Maintenance Practices		201
Cabin Side Window Removal		201
Cabin Side Window Installation		201

"END"



**BEECHCRAFT  
DUKE 60 SERIES  
MAINTENANCE MANUAL**

**GENERAL - MAINTENANCE PRACTICES**

*CLEANING PLASTIC WINDOWS*

A commercial cleaning compound made specifically for acrylic plastic windows may be used. When using a commercial cleaner follow the instructions on the container.

If a commercial cleaner is not available, these instructions should be followed:

Cleaning of the acrylic plastic windows should never be attempted when dry. The window should first be flushed

with water or a mild soap solution, then rubbed slightly with a grit-free soft cloth, chamois or sponge. Stubborn grease or oil deposits are readily removed with aliphatic naphtha or hexane. Rinse with clear water.

*CAUTION*

Do not use thinner or aromatic abrasive cleaners to clean the windows as they will damage the surface of the plastic. Aliphatic naphtha and similar solvents are highly inflammable, and extreme care must be exercised when used.

**"END"**



**BEECHCRAFT  
DUKE 60 SERIES  
MAINTENANCE MANUAL**

**FLIGHT COMPARTMENT - MAINTENANCE  
PRACTICES**

**WINDSHIELD REMOVAL**

(Figure 201)

- a. Remove the windshield heater wiring from the lower corners of the windshield (heated windshield only).
- b. Remove the screws that hold the retainer strips on the front of the windshield.
- c. Remove the retainer strips from around the windshield.
- d. Remove the windshield.
- e. Remove the old sealer from the retainer strips and window frame with toluol.

**NOTE**

Do not allow the toluol to come in contact with the plastic window as it will craze the surface.

**WINDSHIELD INSTALLATION**

(Figure 201)

- a. It is suggested that Y9136 teflon tape (8, Chart 205, 91-00-00) should be applied to all areas of the windshield that will come in contact with the windshield frame or the windshield retainer strips. The tape will keep the sealer from bonding permanently to the windshield and will facilitate future windshield removal procedures.
- b. Apply PR1221 sealer (9, Chart 205, 91-00-00) to the windshield frame.
- c. Place the windshield in position and secure by starting an attaching screw in each corner. Fill the gap between the windshield and the windshield frame with PR1221 sealer (9, Chart 205, 91-00-00).
- d. Place the retainer strips in position and secure in place with the attaching screws. Tighten the screws (in alternate rows progressively) to a torque of 16 to 20 inch-pounds.

**CAUTION**

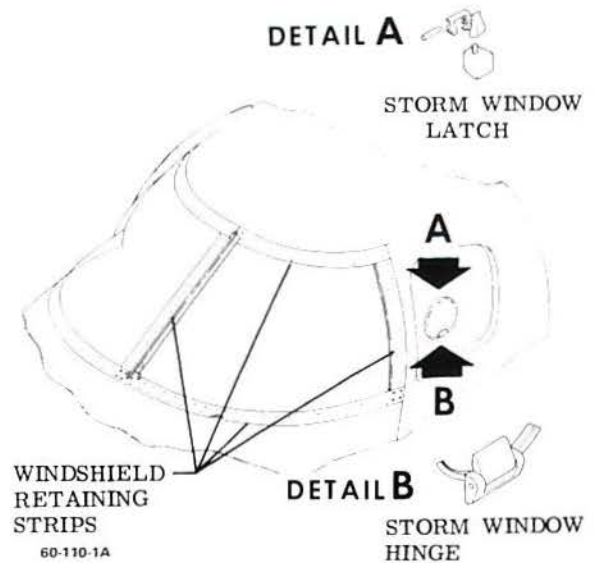
Overtightening the screws will cause damage to the windshield.

- e. Connect the windshield heater wiring to the lower corners of the windshield as they were on the old windshield (heated windshield only).

**STORM WINDOW LATCH REMOVAL**

(Figure 201)

- a. Using an Allen wrench in the end of the latch



**Windshield Replacement  
Figure 201**

attaching bolts to prevent the bolts from turning, remove the nuts from the bolts.

- b. Remove the latch.

**NOTE**

Care should be taken not to damage the attaching bolts or the plexiglass block to which the hinge attaches. If either of these are damaged beyond use, the entire window assembly must be replaced.

