TEMPORARY REVISION NO. 025
To: EA500 POH and FAA-Approved Airplane Flight Manual

Glass-Faced Windshields

This Temporary Revision affects the AFM Part Number 06-122204, Revision 04, dated July 23, 2012. Remove this TR when Revision 05 is inserted. Record this TR insertion (or removal) on the Log of Temporary Revisions.

Insert this page facing LOTR-2.

06-122204-TR025

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ICE PROTECTION SYSTEM LIMITATIONS

Windshield Heat

The use of windshield heat is prohibited for aircraft 001-265 not modified by SB 500-99-004. The following windshield heat ECBs must be collared:

- L WINDSHIELD HEAT
- R WINDSHIELD HEAT

For Aircraft Without Glass-Faced Windshields

- Use of Windshield heat high (HI) mode is prohibited during takeoff or landing and its use is limited to clearing ice accretion only.

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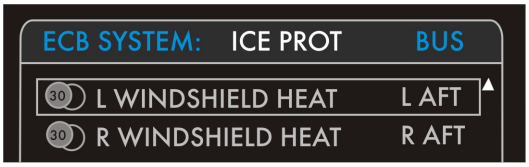
L(R) WSHLD OVHT

L WSHLD OVHT OR R WSHLD OVHT	WARN

Sensors embedded in the windshield have detected the Left or Right Windshield Heat has exceeded its upper limit and the windshield heat should automatically turn off. The message will remain as long as the overheat condition exists.

Sensed overheat is also indicated on the ICE synoptic by a red OVHT, inside the windshield and the temperature display, changing to red.

1. L(R) WSHLD HEAT (ICE page) ..... OFF
2. L(R) WINDSHIELD HEAT (ECB Page - ICE PROT) ..... PULL
3. Exit and Avoid Icing conditions.



NOTE

Windshield should slowly begin to cool as indicated by decreasing temperature on the ICE synoptic.

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Windshield and Side Windows

Two windshields and two side windows provide cockpit visibility.

The forward windshields are acrylic, or acrylic on the inside only with glass outside and a surface seal.

The side windows are stretched acrylic both inside and outside, with an air gap between the layers.

The windshields each contain electrical heater wire arranged in a grid for ice protection. Refer to the "ICE PROTECTION SYSTEM" (page 7-214) for more information about the windshield heat.

Insert facing page 7-214:

Windshield Heat

The left and right windshields each contain electrical heater wire embedded into the center portion of the windshield. The ACS maintains the windshield temperature between 41 °C and 46 °C for the glass-faced version, and between 53 °C and 60 °C for the acrylic-faced version, by cycling windshield heat on and off.

Windshield heat will power up in the NORMAL heat mode when the engine generators are operating or external power is in use. Left or Right Windshield heat can be selected to HIGH using the ICE page line select keys if heavy icing conditions are encountered, or to OFF. A WSHLD HEAT OFF status message is displayed when either windshield is selected OFF.

The windshield heat operation is displayed on the ICE page (Figure 7-168). A green windshield outline indicates windshield heat is on and functioning normally. A white windshield outline indicates windshield heat is off.

Windshield Heat Failure

A L(R) WSHLD OVHT warning message indicates a windshield temperature exceeding 71 °C for the glass-faced version, or 82 °C for the acrylic-faced version. The respective windshield heat will automatically turn off. On the ICE Page display, the windshield outline turns amber with a red OVHT message inside, and the temperature display changes to red. The message will remain as long as the overheat condition exists.

If either windshield fails for a reason other than overheat, a L(R) WSHLD HEAT FAIL caution message is displayed and the ICE page windshield outline turns amber.

A malfunction of the embedded temperature sensors causes a L(R) WSHLD HEAT FAULT advisory message to appear and the associated temperature display turns to dashes. This message is only active on the ground. Dispatch is allowed except for flight into icing conditions.

Defog

The windshield defog system is available and controlled from the ENVIR page. Refer to the environmental system description, "ENVIR (Environmental) Page" (page 7-189).

Insert facing page 8-30:

CLEANING AND CARE

Windshield and Side Windows

CAUTION

All side windows are acrylic on inside and outside. The cockpit front windshields are acrylic on the insides; the outsides of the front windshields are glass or acrylic.

The windshields and side windows should be cleaned only with 50/50 water/isopropyl alcohol mixture. Windshield and windows are easily damaged by improper handling and cleaning techniques or use of unapproved cleaning agents.

Transparent plastics (acrylics) lack the surface hardness of glass. Exercise caution when cleaning windows to avoid scratching or scoring. Before cleaning an acrylic window, remove wrist-watches, rings and other jewelry from hands.

DO NOT use solvents, fuels, detergents, denatured alcohol, acetone or thinners to clean the windshield and side windows.

DO NOT park the airplane where it might be subjected to direct contact with or vapor from: methanol, denatured alcohol, gasoline, benzene, xylene, MEK, acetone, carbon tetrachloride, lacquer thinners, commercial or household window cleaning sprays, paint strippers or other types of solvents.

Cleaning Windshield and Side Windows (Acrylic or Glass)

1. Flush with clean water to remove loose dust etc.
2. Clean the windshield and side windows using a clean, lint-free towel and the 50/50 water/isopropyl alcohol mixture as cautioned above.
3. Rinse with clean water and dry with a damp chamois leather.

NOTE

Rubbing transparencies with a dry cloth will cause scratches and the build-up of an electrostatic charge, which attracts dust. Where an electrostatic charge is present, gently pat the area with a damp chamois leather to remove the charge and any accumulated dust.

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