#### FLIGHT COMPARTMENT WINDOWS - REMOVAL/INSTALLATION

# 1. General

A. This section covers removal and installation procedures for the left and right flight compartment windshields.

# 2. Tools, Equipment and Materials

A. For a list of required tools, equipment and materials, refer to Windows - General.

# 3. Windshield Removal/Installation

- A. Remove Windshield (Refer to Figure 401).
  - (1) Remove OAT gage. Refer to Chapter 34, Outside Air Temperature Gage Maintenance Practices.
  - (2) Remove windshield anti-ice panel, if installed. Refer to Chapter 30, Windshield Anti-Ice Maintenance Practices.

CAUTION: Do not use any tool, abrasive or cleaner which might damage windshield.

- (3) Cover the left (9) and right (2) windshield halves with a protective covering.
- (4) Remove cover strip (15) from windshield post (5).
- (5) Remove and retain all screws (3), tubing spacers/rubber grommets (12), and nuts securing left (8), and right (1) outboard retainers and lower left (10) and right (11) retainers.
- (6) Remove and retain screws (3), washers (6) and nuts (7) securing center retainer (4) to windshield post (5), and left (9) and right (2) windshield halves and. Retain center retainer (4).
  - NOTE: To remove only left (9) or right (2) windshield half, remove attaching screws (3), tubing spacers/grommets (12), washers (6), and nuts (7), securing applicable windshield half. Tubing spacers/rubber grommets (12) are not installed in the windshield center retainer (4) or windshield post (5), but rather, around outer periphery of windshield halves.
- (7) Remove windshield halves as desired.
- (8) Carefully remove existing sealant, solution, tape, and foreign material from left (9) and right (2) windshield halves, center retainer (4), windshield post (5), left (1) and right (8) outboard retainers, cowling deck (16), and upper cabin skin (17).
- B. Install Windshield (Refer to Figure 401).

#### NOTE: Pro Seal 890 can be combined with either a B2 or B4 accelerator.

- (1) Ensure left (9) and right (2) windshield halves, center retainer (4), windshield post (5), left (1) and right (8) outboard retainers, cowling deck (16), and upper cabin skin (17) are free of foreign material, old sealant and solutions.
- (2) Scuff periphery of left (9) and right (2) windshield halves where center retainer (4), left (1) and right (8) outboard retainers, lower left (10) and lower right (11) retainers overlap with Scotch Brite abrasive pad or equivalent.
- (3) Spread a thin layer of Pro Seal 890 to inside surface of upper cabin skin (17) where skin laps periphery of left (9) and right (2) windshield halves.
- (4) Apply FS4291 Sealant Tape, as required, to airframe where periphery of left (9) and right (2) windshield halves lap the airframe. Do not remove sealant tape backing common to forward lower region of windshield.
- (5) Peel ends of FS4291 Sealant Tape backing to allow a portion of backing to protrude from under windshield halves.
- (6) Install left (9) and right (2) windshield halves and secure upper portion of windshield to upper cabin skin (17) using screws (3), washers (6), and nuts (7). Finger tighten nuts.
- (7) Once windshield halves have been properly positioned, gently grasp sealant tape backing and pull from between windshield halves and airframe.
- (8) Firmly press left (9) and right (2) windshield halves against airframe to provide an adequate seal.
- (9) Fill gaps resulting from contour difference using additional FS4291 Sealant Tape.
- (10) Carefully trim ends of FS4291 Sealant Tape left protruding in step 3.B.(5).
- (11) Fill void between left (9) and right (2) windshield halves and airframe with Pro Seal 890. Smooth sealant to provide flush transition between edges of left (9) and right (2) windshield halves and airframe.
- (12) Spread a thin layer of Pro Seal 890 over exterior surface of left (9) and right (2) windshield halves where lower left (10) and right (11) lower retainers lap left (9) and right (2) windshield halves.
- (13) Apply a bead of Pro Seal 890 to airframe where left (10) and right (11) retainers lap airframe.

- (14) Spread a thin layer of Pro Seal 890 over interior surface of lower left (10) and right (11) retainers.
- (15) Hand form and install lower left (10) and right (11) lower retainers using previously retained screws (3), tubing spacers/rubber grommets (12), and nuts (7).
- (16) Tighten loosely installed fasteners from step 3.B.(6).
- (17) Apply two beads of Pro Seal 890 to exterior surfaces of left (9) and right (2) windshield halves in the region lapped by the center retainer (4).
- (18) Fill void between left (9) and right (2) windshield halves using Pro Seal 890. Avoid obstructing holes common to windshield post.
- (19) Fill any gaps between lower left (10) and right (11) lower retainers with Pro Seal 890 if necessary.
- (20) Install and secure center retainer (4) to windshield post (5, to left (9) and right (2) windshield halves using screws (3), washers (6) and nuts (7).
- (21) Spread a thin layer of Pro Seal 890 over interior surface of left (8) and right (1) outboard retainers.
- (22) Install left (8) and right (1) outboard retainers. Secure using screws (3), tubing spacers/rubber grommets (12), and nuts (7).
- (23) Remove excess sealant from windshield and airframe.
- CAUTION: Do not use any tool, abrasive or cleaner which might damage windshield.
- (24) Remove protective covering from left (9) and right (2) windshield halves.
- (25) Install cover strip (15) on windshield post (5).
- (26) Install windshield anti-ice panel if removed. Refer to Chapter 30, Windshield Anti-Ice Maintenance Practices.
- (27) Install OAT gage. Refer to Chapter 34, Outside Air Temperature Gage Maintenance Practices.