**STORM WINDOW LATCH INSTALLATION**

(Figure 201)

- a. Position the latch on the storm window.
- b. Using an Allen wrench in the end of the latch attaching bolts to prevent the bolts from turning, install the nuts on the bolts and secure.

**STORM WINDOW HINGE REMOVAL**

(Figure 201)

- a. Loosen the two set screws in the plexiglass hinge block and punch the hinge pin out from one end.
- b. Remove the hinge block.

**NOTE**

The hinge pin and the set screws are the only replaceable parts in the hinge. If either hinge block is damaged, the window assembly to which it is attached must be replaced.

**BEECHCRAFT  
DUKE 60 SERIES  
MAINTENANCE MANUAL**

**STORM WINDOW HINGE INSTALLATION  
(Figure 201)**

- a. Position the hinge block and install the hinge pin.
- b. Secure the hinge pin with the set screws.

**FLIGHT COMPARTMENT SIDE WINDOW  
REMOVAL  
(Figure 202)**

- a. Remove the screws from the inner window frame and remove the window frame.
- b. Remove the L-shaped retaining clips from around the window.
- c. Remove the window. If the window is not bonded tightly to the airplane skin, remove the window intact. If the window is tightly bonded, the bulk of the window may be cut away, leaving a narrow strip of window bonded to the airplane skin. This strip may then be peeled or broken away.

**CAUTION**

Do not use a sharpened metal tool or knife to cut the sealant from around the window or damage to the area may result.

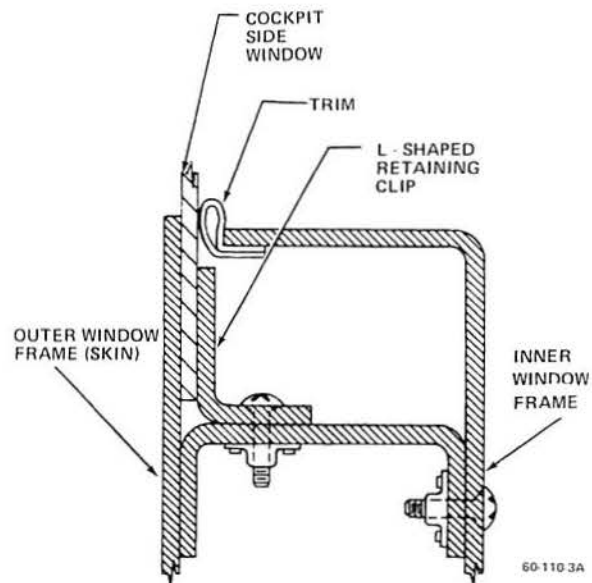
- d. Clean the old sealant from the airplane skin by scraping with a sharpened wood or plastic tool. Sand lightly to remove all traces of the old sealant.

**FLIGHT COMPARTMENT SIDE WINDOW  
INSTALLATION  
(Figure 202)**

- a. Clean all bonding surfaces with naphtha (20, Chart 207, 91-00-00). Clean both the airplane skin and the plastic window bonding surfaces.
- b. Rough sand the bonding surface, of both the airplane skin and the window, using 60 grit emery cloth. Exercise caution not to sand the surface of the window which will be exposed.
- c. Thoroughly clean each sanded surface, using a clean white rag dampened with naphtha (20, Chart 207, 91-00-00). Continue cleaning until no discoloration appears on the rag.

**NOTE**

Do not use red shop rags for cleaning, as they contain oil.



**Flight Compartment Side Window  
Figure 202**

- d. Immediately prior to applying the sealant, clean the metal part (bond area only), using EC3911 degreasing primer (45, Chart 207, 91-00-00). Remove all traces of powder by brushing or wiping with a clean, lint free cloth.

**CAUTION**

Do not apply EC3911 degreasing primer to fiberglass or plastic parts.

- e. Prepare the sealant, EP711 (5, Chart 205, 91-00-00), per the manufacturers instructions.
- f. Apply a uniform layer of the prepared sealant, 1/16 inch to 1/8 inch thick over the contact bond area of the airplane skin.
- g. Carefully position the window in place. Apply sufficient pressure to force a small amount of sealant out at the periphery of the bond area. Maintain a light pressure while securing the window, using the L-shaped retaining clips and attaching screws.
- h. Permit the sealant to cure.
- i. After the sealant has cured, use a sharpened wood or plastic tool to remove the excess fillet of sealant on the exposed surface of the window.
- j. Clean the window using naphtha (20, Chart 207, 91-00-00).
- k. Install the inner window frame. Secure it, using the attaching screws.

**“END”**



**BEECHCRAFT  
DUKE 60 SERIES  
MAINTENANCE MANUAL**

## CABIN - MAINTENANCE PRACTICES

### *CABIN SIDE WINDOW REMOVAL (Figure 201)*

- a. If the curtains are installed, remove the spring clips from each end of the window curtain tracks and slide the curtains to the center of the window.
- b. Remove the attaching screws (exposed by moving the curtains) from the inner window frame and remove the inner window frame.
- c. Remove the attaching screws from around the inner window. Remove the inner window and the inner window molding. See Figure 201, Cabin Side Window.
- d. Remove the U-shaped retaining clips.
- e. Remove the window. If the window is not bonded tightly to the airplane skin, remove the window intact. If the window is tightly bonded, the bulk of the window may be cut away, leaving a narrow strip of window bonded to the airplane skin. This strip may then be peeled or broken away.

### **CAUTION**

Do not use a sharpened metal tool or knife to cut the sealant from around the window or damage to the area may result.

- f. Clean the old sealant from the airplane skin by scraping with a sharpened wood or plastic tool. Sand lightly to remove all traces of the old sealant.

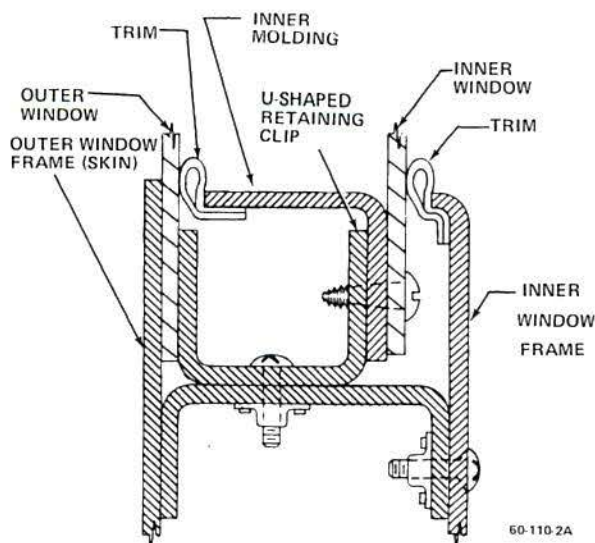
### *CABIN SIDE WINDOW INSTALLATION (Figure 201)*

- a. Clean all bonding surfaces with naphtha (20, Chart 207, 91-00-00). Clean both the airplane skin and the plastic window bonding surfaces.
- b. Rough sand the bonding surface, of both the airplane skin and the window, using 60 grit emery cloth. Exercise caution not to sand the surface of the window which will be exposed.
- c. Thoroughly clean each sanded surface, using a clean, white rag dampened with naphtha (20, Chart 207, 91-00-00). Continue cleaning until no discoloration appears on the rag.

### **NOTE**

Do not use red shop rags for cleaning, as they contain oil.

- d. Immediately prior to applying the sealant, clean the metal part (bond area only), using EC3911 degreasing



**Cabin Side Window  
Figure 201**

primer (45, Chart 207, 91-00-00). Remove all traces of powder by brushing or wiping with a clean, lint free cloth.

### **CAUTION**

Do not apply EC3911 degreasing primer to fiberglass or plastic parts.

- e. Prepare the sealant, EP711 (5, Chart 205, 91-00-00), per the manufacturers instructions.
- f. Apply a uniform layer of the prepared sealant, 1/16 inch to 1/8 inch thick over the contact bond area of the airplane skin.
- g. Carefully position the window in place. Apply sufficient pressure to force a small amount of sealant out at the periphery of the bond area. Maintain a light pressure while securing the window, using the U-shaped retaining clips and attaching screws.
- h. Permit the sealant to cure.
- i. After the sealant has cured, use a sharpened wood or plastic tool to remove the fillet of excess sealant on the exposed surface of the window.
- j. Clean the window using naphtha (20, Chart 207, 91-00-00).
- k. Install the inner window molding and position the inner window, secure to the U-shaped outer window retaining clips with the attaching screws.
- l. Install the inner window frame in position and secure with the attaching screws.
- m. If curtains are installed, slide the curtains into position and install the spring clips.

**“END”**

